The London School of Economics and Political Science

Reconceptualising green space: Planning for urban green space in the contemporary city

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DECLARATION

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ABSTRACT

Urban green space has risen up the policy and research agendas, buoyed by a heightened awareness of the role nature plays in addressing contemporary urban challenges, such as climate change, chronic health conditions and waning biodiversity. Lauded for their economic, environmental and social benefits, urban green spaces are presented as a policy and planning panacea as urbanisation continues at a rapid pace.

In practice, however, urban green spaces do not realise this full potential. Instead of being managed as essential elements of a multifunctional, interconnected system of green infrastructure, green spaces are conceptualised as an ornamental afterthought, detached from the city around them. This is because green space planning adheres to an institutional and cultural focus on a form and function of publicly accessible green space established nearly 200 years ago in Victorian England. As such, a gap between the theoretical way urban green space is discussed and the practical way it is delivered leads to missed opportunities to address the impacts of urbanisation.

Using qualitative research conducted in three Inner London boroughs, this thesis shows that, despite recognition that urban green spaces can provide vital contributions to the contemporary city, a conceptualisation of green space based on heritage has become institutionalised. This has led to planning, governance and funding processes that further embed a path-dependent way of thinking about green spaces as conduits to the past rather than as assets to address present and future needs.

Yet, this research identifies three processes of change that, collectively, may break the path dependency: changes in the understanding of environmental systems, changes in population, demographics and preferences, and changes in governance. Together, these forces may open the door to reconceptualising green space as critical urban infrastructure that grows and changes with the city and makes essential contributions to urban life.

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CHAPTER 1 – INTRODUCTION

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"'Green space,' of course, is not always perfectly green: sometimes it is a frozen grey or muddy brown or wintry white …. But it is ubiquitous even in the biggest city." – Peter Clark and Jussi S. Jauhiainen, *The European City and Green Space* (2006, p. 2)

1.1. AN URBAN EXISTENCE

We live in an urban world. In recent years, cities have triumphed (Glaeser, 2011), been reborn (Cairncross, 2001), experienced rediscovery (Amin and Graham, 1997) and resurged (Storper and Manville, 2006). Despite predictions that advancements in information and communication technologies would lead to cities falling into obscurity (Pascal, 1987; Naisbitt, 1994; Karlgaard and Malone, 1995; Cairncross, 2001), urban areas have grown more important, more relevant and more powerful (Behrman and Rondinelli, 1992; Florida, 2003; Huggins and Thompson, 2012).

The focus of this urban resurgence centres greatly on the economic might of cities. Agglomeration theories explain increasing urbanisation as the product of cities' roles as "incubators of creativity, innovation and new industries," long heralded by urbanists such as Jane Jacobs and Robert Park (Cairncross, 2001; Florida, 2003, p. 4; Storper and Venables, 2004; Storper and Manville, 2006; Rodríguez-Pose and Crescenzi, 2008). People and firms continue to cluster in cities, despite technologies that might seem to signal "the death of distance" (Cairncross, 2001, p. xi, p. 187; Florida, 2003; Storper and Manville, 2006). Thus, the city plays a premiere part in the globalised economy because the economic benefits of living and working clustered near others outweigh the costs of living dispersed across the landscape (Behrman and Rondinelli, 1992; Quah, 1999; Glaeser, Kolko and Saiz, 2001; Storper and Manville, 2006; Huggins and Thompson, 2012). This urbanisation has ramifications for the role of the natural environment in cities.

The emphasis on the impacts of increasing urbanisation resulting from a productive, innovative urban economy led to a renewed interest in urban studies and urban planning (Florida, 2003). Looking at urban issues beyond the economy, attention on the ecological, social and cultural environments of urban areas resurged, as well. An

acknowledgement of and concern for how all these facets of urban life are entangled led to the emergence of the concept of sustainable development and a subsequent exploration of the links between sustainability and urbanisation (Campbell, 2016). Thus, sustainable development theory contributes to broader urban theory by emphasising an intricate, interdependent and global relationship among economic growth, environmental protection and social equity (WECD, 1987). Sustainable development theory also stresses a strong temporal element, with a goal of "intergenerational equity, which implies fairness to coming generations" (Berke, 2002, p. 29).

1.1.1. Planning and sustainable development

The concept of sustainable development revived the idea that planning could be visionary, long-range and large-scale (Berke, 2002). It also led to a more focused purpose for planning (Beatley and Manning, 1997; Wheeler, 2000). Berke goes so far as to say that sustainable development is the "common good" that can restore planning's "guiding principle" (2002, p. 21). Campbell, who at one time was "unsettled with planning's schizophrenic split between growth and conservation," calls sustainable development "a core tenet for urban planners" that has "catalysed much innovation and collaboration in planning" (2016, p. 388, pp. 392-393). Planning, as a practical field and an academic discipline, can contribute to creating more sustainable communities (Beatley, 1995).

Since the World Commission on Environment and Development thrust the term "sustainable development" into planning vernacular, sustainability has become institutionalised in planning practice (WECD, 1987; Berke, 2002; Campbell, 2016). In the first line of his forward to the UK's National Planning Policy Framework, Greg Clark, minister for planning, declared: "The purpose of planning is to help achieve sustainable development" (DCLG, 2012, p. i). As such, "planning for sustainability seeks and reorganises the social, physical and political-economic landscape in very fundamental ways" (Beatley, 1995, p. 384). Sustainability endures, Campbell says, "because it taps into planning's core ideas, values and practices" (2016, p. 394).

Yet, sustainable development reveals planning's strategic limitations. While planning gives local people a means to address unsustainable actions, it provides limited opportunities to address problems beyond the local area (Berke, 2002). This creates a dilemma for planners, given that a principle of sustainability is that "community

planning must *link local to global concerns*" (Berke, 2002, p. 32, emphasis original). Even addressing sustainable development at the metropolitan regional scale is challenging, given typically weak regional planning structures (Wheeler, 2000). The limited ability to consider broader actions and impacts is apparent in planning concepts established in the name of sustainable development, such as new urbanism and compact city. New urbanism's principles, for example, focus on the neighbourhood and block scale, which often are not consistent with broader regional concerns (Berke, 2002).

Sustainable development also highlights inherent tensions in planning, notably the long-standing conflict between growth and conservation (Campbell, 1996). Concern for environmentally sensitive urban landscapes and the impacts of urbanisation featured prominently in the work of planning pioneers, such as Patrick Geddes, Ebenezer Howard, Jane Jacobs and Lewis Mumford (Beatley, 1995; Wheeler, 2000). Despite this, urban development has led to a loss of open space, including green space, as land is built on, paved over and used to provide housing, offices, roads and industrial sites – all essential to the urban economy.

Fostered largely because of climate change, sustainable development's emphasis on a long-term, interdisciplinary and more holistic approach to planning attempts to differentiate contemporary thinking about the role of planning (Beatley and Manning, 1997). A prominent feature of the 21st-century approach to urban planning is to incorporate green space planning as an essential aspect for the urban existence. However, entrenched interests and well-established forces that support unsustainable development are powerful (Wheeler, 2000). Thus, tension between growth and conservation continues. Nowhere is this tension more palpable than in cities, where capitalism, based on principles of expansion and growth, focus on the here and now, not the world future generations will inherit (Beatley, 1995).

1.1.2. Cities and sustainable development

Sustainable development – and the relationship and tensions among the economy, the environment and the social equity it highlights – is particularly relevant for cities. With increasing global urbanisation, the role cities play in sustainable development has become more prominent (Dempsey et al., 2011). Processes of urbanisation have resulted in increased energy consumption, impermeable surfaces, disruption of the hydrological cycle, loss of habitat and biodiversity, and climate change and,

thus, cities often are blamed for contributing disproportionately to global greenhouse gas emissions and the catastrophic effects of global warming (WECD, 1987; Rees and Wackernagel, 1996; Portney, 2003; Dodman, 2009; Young, 2010).

Yet, despite the negative impacts of increasing urbanisation, cities now are simultaneously recognised as having the ability to lead sustainability efforts, buoyed by planning tools such as green building and green infrastructure (Beatley, 2000). Cities and local authorities have established sustainability offices, sustainability-focused jobs, sustainability plans and sustainability measures (Campbell, 2016). Indeed, the role of cities and positive urbanism is recognised as essential to mitigating the impacts of global climate change, as cities are considered places that can contribute to reducing the economic, environmental and social impacts stemming from urbanisation (WECD, 1987; Wheeler, 2000; Betsill and Bulkeley, 2007). As Beatley observes:

> Green and sustainable cities present fundamental opportunities to both apply new technologies (such as public transit, district heating, and green building and design) and bring about major lifestyle changes (such as walking, bicycling, and reduction in consumption). Indeed, it seems that cities hold the greatest hope for achieving a more sustainable future for our planet. Any effective agenda for confronting global climate change, biodiversity loss, and a host of other environmental challenges must necessarily include cites as a key, indeed *the* key, element (2000, p. 4, emphasis original).

1.1.3. Cities and green space in the past

This focus on sustainable cities represents a change, as before the early 1990s, few policymakers and planners turned their attention to sustainable urban development for solutions (Wheeler, 2000). Indeed, the 21st-century strategy of looking to cities and urban sustainability to lead the way in addressing the impacts of urbanisation contrasts with previous periods of rapid urbanisation, notably the industrialisation of the late 18th and early 19th centuries in England. During the Victorian era, dense, industrialised cities became economic engines, replacing a largely agriculture-based, dispersed economy. Yet, urbanisation was not uniformly welcomed. Indeed, Glass observes that "British anti-urbanism has a long history" (1955, p. 14). For the Victorians, cities were considered a necessary evil – urban areas drove innovation

and economic fortunes, but they were the source of disease, such as cholera and typhoid, poor physical health, behavioural ills and moral decay (Malchow, 1985; Reeder, 2006b; Brown, 2013). The heavy environmental and social costs attributed to cities fuelled a strong anti-urban sentiment that characterised the era.

Cities were far less preferable than the idealised, virtuous and superior countryside and the pure life it encouraged. Thus, instead of searching for decidedly urban solutions to environmental and social problems, the Victorians looked beyond the borders of the city to address their concerns about urbanisation and industrialisation. Their solution was to bring the countryside into the city, simulating the country for those urban dwellers – namely, the working class – who could not retreat to the moral countryside from the corruptive influences of the city. For the Victorians, "the 'country-in-town' principle had almost become an obsession both with town-planners and social reformers" (Hulin, 1979, p. 17).

Born out of Victorian liberalism, England's "parks for the people" movement began in 1833, with the Select Committee on Public Walks (Conway, 1991). From then through 1845, as it became more "recognisable," the public park movement ushered in the idea that providing publicly accessible green space with public funding was beneficial to city residents and could alleviate many ills of urbanisation and dense clustering of people and economic activity (Conway, 1991, p. 3; Jordan, 1994). Nature – specifically the tamed version of nature idealised in country estates and gardens – was wholesome, healthful and restorative (Welch, 1991; Brück, 2013).

Replicating the countryside in the town was not simply about providing "essential 'breathing spaces' in an increasingly pathological city" (Clark and Jauhiainen, 2006, p. 17). In bringing countryside into the city, the Victorians sought to influence behaviour and impose their specific vision of morality (Gaskell, 1980; Jordan, 1994). Their urban green spaces were places where the lower classes could be exposed to the more refined and well-mannered upper classes, thus teaching them better behaviour. By consciously replicating the countryside in the city, the Victorians constructed green space that was not considered urban space, but *anti*-urban space, with the purpose of saving city dwellers from the unwholesome physical environment and the immoralities of city life around them (Reeder, 2006b). As such, urban green spaces were ideologically separate from the city. This reflected a "'deep-seated rurality' of the British and their allergy to town-life" (Hulin, 1979, p. 11).

This construction of the concept of urban green space is not confined to Britain, as the Victorian concept of urban green space has been exported across the world, with its influences reaching across oceans to have impact on other cultures. For example, Frederick Law Olmsted's philosophy of green space and designs for New York's Central Park were largely influenced by his visits to English parks and gardens, particularly Birkenhead Park on Merseyside, and Olmsted – considered "the 'father' of urban parks" – in turn influenced a generation of park-designers and landscape architects in the United States (Conway, 1991; Cohen et al., 2007, p. 509; Dempsey, Brown and Bramley, 2012; Eisenman, 2013). As this thesis will show, the idea of urban green space as a metaphorical, if not literal, escape from the city continues to influence urban planning and the urban landscape.

1.1.4. Cities and green space today

The Victorian concept of urban green space has endured and remains a powerful influence on urban planning in the 21st century. Indeed, today, a prominent planning tool used by cities across the world to address the economic, environmental and social ramifications of urbanisation is the creation and conservation of publicly accessible green spaces in city centres and other urban areas (Rutt and Gulsrud, 2016).

Research has demonstrated that urban green space has wide-ranging benefits. While not an exhaustive list, these benefits include: opportunities for sport and recreation (Hillsdon et al., 2006); cooling of increased temperatures from the heat-island effect (Gill et al., 2007); air and water filtration (Heidt and Neef, 2008); flood control and prevention (Zhang et al., 2012); urban agriculture and community gardening (De Bon, Parrot and Moustier, 2009); biodiversity and habitat for urban wildlife and rare plant species (Niemelä, 1999); improved physical and mental health and well-being, including stress (Tzoulas et al., 2007); increased social interaction and integration (Swanwick, Dunnett and Woolley, 2003); tourism promotion (Choumert and Salanié, 2008); increased property values and tax revenue (Crompton, 2001; Choumert and Salanié, 2008); contributions to cultural heritage (Urban Parks Forum, 2001); enhanced economic competitiveness (Panduro and Veie, 2013); reduced antisocial behaviour (Woolley, 2003); education and child development (Taylor et al., 1998); and quality of life (Bullock, 2008). This list of acknowledged benefits of urban green space is considerably longer and broader than in the 19th century, when green space delivery and management was more

limited, focusing on humans' physical health and moral behaviour, including airborne contagion prevention and mitigation of air pollution resulting from the increasing number of large factories (Olsen, 1993; Reeder, 2006b).

While in the 19th century people turned away from the city – to the countryside – to alleviate urban conditions, today, policymakers and planners advocate for green spaces designed and managed in a specifically urban way to offer solutions to the negative impacts resulting from urbanisation. In this way, the contemporary construction of publicly accessible urban green space diverges from the 19th-century concept of public parks. Thus, at least theoretically, urban green space would seem to be thought of as a part of the contemporary urban fabric.

1.1.4.1. *Green infrastructure*

One planning approach that uses urban green space to work towards urban sustainable development and that has gained prominence in the past two decades is green infrastructure. With its focus on connectivity and multifunctionality, green infrastructure considers green space and other urban greening measures as part of the urban infrastructure, in the same way that transport and utility networks are (Matthews, Lo and Byrne, 2015). Under a green infrastructure approach, planning for urban greening occurs at the beginning of development, which differs from the typical practice of considering green space as an afterthought to development (Wright, 2011; Eisenman, 2013). No longer the last thing added and the first thing cut from development projects, urban green spaces are, thus, presented as integral and essential to growth and development. With a green infrastructure approach, urban green spaces are recognised for the broader range of work they can do for the city than the original, limited concept of urban green space as provided primarily for amenity, leisure, and physical and moral health.

Hence, in theory and in policy, the contemporary relationship of urbanisation and urban green space diverges from historic views. Victorians blamed cities and looked beyond their borders for solutions, while today, planners and policymakers believe the solution to urban problems lies *within* the urban environment. By widening what urban green spaces are recognised as being able to do to mitigate the impacts of urbanisation, the conceptualisation of these spaces and their function in cities is evolving. They are considered a prominent feature of green infrastructure. How green space in urban areas is conceptualised matters because, despite half the

world's population now living in urban areas, the urban rebirth is predicted to continue and, thus, the impacts of urbanisation across the world will continue to intensify (UNFPA, 2007). Indeed, in just over one decade, by 2030, almost 5 billion people worldwide will be urban dwellers, meaning "the world of the 21st century will be a largely urban world" (WECD, 1987, p. 22; UNFPA, 2007). If the future is urban, cities – and the infrastructure within them – must be part of the solution for addressing global problems.

1.2. OVERVIEW OF THE RESEARCH PROJECT

1.2.1. Defining the problem

With a renewed appreciation for cities and their ability to lead the charge in addressing global problems, notably climate change and the impacts of urbanisation, the anti-urban sentiment of the past would seem to have given way to a more positive way of thinking about cities. As discussed, urban green space is a prominent planning tool employed for moderating the impacts of climate change and urbanisation (Pincetl and Gearin, 2005; Gill et al., 2007). This, coupled with a heightened focus on related environmental issues such as biodiversity and ecosystem services, as well as quality of life and well-being for urban dwellers, has led to a deeper understanding of the complex, multifaceted role that urban green space can play in mitigating and adapting to the economic, environmental and social impacts of urbanisation. As a result, urban green space has risen up the urban agenda (Pincetl and Gearin, 2005; Rutt and Gulsrud, 2016; Tappert, Klöti and Drilling, 2018). The focus on green infrastructure has further elevated the role of urban green space, connecting it with critical urban systems and services, such as urban cooling and flood prevention. Although delivering and managing urban green space typically is not a statutory requirement, urban green space and green infrastructure are evoked by planners, policymakers and developers as essential.

Yet, merely adopting policies and saying urban green space can provide a laundry list of benefits does not automatically lead to a change in practice or in practitioners' attitudes, particularly when the existing approach to green space planning has been embedded in ways of thinking about green space's form and function for nearly two centuries. Despite theories and empirical evidence regarding the extensive ways in which the planning tools of urban green space and green infrastructure can contribute to sustainable development and urban resilience, in practice, urban green

space is not managed in a way that sees these wide benefits realised. As such, a gap between the theoretical way urban green space is discussed and the practical way it is delivered and managed leads to missed opportunities for cities to address negative economic, environmental and social impacts resulting from urbanisation. Media coverage, government reports and parliamentary inquiries portray urban green space in a near-constant state of threat and decline without adequate political or financial support, further calling into question the commitment to using urban green space as a critical tool for improving urban sustainability.

If urban green spaces are universally acknowledged to provide such a vital array of benefits, why do these spaces fail to live up to these expectations? What influences this? Is it simply a funding or resources issue? How does the concept of publicly accessible urban green space, established nearly 200 years ago, influence this? The purpose of my research is to investigate the causes of the paradox of portraying urban green space as a panacea to urban problems, yet treating it as a "cosmetic afterthought" (UKDoE, 1996, p. iii).

1.2.2. Grounding the research in London

As home of one of the first publicly funded, publicly accessible green spaces of the Victorian park-building era, the UK capital serves as an ideal laboratory for examining the influences on the delivery and management of urban green space in the contemporary era. In London, a critical housing shortage, critical transport needs, and a changing population and demographic collide with perpetually shrinking budgets, constantly evolving governance structures, and a deeply entrenched policy and cultural focus on heritage. Within the case study of London, I examine three Inner London boroughs: Islington, Tower Hamlets and Wandsworth, which are discussed in detail in Chapter 4 (London Context).

Twenty-first-century London faces global challenges, notably climate change. Climate change has been called "the greatest threat to London's prosperity" (LAEC, 2016), while the London Plan, Greater London's statutory spatial development strategy, asserts that "London is already feeling the effects" of climate change (GLA, 2016c, p. 176). London's local authorities have incorporated addressing urbanisation and climate change into their planning policies. For example, Islington – one of the boroughs researched in this project – has adopted a core planning strategy that says, "Islington's environment is under particular pressure, both due to the density and

Figure 1.1 – **Urban London:** Like other places around the world, London continues to urbanise. London's population stands at its highest ever, and the capital's growth and development "has stepped up significantly" (Imrie, Lees and Raco, 2009, p. 3) (source: author).

central urban location of the borough and the levels of growth it is experiencing" (Islington Council, 2011a, p. 52). Islington's strategy identifies "protecting and improving our environment and tackling climate change" as key priorities (Islington Council, 2011a, p. 52).

Londoners expressed awareness and concern about the impact of London's urbanisation as far back as 1580, when the Lord Mayor and alderman complained that "the vast increase of new buildings and number of inhabitants within the City and suburbs of London … would prove of dangerous consequence" (Fitter, 1945, p. 61). Yet, nothing compared to the growth of the 18th and 19th centuries, when Londoners faced the consequences of industrialisation, particularly increased density and overcrowding, slum conditions for the working class, ill health and disease, and degradation of the environment. Further, the factories of the crowded cityscape led to water, air and noise pollution. As existing green spaces disappeared and became "smothered with Victorian slums," Londoners felt deprived of the "sweet

and wholesome air" of the countryside (Forshaw and Bergström, 1986, p. 68; Reeder, 2006b, p. 42). As discussed in Section 1.1.3, the solution to these mounting urban ills was to look outside of London and bring the countryside into the city.

Today, the countryside-in-the-city influence of Victoria Park, the first public green space in London, and other early Victorian-era green spaces and London's Royal Parks looms large. The strategic, multifunctional and interconnected approach championed by green infrastructure policies is not manifested in practice. Instead, London's urban green spaces continue to be provided and managed primarily for amenity use and maintained with strict adherence to traditional design and management methods inherited from an earlier era. The 19th-century concept of green space remains dominant, with London's green spaces seen as places to escape the city, not places that are part of the urban fabric doing work for the city. Thus, the opportunities for London's urban green spaces to contribute to reducing the negative impacts of increasing urbanisation now and into the future remain largely theoretical. As the context in which urban green space is supplied and used changes, London's urban green spaces remain rooted in the past, perpetuating these spaces as distinct and disconnected from the dynamic city around them.

1.2.3. Research aim and questions

The specific questions that guided my data collection and analysis are:

1. What influences how contemporary urban green space is delivered and managed?
    1a.   How is the concept of urban green space constructed?
2. What role does urban green space play in planning for the sustainable city?
    2a.   How is urban green space used as a planning tool for addressing challenges of urbanisation?
3. How does the conceptualisation of urban green space affect policy development, planning, governance and funding for these spaces?

To address these questions, I conducted fieldwork in Inner London. My primary methodology included interviewing 50 respondents. Secondary research methods involved archival research, document collection, site observation, attendance at meetings, and use of maps and quantitative data. My objective was not to evaluate

what constitutes a "good" green space or to evaluate the quality of green space management. Instead, I had two principal goals.

First, I wanted to unpack the concept of urban green space and examine how this concept works within a contemporary context. By asking the fundamental question of how urban green space is conceptualised and critiquing this through a comparison with what urban green spaces in the 21st century are expected to be, I identify a gap in the theoretical debates and discussions surrounding urban green space. The existing literature starts from an assumption of what we mean by urban green space, providing evidence of how institutionalised the concept has become. Yet, the literature also discusses the changing nature of cities – their transformation, rebirth and resurgence. As places of dynamic economies, environments and communities, cities do not stand still and, thus, what they demand from their urban green spaces does not stand still, either. However, the literature does not address the dichotomy of changing cities with green spaces frozen in time. Thus, a goal of this thesis is to address this theoretical gap.

Second, I wanted to empirically demonstrate the impact the conceptualisation of urban green space has on the practical delivery and management of these spaces. In practice, many green spaces are preserved and protected for heritage purposes, thus freezing in time and place not only the physical layout and design of green spaces, but also the ideal of what green space is meant to be. This applies to larger green spaces, such as heaths and commons, as well as to smaller green spaces, such as Inner London's green squares. Wandsworth Park, for example, is a Grade II-listed park, so designated because it remains true to its original Edwardian layout (Historic England, 1999). As a listed landscape, this layout cannot change, and alterations to the green space's uses are limited.

Similarly, when Victoria Park underwent a £10 million regeneration in 2012, the funding was tied to restoring heritage assets and returning the park to its Victorian splendour. Despite contemporary users advocating for changes – such as additional sports fields and toilets – to meet current uses and demands, the regeneration was limited to heritage-related improvements. Although located in Tower Hamlets – the fastest-growing Inner London borough and one that is experiencing demographic and socioeconomic change – the regenerated park was delivered in a way that focused on its historic context and not on meeting the demands of the urban changes

occurring around the park (ONS, 2012b; GLA, 2015b). The restrictions from heritage occur in green spaces that are not designated as listed landscapes, as well.

While the historic, physical developmental patterns of London directly affect the green space that exists in the city today, the contemporary concept of green space also directly descended from historic ways of thinking about green space. In this thesis, I argue that this concept is just as enduring and influential on current green spaces as the physical development of the landscape is. Thus, green spaces of today are tied to green spaces of the past by an institutionalised ideal that has endured over time. Indeed, a traditional notion of what a green space should be – grounded in an era almost 200 years ago – is a powerful force shaping the practical way green space is delivered, managed, funded and used in Inner London today.

1.3. THESIS STRUCTURE

The thesis consists of eight chapters. Following this introductory chapter, the remaining seven chapters are structured as follows.

Chapter 2 introduces the literature that this thesis engages with to address the research questions laid out above. The green space-related literature draws from a far-reaching pool, reflecting the breadth of research that examines the relation of green space to economic, environmental and social issues of urban areas. Further, I review how urban green space has become a key issue in urban planning and urban policy as city leaders have increasingly become focused on urban quality of life and have developed a heightened awareness regarding the ecology of cities (Conway, 1991; Rutt and Gulsrud, 2016; Sandström, 2002; Clark and Jauhiainen, 2006; Baycan-Levent, Vreeker and Nijkamp, 2009).

Chapter 2 also draws from literature on sustainable development, particularly environmental sustainability, to elaborate on how this concept focuses attention on the role of cities in addressing environmental problems, namely the impact of climate change. It discusses the compact city, a prominent planning policy adopted in the name of sustainable development that aims to manage urban growth and reduce cities' environmental footprints by promoting dense development, especially in the urban core. Such urban containment literature is relevant to my research aims and questions because cities, including London, have adopted planning policies such as

compact city as a way to manage the negative impact of their continued urbanisation. By adopting such policies, cities place an inherent tension on urban green space, further discussed in Chapter 2. I delve into literature that examines how, despite their common goal of sustainable development, planning policies that promote the green city and those that promote the compact city often conflict.

Also in Chapter 2, I review literature relevant to the two theoretical approaches used to address the research questions: new institutionalism and green infrastructure. With new institutionalism, I review how a concept, such as green space, can become institutionalised and, thus, how it can influence decision making and policy development. This includes a discussion about path dependency, which flows from new institutionalism. Path dependency provides a framework for examining the influences on green space delivery and management, and links decision making about these spaces to how the concept of urban green space has been constructed through time (North, 1990; Kay, 2005).

A green infrastructure approach elaborates on contemporary ways of thinking about green space's role in the city and how this can be achieved through urban planning. It provides a conceptual framework for comparing the contemporary provision of urban green space with other essential urban functions, such as roads and utilities. While new institutionalism looks back to show the past's influence on today's urban green space delivery and management, green infrastructure offers a theory for urban green space's present and future. It highlights the role urban green space could have on the future functioning of the city if these assets are conceptualised and managed as vital parts of development and the urban environment.

Next, in **Chapter 3,** I lay out the rationale for the specific methods used for data collection and data analysis. The chapter describes the journey from the initial thesis topic to the ultimate research questions posed. In doing so, the chapter demonstrates how qualitative research methods are most appropriate for analysing the complexity and nuances of meaning ascribed to urban green space, which allows me to understand how the concept is constructed in a way that quantitative research methods could not achieve (Bauer and Gaskell, 2000; Robson, 2011).

Chapter 3 also discusses secondary research methods, such as archival work and site observation. These secondary methods emerged as my research interviews

began. Initial interviews signalled a need to engage with the historical foundations of the physical spaces, but, just as importantly, the conceptual foundations, to a greater extent than originally imagined. Thus, these secondary methods fleshed out information gleaned from the primary method of interviews.

The chapter discusses the key methodological challenges of deconstructing the concept of green space. Notably, my fieldwork began about two years into a period of austerity in Britain, and the ramifications of this weighed heavily on respondents. Several respondents commented on how cuts to green space budgets and resources do not become apparent for at least several years after the cuts are imposed, thus, austerity's impact on urban green space was constantly being revealed during this research. Also during my fieldwork, a number of organisations, such as the Heritage Lottery Fund, published research and policy reports about the impacts of funding on Britain's green spaces (see HLF, 2014a). Thus, it could have been easy to focus primarily on the budget's effect on how urban green space is delivered and managed. Yet, this would not have elaborated on the idea of *what* it is that is being funded.

After Chapter 3 discusses the research and methodological design, **Chapter 4** provides more detail about the use of London as a case study. This contextual chapter introduces the three Inner London boroughs – Islington, Tower Hamlets and Wandsworth – selected as embedded units within the London case, providing specific data and detail about each borough.

Chapters 5, 6 and 7 present the results from my fieldwork. These empirical chapters connect the data I collected and analysed with theories regarding sustainable development, urban green space, green infrastructure, new institutionalism and path dependency to collectively address the influences on green space delivery and management in the 21st century. Evidence from Islington, Tower Hamlets and Wandsworth is woven throughout these chapters.

The first empirical chapter, **Chapter 5**, connects the delivery and management of contemporary urban green space with that of green space in the mid-1800s, when the Victorian-era concept of publicly funded, publicly accessible urban green space originated. Building on the concept of institutionalism, I demonstrate how the Victorian approach to urban green space created an enduring construction of the

form and function of these spaces. In doing so, the chapter demonstrates a path dependency of the conceptualisation of urban green space and lays out how the Victorians' obsession with the "idealised countryside" continues to influence how urban green space is delivered and managed today (Welch, 1991, p. 6).

The chapter is concerned with how the cultural and institutional emphasis on heritage has created an enduringly inflexible concept of green space. This oversized fixation on urban green space as a heritage asset limits these spaces from being managed to meet contemporary urban demands. While the recognition of urban green spaces as heritage assets is not revolutionary, this chapter seeks to show how far-reaching and embedded the influence of heritage is in the conceptualisation of urban green space, to the extent it overrides contemporary policies, grounded in sustainable development and green infrastructure, that promote using urban green space as a planning tool to address contemporary urban economic, environmental and social issues identified as urgent by policymakers and planners.

Moving on from the historical roots of urban green space, the next chapter, **Chapter 6**, is concerned with contemporary planning processes. The chapter analyses how green space is narrowly defined, despite research that shows approaching urban nature from a more strategic, interconnected and multifunctional perspective enhances the economically, environmentally and socially sustainable city. How local authorities and others involved in urban green space governance have built processes and policies, set standards and targets, and developed funding streams is critiqued to show how these contribute to holding urban green spaces frozen in time, hence limiting the work these spaces can do for the contemporary city.

Chapter 7, the final empirical chapter, addresses the paradox of discussing urban green space as essential to urban life, yet managing it as an optional, non-statutory amenity with inconsistent and vulnerable funding. The chapter then discusses the expanding green space governance that has resulted as local authorities are less able and willing to take on responsibility for these urban spaces. Governance is a broad concept and reaches from how local authorities are structured to how funding is organised and how urban change affects the institutional grip of history. At the same time that funding – including increasing demands on statutory services and budget cuts resulting from austerity – and a widening pool of actors involved in green space governance are occurring around green space, a heightened awareness of

the role urban green space plays in environmental issues, namely climate change, is taking place. Thus, Chapter 7 proposes that three issues – evolving environmental awareness, urban processes and churn, and funding and governance changes – may be causing history's tight grip on urban green space to loosen.

I present my conclusions in **Chapter 8.** This involves reviewing the empirical analysis from Chapters 5 through 7 in connection with the literature reviewed in Chapter 2 regarding urban green space, sustainable development, new institutionalism, path dependency and green infrastructure. In this chapter, I synthesise my arguments that, despite planning goals and policies that emphasise urban green spaces are critical to contemporary and future urban life, the conceptualisation of these public spaces remains rooted in the past. A powerful cultural and institutional preoccupation with heritage limits London's urban green spaces from providing the strategic connectivity and multifunctional infrastructure identified as essential for city living today and into the future (Thomas and Littlewood, 2010). That said, the thesis then concludes that changes in understanding of environmental processes, population, demographics and lifestyle, and funding and governance structures may have opened the door to reconceptualising London's urban green spaces.

This concluding chapter considers my arguments beyond London. Urban areas across the world wrestle with economic, environmental and social issues, including mitigating and reducing the impacts of climate change and enhancing quality of life for people who live and work in urban areas. Despite contextual variations in cities around the world, the London case provides insight and lessons beyond its boundaries. This is largely due to the global influence of the English park or garden. Indeed, the modern idea of public green space originated in the English "parks for people" movement that erupted from Victorian liberalism (Reeder, 2006a, p. 31). Thus, the Victorian conceptualisation of urban green space has been exported beyond Britain and, as such, the ideas, beliefs and concerns that influenced the movement in 19th-century England took root elsewhere and continue to influence other urban areas today.

Reviewing the challenges and limitations of the research design, I consider the lessons of this project for urban green space planning. In addition to revisiting the key arguments from the thesis, I also look to the future of urban green space delivery and management. Finally, reviewing this project's contribution to theories regarding

urban green space and green infrastructure, I present implications and opportunities for policy, practice and further research.

Ultimately, this thesis examines how urban green space is conceptualised and, given this, how green space relates, as a planning tool, to the dynamic, changing city. It asks the fundamental question of what we want our urban green spaces to be in a contemporary city. Are they time machines to the past, conceptualised as heritage assets? Or, are they vital pieces of modern urban infrastructure that grow and change with the city, now and into the future?

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CHAPTER 2 – LITERATURE REVIEW

This chapter discusses the academic debates that have proven foundational to this research regarding the tensions surrounding how urban green space is delivered and managed, particularly as cities – including London – continue to urbanise. This chapter also discusses the theoretical lens through which this research approaches the delivery and management of urban green space. This includes connecting how the historical provision of green space – including its purpose, use, look and value – connects with modern theories about the role of urban nature to influence how urban green space is conceptualised.

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"[Urban parks and green space] is a very rich subject, involving as it does social, economic and political history, recreation, landscape design, architecture, sculpture and the urban environment." – Hazel Conway, *People's parks: the design and development of Victorian parks in Britain* (1991, p. 1)

2.1. INTRODUCTION

It is a well-worn statement that more than half of the world's population now lives in urban areas (UNFPA, 2016). In Europe, this is 75 percent (Bertram and Rehdanz, 2015). This global urbanisation is predicted to rise to 68 percent – or more than two out of every three people on the planet – by 2050 (UNDESA, 2018). Given this rate of urbanisation, the focus on urban areas and life within them has become prominent. Urbanisation has led to concerns about the sustainability of cities (Andersson, 2006). This includes the economic, environmental and social sustainability, as well as the general liveability of and quality of life in cities.

2.2. THE GREEN CITY

Including urban green space throughout the city, particularly in the urban core, is a vital ingredient for the sustainable city (Chiesura, 2004; Jim, 2004; Pincetl and Gearin, 2005; Clark and Jauhiainen, 2006; Esbah and Deniz, 2007; Choumert and Salanié, 2008). Urban green space has become a key issue in urban planning and

urban policy, a result of increased consumption of green spaces, a focus on urban quality of life and a heightened awareness regarding the ecology of cities (Sandström, 2002; Clark and Jauhiainen, 2006; Baycan-Levent, Vreeker and Nijkamp, 2009; Rutt and Gulsrud, 2016;). Increasingly, cities are turning to green spaces to achieve sustainable growth, design liveable communities and combat the diseconomies of urbanisation (Erickson, 2006; Choumert and Salanié, 2008). In its "Greening the City" initiative, the UK Department of the Environment concluded that urban green spaces contribute to sustainability and are "not just a cosmetic afterthought" (1996, p. iii). Yet, the importance of urban green spaces to the sustainable city gets lost in the typical planning debate about land development, the built environment and urban form (Woolley, 2003; Erickson, 2006).

Urban green spaces provide positive environmental, social and economic benefits (Thompson, 2002; Swanwick, Dunnett and Woolley, 2003; Pincetl and Gearin, 2005). In the UK, the Urban Task Force – created to identify causes of urban decline and establish a vision for sustainable urban development – asserted that "parks and open spaces are among the most valued features of the places people live" (DETR, 2000, p. 4.38). Indeed, the literature says little negative about urban green spaces and provision of green space consistently ranks high among city residents. Like cities themselves, urban green spaces have experienced a resurgence, with increasing awareness about the critical environmental, social, economic and quality-of-life roles they play (Swanwick, Dunnett and Woolley, 2003; Pincetl and Gearin, 2005). The following sections elaborate on these roles.

2.2.1. Environmental benefits

As the population of cities continues to grow, urban areas display increasing signs of environmental stress and the negative effects of urbanisation (De Ridder et al., 2004; Andersson, 2006). Research shows that green spaces counteract issues of urbanisation (Rutt and Gulsrud, 2016). Urban green spaces mitigate the negative environmental impacts of urbanisation by providing critical environmental services, including: air and water purification; improvement of airflow; noise and wind filtration; cooling of increased temperatures from the heat-island effect; shading; sewage treatment; and maintaining biodiversity and habitat for urban wildlife and rare plant species (Dunnett and Woolley, 2003; Jim and Chen, 2003; Woolley, 2003; Chiesura, 2004; Swanwick, De Ridder et al., 2004; Choumert and Salanié, 2008). By providing

access to nature for city dwellers, urban green spaces also may alleviate pressure on rural open space and countryside (DoE, 1995).

A renewed interest in urban green space coincides with an increased awareness about climate change and cities' contributions to mitigating its effects, and the literature reflects the relationship between the two concepts. Green spaces are particularly important for mitigating impacts of climate change in dense urban areas, as they reduce carbon emissions and other harmful pollutants in the air, create cooler temperatures and reduce the amount of surface water runoff (Pincetl and Gearin, 2005; Gill et al., 2007; Rutt and Gulsrud, 2016). For example, Gill et al. (2007) demonstrated that increasing green space coverage by 10 percent in high-density residential areas and Greater Manchester's city centre held maximum surface temperatures at or below baseline levels, while reducing green space by 10 percent led to a 7-degree to 8.2-degree Celsius increase in surface temperatures. Gill et al. (2007) concluded that green spaces should be considered critical environmental capital within high-density areas and cautioned that once such essential green spaces are developed, recapturing their environmental contributions is difficult.

2.2.2. Social benefits

Urban green spaces also affect the social sustainability of cities (Swanwick, Dunnett and Woolley, 2003; Woolley, 2003; Chiesura, 2004; Clark and Jauhiainen, 2006). Social sustainability "is a nebulous term" and is "considered an umbrella term, encompassing a wide and diverse range of factors or dimensions," including social interaction and cohesion, community development, physical health and mental well-being, crime and safety, quality of life and sense of place, social equity, and education (Dempsey, 2013, p. 1089).

2.2.2.1. Social interaction and cohesion

The literature focuses on the role urban green spaces play in social interaction and inclusion, cultural identity and community development. Woolley argues that social benefits are the most obvious benefits of urban green spaces, enabling "*people* to do things, take part in events and activities or just to be" (2003, p. 9, emphasis original). Such social purposes are essential for cities' liveability, as "developing more sustainable cities is not just about improving the abiotic and biotic aspects of urban life, it is also about the social aspects of city life…" (Chiesura, 2004, p. 131).

Green spaces increase social integration and interaction by serving as meeting places and by bringing together local residents from a variety of cultures, ages, ethnicities and classes in both formal and informal gatherings (Thompson, 2002; Swanwick, Dunnett and Woolley, 2003; Woolley, 2003; Chiesura, 2004; Clark and Jauhiainen, 2006; Kaźmierczak, 2013; Rutt and Gulsrud, 2016). Social interactions occur more frequently in publicly accessible urban green spaces (Zhou and Rana, 2012). Clark and Jauhiainen argue that open, accessible green spaces are essential for local people to maintain cultural identity and build social ties (2006, p. 8). Parks and green spaces enable people to both initiate and reaffirm social ties (Kaźmierczak, 2013). Local residents often identify green spaces as the centre of their community (Dunnett, Swanwick and Woolley, 2002). Such spaces serve as "neutral ground" where a diverse range of uses – some of which are culturally affiliated – are "mutually tolerated" (Dunnett, Swanwick and Woolley, 2002, p. 83; Swanwick, Dunnett and Woolley, 2003, p. 103).

Figure 2.1 – **Social cohesion:** Building community ties and social cohesion is cited as a benefit of urban green space (source: author).

Contact with nature in cities can promote an increased sense of community and belonging, as well as support between neighbours and stronger social ties to the local neighbourhood (Eisenman, 2013). This contributes to pro-social behaviour and social justice and promotes tolerance by supporting the existence and interaction of a diverse, multicultural society (Baycan-Levent, Vreeker and Nijkamp, 2009; Eisenman, 2013). Ultimately, this can lead to a more cohesive community (DoE, 1996; Dempsey et al., 2011). As the Council of Europe maintained, "[open space] plays a significant role in the development of a community and in the creation of community pride and so helps reduce the inherent tension and conflict in deprived parts of urban areas" (1986, p. 3, 1.3). Urban green spaces also play a valuable role in child development – particularly green spaces found at or near schools – and provide educational opportunities for both children and adults (Swanwick, Dunnett and Woolley, 2003; Woolley, 2003). Many local authorities offer training schemes in their green spaces, such as part of urban regeneration efforts (Dunnett, Swanwick and Woolley, 2002).

Despite the positive social effects of urban green spaces, their social benefits and contribution s to the community have been largely limited and overlooked (Loukaitou-Sideris, 1995; Swanwick, Dunnett and Woolley, 2003; Clark and Jauhiainen, 2006; Kaźmierczak, 2013). This likely stems from difficulty in quantifying social impacts, which limits the explanatory capability of the literature. Further, Maas et al. found that the relationship between green space and social interactions "has more to do with the fact that green spaces can strengthen sense of community via place attachment and place identity of its residents, than with actual contacts with neighbours" (2009, p. 593). Urban green spaces remain more abundant in wealthier suburbs and outer boroughs than in the urban centre and, thus, they can reflect segregation within a city. Low-income and low-education neighbourhoods often have less access to urban green spaces, with the spatial distribution of green spaces disproportionately located near wealthier residents, "a classical environmental justice concern" (Choumert and Salanié, 2008; Rutt and Gulsrud, 2016, p. 124). Indeed, the availability of green spaces is worse in deprived areas than in affluent areas, giving minority groups less access to urban green space, even though "vulnerable or marginalized areas and people may be in greater need of the health benefits and ecological resilience provided by UGS" (CABE, 2010; Rutt and Gulsrud, 2016, p. 124). The green space that does exist in deprived neighbourhoods tends to be poorer quality (CABE, 2010).

As Section 2.2.3 elaborates, addressing green space poverty in deprived or poorer neighbourhoods can lead to an "urban green space paradox," where improved access to and quality of green space causes increased housing costs and gentrification, displacing the communities it was meant to benefit (Wolch, Byrne and Newell, 2014, p. 235). Green spaces also may be seen as "'belonging' to another group in the community" (Wolch, Byrne and Newell, 2014, p. 237). Yet, cities can use urban green space to address physical segregation. Boston's Big Dig project, for example, added 30 acres of open space – the Rose Kennedy Greenway – in the densely developed city centre after the elevated Interstate 93 was moved underground. The highway had served as a physical, visual and symbolic barrier, cutting off immigrant neighbourhoods from the rest of the city. Eliminating this barrier contributed to a more cohesive city and "knit together the urban fabric that was torn apart by the construction of the Central Artery in the 1950s" (Tajima, 2003, p. 643). In doing so, the new urban green space changed the social character of central Boston (Tajima, 2003).

2.2.2.2.   *Quality of life and well-being*

The contribution of urban green spaces to quality of life, especially in dense areas, frequently is discussed (McPherson, 1992). Quality of life is a subjective concept and can combine economic, environmental and social aspects. A city's quality of life is central to urban sustainability and improving quality of life is often a metropolitan policy objective (Van Herzele and Wiedemann, 2003; Chiesura, 2004). Chiesura cites quality-of-life measures, such as amount of public green space per inhabitant, as sustainability indicators, and notes that urban green spaces "are of a strategic importance for the quality of life of our increasingly urbanized society" (2004, p. 129).

Urban life, Kaplan states, "is rarely described as peaceful" (1984, p. 189). The negative aspects of living in urban areas – crowds, noise, congestion, pollution, lack of privacy – are widely known. Green spaces make cities more liveable, particularly as urbanisation continues (Chiesura, 2004; Pincetl and Gearin, 2005). By serving as an escape from hectic, crowded urban life, urban green spaces reduce stress, promote a sense of tranquillity, lead to better mental and physical health, offer recreational opportunities, improve overall well-being, and rejuvenate urban

Figure 2.2 – **Quiet contemplation:** Respondents cited quiet contemplation and other opportunities for escaping the stress of urban life as key benefits of London's urban green spaces (source: author).

residents (Bishop, Ye and Karadaglis, 2001; Chiesura, 2004; Esbah, Deniz and Cook, 2005; Choumert and Salanié, 2008).

One of the primary contributions urban green space makes to urban quality of life is providing a place to relax, unwind and destress. This then promotes positive psychological, mental health and well-being benefits (Thompson, 2002; Chiesura, 2004). The impact of access to nature on well-being is well-covered in empirical research (Van Herzele and Wiedemann, 2003; Chiesura, 2004; Gidlöf-Gunnarsson and Ohrsrom, 2007; Baycan-Levent, Vreeker and Nijkamp, 2009). For example, access to natural areas, such as parks, greenways, nature preserves and pocket parks, helps provide calmness and tranquillity (Kaplan, 1984). Throughout his career, Olmsted highlighted his belief "that in addition to physical health risks associated with industrial urbanization, city living can compromise mental health and social bonds" (Eisenman, 2013, p. 290). His solution was to provide urban green spaces woven throughout cities "to give the mind a suggestion of rest from the devouring eagerness and intellectual strife of town life" (Olmsted, 1871, p. 21).

Increasingly, a consensus exists "in theory and policy that open and green spaces are vital to urban life because of their significant contribution to urban dwellers' wellbeing" (Dempsey and Burton, 2012, p. 12). The high-density development found increasingly in urban areas often elicits a desire to be closer to nature (Thompson, 2002). Although the amount of green space within a city does not compare with the

amount in the countryside, visits to a small park or garden can be sufficient interaction with nature to help urban dwellers relax and experience tranquillity (Kaplan, 1984). Small green spaces "on people's doorstep" are vital to connecting urban dwellers with nature (Van Herzele and Wiedemann, 2003, p. 114). Chiesura found people living in urban areas have a strong need to "step away from the hectic rhythm of the city" and "the park constitutes a sort of 'oasis,' a refuge far from the traffic, the noise and the pollution of the city" (2004, p. 132-133). The tranquillity, coherence, and positive emotional and psychological well-being that result enhance quality of life, a key ingredient of sustainable development (Chiesura, 2004). Even the ecosystem services provided by urban green spaces boost well-being and are essential to making cities liveable (Andersson, 2006).

2.2.2.3. *Physical health*

The relationship between urban green spaces and physical health also is increasingly studied. Swanwick, Dunnett and Woolley (2003) contend that health-related benefits are among the most valuable benefits of urban green space. People living in urban areas are generally found to be less healthy than people living in rural areas (de Vries et al., 2003). People who live in neighbourhoods with access to urban green spaces report better health, as do those who use local parks frequently (Godbey et al., 1992; Maas et al., 2006). Indeed, as with mental well-being, regular contact with nature and green space has a positive effect on physical health (Barton, Hine and Pretty, 2009). Green spaces in urban settings provide a place for people to participate in sport and exercise and generally be active. More, Stevens and Allen contend that opportunities for recreation are the "primary on-site" benefit of urban green spaces, and policymakers and other decision makers continue to promote urban green spaces as key to a healthy urban lifestyle (1988, p. 140; Dunnett, Swanwick and Woolley, 2002; also see Baycan-Levent, Vreeker and Nijkamp, 2009).

In Britain, urban parks were originally developed to improve the health and well-being of urban residents, including reducing levels of plague and pestilence (Dunnett, Swanwick and Woolley, 2002; Woolley, 2003). More recently, the association between leisure activities and health has become a prominent issue in discussions regarding UK health policy and the costs of health care (Dunnett, Swanwick and Woolley, 2002). Cities and local communities also encourage healthy lifestyles by using urban green spaces, particularly allotments, to grow local foods, hold farmers' markets and reduce food miles (Dunnett, Swanwick and Woolley,

2002). Researchers have calculated the health benefits of urban green space in economic terms (Choumert and Salanié, 2008). Willis and Osman (2005) found that the proximity of urban green spaces lowers the proportion of sedentary individuals by 1 percent and can lead to £5.5 million in health-care savings related to coronary and heart disease in the UK each year.

Figure 2.3 – **Green gym:** The health benefits of green space has become an increasingly researched topic. In addition to providing space for organised sport, green spaces also provide opportunities for walking, running and use of green gyms, which local councils have increasingly provided (source: author).

Yet, the connection between urban green space and health is not fully understood. In one of the widest studies to date, Maas et al. (2006) examined more than 250,000 Dutch residents to identify the strength of the relationship between their proximity to urban green space and their perceived health. They determined that amount of green space near a person had a strong positive association with their perceived general health. Maas et al. contend that "green space is more than just a luxury, and the development of green space should therefore be allocated a more central position in spatial planning policy … especially in urban environments" (2006, p. 591). Similarly, Nielsen and Hansen (2007) found that distance to green space from

a person's home had an impact on obesity and stress. However, their research also showed that "the use of green areas cannot explain the effects of green areas on the health indicators" (2007, p. 849). They suggest that green infrastructure may have an impact on a neighbourhood's "general character," making the area "more or less conducive to outdoor activities and 'healthy' modes of travel in everyday life such as walking and bicycling" (2007, p. 849).

Some researchers have found little or no connection between access to green space and good health. Hillsdon et al. (2006) studied 4,732 middle-aged adults in Norwich, England, to examine the relationship between level of recreational physical activity and access to quality urban green spaces. They found no association, leading them to conclude that the evidence did not suggest "that any public health value of urban green spaces is based on their impact on population levels of physical activity" (Hillsdon et al., 2006, p. 1132). Yet, Hillsdon et al. (2006) maintain that a finding of a weak or inconsistent association between green spaces and health could be the result of variations and difficulty in defining and measuring urban green space, as well as other study limitations, such as lack of information about potential confounding variables. More research clearly is needed.

2.2.2.4. Crime and safety

Urban green spaces can contribute to a reduction in crime and, thus, an improvement in perceptions of safety (Kuo and Sullivan, 2001). Access to nature may lead to reduced crime and violence by reducing aggression (Baycan-Levent, Vreeker and Nijkamp, 2009). Mental fatigue, which is a predictor of aggression, is reduced for individuals living in green surroundings (Kuo and Sullivan, 2001). Green spaces also may diminish crime by providing a community space where local residents – particularly youth – can participate in sport, which is thought to reduce uncivil activities such as antisocial behaviour (Woolley, 2003). In addition, alternate activities, such as youth and adult educational programmes, take place in urban green spaces, providing an opportunity to interact with others while deterring criminal activity (Dunnett, Swanwick and Woolley, 2002). Urban green spaces, particularly those fitted with play equipment, offer safe play areas for children (Burgess, Harrison and Limb, 1988).

Kuo and Sullivan (2001) found the greener an area is, the less crime was reported. In research in inner-city green spaces, Kuo, Bacaicoa and Sullivan (1998) found the

Figure 2.4 – **Vandalism:** Crime, vandalism and antisocial behaviour are some of the negative aspects regarding parks mentioned in the literature. In some boroughs, the types of materials used, such as for benches, is based on antisocial behaviour (source: author).

presence of trees decreased a sense of safety because of the limited views, while trees in a well-maintained space increased a sense of safety. Still, urban green spaces have been associated with a fear of crime, especially youth crime (Burgess, Harrison and Limb, 1988; Kuo, Bacaicoa and Sullivan, 1998; Chiesura, 2004). A study in London found that fear of crime "is a common factor that deters people from using parks and green spaces" (GLA, 2003, p. 13). This fear can stem from the deserted feeling of the space, particularly for people who are alone; this is especially a concern for women (Burgess, Harrison and Limb, 1988; Chiesura, 2004). As such, vegetation is often removed because it is thought to hide criminal activity from view (Kuo and Sullivan, 2001). Kuo and Sullivan observe that this perception has long existed: "As early as 1285, the English King Edward I sought to reduce highway robbery by forcing property owners to clear highway edges of trees and shrubs" (2001, p. 344).

Vandalism also elicits increased insecurity, particularly in spaces not maintained well (Kuo, Bacaicoa and Sullivan, 1998; Chiesura, 2004). Dempsey, Brown and Bramley

(2012) observe that lack of maintenance can lead to increased antisocial behaviour and crime in green spaces. In some instances, people have expressed fear of racial attack, sexual violence and abduction of young children (Burgess, Harrison and Limb, 1988). Crime and violence in green spaces has a particular impact on urban dwellers:

> …the symbolism of the park as refuge or paradise is deeply embedded in our cultural histories and our psyche, and thus, crimes which take place in parks assume a shock value out of all proportion to the likelihood of such crimes on adjacent streets. We cling to the notion, perhaps subconsciously, that the park is a place of freedom and non-threatening nature, yet for many a park can also be a place of fear and anxiety (Thompson, 2002, p. 66).

2.2.3. Economic benefits

The economic impact of urban green space is a subject that, until recently, largely has been neglected in academic research (Dunnett, Swanwick and Woolley, 2002; Swanwick, Dunnett and Woolley, 2003; Woolley, 2003; Choumert and Salanié, 2008). This is rather ironic, given that many urban parks – including London's Victoria Park, Liverpool's Birkenhead Park and New York City's Central Park – were created, in large part, because proximity to green space was considered to raise nearby property values (Dunnett, Swanwick and Woolley, 2002; Woolley, 2003; Nicholls and Crompton, 2005a; Crompton, 2007). Indeed, in his proposals regarding development of farmland in what is now The Regent's Park, a royal park in London, architect John Nash remarked that "the preferred parts of London were those near to the parks," and he predicted the Crown would see a substantial return on its investment into the park (Anon., 2015, p. 16; also see Olsen, 1993).

A growing body of research on the economic impact of urban green spaces addresses issues such as impact on property values, city regeneration efforts, worker productivity, health care, environmental services, and attraction of investment, business and tourists (Chiesura, 2004; Sherer, 2006; Choumert and Salanié, 2008). Much of the existing research regarding the economic benefits relates to green spaces' impact on land and property values (Luttik, 2000; Tajima, 2003; Woolley, 2003). It is generally assumed that properties located near green space have increased values that reflect this proximity (Woolley, 2003). Crompton

has shown evidence of "the proximate principle," in which the value of an adjacent green space is capitalised into the price of a property (2007, p. 214). Indeed, "the real estate market has consistently demonstrated that many people are willing to pay a larger amount for property located close to parks than for a house that does not offer this amenity" (Crompton, 2007, p. 214).

The proximate principle was key to repositioning the expense of providing public green space as an investment rather than a cost and this, then, "resulted in parks becoming a standard component of the British urban infrastructure," as well as contributing to the growth of the concept of public urban parks across the world (Crompton, 2007, p. 231). In Chicago, for example, the value of land near the proposed West Chicago Park increased before the park was even built. After the park was laid out, adjacent housing plots became twice as expensive as plots slightly further away (Woolley, 2003). New York City's High Line Park is estimated to result in a net gain in tax revenue from residential real estate appreciation and incremental visitor spending of more than $1 billion over a 20-year period (Broder, 2012). In Castellón, Spain, Morancho (2003) observed that proximity to green space is more relevant to property values than the size of the nearest green area, implying the importance of having access to even small green spaces.

However, Crompton maintains that articulation of the proximate principle "has largely been forgotten in the context of urban parks" (2007, p. 232). What research does exist typically is location-specific and not readily transferable. For example, in Boston, home of the first public park in the United States, Tajima (2003) employed hedonic pricing to show the impact of proximity to parks on property values. Tajima concluded that people will pay higher prices to live near a park and, thus, "demand for a property apparently increases with the creation of a new park nearby" (2003, p. 651). Similarly, Nicholls and Crompton (2005a) used a hedonic-pricing approach to ascertain whether greenways had an impact on the sale prices of properties in three central city neighbourhoods in Austin, Texas, adjacent to the Barton Creek Greenbelt and Wilderness Park. Their research suggested that greenways contribute positively to sale prices. However, the results admittedly were not overwhelming.

The proximity of residential development to green space matters to cities because any increase in property values causes an enlarged property tax base and, thus, higher tax revenues (Chiesura, 2004; Nicholls and Crompton, 2005a; Choumert and

Salanié, 2008). This revenue, in turn, can lead indirectly to other public investment (Choumert and Salanié, 2008). Thus, cities can consider urban green spaces as economically valuable from an urban planning perspective (Nicholls and Crompton, 2005a). Because distance to the nearest park matters more than park size, Morancho (2003) says a policy that creates many small green spaces, as opposed to fewer, but larger, parks will be more successful at increasing property values and property tax revenues. However, such small green spaces remain more vulnerable to development. Yet, despite a recognition that green spaces add economic value to urban areas, these spaces fall victim to urban pressures, in part, because their economic value is not well-articulated to policymakers, who focus on the bottom line (McPherson, 1992; Luttik, 2000; James et al., 2009). Thus, when a development project on or near urban green space is considered, decision makers cannot compare the monetary value of the green space to the development project's economic value, including jobs created and increase to the tax base.

Determining the economic value of green spaces has proved challenging partly because they are typically public goods and, thus, no market price is established (Morancho, 2003; Tajima, 2003; Nicholls and Crompton, 2005a). Yet, without quantifiable benefits of green spaces, cities likely will not consider such spaces in urban areas as the highest and best use of land (Szulczewska and Kaliszuk, 2003; Nicholls and Crompton, 2005a). Still, some economic benefits are more readily quantified. For example, green spaces that include amenities, such as cafés, education courses, or field and equipment rental, can generate revenue and direct employment (Swanwick, Dunnett and Woolley, 2003). However, such revenues typically are not large, meaning the vast majority of the economic impact of green space goes unaccounted.

While an increasing tax base may economically benefit city coffers, increasing property values can create other problems. Tajima (2003) concluded that the increase in price of properties caused by creating a new 30-acre green space near the waterfront in Boston's city centre could negatively affect low-income minority groups because of increased rents and displacement. This illustrates how the economic aspect of urban green spaces is intricately intertwined with social equity.

The possible role that urban green space plays in interurban competition and local economic development efforts to attract businesses, workers and tourists has

become increasingly studied (Dunnett, Swanwick and Woolley, 2002). By enhancing quality of life for workers, urban green spaces can form a valuable part of business and talent attraction strategies (James et al., 2009). Being near recreational opportunities and open space is the primary reason smaller companies choose where to locate. For larger companies, quality of life for employees ranks only behind access to domestic markets and a skilled labour pool in locational decisions (Sherer, 2006; Choumert and Salamie, 2008). The presence of urban green spaces and the enhanced quality of life they offer can boost cities' competitiveness as they vie for skilled workers, investment and firms (Tajima, 2003; Clark and Jauhiainen, 2006; Baycan-Levent, Vreeker and Nijkamp, 2009; James et al., 2009; Rutt and Gulsrud, 2016).

Urban green spaces often play a role in efforts to enhance a city's image and in urban regeneration, as is the case with Queen Elizabeth Olympic Park in East London (Dunnett, Swanwick and Woolley, 2002; Chiesura, 2004; Choumert and Salanié, 2008). In "Greening the City: A Guide to Good Practice," the UK Department of the Environment (1996) identified economic benefits of urban green spaces, including stimulating inward investment, retaining and attracting businesses, and encouraging tourism by improving a city's image. However, Horwood expresses concern about focusing on the economic benefits of urban green space, which leads "to an implication that they are only of value insofar as they contribute economically" (2011, p. 972).

Perhaps the most difficult task in expressing the economic value of urban green spaces is quantifying their ecological functions, such as water and air filtration and reducing air pollution. While doing so can "make the case for urban sustainability more tangible," efforts to determine the value of natural services are still in early days (Chiesura, 2004; Nicholls and Crompton, 2005b; Pincetl and Gearin, 2005, p. 371). Better presenting the economic benefits of urban green spaces could aid policymakers when deliberating on planning issues and provide a counterargument when development threatens green space (Luttik, 2000). In recent years, the concept of natural capital accounting has become more robust, including in London, where such a method is seen to "help to inform and improve decision-making by framing public green spaces as economic assets, and highlighting the range and value of benefits that they provide" (GLA, 2017e). Expressing the benefits of urban

green space in monetary value could put green space "on a more equal standing with other capital investment options" (McPherson, 1992, p. 49; Luttik, 2000).

2.3. DENSE DEVELOPMENT

In addition to urban green space, another planning tool used in the name of the sustainable city promotes dense development, particularly in the urban core. Indeed, it is its location among dense development that makes *urban* green space differ from green space in general. The dense, urban context also contributes to challenges unique to urban green space. And, it is the urban setting that fosters opportunities for reconceptualising green space.

Growth-management movements and tools such as new urbanism, smart growth, compact city, urban growth boundaries and healthy community advocate for increased densities as a means for improving the environment and quality of life in cities (Breheny, 1995; Crookston, Clarke and Averley, 1996; Burton, 2000; Neuman, 2005; Tappert, Klöti and Drilling, 2018). Indeed, "one of the enduring themes behind the search for more sustainable urban forms is that of the density of development" (Jenks and Dempsey, 2005, p. 287). The compact city – as all urban containment policies are referred to here – can have a profound impact on the economic, environmental, social and physical form of a city (Breheny, 1995; Jenks, Burton and Williams, 1996; Holden and Norland, 2005). Some researchers go so far as to maintain that the compact city is the most sustainable form of development (Burton, Williams and Jenks, 1996).

The compact city fits well with the sustainability principle of "living within limits" (Burton, 2000; Wheeler, 2004, p. 39; Holden and Norland, 2005; Neuman, 2005). The main tenet of the compact city concept is high-density, mixed-use development located in the central city (Thomas and Cousins, 1996; Burton, 2000; Holden and Norland, 2005). Preserving land outside the urban area and slowing the pace of consumption of land are also critical drivers of compact city policies (O'Connell, 2008). Thus, characteristics of compact cities include high residential and employment density; multimodal transport, including public transportation, walking and cycling; mixed land use; high street connectivity and accessibility; contiguous development; increased social and economic interaction; and contained urban development (Thomas and Cousins, 1996; Burton, 2000; Holden and Norland, 2005;

Burchell et al., 1998 cited in Neuman, 2005). In England, an "unwavering desire to 'save' an idealized" countryside from urban sprawl influentially led to modern British town and country planning (Harrison and Clifford, 2016, p. 589).

Encouraging a compact city by increasing residential, commercial and employment density can conserve open space and undeveloped land; reduce the number of vehicle trips, vehicle miles and fuel emissions; decrease consumption of energy and water; spur demand for public transport; provide economic support for local businesses, especially in inner cities; increase social interaction; reduce crime; and create pedestrian- and bicycle-friendly communities that encourage a high quality of life (Breheny, 1995; Fulford, 1996; Thomas and Cousins, 1996; Burton, 2000; Wheeler, 2004; Neuman, 2005; Cheng, 2010; Dempsey, Brown and Bramley, 2012). By reducing transport needs, a compact city can lead to a decrease in the greenhouse gases that then contribute to global warming (Hillman, 1996). To Wheeler, who believes that the compact city is essential for meeting sustainable development goals, "stabilizing the outward growth of cities and suburbs – and in the process preserving agricultural land, wilderness, important natural habitat and species – is one of the most pressing challenges for sustainability planning" (2004, p. 66).

However, some urban researchers question the empirical research offered as evidence that compact development contributes to a sustainable city. Burton, Williams and Jenks (1996) note that proponents of the compact city claim that urban containment protects countryside and rural lands, as well as reduces harmful emissions by reducing vehicular travel. Yet, they observe, arguments against the compact city contend that it actually increases congestion, causes higher air and noise pollution, and reduces valuable green spaces. Neuman outlines the "compact city paradox" between urban desirability and suburban liveability (1995, pp. 15-16). Arguments for the sustainable city assert that highly concentrated population and development are critical, but for a city to be viewed as having the liveability and quality of life – which are sustainability indicators – that people want, low-density development is key. Indeed, for the British, "the lifestyle choice is still largely one of flight from the city to low-density suburbs and the country, but with some counter movement by small numbers back to large cities" (Jenks and Dempsey, 2005, p. 307). Dempsey pointedly asks, "Is the compact city a relevant concept in the predominantly urban twenty-first century?" (2010, p. 5).

To many, particularly North Americans, density "is a four-letter word" that conjures up "images of social housing, soulless apartment buildings and overcrowded conditions" (Wheeler, 2004, p. 190; Cheng, 2010). Jacobs, the premier advocate for city living, noted that promoting higher residential density was akin to being "regarded as lower than taking sides with the man-eating shark" (1961, p. 231). In the UK, "policymakers and practitioners have had a long-standing and complex relationship with density as a planning tool" (Dempsey, Brown and Bramley, 2012, p. 90). Perceived density – as opposed to actual density – is subjective and is influenced by sociocultural and individual cognitive factors (Wheeler, 2004; Cheng, 2010). Elements such as noise, crime and safety, traffic, and a lack of green and open space can affect people's perceptions of density much more than actual number of dwelling units or people per acre can (Wheeler, 2004). Crookston, Clarke and Averley further highlight cultural influences on preferences for density:

> The English (much more than the Scots and the Welsh) and the North Americans seem much less at ease with urban life than the French, Germans or Swiss, all of whom seem to be quite happy to know that the countryside is out there if they happen to want to use it, but are much less driven by a burning desire to live in it or something like it (1996, p. 135-136).

2.4. TENSION IN THE CITY

Although both urban green spaces and high-density central development provide opportunities to enhance the sustainability of cities, inherent tension exists between the two concepts (Beer, Delshammar and Schildwacht, 2003; Jim and Chen, 2003; Erickson, 2006). Despite policymakers' and planners' increasing use of policies that promote urban green space and policies that promote dense development, little research has been done into the impact the two concepts may have on each other (Jim and Chen, 2003; Clark and Jauhiainen, 2006). Little is known about why green space differs among cities and the impact of increasing urbanisation on green spaces is not fully understood (Fuller and Gaston, 2009). It stands to reason that the more people and buildings that exist in a compact space, the less undeveloped land, notably green spaces, can exist as well. Indeed, as housing densities increase, traditional urban green space is threatened (Beer, Delshammar and Schildwacht,

2003; Dempsey, Brown and Bramley, 2012; Haaland and van den Bosch, 2015). "Conflicting demands" result from pressure for more residential and commercial development and recognition that ecological environments are needed (Dempsey and Burton, 2012, p. 12). The European Commission notes that urban green space is as essential as buildings and physical infrastructure for urban life, yet green space is threatened by urbanisation and its accompanying densification (Sandström, 2002).

It was urban densification and the resulting unsanitary conditions in the 19th century that brought attention to the lack of green spaces in European cities (Clark and Jauhiainen, 2006; Dempsey, Brown and Bramley, 2012). In response, parks were built that became thought of as "essential 'breathing spaces' in an increasingly pathological city" (Clark and Jauhiainen, 2006, p. 17). Since then, the idea to wed compact cities with green space has come into vogue in planning circles a number of times (Clark and Jauhiainen, 2006). For example, Ebenzer Howard (1974) "pioneered consideration of the green dimension of urban forms" and his garden city is considered a "landmark in the green city movement" (Jim and Chen, 2003; Baycan-Levent, Vreeker and Nijkamp, 2009, p. 193). Howard's garden cities included both a compact urban city as well as generous amounts of green space, reflecting his concern with quality of life. Planning movements such as new urbanism and smart growth prescribe intertwining compact development and green space, as well.

The relationship between green space and population density is ambiguous and complex. Some urban researchers, policymakers and planners argue that increasing density in the city centre can improve conservation of green space (Beatley, 2000). However, the green space that is saved from development often lies outside of the urban core and, thus, does not have an effect on city residents' daily lives (Jim and Chen, 2003). Dempsey and Jenks (2010) question whether the compact city's pressure on green space affects physical and mental health. Providing green spaces in urban areas may actually foster demand for density, as living near green spaces coupled with reduced commuting costs can attract people to the city centre (Beer, Delshammar and Schildwacht, 2003; Erickson, 2006). This, in turn, improves a city's sustainability. A study of Leuven, Belgium, found that half of the families who moved from the city centre did so because of a lack of local urban green space (Beer, Delshammar and Schildwacht, 2003; Erickson, 2006). Similar research by Willaert (1999 cited in Beer, Delshammar and Schildwacht, 2003) showed that people were

Figure 2.5 – **Demand pressure:** Urban green spaces are more likely to face overuse and heightened pressure from demand than more rural spaces (source: author).

less likely to move from urban areas if green space was available near their residence. Thus, the presence of green space in the inner city may positively affect people's preferences for living in dense areas. Ultimately, determining whether the compact city is a green city needs more research (Dempsey and Jenks, 2010).

However, to provide high-density development, high-rise buildings and related infrastructure, such as roads, are built close to each other, inevitably resulting in little green and open space, as well as "a crowded cityscape" (Arnold and Gibbons, 1996; Jenks, Burton and Williams, 1996; Cheng, 2010, p. 15). Sandström finds that land used for roads and buildings has increased "at the expense of parks and other green spaces that are already in limited supply" (2002, p. 373). The compact city concept itself implies greater use of existing green space for development, as more infill development occurs (Knight, 1996; Sandström, 2002; Clark and Jauhiainen, 2006; Tappert, Klöti and Drilling, 2018). A study by the Greater London Authority found that "dwelling density is an inverse indicator of green spaces" (GLA Economics, 2003, p. 11). The study also identified a "trade-off between protecting and enhancing

London's green spaces while addressing the need for affordable housing" (GLA Economics, 2003, p. 2). As Jim and Chen observe, "The high-density development mode … often lacks greenspaces" (2003, p. 96). Thomas and Cousins caution that trade-offs between the compact city and urban green space should be weighed carefully when planning for the competitive, sustainable city: "What is to be gained from 'the stick' of increased densities, if there is no room for 'the carrot' of invigorating and ample public open space and amenities?" (1996, p. 60).

Densely developed cities typically have a high ratio of impervious-to-pervious surface coverage, resulting in conditions hostile to biodiversity (Arnold and Gibbons, 1996; Jim, 2004; Clark and Jauhiainen, 2006). Reducing space for trees and other greenery decreases the valuable environmental services green spaces provide, such as air purification and mitigation of the urban heat-island effect (Cheng, 2010). Compared to green spaces in lower-density developments, green spaces in dense urban areas face more stress, overuse, degradation and loss (Jim, 2004). Because of the high cost of land use in city centres, urban green spaces also tend to be isolated and unevenly distributed, limiting environmental benefits and connectivity, such as biodiversity or wildlife corridors; affecting social equality, such as through proximity and access; and highlighting economic issues, with green spaces located disproportionately in wealthy enclaves (Jim, 2004; also see Fainstein, 2010).

The use of private or gated gardens – more prevalent in wealthy neighbourhoods – privileges access to green spaces (see Kellett, 1982). Some critics argue that provision of green space is more equitable in low-density cities because such spaces are more abundant and more publicly accessible (Knight, 1996; also see Burton, 2000). A report on behalf of the London Planning Advisory Committee emphasises that public open and green spaces available for recreation and amenity purposes in London are unequally distributed between, as well as within, boroughs, partly because of history and geography (Atkins, 2000). Deprivation levels in London are often high in areas lacking in green spaces (GLA Economics, 2003). And, while green spaces may contribute to regeneration efforts by attracting businesses and increasing local housing demand, the success of doing so may force poorer residents out of the area (GLA Economics, 2003).

When discussing green spaces within highly dense cities, the tendency is to focus on formal green spaces (Chiesura, 2004; Jim, 2004). Formal green spaces, including

gardens and parks, receive more attention from local authorities and are, thus, well protected and managed (Jim, 2004). Indeed, when large green spaces are threatened by development, organisations rally to save them (Clark and Jauhiainen, 2006). However, "nature-at-the-doorstep" is often more valued by urban dwellers (Kaplan 1984, p. 189; Burgess, Harrison and Limb, 1988; Van Herzele and Wiedemann, 2003). Smaller, neighbourhood green spaces have a larger impact on residents' daily lives than more sizeable, but more distant, green spaces (Jim and Chen, 2003). Such smaller, semi-natural or natural informal spaces "cater to the daily needs for contact with nature" and play a more intimate role in city life (Jim and Chen, 2003, p. 103). Very small parks and even simply trees and flowers in small landscaped areas can provide opportunities for relaxation and physical and psychological escape from the crowded, hectic pace of urban life (Kaplan, 1984).

However, these informal spaces, whether "embedded within the city fabric or located at the fringe," are more vulnerable to development pressures as land use intensifies in the city centre and as the city expands its borders (Jim, 2004, p. 313). Small spaces also are less likely to be recorded or mapped by local authorities and, thus, unlikely to receive protection from development. Literature specifically addressing informal green spaces is lacking. Baines (1999) broaches this topic, noting value in gap sites, or those unmanaged sites that await development. Thompson (2002) is more direct in her approach to informal urban green spaces: "There is, more than ever, a recognition of the value of wild spaces, informal, loose-fit, sometimes messy places, that turn out often to be as valuable as the tidy and the formal." Dempsey, Brown and Bramley (2012) say using more wild landscapes in urban areas is a popular debate in landscape design. Little research exists on "changing ideas, policies and attitudes to green space," particularly compared to the volume of research regarding the financial relationship of cities, or even on other environmental aspects, such as pollution and sprawl (Clark and Jauhiainen, 2006, p. 5-6).

2.5. THEORETICAL APPROACH

As with many urban planning policies, the issue of providing green space in a densely developed city is complex. Although urban green space and dense development share a goal of achieving the sustainable city, successfully implementing both approaches is challenging and can lead to contradictory policies and planning decisions. As research indicates urbanisation will continue, what role,

then, does green space play in planning for the sustainable city? How is urban green space used as a planning tool for addressing challenges of urbanisation? What influences how contemporary urban green space is delivered and managed?

This research examines these questions through the lens of two theoretical approaches: new institutionalism and green infrastructure. New institutionalism provides a means to conceptualise how urban green spaces have been defined, delivered and managed from the past to present day. Green infrastructure, meanwhile, allows the means for examining the contemporary provision of urban green space, with a goal of using these spaces to have a significant impact on the future of cities. Together, these two theoretical approaches paint a picture of the functional breadth of urban green spaces, while shining light on the conceptual and structural limitations of green space.

2.5.1. New institutionalism

New institutionalism, which has become "a major stream" in political science, sociology and economics, draws variously from rational choice, historical and sociological approaches to examine how institutions affect individual and political behaviour (Bührs and Aplin, 1999, p. 318; Grubovic, 2004; also see March and Olsen, 1984, 1989; Lowndes, 1996). A new institutionalist approach is concerned with how institutions shape, mediate and channel social and economic choices (Powell and DiMaggio, 1991). Thus, new institutionalism offers a theoretical approach to examine how decisions regarding urban green space are made, and how variations across the political geography may result in variations in the shape of green space across jurisdictions, which is useful for this research, which studies three Inner London boroughs. Indeed, new institutionalism "is particularly well suited for comparative research, whether the institutional comparisons are cross-sectional or inter-temporal or whether they are between committees or constitutions" (Diermeier and Krehbiel, 2003, p. 124).

Institutions are the "rules of the game" (Clarke, 1995; Lowndes, 2001, p. 1958; Lowndes, 2005). They are the norms, customs, values and ways of doing things that influence and inform decision making and behaviour and dictate the objectives and range of acceptable tactics or moves (O'Riordan and Jordan, 1999; Lowndes, 2001; 2005; Steinmo, 2001). Institutions are "humanly devised constraints that shape human interaction" and provide "enduring rules for making decisions" (North, 1990,

p. 3; Baumgartner and Jones, 2002, p. 24). March and Olsen emphasise this durability, noting that an institution is "a relatively enduring collection of rules and organized practices, embedded in structures of meaning and resources that are relatively invariant in the face of turnover of individuals and relatively resilient to the idiosyncratic preferences and expectations of individuals and changing external circumstances" (2006, p. 3). Institutions "cut across the landscape of formal organisations and to the active processes by which individuals in social contexts construct their ways of thinking and acting" (Healey, 1999, p. 113). Institutions embody rules, take time to develop as actions become habitualised, are relatively stable, have a degree of permanence and are continually renegotiated (O'Riordan and Jordan, 1999). "Institutions shape the preferences and goals of the actors in the decision-making process and, by distributing power among the players, help shape the outcomes of this process" (Koelble, 1995, p. 236). As a collection of rules and routines, institutions offer a framework for every aspect of life (Lecours, 2005).

New institutionalists believe that institutions affect political behaviour and outcomes by influencing the normative expectations and political strategies adopted by individuals, groups and governments. While institutions constrain and restrict behaviour by outlining legal, moral and cultural parameters, institutions also provide guidelines that "support and empower activities and actors" (Scott, 2001, p. 50). Thus, institutions are critical in explaining how decisions are made (Koelble, 1995, p. 231). Indeed, Peters, echoing March and Olsen (1984), simply states: "Institutions do matter, and they matter more than anything else that could be used to explain political decisions" (1999, p. 150).

This is a key departure from traditional institutionalism, which considered material structures, such as constitutions, parliaments and local authorities, as institutions (Lecours, 2005, p. 6). In the past, institutionalism focused primarily on formal processes, structures and interactions to explain how decisions were made and policies were implemented. However, this traditional institutionalist perspective fell out of favour in the 1970s because it was too rigid, resulting in what critics called "unpalatably formalistic and old-fashioned" and an "institutional straightjacket" (Lowndes, 2001, p. 1955; Drewry, 1996, p. 191 cited in March and Olsen, 2006, p. 5). Focus on formal institutions, processes and laws was "relatively insensitive" to those determinants of political behaviour that were not of a political nature and, thus, to any non-political foundations of governmental institutions (Macridis, 1963, p. 47

cited in March and Olsen, 2006, p. 5). Ultimately, traditional institutionalists were too quick to accept "that power resides in the town hall … and nowhere else" (Saunders, 1979 cited in Lowndes, 2001, p. 1955).

New institutionalism, on the other hand, looks beyond "the town hall." Unlike traditional institutionalism, new institutionalism is not so rigidly focused on formal structures. Instead, new institutionalists emphasise informal conventions as an explanation of how decisions are made, policies are developed and plans are implemented (Lowndes, 2001, p. 1958; Lowndes, 2005). Institutions are "not understood as an organization as such, but as an established way of addressing certain social issues" (Healey, 1999, p. 113). The purpose is "to penetrate the formal surface of governmental institutions and describe and explain how politics 'really works'" (Eulau and March, 1969, p. 16 cited in March and Olsen, 2006). With new institutionalism, informal institutions have as much – if not more – influence on decision making as formal institutions do. Ultimately, new institutional analysis asks: "How are the behaviour of political actors and their collective choices influenced by incentives and constraints?" (Diermier and Krehble, 2005, p. 127).

Thus, new institutionalism offers a solid approach for examining how decisions regarding the provision of urban green space are influenced by institutions that provide incentives (the economic, environmental, social and quality-of-life benefits of green space, for example) and constraints (demand for dense housing, socioeconomic conditions and local resident campaigns to protect green spaces from development, for example). New institutionalism provides a lens to study how conventions and cultures affect decisions regarding green space, particularly given the constraints of the priorities of neoliberal economic competitiveness and a more compact urban form. A new institutionalist approach, then, provides a foundation for establishing a theory that seeks to understand the relationships among institutions, behaviour and decision making, and outcomes (Diermier and Krehble, 2005).

Instead of focusing on rigid, formal structures of local authorities, new institutionalism enables a researcher to look to customs, informal links and enduring, habitualised human actions to determine how decisions are made (O'Riordan and Jordan, 1999). By focusing on informal links, a researcher can look beyond the "core executive" involved in the policymaking process to understand how decisions are made (Richards and Smith, 2002, p. 2; Grubvoic, 2004). New institutionalism provides a

valuable, relevant perspective, as global economic and social changes have caused the organisational landscape of local decision making to become increasingly fragmented with a broadened pool of actors (Clarke, 1995; Raco, 1999; Lowndes, 2001). Indeed, as green space budgets are cut, the reliance on user groups, charities and private partners to play a role in managing, maintaining and making decisions about urban green space increases (Mathers, Dempsey and Molin, 2015). With a new institutionalism approach, one could expect to find that a complex, varying web of relationships, history, power and values is manifested in institutions that then influence the shape of development and green space. A decision about green space may officially be made by a local authority, but the path to that decision is shaped by a multifaceted web of institutions.

Institutions influence not just the supply of information, but also how that information is interpreted and prioritised. Thus, institutions play a role in agenda- or priority-setting. Local authorities, like most decision-making bodies, have a constant bombardment of information about a horde of issues directed at them, and this information is of "varying uncertainty and bias" (Jones and Baumgartner, 2005, p. viii). Even information produced from within a local authority is subjected to institutional influences, meaning "organizational cultures can yield one-sided estimates" (Jones and Baumgartner, 2005, p. viii). How decision makers filter this information and how they allocate their attention to specific topics – such as green space provision or residential development – is influenced by institutions (Jones and Baumgartner, 2005). Indeed, "paying attention to problems prioritizes them" (Jones and Baumgartner, 2005, p. 10). Therefore, institutions influence the level of attention paid to a particular issue, such as urban green space, and the level of attention is then reflected in a local authority's policy agenda.

Cities and local authorities face "considerable institutional difficulties" as they attempt to balance the needs to compete to attract investment, provide housing and improve their environmental performance to meet sustainability goals (Satterthwaite, 1997, p. 1669). O'Connell suggests that institutional change already is occurring, as the adoption of smart growth policies means that "it is no longer the case that the supporters of unfettered growth and land development inevitably get their way" (2008, p. 1369). Institutions also are important in the study of urban green space because they embody value. Indeed, values are central to institutional theory (Selznick, 1996). Institutions are "the vehicle through which the basic purposes and

values a society wishes to pursue through local government are carried out. It is, thus, presumed that institutions matter – that political and policy outcomes will differ as institutional structure differs" (Wolman, 1995, p. 135). Institutions apply to "socialised ways of looking at the world as shaped by communication, culturally ascribed values, and patterns of status and association" (O'Riordan and Jordan, 1999, p. 81). These institutions greatly influence decisions about what ultimately gets provided on the ground. Wolman observes:

> Theories of democratic government, including those of local democratic government, are embedded in institutions designed to carry out these values. By institutions and institutional structure I mean not only the internal structure of local government (that is, its council, its executive arrangements, its departments and bureaux and their relationship to each other, the nature of the electoral system, etc.), but also informal norms, roles, relationships and operating practices that are so stable, structured and accepted that they can be said to be 'institutionalized' (1995, p. 135).

As established in Section 2.4, the concept of a city endowed with urban green spaces and the compact city concept can conflict despite both supporting work towards urban sustainability. This reflects inherent tensions within the planning profession (Campbell, 1996). These tensions are embedded in institutions. Planners work within a borough's institutional incentives and constraints while wrestling with "the divergent priorities of planning" (Campbell, 1996, p. 296). Yet, the planning profession itself can influence institutions. Campbell maintains that planners must "promote creative technical, architectural and institutional solutions" to conflicts surrounding the economy, the environment and the equity of a city (1996, p. 305). Thus, analysing if, and how, institutions matter in the delivery of urban green space directly relates to the role of the planner.

2.5.1.1. *Path dependency*

From new institutionalism the framework of path dependency has emerged. Path dependency argues that "once established, some institutions tend to become increasingly difficult to change over time, and so small choices early on can have significant long-term impacts" (Sorensen, 2015, p. 21). It is the institutions that are path dependent. Kay adds to this, observing that "the order in which things happen

affects how they happen; the trajectory of change up to a certain point *constrains* the trajectory after that point" (2005, p. 553, emphasis original). Essentially, path dependency captures the idea that "policy decisions accumulate over time; a process of accretion can occur in a policy area that restricts options for future policy-makers" (Kay, 205, p. 558). Yet, path dependency "is not the functional equivalent of historical determinism" (Wilsford, 1994, p. 253). Indeed, North clarifies that path dependency does not imply no choice exists: "At every step along the way there are choices – political and economic – that provide … real alternatives. Path dependence is a way to narrow conceptually the choice set and link decision-making through time. It is not a story of inevitability in which the past neatly predicts the future" (1990, pp. 98-99).

Sorensen (2015) discusses two ways in which path dependency can change. One, critical junctures, comes when "major changes are triggered primarily by exogenous forces, and new institutional arrangements and new developmental pathways are created" (2015, p. 25). New institutions are established at these critical junctures. Wilsford builds on this, noting that "occasional windows of exceptional opportunity, or conjunctures," can lead to change (1994, p. 252). Greener, however, is a reluctant follower of Wilsford's conjunctures argument, as it "seems to place an excessive burden onto fate; we have a kind of historical determinism in place until a number of contingencies happen to come together to allow us to change" (2002, p. 615). A second, more common way for path dependency to change involves incremental and endogenous change (Sorensen, 2015). Here, "a majority of institutional change may in fact occur through gradual change processes which may nonetheless be transformative over time" (Sorensen, 2015, p. 28). Wilsford acknowledges "policy movement is most likely to be incremental" (1994, p. 252).

Recent planning and urban geography research has found that path-dependent processes are important for the study of urban infrastructure systems (Sorensen, 2015). Sorensen finds that "there is no doubt that many urban institutions show signs of path dependence and that the positive feedback effects that generate it are pervasive in cities," (2015, p. 19). Still, applying path dependency to planning studies is a new theoretical approach. Stead, De Vries and Tasan-Kok note gaps in the relevant literature and find that "whether and how events and decisions in the past have shaped the system of planning and patterns of spatial development that can

be observed today" is a fundamental question that needs to be examined (2015, p. 2128). In other words, how does history matter for planning?

2.5.2. Green infrastructure

Another theoretical approach for examining how cities attempt to combine urban green space and urban sustainable development, while accommodating the compact city, is green infrastructure. Broadly, green infrastructure means "an interconnected network of green space that conserves natural ecosystem values and functions and provides associated benefits to human populations" (Benedict and McMahon, 2002, p. 12). Definitions usually include private green spaces, yet research typically focuses on green infrastructure in the public realm.

As with urban green space, green infrastructure is credited with a laundry list of environmental, social and economic benefits, notably reducing greenhouse gas emissions and mitigating climate change (Mell, 2008; Wright, 2011). Other benefits of green infrastructure include improving air and water quality; reducing flooding risk; protecting habitat and biodiversity; improving physical health and mental well-being and reducing associated costs; increasing tourism; increasing land and property values; attracting firms, talent and investment; increasing employment and labour productivity; reducing costs from natural disasters; and enhancing social cohesion and a sense of community (Kambites and Owen, 2006; Gill et al., 2007; Wright, 2011). The breadth of the concept of green infrastructure results from the variety of disciplines it draws from, including landscape ecology, human geography and planning (Mell, 2008).

The concept of green infrastructure did not "come out of nowhere" (Thomas, 2010 cited in Wright, 2011, p. 1004). Wright observes that the concept's evolution "is far from linear" and a number of narratives have been attached to the concept of green infrastructure throughout its history, including Victorian parks (2011, p. 1004). Frederick Law Olmsted, who designed New York City's Central Park and Boston's Emerald Necklace, believed in parks' and green spaces' role in green infrastructure: "No single park would provide people with all the beneficial influences of nature" (Olmsted, n.d. cited in McMahon, 2000, p. 4). In 1996, Rosenberg "sought to redefine the public park as an extension of urban infrastructure" (Matthews, Lo and Byrne, 2015, p. 156). Yet, it wasn't until the past 20 years that the concept of green infrastructure began to gain prominence in urban planning research and practice.

More specifically, Wright (2011) cites growth in the use of the concept in academic literature since the beginning of the 21st century. In policy, green infrastructure went "from a reference in planning policy to the basis of emerging national policy" in just two years (2008-10) in England (Wright, 2011, p. 1005). Eisenman observes that "over the past decade, green infrastructure has emerged as a topic of significant interest in urban and regional planning" (2013, p. 1), while Lennon characterises the concept's rise on the planning agenda as "meteoric" (2015, p. 958).

Most research related to green infrastructure has come out of the US, where work focus on an ecocentric approach (Kambites and Owen, 2006; Lennon, 2015). The work of Benedict and McMahon (2002; 2006) has been influential in forwarding a
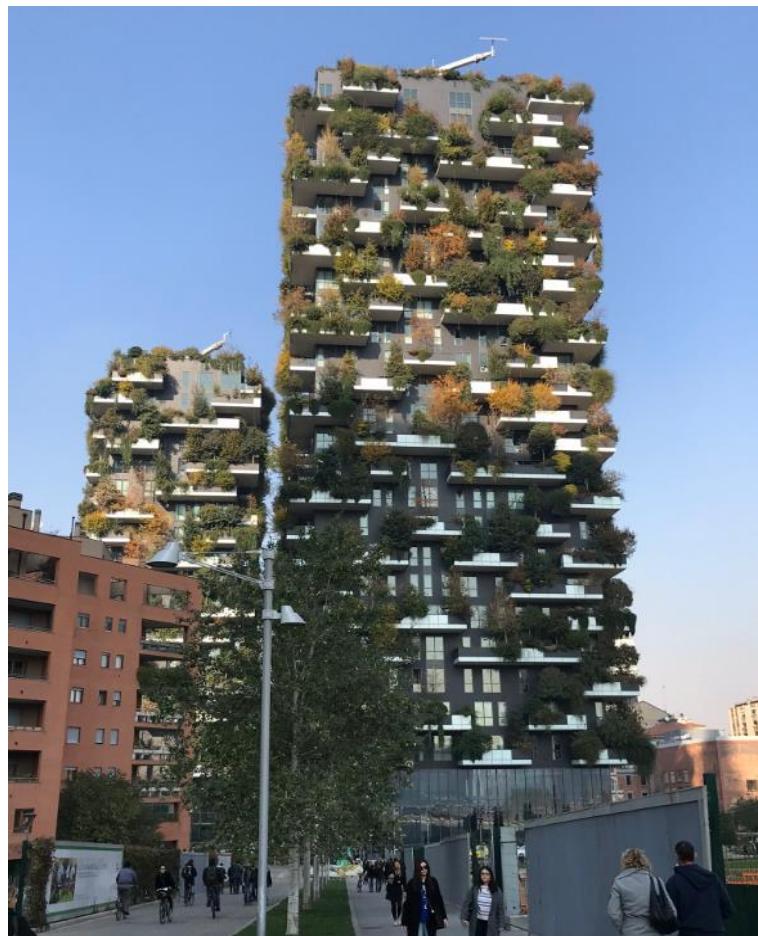
Figure 2.6 – **Vertical forest:** In Milan, Bosco Verticale, which means "vertical forest," consists of two residential towers in the city centre. The development includes 900 trees, 5,000 shrubs and 11,000 perennials. Designed to mitigate smog and produce oxygen, this green infrastructure also moderates temperatures in the building and mitigates noise (source: author).

green infrastructure agenda. Yet, Lennon says in North America, "GI is not so much a design concept as it is 'a philosophy or organizational agenda strategy that provides a framework for planning conservation and development'" with the aim of advancing more sustainable forms of growth (Benedict and McMahon, 2006, p. 15 cited in Lennon, 2015, p. 960).

Although Kambites and Owen (2006) say a form of green infrastructure planning began in Britain in the 1970s, with new towns such as Warrington and Milton Keynes, green infrastructure gained traction in the UK at the start of the 21st century as central government focused on urban areas. This includes the work of the Urban Task Force and the Department of the Environment, Transport and the Regions (Mell, 2008). These organisations proposed a strategic network of green infrastructure "as a method of providing wider access to green spaces and allowing a greater proportion of the public to benefit from them" (Mell, 2008, p. 70). In the UK, the focus has tended more towards social concerns (Kambites and Owen, 2006). Yet, green infrastructure

Figure 2.7 – **Green roof:** Green roofs, such as this one in Birmingham, can provide opportunities for quiet reflection, biodiversity and food growing, among other benefits (source: author).

also is viewed as a means for balancing ecocentric approaches with more anthropocentric approaches to urban planning (Kambites and Owen, 2006).

Mell claims that, like Olmsted's work, Ebenezer Howard's garden-city designs "were fundamental to the development of green infrastructure thinking" (2008, p. 71). The connection they both made between green spaces' form and function and the resulting landscape multifunctionality in urban areas are fundamental themes in green infrastructure today (Mell, 2008; also see CABE, 2010). Indeed, Olmsted designed Boston's famed Emerald Necklace in response to flooding from the Charles River by linking several urban parks to a flood-defense fen system (Mell, 2008). Further, Olmsted was concerned with the expansion of cities and believed in the need to strategically plan for growth and development, a philosophy Eisenman calls "one of Olmsted's greatest contributions" (2013, p. 299). While similarities between Olmsted's and Howard's approaches to urban green space exist, Howard's use of green space in his garden-city designs primarily served as a way to contain urban growth while protecting the countryside from further encroachment from development (Mell, 2008). Howard intended for each city's green spaces to sustain the city's residents. Olmsted, on the other hand, saw urban green space as connecting urban areas and the suburban and rural spaces between them (Eisenman, 2013).

Like the concept of green space, no cohesive definition of green infrastructure exists (Benedict and McMahon, 2006; Wright, 2011). Indeed, Lennon notes that "much of the academic literature on GI frequently allots considerable attention to a discussion on how to define what GI means" (2015, p. 959). Mell finds that "the actual definitions of green infrastructure vary significantly depending on the focus of the document and the work of the researchers who compiled it" (2008, p. 73). Similarly, Wright says "different interests attach different environmental, social and economic meanings" to green infrastructure (2011, p. 1004). Some argue that the ambiguity allows disparate interests to use a common language to find common ground (Kambites and Owen, 2006; Wright, 2011).

Although "a settled definition of GI is hard to come by," most definitions include the themes of connectivity (including networks), multifunctionality and green (Kambites and Owen, 2006; Thomas and Littlewood, 2010, p. 210; Wright, 2011, p. 1007; Lennon, 2015; Norton et al., 2015). Connectivity is "an inherent attribute of green

infrastructure" and should inform all phases of planning for green infrastructure (Kambites and Owen, 2006, p. 490). Kambites and Owen (2006) break down the types of connectivity involved in green space planning to include spatial connectivity, connectivity between ecological and social functions, human use connectivity, administrative connectivity, and connectivity across various departments within a local authority.

A defining aspect of green infrastructure theory is that planning for urban greening occurs at the beginning of development, similar to planning for grey infrastructure, such as transportation and utility networks, thus enabling green infrastructure planning to serve "as an organizing framework for urban form and growth" (Eisenman, 2013, p. 288). McMahon notes that "the concept of green infrastructure represents a dramatic shift in the way local and state governments think about green space" (2000, p. 4). This conceptual departure from typical green- or open-space planning stems from putting green space on par with other "physical urban elements, to be protected, managed and restored in concert with or before land development" (Eisenman, 2013, p. 288). Indeed, Olmsted considered networks of open space "critical scaffolding in urban plans," never viewing a park as "an ornamental addition," but rather an essential piece of the urban fabric "and a force for future growth on several levels: geographic, economic, social and cultural" (Zaitzevsky, 1982, p. 51 cited in Eisenman, 2013, p. 298, 298-299).

Thus, the key distinguishing characteristic between urban green spaces and green infrastructure is the latter is considered essential "critical scaffolding," while the former is "a cosmetic afterthought" (UKDoE, 1996, p. iii; Eisenman, 2013, p. 298). By design, the concept of green infrastructure is meant to overcome the notion that green spaces are solely "a community amenity, an extra, even a frill" and instead are as essential to the planning and sustainability of a city as grey and social infrastructure are (McMahon, 2000, p. 4). Instead of thinking about green space in a site-specific way, green infrastructure theory maintains that green space "should be planned and developed as an integrated system" (McMahon, 2000, p. 4; Mell, 2008).

A theme that urban green spaces have not been considered essential in planning and development emerges through green infrastructure theory. Wright says "the branding of the ideas of connectivity, multifunctionality and 'green' as 'green infrastructure' has been explained as an attempt to shift the concept from something

that is an 'amenity' to something that is a 'necessity'" (2011, p. 1010). Rosenberg argues that "conceptually, the emphasis on nature as a system breaks down the false dichotomy of city and nature that was deeply embedded in the nineteenth century thought" from which the public park movement began (1996, p. 89). Similarly, Lennon notes that describing green spaces as multifunctional reframes these spaces from "doing nothing to doing something" (2015, p. 964). Thomas and Littlewood concur:

> Infrastructure implies something essential to city living, more so than concepts of amenity, implies a systemic understanding of interconnected elements rather than isolated spaces and suggests, according to Benedict and McMahon (2001), a set of assets that must be actively managed and maintained rather than left entirely to 'natural' processes' (2010, p. 210).

Indeed, the mere use of the word "infrastructure" implies "something you have to have," which Lennon says "gives greater weight to the consideration of a broad spectrum of green space issues in planning policy formulation" (2015, p. 964, 966). Urban green space needs an "upgrade" so it is considered to have the same importance as other urban infrastructure, such as roadways and buildings: "only then would urban planners widen their attention to the manifold functions of urban green space" (Sandström, 2002, p. 380). Simply using the term "green infrastructure" raised the profile of urban green space by shifting perceptions that undeveloped land was not doing work for the city (Lennon, 2015). "GI is increasingly being adopted as the dominant way to frame urban green space activity" (Horwood, 2011, p. 972). Lennon (2015) found green infrastructure is intricately associated with green spaces:

> … by virtue of the word 'green,' the term GI was increasingly seen to encompass a broad spectrum of issues associated with green space that were perceived as neglected in planning policy. Thus, GI was employed as a linguistic device facilitating the reconceptualization of broadly conceived green spaces from residual areas to locations providing crucial services to society (2015, p. 965).

Like roadway or utility systems, green infrastructure is strategic, going beyond administrative, stakeholder and other boundaries, as well as having a time frame

that extends well into the future (Kambites and Owen, 2006). Similar to the way cities and regions work with long-term transportation plans, they should consider a green infrastructure plan as a long-term plan for conservation (McMahon, 2000). Green infrastructure planning is considered more complex than conventional open space planning (Kambites and Owen, 2006). Increasing the natural vegetation in a city through urban greening, or green infrastructure, can address the long-term causes of global warming, but, Norton et al. note, "widespread implementation of green infrastructure is required" to significantly reduce the urban heat-island effect (2015, p. 128). Because of the relatively recent focus on green infrastructure, research into the long-term impacts of elements of green infrastructure is lacking (Hostetler, Allen and Meurk, 2011).

Yet, despite the ambitious theoretical agenda for green infrastructure, in practice the impact is less clear, with the concept greeted more sceptically. Green infrastructure research "is not well integrated with urban design and planning, which contributes to the lack of guidance on how best to implement" urban green infrastructure (Norton et al., 2015, p. 128). Indeed, the level of "take-up" of green infrastructure by urban planners "is low" (Norton et al., 2015, p. 136). "The impression created is that GI is the policy vehicle through which current demands on green spaces are most likely to be resolved, but there is no clarity as to how this will be achieved in strategic terms" (Thomas and Littlewood, 2010, p. 218). Dempsey and Jenks, connecting green infrastructure to the compact city concept, say how such an urban containment policy "might provide and support a connected network of green spaces is as yet unclear" (2010, p. 120).

Little debate about the implications of incorporating the concept of green infrastructure into standard planning practice has occurred in the literature, with "critical deliberation on GI conspicuous by its absence" (Kambites and Owen, 2006; Lennon, 2015, p. 958). Indeed, Lennon observes "with rare exceptions," the academic and practitioner literature about green infrastructure in the UK is more concerned with promoting its benefits than critically appraising the concept (2015, p. 963). Lennon elaborates:

> While considerable effort is expended on advocating the benefits of GI, vagueness as to what it signifies is evident in much UK practitioner literature, government-sponsored advocacy and national

planning policy. Such ambiguity is compounded by the propensity of many of the concept's UK advocates to label celebrated historic planning publications as GI, or to classify selected planning programmes from other countries as GI even though such programmes are not normally referred to as such by those engaged in their formulation and implementation. This has increased latitude for interpretation of the term, with, for example, some studies employing 'GI' to primarily describe planning for environmentally sensitive access to green open spaces in urban areas, while others largely interpreting it as a means to facilitate regional economic development, and yet others endorsing it principally in the context of climate change adaptation (2015, p. 962).

Wright cites a Royal Town Planning Institute green infrastructure conference held in Leeds in 2010 as significant because, despite attending such events in the past, "planning practitioners remained confused about what 'green infrastructure' is or is not," with differing visions of green infrastructure given in each presentation (2011, p. 1003). The ambiguity of green infrastructure makes planning practitioners uncomfortable and leads them to believe it is a "corruptible concept" (Wright, 2011, p. 1003). A disconnect exists between the theoretical discussions surrounding green infrastructure in academic literature, which focuses on the environment, and policy and practice, which focus on socioeconomic issues related to green infrastructure (Wright, 2011). Indeed, use of the word "infrastructure" has made the concept more amenable to socioeconomic interests and, therefore, it has become more popular in planning policy (Wright, 2011).

Some argue that green infrastructure is simply the latest effort to address larger debates on balancing environmental concerns with development in land-use planning policy (Lennon, 2015). Thomas and Littlewood posit that green infrastructure is a form of "ecological modernization" that provides a means of "lubricating the frictions found between economic development and environment-oriented strategies" (2010, p. 212). They argue that efforts to define green infrastructure emphasise economic benefits and, because "contested concepts are inherently political," those with more political power likely have more influence over how the concept of green infrastructure is interpreted and implemented in policy (Wright, 2011, p. 1010). Indeed, Wright says "on the surface, green infrastructure

appears to benefit everyone; however, it may benefit socioeconomic interests more than environmental in practice" (2011, p. 1011). Further, economic interests "carry significant weight for the implementation of green infrastructure, especially in uncertain economic conditions when the state must facilitate economic growth and meet housing pressure" (Wright, 2011, p. 1011).

Planners, meanwhile, view green infrastructure as a wider, more palatable concept that addresses a range of issues they "have struggled in getting buy-in for at an individual topic by topic level" (Lennon, 2015, p. 964). Incorporating green infrastructure into planning policies and strategies allows planners to address green space issues "without challenging the orientation of a planning system focused on development facilitation" (Lennon, 2015, p. 968). Much like the concept of sustainable development, green infrastructure's breadth and accessibility to so many disciplines risks diluting its effectiveness. Indeed, Wright says the ambiguity of the concept of green infrastructure has made it a "contested concept" (2011, p. 1004). Green infrastructure is portrayed as a "win-win or 'no regrets' solution" (European Commission, 2012, p. 1 cited in Lennon, 2015, p. 961).

Green infrastructure policy may mirror planning debates regarding the meaning of sustainable development, "wherein 'any attempt to define the concept precisely …. would have the effect of excluding those whose views were not expressed in that definition'" (Robinson, 2004, p. 374 cited in Lennon, 2015, p. 971). Wright, who argues in favour of ambiguity, acknowledges that "sustainable development has been heavily criticised because of its ambiguity and 'green infrastructure' is in danger of heading for a similar fate" (2011, p. 1015).

The varying and breadth of definitions also reflect a rush to capitalise on the concept of green infrastructure (Wright, 2011). Thomas and Littlewood maintain that the "relatively weak policy discourses around nature and environment are looking for 'strong' policy discourses to 'hitch' to so they can gain greater strategic purchase and better access to funding opportunities" (2010, p. 212). Further, England's planning system aims for sustainable development, in which economic growth competitiveness "gets higher priority than environmental protection or social goals" (Thomas and Littlewood, 2010, p. 206). Wright discusses the "apparent contestation between desirable environmental outcomes and the necessity to satisfy those able to invest in green infrastructure on the ground" (2011, p. 1009).

Given the relative newness of the concept in UK planning, Mell concludes "discussions as to what green infrastructure actually means is an ongoing process of negotiation between researchers and practitioners placing their thoughts and hierarchal views onto the concept" (2008, pp. 73-74). Wright agrees, arguing that resisting the term green infrastructure because of its ambiguity is "problematic because the concept is evolving, divided and gravitating toward socioeconomic centres" (2011, p. 1004). Indeed, Mell concludes that "the future of green infrastructure is still somewhat uncertain" (2008, p. 75). In particular, he highlights scepticism that green infrastructure can truly be embedded in planning policy. Kambites and Owen question "whether green infrastructure planning will be just a fleeting fashion" (2006, p. 483). Yet, Wright connects the evolving concept of green infrastructure with England's planning system being "now explicitly concerned with climate change," noting that green infrastructure increasingly includes "more technical environmental services, such as stormwater management and flood alleviation" (2011, p. 1008).

2.6. CONCLUSION

To combat the negative impacts of urbanisation, cities adopt policies to conserve, deliver and manage publicly accessible urban green spaces. This chapter discusses the growing body of research regarding how urban green space contributes to economic, environmental and social sustainability, and quality of life. Research is largely positive about the role that green space plays in urban areas, with few downsides, particularly that are not related to management of a green space rather than the existence of the space itself. At the same time, as urbanisation continues, even areas that are already highly urban, such as London, adopt policies that encourage high-density development, also in the name of the sustainable city. Yet, such compact city policies are not problem-free.

Despite the parallel objectives of urban sustainability and mitigation and adaptation of climate change, planning policies that promote the green city and those that promote the compact city often conflict. In spite of the recognised benefits of urban green space, particularly in increasingly urbanised, dense contexts, conflicts and tensions exist in how green space is provided. In particular, "urban growth, by altering cities and the surrounding countryside, presents numerous challenges for

the maintenance of urban green space, and consequently also for human health and well-being" (Tzoulas et al., 2007, p. 168).

This chapter outlines two theoretical approaches for examining what influences decisions about urban green space delivery and management. New institutionalism provides a theory for understanding how we arrived at the present situation with green space by looking back, namely to when the concept of publicly accessible urban green space was introduced, and unpacking the influence this historical perspective retains today. Here, path dependency, which flows from institutionalism, provides a relevant framework.

A more recent theoretical framework, green infrastructure, allows us to look forward from today and think about how urban green space can be reconceptualised to better meet the demands of the 21st century and beyond. It does this by introducing a strategic, interconnected and multifunctional way of thinking about green space, challenging planners, developers and others to consider green infrastructure as central to development as the bricks and mortar are. Doing so involves a change in how urban green space is perceived, which as new institutionalism explains, is a challenge given that the processes, policies, funding, governance and ways of thinking about green space have had nearly two centuries to become embedded. Thus, while providing green spaces within "a heavily built-up milieu" is often portrayed as a policy goal everyone can support, the delivery and management of urban green space is deceptively complex and needs more attention and research (Jim and Chen, 2003, p. 96). That is the focus of this thesis.

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CHAPTER 3 – METHODOLOGY

This chapter discusses the research methods used to collect and analyse the data used to answer the research questions posed in this thesis. The chapter begins by explaining the genesis and evolution of the research questions as well as the role of the researcher. Next, this chapter discusses methods and sources for data collection as well as challenges faced during fieldwork. Following this is a discussion about analysing the data that, ultimately, led to the findings and arguments in this thesis. An introduction to London as a case study and a discussion regarding the quantitative methods used for selecting the boroughs of Islington, Tower Hamlets and Wandsworth as embedded units within that case study follow. The chapter concludes with a discussion of ethics.

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"It is desirable to identify the key [urban green space] issues requiring research to develop evidence on which to base decisions and to present these in a way that is accessible to academics, practitioners and decision-makers." – James et al., Towards an integrated understanding of green space in the European built environment. *Urban Forestry and Urban Greening* (2009, p. 66)

3.1. INTRODUCTION
3.1.1. Evolution of the research questions

My research questions were borne from my interest in how decision makers attempt to balance critical housing and development needs with provision of green spaces in urban areas. As shown in Chapter 2 (Literature), tensions between land development and land conservation are becoming increasingly acute as the world continues to grow increasingly urbanised. Thus, my initial research question focused on development density and the implications for green space of increasing density.

Yet, as I began reviewing literature, I found myself questioning how the concept of "urban green space" was used. I realised I needed to take a step back and examine what the concept of urban green space means – one cannot understand how density

affects provision of urban green space without first understanding what urban green space actually is. The urban setting presents a host of challenges, as well as opportunities, for both development and urban nature that differ from those in rural and suburban areas or areas at the urban fringe. Thus, to me, the richer question became focused on how *urban* green space is conceptualised, what influences this conceptualisation and whether this conceptualisation had changed as cities themselves experience constant churn and change.

3.1.2. Role of the researcher

According to Robson, "issues of bias and rigour are present in all research involving people" (2011, p. 157). I am not immune to this. Like other researchers, I am examining my thesis topic through the filter of my experience. Qualitative researchers should acknowledge any biases, expectations and experiences to qualify their ability to conduct the research (Greenbank, 2003). As a postgraduate student in the late 1990s, I researched public lands policy in the United States, primarily regarding the National Park System. I also worked as a policy analyst for The Wilderness Society, a national nonprofit organisation that advocates for federally designated wilderness areas in the US. While both experiences centred on large, non-urban natural areas, they have overlapping interests with the provision of nature in an urban setting. Thus, I bring with me relevant experience and knowledge of general public land-use and land-conservation principles. My role as a researcher, while not entirely etic, was not emic, either, as I am not an insider.

While this thesis discusses non-human topics such as green space, the research questions I seek to answer and the methodology I employ involve people and their perspectives, interpretations and decisions. Although my research methods do not require the level of sustained interaction with people that a method such as ethnography would, I am, nonetheless, establishing some level of relationship with interview respondents. Most researchers acknowledge that the "actual choice of a research project and the kind of research questions asked involve value judgments. A topic is chosen because it is more worthwhile than another" (Robson, 2011, p. 209). To me, identifying and understanding the influences on delivering and managing green space in urban areas is indeed worthwhile, as these influences contribute to shaping cities today, as well as into the future.

3.2. DATA COLLECTION

3.2.1. Qualitative research methods

Urban green space is not delivered and managed in a vacuum, but instead is "influenced by a larger milieu" involving economic, environmental, social and political conditions at multiple levels (Galleta, 2013, p. 11). Thus, the research methods I use must be capable of capturing this complexity. Although a mixed-method approach is used, the methodology employed in this project is predominantly qualitative. Qualitative research is widely used in the social sciences (Bauer and Gaskell, 2000; Robson, 2011). Qualitative methods enable a researcher to focus on meanings and examine contexts and allow a depth and level of detail not as easily achieved by quantitative methods (Bauer and Gaskell, 2000; Robson, 2011). Meanings and context are particularly relevant for this research, as I am interested in understanding perceptions and attitudes across administrative and professional boundaries. Research into attitudes, beliefs and opinions can shed light on how these tendencies influence decisions and actions (Black, 1999). Qualitative research should be rigorous, reliable and valid from the data collection phase through the data analysis phase of a research project (Bauer and Gaskell, 2000; Robson, 2011). This is essential if research is going to expand existing research and contribute to theory, key objectives of a doctoral thesis.

I conducted my field research between June 2013 and December 2015. Field research "is best for studying nuances and attitudes and for examining social processes over time" (Andranovich and Riposa, 2013, p. 80). Data collection in the field focuses on roles, responsibilities, relationships, encounters, hidden meanings and practices. Field research "allows the researcher to experience the field context and, thereby, gain depth in understanding" (Andranovich and Riposa, 1993, p. 80).

Data for this thesis primarily comes from in-depth, semi-structured interviews. This is complemented by data derived from secondary methods, including archival research, document collection, direct site observation, attendance at local and regional policy and planning meetings, and analysis of statistical data. A researcher must consider all research methods "before settling on your method of choice in conducting a new social science study" (Yin, 2014, p. 23). A variety of additional methods could be used to investigate influences on the delivery and management of publicly accessible green space in urban areas. For example, green space users may exert influence through their use patterns and demands or by pressuring local

councillors and local authority officers. Data from users could be collected using focus groups or surveys. Quantitative methods could be used to research whether green spaces influence property values or result in fiscal savings related to improved physical and mental health. While these are valid and relevant research methods, they do not address the specific research issue I am investigating as well as the methods used here do. Further, this is a thesis with limitations in time and scope. Tempting as it is, I cannot pursue an overly broad range of green space issues. More is not always better when developing the research design for a single doctoral thesis.

The following subsections elaborate on specific qualitative data collection methods I used, as well as any challenges or limitations experienced during my fieldwork.

3.2.1.1.   *Semi-structured interviews*

To examine the multifaceted and complex influences on how urban green space is delivered and managed, I needed to understand the perspective and reasoning of the people involved in decision making, management and maintenance of these spaces. I wanted respondents to share their thoughts, opinions and experiences in open responses (Longhurst, 2010). The research method that best fits this goal is in-depth, semi-structured interviews, a versatile method commonly used in social science research (Longhurst, 2010; Robson, 2011).

Although the semi-structured interview is often "underestimated" as a research method in the social sciences, interviews enable the researcher to obtain deep and complex data (Galleta, 2013, p. 191). Semi-structured interviews use "both open-ended and more theoretically driven questions, eliciting data grounded in the experience of the participant as well as data guided by existing constructs in the particular discipline within which one is conducting research" (Galleta, 2013, p. 45). The in-depth, semi-structured interview is "a flexible and adaptable way of finding things out" (Robson, 2011, p. 280; also see Gaskell, 2000). Interviews take a "conversational, fluid form," with each interview differing based on the interests and experiences of the respondent (Valentine, 2005, p. 111). The open-ended questions used in this research method create space where respondents can tell their own story and relate their experiences (Longhurst, 2010; Galleta, 2013). Because I wanted information as seen through the lens of each respondent's experience and perspective, interviews provided an optimal research method.

I conducted all but two interviews in person, as face-to-face interviews allow researchers to observe non-verbal cues and gestures and enable them to probe or follow up on complex issues and unexpected leads (Andranovich and Riposa, 1993; Galleta, 2013). Having conversations in person also allows the researcher to "take advantage of serendipitous points as they emerge" (Andranovich and Riposa, 1993, p. 80). Additionally, meeting in person helped build rapport and enabled respondents to use and refer to plans, photographs, maps and other documents during interviews. For example, respondent 18 (strategy officer, Tower Hamlets) brought Tower Hamlet's Core Strategy – the council's primary strategic planning document – to the interview and referred to it often, including using maps in the document and reading particular passages from it. Likewise, respondent 45 (landscape architect, national charity) referred to architectural renderings during the interview, which added clarity to the respondent's points.

3.2.1.1.1. Topic guide

While semi-structured interviews are informal and conversational, they do use a topic guide or question list that outlines the main subjects to cover during the interview (Longhurst, 2010). A topic guide also may provide standard wording for questions, which should invite the respondent to elaborate on responses. Indeed, "the questions are almost an invitation to the respondent to talk at length, in their own terms, and with time to reflect" (Gaskell, 2000, p. 45). While a topic guide is essential to semi-structured interviews, such interviews also call for flexibility and, thus, the guide can be modified "based on the flow of the interview" (Longhurst, 2010; Robson, 2011, p. 280). Indeed, King and Horrocks observe that "flexibility is a key requirement of qualitative interviewing" (2010, p. 35).

Because the role and affiliated organisation of each respondent varied, I created a topic guide and questions that easily could be modified to fit with each respondent's specific responsibilities. My interview guide was a framework of topics to cover along with suggested questions, not a list of questions I had to rigidly adhere to, thus I could modify the wording, or add or omit questions if needed (Kvale, 1996). Further, because the interviews were semi-structured, respondents had wider latitude to venture down unexpected paths. This open-ended approach provided a fruitful way to develop a clearer idea of respondents' perspectives and highlighted differences or commonalities among respondents. This also allowed respondents to talk more about particular green space and development issues that were, in their opinion,

important influences on and relevant to urban green space delivery and management. My topic and question guide is included as Appendix 1.

I identified interview participants based on my research question and the three boroughs – Islington, Tower Hamlets and Wandsworth – within the case study (see Section 3.3). I categorised respondents into three general groups: local authority and other government officers; developers, registered social landlords and consultants; and representatives from charities and nonprofit organisations, including user groups and "friends of the park" organisations. In total, I interviewed 50 respondents. Table 3.1 breaks down the respondents by category.

Table 3.1 – Respondents by category

Category of organisation	Number of respondents
Local authorities	20
Planning officers	6
Green space officers	12
Housing and strategy officers	2
Regional government	2
Central government	1
Developers, registered social landlords & consultants	5
Nonprofit organisations/ charities/user groups	22
Green space organisations	6
User/friends groups	9
Heritage organisations	4
Planning organisations	2
Sport organisations	1
Total respondents	**50**

I identified respondents in several ways. I started with local authority and other public-sector staff, as talking with this group could coincide with reviewing relevant planning and policy documents (see Section 3.2.1.2), thus enabling me to immerse my research in the public sector perspective all at once. Formal decision-making authority and funding decisions regarding urban green space delivery and management in London predominantly lie with local authorities, so it was practical to start my interviews with this group.

Initially, I cold-called or -emailed council officers whose job descriptions or job titles – which I found online or in council documents – indicated they worked in an area involving green space planning or management. Cold calling is a common method of selecting and recruiting interview participants (Longhurst, 2010). While the organisational structure of each local authority differed, these respondents worked in the following functional areas: planning and development, including strategic planning; recreation, leisure and cultural services, including parks and green space management and maintenance; biodiversity; sustainability; housing; and policy. I selected respondents who had comparable job responsibilities in each of the three councils, regardless of their job titles. This helped with concerns about cherry-picking participants. Also, a common, but mistaken, critique of using interviewing as a method is that a representative sample is essential (Valentine, 2005). Valentine emphasises that the "fluid and individual nature of conversational-style interviews means that they can never be replicated, only corroborated by similar studies or complementary techniques" (2005, p. 111).

Respondents from other government organisations included staff from the Greater London Authority (GLA). Although the GLA has no statutory or official responsibilities for green space, London's regional government drafts policies regarding planning, development and green space that local authorities take as guidance. The GLA publishes the London Plan, the spatial development strategy for London that sets out a framework for development in the capital, including a chapter on green infrastructure, first published in 2017. The GLA also supports green space delivery and management, such as through a community fund available to local authorities to fund pocket parks (GLA, 2013).

Following respondents from governmental organisations, I identified respondents from the private sector, including home developers and builders, and registered social landlords. I included representatives from this group because, during my literature review, preliminary background research and initial interviews with local council officers, the growing responsibility of developers in providing publicly accessible green and open space became more apparent. Similar to my method for public sector staff, I initially contacted developers through cold-calling.

The third group comprised charities and not-for-profit organisations. This includes user groups based in a particular borough or neighbourhood or associated with a

specific park or green space. Other organisations are not tied to a specific site or borough, but rather work with London-wide green spaces or are concerned with specific green space issues, such as recreation or biodiversity. Similar to how I contacted respondents from the public sector, I recruited respondents in this category by first identifying relevant organisations. Several of these organisations are statutory consultees on planning proposals. Others are long-established organisations that actively address urban green space issues. The snowball method was useful, as well. And, particularly for user groups (namely, park "friends" groups), I asked the local council for a list, then randomly selected groups to contact.

After interviews, respondents often suggested additional organisations or people I should contact. If a respondent did not offer others to contact, I would ask if they had such suggestions. This kind of "insider assistance" or "snowballing" has advantages (King and Horrocks, 2010, p. 31). For instance, contacting potential respondents based on a mutual contact is more likely to elicit a response than a cold call (King and Horrocks, 2010). Some respondents suggested organisations I had not considered. Additionally, the people or organisations a respondent suggested I contact provided insight into who the respondent felt had influence over urban green space delivery and management.

However, disadvantages to the snowballing method exist. The most significant is that the insider may cherry-pick contacts more likely to hold a view similar to theirs (King and Horrocks, 2010). Yet, given that local council officers, developers, user groups and charities have different motivations regarding green space and, thus, at times disagree on planning and development issues, I felt bias would not be a concern for getting contacts this way. Further, in many instances, the contact a respondent suggested was not the person I ultimately interviewed, but rather simply an "in" to an organisation.

3.2.1.1.3.   Challenges and limitations to using interviews

Although interviews provide an opportunity to gather rich and deep information, there are concerns to note. An interview is not a neutral interaction and exchange of information. Respondents may misrepresent themselves intentionally, such as by saying what they think the interviewer wants to hear, or unintentionally, such as by behaving differently in practice versus how they believe they do (Gaskell, 2000). I

also felt concern that respondents, particularly council staff, would not tell me how they honestly felt, but rather, give me the company line.

My interviews took place amidst a period of austerity, and many councils' green space staff had experienced deep budget cuts and redundancies. This seemed to cause some respondents to be defensive when talking about their job responsibilities or quick to defend how their role added value to green space delivery and management. At the start of some interviews, I felt as though the respondent reacted as if I was an investigative reporter writing an expose. Thus, building trust and establishing a non-threatening environment was critical to getting respondents to open up (Gaskell, 2000). An interviewer also must rely on the respondent's account, which could be viewed through a distorted lens, and the respondent may omit or forget to include details (Gaskell, 2000). Yet, this was not necessarily a negative to me, as a "distorted lens" could imply the respondent interpreted policies, planning proposals and other information differently, but no less validly.

One challenge I encountered during interviews was gaining access, particularly to developers and home builders that worked in the boroughs included in this project. Gaining access can often be a problem associated with conducting interviews and can vary considerably (King and Horrocks, 2010; Galleta, 2013). As with local council staff, my first step was to cold call builders and developers working in one or more of the three boroughs where I conducted my research. This method proved difficult, as most of the people I contacted either said they did not have time to meet or simply did not reply to my calls or emails. Thus, asking respondents from local councils to provide contacts was especially useful for this group. However, difficulty with access spanned all groups of respondents. Respondent 11 (senior staff, national charity), told me he originally planned to ignore my requests for an interview, but had a change of heart after his daughter, who was a postgraduate student at the time, explained to him how frustrating it can be for student researchers to gain access.

Similarly, I encountered issues with consistent access to elected officials. Originally, I planned to include local councillors as respondents, but after contacting several in each borough, I received no responses. I was concerned that more aggressively pursuing contact would result in councillors in one borough agreeing to an interview, while councillors in another borough would not, meaning that I had not met with comparable representatives across the three councils. This is one area that I would

have liked to pursue further, if time limitations had allowed. Another challenge I faced with local council staff was ensuring I interviewed people with comparable job descriptions and responsibilities across the three boroughs. Because local councils are structured differently, officers across the three did not have the exact same titles or job responsibilities.

A challenge particular to the subject of my research and the timing of it had to do with staff turnover and redundancies. As mentioned above, my data collection occurred during a period of austerity. Non-statutory, or discretionary, functions within local councils, notably the provision and maintenance of green space, experienced cuts to budgets and resources, including in the three boroughs where I conducted my research (Centre for London, 2018). Over the time frame I conducted my fieldwork, several respondents or contacts at local councils were made redundant or retired. The tone for this was set with the first interview I scheduled, with the green space manager in one of the local authorities. By the time the interview date arrived, the green space manager had been made redundant and I ended up interviewing a staff member who had been assigned many of the former manager's responsibilities only a few days earlier.

Another challenge, faced by most interviewers, is that as I conducted more interviews, themes emerged. I became more aware of these themes in subsequent interviews and, thus, the temptation to be more attentive to these topics existed (Galleta, 2013). Galleta warns that focusing an interview on themes that have already emerged from other interviews can "dull your sensitivity to what is said *and* not said during the interview. It also may slant your questioning in pursuit of confirming evidence" (2013, p. 77, emphasis original). Yet, "not only is it permissible to change your guide in the course of your study, it is generally advisable. … insights you gain in the process of carrying out your first few interviews should inform subsequent ones" (King and Horrocks, 2010, pp. 37-38). To resist any temptation to stray too far from the research questions, I referred closely to the themes in the topic guide. This was useful for keeping interviews on track, particularly because I included suggested wording for each question and category of respondent. Still, I let respondents go where they wanted with their comments, as semi-structured interviews allow.

Interest in and support of urban green space was evident among residents, with the number of user groups – or "friends" groups – growing over the past decade (respondent 32, senior staff, national charity). In some instances, a single green space has more than one user group associated with it. Thus, I could have cast a much wider net and interviewed a seemingly endless number of people and organisations. Yet, given the limitations on time, I restricted the people I interviewed to those most likely to offer information on my specific research question. I also had to accept that I could not feasibly interview every group. By the time I completed my interviews, I reached a saturation point, with no significantly different issues or information emerging from additional interviews. Guest et al. (2006) found that, when using interviews as a qualitative research method, saturation occurs within the first 12 interviews, and often as early as six interviews. As noted, I interviewed 50 respondents.

Sections 3.2.1.2 through 3.2.2 detail the secondary methods I used to complement the data collected through semi-structured interviews. Although this thesis relies primarily on interviews, these secondary methods supplement the interviews and add a layer of richness to the data collected.

3.2.1.2. Document collection

Document collection can show how discourses or practices have emerged or shifted over time, which proved beneficial for a concept such as urban green space that has evolved as cities have grown larger and more concerned with environmental sustainability (Silverman, 2004). Unlike interviews, documents are unobtrusive and non-reactive, meaning that "the document is not affected by the fact that you are using it" (Robson, 2011, p. 349).

Reviewing documents can provide contextualisation and can help frame data from other sources, such as interviews. The types of documents used included planning applications, officers' reports and decision notices; strategic plans or similar documents that outline local authority objectives, goals and priorities; organisations' reports, such as not-for-profit or charity organisational reports pertaining to a specific green space or a particular issue; photographs; minutes from meetings; and websites. Reviewing these documents enabled me to further my understanding of how each local council approaches urban green space delivery and management and how it structures or organises green space-related responsibilities. For example,

decision notices and officer or committee reports indicate green space-related conditions a council imposes on planning consent, which signals the uses or purposes a council prioritises in its green spaces.

Document collection is not without its challenges, though. For example, selection of documents is a concern (Robson, 2011). This includes concerns about cherry-picking documents as well as the accessibility of documents, particularly those held by private-sector organisations. The meanings of documents can be misinterpreted in a different context. And, there is limited ability to account for audience reception issues (Silverman, 2004). Similarly, documents may be limited or incomplete and may not reflect biases that actually exist (Robson, 2011).

Another challenge was that, because the National Planning Policy Framework had recently been adopted when I began my research, its impact on local planning was still in the early stages. As a result, the councils had planning documents and policies that either had not been updated or were in a period of flux during my data-collection stage. Councils that were updating their planning documents to incorporate the new national policy were at different stages of this process. This made it challenging to compare documents across the three jurisdictions. Still, all local councils have planning policy documents that govern how they interpret and implement national planning policies and apply local policies. Thus, each council had planning-related documents to review.

3.2.1.3. *Archival research*

Archival materials include a variety of documents, such as newspaper clippings, meeting minutes, professional and personal journals, maps and photographs. These materials can serve as a historical record of events and conversations, including public discourse and debates (Galleta, 2013). Archival data can "inform the development of other data-collection instruments" (Galleta, 2013, p. 25). Indeed, the primary purpose of my archival review was to complement data collected using other methods.

My original research design did not include archival documents. After I began conducting interviews and reviewing council documents, such as green space management plans, the theme of heritage emerged. As it became increasingly apparent that this would be an important issue in my thesis, I had to research

historical aspects more than I had expected. Thus, I relied on historical journal articles, books, meeting minutes, planning and policy documents, maps, and photographs to complement data collected from interviews. For example, maps of original green space layouts provided more history about park and green space development in the boroughs. Comparing an original Victorian or Edwardian green space layout with contemporary layouts of the same spaces enabled me to see any changes that had occurred over time. When a respondent discussed preserving the original layout of a space, I, thus, could visualise this.

I conducted archival research at the Guildhall Library, a public reference library located in the City of London that specialises in the history of London. Each local council had archival resources as well, including the Islington Local History Centre, Tower Hamlets Local History Library and Archives, and the Wandsworth Heritage Service. Some respondents shared historic documents during interviews, as well.

3.2.1.4. *Direct observation*

Another research method used in support of my primary method was direct observation. For this thesis, I was not observing people, but rather places – green spaces themselves. Direct observation is a useful complement to other research methods (Robson, 2011). For example, directly observing a site can help the researcher identify discrepancies between what a respondent describes and what exists (Robson, 2011). This method proved particularly beneficial when conducted during or directly after an interview. First, it enabled me to develop a better understanding of what people I interviewed meant when they used terms such as "dense," "quality," "access" or even "green." For example, respondent 39 (green space staff, Tower Hamlets), in describing a new residential development that included a component of new publicly accessible green space, discussed the space's "keep out" feel, which deterred public use. After the interview, I directly observed this space myself and this gave me a clearer picture of what respondent 39 meant. It replaced images I formed during the interview with an actual visual, thus eliminating any ambiguity. This contributed to a richer understanding of the issues I just had discussed with the respondent.

Several of my interviews took place completely or partly in green space, giving me an immediate illustration of issues respondents discussed. For example, I met respondent 42 (member, user's group) in an Islington green space, where the

respondent pointed out specific issues the user group had with the council's management of local green space, such as granting planning permission for adjacent development. Again, this provided a clear and immediate contextual understanding of the respondent's points.

Second, direct observation offered an opportunity to visualise how the concept of green space might differ across local authorities. For example, when respondents in Islington discussed managing the borough's largest green spaces, I could compare these spaces with the largest spaces in the other two boroughs because I had directly observed the sites and, thus, did not have to rely solely on respondents' descriptions. For example, with the largest space in Wandsworth being eight times bigger than the largest space in Islington, observing this drove home the differences between the two boroughs. Directly observing these spaces provided an added level of meaning to my interviews.

3.2.1.5.   *Attendance at meetings*

Attending meetings held by organisations involved in delivering and managing London's urban green spaces contributed to my understanding of urban green space and the challenges, opportunities and pressures green space managers and users face – or perceive they face. I did not participate in meetings – my only engagement with participants during meetings occurred during introductions at the start of a meeting. Other than stating my name and noting I am a doctoral researcher, I simply listened to the discussions and debates to further my understanding of current issues that people involved with London's green spaces feel are important. I attended seven meetings, which were conducted by user groups, charities, and local and regional government.

An example of how attending meetings contributed to my research involves the issue of cycling, which was discussed at all but one meeting. In one instance, the person leading a user's group meeting began the meeting by announcing that cycling would not be discussed during the meeting because the group's previous experiences with the issue had been divisive and unproductive. From this example, and debates at other meetings, I learned that the issue of whether to permit cycling in green spaces is contentious, with some meeting participants advocating banning cycling in green spaces completely. Park police officers attending some of the meetings discussed tension between cyclists and other green space users, further highlighting how

contentious the issue is in some areas. Hearing these discussions and debates first-hand illustrated the complexity of an issue like cycling in a way that discussing it in a one-on-one interview could not.

The issue of cycling is a relevant example for my research because it is encouraged by policymakers, including the mayor of London, the GLA and some Inner London local authorities, as a sustainable mode of urban transport. Cycling fits well with the GLA's and local councils' objectives of improving environmental sustainability, reducing the negative impacts, such as pollution and poor air quality, caused by vehicular traffic, particularly in Inner London, and encouraging residents to be more physically active. Thus, cycling is an example of an urban policy – prompted, in part, by dense, compact development and by a focus on environmental issues (see Chapter 7, Governance) – that conflicts with another urban policy, namely managing urban green spaces as areas of nature where urbanites seek refuge from the congestion and bustle of London. Had I not attended these meetings, my understanding of the intensity and divisiveness regarding issues such as cycling in urban green space would not have been as deep and, thus, I would not have fully recognised its importance when such issues came up in interviews.

3.2.1.6.   *Green space data and maps*

Greenspace Information for Greater London (GiGL) collects data regarding green space in London and maintains GIS maps (respondent 47, senior staff, community interest company). GiGL's data is largely provided by local authorities, although GiGL conducts its own research, as well, such as regarding the quantity of private gardens in London (GiGL and LWT, 2010). Local authorities have no requirement to submit data to GiGL, although each council is supposed to conduct a habitat survey at least once every 10 years and this information is reported to GiGL (GLA, 2002). Yet, data collected by GiGL contains inconsistencies across the boroughs, including how councils define, categorise and measure green space (respondent 47, senior staff, community interest company).

Based on the data provided by local councils, GiGL's maps are used by the GLA and by the councils themselves in planning activities, including strategic planning and green space planning, as well as when permitting or refusing planning applications that will affect green space. For example, GiGL's maps illustrating areas of a borough that are deficient in access to public open space are cited in regional and local

planning documents and influence policy making (respondent 47). GiGL also maintains data and maps regarding areas that are deficient in access to nature, defined as areas where people must walk more than one kilometre to reach an accessible wildlife site of metropolitan or borough importance (GiGL, n.d.). Such regional and local nature conservation sites are critical for the GLA's and local authorities' biodiversity policies. GiGL's maps were useful for my research, as this secondary data source showed in which neighbourhoods or wards green space is located, and which areas are deficient in access to public open space and nature.

3.2.2. Quantitative Research Methods

While this project primarily relies on qualitative methods, I did use quantitative methods for data collection and analysis, as well. For quantitative social research, the focus is on measurement, reliability and replication (Robson, 2011). In particular, quantitative analysis was used to calculate and evaluate data related to population and residential densities; habitable rooms and dwellings per hectare; net changes in housing units; net changes in green space; and funding and staffing directed to green spaces. Quantitative analysis was used to determine which boroughs to examine as embedded units within the London case study. The specific quantitative methods used to select the boroughs are discussed in more detail in Section 3.3.4.

3.3. CASE STUDY
3.3.1. Rationale for case study

This thesis uses a case study to examine the influences on urban green space delivery and management. Increasingly used in the social sciences, a case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context and is particularly valuable for theory development (George and Bennett, 2005; Yin, 2009; Robson, 2011). By providing context-specific knowledge, case studies enhance learning and "allow people to develop from rule-based beginners to virtuoso experts" (Flyvbjerg, 2006, p. 221). Case studies are useful in measuring concepts that are difficult to capture, such as power and culture (George and Bennett, 2005). This method requires the same procedures central to all research methods, including ensuring validity and rigour (Gerring, 2004; Yin, 2009). Case studies can provide a foundation for future research, which matters as the research for this thesis should lay the groundwork for opportunities for future research.

Gerring defines the case study as "an intensive study of a single unit with an aim to generalize across a larger set of units" (2004, p. 341). My research questions and general hypothesis can be applied to other cities, as understanding the influences on delivering and managing urban green space is relevant and useful for urban planning beyond London and even Britain. Obviously, national and local policies, politics and pressures differ across countries and cities, as do local cultures, customs and institutions, thus context is critical to any research about urban green space delivery and management. Accounting for these differing characteristics would be a necessary part of the research design for similar research in other cities.

Some researchers express caution about the case-study method, however, viewing it as appropriate only for the exploratory stage of research or labelling it a "soft option" (Gerring, 2004; Yin, 2009; Robson, 2011, p. 137). The greatest criticism against the case study is lack of rigour (Yin, 2009). As a result, the case study is left in "a curious methodological limbo" (Gerring, 2004, p. 341). Yet, this is less likely to occur when a case study is used in conjunction with other methods, as it is here. Other concerns about case studies include that "they provide little basis for scientific generalization," which "is usually considered to be devastating to the case study as scientific method" (Flyvbjerg, 2006, p. 224). Further concerns argue case studies are too time-consuming and prolific, and are not randomised field trials (Yin, 2009; Robson, 2011). Flyvbjerg (2006), however, considers such arguments as misunderstandings or oversimplifications regarding case-study research.

Indeed, case studies constitute a sample and, thus, can be generalised to theoretical propositions, although not to populations or universes (Flyvbjerg, 2006; Yin, 2009). Case studies are valuable for contributing to theory, as they can explain the "how" or "why" of a research issue (Yin, 2009). Flyvbjerg defends the case study as a qualitative research method, asserting that "the conventional wisdom of case-study research, which if not directly wrong, is so oversimplified as to be grossly misleading" (2006, p. 220).

3.3.2. Rationale for selecting London as the case study

The case study used for this thesis is London. London is a world city wrestling with accommodating future population growth, staying globally competitive, maintaining an identity, reducing its environmental impact and improving the quality of life for its more than 8.8 million residents (GLA, 2017a). I selected London as my case study

for several reasons. First, protecting London's existing green spaces, as well as creating new ones, is an objective outlined in the London Plan (GLA, 2011b). Proclaiming that green spaces "contribute to a high-quality public realm," the London Plan specifies that London's "unique resources of green and open spaces must be defended and improved" (GLA, 2011b, p. 215, 5). Similarly, local authorities across London have planning policies designed to protect and conserve their urban green spaces. For example, most Inner London councils maintain a no-net loss green-space policy to prevent development from eroding the borough's existing green spaces. Local councils also have adopted open-space-per-capita targets, indicating that providing open and green spaces makes a valuable contribution to quality of life for a borough's residents (both of these planning targets are discussed further in Chapter 6, Planning).

Second, alongside green space planning policies, London's leaders have promoted London as a compact, multicentred, multiuse city to make London competitive and sustainable, (GLA, 2011b). Key to achieving this is high-density residential development throughout London, particularly in Inner London, where demand for scarce land and affordable housing remains fierce (Bowie, 2010; GLA, 2011b). Planning policies call for London – and particularly Inner London – to focus current and future development on building more compactly. Thus, development pressure in Inner London is increasing and this causes tensions with the delivery and management of urban green space, as discussed in Chapter 2 (Literature) (Beer, Delshammar and Schildwacht, 2003; Jim and Chen, 2003; Erickson, 2006). Indeed, Beer, Delshammar and Schildwacht (2003) observe that as housing densities increase, urban green space becomes more threatened.

Third, the governing and planning processes in London provide a multi-layered complexity that affects urban green space delivery and management. There are national and regional policy bodies and planning policies, as well as 33 individual local planning authorities. Further, structures of green-space service delivery vary across the boroughs, sometimes involving third parties, such as charity organisations. Funding structures vary, too, with organisations such as the Heritage Lottery Fund providing local authorities with funding for urban green space only if certain conditions and standards are adhered to. With so many governing bodies and policy influences, using more than one borough in my research produces deeper results and provides richer opportunities for comparative research. This is

particularly relevant for research that considers the governance of urban green space, as using administrative boundaries in environmental research, such as biodiversity, has been criticised for its inability to understand the need for a more strategic approach to environmental governance (Lundqvist, 2004; Van Oosten, Uzamukunda and Runhaar, 2018). Similarly, limiting the focus to within a city's – or a borough's – administrative boundaries is inadequate, as "greater problems of governability are created" as the functional city-region expands (Holman and Thornley, 2015, p. 499).

Finally, London's history is greatly entangled with green space. As the site of one of the first Victorian-era public parks – Victoria Park, in the East End – the British capital has included publicly accessible green space provision in its planning and development for nearly two centuries. Green spaces in London have influenced international landscape architects and designers, such as Frederick Law Olmsted, thus shaping the development of cities beyond London (Eisenman, 2013). Today, London's local councils, as well as regional organisations such as the GLA, promote the city's green spaces in tourism and city marketing material, as well as business and talent attraction strategies and campaigns.

3.3.3. Rationale for boroughs as embedded units

Within the case study of London, I use three Inner London boroughs as embedded units of analysis (Yin, 2009). Researching subunits, or embedded units, within a single case study provides "significant opportunities for extensive analysis, enhancing the insights into the single case" (Yin, 2009, p. 52). Baxter and Jack build on this, adding that using embedded units within a larger case is "powerful" and "the ability to engage in such rich analysis only serves to better illuminate the case" (2008, p. 550). Although examining all 33 of London's local governments is not needed, looking at more than one borough provides the opportunity to detect patterns and themes. Also, by investigating more than one borough, my research will be more robust (Yin, 2009). Conducting research in all 32 London boroughs plus the City of London is not feasible, given time and resource constraints on a thesis.

Conducting research at the borough level in London provides an appropriate level of analysis, as available data regarding green space, development, planning decisions, and demographics and socioeconomic factors is most consistently available at the borough level, facilitating comparison across local councils. This also fits with the

theoretical approach, as new institutionalism "is particularly well suited for comparative research, whether the institutional comparisons are cross-sectional or inter-temporal or whether they are between committees or constitutions" (Diermeier and Krehbiel, 2003, p. 124).

3.3.4. Selecting the embedded units

This research focuses specifically on Inner London boroughs because they have higher population densities than those in Outer London, thus, green space is delivered and managed in these boroughs with greater pressure resulting from more people in less space. Further, the London Plan sets out higher density targets for urban areas than for suburban areas (GLA, 2011b, p. 85). Table 3.2 shows each borough's population density, calculated by dividing the GLA's population estimate for each borough by total inland area, in hectares (GLA, 2011c). With the exception of Greenwich, Lewisham and the City of London – a statistical outlier because of its relatively sparse residential population – the 13 Inner London boroughs have higher population densities than the 20 Outer London boroughs.[1] Population density shows the number of people in a certain amount of space and, thus, is used as a proxy for how developed or urbanised an area is. However, it does not indicate levels of density on a personal scale.

Further, an area can be densely developed – e.g., be heavily built up – but not be densely populated. This is illustrated by the City of London, which is the least densely populated Inner London area, as well as one of the least dense in Greater London. However, while the City, a densely clustered business district located on 2.9 square kilometres, has the lowest housing stock in London, it is highly built up, with 16,580 businesses across 1,384 addresses in 8.6 million square metres of office space, in addition to other commercial buildings, and this has an impact on the ability to deliver and manage green space (City of London Corporation, 2016; GLA, 2018a). Indeed, 4.8 percent of the City is considered green, compared to 12.4 percent green space in Islington, which is a more densely populated borough (GLA, 2017a).

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[1] The GLA classifies Newham as an Inner London borough even though the London Government Act of 1963 classifies it as Outer London. Further, London Councils, which represents all 33 local governments in London, also considers Newham as an Outer London borough. For this research, Newham is considered an Outer London borough.

TABLE 3.2 – Population density in London's boroughs, 2011

	Borough	Inner/Outer	Population/ha
1	Islington	Inner	142.0
2	Kensington & Chelsea	Inner	136.3
3	Tower Hamlets	Inner	124.2
4	Hackney	Inner	123.5
5	Hammersmith & Fulham	Inner	114.8
6	Lambeth	Inner	110.4
7	Westminster	Inner	102.0
8	Southwark	Inner	100.5
9	Camden	Inner	97.1
10	Wandsworth	Inner	90.4
11	Newham	Outer	81.7
12	Haringey	Outer	80.4
13	Lewisham	Inner	77.2
14	Brent	Outer	66.8
15	Waltham Forest	Outer	63.0
16	Ealing	Outer	59.4
17	Merton	Outer	53.3
18	Greenwich	Inner	51.9
19	Barking & Dagenham	Outer	50.1
20	Redbridge	Outer	47.2
21	Harrow	Outer	45.5
22	Hounslow	Outer	43.5
23	Sutton	Outer	43.1
24	Kingston Upon Thames	Outer	42.6
25	Croydon	Outer	40.9
26	Barnet	Outer	39.3
27	Enfield	Outer	37.1
28	Bexley	Outer	36.9
29	City of London	Inner	33.7
30	Richmond Upon Thames	Outer	33.1
31	Hillingdon	Outer	23.4
32	Bromley	Outer	21.0
33	Havering	Outer	20.8

Source: GLA, 2011c

The sustainable residential quality (SRQ) density matrix, as outlined in the London Plan, provides density ranges related to setting in terms of location, existing building form and massing, as well as the index of public transport accessibility (PTAL) (GLA, 2011b). The density ranges in the London Plan are not meant to be applied "mechanistically," and give councils flexibility so that they can "refine local approaches to implementation of this strategic policy" (GLA, 2011b, p. 84). Like population density, the matrix does not tell us about density at a personal scale.[2]

Using data from the GLA's London Development Database (LDD) regarding net changes in the number of housing units resulting from residential development completions, I determined which Inner London boroughs added the most residential housing units from 2005 to 2011 by calculating the net gain in residential units of each completed development scheme with a density of 100 units per hectare or more in each borough during the six-year time frame. I chose the 2005-11 time period because the first London Plan, with density requirements, was published in its final form in 2004. Thus, 2005 was the first full year that the plan was in effect. 2011 was selected because it was the most recent complete year for which the GLA had data when I began my fieldwork. Planning permissions in Greater London are recorded in the LDD as part of the process of monitoring the London Plan and are required to be recorded in the LDD if they meet one or more criteria, including a change in the amount of public open space. These criteria include (GLA, 2011d):

- Change in the number of residential units through change of use or conversion.
- Any new-build residential units.
- Change of use or new build of 1,000m^2 or more of non-residential floorspace in any of the non-residential use classes not monitored by number of bedrooms.
- Gain of seven bedrooms or more in class C1 or C2, or in SG Hostels or Apart-hotels.
- A loss, gain or change in use of public open space.

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[2] The SRQ density matrix was removed in the most recent draft London Plan, published for consultation in November 2017. In this latest iteration of London's spatial development strategy, the mayor's density policy is meant to be design- and infrastructure-led, rather than numbers-led (GLA, 2017f).

The data presented in Table 3.3 shows the results of my calculations of the net residential units per hectare in all 13 Inner London boroughs during the time period studied. According to my analysis, the Inner London boroughs with the highest net gain in residential units between 2005 and 2011 are Tower Hamlets, Southwark, Islington, Hackney and Wandsworth. Table 3.3 also includes the population density rank of each borough from Table 3.2 for ease of comparison.

Initially, I planned to include five boroughs in my case study. However, after conducting preliminary fieldwork and interviewing professionals knowledgeable about Inner London's boroughs, I concluded that researching three boroughs would provide adequate data to have rigorous and robust results to answer the research questions. I also was cognizant of time constraints for conducting research, analysing findings and writing. Thus, the three boroughs I used as embedded units in the case study are Islington, Tower Hamlets and Wandsworth. I dropped Hackney and Southwark because both are located adjacent to Tower Hamlets in East London. Islington, Tower Hamlets and Wandsworth are among the five boroughs with the highest net gain in residential units and they fall within the 10 densest boroughs in Greater London. In other words, these three Inner London boroughs are dense and growing denser, in line with planning policies in the London Plan.

TABLE 3.3 – Residential units added, 2005-11

	Borough	Net residential units/ha	Pop density rank
1	Tower Hamlets	12,037	3
2	Southwark	8,146	8
3	Islington	7,666	1
4	Hackney	6,838	4
5	Wandsworth	6,645	10
6	Greenwich	6,034	18
7	Lambeth	6,027	6
8	Westminster	4,145	7
9	Lewisham	3,662	13
10	Hammersmith & Fulham	3,152	5
11	Camden	3,028	9
12	Kensington & Chelsea	1,079	2
13	City of London	425	29

Source: GLA, 2011d

3.4. DATA ANALYSIS

After conducting a thorough literature review and collecting data through fieldwork, I turned to analysing the data. Basit observes that "the analysis of qualitative data is usually seen as arduous" because it is "a dynamic, intuitive and creative process of inductive reasoning, thinking and theorizing" (2003, p. 143). Although my data analysis is described here in several stages, analysis actually is an "'iterative process' of coding, writing, theorising, and reading that '…(take) place simultaneously'" (Higginbotham et al., 2001, p. 247 cited in Tuckett, 2005, p. 77). Indeed, "qualitative data analysis is not a discrete procedure carried out at the final stage of research. It is, indeed, an all-encompassing activity that continues through the life of the project" (Basit, 2003, p. 145). Thus, while steps to analyse the data are delineated here, in reality "the analysis of qualitative data is rigorous and is not a separate self-contained phase in the research process" (Basit, 2003, p. 152).

3.4.1. Literature review

Tuckett (2005) argues that a review of the literature is the foundation of qualitative data analysis. Conducting a literature review and being well-versed in a topic through existing literature is helpful in putting together the topic guide discussed in Section 3.2.1.1.1. While I conducted an extensive literature review before going into the field and conducting interviews, I continued to review literature as themes emerged from the data. This illustrates the "iterative process" of data analysis (Tuckett, 2005). Further, an ongoing literature review can "confirm findings" as well as provide the researcher opportunities "to challenge and add to the literature" (Tuckett, 2005, p. 79).

3.4.2. Transcription

First, I transcribed the interviews, which I had recorded, thus turning them into texts to analyse. To do this, I used NVIVO, research software that provides transcription and analysis capabilities. Although colleagues had warned me about how long it takes to transcribe interviews, I still underestimated the time and, thus, transcribing took much longer than I anticipated. This is not uncommon and Basit notes researchers need to allow "plenty of time and energy" for data analysis (2003, p. 143). Researchers have cited recording-to-transcription times ranging from 1-to-3 hours to 1-to-10 hours (Tuckett, 2005). Most of my interviews had lasted about one hour, and each easily could take more than a day to transcribe. Still, despite this laborious stage, I found it beneficial to listen to the interviews again, as by the time I

transcribed the recordings, I had forgotten some of the details discussed, despite taking notes during the interviews. Listening to the interviews proved useful in developing a coding framework, as well.

3.4.3. Coding framework

For the next step, I developed a coding framework based on themes that emerged from my interviews. In thematic analysis, a researcher identifies themes by "bringing together components or fragments of ideas or experiences, which often are meaningless when viewed alone" (Leininger, 1985, p. 60). This involves identifying commonalities, differences and patterns in the data (Basit, 2003). Creating a coding framework does not happen in isolation, however, as thinking about codes, categories and themes can take place even during initial stages of the research and during the actual interviews (Basit, 2003). Developing the categories, or themes, of a coding framework is a critical step toward answering the research questions, and amounts to "a very close, intense conversation between a researcher and the data that has implications for ongoing method, descriptive reporting and theory building," as it "triggers a conceptual scheme that suits the data" (Basit, 2003, p. 144).

I have professional experience coding qualitative data from working for a London-based stakeholder engagement consultancy. This experience proved valuable when developing the coding framework for my thesis, as I was familiar with creating and applying a hierarchy of codes. This entailed creating high-level themes, with subthemes in each category (see Appendix 2). As with transcribing, though, this took much longer than I expected. Ultimately, the coding framework included 17 themes, with between two and five subthemes under each.

3.4.4. Application of codes

Once I established a general coding framework, I organised my data by applying the codes to the text from my interview transcriptions using NVIVO. Categorising data through coding is an important step in analysis, although it is worth noting that coding and analysis are not the same thing (Basit, 2003; Tuckett, 2005). Although I used a software package, the researcher, not the computer, performs "the intuitive and creative work that is an essential part of qualitative analysis" (Gaskell, 2000, p. 55). Indeed, developing new theoretical insight requires "the application of disciplinary knowledge and creative imagination," something computer software cannot achieve (Basit, 2003, p. 145). The process of coding meant reading each transcript multiple

times. This is a useful endeavour, as "in reading the transcripts, aspects of the interview beyond the words are recalled and the researcher almost relives the interview" (Gaskell, 2000, p. 54).

This step involved employing thematic analysis as an analytic approach. Thematic analysis is a process for encoding qualitative information. It is not another qualitative method, but rather a process that can be used with most, if not all, qualitative methods (Boyatzis, 1998). "Thematic analyses seek to unearth the themes salient in a text at different levels" (Attride-Sterling, 2001, p. 387). Or, as Hsieh and Shannon observe, thematic analysis is "a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns" (2005, p. 1278).

With thematic analysis, a conceptual description emerges from the data and the researcher can generate theory rooted in the data and these themes (Rapley, 2011). Yet, identifying what a theme is varies among researchers (Rapley, 2011). As such, thematic analysis "suffers as it has no coherent groups of academics claiming, defining and shaping its trajectory. So, the specific analytic etiquette of doing thematic analysis seems to vary broadly between authors" (Rapley, 2011, p. 279). Ultimately, collating the codes resulted in a set of logical themes and subthemes that collectively led to my analysis of the influences on urban green space delivery and management in Inner London. This analysis forms the basis for the empirical evidence presented in Chapters 5-7.

3.5. A NOTE ON ETHICS

This section provides a brief discussion of ethics during fieldwork, which is particularly relevant for the use of interviews as the primary method of data collection. My initial contact with most respondents occurred via email, so I was able to spell out who I was, why I was contacting them and what the objectives of my research were before they agreed to schedule a face-to-face interview. Then, before starting each interview, I sought the respondent's informed consent in line with the London School of Economics' research ethics policy and procedures (LSE, 2018). I provided each respondent with a research information sheet, which explained that I am a doctoral research student at the London School of Economics and that described the topic and objectives of my research. The research information sheet

described how I would use the information collected during the interview, explained that audio of the interview would be recorded and emphasised that participation was voluntary. It stated that, although quotes and information collected from interviews may be cited in academic publications and presentations, the respondent would never be called by name or any other method that would enable the respondent to be identified. Further, I clarified that I would not reveal anything they said to other respondents during subsequent interviews. This was critical, as green space professionals have a strong and close network, with many respondents having worked in multiple local authorities or green space-related organisations in London over the years. Thus, many green space professionals have worked with each other in the past or knew each other professionally.

In addition to giving each respondent this information in writing, I also went over it verbally at the start of each interview, before asking if I had the respondent's consent to continue. I offered to provide the respondent with a copy of their transcribed interview. None took me up on this offer, although most respondents expressed interest in seeing the results of my research when my thesis is published. No respondents expressed concern about their professional relationships or employment situation if they talked with me. Data I collected through interviews, or through my secondary research methods, was not personally sensitive. I did not remunerate any respondent in exchange for agreeing to an interview. While some of the interviews took place in cafes, I did not pay for any items purchased by the respondent and they did not pay for mine.

3.6. CONCLUSION

This chapter has explained the journey from the formulation of the research topic and questions to the methodological approaches used to collect and analyse data to address those research questions. In doing so, this chapter details the justification for the specific methods used and identifies challenges that arose in employing these methods, such as gaining access to interview respondents.

Although several methods were used, semi-structured interviews primarily were employed, as this method is well-suited for the type of issues laid out in my research questions. The use of interviews was supported by several secondary methods, including document review, archival research, direct observation and attendance at

meetings. Further, a single case study with three embedded units was used, as this method allows a researcher to address complex research questions "while taking into consideration how a phenomenon is influenced by the context within which it is situated" (Baxter and Jack, 2008, p. 556). The data collected was analysed using a coding framework that revealed themes. This thematic analysis then led to the research findings discussed in the following chapters.

Different approaches to answering the research questions could have warranted use of different methods – the myriad ways of researching urban green space reflect the complexity and increasing recognition of the range of roles green space plays in urban areas. This breadth poses challenges for green space researchers, but also presents opportunities to dig deeper to develop a richer understanding of how green space fits into the urban economic, environmental and social fabric.

While a chapter on methodology may at times seem rather mundane or mechanical compared to chapters that present empirical evidence or expand on theoretical concepts, for me, detailing the methods and approaches used to collect and analyse the data provided the opportunity to revisit the fieldwork experience, which was a highlight of my time as a doctoral student.

The following chapter elaborates on the London case study, as well as the three boroughs – Islington, Tower Hamlets and Wandsworth – used as embedded units. Demographic, socioeconomic and development data is used to paint a picture of the physical, social, economic and political context in which London's urban green spaces exist and, thus, within which they are delivered and managed.

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CHAPTER 4 – THE LONDON CONTEXT

This research uses London as a case study to examine the influences on the delivery and management of urban green space. Within that case study, three Inner London boroughs – Islington, Tower Hamlets and Wandsworth – serve as embedded units. This chapter provides context and analysis regarding London, as well as the three boroughs, including data on demographics, socioeconomic factors, housing, green space provision and politics. This paints a picture for understanding the environment in which green space planning occurs across the boroughs.

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"London can therefore be seen as a built-up area, itself a kaleidoscope of neighbourhoods, set amidst a large and amorphous urban region." – Leonard Schwarz, *The Cambridge Urban History of Britain: Volume II* (2000, p. 647)

4.1. INTRODUCTION

By 2041, London's population is projected to reach 10.5 million (GLA, 2017d). This has considerable ramifications for London's economy, environment and society. In addition to new homes and new jobs, new urban green spaces will be needed to provide urban sustainability and resilience, particularly if the Greater London Authority and the capital's 33 local authorities continue to adopt policies calling for creation of green space and use of a green infrastructure approach to planning. How such green-infrastructure policies are shaped and implemented depends, in part, on the context in which they exist. The following sections provide detail about Greater London, Inner London and the three boroughs used as embedded units within the London case study.

4.2. GREATER LONDON
4.2.1. Demographics

London, the capital of the United Kingdom and a global city, consists of 32 local authorities, plus the City of London. Greater London is 1,572 square kilometres, giving it the 69th-largest urban footprint, by land area, of cities with at least 500,000

residents in the world (Demographia, 2018; GLA, 2018a). For example, London has a smaller footprint than New York City (11,875 sqkm), Tokyo (8,547 sqkm), Seattle (3,209 sqkm) Johannesburg-East Rand (2,590 sqkm), Brisbane (2,005 sqkm) and Raleigh, North Carolina (1,813 sqkm) (Demographia, 2018). The second-largest city by land area in Britain is Greater Manchester, which at 630 square kilometres, ranks 218th globally (Demographia, 2018). The reach of London, however, stretches far beyond its administrative borders (Travers, 2004). London's travel-to-work area – or, its commuter belt – comprises an area nearly the same size as Greater London (GLA Tories, 2015). Eighteen percent of London workers commute from outside London's boundary (GLA Economics, 2017). Meanwhile, only 27 percent of London workers live in the same borough as their place of work, while 55 percent travel into work from a London borough different from where they live (GLA Economics, 2017).

Table 4.1 – Population density of select UK cities, 2010

City/urban area	Population/sqkm
London	5,729
Portsmouth	5,146
Manchester	4,313
Bristol	4,026
Liverpool	3,981
Birmingham	3,872
Sheffield	1,510
England	401

Source: ONS, 2015

In 2017, London's population stood at an estimated 8,835,500, the largest in its history (GLA, 2017a). Between 2001 and 2011, London's population grew 11.6 percent, more than any region in England (ONS, 2012b). London also is significantly more densely populated than other urban areas in the UK (see Table 4.1) and is 14 times as dense as the England and Wales average (ONS, 2012b; GLA, 2018a). The 19 most-densely populated local and unitary authorities in England and Wales are London boroughs (ONS, 2012b). Even the Outer London borough of Bromley, which at 2,061 residents per square kilometre is the least-populated borough in London, is more than five times denser than England and Wales (ONS, 2012b). England is the third-densest country of the 28 European Union countries, after Malta and The Netherlands (ONS, 2012b). Although London's footprint was smaller in the past, its population density was substantially higher, notably in the 19th and early 20th

centuries. The average London household size in 1931 was 3.8 people (GLA, 2015b). Although this fell to 2.38 by 1991, it has increased in recent years, with an average household size of 2.48 people in 2011 (GLA, 2015b). Thus, contemporary London has an increased population and a wider footprint, but a lower household density, differentiating it from Victorian London.

Concern about London's sprawl has existed for centuries. Elizabethan-era Londoners attempted to impose a green belt "to contain the burgeoning sprawl that bulged around the Thames" (Travers, 2015, p. 6). Ebenezer Howard's garden cities – which "just missed being called 'Rural Cities'" – also sought to address the growing density and congestion of cities, and post-war proposals for green belts throughout the UK "drew on a deep-rooted revulsion towards rapid and uncontrolled urban growth during the pre-war period" (Hulin, 1979, p. 18; Relph, 1987; Amati and Taylor, 2010). A green belt around London had been proposed since the late 1800s, and came to fruition in the 1930s, with its purpose ultimately being "to physically constrain the growth of London" (Mace et al., 2016, p. 4). This, however, led development "leapfrog" into surrounding towns and villages" (Amati and Taylor, 2016, p. 150; Mace et al., 2016). More recently, London, like other cities, has become increasingly aware of the economic, environmental and social impact of its growing footprint and has pursued policies to address this, including encouraging compact development. Such urban containment policies have an impact on urban green space.

At 36.0 years, the average age of Greater London residents is younger than the UK average (40.1 years) (GLA, 2017a). Greater London's population consists largely of working-age residents, or those 16-64 years old. Nearly three-fourths (73.6 percent) of Greater London's population falls within this range, compared with less than two-thirds (63.3 percent) of England's population (GLA, 2017a). Children 0-15 years old account for 13.9 percent of Greater London's population, less than England (19.0 percent) (GLA, 2017a). Similarly, residents 65 and older make up less of Greater London's population (12.5 percent) across England (17.7 percent) (GLA, 2017a).

London diverges significantly from the rest of Britain when it comes to residents born abroad (see Table 4.2). In Greater London, more than one third (36.6 percent) of residents were born outside the UK; this figure is 13.3 percent for Britain as a whole (GLA, 2017a). As with Britain in general, the largest migrant population group in London comes from India, with the second-largest hailing from Poland (GLA, 2017a).

Table 4.2 – Foreign-born population, 2015

Area	Pop born abroad	Largest	2nd largest
Islington	36.6%	Ireland (2.8%)	Turkey (1.8%)
Tower Hamlets	38.6%	Bangladesh (15.3%)	India (1.5%)
Wandsworth	32.8%	Poland (2.2%)	South Africa (2.1%)
Inner London	40.1%	Bangladesh (2.5%)	India (1.8%)
Greater London	36.6%	India (3.2%)	Poland (1.9%)
Great Britain	13.3%	India (1.3%)	Poland (1.1%)

Source: GLA, 2017a

Greater London's reach also is felt in the economy. London accounts for 22.5 percent of the UK economy, despite making up about 13 percent of the national population (GLA Economics, 2017). In 2016, London's economy grew at 1.7 percent, more than double the national average (0.8 percent) (ONS, 2017). Gross annual pay in Greater London was £33,776, higher than the England average of £28,503 (GLA, 2017a). Meanwhile the modelled household median income estimate (2012-13), which considers average household size or composition within an area, was £39,110 in Greater London, much higher than the UK estimate of £30,600 (GLA, 2017a). There are 5.9 million jobs in Greater London, resulting in a jobs density – the number of jobs in an area divided by the resident population aged 16-64 in that area – of 0.99 (GLA, 2018a). In other words, essentially one job exists for every London resident. In England, the 29.7 million jobs result in a jobs density of 0.85, while in the UK, 34.8 million jobs result in a job density of 0.84 (ONS, 2018a). In 2015, Greater London's and England's employment rates were nearly the same (72.9 percent and 73.9 percent, respectively) (GLA, 2017a). The male and female employment rates in London (79.3 percent and 66.5 percent, respectively) also mirrored those in England (79.1 percent and 68.6 percent) (GLA, 2017a).

The Department for Communities and Local Government (DCLG) maintains an Index of Multiple Deprivation (IMD), which considers seven specific factors, or domains: income; employment; health deprivation and disability; education, skills and training; barriers to housing and services; crime; and living environment (DCLG, 2015; GLA, 2016a). Compared to the rest of England, London is less deprived overall (GLA, 2016a). Still, 22.5 percent of London falls within the most-deprived 20 percent of England (GLA, 2016a). The most-deprived London areas are in Inner London and

include Islington and Tower Hamlets (GLA, 2016a). Barking and Dagenham, Tower Hamlets and Hackney rank highest in England, and in Greater London, in income deprivation, which includes both those people who are out of work and those who are in work, but have low earnings (DCLG, 2015). Eight of the 10 boroughs in England with the worst-ranked living environment are in London, as well (DCLG, 2015).

According to Sport England (2016), 37.8 percent of Londoners participated in sport at least once a week in 2015-16. However, 27.0 percent of London residents were inactive (Sport England, 2016). Meanwhile, 42.5 percent of residents were considered overweight or obese, compared to 48.1 percent across England (Sport England, 2017). Overall, Londoners 16 and older said they volunteered during the past 12 months at the same rate (24 percent) as England residents overall (GLA, 2016b).

Figure 4.1 – Map of Greater London with Inner and Outer London boroughs (source: GLA, 2015d. Contains Ordnance Survey data © Crown copyright and database rights).

4.2.2. Urban development and change

Greater London came into its current administrative form in 1965 with the London Government Act. At that point, the 32 local boroughs (minus the City of London) and the Greater London Council (GLC), a regional governmental body, came into existence, and the London County Council (LCC) and metropolitan boroughs ceased to exist (Travers, 2015). The GLC lasted 21 years before it was abolished in 1986 (Travers, 2015). London went without a regional government until 2000, when the Greater London Authority (GLA) was created. The GLA includes a mayor, who serves as the chief executive, and the London Assembly, a 25-member elected body. The GLA is responsible for transport, policing, fire and rescue, development, and strategic planning (GLA, 2018b). Unlike the GLC, which owned and managed green spaces, the mayor and the GLA do not have responsibilities or power for management of any of London's urban green spaces, although they seek to "protect green spaces and encourage more greening of the urban environment such as pocket parks" through policies in the London Plan (GLA, 2018c).

Over several centuries, the capital "has seen waves of growth" and the city's "surroundings reflect these past chapters of rapid development and change" (GLA, 2017d, p. xiv). Between 1919 and 1939, built-up London doubled in size as the suburbs were extended (Beecroft, 2017). Yet, London also experienced deep losses in population. After population peaked in 1939, the city lost nearly a quarter of its residents by the 1990s (Stringer, 2015). But, as the following sections discuss, London has experienced a renaissance. London's population, which has surpassed its historic peak, is projected to continue to grow "the likes of which we've not seen for a century" (GLA, 2017d, p. xiv).

This growth is likely to be challenging for London's urban green spaces, as it admittedly will lead to "increasing and competing pressures on the use of space" (GLA, 2017d, p. 14). Although the London Plan asserts that "local green and open spaces should be protected," it also acknowledges that "London needs 66,000 new homes each year, for at least twenty years" (GLA, 2017d, p. 18, 305). The London Plan calls for compact, high-density development, which can further exacerbate the delivery of urban green space in Inner London, as more people and more buildings are added to a finite amount of existing land.

The exact amount of green space in London is difficult to pin down. The figure depends on how green space is defined – for example, does it include private green spaces, such as back gardens? Such a lack of data has contributed to green spaces being "politically invisible at both local and central government level" over the years (Clark, 2004, p. 77). Local authorities tend to categorise green space under a broader umbrella of open space. An increasingly prevalent figure cited – such as in the London National Park City campaign – is that London is 47 percent green (LNPC, 2015a). Thirty-three percent of London is vegetated green space, according to surveyed habitat information, and an additional 14 percent is estimated to be vegetated private, domestic garden green space (GiGL, 2015a). Other figures claim Greater London is 38.3 percent green (GLA, 2017a). By comparison, England is 87.5 percent green (GLA, 2017a).

Each of London's 33 local governing bodies "has developed a character of its own" (Travers, 2015, p. 60). The boroughs differ in demographics, economy, culture, politics and environment, which has an impact on the delivery and management of urban green space across London. Further, "policies towards new development have varied within boroughs over time and, today, from borough to borough" (Travers, 2015, p. 60). Local authorities' differing policies on issues such as planning, housing and the environment "can be read on the streets and skyline of the city" (Travers, 2015, p. 60).

The median house price in 2017 in Greater London was £465,000 (ONS, 2018b). Between 2010-11 and 2016-17, London added 188,095 net new homes (DCLG, 2017). During that same period, 81,330 new affordable homes were built in Greater London (GLA, 2017c). Of the 66,000 new homes needed annually for the next 20 years, 43,000 of them need to be "genuinely affordable" (GLA, 2017d, p. 18). Given that the Londoner of the future is projected to live in a more populated city and in higher-density housing, delivering and managing urban green space for future Londoners will be challenging. However, lessons can be learned from current experiences, such as from those in Inner London in general and from Inner London boroughs specifically, such as those investigated in this research.

4.3. INNER LONDON

4.3.1. Demographics

When the London Government Act of 1963 created the boroughs that exist today, it designated 12 Inner London boroughs and 20 Outer London boroughs, as well as maintained the City of London (LGA, 1963). Inner London included the boroughs that existed as the County of London and operated under the jurisdiction of the LCC (LGA, 1963; Williams, 1964). The 12 Inner London boroughs are: Camden, Greenwich, Hackney, Hammersmith and Fulham, Islington, Kensington and Chelsea, Lambeth, Lewisham, Southwark, Tower Hamlets, Wandsworth and Westminster (London Councils, n.d.). Although not a borough, the City of London, which is governed by the City of London Corporation, is considered an Inner London entity and, thus, typically is discussed alongside the other 12 Inner London local authorities (London Councils, n.d.).

Inner London is 20 percent of Greater London's geographical footprint, yet, in 2017, comprised 40 percent of Greater London's population (GLA, 2017a; 2018a). At 11,352 residents per square kilometre, Inner London has a much higher population density than Outer London (4,291 residents per sqkm) (GLA, 2018a). Indeed, with

TABLE 4.3 – Key population figures

	National comparator	Greater London	Inner London	Islington	Tower Hamlets	W'sworth
Pop estimate, 2017	55,609,600[a]	8,835,500	3,535,700	231,200	304,000	321,000
Pop density/ sqkm	387[b]	5,729	11,352	16,038	16,036	9,468
Average age, 2017	40.1[c]	36.0	34.7	34.8	31.4	35.0
% aged 0-15, 2015	19.0[a]	13.9	38.5	15.9	20.1	17.8
% working age (16-64), 2015	63.3[a]	73.6	54.7	75.3	73.9	72.8
Proportion of pop aged 65+, 2015	17.7[a]	12.5	6.8	8.8	6.0	9.3
% of pop from BME, 2013	N/A	42.5	43.1	32.0	54.0	29.7

a = England; b = England & Wales; c = UK (source: GLA, 2017a)

the exception of the City of London, all Inner London boroughs fall within the 20 most-densely populated local and unitary authorities in England and Wales (ONS, 2012b).

As shown in Table 4.3, on average, Inner London (34.7 years) is younger than Outer London (36.9 years) and Greater London (36.0 years) (GLA, 2017a). Nearly 55 percent of Inner London's population is working age (16-64 years old), considerably less than Outer London and Greater London, as well as less than England (GLA, 2017a). Similarly, 38.5 percent of Inner London consists of children 0-15 years old, much higher than Outer London and Greater London (GLA, 2017a). This challenges the perception that Inner London consists almost exclusively of working-age adults and few children. Inner London residents 65 and older account for less of the population (6.8 percent), however, than they do in Outer London and across England, indicating that once a Londoner reaches retirement age, they are likely to move to Outer London or away from Greater London altogether (GLA, 2017a).

As Table 4.2 shows, Inner London comprises a larger percentage of residents born abroad than Outer London (40.1 percent versus 34.2 percent, respectively) (GLA, 2017a). The largest migrant population in Inner London comes from Bangladesh and the second-largest group hails from India (GLA, 2017a). This differs from Outer London, where the largest migrant groups mirror those of England overall: India and Poland (GLA, 2017a). Forty-three percent of Inner London's population comes from ethnic minority (BME) groups, slightly higher than the 42.5 percent in Greater London (GLA, 2017a).

As shown in Table 4.4, the modelled household median income estimate (2012-13) was £40,290 in Inner London, slightly higher than in Outer London, where it stood at £38,360 (GLA, 2017a). In 2015, Inner London's and Outer London's employment rates were nearly the same (72.3 percent and 73.3 percent, respectively), and in line with England-wide rates (GLA, 2017a). The male and female employment rates in Inner London (78.0 percent and 66.6 percent) are closer than they are in Outer London, where a larger gap exists between male and female employment (GLA, 2017a). There are 3.5 million jobs in Inner London, resulting in a jobs density of 1.4, twice that of Outer London (ONS, 2018a). The City of London has a jobs density of 82.6, demonstrating the intense clustering of business and the limited residential

population in the City (ONS, 2018a). Inner London has 62 percent of all Greater London jobs (GLA Economics, 2017).

Although 35 percent of Londoners lived in an Inner London borough in 2015-16, 41 percent of Londoners in poverty lived in an Inner borough (Trust for London, 2017a). More than 27 percent of Inner London residents age 16 and older said they volunteered during the past 12 months, slightly more than Outer London (25.8 percent) (GLA, 2016b). In general, Inner London is denser, with a younger, more ethnically and culturally diverse population than Greater London or any national comparisons. Income is higher, but poverty is more prevalent, thus, indicating a large inequality gap. It must be noted, however, that borough-level data, such as that for income or deprivation, hides considerable differences at the ward or household level.

TABLE 4.4 – Key jobs and income figures

	National comparator	Greater London	Inner London	Islington	Tower Hamlets	W'sworth
Number of jobs, 2016	34,800,000[c]	5,900,000	3,526,000	256,000	300,00	145,100
Jobs density, 2016	0.84[c]	0.85	1.4	1.46	1.33	0.63
Employment rate, 2015	73.9%[a]	72.9%	72.3%	72.6%	70.4%	78.8%
- Male	79.1%[a]	79.3%	78.0%	78.2%	80.3%	86.6%
- Female	68.6%[a]	66.5%	66.6%	67.0%	59.6%	71.6%
Gross annual pay, 2016	£28,503[a]	£33,776	N/A	£36,592	£36,429	£41,064
Modelled household income, 2012-13	£30,600[c]	£39,110	£40,290	£39,790	£34,930	£47,480

a = England; b = England & Wales; c = UK (source: GLA, 2017a; 2018a; ONS, 2018a)

4.3.2. Urban development and change

As it is denser than Outer London, Inner London, or the former County of London, has less green space. Inner London is 21.7 percent green, compared to 42.5 percent for "leafier" Outer London (Travers, 2015, p. 60; GLA, 2017a) (see Table 4.5). The amount of green space in Inner London also is significantly lower than England (GLA, 2017a). The pressure on Inner London's green spaces has intensified as the area's

Table 4.5 – Percentage considered green space

Area	% public green space
Islington	12.4%
Tower Hamlets	15.2%
Wandsworth	26.9%
Inner London	21.7%
Outer London	42.5%
Greater London	38.3%
England	87.5%

Source: GLA, 2017a

population has grown. Between the 2001 and 2011 censuses, Inner London's population increased by 13.4 percent, while Outer London's increased by 11.2 percent (ONS, 2016). Although Inner London is growing, its population remains far below its peak of 5 million before World War II (Trust for London, 2017c).

The median house price in Inner London in 2017 was £560,000 (ONS, 2018b). Between 2010-11 and 2016-17, Inner London added 93,775 net new homes (DCLG, 2017). During that same period, 37,690 new affordable homes were built in Inner London (GLA, 2017c). Of this, nearly one-third were built by the three boroughs researched here: Islington, Tower Hamlets and Wandsworth (GLA, 2017c).

4.4. ISLINGTON

4.4.1. Demographics

At 14.9 square kilometres, the London borough of Islington is the third-smallest borough in London by land area, larger only than the City of London (2.9 square kilometres) and Kensington and Chelsea (12.1 square kilometres) (GLA, 2018a). With an estimated population in 2017 of 231,200, Islington packs in more people per square kilometre than any other London borough (ONS, 2012b; GLA, 2017a) (see Table 4.3). Indeed, Islington is the densest borough not just in London, but in all of England and Wales (ONS, 2012b; GLA, 2018a). Between the 2001 and 2011 censuses, Islington, located in North Central London, experienced a 14.9 percent increase in population, the 10th-largest in Greater London and the fifth-largest in Inner London during that period (ONS, 2012b).

The average age in Islington is 34.8 years (GLA, 2017a). Three-fourths (75.3 percent) of Islington's population is working age (GLA, 2017a). According to the Islington Fairness Commission, two main, but quite different, groups account for more than 90 percent of the borough's population: "young people renting flats in high-density social housing" (43 percent) and "young well-educated city dwellers" (48 percent) (2011, p. 4). Children (0-15 years old) account for 15.9 percent of the population, a significant departure from the Inner London average of 38.5 percent (GLA, 2017a). Residents 65 and older make up 8.8 percent of Islington's population (GLA, 2017a).

In Islington, 36.6 percent of the population was born abroad, the same as London as a whole, but less than Inner London (GLA, 2017a) (see Table 4.2). Islington's largest migrant population comes from Ireland, the second-largest proportion of Irish population in England and Wales, after the Outer London borough of Brent (ONS, 2012a). Thirty-two percent of Islington's population comes from ethnic minority (BME) groups, lower than Inner London and Greater London (GLA, 2017a).

There are 256,000 jobs in the borough, which shares a border with the City, resulting in a jobs density of 1.46 (ONS, 2018a) (see Table 4.4). In 2015, Islington's employment rate (72.6 percent) was essentially the same as Inner London and Greater London (GLA, 2017a). In 2016, gross annual pay was £36,592, higher than in Greater London (GLA, 2017a). The modelled household median income estimate (2012-13) was £39,790, just shy of the Inner London median, but slightly more than the Greater London median (GLA, 2017a). Islington's income inequality gap between rich and poor is high, ranking seventh of 32 London boroughs (Trust for London, 2017a).

The Islington Fairness Commission said, despite the cliché, "Islington is a place where rich and poor live cheek by jowl" (IFC, 2011, p. 1). Islington was the 13th-most deprived borough in England in 2015, and the fifth-most deprived in London (DCLG, 2015). More than one-third (33.7 percent) of Islington residents live in poverty, higher than in Greater London (27 percent) (Trust for London, 2017a). Only Tower Hamlets has a higher rate of child poverty than Islington (Trust for London, 2017a). The borough ranked fourth in crime, which measures the risk of personal and material victimisation at the local level (DCLG, 2015). Islington also ranked seventh in living environment deprivation, which measures the quality of the local environment,

including the quality of housing (indoors) and measures of air quality and road traffic accidents (outdoors) (DCLG, 2015; GLA, 2016a). In 2015, the premature mortality rate was 762 per 100,000 people aged 55-64 years old dying, the second-highest rate in London, lower only than Hammersmith and Fulham (795 per 100,000 residents) (Trust for London, 2017b).

According to Sport England (2016), 39.2 percent of Islington residents participated in sport at least once a week in 2015-16. This is slightly less than Tower Hamlets and Wandsworth, but higher than London overall (Sport England, 2016). However, 20.2 percent of Islington residents were inactive, and 34 percent of residents were considered overweight or obese, although this is better than London as a whole (Sport England, 2016; 2017). Twenty-six percent of Islington's residents over 16 years old said they volunteered during the past 12 months, higher than Greater London (24.0 percent), but less than Inner London (27.3 percent) (GLA, 2016b). This ranks 16th in Greater London, tied with the boroughs of Enfield and Lewisham, and seventh in Inner London (GLA, 2016b).

4.4.2. Urban development and change

Islington was formed from the former boroughs of Islington and Finsbury in 1965. Contemporary Islington "has come to represent progressive values embodied in local policies in relation to housing, egalitarianism and liberal causes" (Travers, 2015, p. 89). Former Labour Prime Minister Tony Blair lived in Islington when he became prime minister and current Labour Party leader Jeremy Corbyn resides in Islington, as well (Travers, 2015). Nonprofit organisations and charities locate in Islington because of its "radical leanings and location near the City and West End" (Travers, 2015 pp. 95-96). Finsbury's "radical political past" remains tangible in Islington today, such as by the large amount of social housing in the borough (Travers, 2015, p. 90). Politically, Islington Council has been under Liberal Democrat or Labour control for decades (London Councils, 2018a). In the 2018 elections, Labour won 98 percent of councillors, the same as in the 2014 elections (London Councils, 2018a). In the early 2000s, Islington Council was a stronghold for the Liberal Democrats, with 75 percent control in 2004 (London Councils, 2018a).

Islington's proximity to the City of London and the City of Westminster influenced its growth and development from the 16th century (Baggs et al., 1985). Middle-class residents, drawn to Islington because of its location near Central London, moved into

terraced homes on main roads. By 1819, Islington was considered "chiefly composed of the dwellings of retired citizens and others connected with the metropolis" (Baggs et al., 1985). The 19th century saw rapid development (Baggs et al., 1985). By 1903, Islington had a large population, with "very little open space and above average overcrowding" (Baggs et al., 1985). Bombings during World War II, in some ways, brought relief to Islington's crowded cityscape. More than 3,200 houses were destroyed during the war and bombed sites were used for new municipal housing (Baggs et al., 1985). Some sites also were turned into open spaces, many of which remain part of Islington's system of green and open spaces today (Baggs et al., 1985; respondent 31, green space staff, Islington, and respondent 44, green space staff, Islington).

Figure 4.2 – **Highbury Fields:** At 11.75 ha, Highbury Fields is Islington's largest green space (source: author).

In the ensuing years, Islington has remained densely populated. In 1951, Islington was London's most-densely populated metropolitan borough, as it is today, and was "very short of public open space" (Baggs et al., 1985). The borough had the most multi-occupied housing in London and 77 percent of households lacked amenities

such as their own toilet, stove, sink or bath, so in 1967 the council began slum clearance (Baggs et al., 1985). In its efforts to clear land for new housing estates, Islington also reserved land for green and open spaces. The amount of open space in the borough went from 60 acres in 1958 to 107 acres by 1971 (Baggs et al., 1985). Today, 12.4 percent of the borough is considered green space, considerably less than the London average (38.3 percent) and nearly half the Inner London average (21.7 percent) (GLA, 2017a). In fact, Islington has the least amount of green space of all Inner London boroughs, except the City of London, which, as noted earlier, is a statistical outlier. Islington's largest green space is Highbury Fields, at 11.75 ha (Islington, n.d.). At least 50 percent of households in each of Islington's 16 wards have access to open space (GiGL, 2015b). In 12 of 16 wards, at least 50 percent of households have access to a local park (GiGL, 2015b). Nine wards have at least 50 percent household access to a metropolitan or regional park; six wards have less than 10 percent of households with access to these larger spaces (GiGL, 2015b). This emphasises how Islington has a system of smaller urban green spaces, yet struggles to provide larger spaces (GiGL, 2015).

Nearly every respondent who discussed Islington cited the borough's population density as a significant influence on how green space is delivered and managed. Some respondents, such as respondent 31 (green space staff, Islington), said this density has caused the council to alter its definition of green space. This indicates the influence of density – notably, sustained density – on how urban green space may be conceptualised.

Travers calls Islington "a borough of extreme contrasts, often across a street," with vast social housing estates literally across the road from some of the most expensive homes in London (2015, p. 97). The median house price in Islington in 2017 was £615,000 (ONS, 2018b). Between 2010-11 and 2016-17, Islington added 6,156 net new homes, the 13th-most in London and the eighth-most in Inner London (DCLG, 2017). During that same period, 2,500 new affordable homes were built in Islington, the 15th-most in Greater London and eighth-most in Inner London (GLA, 2017c). Islington's housing estates form a critical part of the borough's green infrastructure, as open space on these housing estates totals an area four times more than the council's public open spaces, including green spaces (Islington, 2005).
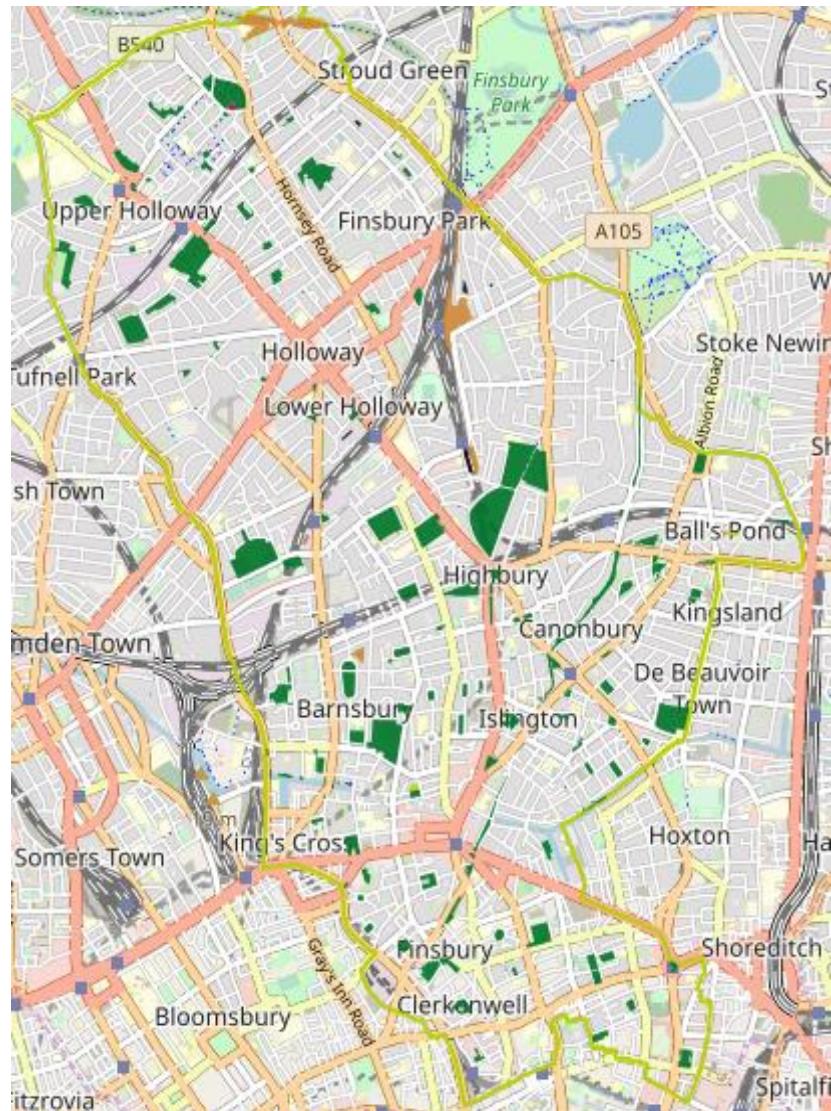
Figure 4.3 – Green and open spaces in Islington (source: Islington Council, 2018).

4.5. TOWER HAMLETS

4.5.1. Demographics

At 19.8 square kilometres, the London borough of Tower Hamlets is the sixth smallest borough in London by land area (GLA, 2018a). Tower Hamlets, which borders the River Thames and includes canals and much of the Docklands, has more waterside than any other London borough (Tower Hamlets, 2017a). With an estimated population in 2017 of 304,000, Tower Hamlets has the 11th-largest population in Greater London and the fourth-largest in Inner London (GLA, 2018a).

The borough's population per square kilometre of 16,036 makes it the second-densest borough in London and England, after only Islington, although Tower Hamlets is catching up (GLA, 2018a). Between the 2001 and 2011 censuses, Tower Hamlets, located in East London, experienced a 26.4 percent increase in population, the largest change in not only London, but also all of England and Wales (ONS, 2012b). The borough's growth is projected to continue with an increase of 8 percent between 2015 and 2030 (Trust for London, 2017c).

The average age in Tower Hamlets is 31.4 years, the youngest of the three boroughs in this research (GLA, 2017a) (see Table 4.3). Nearly three-fourths – or 73.9 percent – of the borough's population is working age (GLA, 2017a). Children 0-15 years account for 20.1 percent of the population, more than Greater London, but much less than Inner London (GLA, 2017a). Residents 65 and older constitute 6.0 percent of Tower Hamlet's population, the smallest percentage of the three boroughs in this research (GLA, 2017a).

As shown in Table 4.2, in Tower Hamlets, 38.6 percent of the population was born abroad, nearly the same as Greater London and Inner London (GLA, 2017a). However, while other Inner London boroughs have a foreign-born population spread fairly evenly among several groups, Tower Hamlets has a sizeable percentage of migrants from one country, with 15.3 percent of the population from Bangladesh (GLA, 2017a). This gives the borough the largest Bangladeshi population in England (TH, 2013; GLA, 2017a). Indeed, the eastern part of Tower Hamlets "has become as symbolic of British Bangladeshis as Canary Wharf has of bankers" (Travers, 2015, p. 126). More than half (54 percent) of the borough's population comes from ethnic minority (BME) groups, while white British residents make up 31 percent of Tower Hamlets' population, substantially less than the national average (80 percent) (TH, 2013; GLA, 2017a). Indeed, Tower Hamlets has the fifth-lowest proportion of white British residents in England (TH, 2013).

In 2016, gross annual pay in Tower Hamlets was £36,429, higher than London as a whole (GLA, 2017a) (see Table 4.4). Meanwhile, the modelled household median income estimate (2012-13) was £34,930, below both Inner London and Greater London (GLA, 2017a). Along with five other East London boroughs, Tower Hamlets

Figure 4.4 – **Mile End Park:** Mile End Park is a 32-ha linear park in Tower Hamlets (source: author).

served as a host for the 2012 Olympic Games. As such, the borough has been part of efforts to regenerate the area, build additional housing and stimulate economic growth in East London. In October 2017, London Mayor Sadiq Khan asserted that "the centre of gravity in London is moving east" (GLA, 2017b). Between 2013 and 2017, 50,000 new jobs were created in Tower Hamlets (GLA, 2017b). There are 300,000 jobs in the borough, resulting in a jobs density of 1.33 (ONS, 2018a). Like Islington, Tower Hamlets shares a border with the City. The population of Tower Hamlets increases significantly on weekdays, with more than 200,000 workers commuting into Canary Wharf (Tower Hamlets, 2010). This has an impact on the borough's green spaces. In 2015, Tower Hamlets' employment rate was 70.4 percent, similar to Inner London and Greater London (GLA, 2017a). However, a greater disparity exists between male and female employment than in Islington and Wandsworth (GLA, 2017a).

Tower Hamlets is the sixth-most deprived borough in England, and the third-most deprived in London, after Hackney and Barking and Dagenham (DCLG, 2015). The borough ranks second in Greater London and in England in income deprivation

(DCLG, 2015). Only Barking and Dagenham ranked higher (DCLG, 2015). Tower Hamlets has the highest rate of poverty, child poverty, unemployment and pay inequality of any London borough (Trust for London, 2017a). The borough also ranks fifth in barriers to housing and services, which measures physical and financial accessibility of housing and local services (DCLG, 2015; GLA, 2016a; Trust for London, 2017a).

In 2015-16, 41 percent of Tower Hamlets residents participated in sport at least once a week, more than London (Sport England, 2016). Yet, 30.2 percent of Tower Hamlets residents were inactive, higher than the London and England averages (Sport England, 2016). And, 40.4 percent of borough residents were considered overweight or obese, although this is still better than the London and England averages (Sport England, 2017). Sixteen percent of Tower Hamlets residents said they volunteered during the past 12 months, the lowest in Inner London (GLA, 2016b). This is less than the London and England percentages and the third-lowest percentage among all London boroughs (GLA, 2016b). This could affect green space governance, as local councils move to include more community volunteers in the delivery and management of green space, as discussed in Chapter 7 (Governance).

4.5.2. Urban development and change

Tower Hamlets was formed from the former boroughs of Bethnal Green, Stepney and Poplar in 1965, although the name "Tower Hamlets" dates to 1605, when it was used to describe an area near the Tower of London (Travers, 2015). With its location on the Thames, the borough has been influenced over the centuries by its association with international immigration. Travers calls Tower Hamlets' role as a first home for immigrants "legendary," comparing it to Manhattan's Lower East Side (2015, p. 125). Many of these immigrants worked in the clothing industry and the area has long been associated with poverty, poor conditions and low-skilled workers. The East End, including what is now Tower Hamlets, suffered heavy bomb damage during World War II, as the Docklands, railways and storage of materials for the war made the area a target. In Tower Hamlets, nearly 47,000 homes were destroyed, with even more damaged, thus, a post-war wave of rebuilding and urban renewal, dominated by public housing, ensued in the 1940s and 1950s, and this was dominated by construction of public housing (Oakley, 2013; Travers, 2015).

The location on the Thames, including the Docklands, also is central to the rise and fall of Tower Hamlets' economic fortunes. Between 1966 and 1976, the Docklands lost 150,000 jobs – 20 percent of all jobs in the area – causing the area to experience "dreadful decline" (Travers, 2015, p. 127). However, since the 1980s, the borough has experienced a number of significant regeneration projects centred on private development, particularly Canary Wharf and the Isle of Dogs in the Docklands, but also areas such as St. Katharine's Docks, near the border with the City. In the 1980s, the government-appointed London Docklands Development Corporation (LDDC) was established and had responsibility for most of the Docklands, with an enterprise zone at the Isle of Dogs established to spur development through attracting private investment (Travers, 2015). This pro-private development approach had a "profound" effect on Tower Hamlets, particularly as the LDDC had planning authority for the area it oversaw (Travers, 2015, p. 128). Other regeneration sights in Tower Hamlets have included the Lower Lee Valley and the 2012 Olympic site. Yet, the success of the Docklands did not spill out across the rest of Tower Hamlets and today the borough contains some of the most-deprived wards in England rubbing up against some of the wealthiest (Tower Hamlets Fairness Commission, 2013). Income and deprivation are not spread equally across the borough and, as noted earlier, borough-level data obfuscates considerable differences at the ward or household level.

This dramatic contrast is evident in the borough's green spaces, as well. Tower Hamlets' urban green spaces were established largely in three waves, starting with the creation of Victoria Park in the mid-19th century (Tower Hamlets, n.d.-a). In the late 19th century, a number of churchyards were converted to publicly accessible gardens; these remain the only green spaces in some parts of Tower Hamlets today. Then, post-war development in the 20th century led to creation of additional green spaces in the borough. Some spaces are remnants of former commons and greens. For example, Stepney Green Gardens, along with the Stepney Clock Tower site, are all that remain of Mile End Green (Tower Hamlets, n.d.-a). Tower Hamlets' largest green space remains Victoria Park, at 86.18 ha (Tower Hamlets, n.d.-b). However, respondent 37 (green space staff, Tower Hamlets) said more users come from the neighbouring borough of Hackney, as Victoria Park lies on the border between the two boroughs and used to be jointly managed by the two local authorities. Today, 15.2 percent of the borough is considered green space, considerably less than London and Inner London (GLA, 2017a; see figure). Indeed, of the 13 Inner London

boroughs, Tower Hamlet's is 10th in amount of green space, ahead of only Kensington and Chelsea, Islington and the City of London.

At least 50 percent of households in each of Tower Hamlets' 17 wards have access to open space (GiGL, 2015b). Ten wards have at least 50 percent household access to a metropolitan or regional park (GiGL, 2015b). Similarly, 10 of the 17 wards have at least 50 percent of households with access to a local park, although these are not the same wards (GiGL, 2015b). Thus, Tower Hamlets has areas of deficiency in access to large and small open spaces. The council's Core Strategy acknowledges the unlikelihood that the amount of green space will increase: "Given the inner-London nature of the borough, improving access to open, green and water spaces continues to be a significant challenge" (Tower Hamlets, 2010, p. 21).

This is further complicated by the pace of the borough's growth and development. Tower Hamlets has the highest percentage of 21st-century homes in its housing stock in the country (GLA, 2015b). Between 2010-11 and 2016-17, Tower Hamlets built 14,503 net new homes, the most in London and nearly 4,000 more homes than second-place Southwark (DCLG, 2017). Nearly half of these (7,221) were built between 2015-16 and 2016-17 (DCLG, 2017). From 2004-14, the number of homes in the borough increased by 29 percent, the fastest growth rate of all local authorities in England (GLA, 2015b). Also, between 2010-11 and 2016-17, Tower Hamlets added 7,110 new affordable homes, the most of any London borough and 8.7 percent of the 81,330 new affordable homes built in Greater London (GLA, 2017c). The median house price in Tower Hamlets in 2017 was £490,000 (ONS, 2018b). Council tax records list 5,000 homes in Tower Hamlets as second homes, the fourth-most after Kensington and Chelsea, Westminster and Camden (GLA, 2015b). Collectively, these four boroughs account for more than half of the 48,390 second homes in London (GLA, 2015b). Further, inward pressure resulting from the green belt around London puts pressure on brownfield sites, such as the Docklands and the Olympic Park – both in Tower Hamlets (Holman and Thornley, 2015).

Tower Hamlets also has experienced unstable political leadership since the borough's creation. Indeed, "complex politics is the hallmark of contemporary Tower Hamlets" (Travers, 2015, p. 132). The council initially was Labour, but the Liberal Democrats took over in the mid-1980s (Travers, 2015). By 2010, Conservatives represented more than 20 percent of the local vote (Travers, 2015). In 2010, Tower

Hamlets voters approved having a directly elected mayor (Travers, 2015). Accusations of corruption and illegal voting ensued and local politics "continued to be at risk of tumultuous and unsettling change" (Travers, 2015, p. 132). As of the May 2018 elections, Tower Hamlets Council is under Labour control, with 93 percent of councillors (London Councils, 2018a). In 2014, Labour controlled 48 percent of the council, with 43 percent controlled by the now-defunct Tower Hamlets First (London Councils, 2018a). Currently, the directly elected mayor of Tower Hamlets is a member of the Labour Party (London Councils, 2018a).
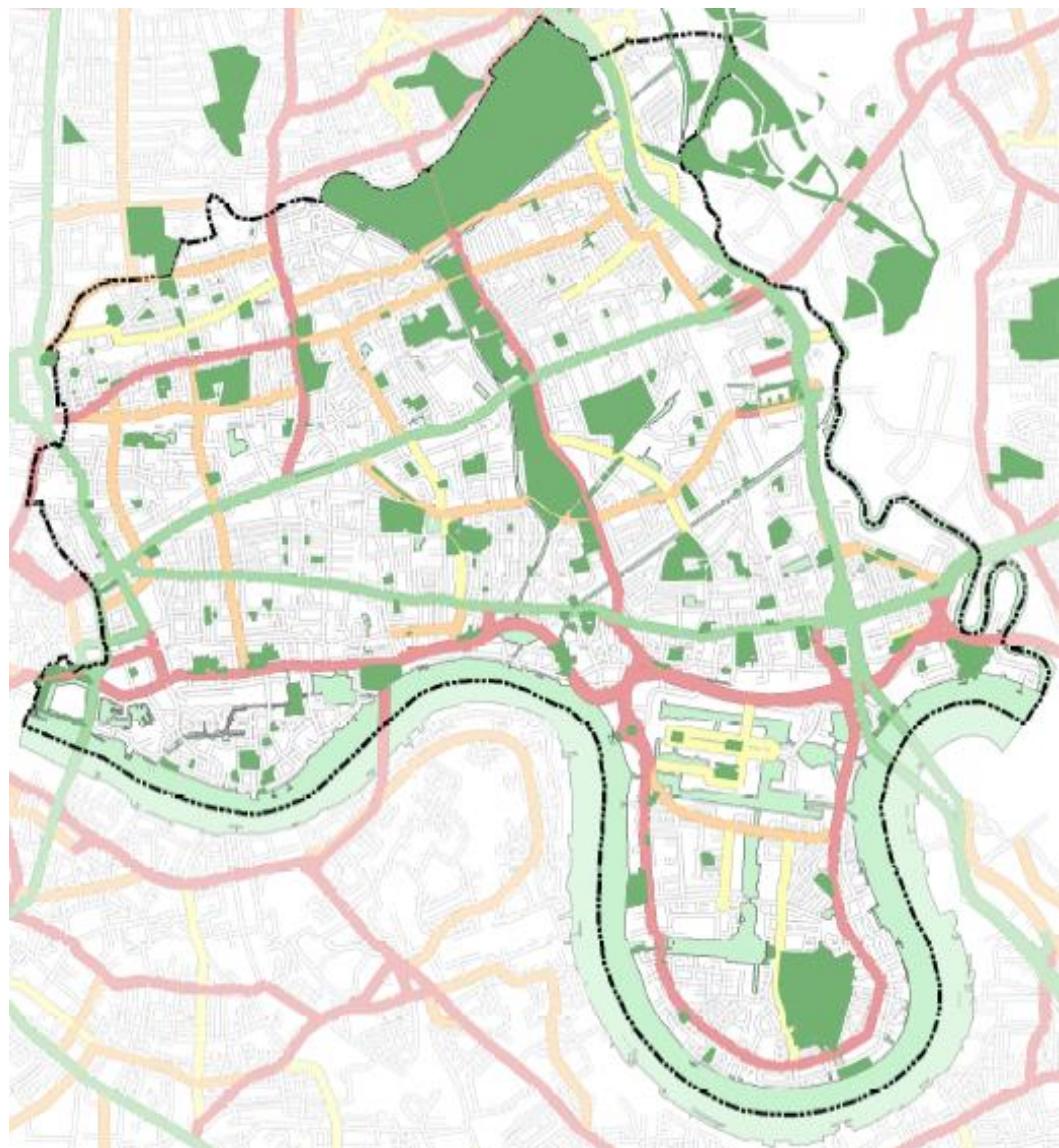
Figure 4.5 – Green and open spaces in Tower Hamlets (source: TH, 2017b; Crown copyright and database rights, 2017 Ordnance Survey. All rights reserved. London Borough of Tower Hamlets, 100019288).

4.6. WANDSWORTH

4.6.1. Demographics

At 34.3 square kilometres, the London borough of Wandsworth is the sixth-largest borough in London by size and the second-largest in Inner London, smaller only than Lewisham (35.1 sqkm) (GLA, 2018a) (see Table 4.3). Like Tower Hamlets, Wandsworth borders the Thames. With a 2017 estimated population of 321,000, Wandsworth, located in Southwest London, also is the third-largest Inner London borough by population (GLA, 2017a). A population density of 9,468 residents per square kilometre makes Wandsworth the 10th-densest London borough (GLA, 2018a). Between the 2001 and 2011 censuses, Wandsworth experienced a 13.0 percent increase in population, the 12th-largest in Greater London and the fifth-largest in Inner London (ONS, 2016).

The average age in Wandsworth is 35.0 years, making it the oldest of the three boroughs researched here (GLA, 2017a) (see Table 4.3). Almost three-fourths, or 72.8 percent, of Wandsworth' population is working age (GLA, 2017a). Wandsworth has the highest proportion of 25-39-year-olds of any local authority nationally – 39 percent compared with 28 percent across London and 20 percent in England (GLA, 2011a). Children 0-15 years account for 17.8 percent of the population, a significant departure from the Inner London average (38.5 percent) (GLA, 2017a). Residents 65 and older make up 9.3 percent of Wandsworth's population, higher than Inner London, but still lower than Greater London (GLA, 2017a).

In Wandsworth, 32.8 percent of the population was born abroad, less than Greater London and Inner London (GLA, 2017a). Wandsworth's largest migrant population comes from Poland, followed closely by South Africa (GLA, 2017a). Ethnic minority (BME) groups account for 29.7 percent of Wandsworth residents, similar to Islington (32.0 percent), but much lower than Tower Hamlets (54.0 percent), Inner London (43.1 percent) and Greater London (42.5 percent) (GLA, 2017a). Wandsworth also has the highest number of Australians and South Africans of all London boroughs (ONS, 2011a).

Gross annual pay was £41,064, higher than the London average and the highest of the three boroughs (GLA, 2017a) (see Table 4.4). Meanwhile, the modelled household median income estimate (2012-13) was £47,480, above both Inner London and Greater London, and higher than Islington and Tower Hamlets (GLA,

2017a). Income inequality is relatively high in Wandsworth, where the gap between the rich and poor is larger than in 26 of London's other 32 boroughs (Trust for London, 2017a). There are 145,100 jobs in the borough, the fewest of the three boroughs in this research, resulting in a jobs density of 0.63, which ranks 20th in Greater London and 11th in Inner London; only Greenwich and Lewisham had a lower jobs density (GLA, 2018a). In 2015, Wandsworth's employment rate was 78.8 percent, higher than Inner London and Greater London (GLA, 2017a; see Table 4.4).

Figure 4.6 – **Wandsworth Park:** Wandsworth Park is a Grade II-listed park that borders the River Thames (source: author).

Wandsworth does not suffer from the levels of deprivation found in Islington and Tower Hamlets, as the borough was the 12th-least deprived in London in 2015 (DCLG, 2015). However, the borough ranks 11th in Greater London and 14th in England in living environment deprivation (DCLG, 2015; GLA, 2016a). Despite being one of the least-deprived boroughs in the capital, Wandsworth's premature mortality rate ranks among the worst in London, with 728 of every 100,000 people aged 55-64 dying in 2015, the fourth-highest rate in London (Trust for London, 2017b).

According to Sport England, 41 percent of Wandsworth residents participated in sport at least once a week in 2015-16, higher than London (Sport England, 2016). Further, 19.2 percent of Wandsworth residents were inactive, less than London and England (Sport England, 2016). Meanwhile, 35.7 percent of residents were considered overweight or obese, better than Tower Hamlets, Greater London and England, but worse than Islington (Sport England, 2017). In Wandsworth, 25 percent of adult residents volunteered in the past 12 months, ranking 19th in Greater London and ninth in Inner London (GLA, 2016b).

4.6.2. Urban development and change

In 1965, Wandsworth was formed from the former borough of Battersea and a large part of an earlier borough of Wandsworth, with an eastern slice made up of Clapham, Streatham Hill and Streatham lost to the new borough of Lambeth (Travers, 2015). The borough's history has been shaped by its location on the rivers Wandle and Thames. For example, the Wandle provided power for the borough's largely industrial background, including numerous mills – flour and, later, iron working, copper, gunpowder making, leather working, printing, brewing and hatmaking, among others (Wandsworth Historical Society, n.d.).

Housing and development have been strong features of the borough's history (Travers, 2015). One of the most iconic developments is the modernist Alton Estate in Roehampton, built by the London County Council in 1959 in an area of mature parkland, and one of the largest housing estates projects in Europe at the time (Travers, 2015). More recently, Wandsworth has been home to several large-scale developments, notably the Nine Elms and Battersea Power Station site, which is the largest regeneration scheme in Central London since the Docklands (UCL, 2013; Travers, 2015). Community benefits provided by Nine Elms developers, as part of planning conditions, include a 12-acre linear green corridor from Vauxhall Bridge to

Battersea Power Station (Wandsworth Council, 2018). The size and viability of the urban green space have already been challenged and it is not a continuous green space, but rather a connection of privately owned and managed plazas, pocket parks, landscaping, and retail and dining (London Forum, 2015). Still, it remains one of the largest new publicly accessible spaces created in London in recent years.

The median house price in Wandsworth in 2017 was £654,000, well above both Inner London and Greater London (ONS, 2018b). Between 2010-11 and 2016-17, Wandsworth added 10,030 net new homes, the fifth-most in London and the third-most in Inner London, after Tower Hamlets and Southwark (DCLG, 2017). During that same period, 2,510 new affordable homes were built in Wandsworth, the 14th-most in Greater London and seventh-most in Inner London (GLA, 2017c).

With 26.9 percent of the borough considered green space, Wandsworth has more green space than Inner London (21.7 percent) (GLA, 2017a). Indeed, Wandsworth
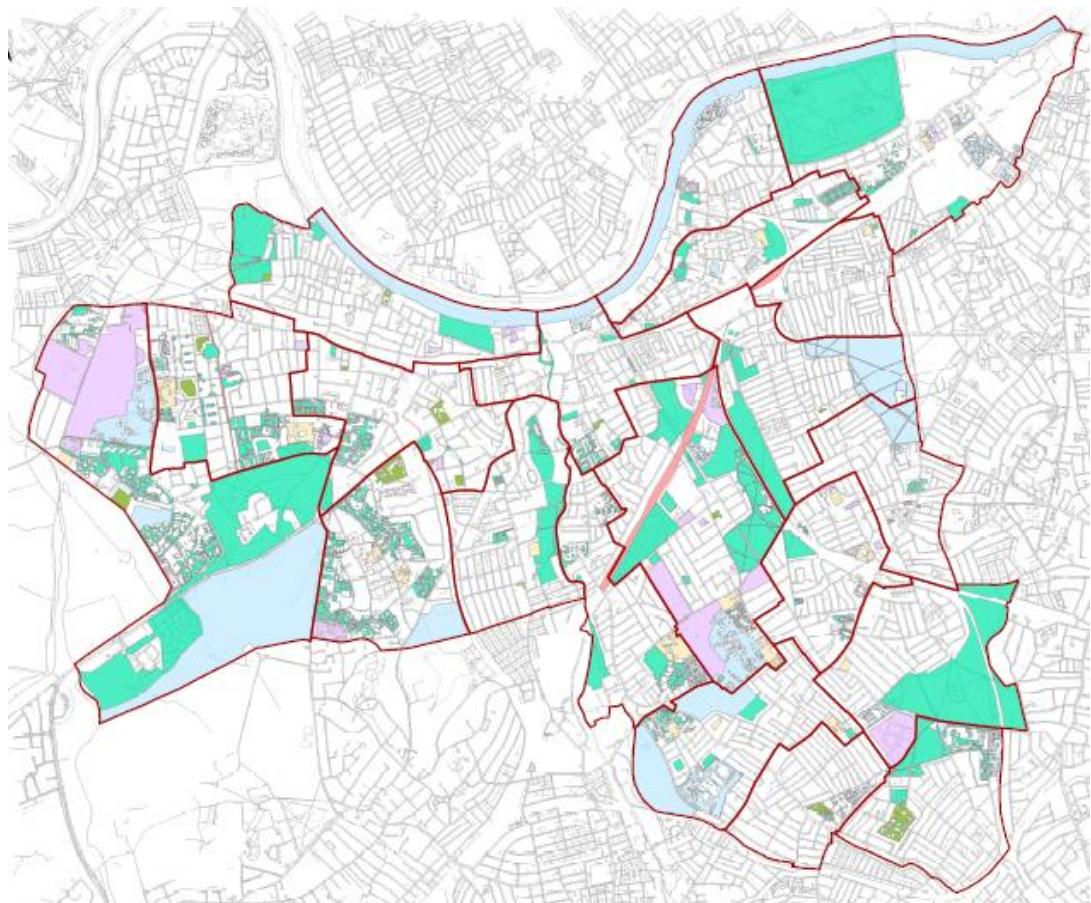
Figure 4.7 – Green and open spaces in Wandsworth (purple is privately owned and managed space) (source: Wandsworth Council, 2007).

has the third-most green space of all Inner London boroughs, behind only Westminster, which benefits from the presence of several large Royal Parks, and Greenwich, which also has a large Royal Park within its borders. Respondent 19 (green space staff, Wandsworth) remarked that the borough is "blessed in terms of the amount of green space we've got."

Quite unlike Islington and Tower Hamlets, Wandsworth has large green spaces. At 92 ha (220 acres), Tooting Common, in the south of the borough, is Wandsworth's largest public green space not shared with another borough (Enable, 2018). This is followed by 83-ha (210-acre) Battersea Park and Wandsworth Common, at 73 ha (180 acres) (Enable, 2018). Thus, large green spaces are a feature of Wandsworth. Indeed, Islington's largest green space, Highbury Fields, would fit into Tooting Common almost eight times. Despite this, housing amenity green space is the most-abundant space type in Wandsworth, although, as discussed in Chapter 6 (Planning), amenity space is not included in green space measurements.

Figure 4.8 – **Putney Lower Common:** Wandsworth has more publicly accessible green space than all other Inner London boroughs, except Westminster, which is home to several large Royal Parks. Several commons lie within Wandsworth's boundaries, including Putney Lower Common (source: author).

(Wandsworth Council, 2007). At least 50 percent of households in 14 of Wandsworth's 20 wards have access to open space (GiGL, 2015b). All 20 wards have at least 50 percent household access to a metropolitan or regional park (GiGL, 2015b). However, only one ward has at least 50 percent of households with access to a local park, illustrating how Wandsworth's public spaces tend to be large spaces and contrasting greatly with Islington (GiGL, 2015b).

The presence of several commons "are a distinctive part of Wandsworth" (Wandsworth Council, 2007, p. 5-1). In addition to Tooting Common and Wandsworth Common, other commons land wholly or partly in Wandsworth include Clapham Common, Wimbledon Common, and Putney Heath and Putney Lower Common (Wandsworth Council, 2007). Per the Wimbledon and Putney Commons Act of 1871, the 1,140 acres of Wimbledon Common, Putney Heath and Putney Lower Common are managed by a board of conservators, not Wandsworth Council (Wimbledon and Putney Commons Act, 1871). Both Tooting and Wandsworth commons have management advisory committees that work with Wandsworth Council to protect the commons and promote public interest. These committees consist of local residents, commons users, and representatives from local organisations and sports clubs (Wandsworth Council, 2015).

Politically, Wandsworth Council is under Conservative party control, with 55 percent of councillors as of the May 2018 elections, although this is a lower percentage than the 68 percent in 2014 and 78 percent in 2010 (London Councils, 2018a). The borough has been seen as "the leading model of Thatcherite local government," and the Conservatives have won every election since 1978 (Travers, 2015, p. 132). Successive Conservative leaders and councillors have advocated for a "common-sense approach" to government (Travers, 2015, p. 135). This includes routinely contracted-out services, including green-space maintenance, and a reduced council staff (Travers, 2015). Wandsworth Council promotes its low council tax and recently partnered with the borough of Richmond-upon-Thames to share a workforce (Wandsworth Council, 2017a; 2017b). Despite its political stability, Wandsworth has experienced substantial social and demographic change since 1965, and the borough is predicted to be on the cusp of further significant change (Travers, 2015). As Travers notes: "The future is likely to see a radical urbanisation of the north of Wandsworth, linking it more strongly to central London" (2015, p. 139).

4.7. CONCLUSION

London differs from other cities in Britain in myriad ways, from demographics to population density to economic growth (Travers, 2004). Thus, London's issues related to the delivery and management of urban green space are different, as well. In addition to London diverging from the rest of the UK in many ways, the capital's boroughs also have their own unique characteristics, further adding complexity to green space planning. Islington, for example, is London's densest borough, with relatively little green space. What green space Islington does have comprises mostly small spaces. Tower Hamlets is experiencing phenomenal population and development growth, to the point that it is catching up with Islington regarding population density. Tower Hamlets also is a culturally and ethnically diverse borough, as well as a relatively young one. Meanwhile, Wandsworth is a relatively wealthy borough, with large green spaces and a large total amount of green space in comparison to other boroughs across Inner London. All three boroughs, though, are growing in population, which puts pressure on green space delivery and management. Each has areas where residents are identified as having deficient access to public open space, including green space.

For centuries, London has been a place of churn, with people and businesses coming and going. This will continue. Yet, amidst the constant urban change, a focus on sustainable development and urban resilience has become more prominent across Britain and, notably, in London. Even with this change, London's long and rich history remains influential (Travers, 2015). Indeed, "no other global city entwines its rural history and urban present so deliberately" (Travers, 2015, p. 7). Thus, delivering and managing urban green space in London is a balancing act that is influenced not only by history and a changing local context, but also by evolving national, regional and local policies and planning strategies. The following three chapters, which provide the empirical evidence for this thesis, address this.

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CHAPTER 5 – HERITAGE

This chapter, which relies largely on document analysis, is used to argue that Inner London's urban green spaces are delivered and managed in a path-dependent way, which results in focusing on these spaces as heritage assets. This path dependency is repeated throughout Inner London because: (1) the concept of what green space is, how it should look and how it should be used has been institutionalised; (2) heritage is a cultural and policy priority in England, with green space embedded in English identity; and (3) the reasons for providing urban green space remain unchanged since the Victorians established public green spaces in the 1800s, despite the dynamic change that has occurred in London.

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"A contrast between country and city, as fundamental ways of life, reaches back into classical times." – Raymond Williams, *The Country and the City* (1973, p. 1)

5.1. INTRODUCTION

In the heart of London's East End lies Victoria Park, the British capital's oldest public green space (Poulsen, 1976). Created through an act of Parliament in 1841, the park opened to the public in 1845, becoming the first open space in London's crowded, polluted and unhealthy East End. Victoria Park stamped its place in the long and storied history of London when it became the first green space in the city to be designed and built specifically for the public and surrounding communities (Tower Hamlets, n.d.-c). Until Victoria Park, located in the borough of Tower Hamlets, green spaces in London primarily consisted of private gardens and squares and royal hunting grounds, found predominantly in West London and largely inaccessible to the working class.

For a green space that is almost 175 years old, Victoria Park has changed relatively little. Indeed, in its justification for adding the park to its Register of Historic Parks and Gardens as a Grade II-listed park in 1987, Historic England cited Victoria Park's special historic interest and the fact that it retains much of its original Victorian-era layout and monuments (Historic England, 1998b). In addition to the park itself, a

Figure 5.1 – **Burdett Coutts fountain:** The Victorian gothic Baroness Burdett Coutts drinking fountain, also known as Victoria fountain, is a Grade II*-listed structure in Victoria Park, Tower Hamlets (source: author).

number of individual structures within the park, such as the Victorian Gothic Burdett Coutts fountain (see Figure 5.1) and Bonner and Crown gates, also are listed as historic features (Historic England, 1998b). Thus, it is not just the park as a whole that is considered historic, but parts within it, as well, further underscoring the heritage value of the site. Although the pagoda, lido and other features of the park were lost during and after World War II, many of the common elements of London's first public green space can still be found in Victoria Park (Historic England, 1998b). For example, the perimeter carriage drive, belts of trees and formal bedding displays as originally designed by James Pennethorne remain.

The park's being frozen in time is consciously done. Victoria Park, like many of Inner London's green spaces, is recognised as a heritage asset as much as an urban green space. The focus on the heritage aspect of this urban park is evidenced by the management approach, maintenance practices and funding sources chosen by Tower Hamlets decision makers. The research in this thesis shows that Victoria

Park's heritage value, like that of other urban green spaces, drives the way of thinking about the park and contributes to the over-arching way of conceptualising urban green spaces across London primarily as conduits to the past and not vehicles for future urban sustainability.

Even when an individual urban green space does not have a strong link to heritage, the general heritage-based approach to green space overall influences how all spaces are managed. Respondent 25 (senior staff, national charity) observed that "the main driver really in the [green space] industry at the moment is heritage." Similarly, respondent 46 (senior staff, national charity), said urban green spaces are "culturally very rich and very interesting, but they are looking back to the past, rather than looking forward to the future." Indeed, the concept of urban green space has evolved into a powerful institution grounded in heritage, with maintaining "the Victorian legacy" continuing to influence green space today (respondent 5, planner, Wandsworth). As shown in Chapter 2 (Literature), institutions influence preferences and expectations and are critical for explaining how decisions are made (Koelble, 1995; March and Olsen, 2006). Institutions are "a relatively enduring collection of rules and organized practices, embedded in structures of meaning and resources that are relatively invariant in the face of turnover of individuals and relatively resilient to the idiosyncratic preferences and expectations of individuals and changing external circumstances" (O'Riordan and Jordan, 1999; March and Olsen, 2006, p. 3). For urban green spaces in Inner London, these "rules of the game" mean prioritising heritage over other uses, such as environmental services. This has paved the way for a path-dependent conceptualisation and approach to designing, delivering and managing urban green spaces in contemporary London (Lowndes, 2001, p. 1958).

London's urban green spaces remain "frozen in time" (respondent 2, senior staff, regional charity) by pursuit of a historical look, feel and function that has, over time, become the accepted way of doing things. This is a dominant influence on green space delivery and management in London today because it shapes debates, attitudes and expectations about how urban green space is provided throughout the capital. The contemporary way green space is planned, delivered and managed in Inner London occurs within a traditional perspective of and approach to green space, established almost two centuries ago, that is deeply rooted in English history and culture. Thus, London's urban green space is delivered and managed in a path-

dependent way. This collides with 21st-century urban demands on London's green spaces, notably ecosystem services such as water filtration, air purification and biodiversity protection that mitigate the impacts of climate change, as discussed in Chapter 2 (Literature) and further developed in Chapter 6 (Planning) and Chapter 7 (Governance). Ultimately, tension results between a fixation on the past and policies that espouse urban green space's role in ensuring the viability of London's future.

The following sections, which draw largely from document analysis, discuss three reasons the connection of Inner London's urban green spaces to the past persists: (1) the concept of green space, including what it is, how it should look and how it should be used, has been institutionalised; (2) heritage is a cultural and policy priority in England, with green space deeply embedded in English cultural identity; and (3) the justifications for providing urban green space remain the same today as when the Victorians established public green spaces, even though the urban context in which London's green spaces exist has changed since "Vicky Park" welcomed its first users in 1845.

5.2. INSTITUTIONALISED CONCEPT

The path dependency of London's urban green space is largely influenced by an institutional concept of urban green space – including what green space is, how it should look, how it should be used and how it should be managed – that originated in the Victorian era. The prominent theme of this institutionalised concept is the notion that urban green spaces embody the countryside and this is a desirable – and achievable – condition for urban life. This was emphasised by the Victorians, who highly valued the countryside, associating it with goodness and purity and ascribing it almost mythical powers (Walker and Duffield, 1983).

5.2.1. Anti-urbanism

England's public park and green space movement began in the 19th century amidst an expanding population as a counterpoint to industrialisation, with the urban park identified as "a new kind of nature that, however proximate to the city, was characterized by an absence of people and, more to the point, distance from economic activity" (Conway, 1991; Gabriel, 2011, p. 127). Being away from the city, if not literally, then metaphorically, mattered to the Victorians because they considered the city physically and morally dirty, polluted, and corrupt, and this fanned

their disdain for urban life (Malchow, 1985; also see Harrison and Clifford, 2016). The Victorians blamed cities – particularly the air in urban areas – for the disease and ill health that affected much of England's urban population at the time. Contempt for "the ever-widening girdle of bricks and mortar" grew with every census count, as did the belief that "physical, mental and moral decay were inseparable and intimately linked to urban life" (Malchow, 1985, p. 109). As such, cities were considered "the antithesis of good living environments" (Dempsey, 2009, p. 316).

Rapid urbanisation from the start of the 19th century dramatically increased the density of English cities, consuming open space as urban development progressed (Walker and Duffield, 1983). This was the case in London's East End, where urbanisation from the docks, arrival of the railway and poorly constructed housing contributed to the crowded 19th-century environment (Poulsen, 1976). Cities' physical and institutional infrastructures were not equipped to handle such extraordinary growth (Eisenman, 2013). Cramped, dense living conditions left workers with little access to nature in urban areas considered "devoid of anything beautiful or natural" (Poulsen, 1976. pp. 7-9). Indeed, the poor environment of London's East End – epicentre of the working class during the height of the Industrial Revolution – is well-documented (Walker and Duffield, 1983).

Along with other urban areas throughout England, London's East End was identified as the source of poor health and served as the impetus for public health becoming a high-profile social issue (Power, 2002; Brown, 2013, p. 15). Social and sanitary reformers in London, such as Octavia Hill and J.C. Loudon, used the squalid conditions and lack of access to nature to highlight the threat of "a disease mist or miasma" hanging over densely populated areas and to argue for the provision of urban green space (Reeder, 2006b, p. 42; Dempsey, Brown and Bramley, 2012). In addition to fear that ill health from dire living conditions in the East End would spill over to their part of London, the upper class recognised that these conditions affected workers' productivity and, thus, the economic well-being of the upper classes that depended on them (Walker and Duffield, 1983; Brück, 2013). Concerns also emerged about growing social unrest among industrial workers and the idea that "the process of labour discipline accompanied industrialization" (Gaskell, 1980, p. 480; Walker and Duffield, 1983). This further contributed to the passionate anti-urbanism sentiment that characterised the Victorian period.

5.2.2. Countryside as an antidote to urban life

Their anti-urbanist view "gave Victorians another of those powerful antagonistic dichotomies which they used to explain their world: town and country" (Malchow, 1985, p. 97). The belief that exposure to fresh, unpolluted air reduced the incidence of disease remained powerful throughout the Victorian era and this influenced their approach to urban parks and green spaces (Walker and Duffield, 1983, p. 2). Indeed, whereas the Victorians disliked urban life, they idealised nature and romanticised life among it in the countryside (Hulin, 1979). Victorian-era thought centred on how the natural environment could alleviate the negative and damaging impacts of densely developed urban areas. Writing in Charles Dickens' "Once a Week," Adams advocated the need to "convert London into a garden" through creating roof gardens, which would help clear the air and lead to "a return of the olden time only with the gardens elevated" (1859, p. 520, p. 522). Public parks and green spaces "were seen by middle- and upper-class reformers as a remedy for physical and social ills of the poor" (Brück, 2013, pp. 199-200). Thus, establishing public green space was a "specifically 'Victorian' solution" to address the problem of both the physical and moral health of urban dwellers, which had become a significant social and political issue (Brück, 2013, p. 196).

The belief that access to the countryside not only improved urban workers' physical health, but also improved their morality, formed the foundation for what became England's public park movement – a movement that has been exported beyond Britain and has influenced park and green space provision across the world. As such, the location for Victoria Park was not chosen at random, as the East End was the centre of where the poor and working class lived. The impact of urban development on the East End was palpable, as "urbanisation is something tangible that influences the environment" (Andersson, 2006).

The Victorians believed that exposing the working class to the fresh air and "ideals of beauty" of the countryside would improve their physical health and lead to the poor and working class becoming "cultivated" (Brück, 2013, p. 204). Urban green spaces were considered "spaces for social and moral improvement as well as sites for the promotion of physical health" (Brown, 2013, p. 16). These spaces would provide the working class with places for "suitable" recreation and, thus, they would become "thrifty, industrious, docile and moral" (Conway, 1991, p. 34). Urban parks and green spaces served as part of the political process, as a form of "labor pacification," and

provided a way to maintain order and dictate behaviour and morality: "If outlets were provided, the consumption of spirits would decrease, and mechanics, instead of sotting in alehouses, would rejoice in the opportunity of enjoying the open air" (Slaney, 1833, p. 1054 cited in Walker and Duffield, 1983, p. 3; Perkins, 2009, p. 2615).

Given these beliefs about the countryside, more than 30,000 people signed a petition to establish a park in the East End. The petition, presented to 21-year-old Queen Victoria, read in part:

> …these Poor People, closely crowded in confined districts, have no
> open spaces in the vicinity of their humble dwellings for air, exercise
> or healthful recreation; circumstances which produce the most painful
> effects on their physical and moral condition (Poulsen, 1976, p. 18).

The petition requested that the queen form a "Royal Park" in Tower Hamlets, "in which the comfort and healthful recreation of all classes of the inhabitants shall be adequately provided for, on a scale commensurate with that of the other Metropolitan Parks…" (Poulsen, 1976, p. 20; Conway, 1991). Queen Victoria and the government agreed and, in 1840, the Commission of Woods and Forests authorised Victoria Park to be created as a "Memorial to the Sovereign" (Historic England, 1998b). The growing support for establishing a green space, open to all, in London's East End was fuelled by Victorian ideas that "nature, like art, was thought to have a morally beneficial influence as well as recuperative powers" (Reeder, 2006b, p. 43).

The idea that access to nature would benefit the working class – as well as others living in urban areas – had been formalised by a parliamentary select committee, established in 1833, several years before Queen Victoria approved creation of Victoria Park. Tasked with investigating the need for public walks and open spaces in Britain's urban areas, the committee "had drawn attention to the limited provision in towns and their vicinity of places where the middle and lower classes could take exercise and find amusement" (Gaskell, 1980, p. 480; Reeder, 2006b, p. 42). Until this point, parks and green spaces were mostly "exclusively intended for fine people, dandies on horseback, and splendid equipages" in West London (Wakley, 1840, p. 868). The committee recommended creating publicly accessible urban green spaces to give the working class "alternatives to drinking houses, dog fights and boxing

matches" (Historic England, 2017, p. 9). The committee's report "marked a shift in attitude and policy" that "envisaged parks less as urban adornments than as devices for social betterment; not as places for the amusement of the idle few, but for the recreation of the labouring many" (Olsen, 1993, p. 491).

The impact of the belief in the restorative and superior powers of the countryside on the burgeoning public park and green space movement in the early to mid-1800s cannot be ignored, as it influenced everything from the physical layout of a park to the social intent underlying the purpose for providing publicly accessible urban green spaces in the first place. In creating public parks and green spaces, the Victorians established the idea that, by replicating an idealised version of the countryside within an urban area, urban green spaces offered an essential escape from the city to the physically and morally healthier countryside. The "preservation of open spaces, the crusades for the *Lungs* of London, the multiplication of public parks and playing grounds in all great cities … even in the most densely urbanized areas" illustrated the Victorians' "anti-urban urbanism," with the city designed to "tell us about Nature" (Hulin, 1979, p. 18, emphasis original). If the working class could not go to the countryside, the countryside would come to them. Indeed, as Brück observes, the "picturesque" style of Victorian-era public parks and green spaces was "a deliberate contrast to the dirt and disorder of city life" meant to be "a moral counterpoint to the dangers of the city" (2013, p. 201). As such, "the main trends of Victorian town-planning and architecture reflect, on the whole, a characteristic insistence on designing the urban scene in rural terms" (Hulin, 1979, p. 17). This matters because, through green spaces, the divide between country and city – or rural and urban – visibly played out within the boundaries of London.

This divide persists today. Indeed, Harrison and Clifford argue that a "divide between the 'rural' and 'urban' spheres is woven into the fabric of English society, perhaps nowhere more so than in planning and policy discourse" (2016, p. 585). Indeed, "representations of the countryside in planning discourse are extremely powerful because 'they shape views not only on what the countryside is like, but what it should be like' which may frame debate and thus influence policy making" (Harrison and Clifford, 2016, p. 588, including citing Satsangi et al, 2011). This sets the stage for how London's green spaces have been conceptualised for nearly 200 years and is key to connecting green spaces of the past to urban green spaces today. The rapidly increasing density in English cities contributed to the urgency to establish urban

green space in the 19th century, underscoring Clark and Jauhiainen's assertion, discussed in Chapter 2 (Literature), that urban densification in 19th-century European cities led to creation of "essential 'breathing spaces' in an increasingly pathological city" (2006, p. 17). By the last quarter of the 19th century, the public park movement's objectives were "the creation of open space in densely populated districts, and the preservation of the countryside" (Conway, 1991, p. 208).

The theme of bringing the countryside into the city was prominent in my research. For example, respondent 35 (green space staff, Tower Hamlets) said "the purpose of green space is to encapsulate the countryside." Such comments from respondents tie directly back to the Victorians' "rural ideal" and illustrate the concept of urban green space as countryside in the city has been perpetuated from the 1800s to present day (Malchow, 1985, p. 97). Respondents talked about a heightened need for green space in present-day London. In doing so, they demonstrated that the influence of bringing the country into the city remains powerful. This feeds into Gabriel's argument that urban parks and green spaces developed specifically as places to escape the city and, thus, urban green space and the city have always been defined as "separate but intertwined domains" (2011, p. 125). The parks and green spaces created by the Victorians "served as contrasting retreats from the evils of city life: not adornments to the town, but refuges from it" (Olsen, 1993, p. 491). Indeed, "parks in Britain were created as isolated elements, lungs and oases of green, which contrasted with their urban surroundings" (Conway, 1991, p. 7). In other words, the institutional concept of urban green space indicates a space that may be technically in the city, but is not conceptually part of the city.

Figures 5.2 and 5.3 demonstrate how this concept is perpetuated in contemporary marketing, a tool cities increasingly use to improve competitiveness, attract foreign inward investment, reconstruct the city's image and enhance local well-being, (Paddison, 1993). Such marketing also can condition expectations regarding urban green space. Figure 5.2, an advert inside an Inner London bus in 2015, directly connects London's urban green spaces to the concept of countryside. The image shows nothing of the urban environment in which London's urban green spaces exist and, instead, presents a pastoral landscape with a house more like those found in the English countryside than in Inner London, where the particular urban green space featured in the advertisement is located.
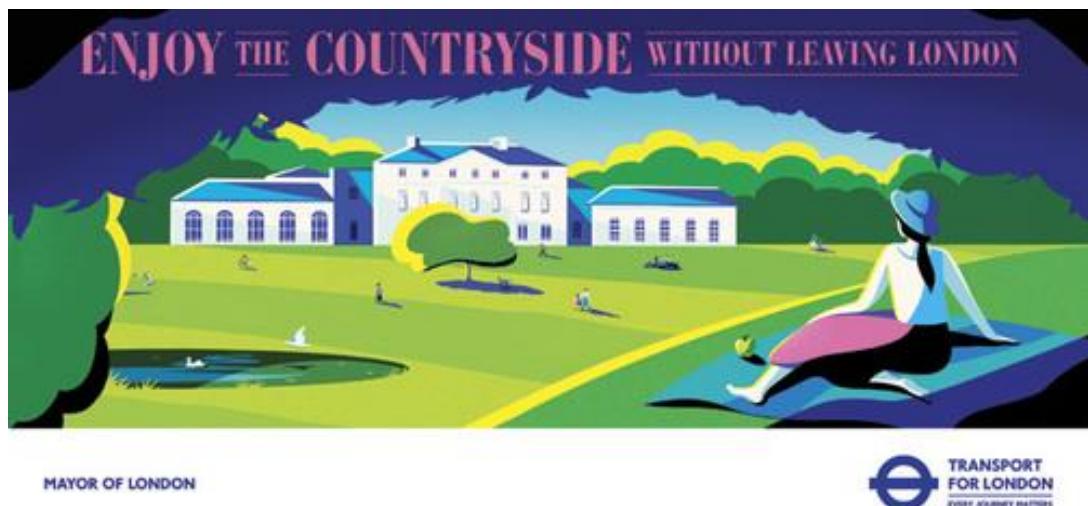
Figure 5.2 – **Bus advert 1:** This advert inside a bus in Central London promotes London's urban green spaces as countryside in the city (source: TfL, 2014; ©TfL).

Figure 5.3, an advert on the outside of an Inner London bus in 2016, connects one of London's newest urban green spaces, Queen Elizabeth Olympic Park, which straddles four East London boroughs, including Tower Hamlets, with a need to get away from the city. Again, this emphasises the Victorian belief that the city is a place that needs escaping, while the countryside is a desirable place to escape to, as echoed by respondents. This further positions the concept of urban green space as separate from the urban fabric and implies that the countryside is good.

Research shows that a prominent benefit of urban green space is its positive impact on mental health and psychological well-being, and it can help combat stress and anxiety (Bishop, Ye and Karadaglis, 2001; Chiesura, 2004; Esbah, Deniz and Cook, 2005; Choumert and Salanié, 2008). Yet, this research does not limit the benefits to large, rural spaces. Indeed, green walls, green roofs, street trees and other greening structures found within urban areas can have a positive impact on health (Mentens, Raes and Hermy, 2006; Gill et al., 2007; Norton et al., 2015). Thus, "escaping the city" to a pastoral landscape is not essential. However, "relax in the city" is not a concept that is publicised. Instead, urban green spaces are consistently valued for their *un*-urban features and benefits.

Urban green spaces, respondents said, provide an escape from Inner London, allowing Londoners to feel as if they are no longer in the city, but have been transported to the countryside. This further demonstrates the path dependency of

Figure 5.3 – **Bus advert 2:** An advert on a bus in Inner London promotes Queen Elizabeth Olympic Park as a place to "escape the city," despite the site's website calling it an urban park (source: author).

the concept of urban green space as countryside in the city, continuing the idea that the city is corrupt, polluted and generally not good for us, hence the need to escape it (see Cranz and Boland, 2004). Indeed, with urban green spaces, "it was quite possible to imagine oneself in the depths of the countryside, rather than in the centre of a city" (Conway, 1991, p. 223). Barton, Hine and Pretty (2009) maintain that contemporary urban dwellers continue to express their preference for the countryside through visits to rural natural areas as well as membership in environmental and wildlife organisations.

The concept of countryside as separate from the city is further underscored visually, as many of London's publicly accessible urban green spaces are fenced and gated and locked during certain hours, meaning these public urban spaces are essentially removed from urban life during these times. According to respondents, this is done to prevent antisocial behaviour, which mirrors Victorian-era reasons for enclosing parks and green spaces because of concerns regarding access and regulation of behaviour (see Brück, 2013). Indeed, the Victorians' use of fencing and gates meant

"access to the green world of the interior was forbidden to the public and reserved to the privileged few" (Anon., 2015, page 19).

Further, Brück observes that the ornate and elaborate gates at park and green space entrances "acted as a means of differentiating these landscapes from the wider urban environment and marking as significant the transition from the chaos of the streets to spaces of calm and order" (2013, p. 201). In other words, parks and green spaces were designed to be separate from the rest of the urban fabric and the gates and fences signify to users they are leaving the city and stepping into the countryside (Rosenberg, 1996). Gates and railings protect an urban green space "from the realities of its city surroundings," so green spaces are "literally and symbolically a world apart" from the city, as shown in Figure 5.4 (Conway, 1991, p. 10). The urban green spaces of London – a global, cosmopolitan city of nearly 9 million people – are, thus, not conceptualised as urban, but rather as countryside located within an urban area. This conflicts with green infrastructure, as discussed in Chapter 2 (Literature). Linking town and country is a potential outcome of the spatial connectivity that is a hallmark of the green infrastructure concept. In other words, with green infrastructure, urban and suburban or rural spaces are connected, but are not the same; urban green space does not replicate the countryside, but instead complements it (Kambites and Owen, 2006).

5.2.3. Green space as an institution

The idealisation of the countryside provided the lens through which Victorian objectives and much of 19th-century social thought must be viewed (Malchow, 1985). By rooting the foundation of the public green space movement in the belief that urban green space should replicate the countryside and reject the urban nature of its setting, the Victorians created a powerful institutional concept for green space that perseveres today (Hulin, 1979). Walker and Duffield acknowledge this: "The myth of the rural arcadia fuelled the desire to reconstruct the countryside in town. The impact of this idea has been far-reaching and has influenced the approach to open space and to outdoor recreation even to the present" (1983, p. 2). Hulin labels this "the *rus in urbe* convention" (1979, p. 25, emphasis original). The "enduring strength of the imaginary of the 'rural idyll'" "fundamentally shapes how we [the English] design policy and make planning decisions" (Harrison and Clifford, 2016, p. 585, p. 602). Reeder agrees and observes "the English concept of green space can be traced through an evolving discourse on parks and open spaces dating from the early

modern period" (2006b, p. 41). Harding is matter-of-fact: "Public parks in the UK are an overwhelmingly 19th-century provision" (1999, p. 3).

Contemporary institutionalised practices are based on past ones, "with layers of values and understandings left from earlier times influencing new initiatives through institutional remembering and the strength of tradition and culture" (Clifford, 2016, p. 388). Cox refers to the enduring attachment to such an idea as "stickiness" (2004, p. 206). London's urban green spaces are discussed as a way to escape the city today just as they were during the Victorian era, reflecting this stickiness (interview respondents) (see Figure 5.3). For example, respondent 19 (green space staff, Wandsworth) referred to the frequent "complaints" the council receives because of the increased use of the borough's green spaces. Instead, respondent 19 said, residents expect the green spaces to be quiet and away from the bustle and noise of the city. Similarly, respondent 44 (green space staff, Islington) said Islington residents expect the borough's green spaces to provide places for "quiet contemplation." In Tower Hamlets, respondents described London's urban green space as "space away from the density and the buildings" (respondent 39, green space staff), "access to wild open spaces" (respondent 35, green space staff) and quiet areas that people "appreciate more" (respondent 15, planner).

The rationale remains the same now as it did almost two centuries ago: urban life is stressful, thus, urban dwellers must leave the city to recuperate and escape the city's ills. Thinking of green space as a place to escape the physical and mental stresses of city life may seem an innocuous purpose. However, tension arises from managing and approaching green space in a highly urban setting, such as Inner London, as if it behaves like a patch of the English countryside. It reflects a "conceptual divide between the city and nature" (Gabriel, 2011, p. 138). Indeed, the concept of urban green space as countryside in the city has remained resilient since the Victorian era and is largely unchanged, affirming it has become an institution.

5.2.4. Landscape design

The continuation of the institutional concept of countryside in the city can be seen literally on the ground. Many parks and green spaces throughout London follow similar design and maintenance principles that are rooted in the past. In many urban green spaces, notably larger, flagship spaces, design and maintenance principles support the continuation of the Victorian conceptualisation of urban green space,

namely designed, high-maintenance landscaping, or what Archer calls "picturesquely landscaped urban parks" (1983, p. 139). Fricker argues that "it is the style of gardening that should be protected as well as the gardens themselves" (1975, p. 408).

The Victorians designed their green spaces to reflect their desire "to see elements of the idealised countryside brought into the city" (Welch, 1991, p. 6). Indeed, "*contrast* to the surrounding city was an essential device used in the design of the pastoral landscape" (Rosenberg, 1996, p., 89, emphasis original). Their fixation on the aesthetic of the urban landscape – "making the environment conform to an Arcadian ideal" (Malchow, 1985, p. 98) – was so dominant that it influenced how Britons thought about increasing urbanisation and the rise of cities (Malchow, 1985). This rural arcadia "fuelled the desire to reconstruct the countryside in the town" (Walker and Duffield, 1983, p. 2). Pendlebury echoes this: "Parks were intended to bring the countryside into the town, but a particular vision of the countryside – one in which nature is organized and artfully displayed" (1997, p. 246). Thus, the link between the countryside and urban green space was consciously done. As such, the Victorians designed and maintained urban parks, gardens, pleasure gardens and other green spaces to simulate the countryside, as they believed that "the countryside was the natural and most beneficial milieu for man" (Welch, 1991, p. 4).

Many of the original park and green space designers and planners learned from each other, resulting in a shared idea of what constitutes green space, including how it should look. Notable park designers include John Nash, John Claudius Loudon, James Pennethorne and Joseph Paxton, who "could almost be said to have had the monopoly of laying out urban and municipal parks" (Conway, 1991, p. 85). Pennethorne not only designed Victoria Park, but also Battersea Park, in the borough of Wandsworth. As flagship green spaces, both Victoria and Battersea parks remain highly influential within their respective boroughs. Pennethorne was inspired by Nash after the two worked on the design of The Regent's Park, a royal chase originally known as Marylebone Park that had been opened to the public to bring the design of an aristocratic country park to an urban environment (Poulsen, 1976; Archer, 1983).

> It was nature itself that Nash glorified, but nature carefully planned to
> fashionable concepts of the idealized and the picturesque. … It was

very much the influence of these ideas that lay behind Pennethorne's designs for Victoria Park (Poulsen, 1976, p. 34).

A specific design and maintenance approach to green space has been passed down by park designers through the years to contemporary times. This "chain of connection" among English urban parks designers helped embed a particular approach to urban green space – a Victorian approach – that persists today (Archer, 1983, p. 40). Until recent wide-ranging reductions in staff, green space officers in local authorities typically shared a common background based in horticulture (respondent 2, senior staff, regional charity; respondent 25, senior staff, national charity). This supports Turner's assertion that "most British urban parks are managed by the professional descendants of the staff who ran the great private estates of the nineteenth century. They see their task as the provision of a certain kind of aesthetic horticulture …" (1995, p. 276). The primary education, training and recognised courses related to landscaping, horticulture and green space

Figure 5.4 – **Fences and gates:** The use of gates, fences and locks visually and conceptually separates green spaces from the urban context around them (source: author).

management available in London today are rooted in traditional concepts, perpetuating the institutional concept of "countryside in the city" (respondent 2).[3]

This path dependency within the horticulture industry not only keeps present-day London's urban green spaces conceptually rooted in the past, but visually frozen in time, as well. This design conflicts with contemporary planning policies that call for dense, compact development to promote sustainability because the horticultural practice of bringing the countryside into the city means emulating nature in a low-density setting (Gaskell, 1980; Archer, 1983). In other words, to replicate countryside in the city, the context of that countryside needs to be replicated, as well. Given the context of Inner London discussed in Chapter 4, this will be difficult to achieve.

For example, across the boroughs, the use of seasonal planting – a hallmark of Victorian park design – underscores the rigid adherence to Victorian green space design and maintenance practices, even though seasonal planting is costly both fiscally and environmentally (respondent 37, green space staff, Tower Hamlets; Dunnett and Hitchmough, 2004; Friends of Victoria Park, 2018). Additionally, one local council researched here requires frequent grass-cutting and maintenance in its green spaces because council staff believes that residents would think the council was not doing its job if they saw unkempt or more natural, wild growth within the borough's green spaces (respondent 19, green space staff, Wandsworth). Council staff have a perceived idea of how a green space should look, which involves highly manicured and maintained spaces, and assume that local residents expect this, too. It is possible that by frequently mowing the council has conditioned residents to expect a manicured approach to green space maintenance. Meanwhile, a local user, or "friends of the park," group that has responsibility for a section of a green space in the borough asked the council to mow less frequently to allow this green space to have a more natural appearance (respondent 10, member, user group). The local council declined and instead continues to mow the grass and maintain a trim, controlled appearance to meet what they perceive as residents' expectations.

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[3] In 2016, Capel Manor College, London's only land-based further education college, began offering a two-year, full-time Foundation Degree in Urban Green Space Management. However, in 2018, Capel Manor paused the course (Capel Manor College, 2018).

The next section examines why the Victorian concept of green space has remained so powerful in Britain, particularly England. This section discusses the importance of heritage, including heritage landscapes, to the English and how this has led to heritage being a cultural and policy priority. In particular, the idea of countryside is greatly entangled with English identity, which further tightens the grip of the institutional concept of urban green space.

5.3. THE ROLE OF HERITAGE

Heritage is "a contemporary product shaped from history" that "is one of those things which everyone possesses, and which everyone will defend, seemingly without thought" (Tunbridge and Ashworth, 1996 cited in Harvey, 2001, p. 327; Harvey, 2001, p. 322, footnote 12). A product can be tourism, a building or a green space. Heritage "is a value-laden concept, related to processes of economic and cultural commodification, but intrinsically reflective of a relationship with the past, however that 'past' is perceived and defined" (Harvey, 2001, p. 327). Lowenthal maintains that "since the early nineteenth century, national identity has required having a heritage and thinking it unique" (1991, p. 206). Clark observes that "heritage is coming to be seen as a powerful economic, social and environmental tool" (2004, p. 81). Heritage matters to the English and has broad influence over present-day culture, identity and policy, including planning policy (Clark, 2004). This influence extends to policies and practices regarding urban green space. My research found that the heritage aspect of green space is prioritised over other – often more contemporary – uses. Indeed, cultural heritage is "often prioritised in planning, design and management of urban green spaces" (Haaland and van den Bosch, 2015, p. 761). As such, heritage dominates green-space planning in Britain.

5.3.1. Planning consultees

One way the cultural and political focus on heritage is evident is with the government's statutory consultees on applications for planning permission (Town and Country Planning Act, 2015). Of the 27 consultees, two – Historic England and the Gardens Trust (which changed its name in 2015 when the Garden History Society and Association of Garden Trusts merged) – focus on protecting heritage assets, thus they approach urban green space through a lens of heritage. Indeed, respondent 22 (landscape architect, national charity) said Historic England's interest in green spaces relates strictly to historic designed landscapes. The Garden History

Society, meanwhile, was influential in establishing a national policy for protecting gardens and landscapes for their amenity value (Fricker, 1975).

Britain's 15 national park authorities also are statutory consultees, but they only comment on development likely to affect land in national parks, none of which are urban (Town and Country Planning Act, 2015).[4] The National Trust was established to protect wild, rural landscapes (Williamson, 1995). The organisation has become more focused on green space, such as with its Future Parks programme. However, its focus remains on preserving the nation's heritage, include its natural heritage (National Trust, n.d.). Natural England, the government's advisor on the natural environment, is the consultee with a remit most in line with urban green space issues (respondent 35, green space staff, Tower Hamlets). However, respondents said Natural England rarely comments on issues of a local matter – and almost all planning matters involving urban green space are local. Indeed, heritage is considered a national issue, whereas green space is relevant at the local level. Thus, national statutory champions exist for green space, but primarily as green space relates to heritage or to non-urban spaces. This further embeds the institution of a traditional concept of green space as one rooted in heritage and preservation of the countryside and rural landscapes. It also reinforces the role of London's urban green spaces as conduits to the past rather than providing urban green space as multifunctional, interconnected, critical urban infrastructure for current and future development.

5.3.2. English identity

Preserving historic landscapes is tied to preserving English culture and identity. Englishness is entangled with the landscape – and particularly the heritage landscape (Fitter, 1946; Howkins, 2003; Swanwick, Dunnett and Woolley, 2003; Clark, 2006). The connection of Englishness to the landscape is well-demonstrated (Mace, 2018). The notion of landscape "has a particular resonance in England" and "nowhere else is landscape so freighted as legacy" (Lowenthal, 1991, p. 213; Driver,

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[4] In 2019, London National Park City is scheduled to launch. Organised by the National Park City Foundation and supported by London's mayor, the scheme aims to work with residents, visitors and partners to make the city greener, healthier and wilder (LNPC, 2018). However, London National Park City will "not bring the kind of planning powers the UK's other National Parks have" (LNPC, 2018).

1995, p. 765). As such, the countryside serves as a "powerful cultural institution" (Mace, 2018, p. 2). Indeed, "nowhere else does the very term suggest not simply scenery and *genres de vie*, but quintessential national virtues" (Lowenthal, 1991, p. 213, emphasis original). England's association with an "arcadian and pastoral idyll" is culturally constructed (Abrams, 2003 cited in Harrison and Clifford, 2016, p. 588). Meanwhile, Hulin remarks that a "'rurality' and the anti-urban feelings that go with it, have long been considered as a fundamental disposition in the British character," noting that "the Englishman is 'a rural animal,' who has never quite accepted the city as a way of life" (1979, pp. 11-12).

Heritage outlines cultural parameters in England (Scott, 2001). Indeed, Pendlebury says "there can be no doubt that historic parks and gardens form an important part of the cultural heritage of England" (1997, p. 241). Continuing to adhere to a Victorian notion of urban green space – idealised countryside encapsulated in the city – creates contemporary expectations, both real and perceived, as Section 5.2 illustrated. Yet, this concept of "encapsulating the countryside" is not a modern phenomenon, but instead is deeply embedded in English culture and, thus, it has heritage value. Mischi (2009) dates the association of the countryside with Englishness to the 19th century, the Victorian era of park-building and a period when England, and London, experienced intense urbanisation and industrialisation. Thus, the Victorians' preference for the countryside became manifested in the concept of urban green space.

Mischi discusses the countryside's prominence in the English psyche, observing that "the countryside is a central feature in national symbolism and rural images often serve as signs of the Nation" (2009, p. 109). London County Council observes that "the love of gardens and the open air is a characteristic of the Englishman" (1952, p. 1), while Cecil says that "the English love parks more than any book about them" (1907, p. 9). By the early 20th century, the garden was "the expected birthright of all free-born Englishmen" (Gaskell, 1980, p. 479). Others note the prominence green spaces hold in English culture and history (see Fitter, 1946; Howkins, 2003; Swanwick, Dunnett and Woolley, 2003; Clark, 2006). For example, Driver maintains "the English have invested in landscape so much history, so much emotion, so much fantasy, not to mention money, that they are ever ready to declare it 'under threat' from outside forces" (Driver, 1995, p. 765). As such, "conflicts over landscape are interpreted as battles for the heart of the nation itself" (Driver, 1995, p. 765).

The goal of bringing the countryside into the city has been central to planning policies and planning movements lauded in England, notably Ebenzer Howard's Garden City movement – which emphasised "forcing of rural elements into the topographical texture of the city" (Hulin, 1979, p. 18; Gaskell, 1980). In particular, garden cities proposed "to resolve both the congestion of cities and the isolation of rural life by combining the best qualities of city and countryside in autonomous new communities" (Relph, 1987, p. 56). Indeed, in Great Britain, "green space is perceived as a prerequisite for urban life" (Sandström, 2002, p. 373). This has perpetuated expectations about how urban green space is delivered and managed. It has contributed to contentious debate regarding development on the Metropolitan Green Belt surrounding London, as whether or not the green belt is actually green, the idea of a green ring around the city is powerful (Mace, 2018). Turner, however, laments that "too few cities offer the blend of country and town benefits which Ebenezer Howard praised in Garden Cities of Tomorrow" (1995, p. 277).

Protecting and preserving urban green space because of its ties to the past and its representation of English cultural heritage is on its face not a problem. After all, French gardens and American wilderness, for example, are preserved, in part, because they represent historic and cultural national ideals. Parks and gardens are considered "Britain's greatest contribution to European culture" (Pendlebury, 1997, p. 241). However, the reason heritage is presented as a problem in this research is because the focus on heritage and cultural identity creates an inflexible approach to urban green space delivery and management that limits the ability of London's urban green spaces to adapt to changing needs, demands and demographics.

The layout and design of urban green spaces, as well as their other features, such as style and arrangement of monuments and buildings, "reflected and underpinned a specific set of social and cultural values" that existed in 19th-century England (Brück, 2013, p. 198). Expecting urban green spaces – old and new – to conform to an ideal established nearly 200 years ago limits the work contemporary urban green space can do to deliver the sustainable city described in Chapter 2 (Literature) (see Swanwick, Dunnett and Woolley, 2003; Pincetl and Gearin, 2005; Gill et al., 2007; Rutt and Gulsrud, 2016). For example, local councils indicate they cannot provide more green space because they do not have the budget to do so, but what budget they do have is often spent on maintaining urban green space to specific standards and styles dating to the Victorian era. Some of these maintenance practices, such

as seasonal planting, are fiscally and environmentally costly (Dunnett and Hitchmough, 2004). This then creates tension in a growing and changing urban area such as London.

5.3.3. Influence of Heritage Lottery Fund

This tension is compounded by external organisations, particularly those that provide funding. Outside of local authorities, the Heritage Lottery Fund (HLF) is the largest funder of parks and green spaces in England, yet HLF funding was never intended to replace council funding for general urban green space provision and management (Clark, 2004). (Funding from HLF is discussed more in Chapter 7, Governance.) Clark observes:

> Unlike museums or the historic environment, there was no single agency to champion parks, which fell between culture, leisure and environment, and thus between government departments. The HLF had become, by default, the lead agency, a role which did not sit well with its remit as a wider funding body or with its heritage role (2004, p. 76).

HLF stepped in and helped reverse a long-term slide into disrepair of many green spaces by providing funding (Clark, 2004). Yet, according to respondent 23 (senior staff, national charity), HLF's focus is limited to "the big, historic parks, the Birkenheads, the Batterseas, the Victorias" that are "classic designed parks." Indeed, HLF's Urban Parks Programme, launched in 1996, "focused on the restoration of historic parks rather than on the full range of urban green spaces" (Swanwick, Dunnett and Woolley, 2003, p. 94). This conflicts with the needs and function of green spaces in a highly urban, densely developed setting, such as present-day Inner London. Importantly, such funding funnels support to green spaces recognised for heritage, which tend to be larger or flagship spaces. Newer urban green spaces typically are not eligible for heritage-based funding simply because they do not meet the heritage-related eligibility requirements, as to receive HLF funding, a green space must have a heritage connection. Indeed, the first question HLF listed in its Parks for People application guidance was, "What is the heritage focus of the park or cemetery project?" (HLF, 2017, p. 13). This eliminates many Inner London spaces, particularly smaller spaces, from eligibility for HLF funding.

Respondents 36, 37 and 38 (green space staff, Tower Hamlets) questioned to what extent – if any – Tower Hamlets Council would have received funding for Victoria Park's revitalisation if the park was not considered a heritage asset. Tower Hamlets chose to pursue funding from HLF because the council felt it was the organisation most likely to offer funding (respondent 39, green space staff, Tower Hamlets). Limited options for green space funding beyond the heritage sector results in a catch-22: these spaces are selected for funding based on heritage, then the funding goes to efforts that further entrench and perpetuate their heritage focus. As such, these urban spaces are valued for their heritage and historic landscapes as much as for more contemporary benefits, such as providing urban wildlife habitat or mitigating the heat-island effect, that they provide to an increasingly dense urban milieu.

For example, the decision to apply to the Heritage Lottery Fund had an impact on the types of improvements and upgrades Tower Hamlets could make in Victoria Park (see Figure 5.5). Concerns about the park's form and function, which are fundamental to green infrastructure or urban greening, as discussed in Chapter 2 (Literature), were not the purpose of the funding. Respondent 36 said:

> It is a heritage site, so they [HLF] were very keen on a memoryscape walk and they wanted to see stuff like that going on to encourage people to learn about the history of the park. I think because it was a heritage fund that we went for, we couldn't touch any of our sports facilities or anything. We couldn't spend any of the money on that because it was all to do with heritage. In some elements they wanted a lot of the Victorian designs brought back in. … It all is very much to do with heritage and history.

5.3.4. Heritage and a diverse population

As established in Chapter 4 (London Context), London has a culturally diverse population. As the city's population continues to grow and change, Clark and Jauhiainen's (2006) argument that open, accessible green spaces are essential for local people to maintain cultural identity and build social ties stands out. How can London's green spaces facilitate the city's changing population in building social ties if urban green spaces remain rooted in a rigid, singular cultural identity (see Wolch, Byrne and Newell, 2014)? In fact, green space can reflect the cultural and social

Figure 5.5 – **Chinese pagoda:** As part of the revitalisation of Victoria Park, in Tower Hamlets, the Chinese pagoda, which had been demolished in the 1950s, was rebuilt. The pagoda is on an island in the park that is connected to the rest of the park by a newly built bridge. The bridge, based on James Pennethorne's designs in the mid-1800s, had never actually been built (source: author).

segregation that exists within a city (Choumert and Salanié, 2008; Rutt and Gulsrud, 2016; CABE 2010).

Focusing on heritage – and heritage of one particular culture – can limit access to and use of green space. Factors such as landscape design and maintenance frequency affect people's perceptions regarding access and use of green space (Dempsey and Burton, 2012; Wang, Brown and Liu, 2015). People from other racial and ethnic groups "may find public park spaces less attractive if park designs are guided exclusively by Anglo-Celtic landscape aesthetics" (Wang, Brown and Liu, 2015, p. 55). For example, "personal sense of belongings [sic] to the community" influences use of green spaces, emphasising the importance of ensuring changing neighbourhoods continue to have green spaces that are welcoming to all local residents (Chen and Jim, 2010; Wang, Brown and Liu, 2015, p. 55).

Heritage also is presented as a concern in this research because the overt focus on the heritage of certain parks and green spaces influences the management of urban green space in general across the boroughs, even though not all of London's urban green spaces have heritage value. Thus, the way we think about, deliver and manage urban green space is strongly influenced by a 19th-century Victorian approach to green space perpetuated by a cultural focus on heritage.

5.3.5. Large versus small green spaces

The focus on heritage is particularly palpable in larger urban green spaces in the boroughs, particularly Tower Hamlets and Wandsworth, which have larger parks and green spaces than Islington does (see Chapter 4, London Context). Larger spaces, such as Battersea Park and Victoria Park, tend to be older and more historic, in part, because in recent years London has created few new large green spaces, particularly in Inner London.[5] This perpetuates the focus on the heritage of green space because these flagship spaces influence the management of other smaller, informal spaces in the boroughs. Large flagship spaces consume more resources, namely staff, police and budget, and are publicised and promoted to a greater extent than small spaces, such as pocket parks. Respondents, council documents, and policies and practices emphasise the larger, more historic green spaces. Photos of these spaces are used on websites and in council documents. Respondents spoke of the importance of heritage, even though their roles and responsibilities were not that of a heritage officer, but rather park and green space management, biodiversity protection and planning, among others. In doing so, they referenced the larger green spaces when discussing urban green space in their borough. This illustrates how green space management "really works," and highlights the powerful pull of heritage (Eulau and March, 1969, p. 16 cited in March and Olsen, 2005, p. 6).

For example, Battersea Park in the borough of Wandsworth, opened in 1858 and laid out in the Victorian era by James Pennethorne – who also designed Victoria Park – shares similar influence today in Wandsworth as Victoria Park does in Tower

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[5] Queen Elizabeth Olympic Park, a legacy of the 2012 Olympic Games held in London, is one of the capital's few new public green spaces. It covers 560 acres, of which 111 acres are open space. The park falls in both Inner and Outer London and lies across four East London boroughs, including Tower Hamlets, and is managed by the London Legacy Development Corporation, a Mayoral Development Corporation (LLDC, n.d.-a, n.d.-b).

Hamlets (respondent 2, senior staff, regional charity). According to respondent 19 (green space staff, Wandsworth), "The two of those (Battersea and Victoria parks) came parallel as open spaces. Same issue, same time, same thinking behind securing them and safeguarding them." Like Victoria Park, Battersea Park is intertwined with the development and history of the area. Charles Dickens called Battersea "one of the prettiest" parks in London, which "no visitor should fail to see" (Dickens, 1881 cited in Sinclair, 2007, p. 113). The 83-ha park that transfixed Dickens also is designated a Grade II-listed landscape by Historic England (Historic England, 1998a).

In July 2014, after Battersea Park retained its Green Flag Award status – considered by green space professionals to be the benchmark of excellence for public green space standards (see Section 6.7.2) – Wandsworth Council released a statement saying, "A Green Flag is a sign to visitors that Battersea Park 'boasts the highest possible standards, is beautifully maintained and has excellent facilities'" (Wandsworth Council, 2014a). As seen in Figure 5.6, the council followed this with a tweet announcing, "Battersea Park retains coveted Green Flag Award" and noting this confirmed the park's status as "the jewel in the crown of London's parks!" (Wandsworth Council, 2014b). Tweets and publicity for Battersea Park's Green Flag Award were repeated in subsequent years. This indicates the green space management and maintenance practices the council aims for and signals to green space users what constitutes an ideal, well-maintained and award-winning green space, reinforcing the ideas of sizeable, formal and manicured – all characteristics of Victorian-era green spaces.

Figure 5.6 – **Wandsworth tweet:** Among the publicity for Battersea Park maintaining its Green Flag Award for another year is this tweet from Wandsworth Council (source: Wandsworth Council, 2014b).

In Tower Hamlets, council staff also refer to Victoria Park as a "crown jewel." Indeed, respondent 36 said, "Victoria Park is viewed as the crown jewel, the flagship. The mayor [of Tower Hamlets] always says in his speeches, 'the jewel in Tower Hamlets' crown is Victoria Park.'" Similar to Wandsworth, Tower Hamlets sent out news releases when the park received the London in Bloom Award and the Green Flag Award's People's Choice Award for favourite park in Britain, and regularly send emails and other notifications asking people – not just Tower Hamlets residents – to vote for Victoria Park. The council does not provide such a level of exposure for smaller green spaces across the borough.

Notably, councils rarely tweet or issue statements about smaller, more informal spaces, such as Waterman's Green, the small, riverside space shown in Figure 5.7, or refer to these spaces as "jewels." This further signals where councils' priorities regarding urban green space lie and it perpetuates the institutional concept of urban green space as equating with countryside or formal, larger spaces over smaller, informal space. Yet, although councils focus more attention and resources on high-profile, flagship spaces, residents encounter the smaller, informal spaces – "nature-at-the-doorstep" – more frequently and these smaller spaces have more impact on their daily lives, as discussed in Chapter 2 (Literature) (Kaplan, 1984, p. 189; Burgess, Harrison and Limb, 1988; Jim and Chen, 2003; Van Herzele and Wiedemann, 2003). Small green spaces – even simply trees and flowers in small landscaped areas – are enough to provide opportunities for relaxation and psychological escape from the din and stress of urban life (Kaplan, 1984). Further, opportunities to create large new green spaces are rare in established urban areas, such as Inner London (Gill et al., 2007; Norton et al., 2015; interview respondents). The focus on large, flagship spaces has ramifications for distribution of access to urban green space, particularly in urban areas considered deficient in access to public green spaces. As shown in Chapter 4 (London Context), residents in each borough lack access to small local parks near where they live.

People visit green spaces and use recreational facilities near where they live much more than they do spaces located elsewhere (Cohen et al., 2007). Green space proximity is correlated with use and having a green space near where one lives should be a planning goal (Cohen et al., 2007). As such, "land for active participation [in sport and recreation] should be as near to where people live as possible"

Figure 5.7 – **Waterman's Green:** Local authorities rarely put out press releases or tweet about small and informal green spaces, such as Waterman's Green in Wandsworth (source: author).

(respondent 11, senior staff, national charity). People use their local park more than large parks because of the easy access of the former (Byrne, Wolch and Zhang, 2009; Wang, Brown and Liu, 2015). Even Olmsted and his colleagues "recognized the limitations of a single park and they sought to extend its benefits beyond the boundaries of an isolated green space by considering its place in both the current and the future metropolis" (Eisenman, 2013, p. 296). The development of an interconnected parkway system was Olmsted's "major contribution" (Conway, 1991, p. 7). Olmsted and his collaborator Calvert Vaux were clear that, while there is a place for flagship green spaces, they should not dominate park-related resources or how parks and green spaces are conceptualised:

> A large park should not be the sole object in view, but should be regarded simply as the more important member of a general, largely provident, forehanded, comprehensive arrangement for securing refreshment, recreation and health to the people (Olmsted, 1868, p. 18 cited in Eisenman, 2013, p. 297).

Providing "many small, distributed green open spaces could benefit a large number of neighbourhoods" (Norton et al., 2015, p. 132). Further, an interconnected system of urban green spaces – a key characteristic of green infrastructure – provides more benefits than isolated spaces, as shown in Chapter 2 (Literature). Respondent 22 (landscape architect, national charity) emphasised this: "That's a really powerful thing, this sense of linking up open spaces, because it means very small spaces can become part of the continuum and they can be really effective in giving people a big recreation experience, a big outdoor experience." As part of a green infrastructure system, these spaces come in many shapes and sizes (McMahon, 2000). Flagship spaces are not enough – smaller spaces constitute a critical aspect of a city's green network, as well.

Yet, local authorities continue to focus on flagship green spaces and these larger spaces showcase a borough, in part, by referencing back to its history. A green space does not have to be formally listed by Historic England, as Victoria, Battersea and Wandsworth parks are, to have heritage value that influences green space delivery and management or that contributes to an institutionalised concept of green space. For example, Wandsworth Council's primary strategy for Putney Park Lane, a liner green space that runs through a residential neighbourhood, is "to maintain the historic nature of the site" (Wandsworth Council , 2010, p. 10). No mention is made of the wildlife habitat, including the green space's recent recognition as a critical pollination coordinator, including for bees.

Larger spaces, such as Victoria Park in Tower Hamlets or Caledonian Park in Islington, also are more likely to have listed structures and other heritage assets, such as fountains, bandstands and clock towers, within them, or feature traditional landscaping design and techniques, such as seasonal bedding (see Figure 5.8). These heritage assets are retained not because they meet contemporary users' needs or because they contribute to urban sustainability and resilience, such as the need to reduce the heat-island effect, but because they are a link to the past and, thus, sustain a cultural focus on heritage. Again, this is not to argue that heritage does not matter and should not be preserved, but rather it supports the contention that urban green spaces are approached first and foremost as heritage assets.

Local councils spend resources on maintaining urban green space to a certain aesthetic or function, influenced by heritage and heritage-related funding and

Figure 5.8 – **Caledonian Park:** The clock tower in Caledonian Park, Islington, is a Grade II*-listed structure in one of the borough's largest green spaces (7.4 ha). The railings from the site's previous use as the Caledonian Cattle Market are listed, as well (source: author).

reinforced by path-dependent landscape training and design, ahead of preparing for contemporary concerns, such as climate change mitigation. This influence of heritage reflects the "considerable institutional difficulties" cities and local authorities face in putting environmental policies meant to meet sustainability goals into practice, particularly as focusing resources on large spaces leads to more funding, awards and attention from residents (Satterthwaite, 1997, p. 1669). Respondent 2 (senior staff, regional charity) discussed this: "Some boroughs have even taken this decision to focus on a few big parks and put their resources there and let the others go to rack and ruin. Then you get this two-tier system, the top or better quality, and rubbish." This concern intensifies when factoring in HLF's focus on larger spaces: "There is a concern that you end up polarised, with the good parks looking OK and everything else looking pretty rubbish" (respondent 23, senior staff, regional charity). Some respondents, however, argued that some small spaces become unattractive because of the type of use they attract or where they are located. Respondent 19 (green space staff, Wandsworth) used the example of a small space: "You don't want to sit on it and have a picnic – the most you can do is empty your dog on it."

The following section explains a third reason for the path dependency of London's urban green spaces, namely, the reasons urban green spaces are provided remain the same as they were nearly 200 years ago, despite the changing environment in which these spaces exist. The section then addresses why this limits the ability of urban green spaces to be multifunctional.

5.4. REASON FOR PROVIDING URBAN GREEN SPACE

A connection between contemporary urban green space and that of the 19th century is evident in the rationale given for providing these spaces. Nineteenth-century advocates of urban open space centred their arguments on the relationship between the natural environment and physical and moral health, which included leisure and recreation and escape from the "pathological," densely developed city (Malchow, 1985; Cranz and Boland, 2004; Clark and Jauhiainen, 2006, p. 17). These read similar to the reasons urban green space is seen as vital for modern urban living (Thompson, 2002; Swanwick, Dunnett and Woolley, 2003; Woolley, 2003; Chiesura, 2004; Pincetl and Gearin, 2005; Dempsey and Burton, 2012).

Each of the three councils specifically refers to health, leisure, biodiversity and quality of life for residents in a dense environment in their planning and policy documents relating to green spaces. For example, in discussing open space and the natural environment, Wandsworth's Core Strategy mentions "environmental functions," "formal and informal recreation, sport and play," and "health and well-being" (Wandsworth Council, 2016, p. 37). Similarly, nearly every respondent listed a range of benefits of green space, with physical and mental health and well-being, recreation, and quality of life the most consistently mentioned. Respondent 11 (senior staff, national charity) said, "In a sense, the issues of that time [the Victorian era] are very similar to the issues we still have today." These institutionalised justifications for green space demonstrate a path dependency:

> Institutions – or the structures framing the policy path – simplify the
> decisions of decision-agents by providing alternatives that are more
> or less readily available and more or less plausible. Institutions
> simplify decision-agent confusion by providing a meaning structure
> for interpreting history and anticipating the future; that is, they provide
> familiarity, reducing psychological uncertainty and eventually leading

to belief structures, which constitute the routinization of meaning (Wilsford, 1994, p. 277).

5.4.1. Health

The 19th-century argument for providing urban open spaces, and particularly green spaces, was rooted in health issues, as public health was a major concern at the time, with particular anxiety regarding the health of the urban poor (Poulsen, 1976; Brück, 2013). In the early part of the century, worry about the spread of cholera dominated public-health debate, while later in the century other airborne contagion, such as small pox, were the focus (Gaskell, 1980; Malchow, 1985). Green spaces "helped to cleanse cities by opening them to purifying sunlight and air" (Malchow, 1985, p. 99).

In the mid to late 19th century, leisure became more available to the working class, due largely to legislative changes relating to limits on working hours, the introduction of bank holidays, increasing real wages and decreasing costs of travel by rail (Malchow, 1985; Conway, 1991). The increase in personal time and income highlighted the need to provide green spaces in the urban core, near where workers lived (Malchow, 1985). The public park movement became enjoined with social reformers' efforts to improve working-class housing (Gaskell, 1980; Malchow, 1985). Beginning in the later 19th century, the concept of new athleticism gained popularity (Malchow, 1985). Thus, urban green spaces were established to facilitate recreation, such as by providing playgrounds and sports fields.

Today, the health benefits of urban green space are a prominent reason for protecting existing spaces and providing new urban green spaces accessible to the public (see GLA, 2011b; 2017d; Esbah, Deniz and Cook, 2005; Baycan-Levent, Vreeker and Nijkamp, 2009; DCLG, 2012). Respondent 46 (senior staff, national charity) said public health is a major reason green space has risen up the policy agenda: "Public health has renewed interest in the wider determinants of health and that's led to a renewed interest in green spaces. It has gone full circle."

Health concerns rank high among local, regional and national policymakers and the connection between health and urban green space is an area of increasing research (Maas et al., 2006; Lee and Maheswaran, 2011). For example, central government's Urban White Paper addresses how public open spaces help promote a healthier

lifestyle (DETR, 2000). The National Planning Policy Framework discusses protection of open space in a section called "Promoting healthy communities," stating: "Access to high-quality open spaces and opportunities for sport and recreation can make an important contribution to the health and well-being of communities. Planning policies should be based on robust and up‑to‑date assessments of the needs for open space, sports and recreation facilities and opportunities for new provision" (DCLG, 2012, p. 18). Similar statements are found in local authorities' core strategies and other planning documents.

While the Victorians were largely concerned with the working class having access to fresh air and exercise to ward off diseases that spread from cramped living conditions, the health concerns that invoke green space use today largely relate to a 21st-century stressful, inactive lifestyle (Chiesura, 2004; Pincetl and Gearin, 2005). "We've got our own health problems in the 21st century. They're different problems [than in the 19th century] – they're long-term chronic illnesses rather than infectious illnesses" (respondent 46, senior staff, national charity). Addressing obesity and diseases stemming from or exacerbated by it, such as diabetes, as well as the impact of stress on physical and mental health, sits high on the policy agenda (Barton, Hine and Pretty, 2009). As a result, local authorities tie their justifications for providing green space to their policy goals to promote healthier communities.

Respondents frequently referred to the connection between health and urban green space. Respondent 15 (planner, Tower Hamlets) said "open space is seen as absolutely critical to health." Respondent 11 (senior staff, regional charity) said in the future GPs would prescribe regular walks in the park in lieu of medication for certain ailments and medical conditions. Indeed, social prescribing has started in some boroughs, such as Richmond-Upon-Thames, with general practitioners "prescribing outdoor activity as a medical treatment rather than a handful of pills" (APSE, 2016a; Richmond CCG, 2017). A focus on health parallels the reason for creating publicly accessible urban green spaces in the 1800s. In Tower Hamlets, respondent 39 (green space staff) highlighted a direct link between health and green space and how this fits into the council's policies and strategies:

> It's not just about providing open space for activities, it also ties in
> with our health and well-being strategy, in that we need to provide
> people with accessible open space to partake in activities. There's a

strategy to provide just green space and then there's these other public-health strategies to encourage people to live a healthier, more active lifestyle. Given the fact that we, as a borough, have one of the poorest communities in the UK, we need to provide these facilities that are free to use – and parks and open spaces are free to use.

5.4.1.1. Behavioural and moral health

Urban green space also was created for behavioural health. For the Victorians, "physical health was inextricably linked to social and moral improvement" (Brück, 2013, p. 207). Green space was important because natural areas were thought to "purify the spirit" (Brück, 2013, p. 207). As discussed in Section 5.2.2, publicly accessible urban green spaces were meant to provide an alternative to the working class' rowdy activities, such as drinking and gambling (Brück, 2013). Green spaces were intended for walking or promenading, an acceptable activity that exposed the working class to the refined manners of the upper class (Olsen, 1993; Taylor, 1995; Reeder, 2006b). The spaces' design encouraged "polite forms of behaviour;" for example, "paths and railings defined where and how one could walk while shelters and seating were provided at those locations considered educational" (Brück, 2013, p. 210). Indeed, human construction of "nature" often "is used to support a predetermined and prescribed political order" (Freemuth, 2010, pp. 274-275).

Modern green space planners and advocates emphasise the impact of green space on mental health and well-being, as well, and this justification is evoked often in urban areas. Environmental psychologists argue that humans desire contact with nature because it allows psychological restoration (Van Den Berg, Hartig and Staats, 2007). A need for nature is emphasised in a dense urban setting (Thompson, 2002). However, evidence shows exposure to "all types of greenspaces" positively affects physical health and mental well-being and short exposures to green space are as beneficial as longer ones (Barton, Hine and Pretty, 2009, p. 262). This supports green space planning that fosters an interconnected system of green spaces that does not focus on large spaces to the exclusion of smaller, more informal spaces.

5.4.2. Leisure and recreation

Responsibility for day-to-day delivery and management of urban green space, which is not statutorily mandated, lies with local authorities, who typically categorise green

space as a cultural service and prioritise recreational use of urban green space over environmental demands, such as mitigating flood risks or providing space for food growing and urban agriculture. Nearly all respondents referred to sport and recreation as reasons for providing urban green space, aligning with Sandström's (2002) finding that recreation traditionally has been the primary role of urban parks and green spaces. Indeed, for the Victorians, a "main use of the open spaces was for sports" (Conway, 1991, p. 191). This was "with a view to the health of citizens who pass the day in sedentary occupations" (*Gardeners'* magazine, 1835 cited in Conway, 1991, p. 191).

Similarly, through analysis of open space plans for London between 1929 and 1976, Turner (1995) demonstrates the primacy of recreation in these spaces that the plans fostered. Giles-Corti et al. also addresses the focus on leisure and recreation, finding that "a disproportionate amount of community public open space is zoned for organized sports" (2005, p. 174). Respondent 11 (senior staff, national charity) said the emphasis is on formal sports: "Sporting interests are looked after far better than other open space interests. The importance of informal, casual recreation and what it might bring in terms of general health, including mental health, is far less developed."

This affects how green space is provided and managed. Respondent 18 (strategy officer, Tower Hamlets) said sport and recreation use easily could dominate all of the borough's green spaces: "We're never going to be able to provide enough football pitches for everyone to be in a league and do what they want to do … every park in the borough would have to be plastered with football pitches, and you can't do anything else." With an emphasis on formal sports, such as football, cricket and bowls, local authorities are less likely to pay attention to smaller and informal spaces, although respondent 19 (green space staff, Wandsworth) noted that "more sports pitches is actually less free space for people."

5.4.3. Climate change

Although a modern planning and policy justification for providing urban green spaces is to mitigate and adapt to the impacts of climate change, in practice this was not identified by respondents as a predominant reason for why local councils deliver and manage urban green space (Swanwick, Dunnett and Woolley, 2003; Pincetl and Gearin, 2005; Gill et al., 2007). Indeed, while Chiesura (2004), Clark and Jauhiainen

(2006) and others argue that including urban green space throughout the city, including in the urban core, is a critical ingredient for the sustainable city, only seven of the 50 respondents interviewed for this project mentioned mitigating climate change as a purpose for urban green space. Two of these were council planning officers hired specifically to address sustainability and climate change issues in their respective boroughs.

This omission supports Gill et al., who found that "ecosystem services provided by urban greenspace are often overlooked and undervalued" (2007, p. 116). Similarly, Young notes that "researchers have posited that increased understanding of the ecosystem services provided by urban green space has not been adequately integrated into the management process" (2010, p. 314). And, Cranz and Boland observe that "historically, urban parks responded to social problems and expressed various ideas about nature, but they showed little concern for actual ecological fitness" (2004, p. 102). The ecological value of urban green space was not the primary focus when the Victorians established public parks in Britain. Nor did they contemplate the benefits of an interconnected system of green infrastructure: "Each [park] development occurred according to particular circumstances rather than according to any general strategy" (Conway, 1991, p. 220).

Power observes that "urban parks continue to provide relief from an urban industrial landscape by introducing a human-designed 'natural' landscape, but rarely do these urban parks seek to preserve or recreate indigenous ecosystems. Instead, they focus on creating spaces free of dense building, opportunities for sport and recreation, and places of quiet contemplation" (2002, p. 32). Thus, despite policies promoting the environmental benefits of urban green space, in practice, leisure and recreation uses and the connection they have to health take precedent over climate change in green space delivery and management, particularly as the population grows and the amount of green space per capita falls.

5.4.4. "Single-purposism"

Population and development densities in Inner London boroughs coupled with an increasing consumption of green space and dramatically declining budgets and resources (see Chapter 7, Governance) mean local authorities cannot provide enough green space in urban areas to meet user demand for recreation and leisure, much less for broader environmental demands on urban green space, such as

ecosystem services. This reflects key arguments against the compact city, discussed in Chapter 2 (Literature), namely, that green spaces in dense urban areas face more stress, overuse, degradation and loss, and that these green spaces are more hostile to biodiversity and environmental services (Arnold and Gibbons, 1996; Knight, 1996; Jim, 2004; Clark and Jauhiainen, 2006; Cheng, 2010). Respondent 15 (planner, Tower Hamlets) acknowledged this: "We've only got so much space, so you can't do absolutely everything." Respondent 28 (planner, Islington) added: "Especially when you're talking small spaces, they can't be everything to everybody."

Respondent 2 (senior staff, regional charity) called this "a fundamental challenge to the parks sector," adding that "green space ought to be seen as multifunctional, but too often it's not seen like that, it's seen as 'oh, this is where you do football.'" This illustrates Turner's assertion that urban green space is "just as likely to suffer from 'single-purposism' as other types of land use" (1995, pp. 273-274). It further indicates the difficulty in managing urban green space as green infrastructure, not as amenity space, as green infrastructure relies on multifunctionality (Kambites and Owen, 2006; Thomas and Littlewood, 2010; Wright, 2011; Lennon, 2015; Norton et al., 2015). Although an understanding of the multifunctional benefits of urban green space "is reasonably well developed," in practice this has not been well integrated into planning and development processes (James et al., 2009). Despite acknowledgement of the need for and value of multiuse spaces, local councils make decisions regarding urban green space primarily based on recreation and amenity, supporting evidence that opportunities for recreation are the primary benefit of urban green spaces (More, Stevens and Allen, 1988).

This issue is not confined to urban green space in England or Great Britain. In evaluating green plans for seven urban areas in Sweden, Sandström (2002) found the plans focused on recreation, despite the Swedish government's emphasis on the multiple functions of green space. Sandström notes that "[planners] have not understood the multifold importance of green space" (2002, p. 379). In England, the focus on recreation and amenity is deeply embedded in local authorities' planning processes, with even the "restorative potential of nature settings" underappreciated (Barton, Hine and Pretty, 2009, p. 263). A wider range of benefits, namely those related to ecosystem services, factors less frequently into local authority decisions regarding green space use.

The way councils categorise green space (developed further in Chapter 6, Planning) further deters managing green spaces multifunctionally. This funnels green space managers' and green space users' perceptions of a space into a dominant use, typically recreation and amenity. This is a larger problem with smaller spaces, which are even less likely to be managed as multifunctional. Although Tower Hamlets' and Wandsworth's green spaces, overall, are larger than Islington's, the two boroughs have challenges delivering multifunctional spaces. Respondent 35 (green space staff, Tower Hamlets) said, "We don't have very much green space per head of population and that green space has to fulfil an awful lot of functions."

When local authorities do accommodate multiple uses, the approach typically is space by space and not strategic across the borough. Instead, a space is expected to be all things to all users. Respondent 39 (green space staff, Tower Hamlets) said, "Whatever spaces we have, we need to maximise the use of them. So, what we try do is introduce as many uses as we can, within reason." However, most uses remain centred around sport and recreation and amenity, such as play structures and football pitches. Respondent 19 (green space staff, Wandsworth) addressed the provision of recreation over environmental services, such as biodiversity:

> In London, you can't afford to safeguard something just for biodiversity. … You're always jostling and trying to make that balance [between biodiversity and recreation]. How do I say to the public, 'I know you all love coming to Tooting Common and now you're all coming in the millions, but could you actually not enjoy the woodland because you're actually damaging it by going through it?' It's really hard, you don't want to do that.

Given the small size of Islington's green spaces, the council wrestles with providing multifunctional spaces more than Tower Hamlets and Wandsworth do. According to respondent 31 (green space staff, Islington), "Because each is so small, you're trying to do a lot in one space." Trying to accommodate multiple uses in a space creates user conflicts, however, respondent 31 said: "We've got lots of small spaces, and high levels of user and resident involvement, which makes Islington a real challenge … because they [parks and open spaces] are under an intensity of use and conflict of uses that are much harder to manage in small spaces." Indeed, trying to balance

conflicting demands, such as by providing multiple uses within small urban green spaces, defines "the nature of planning" (Clifford and Tewdwr-Jones, 2014, p. 156).

Conflict of use also arises in Tower Hamlets and Wandsworth, particularly as population grows. For example, respondent 36 (green space staff, Tower Hamlets) said in Victoria Park, Tower Hamlet's largest green space, "We've got mums that want to come in here every week to visit the playgrounds and that could clash with the sports facilities. We get cricketeers saying there's not enough cricket provision and the footballers say we've got too much cricket." Similarly, respondent 39 (green space staff, Tower Hamlets) said:

> A lot of our residents live in flats, in high rises, and they don't have their own back garden. They don't have space for the children to go out and do whatever they want. So, these people need to come to a local park and open space. It can feel like we're asking too much of our parks by trying to cram in lots of different uses and usually that ends up in conflict because this group of residents use it for this kind of activity and that group wants to use it for that kind of activity.

Respondent 9 (regional policy officer) cautioned against a more-is-better approach to green space delivery and management:

> You don't talk about multifunctional spaces because, if you go down the route of multifunctional spaces, then everyone tries to make sure that every single space ticks every single box, which is absurd. So, it's about saying, what does that space need? At a local level, what does that space need to do?

The difficulty providing multifunctional green space also is constrained by developers' increasing role as green space providers, as local authorities resist taking on additional public spaces because of a lack of resources to manage and maintain them. "Planning authorities are saying, 'we don't want new provision, we want financing to help us run what we've already got because that's very expensive'" (respondent 11, senior staff, national charity). Respondent 30 (developer) noted that developers and homebuilders are concerned with how green space affects their specific development; they typically do not consider how green space they provide

fits into a wider, strategic system of urban green spaces: "We can only solve the problem on our site." Respondent 26 (developer) added: "The green space [provided by developers] doesn't benefit the public. There should be a master plan and, to benefit the public, it should be managed on a city or borough level."

With developer-provided publicly accessible green and open space (known as privately owned public space, or POPS), the expectations of borough residents may not be met. For example, respondent 31 (green space staff, Islington) said, "[Developers] don't really create parks. They create landscapes, and there's a difference. You might be able to sit there under some trees, but very few of them are really putting in proper playgrounds or sports provision or anything you might expect a park to provide." Respondent 26 (developer) said developers providing public space "design out crime. … It will be well lit and likely won't have things, like water features, that attract antisocial behaviour." This does not meet expectations because it does not conform to the institutionalised concept of green space, which has a specific form and function (Koelble, 1995; March and Olsen, 2006).

To address changing urban needs, the Greater London Authority recently has attempted to focus councils more on green infrastructure through revised strategies and policies in the London Plan. Key to the push for green infrastructure is a multifunctional and strategic view of green space, including its form and function. According to the GLA's London Infrastructure Plan:

> Although the existing parks and green space network has functioned
> well for the purposes of amenity and recreation, in the future it should
> be better planned, designed and managed to deliver a range of
> additional benefits, including mitigating flooding, improving air quality,
> cooling the urban environment and enhancing biodiversity and
> ecological resilience (GLA, 2014, p. 41).

This ties to a broader perspective on the role urban green spaces can play in economic, environmental and social sustainability, as discussed in Chapter 2 (Literature). To achieve this, a "paradigm shift" is needed to overcome the enduring institutionalised concept of urban green space that currently exists, thus, allowing urban green space to be managed as a multifunctional, interconnected network of urban green spaces across the capital (GLA, 2014, p. 43). Eisenman observes that,

given "current challenges," landscape urbanism calls for tearing down the "perennial divide between nature and city" by considering landscape as part of the urban infrastructure (2013, p. 302).

To illustrate the existing limited concept of green space, respondent 8 (regional planner) and respondent 9 (regional policy officer) used the example of green space as a floodwater-protection basin. Such basins often are located in public spaces, yet fenced off from the public, and can be sizeable green spaces that provide critical protection during periods of extreme flooding. However, severe flooding events occur in London, on average, about once a decade. During the rest of the time, the space sits unused and inaccessible because it is managed solely as a floodwater protection basin. In between floods, these spaces could accommodate other uses, such as children's play or food-growing (respondent 8 and respondent 9). Doing this would require breaking from the traditional way of thinking by planners and green space managers, as well as users. Users would have to accept that once every 10 years their food-growing space, their football pitch or the play equipment their children use may be underwater and no longer accessible. In other words, the way of conceptualising urban green space in the modern city would need to align with the multifunctional use of the space.

Although an understanding of the multifunctionality of urban green space is "reasonably well developed, it is not well integrated into the planning, design and management process" (James et al., 2009, p. 66). This means "reliable and robust approaches to the valuation of urban green space that effectively support decision-making are often absent" (James et al., 2009, p. 66). Essentially, the rigid conceptualisation of green space as recreation and amenity space conflicts with contemporary understandings of the broader work urban green space can do for the city, such as air and water filtration, flood control and biodiversity protection. As a result, the rise of the concept of green infrastructure has occurred, in many ways, mutually exclusive to urban green space.

5.5. SUMMARY

Examining how planners, policymakers and green space practitioners conceptualise green space provides insight into local authorities' priorities and practices, including what role ecosystem services as related to the contemporary concern of climate

change adaptation and mitigation may play in their management of these spaces (Young, 2010). Using the theoretical lens of new institutionalism, this chapter has demonstrated how a policy focus on heritage, the importance of green space to English cultural identity, the nearly 200-year-old reasons for providing green space and the enduring Victorian concept of urban green space – what Gabriel refers to as "the institution of the urban park" (2011, p. 137) – have led to a path dependency that holds green space design, delivery and management "stuck in a time warp" (respondent 2, senior staff, regional charity). The concept of urban green space as countryside in the city maintains a way of thinking about these urban spaces as separate from the city, which limits the ability to deliver and manage urban green spaces to meet changing needs and demands.

The recognition of the heritage value of London's urban green spaces is not new. However, this chapter has demonstrated how a deeply entrenched cultural and institutional focus on heritage has become the "rules of the game" for present-day delivery and management of green space (Lowndes, 2001, p. 1958). As such, preserving links to the past outweighs opportunities to deliver and manage urban green to space provide for current and future urban sustainability and resilience in 21st-century London. These arguments are not meant to imply that the Victorian perspective on green space no longer has merit or that heritage landscapes are not valuable. However, the study of cities has evolved to acknowledge the intricate relationship between urban areas and their green spaces, thus, recognition is needed that urban green space can serve as more than just an aesthetic afterthought (UKDoE, 1996; Eisenman, 2013).

The next chapter addresses how contemporary planning processes have responded to the influence of heritage on the concept of urban green space. From defining what urban green space is to setting targets and standards regarding how much green space a borough should have, present-day planning policies, procedures and goals are affected by the past. As such, Chapter 6 elaborates on how the past shapes green space planning and discusses what this means for green infrastructure in London today.

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CHAPTER 6 – PLANNING

An enduring, shared understanding of the concept of green space is reflected in how urban green space is narrowly defined, despite evidence that shows a broader perspective on urban nature, including as an interconnected network of multifunctional spaces, benefits cities and the people who reside in them. This chapter discusses how local authorities and others involved in urban green space governance have built planning processes and policies, set standards and targets, and developed funding and recognition schemes that reinforce a traditional approach to green space planning and contribute to holding urban green spaces frozen in time, hence limiting the work these spaces can do for the contemporary city.

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"Scarcely anything could be conceived more beautiful than the enormous expanse of London roofs covered with shrubs and flowers. … Gardens on our housetops! Babylonian luxuries!" – William Bridges Adams, *How to convert London into a garden* (1859, p. 522)

6.1. INTRODUCTION

In 1995, the Clapham Society declared: "Clapham Common, as its name suggests, is a common, not a park" (1995, p. 4; also see Lambert and Williams, 2014). Despite Clapham Common – which falls in both the boroughs of Wandsworth and Lambeth – having ecological and historic interest and being "largely a recreational area," the Clapham Society was adamant that the 220-acre (0.89 square kilometre) green space in Southwest London differed from "municipal parks" because the common has "little landscaping and no flower beds," few enclosed areas and "no park-keeper patrols" (1995, p. 4).

The categorisation of London's green spaces, such as Clapham Common, may seem a harmless issue. After all, whether a space is considered a park or a common, it can still fall under the broader umbrella of green space. Yet, in practice, this compartmentalisation has contributed to a limited perspective on green space planning, delivery and management. This is exacerbated by award and recognition programmes and funding schemes that further funnel urban green spaces into

narrow, isolated categories. This then affects planning targets and green space standards and measures, rendering them unachievable and, thus, symbolic, but largely irrelevant. Local councils use the broad definition of open space, which includes bodies of water such as the River Thames, and unnatural, impervious spaces such as plazas, squares and other paved or hard-surface areas.

Thus, "open space" obfuscates how green a borough actually is and whether residents have access to nature and the environmental benefits it provides. This makes conceptualising urban green spaces – regardless of if they are a municipal park, a common, a green roof, a housing amenity space or a private garden – as interconnected, multifunctional green infrastructure all the more difficult and unlikely. Instead of focusing on what all of these types of spaces have in common and how they are connected, the focus is on the differences of these spaces' historic design, use, management and maintenance. This leads to questions, such as the one Lambert and Williams ask of Wandsworth Common: "Is it a common or a park?" (2014, p. 95). Indeed, questions regarding green space classification are "one of the key debates today" (Lambert and Williams, 2014, p. 4). Noting the Clapham Society's rigid position on how to categorise Clapham Common, Lambert and Williams call for flexibility: "The demand for wildness needs to be balanced against the demand for recreational amenities and for security" (2014, p. 32).

The following sections elaborate on how urban green space is defined and categorised, and how planning targets, goals and strategies, as well as funding and awards schemes, are intertwined in and contribute to this delineation. The following sections also discuss the ramifications these seemingly administrative classifications have for green infrastructure planning and, ultimately, the role that urban green space can play in urban resilience.

6.2. DEFINITIONS and CATEGORIES
6.2.1. Definition of urban green space

The definition of urban green space – or lack of a definition – perpetuates a traditional concept of and approach to green space. Having a vague or no definition could be conceived as providing flexibility, such is argued with the concepts of sustainable development and green infrastructure, as discussed in Chapter 2 (Literature). In practice, though, the definitional void reinforces historical ways of thinking about

green space (Tate, 1994; Wheeler, 2000; Jepson, 2001; Chiesura, 2004; Benedict and McMahon, 2006; Connelly, 2007; Mell, 2008; Slavin, 2011; Wright, 2011). No single definition of green space – much less *urban* green space – exists. No national definition exists in the UK. At the regional level, the London Plan does not define urban green space, either, despite claiming that increasing green space in the capital is a policy priority (GLA, 2016c). Councils, although guided by planning policy, are largely left to define the concept as they prefer. While this leaves space for local character to be considered, it also allows local authorities to continue to provide green space in a path-dependent way.

For respondents, the definition of urban green space was implicit – they discussed green space without first explaining what they meant by the term. None of the 50 respondents interviewed asked what I meant by urban green space, although respondent 43 (planner, Islington) asked for clarification about whether I was "looking at delivery of green space and things through planning or just in general." Thus, among respondents, the concept of urban green space was accepted and understood, with most substituting the term "park" for "green space," underscoring how entrenched the Victorian construction of the concept remains today. Yet, the word "park" has been vague and imprecise from the beginning of the public park movement, with terms such as "park," "garden" and "walk" used so "loosely" that "the type of open space and its accessibility could not be deduced from the terms … used" (Conway, 199, p. 1, p. 11).

In discussing the delivery and management of urban green space, respondents emphasised the focus of their job responsibilities or professional expertise. For example, respondents with responsibility for biodiversity, such as respondents 19, 27 and 35 (green space staff, local councils), focused on green space's role in and benefits to habitat protection. Meanwhile, those involved with recreation, such as respondent 11 (senior staff, regional charity), focused on sport, fitness, exercise and health. Local authority green space officers advocated for publicly accessible spaces, while housing officers were resistant to allowing public access to amenity space on council estates. This parallels Mell's (2008) findings that definitions of green infrastructure – which, as Chapter 2 (Literature) demonstrated, also has a fuzzy definition – vary widely, depending on the subject of each person's work. This has ramifications for empirical research on urban green space. For example, Hillsdon et al. (2006) note that broad, subjective definitions may contribute to

researchers' failure to provide a consistent association between urban green space and physical activity.

Still, respondents' individual perspectives all were couched within an overarching, implicit and shared understanding of what is meant by "urban green space." As such, there is a general acceptance that when they talk about green space, their audience inherently knows what they mean. This signifies an enduring and specific shared, tacit idea of what urban green space is, despite widespread recognition that green space has a broad range of benefits and can play multiple roles in support of the economically, environmentally and socially sustainable city (Chiesura, 2004; Haaland and van den Bosch, 2015). The implied understanding signifies that "urban green space" is an institution, as laid out in Chapter 2 (Literature) and Chapter 5 (Heritage). This institutionalised concept of urban green space then influences the approach to managing these spaces in contemporary London (Lowndes, 2001; 2005; O'Riordan and Jordan, 1999; Steinmo, 2001). This underscores the argument that the institutionalisation of green space prevents flexibility and adapting green space to contemporary needs, demands and contexts. It also demonstrates the difficulty in thinking strategically about urban green space, even among those responsible for doing so.

Further, by being everything to everyone, the label of urban green space risks being an empty signifier, or a discursive element that has become "emptied of [its] actual content and provide[s] for the unity of the discourse" (Methmann, 2010, p. 352). Policymakers, local residents, green space users and respondents all can argue for urban green space because there is no definition or defined concept and, thus, they advocate for their perspective. Similarly, O'Neill maintains that "nobody claims to be against social justice, or against sustainability. These terms are seen as beyond criticism, contemporary versions of motherhood and apple pie …." (O'Neill, 2011, p. 137). Yet, despite their ubiquity, if these concepts are "too elastic," there is little "substantive to be said in their favour (or against them)" (O'Neill, 2011, p. 137). This mirrors research on other publicly provided services. For example, Cox found that the Scandinavian welfare model "has developed such ambiguous definitions that it is little more than a descriptive label for the welfare systems that exist in Scandinavian countries" (2004, p. 216). Such analysis can apply to green space, as "ambiguous definitions" of urban green space have led to a hollow label that everyone can support without any risk (Cox, 2004, p. 216).

6.2.2. Open space versus green space

In policy, most definitions, including those in the three boroughs researched here, conflate open space and green space (Swanwick, Dunnett and Woolley, 2003; James et al., 2009). This usually is intentional and has an impact on the accuracy, consistency and comparability of reporting data. It also influences policy development and planning decisions and affects a council's ability to strategically plan for contemporary concerns, such as climate change mitigation. For example, Tower Hamlets includes water in its open space targets. The large amount of river throughout the Docklands in Tower Hamlets greatly increases the borough's amount of open space and disguises its deficiency of green space. This distinction was not lost on respondent 18 (strategy, Tower Hamlets): "Unless you can walk on water, the fact that we have great big docks, yes, they create open areas and create breathing space in the city, but actually you can't make very much use of them."

Several respondents said the two terms are conflated because, in a densely developed area, open spaces, whether green or not, are desirable. Respondent 39 (green space staff, Tower Hamlets) discussed this and referred to the "town cramming" that Knight (1996, p. 188) says can result from dense development:

> I think they're [open space and green space] combined for two reasons. It makes it look like we've got more and, from my opinion, because we live in a really dense, built-up borough, anything that gives you that little bit of space away from the density and the buildings is a good thing. That's probably why we lumped the two together. Open space means the green space plus any kind of open space where you don't feel like you've been shut in by the buildings.

Yet, conflating the two presents challenges for addressing contemporary environmental needs. While publicly accessible open space – including bodies of water – and green space have overlapping benefits and share similar challenges, the two types of space are not interchangeable. Swanwick, Dunnett and Woolley differentiated between green open space and grey open space, which "consists *predominantly* of sealed, impermeable, 'hard' surfaces such as concrete, paving or tarmac," such as that shown in Figure 6.1 (2003, p. 98, emphasis original; James et

Figure 6.1 – **Open space:** This publicly accessible paved space, provided by a private developer as a condition of development in Wandsworth, is categorised as open space in the same way a green space is (source: author).

al., 2009). Green space, meanwhile, is "land that consists *predominantly* of unsealed, permeable, 'soft' surfaces such as soil, grass, shrubs and trees" and can be privately or publicly owned (Swanwick, Dunnett and Woolley, 2003, p. 97, emphasis original; James et al., 2009).

An obvious difference between open space and green space is the role of each in climate change mitigation. Given that climate change is a key justification for protecting urban green space in local and regional policy, this distinction is important (Swanwick, Dunnett and Woolley, 2003; Gill et al., 2007). Open space can consist of impervious built surfaces that have replaced natural vegetated surfaces (Gill et al., 2007). Gill et al. show that "a higher proportion of impervious surfaces instead of pervious vegetated surfaces leads to an altered hydrological regime in urban areas"

(2008, p. 211). A concrete plaza with few trees and plants may provide "breathing space" (respondent 18, strategy officer, Tower Hamlets) and could enable a site for increased social and community interaction, but it would not contribute to counteracting the impacts of climate change, as paved open spaces facilitate the heat-island effect (Norton et al., 2015). Unlike vegetated surfaces, impervious surfaces absorb and store solar radiation throughout the day. As this heat is slowly released at night, temperatures in urban areas remain elevated (Norton et al., 2015). This is an issue for global warming.

An urban green space consisting of grass, flowers, plants and trees, however, enables urban cooling, water filtration and biodiversity, all important in mitigating the impact of greenhouse gas emissions and climate change (Swanwick, Dunnett and Woolley, 2003; Pincetl and Gearin, 2005; Gill et al., 2007). Research supports this distinction and points to the contribution green spaces make as critical environmental capital in high-density, urban areas (Gill et al., 2007). Definitions that conflate open space and green space focus on more traditional uses of the spaces, such as recreation and amenity and ignore ecological uses.

This reinforces the institutional concept of green space while neglecting a multifunctional, interconnected green infrastructure approach to planning (see Chapter 2, Literature; Kambites and Owen, 2006; Gill et al., 2007; Wright, 2011). Swanwick, Dunnett and Woolley observe that the term "green space" is relatively new in the UK and reflects a more European approach to green space planning that is rooted in the urban nature conservation movement and that emphasises "the green environment of urban areas is about more than only parks, gardens and playing fields" (2003, p. 97).

This use of "open space" also further illustrates that London's green spaces are not designed, delivered and managed as essential infrastructure providing valuable environmental services. Failing to delineate green space from open space, local councils obfuscate the fundamental issue of whether they are delivering and managing urban green spaces so Londoners, and London, can benefit from the environmental services they provide. Making policy statements that mitigating climate change matters rings hollow if the category of "open space" conflicts with a local council's ability to deliver green spaces that provide such services.

6.2.2.1. *Planning Policy Guidance 17 (PPG17)*

For many respondents, a significant influence on how they and local authorities identify and define urban green space is the former *Planning Policy Guidance 17: Planning for Open Space, Sport and Recreation.* Originally published in 1991 and revised in 2002 by the Department for Communities and Local Government, the name of the guidance itself steered focus toward the broader "open space." PPG17 provided structure to local authorities' open space management, including providing descriptions and differing uses of open space. The revised PPG17 in 2002 directed local authorities to set local open space standards and develop green space policies in line with their local development plans, opening the door for local councils to adopt definitions of urban green space tailored to local circumstances and essentially interpreting "national policy to reflect individual circumstances" (DCLG, 2002; Wilson and Hughes, 2011, p. 216). However, few local councils in London took advantage of this flexibility, as evidenced by council definitions that replicate the GLA's definition essentially word for word (Wilson and Hughes, 2011). As such, the broad and more general concept of "open space" persisted, missing an opportunity to delineate urban green space and the specific benefits that arise from a green infrastructure approach to planning and development.

Respondents referred to PPG17 as highly influential in their respective boroughs. Although PPG17 was eliminated when central government introduced the National Planning Policy Framework in 2010, PPG17's influence continues because the NPPF, which is deliberately briefer than the previous planning framework, did not replace PPG17 with any other guidance on classification of green space. Indeed, the NPPF replaced more than "1,000 pages of previous detailed planning policy guidance" with a streamlined 52-page document (Harrison and Clifford, 2016, pp. 585-586). Local authorities and other organisations established processes based on PPG17, and these processes had time to become entrenched in the councils' policies and practices regarding green space management and, thus, time to influence and inform decision making (O'Riordan and Jordan, 1999; Lowndes, 2001; 2005; Steinmo, 2001).

Central government's elimination of the guidance and direction found in PPG17 caused little to change in local councils' conceptualisation of and approach to urban green space, as most continued with their existing definitions and typologies. New institutionalism argues that forces from above, such as national legislation, interact

with locally prescribed cultures and conventions – "how things are done around here" – to shape the institutions of local governance (Lowndes, 2005, p. 294). Because PPG17 was removed without anything filling its void from above, the guidance's influence continues to be felt. For example, respondent 6 (planner, Wandsworth) noted that when Wandsworth Council consulted on new planning policies to comply with the NPPF, the council did not change its policies "in light of the NPPF because, although they may be worded slightly more PPG17-compliant, we don't think they're in conflict with the NPPF. The intent of the policy stayed the same. … PPG17 had quite a specific list of criteria and the NPPF is a bit vaguer."

Another example of PPG17's influence relates to the green space and wildlife habitat data that all London boroughs report to Greenspace Information for Greater London (GiGL), London's environmental records centre. These reporting methods are built around PPG17 definitions and classifications and have continued despite introduction of the NPPF and the flexibility the central government says it provides (respondent 47, senior staff, community interest company, and respondent 48, senior staff, community interest company). Thus, the green space typology included in PPG17 remains largely intact in practice today and contributes to the institutional concept of green space. This illustrates the resilience of – and difficulty in changing – established practices related to urban green space.

Further, the descriptions included in PPG17's typology contribute to directing green spaces into a particular use, such as outdoor sports facility, cemetery or housing amenity space, instead of promoting a multifunctional green infrastructure use (Chapter 2, Literature; Kambites and Owen, 2006; Thomas and Littlewood, 2010; Wright, 2011; Lennon, 2015; Norton et al., 2015). This matters because the primary use for a green space influences how it is managed, maintained and funded. This causes green space managers and even green space users to identify a space with a principal use, further limiting flexibility of green space delivery and management. Although a space can have multiple uses, typically one use is identified as the predominant use, and this often is a traditional use, particularly leisure and recreation, continuing to entrench the institutionalised concept.

According to respondent 31 (green space staff, Islington): "You sort of send certain parks toward a priority, be it leisure or be it quiet reflection or be it play, and we're trying to do that a little bit more because the level of intensity of use you cannot

satisfy [everyone] – you end up pleasing nobody." Tower Hamlets, meanwhile, classifies sites by typology in accordance with their primary source, even if a site has multiple uses (TH, 2011). This underscores the challenge in seeing urban green space in non-traditional roles and as multifunctional. By managing green spaces individually and identifying a dominant use, thinking of these spaces strategically and as interconnected parts of a greater green infrastructure network is minimised. Thus, delivering and managing London's urban green spaces as "critical scaffolding in urban plans" or conceptualising urban green space as multifunctional green infrastructure becomes unlikely (Eisenman, 2013, p. 298).

Figure 6.2 – **Amenity space:** Housing amenity space, clockwise from top left, in Wandsworth, Islington, Wandsworth and Tower Hamlets is not categorised as green space (source: author).

6.2.3. Housing amenity space

The segregation of housing amenity space and urban green space illustrates how rigid definitions of urban green space, born from an institutionalised approach to green space delivery and management, limit the ability of urban green space provision to change to fit contemporary urban life, urban demands and urban

challenges. Amenity space – which can be a green, natural area – is located on council housing estates and typically is funded from money earmarked specifically for housing and supported by fees paid by an estate's residents (respondent 12, housing officer, Wandsworth). This is not the same pot of money used to fund culture and leisure services, which is how many local councils in London categorise green spaces and parks.

Despite much amenity space being publicly accessible, housing amenity spaces are not categorised as urban green space by local councils and do not form part of a council's green space planning or environmental strategies, although in some local authorities, such as Islington, the in-house green space maintenance team also maintains green spaces for council housing estates. Yet, these housing amenity spaces fit the type of small, local space near where residents live that provides valuable benefits, and research shows residents are more likely to use nearby green spaces (Kaplan, 1984; Van Herzele and Wiedermann, 2003; Dempsey and Burton, 2012). These spaces could play a role in an interconnected, multifunctional green network, but categorising them as "amenity space" and managing them separately minimises the ability to implement green infrastructure planning that could provide a broader array of benefits to a wider community.

Respondents said the reason for the delineation in land-use designation is due to administrative issues related to funding, thus, the funding source dictates whether a space is considered green space and, ultimately, whether a green space is managed to contribute to addressing contemporary concerns. Additionally, although some of these spaces are open (e.g. not fenced) and used by the public, they are not officially designated as public spaces. Opposition from housing estate residents also contributes to how amenity space is categorised. Respondent 18 (strategy officer, Tower Hamlets) said: "Our standard doesn't necessarily include things like what's called housing amenity land because, technically, the way it's funded is out of service charges out of the rents and, therefore, it technically isn't publicly accessible. Many of the residents on many estates tend to object if people use it more widely."

As such, housing amenity spaces are organisationally and strategically cut off from other green spaces owned or managed by the council, despite often serving the same functions and having the potential to contribute to boroughwide sustainability goals outlined in planning documents, such as Local Plans, including providing

stormwater drainage, air and water filtration, and opportunities for quiet reflection. This matters because housing amenity space makes up a sizeable amount of green space across Inner London boroughs.

This is already the case in Islington, London's densest borough. Respondent 31 (green space staff, Islington) noted that in Islington "there's actually more public space on housing estates than there is in parks." Islington has 287 housing amenity spaces, totalling 107.1 ha, and 88 designated parks and gardens, totalling 80.1 ha (Islington Council, 2011b; Islington green space officer, personal communications, 10 December 2018). Yet, despite this amenity space comprising the majority of the borough's urban green space, it does not form part of Islington Council's planning policies and strategies designed to maximise the benefits of urban greening. Thus, in spite of the prevalence of green space on estates – much of it council-owned – these spaces are not managed for their link in a wider green infrastructure network that contributes to mitigating the impacts of climate change, fostering biodiversity and other ecosystem services, and addressing contemporary health concerns, as demanded by a modern, growing and changing borough and city.

6.3. TARGETS AND STANDARDS

6.3.1. Size

In addition to definitions of green space, categories of size of green space also exist. Categories applicable to London are laid out in the London Plan (see Table 6.1). Despite allowing facilities and local importance to be factors, categories are based predominantly on size (GLA, 2016c). Origins of the support for a hierarchy of sizes of urban green spaces can be traced to the 1976 open space plan for London, which based its three sizes of parks – metropolitan, district and local – on the catchment areas for at least six demand groups identified in the general population, from "mothers with young children" to "people over the age of 64" (Turner, 1995, p. 272).

The focus on size also overlooks the work that smaller spaces can do for the contemporary city. The London Plan lists green infrastructure as a benefit of a regional park, but makes no mention of such a benefit for smaller spaces, including local parks, small open spaces and pocket parks (GLA, 2016c). Yet, the types of uses within a space have as much bearing on the benefits the space provides to residents as size does. A smaller space that people interact with every day can have

more of an impact on residents' lives than a larger space – a destination park – that they visit only at weekends or more sporadically does (Luttik, 2000; Morancho, 2003; Nicholls and Compton, 2005a). And, small pocket parks can provide critical ecosystem services, particularly when managed as part of an interconnected network.

As such, the categorisations are too simplistic and do not allow for the flexibility and change involved with green infrastructure planning (London Assembly Planning Committee, 2018; respondent 2, senior staff, regional charity; respondent 31, green space staff, Islington; respondent 39, green space staff, Tower Hamlets). In comments provided on the latest draft of the mayor's London Plan, the London Assembly's Planning Committee expressed this concern and referred to the public open space categorisation table, advocating for the table to "incorporate categories of open space such as playing fields and small-scale open areas used as community resources which are distinct in function and scale to pocket parks. These smaller, local, open spaces should be accorded protection, too" (2018, p. 79). As discussed in Section 5.3.5, an institutional concept of urban green space, rooted in heritage, has led local authorities to focus on large, flagship green spaces. However, the size of a green space may not reflect the value a green space provides to a borough's residents or to the city's overall sustainability goals.

These categories of green space size matter because they influence local planning, as they provide the basis for planning policies and green space targets, such as determining whether a borough's residents are deficient in access to open space (see Section 6.3.3). This, in turn, drives green space planning – such as through local councils' open space strategies – and influences where development is permitted, the type of development permitted, where councils direct their limited funding for green space, and planning concessions and conditions required of developers. Yet, just as quantity of green space does not override quality, size does not signal use. Indeed a "focus on hierarchical plans displays a fundamental misconception" of how people use and move about cities (Alexander, 1965 cited in Turner, 1995, p. 276).

A preoccupation with green space size is evident in councils' focus on their larger, flagship spaces. As discussed in Chapter 5 (Heritage), councils focus on their larger and more historic green spaces, directing funding, staff resources and publicity to

these spaces, which typically are more formal, well-established spaces, such as Victoria Park in Tower Hamlets, Highbury Fields in Islington and Battersea Park in Wandsworth. It also is easier to perpetuate a traditional countryside-in-the-city approach to green space delivery and management, which fits with how urban green space is conceptualised, in larger spaces. Because these spaces consume much of the councils' time, attention and resources, they set the parameters for how green space boroughwide is delivered and managed. Thus, characteristics that are strong in these large spaces, particularly heritage, permeate the wider system of urban green space. This, then, signals what a good green space is to local residents, reinforcing the traditional definition, use, look and concept of green space, resulting in a self-reinforcing, institutionalised approach to urban green space.

This is not meant to argue that large urban green spaces are not beneficial. Larger spaces, for example, provide opportunities for playing fields and are necessary to provide habitat for certain species of wildlife. Indeed, Giles-Corti et al. (2005) found that while having a green space nearby increases use generally, having access to a larger public open space is associated with higher levels of walking. Still, their research suggested linking smaller local parks could attract more walkers (Giles-Corti et al., 2005). Making planning decisions for all green spaces based on size categories overlooks the opportunity to manage and distribute green space in a way that can better contribute to the city's ability to respond to contemporary urban challenges, such as climate change and health and well-being, through an interconnected green infrastructure approach.

Adherence to green space targets has proven unsuccessful elsewhere. In the United States, the National Parks and Recreation Association established a standard of 10 acres of parks and green spaces for recreational purposes per 1,000 people, but after many local governments could not meet the standard due to budget and land availability, the NPRA removed the size standard (Cohen et al., 2007). Instead, the organisation said each local community should determine the level of parks and recreational spaces that fit with the community's context, including economic, environmental and social characteristics (Cohen et al., 2007). The inability to meet arbitrary targets in the boroughs studied here suggests a need to look beyond simply quantity and size, as well.

6.3.2. No net loss and green space per capita

The traditional approach to urban green space and the expectations this creates lead to unreachable green space goals. Policies, standards and strategies that stem from a previous era obstruct more strategic urban greening delivery and management practices (Hostetler, Allen and Meurk, 2011). London's local and regional governments have set specific green space-related targets. At the regional level, London's mayor has set out an environmental strategy calling for London to be at least 50 percent green by 2050 (Mayor of London, 2017, 2018). At the local level, council planning policies typically set out a target of no net loss of open space – not specifically green space, as the two are conflated, as discussed in Section 6.2.2.

Of the three boroughs studied here, Islington and Tower Hamlets have targets for the amount of green space per person within the borough. Wandsworth, in line with its "Thatcherite" approach discussed in Chapter 4 (London Context), instead adopted finance-driven targets, notably spending per capita on parks and green spaces (Travers, 2015, p. 132; respondent 19, green space staff, Wandsworth). Respondents described green space per capita targets as highly unrealistic. Respondent 2 (senior staff, regional charity) called them "unattainable." Islington and Tower Hamlets do not meet their targets, nor do they expect to do so, while in Wandsworth, "we spent a lot of time trying to change those targets around" (respondent 19). In Islington, where the largest urban green space, Highbury Fields, is 11.75 ha, respondent 28 (planner), said:

> If we were to maintain the green space per capita as it is at the moment, we'd have to create effectively 16 ha of open space. There are just no sites for that. … In an ideal world, you would be able to have a certain minimum amount of open space per person and have that as a threshold and that would be nice. But, to keep that level of open space provision per person in line with population growth, you need some substantial amounts of land and it just doesn't exist.

Tower Hamlets' Open Space Strategy says to meet the council's established local standard of 1.2 ha per 1,000 head of population, the council would need to provide an additional 99 ha of publicly accessible open space by 2025, approximately the size of Victoria and Mile End parks – the borough's two largest green spaces – combined (TH, 2011). Thus, Tower Hamlets' primary green space planning

document "recognises that in the context of acute housing need in the Borough, such quantities [of green space] are not achievable" (TH, 2011, p. 19). Instead of being realistic and achievable, such targets are symbolic and exist to signal that a borough values urban green space, respondents said. Tower Hamlets' Core Strategy says the 1.2 ha standard will continue to be used as a monitoring standard "to justify local need" (Tower Hamlets, 2010, p. 56). Retaining these targets in Local Plans also may give councils leverage when making decisions on planning proposals and in negotiating planning concessions with developers (respondent 15, planner, Tower Hamlets).

Yet, the targets used are not based on research indicating an ideal amount of urban green space for recreational, health, environmental services or any other use. Indeed, no consensus exists for an ideal amount of green space, especially in an urban context. Instead, the councils' targets are based on arbitrarily chosen points in time. For example, in Tower Hamlets, the 1.2 ha standard was the amount of open space that existed in the borough in 2005, when the council decided to establish a policy to stop the loss of open space the borough was experiencing. 2005 was also the year the residential development density matrix was published in the London Plan. Given this change in regional planning policy to move toward more compact development, Tower Hamlets expected increased growth and council policymakers decided to use 1.2 ha as the standard from that point forward to guard against further loss of open space, including green space, within the borough (TH, 2011).

Five years later, in 2010, growth and development in Tower Hamlets led to the amount of open space per 1,000 population dropping to 0.98 ha, despite the creation of new open spaces, including green spaces, in the borough (TH, 2011). Tower Hamlets is the fastest-growing Inner London borough in terms of population and net housing units added (ONS, 2012b; DCLG, 2017). This demonstrates the essentially impossible task local authorities in Inner London face to hold the amount of green space per capita steady, much less increase it to meet their targets, given increasing population and development densities.

Even if a borough experiences no net loss of open space from development, the increased population means the amount of green space per capita will decline, moving the local authority further from meeting its green space target. This already is happening: "Our green spaces are hammered" (respondent 17, green space staff,

Wandsworth). Thus, as with the definition of green space, such green space targets ring hollow. Respondent 39 (green space staff, Tower Hamlets) recognised this: "Setting targets and delivering them are two completely different things." Tower Hamlets, for example, acknowledges its standard has not kept pace with growth, begging the question of the purpose of retaining the standard.

In the west of Tower Hamlets, adjacent to the City of London, there is a provision of 0.5 ha of open space (not just green space) per 1,000 population, while the Leaside area has 0.4 ha per 1,000 population, both well below the council's target of 1.2 ha per 1,000 head of population (TH, 2006). Expected increases in residential density and the daytime working population will create additional pressure on these areas (TH, 2006). Further, with just half of Tower Hamlets residents having sufficient access to a major park and 43 percent having access to a local park, the targets do not reflect the changing nature of urban development across the borough (TH, 2006). The same pattern is occurring in Islington and Wandsworth, which both have experienced increasing populations and increased development, yet have not added discernible publicly accessible green space to sustain the existing green space per capita within the boroughs (ONS, 2012b). The sheer amount of green space the three councils would have to create simply to reach their minimum targets is unrealistic given the local and regional focus on dense residential development and the increasing population in the boroughs.

Further, changes to planning laws and policies by central government affect local authorities' ability to meet green space targets. For example, policies that allowed for change of use from office (B1) to residential (C3) without the need for planning permission means local authorities do not have the opportunity to apply their policies that require residential development to include amenity space. And, because this permitted change of use does not go through the planning process, local authorities cannot require a developer to provide amenity space, or contribute to existing green space, as a condition of planning permission. Respondent 28 (planner, Islington) addressed this:

> In Archway, there's this huge office block that may change to residential. We can't secure anything to mitigate its impacts. If that had come forward through a planning application, we could have said, 'There are going to be 200 new people living there. Archway

Park nearby might need a lot of improvements or there's potential to redesign the public realm around there.' You lose your ability to do that. If a lot of that development happens then we'll have a lot of population increase without being able to try and even attempt to mitigate some of its impacts, such as requiring open space.

6.3.3. Access to public open space and nature

In recognition that the benefits a green space provides can vary according to the size of the space, the GLA and local authorities established specific standards that delineate the distance each resident in a borough should be from a public open space of each size category: metropolitan, district and local (see Table 6.1). Use of urban green space has been found to be sensitive to distance, which may be more important than size (Giles-Corti et al., 2005). Using data supplied from the boroughs, GiGL mapped the open space, including green space, in each borough, enabling each local authority, as well as the GLA and others, to ascertain which parts of a borough are deficient in access, e.g., more than the specified distance from each size of open space. This is meant to enable local planners to develop strategic plans that protect existing spaces from development pressure and that create new green spaces in the parts of the boroughs with deficiencies (respondent 47, senior staff, community interest company). These standards also influence decisions on planning applications.

Islington, Tower Hamlets and Wandsworth each have areas categorised as deficient in access to public open space and nature. Yet, determining whether an area is deficient relies on a narrow, traditional concept of green space. This traditional approach ignores other benefits urban green space can provide, such as ecosystem services. In other words, the targets are focused solely on benefits such as health and recreation, but fail to consider access to nature for environmental services, such as air and water filtration, flood mitigation or food growing.

Focusing on distance and green space size in determining whether residents have access to open space and nature detracts from providing other ways of ensuring access to nature in increasingly dense urban areas and perpetuates the traditional conceptualisation of urban green space. For one, providing new green spaces – particularly large metropolitan green spaces, which is one of the targets – in an urban setting is difficult in dense, already built-up areas, as the councils' experiences with

green-space-per-capita targets have indicated (Haaland and van den Bosch, 2015). Also, considering only green space of a certain size as providing access to nature does not acknowledge the existing built-up environment of Inner London boroughs, either. This has been a concern since 1847, when Victoria Park in Tower Hamlets was criticised for "not being near enough to meet the needs of the poor. … A better solution … would have been a number of small … areas of one or two hectare each" (Conway, 1991, p. 209).

In Islington, the densest borough in all of England, opportunities to establish new green spaces, even small spaces at the local park size of 2 ha, are almost non-existent (respondent 28, planner, Islington; respondent 44, green space staff, Islington). Yet, according to existing access-to-nature policies, any new green space less than 2 ha in size that the council could create would not provide Islington residents with improved access to nature. Similarly, Tower Hamlets has not been able to make a dent in reducing its deficiency in access to open space and nature targets, despite adding green space within several new developments and redevelopments (TH, 2011).

The urban change experienced by Tower Hamlets – one of the fastest-growing boroughs in England – in the past five years has caused council planners to re-evaluate their policies regarding green space provision. In a diversion from regional policy, Tower Hamlets recently modified its definition of "local park" by subdividing the GLA category of small open space (TH, 2017b; respondent 18, strategy officer, Tower Hamlets). Now, spaces that fall between 2 ha (what the GLA calls a local park) and 1 ha (what the GLA calls a small open space) are categorised by the council as a "Tower Hamlets Local Park" (TH, 2017b, pp. 27-28). This policy change acknowledges that providing smaller spaces is a more realistic and achievable planning target than holding onto standards and categories that cannot be attained and that do not reflect the development and changes occurring on the ground in the borough (TH, 2017b). Indeed, at the end of the 19th century, "it was increasingly recognised that large parks did not solve the problem of access to open space for those living in the dense urban areas" (Conway, 1991, p. 6). The creation of smaller green spaces, such as converting disused burial grounds, highlighted "the need for better town planning" that involved publicly accessible green space in urban areas (Conway, 1991, p. 6).

TABLE 6.1 – Public open space categorisation

Categorisation and description	Size guideline	Distance from homes
REGIONAL PARKS – Large areas, corridors or networks of open space, the majority of which will be publicly accessible and provide a range of facilities and features offering recreational, ecological, landscape, cultural or green infrastructure benefits. Offer a combination of facilities and features that are unique in London, readily accessible by public transport and managed to meet best-practice quality standards.	400ha	3.2km to 8km
METROPOLITAN PARKS – Large areas of open space that provide a similar range of benefits to Regional Parks and offer a combination of facilities at a subregional level. Readily accessible by public transport and managed to meet best-practice quality standards.	60ha	3.2km
DISTRICT PARKS – Large areas of open space that provide a landscape setting with a variety of natural features. Provide a wide range of activities, including outdoor sports facilities and playing fields, children's play for different age groups, and informal recreation pursuits.	20ha	1.2km
LOCAL PARKS & OPEN SPACES – Provide for court games, children's play, sitting out areas and nature conservation areas.	2ha	400m
SMALL OPEN SPACES – Gardens, sitting-out areas, children's play spaces or other areas of a specialist nature, including nature conservation areas.	Under 2 ha	Less than 400m
POCKET PARKS – Small areas of open space that provide natural surfaces and shaded areas for informal play and passive recreation that sometimes have seating and play equipment.	Under 0.4ha	Less than 400m
LINEAR OPEN SPACES – Open spaces and towpaths alongside the Thames, canals and other waterways, paths, disused railways, nature conservation areas, and other routes that provide opportunities for informal recreation. Often characterised by features or attractive areas not fully accessible to the public, but that contribute to the enjoyment of the space.	Variable	Wherever feasible

Source: GLA, 2017d, pp. 307-308

This echoes an emerging theme in the literature that smaller and more informal urban green spaces, which tend to be closer to where people live and work, have value and are as important, if not more so, than larger, more distant green spaces (Kaplan, 1984; Chiesura, 2004; Jim, 2004; Nicholls and Crompton, 2005a). Rupprecht et al. (2015) found that, overwhelmingly, the most common reason urban dwellers visited an informal green space instead of a large, more formal space was because of proximity to where they live. Yet, smaller and informal spaces, whether "embedded within the city fabric or located at the fringe," are more subject to development pressures as land use intensifies in the city centre and as the city expands its borders (Jim, 2004, p. 313). Respondent 23 (senior staff, national charity) said: "It's unlikely they [local authorities] would sell off any of the really big parks, but small bits of green space to sell a few houses or the green bits at the end of the street where you could build another house on the end of a terrace – those sorts of things will disappear." This, again, reinforces a fixation on larger spaces and minimises the critical work smaller, yet interconnected green spaces can do.

As discussed in Section 6.2.3, local authorities generally do not consider amenity spaces on housing estates as publicly accessible urban green space and, thus, these spaces do not factor into green space planning targets regarding access to nature or green space per capita. Yet, housing amenity spaces can be residents' nearest green space, even for residents who do not live on the estate itself. Many estates have green space that meets the definition of a local park (2 ha), with some estates having even larger green spaces. For example, residents in Wandsworth who live at the Alton Estate in Roehampton, one of the largest council estates in the UK, have access to the estate's green space, which "is a rare, possibly unique combination of eighteenth century and twentieth century picturesque landscape" and one of the largest green spaces within the area (Wandsworth Conservation and Design Group, 2010, p. 16).

Despite this, the amenity space at the estate does not factor into calculations to determine if estate residents are deficient in access to open space. Thus, although residents live amidst a green space, they could be considered deficient in access to open space. Similarly, despite the presence of this green space, a resident who lives across the road from the Alton Estate would be considered to have a deficiency in access to open space if no other open space categorised as a park by the council is

nearby, even though a sizeable amenity space is right outside their door. As respondent 9 (regional policy officer) said:

> You could have a situation where you've got a park and you've got a housing estate, and that housing estate has got loads and loads of green space, but it's not actually recognised in planning terms as a park. You could have a slightly perverse situation where … you do the measurements and these people [at the housing estate] are more than five minutes from a park, therefore they're deprived of access to open space. Actually, they aren't, but it's all down to what metric you use and, clearly, it's quite difficult to get a really, really sophisticated system of metrics that actually discounts the fact that they've actually got quite good quality of open space.

A size-and-distance approach also treats urban green space as one-size-fits-all when the benefits of urban green space are heavily reliant on context and the surrounding environment. This is a critical point in Inner London, where demographic and socioeconomic change is occurring, as detailed in Chapter 4 (London Context). Wang, Brown and Liu found that planners and policymakers should not focus solely on objective green space accessibility measures, namely quantitative open space standards, because these do not capture the complex and dynamic nature of diverse neighbourhoods: "The failure of park planners and managers to provide culturally appropriate park types and amenities to meet diverse community needs may result in the underutilization of neighbourhood parks, especially in communities of disadvantage" (2015, p. 64).

Further, what constitutes a green space and, therefore, the space to which the distance and size targets are measured, is traditionally defined. Green infrastructure, such as green walls, green roofs or street trees, is not considered even though these types of spaces provide opportunities for quiet contemplation, expose people to biodiversity and "can greatly mitigate urban surface temperatures" (Norton et al., 2015, p. 132). This further illustrates a focus on a traditional, institutionalised concept of urban green space. Green roofs and green walls and other green infrastructure, such as in Figure 6.3, provide a range of benefits for urban residents – they just may not provide the recreation and amenity that is the traditional purpose of green space.

Respondent 46 (senior staff, national charity) said spaces "that, from an amenity point of view, are not particularly interesting" still contribute to the sustainable city:

> You can't play a game on a grass verge. Is it providing anything? In terms of leisure, it's not, but in terms of ecosystem benefits, it is providing something. … Urban green space varies hugely from beautifully managed parks that are rich in biodiversity and interest and culture and are amazingly complex places, to a flat piece of grass outside some houses.

Figure 6.3 – **Highway verge:** Green space along roadways, including highway verges, provide often-overlooked benefits, such as ecosystem services. They also can provide shade and seating for pedestrians (source: author).

Such an amenity-based perspective also fosters an island-based approach by measuring distance to green space without concern for interconnectivity, even though such connectivity can increase the benefits of green space beyond what a single space can provide. This further indicates how green space is managed – and measured – for specific benefits, but not for providing ecosystem and environmental services and other benefits identified by planners and policymakers as essential in the contemporary city, such as providing shade and cooling on hot or sunny days. Focusing on traditional green spaces also makes it more difficult to improve access to nature in areas deemed deficient. This can spur equity issues, as low-income and low-education neighbourhoods often have less access to urban parks and green spaces (Choumert and Salanié, 2008). A green roof may not solve a deficiency in access to playing fields, but it could provide access to nature that provides other benefits, including education, well-being and exposure to biodiversity.

This is not to imply that access to nature for recreation and amenity is not important. As discussed in Chapter 2 (Literature), access to green space provides essential opportunities for physical health and mental well-being improvement for urban dwellers. However, existing standards measure access to traditional types of green space and green space uses, but this does not reflect the changing nature of urban demands on green space or capture the contribution of green infrastructure efforts in contemporary London. Further, it identifies residents as deficient in access to nature, when this may not be the case if a green infrastructure approach with a broader, interconnected and multifunctional purpose is considered. It conflates the benefits from green space and assumes all benefits are derived from the same distance. Traditional ways of thinking about urban green space as existing to provide recreation and amenity limit the understanding that urban green space makes critical contributions to the urban environment in myriad other ways.

6.3.4. Private green space

Fourteen percent of Greater London is considered to be vegetated private, domestic garden green space (GiGL, 2015a). Separating public and private urban green space further limits the ability for London's urban green spaces to adapt to changing demands. Focusing solely on publicly accessible green space in planning ignores the benefits that private green space can provide, particularly related to environmental services and biodiversity, which get pushed aside with a focus on recreation and amenity that pervades public-sector approaches to green space

management (Pauleit, 2003). Indeed, the amount of private green space "can be larger than that of public greenspace" (Pauleit, 2003, p. 92). Private green space can have "an enormous richness in plant and animal species, and can therefore be important for urban nature conservation" (Pauleit, Ennos and Golding, 2005, p. 296).

The issue of private and semiprivate urban green space will grow more prevalent as local authorities increasingly rely on others to provide urban green space for local residents (Dempsey, Burton and Selin, 2016). As discussed further in Chapter 7 (Governance), reduced resources and austerity measures have led to deep cuts to local councils' green space planning and management activities (Dempsey, Burton

Figure 6.4 – **Private green space:** Although private green spaces do not count in green space targets and measurements, they can provide many of the same benefits as publicly accessible urban green spaces and, thus, can contribute to a green infrastructure approach to planning (source: author).

and Selin, 2016). Local authorities increasingly are shifting delivery and management of urban green space to developers, housing associations, charities and community organisations, and local residents. Providing public amenity space is often a condition of planning permission, although these privately provided spaces are not consistently green spaces, but may be impermeable hard surfaces. While some of this space is considered publicly accessible, some private amenity green space has no public access even though it provides a green space for adjacent residents that meets the size and distance requirements of a pocket park or a small open space. Such an increase in green space in a borough is, thus, not captured by existing access-to-nature targets, as local authorities only factor in publicly accessible spaces. Thus, as the population of the borough grows, green space targets, as Sections 6.3.2 and 6.3.3 showed, which are narrowly defined and measured, become even less and less attainable.

In other words, the local authority requires a developer to provide a green space to ensure that residents of the new development have access to green space, typically as a condition of planning permission. Yet, because the green space is private, the council does not include the space in its access-to-nature calculations. An extreme example is the Royal Borough of Kensington and Chelsea, in west Inner London. Despite green spaces throughout the borough, residents may be considered deficient in access to nature and smaller open spaces – despite living near a green space – because many of the borough's smaller green spaces are private (see Figure 6.4) (Kensington and Chelsea, 2004; Kensington and Chelsea, n.d.).

Further, although not accessible to the public, private urban green spaces still provide public benefits and contribute to urban sustainability. For example, in the UK, central government has established urban biodiversity indicators, such as increasing participation in wildlife gardening (Gaston et al., 2007). This "reflects the high proportion of urban green space that comprises domestic (private) gardens" (Gaston et al., 2007, p. 3228). To ensure private spaces factor into strategic planning efforts, as well as sustainability targets, indicators and data, local authorities need better information on all green space within the area, "including private and institutional grounds" (Pauleit, 2003, p. 92). However, the mayor of London's Guidance on Preparing Open Space Strategies advises private gardens not be included (CABE Space, 2009). Pauleit questions how green space planning and

management strategies can be developed "if there is a lack of this most basic information on greenspaces" (2003, p. 92).

6.4. IMPACT OF DENSITY

The impact of dense development on local authorities' ability to provide access to a broad range of sizes of urban green space, especially larger spaces, is particularly acute in Inner London. Much of Inner London already was developed before providing urban green space became a policy of local authorities. For example, Islington has long been "joined to the streets of London, excepting one small field" (Defoe, 1974, p. 315; McKellar, 2013, p. 114). Islington's green spaces tend to be small – the borough's largest green space, Highbury Fields, at 11.75 ha, fits into Wandsworth's largest green space, Tooting Common (92 ha), eight times and into Tower Hamlets' largest green space, Victoria Park (86.18 ha), seven times. Respondent 44 (green space staff, Islington) said Highbury Fields is "barely a pocket park to some places." According to respondent 31 (green space staff, Islington), the small size of green spaces, plus council policies regarding access to nature, influence how Islington Council identifies green space (see Figure 6.5):

> There are things that we call parks that other people would not think of. Yeah, they would think of it as just a patch of grass. We have a highway verge, which the residents now call Petherton Green, and it's basically a strip of land in the middle of quite a wide road. From a resident's perspective, that is their park, even though it's probably as wide as this room with some trees on it. ... In any other borough, that's a highway verge that you mow periodically, but, for us, it takes quite a bit of time and resources because we're having to service the demands and expectations of those residents who see it as something it probably isn't, really.

This contrasts with Wandsworth, which of the three boroughs is the least dense, and has both the most total amount of green space and the largest green spaces, including several commons, as Chapter 4 (London Context) showed. When discussing a linear park being created in the Nine Elms redevelopment project in Battersea, respondent 5 (planner, Wandsworth) said, "There's a lot of small sites rather than one big site, so you're not really going to provide a proper green space

there. It's not big enough, really, for a proper lawn that's going to actually achieve anything." Respondent 19 (green space staff, Wandsworth) said, "Whether it will feel like a park or not is up for debate." Yet, the linear space, as proposed, is to be 12 ha – larger than Islington's largest green space. This illustrates the differing conceptualisations of what green space is.

Respondents from Wandsworth referred to the impact the presence of large spaces plays in the council's perception of what constitutes green space and indicated a strong adherence to traditional concepts of urban green space. Respondent 19 (green space staff, Wandsworth) discussed how these spaces affect the council's approach: "We're unique at having that number of big, prestigious open spaces under a local authority's management. In terms of what we own, what does that demand of us, that's quite different. Tower Hamlets has Victoria Park, which is the equivalent there, but what else do they have at that level? We as a local authority have Battersea Park, Wandsworth Park, King George's Park and the two commons in local authority ownership and management. … To have that volume of green space and that quality of green space in local authority management, I think, is quite unique."

Respondent 5 (planner, Wandsworth) said the borough has "a relatively good supply of traditional parks," while respondent 6 (planner, Wandsworth) said, "I think one of the big selling points for Wandsworth are our green spaces. Residents and people who work here value them very highly, I think." Respondent 6 added that green space is entrenched in the character of Wandsworth. When asked why local authorities provide and maintain green space, given that they are not statutorily bound to do so, respondent 6 said: "It seems so obvious that it's sort of hard to remember why."

In addition to having smaller spaces, Islington is the only one of the three boroughs with no listed parks, gardens or green spaces. This does not mean Islington's urban green spaces are not influenced by history. Indeed, Islington's strategic planning policies specifically call for the need to protect "open spaces of heritage value" (Islington Core Strategy, 2011, p. 88). Structures within Islington's green spaces are listed and the borough has many listed structures that have small green spaces connected with them. For example, Historic England has listed the railings, walls and gates around Caledonian Park on the conservation organisation's Heritage at Risk

list. The 7.4-ha park is on the site of the former Caledonian Cattle Market. Thus, the park itself is not listed, but it is considered to have heritage value because of the previous use of the site. Some of Islington's green spaces have ties to social heritage. For example, Spa Fields in the southern part of the borough, is a 0.82-ha green space where the Spa Fields riots took place in 1816.

However, Islington's green spaces themselves are not listed landscapes or heritage sites and, thus, do not have the sitewide formal ties to heritage protection of those in Tower Hamlets and Wandsworth. Islington has received little HLF funding for its green spaces because "they don't have many big parks" (respondent 23, senior staff, national charity). As such, heritage is not as strong a force for green space delivery and management in Islington as it is in the other two boroughs. Respondents in Islington were less likely to discuss heritage or identify history as a reason for delivering and managing green space within the borough. Several respondents associated with Islington, such as respondent 28 (planner), spoke about green infrastructure:

> In Islington, there is a really strong focus on the environment and environmental policies. We've got really strong climate change adaptation policies. One of our key objectives is to maximise green infrastructure alongside development. We only have one sort of largish park and that's Highbury Fields. The rest is a patchwork of smaller parks, pocket parks, amenity spaces and biodiversity corridors, things like that. So, it's really important to look at every aspect because everything matters in that sense. Looking at it from a green infrastructure perspective is really useful.

With a weaker institutional influence of history affecting its green spaces and a long period of being densely developed across the borough, Islington makes decisions about and has an approach to urban greening that differs from Tower Hamlets and Wandsworth. This reflects a main tenant of new institutionalism – that institutions affect behaviour and shape, mediate and channel decisions (Bührs and Aplin, 1999, p. 318; Grubovic, 2004; also see March and Olsen, 1984; 1989; Powell and DiMaggio, 1991; Lowndes, 1996). With less of an institutional pull of heritage within the borough's spaces, Islington is freer and has the flexibility to focus on a green

infrastructure approach despite having less green space than most other Inner London boroughs.

The reason Islington's green spaces are smaller than those in Tower Hamlets and Wandsworth stems from the same reason the borough has no listed parks, gardens or green spaces – many of Islington's green space developed at a more recent point in the borough's history. Respondent 31 (green space staff, Islington) discussed this:

> [Islington] has always been pretty dense. Some of our key spaces, for example Whittington Park, Paradise Park, Rosemary Gardens, were created in the post-war period when the authority recognised that there just weren't enough open spaces and actually demolished houses to create parks … to serve the growing population and community. It was quite radical at the time, I imagine, knocking down housing to create parks. I can't quite see that happening now. So, that's how we got a lot of our bigger spaces, but they're still not that big. But, they are intensively used.

The smaller spaces have influenced Islington's approach to green space. Yet, an institutional approach to the concept of green space does still exist, including among users, whose demands increasingly drive green space management across all three boroughs. Respondent 27 (green space staff, Islington) discussed user expectations, noting that they had expectations that transcended a space's size:

> With amenity space, people have an idea of what it looks like. But, there's still amenity value in a wildlife space. In fact, I would argue there's probably more amenity value. But, it's not the amenity value that people are used to and people associate with. … I think one of the problems we have is changing perceptions because people don't look at that and go, 'that's a park,' they look at that and go, 'oh, it's a tree.' When people go to a space, I think they like to see 'this is for me, this is for my child, this is a place to walk my dog, and this is where I get my cup of coffee.'

While elements of a romantic countryside ideal exists in Islington, respondents associated with the borough talked less about the countryside and more about population and development densities than their counterparts in Tower Hamlets and

Wandsworth did. As the borough with the second-least amount of green space – after the City of London, a statistical outlier – in London, Islington has dealt with extreme development and population pressures on its urban green spaces longer than Tower Hamlets and Wandsworth have (Baggs et al., 1985; GLA, 2017a). Islington Council officers reflected this. Respondent 31 (green space staff, Islington) observed:

> We've run out of land. We haven't got any land holdings sufficiently big enough to provide new parks. We've got a phenomenal increase in population, a lot of new housing coming in, but we need the parks, the open spaces … the schools, the health facilities to go with that. Otherwise, it won't be a very nice place to live.

With a history of relatively smaller green spaces, Islington has fewer opportunities to "encapsulate the countryside" as discussed in Chapter 5 (Heritage) because the borough's smaller spaces reduce the ability to feel as if one has left the dense urban

Figure 6.5 – **Colebrooke Row Gardens:** Colebrooke Row Gardens is a small green space in Islington. Respondent 31 (green space staff, Islington) said: "There are things that we call parks that other people would not think of" (source: author).

environment. It's hard to imagine you are in the countryside when the sound of street cleaners and buses and the sight of crowds and shopfronts are so close in Islington. Because of this, Islington Council's perspective on what urban green space is and how to deliver and manage it is not as wed to a heritage focus or to a "countryside in the city" approach as Tower Hamlets and Wandsworth are. This is not to say the institutionally embedded perspective on urban green space delivery and management does not exist in Islington, but rather, Islington demonstrates more opportunities to challenge the institutional concept of urban green space than boroughs that have not dealt with such high density and small green spaces as Islington historically has. Thus, Islington's experience may offer insight to other London boroughs as population densities increases across Inner London.

6.5. FUNDING AND AWARDS SCHEMES

An institutional approach to urban green space delivery and management is reinforced through third-sector and charity organisations involved with green space issues. The influence of additional organisations fits with new institutionalism, which acknowledges a complexity of actors and the settings in which they operate when examining how decisions are made (Clarke, 1995; Raco, 1999; Lowndes, 2001). External organisations influence how local authorities perceive green space. Prominent among these are the Heritage Lottery Fund and Keep Britain Tidy, which manages the Green Flag Award.

6.5.1. Heritage Lottery Fund

Heritage Lottery Fund's influence on urban green space has risen as local authorities' green space budgets have fallen (Clark, 2004). "On those sites where [HLF] has invested, [HLF] has got a lot of influence" (respondent 23, senior staff, national charity). Indeed, Clark observes:

> HLF funding has been sufficiently large to have an impact on thinking and priorities in the different heritage sectors. Perhaps the most notable of these has been historic parks, where early research helped define needs, and what started as an HLF priority has since become a major issue for government (2004, p. 76).

A requirement of HLF funding is a local authority must have a management plan for the green space receiving funding, which has led to local authorities thinking more broadly about each funded green space (respondent 23, senior staff, national charity; respondent 46, senior staff, national charity). Given the time and resources involved in preparing a management plan and because HLF cannot fund every green space, the funding and management plans enable HLF to "invest in big, really expensive projects and get those into shape and local authorities [will] realise, 'actually, this is really important, we need to get all of our parks in decent state'" (respondent 23). HLF influences how the management plan looks, further highlighting the influence HLF has on urban green space delivery and management (respondent 23).

Many respondents mentioned funding – or, more specifically, the loss of funding – when asked what influences how London's green spaces are delivered and managed today. Respondents' awareness of the influence of funding on urban green space was heightened, as this research occurred during a time of , ushered in by central government in response to the global financial crisis that took hold in 2008. Central government cut funding to local authorities and, as a result, local governments across the UK, including throughout London, cut their budgets, staff, programmes and services. While budget cuts spanned the range of council services, the deepest cuts occurred in discretionary services, including parks and green spaces (Brown and Wilson, 2015; Dempsey, Burton and Selin, 2016; Funding is discussed further in Chapter 7, Governance). Dempsey and Burton observe that investment in green space and other public space "tends to be precarious and disproportionately subject to tight fiscal pressures" (2012, p. 13).

Although support for green spaces is found across London, local authorities – including Islington, Tower Hamlets and Wandsworth councils – made cuts to their green space-related budgets. Hence, to fund the delivery, management and maintenance of their urban green spaces, local councils increasingly have turned to other sources for funding, including the charity sector (Dempsey and Burton, 2012). Local councils remain the largest funder of capital and maintenance resources for London's green spaces, but second to this is HLF. Indeed, the scale of HLF's funding "has had catalytic impact on different heritage sectors, of which perhaps the most politically visible has been parks" (Clark, 2004, p. 69).

As mentioned in Chapter 5 (Heritage), Tower Hamlets received a grant of £5 million from HLF for Victoria Park in 2010. Yet, HLF's statutory focus on heritage limited the type of improvements Tower Hamlets could make. The influence of a £5 million investment in a green space is a powerful reason to adhere to a traditional approach to urban green space management, even though, as Clark observes, the HLF has been criticised "for having too narrow a view of heritage" (2004, p. 67). Thus, Tower Hamlet's £10 million investment (the HLF grant was a matching grant, so Tower Hamlets Council contributed £5 million) in renovating Victoria Park was driven by a focus on heritage over contemporary uses.

For example, HLF required the continued use of seasonal planting. Although seasonal planting is financially costly for a local council and is recognised as an environmentally unsustainable practice, HLF required it throughout Victoria Park – as it does in most parks and green spaces it funds – because it reflects Victorian landscape practices. In other words, seasonal planting was required for heritage purposes, with contemporary concerns and management practices overruled. For example, drought-resistant plantings are more appropriate for mitigating the impacts of climate change than water-consuming seasonal plantings (Gill et al., 2007). According to respondent 37 (green space staff, Tower Hamlets):

> In some elements they [HLF] wanted a lot of the Victorian designs brought back in. Like we have a very large amount of annual bedding. A lot of parks, under their cuts, have done away with their seasonal beddings, which is quite costly. But, we still have a very large amount.

Respondent 36 (green space staff, Tower Hamlets) noted that the use of seasonal planting was rewarded because it was deemed to indicate a high-standard green space:

> I think that's one of the reasons why we gained a gold in London in Bloom this year because the judges were quite surprised by how much annual or seasonal bedding we had. It's quite expensive, but that was something that was put in the bid that they [HLF] wanted to see back [in the park].

What HLF requires local councils to do to be eligible for funding is made more significant because HLF grants are matching grants. Thus, local authorities have to contribute their own funds to meeting HLF's vision of a green space. Further, HLF grants come with a requirement that the local authority will maintain the improvements funded by the grant for up to 10 years. This requires councils to direct their limited green space budgets to maintaining a heritage-focused approach to urban green space for the long term. This can have a powerful impact on other green spaces within a borough (Dempsey and Burton, 2012). Respondent 25 (senior staff, national charity) addressed this, as well as the connection to the Green Flag Award:

> This is potentially going to be one the challenges that a lot of authorities are going to face with their sites that have HLF funding because there's a requirement that they achieve and maintain the Green Flag Award for seven years, otherwise the HLF will claw back the money. In some cases they [the local authority] spent £6 million, £7 million, so that's going to be a challenge for an organisation. 'How do I fund those two parks that have HLF investment from my parks budget if I have to maintain them because there's a real risk of that money being clawed back?' Does that happen at the expense of parks in the surrounding area?

For example, in Tower Hamlets, the council cut funding, including staff, for other green spaces to maintain its contractual obligation to HLF. Indeed, "the value of long-term management of parks and green spaces is consistently underestimated" Dempsey, Burton and Silen, 2016). Thus, Victoria Park is managed as an island, disconnected from other green spaces around it. As such, HLF funding can actually divert a council from focusing its attention and resources on a green infrastructure approach to green space delivery and management. Respondent 46 (senior staff, national charity) addressed how HLF funding contributes to a lack of thinking about London's urban green spaces as interconnected and multifunctional:

> There are a number of individual parks, which, largely thanks to the Heritage Lottery Fund, are now really nice, but they're little islands. They're culturally very rich and very interesting, but they are looking back to the past, rather than looking forward to the future. Particularly thinking about climate change, public health, demographics – going

forward, I think we need to create new sorts of green space that do an awful lot of different things at the same time. They need to meet people's needs, they need to meet the needs of biodiversity, they need to meet the needs of climate change. Every little space we've got is going to have to work a lot harder at providing a lot of different things.

Because Islington does not have large, historic green spaces, respondent 44 (green space staff, Islington) suggested thinking about Islington's small green spaces collectively, instead of individually as HLF funding requires. As such, respondent 44 essentially was advocating for adapting funding schemes to an interconnected green infrastructure approach:

We treat each park as an individual park. If we've got a site that is 50 yards square, that is going to be so far down HLF's list. Whereas, if you look at a map of Islington's parks, you've got a tiny little dot of green and those are part of the whole. Yes, they're nice enough on their own, but I think they are part of the greater whole. If you take Barnsbury, that's an area of Islington with lots of little nice squares. It's a landscape in itself. … I could argue that that little area, which is one-tenth the size of some parks out in the sticks, but that little area with its houses and its green spaces and everything about it is a landscape, isn't it? And I think that's the only chance of us getting funding for it if an area like that was called a historic landscape.

6.5.2. Keep Britain Tidy (Green Flag Award)

Another organisation that influences the delivery and management of London's green spaces is Keep Britain Tidy. In particular, the organisation exerts its influence through its Green Flag Award programme, which it manages under license from the Ministry of Housing, Communities and Local Government, formerly the Department for Communities and Local Government (DCLG). Awards, such as the Green Flag, further embed a historic approach to green space, which perpetuates the institutional influence of heritage in urban green space delivery and management.

Established in 1996 as a scheme that "recognises and rewards well-managed parks and green spaces," the Green Flag Award has evolved into the "the benchmark standard for the management of recreational outdoor spaces across the United Kingdom and around the world" (see Figure 6.6) (GFA, 2018). While Keep Britain Tidy says each green space is judged "on its own merits and suitability to the community it serves," the standards that a green space must meet to receive an award point local authorities and green space managers in a particular direction regarding what constitutes a desirable green space. While noting that "the last thing [Keep Britain Tidy] want is uniformity across green spaces," respondent 25 (senior staff, national charity) said the goal is to "adopt the Green Flag Award standards."

As such, to receive a Green Flag Award, local councils must align their management and maintenance definitions and practices of those individual urban green spaces with the concept of green space encouraged by Keep Britain Tidy. Yet, Wolch, Byrne

Figure 6.6 – **Green Flag:** To receive a Green Flag Award, a green space must meet standards set by Keep Britain Tidy and awarded by a group of judges, who typically come from local authorities or the green space industry (source: author).

and Newell found that standards for urban green space may "negatively impact some urban residents, prescribing blanket solutions where locally specific interventions are needed" (2014, p. 236). Green Flag Award judges consist of park and green space managers, staff from organisations such as Historic England and other industry professionals (respondent 25). Although the Green Flag Award is meant to "celebrate their differences" (respondent 25), the process may foster a self-perpetuating focus on a particular conceptualisation of parks and green spaces. Indeed, Tower Hamlets Council has specified a need to continue providing seasonal bedding plants "to ensure that Tower Hamlets parks continue to be an exemplar of good horticultural practice and remain at the fore front of local and national recognition from external bodies such as Britain in Bloom and Green Flag awards" (Tower Hamlets, 2017c, p. 6).

Although any size green space is eligible for a Green Flag Award, local authorities are more likely to apply for the award for their larger, more formal spaces, such as Victoria Park and Battersea Park, both of which consistently hold Green Flag status. Respondent 25 (senior staff, national charity) addressed this: "[The local authority] is first of all more likely to invest in their premiere park because it is sort of a showpiece for the borough, a showpiece for the authority and probably is the park that they perceive has the widest range of people who are going to visit."

The Green Flag Award is more than a box-ticking exercise. A local authority must devote significant time and resources to meeting the prescribed standards. To be eligible for a Green flag Award, each green space must have a management plan, just as HLF funding requires. This is not without cost, both monetary and in staff resources. Islington Council decided to no longer participate in the Green Flag Award scheme because of the administrative costs and "onerous management plans" that required the council to adhere to standards set forth by Keep Britain Tidy (respondent 27, green space staff, Islington). Respondent 27 continued:

> We made a strategic decision to not do [Green Flag Award] for many
> years, actually. We stopped applying for the status because of the
> administrative costs. The council used to spend an awful lot of money
> [on Green Flag Award]. You have to have your management plan
> written in a certain way. It's quite onerous – more onerous than the
> local authority could do. So, we don't do Green Flag anymore. It's like

a badge, like you're collecting a badge. I don't get it. I don't know how you can say it's a certain standard as far as stuff is done, but the practical implication is 'does this space provide what you need?' I mean, I don't necessarily see a huge value in it, considering the cost of it.

However, Islington Council officers disagree on the value the Green Flag Award provides. Indeed, respondent 31 (green space staff, Islington) said having Green Flag Award green spaces can influence the standard of green spaces in a borough overall, as well as provide publicity for green space in general. Respondent 31 commented on the council's decision to stop pursuing the award:

When the new administration, the Labour administration, came in they felt it wasn't a good use of officer time and resources to be chasing awards and we should actually just be putting our efforts into delivering good public spaces. The problem with that is Green Flag is actually quite useful as a focal point for delivering good standards. Without that focus of Green Flag, I think sometimes things can drift. I think that's a shame that we've stopped doing that.

Islington did not entirely abandon the Green Flag Award concept, however. In addition to still displaying award plaques in green spaces that previously received the award, council staff work with local user or friends groups and community organisations that want the recognition of an award. In such cases, the council suggests a group apply for Keep Britain Tidy's Green Flag Community Award, which is awarded to community- or charity-run public spaces. Yet, respondent 27 (green space staff, Islington) questioned the value in this, as well, and said the Green Flag Community Award is "a step down from the Green Flag Award. You can, as a local friends-of group, apply for Green Pennant status [the previous name of the Green Flag Community Award], but there's not much incentive, really." Encouraging user groups to go after awards historically pursued by a local authority aligns with the trend to devolve more responsibility for green space management and maintenance to community organisations, such as friends groups, as discussed further in Chapter 7 (Governance).

Working to ensure a nominated green space meets the required Green Flag standards can pull local authority staff's attention from the borough's other green spaces, such as the smaller, more informal green spaces. Yet, these are the spaces that residents are more likely to encounter on a day-to-day basis (Kaplan, 1984; Van Herzele and Wiedermann, 2003). And, these smaller green spaces are the ones local authorities are most realistically able to supply, given existing densities and development patterns in Inner London. This highlights a difference between Islington, which has smaller-sized green spaces, and Tower Hamlets and Wandsworth, both of which pursue the Green Flag Award and which have larger green spaces than Islington.

6.6. SUMMARY

To examine the influences on how urban green space is delivered and managed, it is necessary to understand the basic notion of how urban green space is defined. Definitions reflect how urban green space is conceptualised. This, then, guides how green space-related strategies, policies and procedures, standards and targets, and sources of funding and awards are created, implemented and monitored. This chapter has analysed how the definition of urban green space subscribed to in London has shaped local practices that further entrench an institutional concept into urban green space delivery and management, and the limitations this puts on the ability of London's green spaces to be conceptualised as green infrastructure, or "critical scaffolding in urban plans" (Eisenman, 2013, p. 298).

Further, the chapter has critiqued the way these definitions influence planning standards and targets, such as the amount of green space per person within a borough, and calls into question the role and usefulness of these targets, particularly as, across England, "public green spaces are chronically underprovided relative to recommended targets" (Barbosa et al., 2007, p. 187). As such, the targets and standards local authorities use in green space planning do not fit with contemporary research regarding the benefits and opportunities urban green spaces in urban areas, such as London, offer. For example, in an increasingly crowded cityscape, green walls, green roofs and street trees can provide opportunities for biodiversity, quiet reflection, shading and cooling, and windbreaks. Yet, because these types of urban green space do not fit within the traditional definitions and categories, they do not factor into green space-related planning targets and standards. Instead, planning

in England continues to be strongly influenced by "the preservation of rural England" and the notion of countryside (Hall, 1973, p. 371).

Additionally, by focusing on providing urban green space for traditional uses, such as recreation and leisure, and not uses such as ecosystem services, the role that private green spaces can play in policy goals such as climate change mitigation, education and biodiversity are ignored. Private spaces also do not count in determining whether green space-related targets and standards are met. For example, housing amenity spaces provide benefits, such as urban agriculture, biodiversity, social cohesion and well-being, and account for a significant amount of green space in Inner London. Yet, the way green space is defined and how targets and standards are measured ignore this critical source of green space.

External organisations, namely the Heritage Lottery Fund and Keep Britain Tidy, which manages the Green Flag Award, reinforce an institutional approach to defining green space and to setting related targets and standards. External funding bodies and award organisations lack a strategic approach to green space planning and rarely have a green infrastructure approach. For example, green roofs and street trees do not receive the funding, awards and publicity that a traditional, Victorian park does. Awards and funding also are considered on a space-by-space basis, which is the antithesis to green infrastructure and its focus on interconnectivity. As a result, cities, such as London, overlook valuable assets that can contribute to addressing contemporary urban challenges.

The following chapter addresses the issue of governance in green space planning. It draws attention to the increasing number of actors involved in delivering and managing London's urban green spaces and how all of these actors work – or don't work – together. This final empirical chapter also presents evidence for how the combination of three separate forces may be breaking through the path dependency of green space delivery and management, thus offering an opportunity to reconceptualise urban green space for more contemporary use and benefit.

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CHAPTER 7 – GOVERNANCE

Providing urban green space is not a statutory function. Each of the myriad actors involved in green space governance continues with their specific green space roles with little variation because there is no driver for strategic change. However, a perfect storm of three issues may be challenging the institutional concept of urban green space that has persevered for nearly two centuries. These three issues are: (1) a heightened awareness of the role urban green space plays in environmental issues, namely climate change; (2) rapid and dynamic urban change that has occurred in London since the late 20th century; and (3) funding and resource cuts that have been deep and sustained, and which are leading to shifts in urban green space governance.

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"Governing London is a complex business." – Tony Travers, *The Politics of London* (2004, p. 1)

7.1. INTRODUCTION

On a June evening in 2013, the Tooting Common Management Advisory Committee held its annual public meeting in Southwest London. As the largest green space in Wandsworth and one of the largest in an Inner London borough, Tooting Common – which consists of Tooting Bec Common and Tooting Graveney Common – attracts attention from myriad users and organisations with a range of interests and illustrates the complexity in delivering and managing green space in urban London. At the meeting, representatives from local, regional and national organisations, as well as individual residents, voiced their opinions about management of the common. In addition to management advisory committee members, people in attendance represented organisations such as Wandsworth Council, parks police, the council's grounds-maintenance contractor, the Friends of Tooting Common, dog walkers, cyclists, biodiversity organisations, heritage groups, and residents from Wandsworth and the borough of Lambeth, which shares a boundary with Tooting Common.

Some attendees expressed perspectives that conflicted with others, such as cyclists who wanted the speed limit for cycling on the common raised and those who

opposed cycling in the common at any speed. Some people advocated for more signage, while others said the existing amount of signage already detracted from the naturalness of the common. Council staff discussed an upcoming bid to the Heritage Lottery Fund and potential funding from an environmental organisation concerned with frogs and their habitat. The meeting covered issues such as housing, adjacent road construction, mobile-phone mast development, crime and antisocial behaviour, and sports facilities, such as tennis courts, within the common. Twenty-two people were elected to the management advisory committee, which advises Wandsworth Council on matters relating to the common.

To borrow from the opening quote from this chapter, governing London's green spaces is a complex business. The number of actors involved in delivering and managing urban green space continues to evolve. Competing interests occur. Individuals and organisations advocate for conflicting uses within green space. Funding is sought from multiple sources, which typically have a narrow focus. And, this captures only those who voice a concern or get involved with green space management and maintenance. As respondent 5 (planner, Wandsworth) noted: "We take the people who are vocal seriously, they definitely are heard, but … there's an awful lot of the borough that doesn't engage and [we] need to look after them as well." As awareness develops of the role urban green spaces can play beyond amenity, and political, socioeconomic and cultural churn continues in London, changes inevitably are occurring around the governance of the capital's green spaces, such as Tooting Common. The following sections address what these changes mean now – and could mean in the future – for the delivery and management of London's urban green spaces.

7.2. NON-STATUTORY FUNCTION

All of London's local authorities, as well as regional and central government in the UK, have adopted policies that call for the conservation and provision of urban green space. This reflects the rationale that including green space throughout an urban area is essential for the economically, environmentally and socially sustainable city (Swanwick, Dunnett and Woolley, 2003; Woolley, 2003; Chiesura, 2004; Jim, 2004; Pincetl and Gearin, 2005; Clark and Jauhiainen, 2006; Esbah and Deniz, 2007; Choumert and Salanié, 2008). Such policies are not unique to London or the UK, yet, as established in Chapter 5 (Heritage), green space has historically featured

prominently in English culture and identity, and publicly accessible green space has been promoted in London since Victoria Park opened in the East End in 1845 (Fitter, 1946; Howkins, 2003; Swanwick, Dunnett and Woolley, 2003; Clark, 2006). Indeed, by the end of the 19th century, "parks had become quite as much a municipal service as the supply of water, sewerage, and education" (Olsen, 1993, p. 491). A local resident attending the meeting about Tooting Common in Wandsworth in 2013 illustrated how entrenched the idea that local authorities will provide – and fund – green space delivery and management has become. After a representative from Wandsworth Council discussed a bid the council planned to make for HLF funding, the resident said: "It feels like we have to go cap in hand to HLF for things that we should be doing, especially in a wealthy local authority like Wandsworth Council."

Despite a cultural- and a policy-based expectation of access to green space, providing urban green space has never been a statutory requirement in Britain. Even policies calling for urban greening to support the UK's statutory priority of combatting the adverse impacts of climate change are not statutorily prescribed. This demonstrates the lack of connection between thinking about urban green space as an optional amenity and thinking about the varied and essential work these spaces contribute to the sustainable city if they are recognised as "critical scaffolding" (Eisenman, 2013, p. 298). Research for this thesis occurred during a period of austerity, which led to deep cuts to green space budgets across local councils, a point raised by multiple respondents. Several respondents maintained that these cuts would not have been as deep if providing green space was a statutory requirement. Respondent 44 (green space staff, Islington), said, "Because parks are not a statutory service, it has taken, some would say, more than its fair share of cuts."

Yet, some respondents said making green space provision statutory would not change the approach to its delivery and management unless a statutory designation came with greater funding. Others said if green space was statutory, local authorities could be more assertive in requiring green space contributions from developers and homebuilders. Some respondents said, without the teeth of being a statutory requirement, the approach to the delivery and management of urban green spaces remains what the Department of the Environment called a "cosmetic afterthought" (1996, p. iii). Indeed, efforts to enhance a city's environment are among the first items cut when cities experience budget problems, and this may reflect low

appreciation of the role green spaces play in a city and the benefits they can provide (Chiesura, 2004; also see Chapter 2, Literature Review).

Despite government policies and planning strategies hailing the multifunctional benefits of green spaces, which support other council-provided goals and statutory services – such as climate change adaptation and mitigation, education, health and well-being, and housing – urban green spaces are not deemed a core function by local authorities. Respondent 8 (regional planner) and respondent 9 (regional policy officer) argued that the role of green space as green infrastructure, and not simply as recreation and amenity space, illustrates how inherently critical green space is to the city's economic, environmental and social survival, a perspective of urban green space presented by Gill et al. (2007). Yet, as established in Chapter 5 (Heritage) and Chapter 6 (Planning), London's urban green spaces are not conceptualised as green infrastructure.

This also supports Woolley (2003) and Erickson (2006), who maintain that the importance of urban green space gets lost during typical planning debates related to urban development. Respondents repeated the idea that green space staff and budgets are low-hanging fruit for decision makers seeking to make cuts, with some noting that doing so was short-sighted. Respondent 22 (landscape architect, national charity) observed that cutting green space budgets "runs against a lot of the research about the benefits and the importance of open space psychologically and for education and for health. I think it's just that it's an easy target."

Yet, despite the green space-related cuts, several respondents said green space ranked high among council priorities because of residents' affinity for green space, as evidenced by resident satisfaction surveys conducted in each borough. This also reflects research that shows local residents often identify green spaces as the centre of their community (Dunnett, Swanwick and Woolley, 2002). The Department of the Environment, Transport and the Regions noted that "parks and open spaces are among the most valued features of the places people live" (DETR, 2000, 4.38). According to respondent 23 (senior staff, national charity):

> Parks are one of the most visible [council] services, other than emptying the bins. The majority of people judge their council on the condition of their parks and green spaces. So, if the parks and green

spaces are in bad condition, people think the council is rubbish and
is not doing very well.

Further, respondent 43 (planner, Islington) noted: "I think it [urban green space] is a pretty high priority here. It's important to people and people vote. It's as simple as that."

Other respondents, however, challenged this, saying that despite residents consistently ranking green spaces high on councils' resident surveys, the need to deliver and manage these spaces does not rank high among local authority priorities (Wilson and Hughes, 2011). With budgets typically based on quantifiable outcomes, local governments' ability to protect and create green spaces is hampered by a lack of quantifiable evidence about their value and, thus, local governments likely will not consider green spaces as the highest and best use of the land (McPherson, 1992; Luttik, 2000; Nicholls and Crompton, 2005a; James et al., 2009). Respondents said statutory services such as adult and child social care would always be prioritised above green space, and this priority is expressed by how a council allocates its budget. In discussing other council priorities, most respondents did not mention how green space relates to other council services, such as adult and child social care and health and well-being, thus overlooking green space's potential multifunctionality beyond merely amenity. Respondent 2 (senior staff, regional charity) observed:

It's not a statutory service, so it doesn't command the leverage for sustained funding. Housing, education, social services will all be top of the pile. … You could link that with Maslow's hierarchy of needs, which is that basic hygiene factors first, something to eat, a roof over your head and then all these things, the more luxurious things, become important. But, you could argue that health and well-being is derived from parks even if you don't use it, if you just look at it. There's research that shows that's enough.

With no statutory requirement to deliver green spaces and difficulty quantifying their value, some organisations, such as the Heritage Lottery Fund, have raised concern that local authorities could sell some of their spaces (HLF, 2016). This has occurred in Bexley, an Outer London borough, for example, although the borough has far more green space per person than Inner London boroughs, including the three researched

here, do (Davey, 2012; Bexley Council, 2017). The three councils in this research have not sold any of their green spaces, and respondents did not anticipate this happening, largely, they said, because residents rank urban green space as one of the most positive and well-regarded council services (DETR, 2000). Although providing urban green space is not a statutory requirement, local councils are unlikely to ignore pressure to deliver and manage green spaces from local residents, who vote and pay council tax.

This reflects back to institutions, which matter because they embody local priorities and values. Local residents value green space and, thus, put pressure on local authorities to provide these spaces, which largely embody an institutionalised ideal of nature. Indeed, values are central to institutional theory (Selznick, 1996, p. 271). Institutions are "the vehicle through which the basic purposes and values a society wishes to pursue through local government are carried out. It is, thus, presumed that institutions matter" (Wolman, 1995, p. 135). Thus, an expectation exists that local councils provide green space for their residents regardless of if statute mandates it. Respondent 18 (strategy officer, Tower Hamlets) said:

> It's such a high-profile service, and if you look at our resident surveys, it's one of the things that matters most to residents. The number one concern, normally, is security and safety. Number two is around streets and parks – are they clean, are they usable. So, in terms of the public's expectations and what the council should be doing, green space is right up there.

Respondent 6 (planner, Wandsworth) built on this:

> I have no doubt in my mind that if we were ever to propose that [closing parks and green spaces], people would be up in arms. We only really get responses when there's something to complain about. And, I'd like to think that since we haven't proposed getting rid of any of these beloved open spaces we aren't hearing that message directly in planning. Maybe I'm wrong to say people do value it. … Maybe people are going [to a green space] and they don't like it and they think, 'I hate this park, this stupid park,' but I don't think they are.

While it might seem that being a non-statutory service provides a level of flexibility to urban green space delivery and management, my research indicates being a discretionary service actually reinforces the institutional concept of urban green space. By being non-statutory, urban green space is not defined – in other words, because statute does not mandate protecting green space, green space is, therefore, not defined in statute. Because there is no driver for comprehensive, strategic change, every actor or organisation that influences the delivery and management of urban green space remains focused on their specific purpose and can devise a definition to best address their interest in green space. Individually, however, none has the power to change an enduring, institutional concept of urban green space. This prevents planning and managing urban green space in a more strategic, holistic, multidisciplinary and interconnected way (see Hostetler, Allen and Meurk, 2011).

Its non-statutory nature also makes green space delivery and management more subject to the preferences of voters. And, election cycles can affect strategic, long-term and visionary planning because "it's all about what's going to keep people happy today – it's short-termism in the end" (respondent 19, green space staff, Wandsworth). Given that "green space needs to be strategically planned," the practice of thinking space by space and election cycle by election cycle limits the work a system of urban green space collectively can do (Gill et al., 2007, p. 130). Because interconnectedness is a critical, defining characteristic of green infrastructure, this demonstrates how urban green space is not thought of as fundamental urban infrastructure.

Like some respondents, Kambites and Owen (2006) advocate for embedding green infrastructure planning in the statutory planning system, notably as development plans are being prepared. As discussed in the following section, myriad actors have responsibility for and an interest in urban green space planning and management. Yet, Kambites and Owen argue, despite the involvement of multiple stakeholders, "unless the onus for initiating and undertaking green infrastructure planning is vested in a system with continuing statutory responsibility, green infrastructure planning will depend from time to time and from place to place on the enthusiasm of particular participants – and there is overwhelming evidence that such reliance rarely results in widespread or sustained commitment" (2016, p. 492).

7.3. URBAN GREEN SPACE GOVERNANCE

Local authorities remain the primary provider of London's urban green spaces (NAO, 2006; James et al., 2009; Mathers, Dempsey and Molin, 2015; Dempsey, Burton and Selin, 2016; HLF, 2016). This responsibility corresponds with typical powers – particularly related to planning, environmental sustainability and amenity – that rest at the local level, and is rooted in the "provincial antagonism to 'centralization' that characterized much of Victorian-era politics" (Malchow, 1985, p. 104). Indeed, by the late 19th century, Parliament had cut off Exchequer support for public parks in London, apart from the Royal Parks, devolving their delivery "entirely to London ratepayers" (Malchow, 1985, p. 104). However, it was not until the Town Planning Act of 1909, "which for the first time gave local authorities the powers to plan for the future," that green spaces "became absorbed into town planning" (Conway, 1991, pp. 221-222).

Today, central government has essentially no responsibility for parks and green spaces and, thus, largely has ignored them (Dempsey, Burton and Selin, 2016). The GLA has limited statutory powers regarding urban green spaces, despite green space-related policies in the London Plan and initiatives, such as the pocket parks programme, and this may contribute to the tension between strategic and local governments that exists in large cities like London (GLA, 2013; Holman and Thornley, 2015). Still, urban green space governance has a varied history. Although the local authority has long been the primary provider of publicly accessible urban green spaces, the public park movement in the 19th century involved a range of actors. Indeed, it was "a gradual process in which local and central government, benefactors, entrepreneurs and local communities were at various times involved, as were reformists and reactionary individuals and groups" (Conway, 1991, p. 3).

The provision of urban green space as a decidedly local function has become a form of governance embedded in "the way things are done around here" and, thus, has contributed to the path dependency of London's urban green spaces and the challenges associated with adopting a strategic, interconnected and multidisciplinary green infrastructure approach (Lowndes, 2005, p. 292, p. 294). Yet, although green space has been devolved almost exclusively to local authorities, "central government retains extremely close control over local government, particularly through its control

on resources, funding and the ability to pass legislation" (Clifford and Tewdwr-Jones, 2014, p. 15).

7.3.1. Internal governance

Every local authority in London and the City of London Corporation owns and manages green spaces for public benefit. How they do this varies. Each of the three councils researched here has a green space team that falls under the oversight of a culture and leisure department, which also includes libraries and leisure centres. None includes green space in the same department as planning. For example, in Tower Hamlets, green space comes under the Communities, Localities and Culture directorate, while planning is under the Development and Renewal directorate. Green infrastructure and urban greening are planning functions and responsibility for these typically are found in planning departments, where these spaces are considered part of development and the urban fabric. Meanwhile, parks and green spaces, despite being part of the urban environment, are perceived as amenity spaces separate from the city and are treated differently, with funding coming from different sources, policies disconnected in separate sections of planning and development documents, and oversight and management falling into different departments within a council's organisation. Councils' green space teams also are subject to frequently changing organisational structures.[6]

7.3.2. Planning and green space

While some green space decisions are not planning related – the frequency with which to mow the grass, for example – many are, as decisions about green space ultimately are decisions about land use or land management. In London, most planning decisions affecting urban green space relate to development and regeneration, and it is through planning that decisions about development and provision of green space primarily occur. Thus, planning has the preeminent impact on the delivery of urban green space. Through the planning process, including

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[6] For example, Islington Council restructured its departments after data for this research had been collected. The planning and green space teams now fall within a broad Environment and Regeneration department, although the service areas remain functionally separate. Meanwhile, Wandsworth Council's culture and leisure team – which includes green space staff – became a public staff mutual, a form of social enterprise that manages parks and green spaces, leisure, sports, arts and cultural services for the council, but which is no longer part of council staff.

imposing planning conditions, a council negotiates development's impact on existing green space and creation of new green spaces. With decision making resting predominantly in planning, the relationship between planning officers and green space staff becomes critical for enabling green space staff to influence how these spaces are provided. Green space staff manage day-to-day operations, interact with green space users and community organisations, and bear the brunt of green space budget cuts. Meanwhile, planners' focus on green space comes largely at the strategic planning level and during the individual planning application process.

An uneven balance of power between green space and planning teams within councils was presented by respondents. Respondent 2 (senior staff, regional charity) said, "There is a disconnect between parks people and policy and planning. There is a need for greater integration and communication. They [green space staff] are emasculated. They really are." Respondent 44 (green space staff, Islington) was more succinct: "We have a difficult relationship with planning." Such comments indicate an "alleged hostility of planners to participation," even internal stakeholder participation (Clifford and Tewdwr-Jones, 2014, p. 153). Some respondents said council green space staff affect planning decisions, but largely in an inconsistent, advisory role. According to respondent 19 (green space staff, Wandsworth):

> In effect, particularly with new development coming through as planning applications, if the planner says there's going to be an implication for green space or a new green space created or it's got a biodiversity implication, then it should come through to us automatically, although we're never entirely sure what their screening process is. And, so, the kind of regularity of that and the effectiveness of it fluctuates.

The process to involve green space staff in planning and development decisions is generally similar across the three councils. The green space team is considered an internal consultee as are other functional teams, such as highways or housing. The planning officer handling a particular application decides whether to contact internal consultees. As such, planners have influence over the extent to which the effort to infuse planning with a "more inclusive, engaging" relationship with stakeholders actually occurs, with the green space team being considered a stakeholder (Clifford and Tewdwr-Jones, 2014, p. 28). Green space staff does not review all planning

applications, but rather responds when consulted by planning officers. As such, planners hold considerable power and green space staff must trust that planning officers are appropriately and consistently referring applications and doing so at a stage in the planning process when green space staff can influence decisions. Respondent 31 (green space staff, Islington) said, "Trying to get involved at the right stage can be hard."

Respondents from council green space teams said they did not have the resources to review all planning applications for relevance to urban green space, yet they also expressed doubts that the internal consultation process worked consistently, such as with applications for smaller developments, which they felt could benefit from their advice, but do not reach their desks. This highlights the emphasis placed on large green spaces at the expense of smaller spaces, despite smaller spaces being influential in local residents' lives (Kaplan, 1984; Van Herzele and Wiedermann, 2003; see Chapter 6, Planning).

Local authority planners are under pressure to decide on planning applications in an efficient time frame (Clifford, 2016). This reduces the ability for planners to "negotiate, consult, mediate and conduct the activities which allow them to add value" to development decisions, including decisions related to urban green space (Clifford, 2016, p. 385). It stands to reason that working with internal consultees, such as the council's green space staff, would be affected by performance targets focused on planners' efficiency. Indeed, Clifford found that, because of performance targets, planners felt "they could no longer negotiate as much as they would have liked" (2016, p. 391). This can be extended to consulting and negotiating with internal consultees.

As an internal consultee, some green space teams charge other council departments for their input through service-level agreements. Similarly, other departments, such as planning, charge green space for their services. Budget cuts and reduced staff across local councils affect how much two departments can afford to consult with each other. This leads to less collaboration, notably on smaller and less formal spaces, on which planning officers are less likely to consult. Additionally, it deters planning staff from expanding its approach to urban greening or green infrastructure to include the green space team. According to respondent 44 (green space staff,

Islington): "I used to be able to ask [planning] all sorts of things, but now we've just stopped asking." Respondent 43 (planner, Islington) observed:

> It comes down to the way councils work and the context of resource shortages and further cuts. With service-level agreements between different departments, unless we're willing to pay for their [green space] services, they don't have the capacity to provide support to planning. It's so frustrating – there are skills there we need, but we can't access them.

Decisions about green space provision are largely shaped and, in some instances, wholly determined, by council planning staff, as green space staff is seen as handling only amenity issues in existing spaces. Respondent 3 (planner, Tower Hamlets) noted that to research green space issues in local government, it was more important to talk to planning officers than green space staff. Respondent 31 (green space staff, Islington) said the primary decision-making authority that lies with Islington Council's green space staff relates to landscape maintenance of existing green spaces, with no responsibility for development. And, respondent 39 (green space staff, Tower Hamlets) said, "Our main purpose is to manage the existing parks and open spaces that we have, and manage capital projects within those parks, whether that's rejuvenation within the park or delivering something new inside an existing park."

Thus, input into a strategic approach to urban greening, including creation of new green spaces and green infrastructure, including green roofs and green walls, is not seen as the role of green space staff. This demarcation of functions is key because it reflects a silo mentality within local authorities. While organisational fragmentation is not a new concept within local governments, it is problematic for the delivery and management of urban green space, as nearly every department, from planning to health to education to housing, within a local authority has a connection to providing, managing or maintaining a borough's green spaces.

Whether the green space team's advice is sought and, if so, the influence their advice has on land-use decisions varies not only from council to council, but also from planning application to application within a council. Respondent 44 (green space staff, Islington) commented that "policy can be interpreted very differently by different planners." Although each council has established a process to elicit input

from green space staff on planning proposals, respondents described processes dependent not only on relationships between the two organisational areas, but also between individual planning and green space officers. Respondent 27 (green space staff, Islington) elaborated on the importance of this relationship:

> It is about what the planning officer sees as relevant. It all comes down to your relationship with the individual case officers. I've worked with a lot of case officers who have been really good and try and take on the views and others that, yeah, you're just lucky if you get to know about it [the planning application]. And, planning has a high turnover. I've been here 13 years and I think there's only two planning officers who are still here. If you have a good relationship with the case officer, you have regular conversations and they incorporate your thoughts into the [officer's] report. On other occasions, things happen and you think, 'Whoa, why didn't we get told about this?'

This illustrates inherent tensions within the planning profession (Campbell, 1996). Planners work within a council's organisational incentives and constraints while wrestling with "the divergent priorities of planning" (Campbell, 1996, p. 296). This is reflected in the skills of planning departments and their ability to access skills elsewhere in the department. Respondent 43 (planner, Islington) said: "We don't have a person in landscape design or urban design in our planning department. There's a gap there. That's probably something we could do better, the linkages between green space and planning."

In addition to commenting on and influencing individual planning applications, green space staff also can influence council policy and planning guidance regarding green space. This influence has the potential to be more significant than commenting on planning applications, as even if a planner does not consult with green space staff on an individual application, the planner will adhere to council policies and strategies regarding green space. For example, Tower Hamlets' core strategy – including sections dealing with green space – was written by the planning department, although planners sought input from green space staff when drafting the strategy (respondent 18, strategy officer, Tower Hamlets). Thus, although green space staff may not comment on an individual planning application, they potentially have had input into the green space guidance on which planners rely.

7.3.3. Fragmentation

Green space staff also work with staff in other functional areas of the council, such as housing, highways and health, that have responsibilities that affect green space. These other teams simultaneously are working with planning, as well. Thus, the housing department could work with planning on green space issues on council estates, with green space staff not being involved. Indeed, "departments often have overlapping responsibilities for parks, which can render the governance arrangements complex and fragmented" (Dempsey, Burton and Selin, 2016, p. 445).

With green space carved up and spread among different departments and responsibilities, a council's ability to conceptualise urban green space strategically gets diluted. Instead of having a single, strong voice advocating for urban green space, multiple smaller, weaker voices advocating fractured, separate purposes for urban green space exist within the organisation. This perpetuates the path dependency of green space discussed in Chapter 5 (Heritage) because there is no driver for change. In other words, "the way things are done around here" continues (Lowndes, 2005, p. 292, p. 294). Internal fragmentation creates tension between green space staff and other departments that provide services with an impact on green space decisions (Clarke, 1995). This fragmentation then affects how green space delivery and management is coordinated (James et al., 2009). Respondent 19 (green space staff, Wandsworth) said:

> I feel sometimes like I'm pitching a battle with my lovely colleagues in sports development who want people to be more physically active because everybody is putting the same demand on the finite space. It doesn't water down the value of green space, it actually raises the tension far, far more. That means what tends to win is not what's good for that landscape as a green space through time, but what meets the political pressure now. There's a demand now to stop kids from being obese and give them sports pitches. People will put sports pitches in. If I'm not strong enough that means that might happen at the expense of biodiversity. So, it's more of a tension.

Respondent 27 (green space staff, Islington) expressed a similar concern:

We all have our persuasions in terms of what we think about an environment, a space. That happens quite frequently. For example, we had a site that's being renovated and it had a well-established long-grass meadow that we conditioned had to be moved and maintained on site so it could be replaced somewhere within the development once it had been finished. The argument I heard [from planning] was, 'Oh, it won't work, it's dead, so we'll just have to replace it with some turf.' Their whole argument was around the fact that they needed this space for amenity provision because somewhere else in the planning process someone had probably said to them, 'You need to provide X metres squared of amenity space.' So, I'm going to get into an argument whether it's a long-grass wildlife area or whether it's a play provision for children.

Such internal fragmentation also affects council officers' interactions and negotiations with developers. Respondent 26 (developer) called this "a fragmented puzzle of opinions. At the end of the day, we're trying to put it all together." Respondent 11 (senior staff, national charity) said fragmentation exists among green space-related charity organisations, while respondent 2 (senior staff, regional charity) added that the fragmentation of green space management at the local level reflects disintegration at the national level:

[There's an array of benefits] – environmental, economic, social, health – that's linked to silos within central government because parks are under the DCLG [Department for Communities and Local Government], but it's considered a cultural service by many. It doesn't come under the Department of Culture, Media and Sport. It's in a separate department. The two departments don't talk to each other. Then you extend that argument to say health or education and, again, no dialogue. All those silos have their funding schemes, as well. And, you have exactly the same in local authorities.

Fragmented delivery structures are not unique to London (Yates, 1977). Indeed, cities are "incapable of producing coherent decisions, developing effective policies, or implementing state or federal programs" (Yates, 1977, p. 5). Local governments must juggle local residents' demands with pressure from regional and central

government (Yates, 1977). Thus, the internal fragmentation of a local council leads each area within the council, such as planning or housing, to dig its heels in to protect its roles, responsibilities and funding, which limits the opportunity for changing the conceptualisation of urban green space.

7.4. BREAKING PATH DEPENDENCY

Urban green space is considered a key issue in urban planning (Sandström, 2002; Rutt and Gulsrud, 2016). Continued urbanisation and a heightened awareness of the negative economic, environmental and social impacts of continued growth and development have led to an "upgrading of interest" about urban green space and its benefits for cities and city dwellers (Sandström, 2002, p. 373). Thus, urban green spaces are linked to contemporary urban planning goals for sustainability (Fors et al., 2015).

Although, as discussed in Section 7.2, being a discretionary service contributes to holding the path dependency of urban green space in place, it may also be what enables the path dependency to break, or at least loosen. Being non-statutory provides the potential flexibility to respond to forces of change. This is because, as the three influences on urban green space delivery and management discussed in Chapter 5 (Heritage) – an institutionalised concept of green space; a deeply embedded political and cultural focus on heritage; and an unchanged rationale for supplying green space – pull urban green space along a certain path, three forces collectively are creating tension for urban green space provision that may push the delivery and management of green space off this path-dependent trajectory. These three push forces are: (1) a heightened awareness of the role urban green space plays in environmental issues, namely climate change adaptation and mitigation; (2) rapid urban change that has occurred in London since the 1990s; and (3) sustained cuts to London's green space resources that are altering the governance of these spaces. Wilsford supports the idea that multiple forces are "required to move policy further away from the existing path onto a new trajectory" (1994, p. 252). The following sections elaborate on each of the three forces.

7.4.1. Focus on climate change adaptation and mitigation

Green infrastructure has moved to the forefront of local, regional, national and international planning policy in recent years, pushed with increasing urgency by the

growing concern about climate change, which is "viewed as one of, if not most important issue currently discussed by planners and developers," and a focus on development that is sustainable (Gill et al., 2007; Mell, 2008, p. 74; Wright, 2011). The Urban Task Force (1999) identified ecological threats stemming from the rapid consumption of natural resources as a key driver for urban change in 21st-century Britain. In planning for climate change, the emphasis is on reducing and mitigating greenhouse gas emissions (Gill et al., 2007). A focus on climate change has an impact on urban green space because these spaces can be considered a tool for mitigating the impacts of global warming.

Indeed, "urban green spaces can play a central role in both climate-proofing cities and in reducing the impacts of cities on climate" (James et al., 2009, p. 69). Urban green spaces present the means for ecosystem services, such as evaporative cooling, shading, rainwater interception, storage and infiltration functions, that can mitigate the impacts of climate change in a way that hard-surfaced open spaces cannot (Gill et al., 2007). A heightened focus on environmental issues, such as biodiversity and ecosystem services as well as quality of life and well-being, has led to a more pronounced understanding of the complex, multifaceted role that urban green space can play in mitigating and adapting to the economic, environmental and social impacts of climate change (Amati and Taylor, 2010). As such, urban green spaces "constitute critical environmental capital," or green infrastructure (Gill et al., 2007, p. 130; Rutt and Gulsrud, 2016). The role green infrastructure plays in combatting the impacts of climate change means "concerns about the environment have shifted from a romantic attachment with landscape preservation to increasingly technocratic concerns that vary in scale and context from a local to a global perspective" (Amati and Taylor, 2010, p. 144). This has added a justification for delivering and managing urban green spaces in increasingly dense areas, such as Inner London (Amati and Taylor, 2010).

7.4.1.1. National

As scientific evidence regarding climate change has intensified and the global implications have become more tangible, climate change mitigation is an "idea whose time has come" and it has moved up the UK's policy agenda (Cairney, 2009, p. 473; also see Kingdon, 1995). British government has responded to the "serious issue" of global warming by establishing adaption and mitigation of climate change as a policy priority, firmly putting climate change at the centre of the agenda (Wilson,

2006, p. 609). The National Planning Policy Framework (NPPF) sets out how the planning system should address climate change and, in doing so, establishes the prominence planning has in climate change mitigation:

> Planning plays a key role in helping shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and associated infrastructure. This is central to the economic, social and environmental dimensions of sustainable development (DCLG, 2012, pp. 21-22).

Several respondents commented on the increasing amount of evidence available regarding urban green space's role in climate change adaptation and mitigation. This, they said, influences decisions on green space planning and supports a green infrastructure approach. Respondent 46 (senior staff, national charity) said:

> Towards the end of the 20th century, although many ordinary people would say how much they value small green spaces, they were – in policy terms – seen as not being very important at all. There was no evidence to back up those claims, apart from people saying, 'I love the trees in my street, they're important to me.' …Now, what we're getting is evidence, presented by economists, who say, 'they're right, those trees are important.' There was a point when lots of decisions made based on data by accountants were unchallengeable and now they can be challenged, which is good.

7.4.1.2. *Regional and local*

At the regional or London-wide level, climate change has been called "the greatest threat to London's prosperity" (London Assembly Economy Committee, 2015). The London Plan asserts that "London is already feeling the effects" of climate change (GLA, 2016c, p. 176). In the UK, planning is primarily a local function, so, in practice, addressing climate change largely takes place through local action. Thus, national and regional government's commitment to climate change has become embedded in local planning policies. The London Plan directs local councils to identify opportunities for green infrastructure to contribute to climate change mitigation,

notably the urban heat island, and recommends development proposals "incorporate a range of public and/or private outdoor green spaces" (GLA, 2016c, pp. 196-197). The direction to local authorities to address mitigating for and adapting to climate change when deliberating on development proposals and to incorporate a green-infrastructure approach into planning decisions is strongly established. Yet, despite acknowledging that urban green space is an essential planning tool for addressing climate change, regional and local planning policies differentiate between urban green space and green infrastructure. For example, Policy 5.10 of the London Plan specifically addresses green infrastructure:

> Development proposals should integrate green infrastructure from the beginning of the design process to contribute to urban greening, including the public realm. Elements that can contribute to this include tree planting, green roofs and walls, and soft landscaping (GLA, 2016c, p. 197).

While Chapter 5 of the London Plan discusses London's response to climate change, Chapter 7 addresses "London's living spaces and places," including public realm and publicly accessible parks and urban green spaces. Both chapters address climate change, but a differentiation is made between green infrastructure as a climate change mitigation tool in Chapter 5, and urban green space as amenity space in Chapter 7. While the two are not always discussed mutually exclusively, the emphasis of the policies relevant to urban green space is on amenity, leisure and recreation, and policies about green infrastructure are presented in the context of climate change. This bifurcation is mirrored in local government, such as local council organisational structures and the roles and responsibilities of council staff, as discussed in Section 7.3.

Discussing urban green space primarily as space for amenity, recreation and leisure – despite acknowledgement that urban green space constitutes green infrastructure and delivers services to counteract the impacts of climate change – enables the traditional path-dependent role of green space to continue, even though addressing climate change has risen up the international, national, regional and local agendas. This maintains urban green space as conceptually separate from the urban infrastructure critical to sustainable development and allows a traditional concept of urban green space as a "cosmetic afterthought" to persevere, unaffected by the

contemporary focus on climate change (UKDoE, 1996, p. iii). Approaching green space as disconnected from the urban fabric also implies these spaces are insulated from the environment around them. Yet, this is unrealistic, as even vast wilderness areas and national parks in the American west – larger and more remote than London's urban green spaces – are susceptible to external threats (Freemuth, 1991).

Organisationally, policy and practice changes stemming from a focus on climate change occurred primarily in planning, not in green space. Instead of bringing urban green space increasingly into planning decisions, the rise of the separate concept of green infrastructure essentially created a new way for planners to deal with sustainable development that is distinct from cultural services, including green space, provided by local councils. Internal consultations between planning and green space are about amenity-related issues, such as the impact of events on urban green space or permission to install adverts, and not about how a green space can be used as essential green infrastructure or "critical scaffolding" discussed at the onset of development (Eisenman, 2013, p. 298). Organisational structures continue the separation between planning officers and green space staff and foster diverging approaches to urban greening: green infrastructure versus green space.

By being conceptualised not as part of the urban fabric, but rather as time capsules to the past, urban green spaces are missed as an opportunity to be at the forefront of climate change mitigation and adaptation. In practice, they are not doing the work policy says they will. To fill this void, green infrastructure, which falls under the purview of planners, has become more prominent. However, this leads to a bifurcation of how green space is conceptualised: green space as amenity and green infrastructure as critical scaffolding. Nothing says green space cannot mitigate climate change while also hosting a football match, yet this is how local authorities approach the concepts of urban green space versus green infrastructure.

Local authorities' silo approach to planning serves as an impediment to the delivery of green infrastructure (Lennon, 2015). Respondent 44 (green space staff, Islington) referred to the "different motivations" of planners and noted "those two bits of the organisation [green space and planning] are working differently." Administrative connectivity, including partnerships across different jurisdictions as well as "connectivity between different parts of the organizational structures of local

authorities" (Kambites and Owens, 2006, p. 490), is necessary for green infrastructure planning:

> The "silo mentality" whereby different departments of a local authority work separately from each other – and occasionally in conflict with each other – is inimical to the nature of green infrastructure planning. The highest level of cooperation and coordination between departments is essential to deliver the benefits that green infrastructure planning can confer (Kambites and Owen, 2006, p. 490).

Implementing the multifunctional aspect of green infrastructure involves "reconceptualising green spaces as areas that provide a variety of functions including … climatic amelioration" (Amati and Taylor, 2010, p. 145). A green infrastructure approach to conceptualising urban green space would "fit twenty-first century circumstances and deliver more positive benefits for the natural environment and people's enjoyment of it" (Natural England, 2008, p. 2).

Although the focus of local green space departments remains on tasks such as maintenance, beautification and public health, Young maintains "a rising focus on the importance of managing municipal green space to enhance ecosystem services appears to be taking effect," notably in the US (2010, p. 320). Respondent 46 (senior staff, national charity) said "there's been quite a sea change in thinking about green infrastructure." In other words, recognition of urban green space as green infrastructure is becoming more accepted in practice. Cranz and Boland (2004) argue a new type of green space – the "sustainable park" – is emerging. The sustainable park is seen as part of a larger urban system, with the goal of supporting human and ecological health with reduced resource use (Cranz and Boland, 2004).

Eisenman adds that a shift in attitudes has contributed to a "contemporary greening agenda that prioritizes vegetated streetscapes and public rights-of-way instead of traditional, and often inaccessible, parks and nature on the urban periphery" (2013, p. 303). In contemporary cities, public realm goes beyond parks and plazas to incorporate a broader range of spaces (Garvin, 2011 cited in Eisenman, 2013). This indicates a divergence from the traditional path-dependent concept of urban green space. Respondent 45 (landscape architect, national charity) echoed this:

There's always been bits on corners that aren't recognised or maintained as such, they may sit in the portfolio of housing or they may sit in the portfolio of highways or they may sit in the portfolio of education, but actually, you know, humans are very ingenious about being able to extract from the landscape what they need.

Of the three boroughs researched here, Islington has been most assertive in adopting a green infrastructure approach. Indeed, Islington directly links urban green space with climate change: "As part of a wider green infrastructure network, open space not only offers recreation and relaxation opportunities for a healthier borough, but can also contribute to a greener Islington that protects and promotes nature, and is better equipped to deal with climate change" (Islington Council, 2011a, p. 86).

7.4.2. Urban change

A second issue set to challenge the path dependency of London's urban green spaces is urban change. Although all 32 London boroughs and the City of London have experienced population growth in recent years, the three boroughs in this research were selected because of the pace of change they are experiencing, including in population, demographics and development, as discussed in Chapter 3 (Methodology) and Chapter 4 (London Context). This growth and change contrasts with a previous period of decay across London. The British capital, like other former industrial cities, such as New York City, experienced decline in the 20th century, as the city "was haemorrhaging jobs and people" (Butler and Hamnett, 2009, p. 44). The city's population fell 22 percent between 1939 and 1988 (GLA Intelligence, 2015). Between 1971 and 1981, boroughs in Inner London lost up to 20 percent of their population (Butler and Hamnett, 2009).

London's green spaces reflected this deterioration. The late 20th century is recognised for "a widespread decline in the quality of urban parks and other green spaces" (Woolley, 2003; Wilson and Hughes, 2011, p. 207). Indeed, the latter part of the century brought "a massive decline in their [public parks] fortunes. Everything about public parks has got worse" (Harding, 1999, p. 3). In a memorandum submitted to the Select Committee on Environment, Transport and Regional Affairs, which was examining the "spiral of decline" of urban parks, Warpole, who co-authored two national studies of Britain's urban parks, questioned whether these spaces were

becoming "another ghost zone of modern Britain?" (1999). A 2001 survey conducted by the Urban Parks Forum found that "only 18% of local authorities thought that their parks were in 'good' condition" after reductions in funding in the 1980s and early 1990s (Wilson and Hughes, 2003, p. 211).

In the late 1980s and 1990s, London began to resurge, with people, jobs and economic activity returning. Since then, the pace of London's growth and change "has stepped up significantly" (Hall, 2009; Imrie, Lees and Raco, 2009, p. 3). Indeed, "London's transformation from a declining industrial city to its current status as an iconic centre of global financial and cultural flows … has been both rapid and recent" (Butler and Hamnett, 2009, p. 40). Increased political, community and media attention on the decline of parks, green spaces and other public spaces resulted in England's urban green spaces experiencing a renaissance (Harding, 1999; Wilson and Hughes, 2011). This period coincides with the New Labour government's focus on urban green spaces, highlighted by the Urban White Paper in 2000, and the establishment of the Urban Green Spaces Taskforce in 2002 (Wilson and Hughes, 2011). Respondents cited efforts to improve the quality of London's urban green spaces, based on the task force's work, to emphasise the time, work and resources that went into repairing and improving London's declining urban green spaces. This renewed focus, however, was on preserving traditional green spaces for traditional uses, such as leisure and amenity. In other words, it was for restoring the status quo, not moving towards a more contemporary green infrastructure approach.

7.4.2.1. *Population and development changes*

As part of London's urban change, respondents discussed development pressures on urban green space, notably the pressure from expanding and changing populations, and increased homebuilding. Respondents' comments related to increasingly dense development in several ways, including less space available for providing new green space; increasing demands on existing green spaces stemming from growing populations; changes to the character of existing green spaces; and changing use demands resulting because of changing lifestyles and cultural demographic shifts. Respondents identified the pace of population growth and the amount of development occurring as a challenge for delivering and managing urban green space in Inner London. For example, in Tower Hamlets, the fastest-growing of all London boroughs, respondent 15 (planner, Tower Hamlets) observed:

We've got a phenomenal increase in population, with a lot of new housing coming in. If you look at the census 2001 to 2011, we've gone up from about 210,000 to 260,000 in population, which is quite staggering. The issue that we're really grappling with is, how do you provide high-quality residential environments at really high densities? When you're building at high densities, you have a lot of flats with no gardens because they have balconies. So, it [urban green space] is absolutely essential in terms of liveability in Tower Hamlets.

In Islington, the borough with the highest population density in England, respondents spoke about the challenges of providing residents with access to green space while increasing the population in an already dense area. Respondent 31 (green space staff, Islington) said the intensity and conflict of uses "is much harder to manage in small spaces." Respondent 44 (green space staff, Islington) said, "In certain spaces, you can't see the grass for the bodies." Respondent 44 elaborated on the pressure Islington's green spaces face:

It's lots of people having lunches in certain spaces. It's kids running around and having fun. It's barbecues giving us a patchwork of burned patches on the grass. Something like 12 percent of people in Islington have their own garden. I would suggest that a fair few of them have not got what I would call a useable garden and, therefore, if they want to kick the ball around with their little kid or … just sit outside even, where do they do it? They do it in the park. The pressure on our parks is ridiculous.

Respondent 19 (green space staff, Wandsworth) also noted a concern about increasing development densities, particularly regarding new residential development:

"You've got a very tiny balcony on a property, you've got a picnic table and two chairs and a barbeque crammed into this tiny area no bigger than the size of this table. How relaxing is that? So, people do want to have space to get outside their property."

An increase in population densities and development also has occurred as regional and local governments focus on compact development to minimise sprawl and its diseconomies, and as housing costs in London increase (GLA, 2016c; Scanlon, Whitehead and Blanc, 2018). In Inner London, where development density requirements are stricter, development has led to more demand pressure on green space and affected local authorities' ability to supply these spaces (GLA, 2016c).

Many respondents' comments reflected concerns and criticisms levelled against the compact city as a form of spatial development, namely that as housing densities increase, urban green space is threatened (Beer, Delshammar and Schildwacht, 2003). The compact city concept itself implies greater use of existing green space for development (Knight, 1996). Indeed, plans to develop more densely typically come at the expense of natural and open spaces (GLA Economics, 2003; Clark and Jauhiainen, 2006). As Jim and Chen observe, "The high-density development mode … often lacks greenspaces" (2003, p. 96). Creating new green spaces can be a challenge in densely developed areas, as well. Respondent 15 (planner, Tower Hamlets) said:

> The scale of development has to be there in order to get your site allocation to an examination when you've got a developer challenging you, so you need to be confident that it's viable. The site really needs to be big enough to have enough residential development to cross-subsidise the release of the remainder of the site for open space.

However, respondent 39 (green space staff, Tower Hamlets) said increasing density made urban green space all the more critical.

> We won't let developers build at those densities unless we're comfortable we've got the parks and open spaces to accommodate residents. In Tower Hamlets, we're lucky that developers want to come in and invest … so, you know, we can afford to be a bit more aggressive in our negotiations in terms of scoring contributions or in-kind benefits from developers.

Urban growth and change have an impact on urban green space, in part, simply because land prices in urban areas increase and, thus, limit creation of large green

spaces (Rupprecht et al., 2015). This has implications for planning, as smaller and informal spaces and non-traditional spaces, such as green roofs, could increase opportunities for biodiversity and access to nature within the boroughs and contribute to environmental sustainability. As such, "the goals and expectations for parks, as sole providers of greenspace benefits for those residents who lack gardens, might need to be re-evaluated" (Rupprecht et al., 2015, pp. 216-217).

7.4.2.2. Cultural and social changes

London's population is not just growing, it continues to evolve culturally and socially, as well. In 2017, 40.1 percent of Inner London residents were born overseas, compared with 13.3 percent of the UK (GLA, 2017a). In 2001, the percentage of Londoners born overseas was 27.1 (ONS, 2011b). This cultural diversity is tangible. For example, in Tower Hamlets, the 16th-most diverse borough in England and Wales, 15.3 percent of residents were born in Bangladesh, while 32 percent of residents cite their ethnicity as Bangladeshi (GLA Intelligence, 2012; TH, 2013; GLA, 2017a). Indeed, the borough has the largest Bangladeshi population in England (TH, 2013; GLA, 2017a). International in-migration has led to cultural changes in London and this has resulted in changing usage patterns in and demands on green space (Butler and Hamnett, 2009; Özgüner, 2011). This, then, affects how green space is delivered and managed. For example, respondent 39 (green space staff, Tower Hamlets) said:

> For us, other than the budget issue, the main issue is catering for the whole diaspora of people we have wanting to do different things in our parks and the different expectations they have for their green spaces. That's where we find a lot of conflict arises.

Meanwhile, respondent 35 (green space staff, Tower Hamlets) observed how such cultural changes can affect the concept of urban green space: "Obviously with a very wide mix of cultural backgrounds in the borough, a lot of our residents wouldn't have any cultural links with British nature habitats and wildlife." A change in the cultural diversity of a borough's population also is reflected in how people use green space, as well (respondent 19). Respondent 11 (senior staff, national charity) added: "As demographics change and as population profiles change, then the use of an open space changes. If you've got 35 percent of a community from a particular background

Figure 7.1 – **No dogs:** Local authorities must try to provide for a diverse range of green space users' needs, which can be challenging as London's population grows and changes (source: author).

then it makes no sense at all that they should conform to something which isn't standard for them."

Providing urban green space for people from a diverse range of social and cultural groups as well as for different users is critical, although council officers may not understand changing populations (Özgüner, 2011). Research has demonstrated that people from different cultures and ethnicities have differing landscape preferences and different use patterns in urban green spaces (Özgüner, 2011). Indeed, "different cultures have different value systems and relationships with nature" (James et al., 2009). This has ramifications for delivery and management of urban green spaces as Inner London continues to experience cultural change. Thus, providing urban green spaces for the changing demographics and cultural mix of cities is a "challenging task" (Özgüner, 2011, p. 617). For example, Özgüner found that while the main uses of urban green space by Britons consisted of walking, dog walking

and sport, "the use of urban parks for walking, dog walking, sports activities and exercise was relatively low in Turkey" (2011, pp. 611-612). In Chicago, minority groups were more likely to use Lincoln Park for passive activities such as talking and picnicking than whites, who used the park more for active individual pastimes, including walking, jogging and cycling (Gobster, 2002; Özgüner, 2011). In Tower Hamlets, for example, respondent 39 (green space staff) noted how cultural attitudes can conflict in green spaces:

> The problem we have in Tower Hamlets is that the Bengali community is absolutely petrified of dogs [see Figure 7.1]. And we have a large dog-owning population. So, there are different conflicts. In Bartlett Park, what we've done is we've provided a big stretch of dog-walking area and it's fenced off, so people can then just let their dogs run around without interfering. So, we try, but it's not always possible.

Respondent 24 (senior staff, housing association) commented on green space use by the large Asian population in Tower Hamlets: "They will use pocket parks in a different way to other communities. They love growing their own food, so their gardens are generally almost turned over to agriculture in a way." Mace argues that green belt policy in England endures, in part, because the countryside is essential to national identity and "to cede any changes … would be to sow doubt about the durability not only of the policy, but of a particular national identity, too" (2018, p. 4). Yet, as the demographic and cultural profile of a Londoner changes, so, too, may the concept of urban green space.

7.4.2.3. Lifestyle changes

Changing lifestyles and increasing life expectancies also have contributed to a changing London (Urban Task Force, 1999). For example, information and communication technologies have altered how and where people work, as have changes in London's occupational class structure (Butler and Hamnett, 2009; Cochrane, 2009). As a result, the city's housing and infrastructure – including green infrastructure – needs are evolving. Further, lifestyles are changing, particularly as growing populations live in increasingly dense homes with little to no access to private gardens or green areas. Respondent 11 (senior staff, national charity) said: "We've changed, I think, and that's recognising that different people want different

forms of recreation, different forms of sport and play. It's the variety of opportunity that's important." Respondent 35 (green space staff, Tower Hamlets) addressed this, too: "There's also the problem that urban people – and most people are urban people – are having no contact with nature, then they've got no experience, it has no resonance with them, and particularly kids. Respondent 19 (green space staff, Wandsworth) said:

> I think how people use them [green space] has changed. The way people use it [urban green space] across the year and almost despite the weather, people are much more likely to go do something out in the park and spend their time there more frequently than they would have 10 years ago. I think that may be linked to housing, it may be linked to more people or properties that don't have access to a garden or some sort of footprint around their building. It's a different dynamic. It's a more sort of frequent use of the space.

Lifestyle changes also reflect economic changes. When Victoria Park was established in what is now Tower Hamlets, the borough was economically more homogenous. Respondent 39 (green space staff, Tower Hamlets) said this changed in recent years and has had an impact on green space delivery and management.

> Traditionally, the borough was generally quite poor throughout, if you go back 20 or 30 years. The demography of people was very similar. Now, we've got these enclaves of really, really wealthy, and we've got some people who make £5, £10 million pounds. And, then literally on the boundary of Canary Wharf, you've got Robin Hood Park, in one of our poorest wards, overshadowed by Canary Wharf. So, we have all these different communities, all have expectations to use the parks in different ways, and we as the local authority have to find ways to provide people with those expectations.

7.4.2.4.   Age changes

Populations are aging, as well, including as life expectancies increase (Urban Task Force, 1999). London's over-65 population is projected to grow by 21 percent over the next decade (London Councils, 2013).This has ramifications for how urban green

space is used and, thus, delivered and managed. Respondent 45 (landscape architect, national charity) commented:

> I put that seat there [in a green space] because it has a role to play for the elderly people who live in the top of this [adjacent] tower block because, actually, that is halfway between there and the shops. The reality is that's an important little rest break because, guess what, in their tower block – this is a true story – the lift doesn't work very well, it's a local authority lift, they have not really got around to it, it's not in the planned maintenance for another seven years. So, these poor people, they take a bit of a breather on this seat during the day when they go to get their shopping from their local Sainsbury's because it just helps them enough to get up the stairs because they live on the eighth floor.

Some boroughs, such as Tower Hamlets, are experiencing a simultaneous increase in young residents (GLA, 2017a). Indeed, respondent 46 (senior staff, national charity) said a "generational shift" is changing how urban green space is conceptualised and used: "Traditional parks with rose bushes and bedding plants are still loved by many people, but I think there's recognition that people love other sorts of green spaces as well. It's probably a generational shift as much as anything." The school-age population in London is set for 12 percent growth over the next decade (London Councils, 2013). As with aging populations, this affects the demands on urban green space. According to respondent 18 (strategy officer, Tower Hamlets):

> We have a very strong and very sizeable football community, lots and lots of football clubs, very many of them, actually, young Bangladeshi men, and we just don't have enough football pitches. And we're never going to … be able to provide enough football pitches for everyone to be in a league and do what they want to do because … if you apply some of the recommendations Sport England make, every park in the borough would have to be plastered with football pitches, and you can't do anything else. So, we have lots of young men, which has an impact on the kind of activities they may want to do in those parks, but given the limited space, we can't necessarily cater for that.

As the current wave of growth and change gathered steam in London, the Urban Task Force said cities need to be "adaptable to change" (1999, p. viii). This applies to the delivery, management and use – and the conceptualisation – of urban green space. Olmsted considered the ability of urban green spaces to adapt to changing needs as essential: "If a park should prove not adapted to the requirements of those who are to come after us, and even of those who are to come after our immediate successors, the outlay which will be needed for it would be an extravagant one" (Olmsted, 1868, pp. 12-13 cited in Eisenman, 2013, p. 302). Taylor builds on this:

> Landscape is not static, it reflects changing human ideologies over time [Biger, 1992]). In the urban landscape, it is critical that we are able to manage change so that historic cities, as they change in response to changing values, reflect their human history but do not become merely designated historic zones with a tight boundary around them devoid of a sense of lived-in places (2016, p. 472).

Respondent 44 (green space staff, Islington) said allowing London's green spaces to change, rather than holding them frozen in time, is more in line with Victorian attitudes than maintaining these spaces with a frozen-in-the-past approach: "The Victorians would turn in their graves if they thought we were keeping everything the same. They changed things. They tried out new stuff all the time."

Yet, "the nature and purpose of institutions is to resist change," which becomes more prevalent as a city grows (Woodlief, 1998). This stems from organisations, such as local governments, seeking out stability and others, such as local residents and interest groups, protecting policies that they find beneficial (Woodlief, 1998). Path dependency is characterised by "actors hemmed in by existing institutions and structures that channel them along established policy paths" (Wilsford, 1994, p. 251). Thus, even with rapid, dramatic urban change, breaking a path dependency remains a challenge, as "path-dependent processes are bounded by structures which confine and shape them" (Greener, 2002, p. 614).

In London, "the diverse dimensions and complexities of contemporary urban processes and change are evident" (Imrie, Lees and Raco, 2009, p. vii). London's ongoing change affects the city's economy, environment and society, and highlights

the "growing tensions between a globally focused growth agenda and the broader pressures associated with the city's social reproduction, such as housing affordability, sustainability and the provision of public services" (Butler and Hamnett, 2009; Imrie, Lees and Raco, 2009, p. 3). These tensions will continue with the "apparently unstoppable resurgence in London's growth" (Butler and Hamnett, 2009, p. 45). The impact of urban change on green space delivery and management in Inner London is still playing out (Rutt and Gulsrud, 2016). Rutt and Gulsrud highlight the knowledge gap regarding "how the needs and preferences of the changing demographics align or not with current urban green space" (2016, p. 124). As a result, "new analytical frames" are needed (Rutt and Gulsrud, 2016, p. 124). In other words, urban green space needs to be reconceptualised.

7.4.3. Funding and governance
7.4.3.1. Changing funding

Although the institutional, path-dependent concept of urban green space transcends funding issues, the depth and timing of recent cuts to local authorities' budgets – and, in particular, to their budgets for discretionary services – have contributed to pressure on London's urban green spaces (LAEC, 2016). This pressure comes, in part, from austerity measures imposed by Britain's coalition government, beginning in 2010, which was mentioned by nearly every respondent. Austerity ushered in a series of sustained reductions in public spending, felt acutely at the local government level. Local authority budgets fell 44 percent between 2011 and 2016 (London Councils, 2015a). Budget cuts have been particularly deep for non-statutory services, such as providing green space (Dempsey, Burton and Selin, 2016; Centre for London, 2018). HLF – the second-largest funder of green space after local authorities – found that 92 percent of green space managers in the UK had experienced cuts to their revenue budgets between 2013-15 (HLF, 2016). Spending on open space, which includes green spaces, by London councils decreased 18 percent in four years, allowing for inflation, including a reduction of more than 10 percent in 2014-15 (London Councils, 2015a; LAEC, 2016).

In June 2016, the Communities and Local Government Committee launched a parliamentary inquiry to examine the impact of recently reduced local authority budgets on urban parks and green spaces and "to consider concerns that their existence is under threat" (CLGC, 2016). The committee received more than 13,000 responses to its consultation (CLGC, 2017). Committee chairman Clive Betts tied

budget cuts to the lack of a statutory requirement to provide green spaces. Yet, he also reflected the idea that urban green space benefits only the local community: "With councils under enormous financial pressures and with no legal obligation to fund and maintain public parks, these precious community resources may be at risk" (CLGC, 2016).

Cuts to green space funding highlight a long-standing challenge for local authorities regarding capital versus maintenance budgets. Focus tends to be on capital investment, with developer investment made through planning obligations, such as Section 106 contributions and the Community Infrastructure Levy (CIL), going towards creation of new spaces or regeneration of existing spaces (Dempsey and Burton, 2012). However, a long-term budget for maintenance is critical to ensuring green spaces provide the benefits they are designed for and expected to, yet maintenance budgets are more difficult to sustain (Dempsey and Burton, 2012; Dempsey, Burton and Silen, 2016). In 2016, nearly 90 percent of park managers across the UK had experienced a "withdrawal of maintenance from some land and an increase in unmaintained land" (APSE, 2016b, p. 3). Budget cuts also resulted in 52.8 percent of local authorities reducing their bedding and flower displays, 40.7 percent reducing grass cutting and 38.9 percent reducing shrub bed maintenance (APSE, 2016a; 2016b). A sustained – and even permanent – reduction in green space maintenance could contribute to a change in how green space is managed in the long term and, possibly, how it is conceptualised. This would involve changing expectations, which have been reinforced through institutions (Koelble, 1995; March and Olsen, 2006). Respondent 31 (green space staff, Islington) addressed how entrenched such expectations are:

> We seem to have an odd collection of residents whose expectations
> are unbelievably high. I don't think they watch the news or have any
> awareness of what is going on [regarding council budgets] and they
> still think everything should be done to phenomenally high standards
> and irrespective of everything else.

Budget cuts also have led to a loss of institutional knowledge and skills in local authorities (Dempsey and Burton, 2012). Across the UK, 81 percent of local councils have cut green space management staff and 77 percent have reduced frontline staff (HLF, 2014a). I experienced this first hand, as the first research interview I scheduled

was with a council's long-time green space manager. However, by the time the interview date arrived, the manager no longer worked at the council due to budget cuts. Several respondents said the loss of experienced green space staff and, thus, the career pipeline for green space professionals, further threatens London's urban green space. Respondent 2 (senior staff, regional charity) said:

> As the cuts come in more and more, the good people are going or they are retiring. There's a crisis in the industry … there are very little people who are coming up through the system and it's sadly just kind of crumbling.

Green space staff who remain have been assigned additional duties. Respondents discussed taking on further roles because of staff cuts, including responsibilities in which they have no experience or training. The loss of experienced staff also affects relationships between green space staff and planning officers, as coordination between the two is influenced by personal relationships and informal processes established through familiarity. Respondent 27 (green space staff, Islington) took on responsibility for biodiversity issues, which have statutory implications for the borough:

> The other element of my role is taking on the previous responsibilities of a biodiversity officer with regard to specifically for planning and sites of importance for nature conservation, of which many of our open spaces are. Traditionally, it was a single person, but we cut our biodiversity officer and then they [the council] realised there were a lot of statutory things that they are supposed to do. So, they looked around for someone who might be willing to do it.

The loss of staff, and particularly staff with long tenure in a council's green space team, potentially could be seen as helping to loosen the grip of path dependency by both opening the door for additional partners involved in green space delivery and management, and making room for younger or more modern horticulturalists, landscape architects, gardeners and designers who have a more contemporary perspective on green space management, to influence a local council. Additionally, a more traditional, "technocratic" approach to green space management, in which the local authority is seen to possess the needed expertise, may limit the "local, rich

knowledge" local residents can offer (Dempsey and Burton, 2012, pp. 15-16). This is a "dated assumption … about the public being insufficiently knowledgeable and who must therefore be educated by more knowledgeable experts in government" (Dempsey and Burton, 2012, p. 16).

Figure 7.2 – **Resource cuts:** Decreasing maintenance budgets mean local authorities must reduce green space upkeep, including painting railings, such as these in Bartlett Park, Tower Hamlets (source: author).

Yet, while it's convenient to single out austerity as the reason for pressure on urban green space, green spaces – including those in London – previously have been subjected to large budget cuts (Mathers, Dempsey and Molin, 2015). Respondents recalled how previous cycles of deep cuts tangibly affected the delivery and management of public urban green spaces (respondent 20, national green space consultant). The Urban Parks Forum identified the periods of 1979-84 and 1989-94 as when urban green spaces across England had drastic reductions in their budgets (Wilson and Hughes, 2011). This led to "a widespread decline" in the quality of publicly accessible urban green spaces (Wilson and Hughes, 2011, p. 207). In 1999, the Environment, Transport and Regional Affairs Select Committee identified a

"spiral of decline" in urban green spaces and blamed this largely on funding (ETRAC, 1999, para. 86; HLF, 2014a).

The attention on the decline of parks, green spaces and other public spaces resulted in Britain's urban green spaces experiencing a "renaissance" (Harding, 1999; Wilson and Hughes, 2011). The timing coincides with government's focus on urban green spaces, including publication of the Urban White Paper in 2000, and creation of the Urban Green Spaces Taskforce in 2002 (Wilson and Hughes, 2011). The task force made recommendations involving increasing the amount and sources of funding for urban green spaces (DTLR, 2002). Respondents said these efforts illustrated the time, work and resources that local authorities and others put into repairing and developing their green spaces. They pointed to the popularity of and increasing user demand on London's green spaces that resulted from this renewed focus as evidence of the progress and improvements that would be lost with sustained budget cuts. Respondent 31 (green space staff, Islington) said:

> You can carry out improvements, but if you've not got the revenue or the skill set to maintain them, then the worst thing to do is to spend a lot of money doing something up and then not being able to keep it to a good standard. … The basics are, we get the grass cut and we can get the litter picked up. But, the borders and the beds will deteriorate and they will get noticed and it will be much harder to recover them if all you've been doing is cutting the grass and picking up the litter.

Respondent 31 continued, observing that the impact of green space budget cuts may not show up overnight, but rather gradually, which can make restoring declining green space more difficult and costly:

> There's a lag time. Because there's been a lot of investment and improvement in parks, you're still seeing that, but I think it will start to dip, and it will hold for a while as you're do the doing the basics and you're still living off that reputation, but in two or three years' time, they will start to say, 'Well what's happened to this place?'

7.4.3.2.   Changing demand

Austerity is not the sole cause of the current pressure on London's green spaces. As Harding observes: "The reasons for the rapid and decisive decline of public parks are, perhaps, not surprisingly, as complicated as the reasons for their provision" (1999, p. 5). How local authorities put a monetary value on green space has long been problematic, according to interview respondents. Respondent 46 (senior staff, national charity) said:

> The classic thing is, if you go to a local authority, on their balance sheets, their parks will be valued at zero. Anyone who works in the environment says, 'This is absolutely ridiculous, we must do something about it.' But, they didn't have the clout to change that because they're not economists, they can't talk economic language, nobody was listening. Even though you could say, 'Hang on, if you buy a mature tree it costs £10,000, they grow them in Germany, you can ship them in. So, here's a park, it's got hundreds of mature trees in it, but you're telling me it's only worth a pound. This is rubbish.' Getting leverage with the right people was very, very difficult.

Demands on local council services, particularly statutory services, such as adult and child social care, are increasing, squeezing local authority budgets and leaving less funding available for discretionary services, including green space provision. Spending on adult and child social care, by far the largest expenditure in London councils' budgets, made up 62 percent of London councils' budgets in 2017-18, compared to 54 percent in 2010-11 (Centre for London, 2018). This trend is projected to continue. As statutory services have made up a larger share of local authority budgets, declining budgets for green space provision and other non-statutory services already were in motion – austerity merely accelerated this. With demands on statutory services increasing, the opportunity to recover council funding for green space seems unlikely. Respondent 23 (senior staff, national charity) said:

> Museums, libraries, archives, archaeological services, historic environment records, archives, all that sort of stuff is going to get squashed and squashed and squashed. So, if they're [local councils] going to continue doing these kinds of services, they need to find new ways of funding them.

As their budgets shrink and population and development increase, local authorities are less able and willing to take on management and maintenance responsibility for new green spaces (Rupprecht et al., 2015; interview respondents). Similarly, local councils are unable to meet green space-related planning targets, such as green space per capita goals, as detailed in Chapter 6 (Planning). For example, Tower Hamlets, the fastest-growing borough in London in population and new housing units, has seen its green space per 1,000 population fall from 1.2 ha in 2005 to 0.98 ha in 2010, despite policies to protect existing green space and create new spaces (TH, 2011; ONS, 2012b; GLA, 2015b). Further, only half of Londoners live within 400 metres of a small public green space, such as a local park, the planning standard specified in the London Plan (LAEC, 2017).

7.4.3.3. Changing governance

Local councils in London, and across Britain, have responded to pressure on their green-space budgets in myriad ways. This includes cutting budgets; reducing staff through redundancies, early retirements or unfilled vacancies; renegotiating maintenance contracts; bringing maintenance functions in house; reducing maintenance services and schedules; placing management of green spaces into a trust; selling green spaces and facilities within them, such as lodges or depots; and sharing or combining services with other local authorities (LAEC, 2016; 2017).

At the same time, local councils have addressed declining green space budgets through building and expanding partnerships with user groups, community organisations and private businesses (Dempsey, Burton and Selin, 2016). Organisations such as friends-of-the-park groups; environmental-, heritage- and recreation-focused charities; and developers and social landlords have taken on responsibilities for some urban green spaces for which local councils used to have sole responsibility. Respondent 24 (senior staff, housing association) said developers, registered social landlords and housing associations increasingly are delivering and managing urban green spaces instead of the local council: "We have transformed what were dog toilet areas into the highest-quality pocket parks you can imagine." Yet, respondent 24 added that developers' motivation for providing green space is "the pound note. Developers only provide green spaces if it affects the value of their property and enables them to sell their property. With green space, we are adding value to our property and we know that." Respondent 26 (developer) had

similar comments: "Our sites have to be commercially viable. If we can't reach a certain level of profit, we simply can't develop [a site]."

Shifts in governance affect planning (Clifford, 2006). Mathers, Dempsey and Molin discuss an "ongoing shift from (local) government green space management to a governance structure involving local non-governmental stakeholders" (2015, p. 126). This move toward partnerships is "central to the concept of governance" (Clifford and Tewdwr-Jones, 2014, p. 54). From 2013 to 2015, 50 percent of local authorities across the UK had transferred outdoor sports facilities to community groups (HLF, 2016). Almost one-third of local councils said they were considering transferring parks to community groups (HLF, 2016). In 2016, across the UK, 78 percent of friends groups helped local councils with green space maintenance, an increase from 73 percent the previous year (LAEC, 2016). Yet, as demands on council statutory services increased and budgets for green space got squeezed, local authorities already were looking for additional partners. Even before Britain's austerity measures were enacted in 2010, the number of user groups formed to work with green spaces was increasing (respondent 2, senior staff, regional charity; respondent 32, senior staff, national charity). In 2009, 80 friends groups attended the inaugural meeting of the London Green Spaces Friends Groups Network (LGSFGN, 2016). More than 600 friends groups existed across London as of July 2017 (LAEC, 2017; respondent 2, senior staff, regional charity).

As the local authority's role has been reduced, these additional partners have become part of an expanded governance of London's urban green spaces (Mathers, Dempsey and Molin, 2015). The form of the agreements and relationships between local councils and community organisations varies across – and even within – boroughs. For example, in Wandsworth, a local friends group maintains a flower bed in Wandsworth Park, while another friends group helped secure funding for new ecology ponds in Tooting Common. In Tower Hamlets, the council has several service-level agreements with local organisations, such as the Friends of Tower Hamlets Cemetery Park, which manages and maintains the historic cemetery and green space day to day and employs a staff member.

With reduced green space budgets and resources, some local authorities have focused on their larger or flagship spaces, which can generate revenue, such as through events and commercialisation, more readily than smaller spaces can. As

discussed in Chapter 5 (Heritage), larger spaces also are more likely to attract funding, such as from the Heritage Lottery Fund, as they are more likely to be considered heritage assets or have listed features within them. While other organisations do play a role in a borough's larger green spaces, this usually is secondary to the local authority's role in their flagship, high-profile spaces. However, local user and community organisations have subsumed management, maintenance and funding of smaller and more informal spaces, including in the three boroughs

Figure 7.3 – **Arnold Circus:** After Boundary Gardens at Arnold Circus in Tower Hamlets fell into disrepair and was beset by crime and antisocial behaviour, local residents took over management of the space and now have a service-level agreement with Tower Hamlets Council (source: author).

researched here. Thus, by increasing their responsibilities in smaller spaces, local groups have an influential role on green space within a borough, as these are the spaces residents engage with most frequently.

Community organisations often can devote more time and resources to small, local spaces than a local authority often can (Mathers, Dempsey and Molin, 2015). This can improve the economic, environmental and social benefits that these – sometimes neglected – spaces provide. Respondent 31 (green space team, Islington) addressed this:

> A friends group will know their site. They'll know what they planted, and they can sort of tinker and maintain their site to a higher standard than we [the local council] can. … Horticulturally, they can improve [a site] enormously and have a bit of individual character that we couldn't necessarily do trying to manage 80-odd parks and open spaces.

According to respondent 2 (senior staff, regional charity), user groups and other community organisations are becoming increasingly important in the governance of London's urban green spaces as they gradually replace the tacit knowledge formerly held by local authority staff. Giving responsibility for green space delivery and maintenance to local groups also can spur more community involvement and interaction. This aligns with goals of urban sustainability regarding social cohesion (Kaźmierczak, 2013). Local groups have revitalised neglected spaces, such as Boundary Gardens at Arnold Circus in Tower Hamlets, making these spaces vibrant parts of the local community's infrastructure. Respondent 39 (green space staff, Tower Hamlets) discussed this:

> [Arnold Circus] is a small green area with a bandstand inside a beautiful 19th-century housing estate. We had a lot of issues with antisocial behaviour and vandalism, to the extent that the bandstand, which is listed, was burnt down or there was an attempt to burn it down. That's when we as the local authority were leading on the improvements. We thought, 'it's not working well,' so we approached the quite-active community and said, 'Why don't you take ownership of this space, not legally as in taking ownership, but the council will

take a supporting role and you lead on improvements, do what you want, how you want to use this space, and we will take a supporting role and support you.' The community got together and set themselves up as a friends group and they've just done amazing things with it. They're holding regular events and activities, antisocial behaviour has gone down, and people have taken greater ownership of it.

Some respondents saw user groups as a way to shift some of the funding burden away from the council, while others observed that user groups can access funding that public organisations are not eligible for (also see Mathers, Dempsey and Molin, 2015). Yet, at the heart of what many respondents said about relying on user groups is a statement about standards, or what it is that councils want to provide. This ties back to the discussion of the institutional concept of green space in Chapter 5 (Heritage). User groups may be brought on to perform a range of green space tasks, but how they deliver those tasks must conform to an institutionalised idea of green space. In other words, the concern about decreasing green space budgets – and a more limited role for local authorities in green space delivery and management – still revolves around maintaining these spaces with traditional practices and for traditional uses, namely amenity, recreation and leisure.

Yet, relying on community volunteers may not be reliable solution, particularly in the long term. Residents active in a user group may move from the neighbourhood or experience a change in their circumstances, such as new work responsibilities, that affects their commitment to maintaining the local green space. Respondent 24 (senior staff, housing association) commented on this:

> You're relying on one or two individuals to lead that whole process and, if they move out of the picture, it fails. One of our pocket parks used to be maintained by our residents, who set themselves up as a charity. We used to cut the grass, but they would do everything else. But, over time the lead person became ill and they had less influence and now we just do the whole thing.

Concerns about consistency in management and maintenance standards also were mentioned by respondents. Although local groups will know the character of their

space, there remains a homogeneity in the approach, namely a focus on these spaces with uses limited to amenity and recreation. As such, management of the spaces for some uses, such as ecosystem services, is not a priority for local organisations, despite such uses being identified by local councils as strategically important. User groups also may not represent the interests of all users of the green space and may not reflect the demographic and socioeconomic makeup of the local area in general. This mirrors concerns about increased emphasis on community participation in planning, which can lead to inequality, as those who participate may not be representative (Clifford and Tewdwr-Jones, 2014). Respondent 31 (green space staff, Islington) addressed this:

> You've got a lot of articulate, demanding residents with very high expectations who will see parks being used in a certain way, then you've got a large proportion of the community who are – I think we've got the second-highest rate of child poverty in the country – so how do we get those communities engaged in parks and using parks? … They're dealing with other things. They're worried about getting food on their plate or heat in their house, not whether a local park is being maintained to how you want it. … So, you've always got to try and speak for those that haven't got a voice, really.

Respondent 25 (senior staff, national charity) said this can be difficult for council officers, who increasingly are relying on user and community groups for funding:

> [Green space managers] need to have a broader view. You've got to challenge the friends group and say, 'Well, actually, we've done a survey of all the users and this is what they're saying, so this tends to go against what you're asking for.' But, yeah, it can be really challenging because they [local councils] want to keep them [the user group] on their side because they'll fundraise [for the local authority]. But, sometimes giving them what they want can't be done or it's not appropriate.

Several respondents discussed conflicts between the local council and user groups, and between members within a user group. "We tend to now call them user groups [instead of friends groups] because park managers sometimes don't find them very

friendly" (respondent 23, senior staff, national charity). Respondent 44 (green space staff, Islington) discussed a small green space that has three separate user groups associated with it because the local community is divided on how the space should be managed:

> Around one square … we've got three friends groups and they all hate each other. You've got some who say, 'Why are we putting any sport facility in, why are putting any play equipment in?' And you have some that are going, 'Well, we want play equipment everywhere so kids can play.' I mean, you're damned if you do, damned if you don't.

Of the three boroughs, Wandsworth has been the most reluctant to partner with user groups. Respondent 19 (green space staff) noted:

> We weren't a very touchy-feely borough until recently, so they [friends groups] are quite new for us and the public. A lot of the ones we have got now have come from a demand for people to get their hands in the soil and we've had to manage that demand in a different way. 'Can we come in and take out that shrubbery and put in base beds and grow vegetables?' 'No, you can't because that's not appropriate in a public park.' We're very clear on what we mean by providing a public park and it isn't about community gardening for us. In some boroughs it might be. … It's always been hard for us to have those community groups engaged in practical delivery.

Dempsey and Burton observe that "there is a widespread consensus in theory and policy that a partnership approach to public space management is an effective one" (2012, p. 15). The more diverse the actors involved in green space delivery and management, the greater the opportunity for changing the path-dependent approach. While some organisations have a traditional focus, others have a different approach, such as urban agriculture or wild and natural maintenance. Kambites and Owen (2006) argue that the local community must be involved throughout the green infrastructure planning process. Indeed, the very nature of green infrastructure planning lends itself to a partnership approach (Kambites and Owen, 2006). This includes relevant departments within the local planning authority, adjacent local authorities, developers, agencies such as the Environment Agency, interest groups

and the local community. Thus, "transforming governance, then, involves not just changes in policy and organizational structure, but attempting to change the deeper frames of reference and cultural practices structuring how public servants make sense of their collective world and engage in day-to-day routines" (Clifford, 2016, p. 388).

Ensuring local spaces remain vibrant is critical, as research indicates these smaller spaces close to where one lives can have more impact on daily lives than larger, but more distant, green spaces (Kaplan, 1984, p. 189; Burgess, Harrison and Limb, 1988; Van Den Berg, Hartig and Staats, 2007). Small green spaces, including street trees and small landscaped areas, provide opportunities for relaxation and psychological escape from the stress of urban life (Kaplan, 1984). Such smaller spaces "cater to the daily needs for contact with nature" and play an intimate role in

Figure 7.4 – **Friends of Wandsworth Park:** The Friends of Wandsworth Park have taken over maintenance of one of the listed park's flower beds (source: author).

city life (Jim and Chen, 2003, p. 103). Yet, the benefits of small, local spaces are not limited solely to the local community and nearby residents. Local spaces also are critical for an interconnected system of green spaces. They provide linkages necessary for recreation, such as walking and cycling greenways, as well as environmental services, such as flood protection, mitigation of the heat-island effect and urban wildlife corridors. These benefits extend beyond the immediate neighbourhood.

To achieve these benefits, these smaller, local spaces need to be managed not as isolated, disconnected islands, but strategically (Kambites and Owen, 2006). Indeed, green infrastructure "offers a way of reinvigorating the public meaning of landscape by highlighting the interrelationship between natural systems and every day urban life and restoring civic meaning to what is now relegated to a separated functional realm" (Rosenberg, 1996, p. 89). The idea that local spaces are part of a larger system, with benefits spilling over beyond the neighbourhood to provide wider enhancements to the city or region as a whole, highlights challenges with expanding green space governance to developers, user groups and community organisations. "I think there always has to be a green strategy from the local authority (respondent 24, senior staff, housing association). Whereas a local authority will look at its system of urban green spaces strategically with a boroughwide or regional approach, a community organisation typically has a narrow focus on a single space, making issues of interconnectivity challenging (respondent 23, senior staff, national charity). Respondent 2 (senior staff, regional charity) discussed this: "The penny hasn't dropped for a lot of them [user groups] that, although local is important … there's a bigger picture here, there's more at stake."

7.5. SUMMARY

Urban green space has become a key issue in urban policy, a result of increased consumption of green spaces, a focus on urban quality of life and a heightened awareness regarding the ecology of cities (Clark and Jauhiainen, 2006; Baycan-Levent, Vreeker and Nijkamp, 2009). Indeed, the ecological benefits of green space "have brought new levels of awareness of the role" these spaces can play in the contemporary city (Conway, 1991, p. 8). Urban green spaces play a critical role in the economic, environmental and social sustainability of cities, including London, where 47 percent of the city is considered green (GiGL, 2015a). Yet, despite this,

providing green space is not a statutory function and a dedicated, sustainable stream of funding for green space delivery and management does not exist. A cyclical pattern of funding and underfunding of urban green space over past decades illustrates the vulnerability of these non-statutory spaces to changing budgets, government policies and economies. As such, the benefits urban green spaces can provide are vulnerable, as well.

Austerity measures implemented in the UK from 2010 exacerbated pressure on local authority budgets, which already were overburdened by changes in population, demographics and demands on other local authority services, particularly adult and child social care, thus providing exogenous forces than can break path dependency (Sorensen, 2015). This has led to an evolving green space governance, as local authorities, the traditional provider of publicly accessible urban green spaces, look for additional partners to provide and manage these spaces. This will likely intensify, as central government plans to cease providing revenue support grants to local authorities by 2020, and by then, local government will have lost 75 pence of every £1 of core central government funding it received in 2015 (LGA, 2017). These urban changes and expanding governance are occurring at a time when an increased awareness of the role of cities and urban areas in environmental issues, namely climate change, has come to the forefront of the policy and planning agendas.

At the same time, the role of urban green space is evolving, with an understanding and recognition of not only green space's part in contributing to the quality of life for urban dwellers, but also that green space – when conceptualised as an interconnected and integral part of a city's green infrastructure – can do more to support the economic, environmental and social impacts of urbanisation and city life, such as through ecosystem services, cost reduction of services such as cooling and health provision, and increased labour productivity (Swanwick, Dunnett and Woolley, 2003; Pincetl and Gearin, 2005; Kambites and Owen, 2006; Gill et al., 2007; Wright, 2011). This incremental, endogenous evolution provides a challenge to the path dependence of green space (Sorensen, 2015). Instead, an interdisciplinary green infrastructure approach is emerging that goes beyond existing "jurisdictional fragmentation" and allows issues such as health, climate change, leisure and ecosystem services that are linked, but typically discussed separately, to now be discussed as meeting the same goals (Wheeler, 2000, p. 136; Mell, 2008).

This is not guaranteed to happen, as institutional processes are deeply embedded and insufficient understanding about how green spaces will behave under socio-demographic and environmental change exists (James et al., 2009). Yet, a heightened awareness of the role urban green space plays in environmental issues, dynamic urban change, sustained funding limitations and an evolving green space governance, plus lessons from existing experiences in Inner London, may create "windows of exceptional opportunity" for a fundamental shift in thinking necessary for a change in how London's green spaces will be delivered and managed in the future (Wilsford, 1994, p. 252). In other words, urban green space may be reconceptualised.

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CHAPTER 8 – CONCLUSION

In this concluding chapter, I review the empirical findings and the implications for theory. The chapter synthesises the arguments that, despite planning goals and policies that emphasise that urban green spaces are critical to contemporary and future urban life, the conceptualisation of these public spaces remains rooted in the past. A powerful cultural and institutional preoccupation with heritage limits London's urban green spaces from providing the strategic connectivity and multifunctional infrastructure identified as essential for urban sustainability and resilience. Yet, the thesis concludes that changes in the awareness and understanding of environmental processes, shifts in population, demographics and lifestyle, and evolving funding and governance structures may have opened the door to reconceptualising London's urban green spaces.

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"[Green space] is an innocuous symbol that everybody favors except bad people." – Galen Cranz, *The Politics of Park Design* (1982, p. ix)

8.1. INTRODUCTION

Green space is riddled with tension. Headlines claim, "'London's parks 'could become inaccessible to the public'" (BBC, 2015) "England's parks and open spaces have lost £75m in cuts since 2010" (Carrington, 2013) and "'Time running out' for UK parks, government told" (Taylor, 2018). Meanwhile, organisations such as London Councils and the Association for Public Service Excellence warn that "London's parks are at a crossroads and we cannot continue as we have in the past – the money simply isn't there" (London Councils, 2015b). In its 2016 parliamentary inquiry into parks and green spaces, the Communities and Local Government Committee expressed concern that "their existence is under threat" (CLGC, 2016). Such pessimism about urban green space is not limited to Britain. For example, just some pronouncements from beyond the UK include: "'Nothing's safe:' More than 70 of Sydney's green spaces at risk, survey finds" (Hanman, 2017), "Hong Kong needs more public open space, for people's physical and mental well-being" (McKay and Yip, 2017) and "Will we start valuing landscape once cities overheat, forests burn and we die early?" (Dodd, 2018).

At the same time as these dire claims, research increasingly demonstrates the multifaceted benefits green spaces provide for addressing significant global challenges resulting from unprecedented urbanisation. Benefits of urban green space include: opportunities for sport and recreation (Hillsdon et al., 2006); cooling of increased temperatures from the heat-island effect (Gill et al., 2007); air and water filtration (Heidt and Neef, 2008); flood control and prevention (Zhang et al., 2012); urban agriculture and community gardening (De Bon, Parrot and Moustier, 2009); biodiversity and habitat for urban wildlife and rare plant species (Niemelä, 1999); improved physical and mental health, including stress (Tzoulas et al., 2007); increased social interaction and integration (Swanwick, Dunnett and Woolley, 2003); tourism promotion (Choumert and Salanié, 2008); increased property values and tax revenue (Crompton, 2001; Choumert and Salanié, 2008); contributions to cultural heritage (Urban Parks Forum, 2001); enhanced economic competitiveness (Panduro and Veie, 2013); reduced antisocial behaviour (Woolley, 2003); education and child development (Taylor, 1998); and quality of life (Bullock, 2008).

As cities prove researchers wrong by not just avoiding their predicted death, but actually resurging, society is recognising that providing urban green space is not just a luxury, but an urban necessity (Chiesura, 2004; Jim, 2004; Pincetl and Gearin, 2005; Clark and Jauhiainen, 2006; Maas et al., 2006; Esbah and Deniz, 2007; Choumert and Salanié, 2008). This has led to the rise of green infrastructure, which emphasises the critical services urban green spaces provide, such as urban cooling and flood prevention. Yet, if urban green spaces are globally acknowledged to provide such a critical array of benefits, why are they said to constantly be under threat from development, from lack of funding and from overuse? Why, for a "consistently well-used and popular public service," does little requirement to provide urban parks and green spaces exist (Dempsey, Burton and Selin, 2016, p. 446)? Looking back to Chapter 1 (Introduction), the research questions addressing these issues are:

1. What influences how contemporary urban green space is delivered and managed?
2. What role does urban green space play in planning for the sustainable city?
3. How does the conceptualisation of urban green space affect policy development, planning, governance and funding for these spaces?

As this thesis has demonstrated, research findings and policies do not automatically lead to a change in practice. This is particularly the case after more than 175 years of delivering and managing green spaces in a particular way. In that time, a conceptualisation of green space has become entrenched and this influences how urban green space is delivered and managed today. What results, then, is a gap between the theoretical discussion about urban green space as functional green infrastructure and the way it is delivered and managed in practice as an ornamental amenity. What influences this gap between theory and practice? Why does tension exist? Why are urban green spaces portrayed as a panacea, but in reality are a paradox? This research has addressed this dilemma. The following sections summarise the arguments and research findings presented in this thesis.

8.2. SUMMARY OF ARGUMENTS

The primary argument put forth to answer the research questions is that a path-dependent conceptualisation of urban green space drives delivery and management of these spaces, which then limits their ability to meet the demands of a 21st-century city. Instead of planning and managing a network of urban green spaces for contemporary needs, such as mitigation of climate change, healthy living or biodiversity protection, green spaces are grounded in the past, managed as isolated spaces and conceptualised as heritage assets rather than as vital pieces of modern urban infrastructure.

To understand what influences how contemporary urban green space is delivered and managed, one must look at how green space is conceptualised and how such a concept is constructed, including examining the context in which the Victorians began the public parks movement. One also needs to examine how green space factors into current planning strategies and policies. And, one must look at how evolving governance and funding schemes interact with – and, at times, conflict with – the path-dependent concept of green space.

8.2.1. View from the past: Heritage and institutions

This thesis lays out the case for the path dependency of London's urban green spaces, elaborating on how these spaces are directly connected to the past. I argue that a path-dependent approach to urban green space exists in London for three reasons: (1) the concept of urban green space has been institutionalised; (2)

heritage is a cultural and policy priority in England, with the countryside deeply embedded in English identity; and (3) the reasons for providing urban green space remain similar today to when the Victorians established public parks in the 1800s, even though the environment in which urban green spaces exist has changed.

First, the concept of what green space is, including how it should look and how it should be used, has been institutionalised. Indeed, "the weight of history is more or less heavy, but never absent, so paths are … very difficult to break out of" (Wilsford, 1994, p. 277). An entrenched concept of green space, established by the Victorians in the initial era of park building, is predicated on the idea of *rus in urbe* – or countryside in the city: green spaces in urban areas should embody the countryside, providing an antithesis to the dirty, crowded, unhealthy city (Gabriel, 2011; Brück, 2013). Deep anti-urbanism and a profound idealisation of the countryside provided the lens through which the Victorians responded to rapid industrialisation and urbanisation (Malchow, 1985). As such:

> The *rus in urbe* motif … virtually amounts to an anti-urban strategy which, although it was not a discovery of the Victorian age, was then carried to unprecedented, and revealing, extremes ... in their efforts at neutralizing what they considered as the fateful effects of urbanization (Hulin, 1979, p. 16, emphasis original).

Although largely established for the working class, public parks and green spaces provided all classes of Londoners with a metaphorical escape to the countryside. The intent is that by stepping into a green space in London, a person is transported away from the pollution, dirt and din of the city. In other words, the city is a place that needs escaping and, when this is not possible physically, this should be emulated as much as possible. This means green spaces are not conceptualised as *part* of the city, but rather as places to *escape* the city – they are conceptualised as the antithesis to the city.

Grounding the foundation of public green space in this romantic belief, the Victorians established a powerful concept for urban green space that remains deeply entrenched today. Even in the global city of London, urban green space is thought of as countryside brought into the city, not as part of the urban fabric. Hulin remarks on the continuing influence of countryside: "Though most of them now live in highly

urbanized areas, the British … still like to ignore the fact and think of their country as a heaven of lush meadows, thatched cottages, country gardens, village churches and roadside inns" (1979, p. 11). This became evident during my research interviews, with respondents describing the purpose of London's urban green spaces as "to encapsulate the countryside" (respondent 35, green space staff, Tower Hamlets). This approach is not subconscious or even subtle. Fences and iron gates surrounding many of Inner London's green spaces – both private and public – convey that these spaces are distinct from the rest of the city. Adverts and posters promoting the capital's green spaces as a way to "enjoy the countryside without leaving London" further embed this idea (TfL, 2014).

The conceptualisation of urban green space matters because it sets the parameters and guides not just how urban green spaces are delivered and managed, but expectations about urban green space, as well. This, then, leads to a self-reinforcing cycle: urban green space is delivered and managed in a particular way, which conditions users' and residents' expectations. For example, Wandsworth Council requires frequent grass-cutting and maintenance in its parks and green spaces because residents would think the council was not doing its job if they saw wild growth in the borough's green spaces (respondent 19, green space staff, Wandsworth). Council staff have a perceived idea of how a green space should be managed and maintained and assume local residents expect this, too. Yet, it is possible that, by frequently mowing, the council has conditioned residents to expect a more manicured approach to green space maintenance.

The endurance of the conceptualisation of urban green space embodies definitions of institutions: the "rules of the game," "humanly devised constraints that shape human interaction," "enduring rules for making decisions," and the norms, customs, values and ways of doing things that influence and inform decision making and behaviour and dictate the objectives and range of acceptable tactics or moves (North, 1990, p. 3; Clarke, 1995; O'Riordan and Jordan, 1999; Baumgartner and Jones, 2002, p. 24; Lowndes, 2001; 2005; Steinmo, 2001). Just as the Victorians humanly devised their green space as an antidote to the disease-ridden, morally corruptive city, the idea of escaping the city continues to shape how urban green space is delivered and managed in London today.

Second, heritage is a cultural and policy priority in England, with urban green spaces tightly woven into English culture and identity. The importance of heritage to the English is well established and this extends to landscapes (Fitter, 1946; Howkins, 2003; Swanwick, Dunnett and Woolley, 2003; Clark, 2004; Clark, 2006). Indeed, rural landscapes often serve as symbols of Britain (Mischi, 2009). Strong planning policies and special designations, such as listed landscapes and gardens, protect heritage landscapes from being destroyed or affected by development. Thus, urban green space is more protected as a heritage asset than as an environmental one.

The significance of heritage in planning can be seen in the national statutory consultees. Of the 27 consultees, two – Historic England and the Gardens Trust – are concerned with landscapes that have heritage value. No other statutory consultee has an interest in contemporary urban green space for non-heritage reasons. Sport England, also a statutory consultee, is consulted when development could affect playing fields. Natural England, advisor to the government on the natural environment, rarely comments on issues of a local matter. This underscores the role of London's urban green spaces as conduits to the past rather than as infrastructure to address present and future needs. By adhering to a traditional idea, green space providers, namely local councils, create an inflexible approach to green space delivery and management that limits the ability of urban green spaces to adapt to changing needs, demands and demographics. As such, London is addressing 21st-century challenges with a 19th-century solution.

This was evident in Victoria Park, where Tower Hamlets Council undertook a £10 million regeneration, yet focused on restoring heritage features – and installing structures the Victorians imagined, but never built – instead of putting in structures that meet contemporary uses and demands, such as playgrounds, toilets and flood protection. The heritage focus stemmed, in part, from the council's decision to pursue funding from the Heritage Lottery Fund. Meanwhile, in Wandsworth, the council considered using its entire annual tree budget on planting a row of trees across the expansive Wandsworth Park, instead of locations across the borough, because the row of trees appeared on the Grade II-listed park's original plans, although they actually were never planted. Today, Wandsworth has high levels of pollution and street trees are a proven green-infrastructure tool to help reduce pollution (see Figure 8.1). A focus on the past, at the expense of contemporary needs, illustrates heritage's powerful influence.

Figure 8.1 – **Street trees:** Street trees provide shade, contribute to urban cooling and filter air pollution, but are not considered urban green space (source: author).

While not all of London's green spaces have heritage value, many do, particularly flagship parks and green spaces, such as Victoria Park in Tower Hamlets and Battersea Park in Wandsworth, which tend to be more historic and consume much of a council's resources – including their publicity efforts – than smaller spaces. Thus, flagship spaces influence management of other green spaces. Yet, even smaller spaces, such as Spa Fields in Islington and Bethnal Green Gardens in Tower Hamlets, are noted for their heritage, as many of these spaces are connected to London's or Britain's history, or were inherited from previous centuries when they formed part of royal lands and hunting grounds, private estates, church land, or commons.

Finally, the justifications for providing urban green space in contemporary London mirror those of Victorian England, further contributing to green space's limited ability to respond to changing planning challenges. The reasons for establishing public parks and green spaces predominantly emerged from health concerns (Brück, 2013). Green spaces "helped to cleanse cities by opening them to purifying sunlight and air" (Malchow, 1985, p. 99). Improving the moral behaviour of the working class also was a driving force behind providing public green spaces, and efforts to encourage "polite" forms of behaviour, such as walking, were designed into these spaces (Brück, 2013). Related to this was an interest in leisure, spurred in part by legislative changes relating to limits on work hours, the introduction of bank holidays, increasing real wages and decreasing costs of travel by rail (Malchow, 1985). The rise of new athleticism in the 19th century and the influence of the National Playing Fields Association (now Fields in Trust) in the early 20th century further entrenched recreation and leisure as a primary purpose of public urban green space.

Today, urban green space is provided largely for the same reasons, with a focus on amenity, leisure and recreation. Indeed, the provision of recreation and leisure facilities consumes much of local councils' green space resources. The National Planning Policy Framework discusses protection of open space, stating that "access to high-quality open spaces and opportunities for sport and recreation can make an important contribution to the health and well-being of communities" (DCLG, 2012, p. 18). Similar statements are found in local authorities' core strategies and other planning documents.

Today, the health benefit that stems from urban green space is one of the most prominent policy reasons for providing these spaces, as well as one of the most researched issues regarding green spaces in urban areas (Maas et al., 2006; Lee and Maheswaran, 2010). Although council planning strategies refer to multifunctional use of green spaces, in practice, traditional uses dominate. Conceptualising urban green space as green infrastructure, with more contemporary uses, such as air and water filtration, flood control and urban agriculture, does not feature as prominently.

8.2.2. View at the present: Planning

Local authorities and others involved in delivering and managing London's urban green spaces have established definitions, built processes and policies, set standards and targets, and developed education programmes, award schemes and

funding streams that hold urban green spaces frozen in time. As such, contemporary planning policies, procedures and practices limit urban green spaces' ability to be considered critical scaffolding in urban development. No definition – or, at least, no consistent definition – of green space exists, enabling green space to be all things to all people. Perceptions of green space vary and are shaped by an individual's or an organisation's specific interest in these spaces. What results, then, is an assumption that when we talk about green space, there is a shared meaning. Thus, although green space is "an innocuous symbol," green space also is an empty signifier (Cranz, 1982, p. ix).

Conflating green space and open space, as the Greater London Authority and most local councils do, highlights the "emptiness" of the concept and obfuscates the work green spaces do – or could be doing – for the city. Some types of open space, such as paved plazas, hard-court sports pitches and other impermeable surfaces, actually contribute to global warming. Conversely, green spaces, through functions such as air and water filtration, help mitigate the impacts of climate change. Conflating the two concepts in a broad category of open space calls into question whether contemporary green spaces are being managed to reap environmental benefits, as local councils' core strategies and planning documents claim.

Categorisations of green space constrain the ability of these spaces to meet modern demands, particularly in the denser Inner London boroughs, such as the three examined in this research. For example, urban green space and housing amenity space are delivered and managed separately despite having overlapping benefits and needs. Both provide opportunities for reducing stress, fostering biodiversity and enabling food growing, yet, despite this, most housing amenity spaces do not factor into local authorities' green space targets and the two are not seen as having similar roles. They are not conceptualised as part of an interconnected system and this has ramifications for planning.

For example, a resident could live at a housing estate surrounded by green amenity space, but more than 400 metres from the nearest designated local park, which may be smaller than the housing amenity space. In this situation, the resident would be deemed deficient in access to nature despite literally having nature at their doorstep. The local council's planning policies would call for efforts to address this deficiency by creating new green space near the resident even though the housing estate has

a sizeable, accessible green space that provides many of the very benefits councils give as the reasons they provide green space. This has implications for planning in places such as Islington, where more housing estate green space exists than designated public parks and green space. The difference in categorisation could skew planning decisions and take resources from providing green space for a resident who is truly deficient in access to public open space and nature. Islington could double the amount of green space that could be managed with a green infrastructure approach simply by changing its designations. As such, segregating parks and green spaces from housing amenity spaces hampers councils' ability to strategically address contemporary challenges and distorts green space planning efforts.

Local authorities obscure the difficulty in providing green space for an increasing and changing population by setting "unattainable" targets and standards using the broader concept of "open space" (respondent 2, senior staff, regional charity). Yet, as established above, open space and green space are different concepts, with often-conflicting impacts on and benefits to the urban environment. While acknowledging that targets for no net loss of open space and for a specific amount of open space per capita – standards most councils have established – are unrealistic, respondents said these targets are symbolic and acknowledge the importance councils place on providing open space across their boroughs.

Yet, these symbolic targets represent a concept of green space that does not recognise current research regarding urban nature. For example, these targets do not include green walls or green roofs, both of which help mitigate the impact of climate change, promote biodiversity, and provide an opportunity for quiet reflection and improved well-being, among other benefits. Such modern configurations of green space, conceptualised as green infrastructure, do not match the 19th-century idea of green space that permeates contemporary green space planning and management (see Hall, 1973; Harrison and Clifford, 2016). Thus, green roofs, green walls and other green infrastructure, such as street trees, do not factor into a council's planning standards and targets. Ultimately, the standards that exist measure access to traditional green space for traditional uses. This does not reflect changing demands in the context of modern-day London or a changing awareness of the role of green infrastructure in addressing contemporary urban problems.

Further, standards and targets emphasise green space size, putting quantity over quality. Local authorities focus their resources on larger, often flagship, spaces. Yet, research shows "nature at the doorstep" matters most for urban dwellers (Kaplan 1984, p. 189; Burgess, Harrison and Limb, 1988; Van Herzele and Wiedemann, 2003). The most common reason why an urban resident visits an informal green space instead of a more formal, traditional space is because of proximity to their home (Rupprecht et al., 2015). Additionally, creating new urban green space in Inner London is difficult. Opportunities to establish smaller, more informal and less traditional spaces are more likely, although this can be a challenge, as well, as London continues to urbanise. For example, in Islington, the densest borough in England, respondents said opportunities to create new green spaces are almost non-existent (respondent 28, planner; respondent 44, green space staff).

Funding also affects the concept of urban green space. Although benefits of urban green space, such as increased biodiversity, cleaner air and mitigation of climate change, accrue to society at large, "the majority of maintenance comes from this tiny little amenity budget in the local authority" (respondent 46, senior staff, national charity). As the largest funder of parks and green spaces other than local government, HLF has restored green spaces throughout Britain that had fallen into disrepair. Councils' dependence on outside funding increased in recent years, as growing demand on council services and austerity cuts introduced in 2010 led to reduced local authority budgets, with the deepest cuts occurring in discretionary services, including green spaces. Although HLF has invested heavily in Britain's green spaces, the organisation's focus – as the name implies – is on *heritage.* HLF, which has been criticised "for having too narrow a view of heritage," was never intended to replace council funding for urban green spaces in general (Harding, 1999; Clark, 2004, p. 67). Yet, this is largely what has happened, with HLF investing more than £700 million over a 20-year period (HLF, 2014b). Thus, by local councils increasingly turning to a heritage-based organisation to fund capital investment in urban green space, modern needs and preferences are overlooked (respondents 36, 37 and 38, green space staff, Tower Hamlets).

Awards schemes, most notably the Green Flag Award, further influence a traditional concept of urban green space. The Green Flag Award has become "the benchmark standard" for green space management across the UK (GFA, 2018). Yet, it is larger or more formal spaces that tend to be designated with Green Flag status. Attaining

Green Flag status is required for receiving HLF funding, intertwining heritage with the award (respondent 23, senior staff, regional charity). Respondent 31 (green space staff, Islington) said this could influence decision making: "If we're required to have a Green Flag to get £2 million [in funding], I'm sure even our politicians would say, 'Go and get a Green Flag.'"

Local councils, thus, find themselves in a bind: they need the funding that HLF offers in order to deliver – and even save – their green spaces, and they want the recognition and validation that awards bring. But, they also need to provide a diverse network of urban green spaces that meets the demands of present-day residents and that enables development to contribute to the long-term sustainability of London. With planning policies that stipulate a responsibility to make development decisions with future generations in mind, the tension is palpable.

8.2.3. View to the future: Governance

Providing green space is not a statutory requirement, a point mentioned repeatedly by respondents. This also was raised during the 2016 parliamentary inquiry into Britain's public parks, which focused on how a sustainable future for parks can be secured. Although the literature says urban green space is rising up the policy agenda, delivering and managing urban green spaces is not seen as a core council function (Rutt and Gulsrud, 2016). Respondents across all three boroughs pointed to green spaces' popularity with residents as a key driver for continuing to devote council resources to providing these non-statutory spaces.

Despite not being statutorily prescribed themselves, though, green spaces are connected to council responsibilities that *are* statutory, such as health, education and biodiversity. Still, green space budgets are among the first things cut during financial crises or periods of austerity. While it is convenient to blame budget cuts for challenges with green space funding, demands on other local authority services – namely, adult and child social care, which are statutory – have been increasing and consuming a larger share of councils' budgets, leaving fewer resources for green space delivery and management. This further illustrates a tension surrounding urban green spaces: these spaces are desired by a wide cross-section of Londoners and they are proven to benefit the economy, the environment and communities, but because they are conceptualised as optional amenities, not essential infrastructure,

they do not factor in discussions and strategies about the very statutory services they support.

Demands on local authority budgets will only continue to rise, particularly as population, demographic and urban change continues. The population of London, already at its highest ever, is projected to grow to 10 million by 2030 (GLA, 2016d). London's over-65 population is projected to grow by 21 percent over the next decade, while the school-age population is set for 12 percent growth over the same period (London Councils, 2013). Spending on adult and child social care, by far the largest expenditure in London councils' budgets, comprised 62 percent of London councils' budgets in 2017-18, compared to 54 percent in 2010-11 (Centre for London, 2018).

Rising populations and planning policies that require compact development will further put pressure on Inner London's urban green spaces, as more people live in homes without gardens or amenity space and, thus, turn to publicly accessible green spaces. With local authorities increasingly unable to take on management of new green spaces or, in some cases, manage their existing spaces, the amount of green space per capita will decline. This already is evident in the three boroughs researched here, such as Tower Hamlets' declining green space per capita figures, the reduction in size of a planned new green space in Wandsworth before construction even began, and fewer Londoners living within 400 metres of a small public green space, the planning standard specified in the London Plan.

The pressure stemming from increasing demands for council services and decreasing council budgets is leading to a change in the governance of London's urban green spaces. Local councils increasingly devote their time, resources and attention to larger spaces, as these have the most potential for commercialisation and income generation, which is becoming more critical in council green space strategies (Conway, 1991; APSE, 2016a). With less attention on smaller and more informal spaces, community groups and other organisations are taking on a larger role in managing these spaces (HLF, 2014a; Dempsey, Burton and Selin, 2016). While a more collaborative approach fits well with the concept of green infrastructure, the evolving governance of London's green spaces runs the danger of exacerbating a traditional approach to green space management. Local authorities are best positioned to look at their systems of urban green space strategically across the

borough. Local community groups and friends-of-the-park organisations, however, typically focus on a single green space or a single issue within a space, which makes planning for interconnectivity less likely (respondent 23, senior staff, national charity). Sustainability issues, such as mitigation of climate change, require a more strategic approach, and a local authority will have this perspective.

Yet, the dynamic changes occurring around London's green spaces – changes in awareness of green spaces' role in environmental issues, changes in population, demographics and lifestyles, and changes in funding and governance – may provide the necessary push – or "conjunctures" – to reconceptualise urban green space (Wilsford, 1994, p. 252). Each change is significant, but individually they likely will not be enough to challenge the existing path dependency. Indeed, Clifford and Tewdwr-Jones caution that although "particular moments can generate relentless pressure for change, how much this activity sediments down to deeper levels and becomes institutionalised into future governance culture is hard to tell" (2014, p. 242). However, collectively, these dynamic changes – these multiple "moments" – may be forceful enough to challenge the path dependency and the institutional concept of urban green space that has persevered for nearly two centuries.

As with "critical junctures" that can lead to new institutional arrangements, individuals have capacity and agency to effect change (Sorenson, 2015). Institutions are not straight-jackets nor are they "one-way" relationships (Clifford and Tewdwr-Jones, 2014, p. 77). New institutionalism maintains that structure does not fully determine behaviour, but rather behaviour can determine or reinforce structure. Thus, actors may be shaped by their institutional heritage, but they also contribute to shaping it (Clifford and Tewdwr-Jones, 2014).

Individuals have the ability or "power in the sense of transformative capacity" to initiate change in institutions and to "make a difference" (Giddens, 1984, pp. 14-15; Yates, 1997). Yet, "the important role of individual personalities" often is overlooked (Clifford and Tewdwr-Jones, 2014, p. 76). Individuals have the agency to be "visionaries," and such "critical individuals" play a crucial role in institutional change (Scott, 2010, p. 12). By behaving in a different way than institutions predict – to "act otherwise" – a visionary's behaviour can supersede those institutions and lead to a change in institutional structure (Yates, 1997; Giddens, 1984, p. 14; Scott, 2010; also see Clifford and Tewdwr-Jones, 2014).

For example, a council green space manager could decide to no longer prioritise applying for HLF and heritage-based funding and instead focus on grants for contemporary urban-greening uses, such as biodiversity or air filtration. Such a

Figure 8.2 – **Growing London:** As London continues to urbanise, urban green spaces will need to be conceptualised as part of a strategic system of green infrastructure for the city to address economic, environmental and social challenges (source: author).

decision could lead to a shift in the way the council approaches, funds and, ultimately, conceptualises urban green space. Further, by expanding green space governance, the capacity for agency – for individuals and organisations to challenge institutional processes – expands, as well, with a wider pool of potential visionaries working from outside the council organisational structure (see Chapter 7, Governance). The potential success of visionaries to change behaviour and effect institutional change could be heightened when coupled with critical junctures.

The rise of the concept of green infrastructure provides an opportunity to consider green space as critical infrastructure on par with roads and utilities that differs from the traditional conversation about green space as an amenity or "where you do football" (respondent 2, senior staff, regional charity). This shift is made more urgent by the heightened awareness of climate change and its threat to London's economic, environmental and social vitality. With 47 percent of London considered green, it will be hard to ignore the contribution such a significant asset can make to local, regional and sustainability goals – but, to truly realise this contribution, green space will need to be reconceptualised.

Changes in population, demographics and lifestyles also can provide an impetus for a changing conceptualisation of green space. In the 1980s, after several decades of shedding population and experiencing economic decline, London began to resurge and today the pace of the capital's growth and change "has stepped up significantly" (Imrie, Lees and Raco, 2009, p. 3). Changing lifestyles and increasing life expectancies also have contributed to a changing London (Urban Task Force, 1999). Issues such as quality of life have a resonance today that differ from 200 years ago. This is demonstrated by a cultural expectation of access to nature, the role that proximity to natural areas plays in interurban competition and economic development, and planning conditions that require amenity space and urban greening as part of new development. London's continued urbanisation affects the city's economy, environment and society, all of which, in turn, affect urban green space. As the city continues to experience growth, change and churn, this may drive the conceptualisation of green space to change, as well. Islington, the densest borough in the country, offers a glimpse of this possibility. Respondent 44 (green space staff, Islington) called, Islington "the canary in the coal mine." Respondent 44 continued:

I think what will give is, at some point, the density of the population will get so great and, in tandem with that, someone will work out the value of parks and green spaces and there will be an awakening of, well, actually, we can't lose this. We can't let these spaces just fester. We need to make them fit for purpose to make sure people have a good and healthy life.

Funding has contributed to the current pressure on London's green spaces (LAEC, 2016). Austerity measures coupled with rising demand on local authority budgets from statutory services have left local authorities unable to continue providing green space at previous levels. Thus, councils turn to building and expanding partnerships with user groups, community organisations, charities and private businesses to deliver and manage green space, leading to an evolving governance. While some organisations advocate maintaining a traditional purpose and design for London's urban green spaces, others have a different approach. For example, respondent 10 (users group, Wandsworth) supported a lower-maintenance horticultural approach in a small green space in Wandsworth and suggested the space could provide the opportunity for urban agriculture, as residents become more aware of the benefits of locally grown food. Such changes in "deeper frames of reference and cultural practices" are critical for transforming governance and breaking path dependency (Clifford and Tewdwr-Jones, 2014, p. 80).

The existing focus is on urban green space as a heritage asset separate from the city, and the value these urban green spaces have and the reasons for protecting them lie in their links to the past. Focusing on the spaces as cosmetic afterthoughts frozen in time instead of as dynamic, changing infrastructure that can do an immense amount of critical work for the city wastes a valuable resource that already exists in cities across the world. This is not to say that protecting heritage, including heritage landscapes, is not important or that people do not need a break from the urban cacophony. Rather, urban green space should be conceptualised as part of the solution for providing statutory services and addressing contemporary problems. With green infrastructure, "'the 'park' is transformed from a passive setting for recreation to a working landscape" (Rosenberg, 1996, p. 102). The concept of urban green space must be more flexible if London is to meet current and future challenges. This flexibility is significant for urban planning because it shapes and constrains how London's urban green spaces are able to grow and change as the city's needs

evolve. Without this flexibility, London misses a valuable opportunity to meet current and future economic, environmental and social challenges.

As cities, such as London, grow both in population and population density, the need for the benefits – particularly the environmental benefits – of urban green space will grow, as well (see Figure 8.2). Rigidly holding onto vestiges from the past will not be enough. Planning for urban green space in places like Poplar, Clerkenwell and Balham will be unsuccessful if the goal is simply to mirror the countryside so romanticised by the Victorians. Conceptualising *urban* green space as detached from the city – as the antithesis of urban life – limits what we ask of these spaces and what we need from them in an urban context. In modern London, urban green spaces must be more than an opportunity to escape the growing city. They must be part of the city itself, contributing to 21st-century London.

8.3. CONTRIBUTION OF THE RESEARCH

Interest in urban green space as a research topic has increased in recent years (Swanwick, Dunnett and Woolley, 2003; Pincetl and Gearin, 2005; James et al., 2009; Tappert, Klöti and Drilling, 2018). The literature typically discusses green spaces in terms of their positive benefits, particularly in urban areas, where they have been proven to enhance the economic, environmental and social resilience of cities (Thompson, 2002; Swanwick, Dunnett and Woolley, 2003; Pincetl and Gearin, 2005).

While not silent on the subject of the downsides of urban green spaces, the literature says little critical about these spaces. Issues such as lack of or unequal access to green space, antisocial behaviour and crime, and lack of funding are the most prominently discussed negative issues. However, these criticisms are not of green space itself, but rather management, policies or other exogenous factors; green space remains something positive that people want more of – it just needs to be more equitably supplied, better managed and more robustly funded. Yet, as urban geography and planning research increasingly connect urban form to urban sustainability, the literature has become more prolific on the tension between increasing urbanisation and urban green space provision (Haaland and van den Bosch, 2015). This parallels practical perspectives on green space, with political, community and media attention heralding threats to green space.

Whether discussing positive attributes of urban green space or negative aspects associated with these spaces, existing research does little to challenge the concept of urban green space (Young, 2010). Instead, it starts from an assumed idea of what constitutes green space, including green space in an urban context. Existing work typically focuses on a specific benefit, such as physical health, mental well-being, housing prices or social cohesion. It does not step back and start its examination by identifying how green space is conceptualised, especially in an urban setting. In doing so, there is a missed opportunity to connect cultural and policy priorities inherited from the past with limitations for reaping benefits from urban green space in the present and the future. As such, little analysis exists on whether the green spaces that exist continue to be fit for purpose. In other words, most existing work overlooks the cultural-, policy- and heritage-based forces that limit green spaces in a contemporary urban setting. My research bridges this gap.

My work contributes to theoretical concepts of new institutionalism and green infrastructure. First, new institutionalism has been little applied to issues of sustainability. Yet, it offers a link with history that helps explain the limitations of green space planning today. Second, green infrastructure is still relatively new as a theoretical framework. As such, little work exists on how the conceptualisation of green space fits with the concept of green infrastructure, given constraints placed on green space by institutions. Simply identifying green space as green and, therefore, connected to green infrastructure does not provide ample depth. Instead, it is necessary to examine how green spaces are theoretically and practically brought into the fold of green infrastructure. Ultimately, my research proposes a new way of theorising green space, as an asset whose future is greatly entangled with its past.

Further, despite the increase in research on cities, including urban green space, green spaces and urban areas are still seen "as opposing realms" (Gabriel, 2011, p. 131). Taylor notes that published works on landscape "lionise rural settings," while fewer papers address the urban landscape, "its realities and its meanings and how these may change over time" (2016, p. 478). As such, there have been "missed research opportunities" (2016, p. 478). This work has addressed these missed opportunities by empirically demonstrating the impact the concept of urban green space has on the practical delivery and management of these spaces.

With their extensive list of economic, environmental and social benefits, green spaces are portrayed as a prominent planning tool for addressing urban sustainability. By not challenging how urban green space is conceptualised, we limit how we research this planning tool, particularly amidst dynamic urban change. The way we research green space begins with a narrower perspective than if we, instead, start with a broader question of "what do we mean by urban green space?" Rigidly thinking about "parks" instead of acknowledging their connection to a wider system of green infrastructure can limit research. Thus, we miss opportunities to further our understanding of the challenges and opportunities inherent in how to provide and manage multifunctional, interconnected urban green spaces in the contemporary era.

My research addresses this fundamental point. I address the paradox of discussing urban green space as a panacea to urban problems with an expanding list of benefits, yet in practice providing it as an optional, ornamental amenity. In doing so, I identify influences on urban green space delivery and management and analyse how these influences affect the ability of green space, in practice, to achieve the myriad benefits that research says they can. As such, this thesis argues that to truly realise the broad-ranging benefits urban green spaces can provide for the economy, the environment and society, these urban spaces must be allowed to grow and change – both in practice and conceptually – as the city around them grows and changes, as well.

8.4. LIMITATIONS OF THE RESEARCH

Setting out to do green space research involved more than simply visiting parks. The growing profile of urban green space, in research and in practice, touches on issues such as health, recreation, the economy and ecosystem services. Thus, casting a wide net was necessary. Yet, for the purpose of a PhD, looking too broadly can be a detriment and can risk providing too shallow an examination of a topic to contribute anything useful. Given this, I had to make choices about my research.

For example, I chose to narrow my focus to publicly accessible green spaces, even though private gardens and green spaces contribute to many of the same goals as public green spaces, as discussed in Section 6.3.4. Privately provided green infrastructure also is critical to an interconnected, multifunctional system of green

space. Further, as much as I enjoy talking about green space, I could not conduct an infinite number of interviews. Thus, I opted not to focus on individual green space users, although they could provide a rich source of data. Even after I narrowed my case study from multiple cities to solely London, I still chose to look exclusively at Inner London. Thus, the story that emerged from my research may not reflect London as a whole.

My research occurred during a period of austerity. At first, this seemed destined to overshadow other green space-related issues to the point that I worried my thesis would be only about funding. Indeed, from the first interview I scheduled, with a council green space manager who was subsequently affected by austerity-related staffing changes, my work was affected by budget cuts. Additionally, just as London is constantly evolving as a city, so, too, are organisations. During my research, some of the organisations, including local councils, I relied on were changing. For example, after I collected my data, Wandsworth changed the structure of its green space service, with it and other cultural services becoming a staff mutual instead of council employees. And, Wandsworth and the London borough of Richmond-upon-Thames entered into an agreement to share a single staffing structure across the two boroughs beginning in 2016. Such changes continue even as I conclude my thesis, with the mayor of London set to appoint a time-limited London Green Spaces Commission in spring 2019.

8.5. WHY LONDON?

London offers a rich laboratory in which to conduct research on publicly accessible urban green space. The British capital is a world city that is wrestling with accommodating future growth, staying globally competitive, reducing its environmental impact and improving the quality of life for its more than 8.6 million residents (GLA, 2011a). Unsustainable growth and development and the impacts of climate change have been called the greatest threats to London's prosperity (LAEC, 2016). In an effort to become a more competitive, sustainable city, London's leaders have promoted planning policies that improve London's sustainability and resilience through compact, multicentred, multiuse development (GLA, 2011a). Key to achieving this is high-density residential development throughout London, particularly in Inner London, where demand for scarce land and affordable housing is fierce (Bowie, 2010; GLA, 2011a). At the same time, protecting London's existing

green spaces, as well as creating new ones, is one of the mayor's objectives outlined in the London Plan (GLA, 2011a). Proclaiming that green spaces "contribute to a high-quality public realm," the London Plan specifies that London's "unique resources of green and open spaces must be defended and improved" (GLA, 2011a, p. 215, 5).

But, the attention on London's green spaces goes beyond "public realm." Recognising the role green space can play in sustainable development, the Greater London Authority as well as London's local authorities have increasingly turned to the concept of green infrastructure in recent years. The mayor of London defines green infrastructure as "a network of green spaces – and features such as street trees and green roofs – that is planned, designed and managed to provide a range of benefits" (GLA, 2018d). In the executive summary of its report, the mayor-appointed Green Infrastructure Task Force writes that "the concept of green infrastructure provides a stronger justification for the protection and management of the city's green spaces. It argues that the purpose of individual spaces – and the network as a whole – must be designed and managed to address current and future urban challenges, *rather than simply reflect their historic design and use*" (GLA, 2015, p. 5; emphasis added). Thus, when conceptualised as green infrastructure, green spaces are given a more vital purpose – one on par with other infrastructure considered essential, such as roads, electricity and water.

London also makes a good case study because of the prominence green spaces hold in English culture and history (Fitter, 1946; Howkins, 2003; Swanwick, Dunnett and Woolley, 2003; Clark, 2006). Victoria Park, in the East London borough of Tower Hamlets, was one of the first public parks provided n the Victorian parks movement of the 19th century. Since the Victorian era, London residents have turned to the green "lungs of London" as a respite from increasing urban populations, density and growth (Reeder, 2006b, p. 42). Today, with 47 percent of London considered green, green space remains part of the city's character and identity (GiGL, 2015a). Many of London's green spaces were inherited from a previous era and this legacy has ramifications for how urban green space in London today is delivered and managed and – importantly – how it is conceptualised. For example, an increase in value on land surrounding large green spaces had been a focus during the Victorian era and, because "the creation of small open spaces, by contrast, did not result in significant

changes in the value of the surrounding residential land," the focus of park-building remained on larger spaces (Conway, 1991, p. 220).

Specifically, this research is grounded in Inner London. This is because the boroughs in Inner London have higher residential densities than those in Outer London (GLA, 2011b). As explained in Chapter 3 (Methodology), the three London boroughs used as case studies – Islington, Tower Hamlets and Wandsworth – were chosen based on their population density and net gain in housing units. In other words, they are dense boroughs that are getting denser. While Outer London is experiencing increasing population, the 20 Outer London boroughs remain less dense than the 13 Inner London boroughs. Further, Inner London has less green space than Outer London (GLA, 2017a). Indeed, some Outer London boroughs, such as Bexley, have sold green space, claiming an excess (Davey, 2012; Bexley Council, 2017). Park usage is also higher among those living in urban areas than those living in rural areas, with 61 percent compared to 51 percent using their parks at least once a month (HLF, 2016). With more people and fewer green spaces, Inner London continues to acutely feel pressure on its green spaces. Still, challenges faced in Inner London may increasingly apply to the Outer London boroughs, especially as these boroughs experience fast-paced population growth and change. The lessons learned in Inner London can help to influence the design, delivery and management of new green spaces, including those in Outer London, so their benefits are maximised without the constraint of the current conceptualisation of urban green space.

8.6. IMPLICATIONS FOR POLICY DISCOURSE AND PRACTICE

This research raises implications for policy and practice. While by no means an exhaustive list of changes that could lead to the reconceptualisation of urban green space, the recommendations discussed here provide an opportunity to rethink what green space is, how it is used and how it could be managed to provide enhanced benefits to the 21st-century city.

As discussed in Chapter 5 (Heritage), none of the government's 27 statutory consultees on planning applications has a broad purview of ensuring green spaces meet contemporary demands, particularly in urban areas. Instead, green space-related consultees are focused on heritage. Other consultees have a concern for the

environment, but do not focus on urban green space within that remit. As such, green space is considered a local mater, whereas heritage is a national concern. Thus, a statutory consultee is needed to provide guidance and advice on development's potential impact on urban green spaces' role as critical green infrastructure. In other words, a statutory consultee should exist that takes a multifunctional, interconnected and forward-looking approach to green space.

Scope may exist to leverage the London National Park City campaign, which launches in 2019 and is supported by London's mayor, into a statutory consultee or advisory organisation. The impact of designating London a "national park city" is unclear; due to legislative limitations, the campaign does not advocate formally designating London as a national park or establishing a London National Park Authority, which would have to be consulted on development proposals likely to affect land in a designated national park (Town and Country Planning Act, 2015). Instead, the campaign is clear that "the London National Park City does not have a traditional single top-down authority" (LNPC, 2015b). However, the potential to use the concept as more than an awareness campaign, and instead to advocate for London's green spaces at a strategic level should be explored.

The emergence of the London National Park City campaign coupled with the London Green Spaces Commission, which the mayor of London will appoint in early 2019 for a limited 18-month period, speaks to the need for a regional, pan-London and strategic perspective on urban green space. The lack of such a broader perspective contributes to limiting the conceptualisation of urban green space as part of a larger, interconnected system beyond borough and neighbourhood boundaries and maintains urban green space as solely a local issue. Examples of cross-jurisdictional collaboration, such as the All London Green Grid, do exist and these could inform the establishment of a more strategic perspective on London's green spaces.

Although a more strategic perspective on urban green space is needed, policy, planning and practice changes at the local level also could be made. This is important given that the vast majority of urban green spaces will continue to be provided by local authorities. Thus, reconceptualising green space at the local level is vital. Local authorities' open space strategies provide a good analysis of public realm and open space within a borough, but, as discussed in Chapter 6 (Planning), these strategies typically conflate open space and green space. This can obfuscate

the work a borough's green spaces could be doing to meet more contemporary demands. It also fails to acknowledge that impermeable space may actually conflict with the goals of urban greening, such as urban cooling. Thus, a green space strategy that demonstrates how green infrastructure, such as urban parks, street trees and green walls, form a system of urban greening that contributes to broader environmental goals, such as climate change adaptation and mitigation, is needed. This would involve revising definitions and perspectives on what constitutes green space. For example, green roofs would fit into this strategy.

Green space should also be incorporated into council strategies, such as local plans and development strategies or health strategies, as critical infrastructure, in the same way that transport and utilities are. Maintaining a separate open-space strategy continues to conceptualise green space as separate from other council services, namely statutory services. This contributes to maintaining a silo approach and considering green space as an afterthought.

Conceptualising green space – what form it takes, what its purpose is, how it is used – more broadly also could lead to wider potential funding sources. Instead of focusing narrowly on heritage and amenity and, thus, limiting green space funding to grants related to these areas, thinking of green space as critical green infrastructure vital to other council services could open the door to other funding sources, such as those related to public health, transport or utilities. Should local authorities want to pursue recognition from award organisations, the types of awards for which they are eligible would expand, too.

A change in definitions of urban green space and delineation of green space versus open space would have an impact on existing standards and targets. As such, local authorities should rethink the value these standards contribute to planning and policy objectives, as well as how they are measured. Given that in their current form these standards are unlikely to be met (see Chapter 6, Planning), the value they add and their purpose should be assessed and replaced with standards that more accurately reflect the multifunctional and interconnected benefits of green infrastructure. For example, if considering access to nature for quiet reflection, well-being or biodiversity, green roofs and green walls should be included, as they contribute to these goals.

The role that private green space plays in green infrastructure also should be reflected on. Similarly, local authorities should rethink how they provide amenity space: What is this space for? What contribution does it, or could it, make to an interconnected system of green infrastructure? Should it be managed differently to achieve broader goals, such as those related to climate change mitigation? This would need to be sensitively done – installing a green gym on a small amenity space or putting play equipment under a resident's window may not be the best use of the space. But, conceptualising these spaces as part of a larger borough-wide and London-wide system should guide how they are managed.

Although these recommendations are for policy and practice, they have implications for future research, as well. This is discussed in the following section.

8.7. IMPLICATIONS FOR FUTURE RESEARCH

As mentioned in Section 8.1, research on urban green space is increasing, driven largely by a focus on urban studies and an awareness of issues related to urban sustainability and climate change. And, as mentioned in Section 8.4, concentrating on all green space-related issues is simply not possible in one research project given the vastness and complexity of urban green space. Thus, opportunities for future research are abundant. Given this, I will limit my suggestions to two areas.

As discussed in Chapter 7, an evolving governance will play an increasing role in green space delivery and management. This thesis discusses the role of community organisations and user groups, such as friends-of-the-park groups. Indeed, nine interview respondents represented user groups across the three boroughs. The benefits and drawbacks to local authorities increasingly relying on such community volunteer organisations is one area that needs more research. While some organisations are willing to take on more responsibility for green spaces, this cannot come at the expense of ensuring these spaces are managed for a diverse array of users. Further, relying on other partners to deliver and manage green spaces cannot cause a local authority to abdicate its responsibility for strategic planning, including strategic green space planning, especially at a time when the broader benefits of urban green space are becoming more understood. Thus, future research should look at the balance of the relationships, roles and responsibilities surrounding urban green space governance and how this affects urban sustainability and resilience.

Second, cities face different challenges than suburban and rural areas. For example, urban areas are particularly susceptible to climate change (Fryd, Pauleit and Bühler, 2011). Urban green spaces differ in their individual size, overall amount and use. Thus, research must continue to explore *urban* green spaces. In doing so, context should be considered, as local and informal institutions matter. Comparative research that goes beyond London and Britain would be insightful. For example, comparative research could examine how the relationship between national planning policies and local interpretation of those policies, filtered through informal institutions, affects the delivery and management of urban green space across different cities. Lessons about what has worked, and what has not worked, for addressing climate change through including urban green space in a green infrastructure approach should be an aim of such research.

Density's role in the delivery and management of urban green spaces will continue to be key, as urbanisation across the world continues. Thus, comparative international research regarding how density affects the conceptualisation of green space and the practical provision of it would be revealing. Does conceptualisation and management of urban green space vary across cities with differing urban densities? Such comparative research could be conducted across urban areas, but also within an urban area. For example, the influences on green space delivery and management may differ between the city centre and parts of the urban area further from the centre. Differences also may exist within a single jurisdiction. In London, the north of the borough of Wandsworth has much higher density levels than the southern part of the borough, which has a built environment and density levels as similar to Outer London as to Central London. Yet, the same planning and green space policies apply across the whole borough. Examining how changing urban densities within a city or within a part of a city – such as a borough – affect green space provision and use would be helpful in developing policies and practices that support green spaces in contributing critical services to the local area and well beyond.

8.8. FINAL THOUGHTS

I am not a native Londoner or even a native Briton. As such, I did not have a personal history with London's urban green spaces when my research began. As I am not English, green space and a love of the countryside are not woven into my identity in

the way that Mischi (2009) describes. Yet, by being an outsider, my awareness of the role of green space in Londoners' lives was heightened. My research was deepened by living in London for the duration of my doctoral studies. I could have come to London only for fieldwork and left with many of the same findings. But, living as a Londoner and observing how urban green spaces are fundamental to daily life provided a context that deepened my research and made it – in my opinion – richer.

Although I was not born a Londoner, green space has been an integral part of my life for as long as I can remember, from afternoons spent playing in the local park to professional work in U.S. national parks and wilderness areas. Thus, landscape is not just something to research – it has a personal connection. To me, this is the appeal of green space research: nearly everyone has a memory of a park, a green space, or simply flowers or a tree. Researching green space has allowed me to not only connect with nature, but also to share connections with other people.

Research shows humans have an innate link to nature. Yet, more and more of us are becoming urban dwellers. As more people live in cities, green spaces provide increasingly essential infrastructure – "critical scaffolding" – to improve our health and well-being, the air we breathe and water we drink, and the way we interact with others – in essence, to improve our daily lives. Green space, however, does not only benefit humans; it benefits other species as well as the earth's systems. As sustainable development emphasises, these processes are all interconnected.

Just because green space is broadly beneficial does not mean it should be taken for granted. Continued research is needed to understand the work green spaces can do for the city, particularly as cities continue to grow and change. Further, research is needed to examine how awareness of the landscape changes as our awareness of other global issues, such as climate change, shift. Finally, continued research can further study how such a ubiquitous resource as urban green space provides a common connection among urban dwellers across the world. I look forward to continuing to contribute, both personally and professionally, to these ideas.

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APPENDIX 1 – INTERVIEW TOPIC/QUESTION GUIDE

- What is your role related to green space in the borough?

- What is your organisation's role regarding green space? *(Question for charities, user groups and other organisations)*

- How do you interact with councillors?

    o How do you feel about those interactions (e.g., are they successful?).

- How do you interact with local councils concerning green space (specifically the three boroughs I mentioned)? Do you have more experience with some boroughs than others? *(Question for charities, user groups and other organisations)*

    o Are those interactions consistent across the boroughs and within each borough?

- Do you feel you have influence on council decisions?

- What/who influences decisions about urban green space?

- In your opinion, what does the borough do well regarding green space? (Elaborate on answer.)

- In your opinion, what does the borough fall short on regarding green space? (Elaborate on answer.)

- What do you think is the borough's goal regarding green space?

- What do you see as the borough's/organisation's future role regarding urban green space?

- What issues affect how green space is provided?

- Where do you think green space falls within the council's priorities? What ranks higher? Lower? Does this differ across boroughs?

- In your opinion, how does the green space in your borough compare to the green space in other boroughs in Inner London?

- What is the biggest challenge regarding delivering and managing green space? Do you have any suggestions for overcoming these challenges?

- How is green space used in the borough?

- Who uses green space in the borough?

- What are the borough's unique needs? Or, how does the borough differ from other Inner London boroughs?

- What are the biggest pressures or constraints on green space in the borough?

- How does the borough manage green space?

- Does the borough manage green spaces uniformly or do they differ? Why?

- Does the borough meet demand for green space? Are there certain types of green space that are more in demand?

- Are decisions about green space consistent, in your opinion?
- Do you think the way green space is provided is changing across London? If so, how?

Additional questions for charities, user groups and organisations other than local authorities

- Has the policy priority of providing more housing in Inner London affected your organisation's relationship with local councils?

- What is the biggest challenge regarding your organisation's work with urban green spaces?

- How are your organisation's decisions regarding green space made?

    o Has the need for residential development (e.g. a policy priority on housing) been a factor in these decisions?

APPENDIX 2 – DATA ANALYSIS: THEMES & SUBTHEMES

1. Internal governance

    a. Green space and planning

    b. Green space and housing

    c. Green space and other council departments

    d. Green space and councillors

    e. Planning and other departments

    f. Other internal relationships

2. External entities

    a. GLA

    b. Central government

    c. Developers

    d. Nonprofit organisations affecting green space

    e. Friends groups

    f. Heritage Lottery Fund

    g. Green Flag Award

    h. Contractors

    i. National Park

    j. Relationships with other local authorities

    k. Other

3. History and heritage

    a. Victorians

    b. History of parks and green space

    c. Heritage Lottery Fund

    d. Importance/value

    e. Park movement

    f. Other

4. Population

    a. Demographics

    b. Ethnicity/race

      c. Change

      d. Housing

      e. Other

5. Density

      a. Policy

      b. New development

      c. Type of development

      d. Changes

      e. Density in previous eras

      f. Other density

6. Funding

      a. Austerity

      b. Loss of staff and skills

      c. Other cuts

      d. Impacts from cuts

      e. Past budget concerns

      f. Heritage Lottery Fund

      g. Other funding

7. Planning

      a. CIL & Section 106

      b. Sustainability planning

      c. Strategic planning

      d. Planning consultations

8. Targets and measures

      a. Size

      b. Distance

      c. Per capita provision

      d. Purpose/value

      e. Conditions

9. Design

      a. Layout

b. Landscape design

c. Landscapers and architects

d. Plantings

e. Historic design and layouts

10. Definitions (and lack) and categories

    a. Open space (non-green space)

    b. PPG17

    c. NPPF

    d. Private/non-publicly accessible

    e. Countryside

    f. Statutory/non-statutory

11. Uses

    a. Amenity

    b. Quiet reflection

    c. Health and well-being (physical and mental)

    d. Sport, leisure, exercise

    e. Children's play

    f. Education/schools

    g. Biodiversity

    h. Environmental uses

    i. Economic

    j. Multifunctional

    k. Use conflicts

12. Housing amenity space

    a. Access

    b. Use

    c. Funding

    d. Maintenance

    e. Other

13. Value/importance for urban life

    a. Escaping the city

b. Flagship and large spaces

　　　c. Local and small spaces

　　　d. Research

14. Demand

　　　a. Higher use

　　　b. More people

　　　c. Users other than residents

　　　d. Loss of green space

15. Green infrastructure

　　　a. Street trees

　　　b. Green roofs and walls

　　　c. Other urban greening

16. Climate change

　　　a. Role of green space

17. Policy concern

　　　a. Parliament and committees

　　　b. Task forces

　　　c. Other reports

　　　d. Past policies