

Border troubles: urban nature and the remaking of public/private divides

Andrea Armstrong, Harriet Bulkeley, Laura Tozer & Panagiota Kotsila

To cite this article: Andrea Armstrong, Harriet Bulkeley, Laura Tozer & Panagiota Kotsila (2023) Border troubles: urban nature and the remaking of public/private divides, *Urban Geography*, 44:8, 1747-1767, DOI: [10.1080/02723638.2022.2125669](https://doi.org/10.1080/02723638.2022.2125669)

To link to this article: <https://doi.org/10.1080/02723638.2022.2125669>



© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 06 Oct 2022.



Submit your article to this journal [↗](#)



Article views: 1263



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 1 View citing articles [↗](#)

Border troubles: urban nature and the remaking of public/private divides

Andrea Armstrong ^a, Harriet Bulkeley^{a,b}, Laura Tozer^c and Panagiota Kotsila^d

^aDepartment of Geography, Durham University, Durham, UK; ^bCopernicus Institute of Sustainable Development, Utrecht University, Utrecht, Netherlands; ^cDepartment of Physical and Environmental Sciences, University of Toronto, Toronto, ON, Canada; ^dInstitut de Ciència i Tecnologia Ambientals, Universitat Autònoma de Barcelona, Barcelona, Spain

ABSTRACT

Traditional interventions to “bring nature into the city” were often motivated by a concern to create forms of public space which would provide a public good. Despite such well-intentioned motivations, these public forms of urban nature have always been to some extent bounded, serving some in favor of others, authorizing particular uses and forms of behavior as more or less legitimate, and policing the boundaries of who is/not included in such space. In this paper, we argue that new interventions seeking to bring nature-based solutions (NBS) into the city serve to further trouble these boundaries. NBS seek to use nature to address urban sustainability challenges and they navigate and serve to reconfigure what is (and is not) public in the city. We draw on research undertaken in three cities – Newcastle (United Kingdom), Cape Town (South Africa) and Athens (Greece) to explore the ways in which notions of the private and the public are being remade with and through nature, and its implications for how we might understand urban politics. Our conclusions point to the need for governance arrangements that can support the long-term stewardship of nature in the public interest and with due accountability and we suggest three arrangements.

ARTICLE HISTORY



Received 27 May 2021
Accepted 4 August 2022

KEYWORDS

Urban nature; nature-based solutions; public/private space; urban parks; urban governance

Introduction

Although the division between cities and nature is often perceived as clearly demarcated, the development of urban life has been intimately bound up with the production of diverse forms of nature. Traditional interventions to “bring nature into the city” were often motivated by a concern to create forms of public space which would provide various forms of public good such as improving health, reducing pollution, and fostering senses of well-being (Jones, 2018). Yet despite such well-intentioned motivations, these public forms of urban nature have always been to some extent bounded, serving some in favor of others, authorizing particular uses and forms of behavior as more or less

CONTACT Andrea Armstrong  andrea.armstrong@durham.ac.uk  Department of Geography, Durham University, Lower Mountjoy, South Road, Durham DH1 3LE, UK

© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

legitimate, and (increasingly frequently) policing the boundaries of who is/not included in such space. Concerns about whether and how such public forms of nature should be restricted are currently receiving significant attention as local authorities feel the strain of providing public goods in the urban realm. Parks in particular have been at the forefront of budgeting cuts and/or constraints due to the politics of austerity affecting many cities in Europe and North America. Indeed, in the United Kingdom, a report by Members of Parliament showed that park budgets have been cut by 92% since 2010–2011 and local authorities are increasingly searching for ways to subsidize their budgets (Carrington, 2017). Such efforts to find alternative ways of financing parks have raised awareness of, and opposition to, the creeping privatization and commodification of parks e.g. music festivals in London parks for most of the summer (Hancox, 2019). At the same time, private provision of urban nature e.g. private gardens, corporate enclaves, privatized water systems, is never fully enclosed, yielding wider forms of public benefit that “escape” the sites, markets and institutions through which they are provided, in terms of generating spaces for biodiversity, supporting improvements to air quality or efforts to address climate change. Urban nature has then the quality of occupying a liminal space in the urban milieu between the public and the private. To understand urban nature in this sense, recent work on the urban commons as a meaningful category distinct from the public and private is useful (Blomley, 2008; Eidelman & Safransky, 2021). Commons and commoning can be viewed as beyond the asset or the resource whose management might be done by some local commons. In the case of public parks for example, the park might be maintained by the state, but the uses are negotiated through a community of users. Therefore, commons can include goods belonging to particular publics but are at the same time never fully open to “the public at large” so it is an in-between category which suggests that there are degrees of publicness in property and/or resources.

As new efforts to bring nature to the city are increasingly framed as nature-based solutions and existing forms of nature are repurposed towards new (sustainability) ends, it is perhaps unsurprising that these interventions both trouble existing borders surrounding the public/private qualities of urban nature and introduce new dilemmas about the urban commons. Nature-based solutions are heralded as bringing multiple benefits for nature and society, including the capacity to respond to climate change and enhance biodiversity, but also to generate new forms of economy and sustain well-being. How and for whom such benefits are realized comes then to be an essential part of urban politics, with critiques emerging that suggest that such benefits are far too often being directed towards places and communities who already have substantial advantages (Connolly & Anguelovski, 2021; Rigolon & Nemeth, 2020). Yet the malleable and liminal character of urban nature suggests that we need to more carefully excavate how nature-based solutions in the city not only reveal public/private divides, but also serve to constitute what is “public” and “private” in the city.

Rather than drawing an a priori distinction between the public and private, we interrogate how, why and with what consequences nature-based solutions are troubling such categories, requiring a perspective that regards them as multi-layered, multi-level and always contested. Focusing on formal governance, how such processes and arrangements (put in place to design, manage and maintain NBS) deal with the challenge of the fluidity of the public/private, we examine how nature-based solutions are troubling public/

private boundaries and what this in turn means for how the dynamics of urban justice are being recast, where justice is understood as having multiple distributive, procedural and recognition dimensions (Bulkeley et al., 2013). To answer this research question, we draw on a range of literature and three case studies of urban parks conducted as part of the H2020 NATURVATION research project.

We turn first to consider how ideas of the public/private have been advanced in the literature on urbanization and the particular ways in which these categories have come to inform debates on urban nature, before introducing the case-studies and the NATURVATION project of which they are part and detailing the complementary ways in which interventions with urban nature have come to trouble private/public boundaries in the city and with what consequences. In the last part of the paper, we reflect on the case studies and discuss what the reconfiguring of public/private through new urban nature means for its consequences for justice and urban politics. In conclusion, we find that interventions seeking to bring or re-purpose nature in the city are often met with contestation precisely around the terms in which they are intended to create new public arenas and forms of relation and over how the boundaries between what will be constituted as private are formulated and enacted. In this sense, urban nature interventions that are cast as nature-based solutions may not only serve to exacerbate existing ways in which public/private divides serve to shape who benefits from different forms of public good and essentially private benefits, but actually reconfigure the very basis of what constitutes the public and the private in the urban realm.

Situating nature in urban space: configuring and contesting notions of public/private

Within different academic disciplines and in Western thought and practice there is a long, rich and contested history of boundaries e.g. the distinction and division between public and private urban space used in multiple and contradictory ways (Sibley, 1995). As many scholars have argued, public/private binaries are overly simple and do not capture the complexities of gendered social relations or indeed, how the character of public/private spaces are constantly being contested socially, politically, economically, psychologically and spatially and rarely (if ever) exist as wholly private or public when subject to scrutiny (Beebeejaun, 2017; Bodnar, 2015; Bondi, 1998; Davis, 1990; Giesecking et al., 2014; Mandanipour, 2010; Mitchell, 1995, 2017; Sorkin, 1992). Other scholars have argued that the very idea of public or private space is an attempt to apprehend through static categories what is better understood as the dynamic movement of the struggle for power (Fraser, 1990). Such critiques emphasize the importance of combatting the restraining effects of labels like public or private to ensure we avoid the pitfalls of treating space as formed and having a monolithic and determined meaning and experience (Staeheli, 1996) and instead explore imaginaries for understanding the complexity of boundaries and their materialities, paradoxes, leakages, fractionalities, practical enactments, and variations (Mol & Law, 2005).

Nevertheless, such dichotomies persist in everyday life because attempts to organize space and/or the environment are coupled with exclusionary discourse (designating certain things not belonging) thus creating liminal zones (Low, 2006; Sibley, 1995). These liminal zones are spaces of ambiguity and discontinuity and as Sibley (1995,

p. 8) argues, “exclusionary practices and the maintenance of boundaries are a response to the anxiety created by the liminal spaces – the urge to make separations” – between them/us, ordered/disordered, men/women, production/consumption, active/passive, culture/nature and public/private. Questions about who has access to space are crucial to understanding the process of exclusion and the dynamics of the struggle for power. Access has been a major issue in much of the literature on public/private space over the past three decades and such concern corresponds with the end of Keynesianism and the rise of neo-liberal urbanism which has led to two related debates in literature: first, the increased privatization of public space and second, the resultant end or loss of public space (Gareau, 1991; Glazer, 1992; Lang & Rothenberg, 2017; Mitchell, 1995, 2017; Sorkin, 1992). Concerns about the loss of public space are not unfounded as with increased privatization and marketization of public space has come an array of regulations, land use policies, architectural policing (e.g. physical barriers and street furniture such as benches that prevent sleeping) and surveillance techniques (including ethnic profiling), all of which undermine the public dimension of urban spaces as use and access is restricted (Austin, 1998; Brain, 2019; Flusty, 1994; Low, 2016). Adding nature to these debates, as we explore in this paper, further complicates public/private spatial dynamics.

Understanding nature in urban settings is complex because, on the one hand, the urban setting is often imagined as bounded and controlled, e.g. a town, city or neighborhood is defined by formal and informal rules, laws, governance arrangements, politics and social conventions. Whereas, on the other hand, nature is imagined variously as uncontrollable, wild, cultivated, formal, ordered, productive, non-productive, invasive etc. all of which is as much due to distinct disciplinary lines of thought (ecology, planning, forestry, environmental management, conservation biology, ecological economics etc.) as due to historical patterns of struggles for domination and control that led to the creation of distinct sociocultures and narratives around them (Robbins, 2004), as highlighted by political ecologists.

The literature that advances understandings of not only the human world view but also non-human ecologies such as “urban wild things” is particularly illuminating when considering boundaries and urban nature (see Hinchcliffe et al., 2005; Whatmore, 2002). Scholars point to the “return of nature to the city” (Wachsmuth & Angelo, 2018) with the rise of urban sustainability policy, but point out the complex entanglements of urban nature with what it means for a city to be sustainable. Urban nature is found to take many forms, from relatively managed sites with specific functions to forms of “wild nature” or “other than human ecologies” that emerge in “disorderly spaces”, generating an aesthetics of decay and saproxylic (rotten wood invertebrates) geographies of urban space (Gandy, 2019; Lorimer, 2016). Layered across these complex geographies of urban nature are different understandings of what constitutes public and private, which in turn shape what it is about urban nature that comes to be valued, by whom and with what consequences. Understandings of and relations with nature vary, but the deep roots of environmental, social and racial inequalities can perpetuate culturally dominant views about what nature is and which kinds of relationships with nature have value (Tozer et al., 2020). Most commonly *public green space* is seen to include parks and reserves, sporting fields, riparian areas like stream and riverbanks, greenways and trails, community gardens, street trees, and nature conservation areas, as well as less conventional spaces such as green walls, green alleyways and cemeteries (Roy et al., 2012). Whereas,

private green space is usually considered to include private backyards, green roofs, communal grounds of apartment buildings, and corporate campuses (Wolch et al., 2014). An interesting example of how such public/private boundaries can be re-configured is by Blomley (2004). He explores how residents in a low-income, inner-city neighborhood of Vancouver approached the local city government under its Neighborhood Greenway project in 1995. The residents wanted to create a greenway to reduce anti-social behavior by demonstrating that the area was being cared for. In this case, the act of gardening can be understood as “defensible space” (Newman, 1996) whereby, residents took control of their neighborhood, and a sense of ownership and responsibility was created. As Blomley (2004) argues, central to this concept are the notions of territory and property ownership in that through physical design, a sense of proprietary concern can be extended into public space. This is meant to deter potential offenders. However, unlike the actual privatization of public space, this extension is provisional and extra-legal and as Blomley (2004, p. 617) argues, residents’ claim to adjacent space is, in that sense, a form of “illusory property”, or “un-real estate”. From the perspective of this paper what is important is the idea that un-assigned spaces are seen as problematic by authorities and signaling a clear and legible statement of ownership – whether that is public or private – is pivotal to liberalism and the legal world of bright lines and determinacy or in other words “the security of knowing which is mine, and which is thine is said to reduce the possibility of conflict” (Blomley, 2004, p. 622).

Yet, what it is about such forms of urban nature that make them public or private is rarely interrogated. Urban open space, meaning vegetation-dominated “green spaces” (parks, street trees, playgrounds) are often described as publicly accessible with numerous public benefits e.g. ecosystem services for society (Anderson & West, 2006; Irwin, 2002; Jansson et al., 2018; Jones & Reed, 2018). The term “open space” is deceptive as it suggests such spaces are publicly accessible but more often such “pseudo-public spaces” are highly regulated with restrictions on behavior and activities (Mitchell, 1995, p. 121). Similarly, Greenberg (1990, p. 324) argues that whereas public spaces had civic functions, the primary purpose of increasing the amount of open space was “to separate functions, open up distance between buildings, allow for the penetration of sunlight and greenery, not to provide places for extensive social contact”, suggesting that there is no easy fit between notions of the “open” parts of the city and their publicness. Furthermore, the production and configuration of urban nature is far from value neutral or politically benign. Just like other parts of the urban realm, urban nature has significant implications for the ways in which public/private divides are established and felt in the city. In a comparison of strategies to green urban spaces in the United States and China, Wolch et al. (2014) find that access to green space is increasingly recognized as an environmental justice issue with the main beneficiaries being predominantly white and more affluent whilst urban greening can have paradoxical effects making neighborhoods more healthy and attractive but also increasing house and land values which can lead to gentrification and displacement of the residents it was meant to benefit.

As city planners and designers increasingly turn to creating, reshaping or indeed taming nature as part of public–private urban [re]developments, they create both potential for new public benefit through nature but at the same time risk the very real possibilities of exacerbating urban inequalities through processes of gentrification and exclusion (see Anguelovski et al., 2017, 2020; Dooling, 2009; Gould & Lewis, 2017;

Pearsall & Pierce, 2010). The creation and/or re-purposing of urban parks in particular forms a crucible for key issues to arise such as green gentrification as well as environmental [in] justice and exclusion and/or displacement. According to Lang and Rothenberg (2017, p. 1753) there is a tension between the notion that parks, and public spaces can in many cases increase property values becoming a guiding mantra for many city planning officials, and park advocates and critics who argue that the economic priorities of developers are inherently incompatible with the non-economic, social, and community value of parks and other public spaces. The New York High Line is frequently cited as an example of “green gentrification” with Lang and Rothenberg (2017) describing it as a development project masquerading as a park. The High Line was constructed along a disused section of elevated railway in Manhattan and involved additions to spontaneous vegetation through the replanting of birch trees. As Gandy (2013, p. 1306) argues:

... in this instance, the “wasteland as artifice” becomes a cultural motif that serves to underpin real estate speculation, and the boundary between private and public is reworked in the form of a neo-pastoral urban spectacle. The park, in this context, is a designed fragment of nature that inscribes social and political power into the urban landscape.

Therefore, malleability and liminality of urban nature suggests that we need to examine how the reworking nature in the city both reveals and constitutes public/private dynamics. The generation and development of urban nature in cities has profound justice consequences and these are fundamentally shaped by their public/private qualities, yet our understanding of urban nature comes remains limited.

Urban parks and the public/private constitution of city life

In order to examine how, why and with what consequences the design and introduction of urban nature is troubling existing understandings of public/private boundaries in the city, we decided to choose “urban parks” as our focus because they are arguably the most visible manifestation of nature in an urban setting. Our research was conducted as part of the H2020 NATURVATION project which involved studies in eighteen cities.¹ This paper draws upon case-studies of how nature-based solutions were being developed in relation to urban parks in three of the eighteen cities included in the research project – Newcastle, United Kingdom, Cape Town, South Africa and Athens, Greece. The three case studies were chosen because they involved an urban park in different geographical locations with different histories, economic and political situations. They were also at different stages of “green planning” (design, implementation and post-implementation) and contestations about public/private had been a prominent tension over the past decades in all three cases due to neoliberalism and austerity measures.

The fieldwork for each case study took place over six months in the period 2017–2019. Data were collected through the analysis of academic and gray literature (e.g. policy, newspapers, websites etc.) alongside semi-structured interviews (21 in Cape Town, 15 in Newcastle, and 10 in Athens). Interviewees included representatives of government, NGOs, community groups, utilities, knowledge institutions, urban development and planning agencies, engineering, urban development, design, architecture and other relevant companies and small- and medium-sized enterprises. Therefore, we draw on a

diverse set of empirical research (geographical, historical, economic and political) to find complementary evidence in the three case studies rather than including and comparing a range of stakeholder groups which would be beyond the scope of the paper. The 46 interviews were audio-recorded with the consent of interviewees and field notes were kept. The interviews were transcribed and thematically coded using a template that was standardized across all case studies.

These case studies offer perspectives on how new interventions with urban nature are troubling public/private boundaries. Newcastle Parks Trust (from 2019 called “Urban Green Newcastle”) highlights the challenges faced by a municipal authority after drastic public funding cuts to the park budgets due to austerity conditions. The pressing need to search for a solution involved the development of a new business model and the case study reveals how concerns can arise that unsettle the public/private boundary because different publics’ value parks in different ways e.g. history, heritage and stewardship, access, inclusion and how these issues have implications for justice. In the case of Two Rivers Urban Park in Cape Town proposals are being negotiated that would see an industrial and degraded river area redeveloped into a mixed use, mixed income development with green space rehabilitated into a park. The case highlights issues around different values for nature, the role of economic development and green gentrification, and public participation in planning urban nature projects. In Athens, the case of the Hellenikon Metropolitan Park focuses on the creation and implementation of a plan for a new green amenity as part of a larger brownfield redevelopment of the 620 hectares site that used to host the National Airport of Greece. The overall development plan concerns arguably the largest, (previously) publicly owned, urban, coastal, open area in Attica (Prentou, 2012) and has come about through neoliberal crisis-driven policies. The case shows how the private/public nature of a green space is defined by the socio-political context not only within the country but also at European/global level, and the surrounding urban planning and infrastructure patterns in which it is embedded. In Hellenikon, There-Is-No-Alternative narratives on the privatization of public assets took hold, while the public/private character of urban nature for recreation, leisure and health, was as blurred by the developers and the related voted regulations as it was contested by concerned citizen groups who fought for a right to urban nature. Using these three cases, we interrogate how, why and with what consequences nature-based solutions are troubling public/private categories with particular attention to the implications for questions of justice.

Newcastle Parks Trust – “Urban Green Newcastle”

In the face of significant public spending cuts due to the political response to austerity in the United Kingdom, between 2016 and 2018 Newcastle City Council (NCC) established new governance arrangements for existing (mainly Victorian) parks and allotments in the city. In the wake of the post-2010 UK National Government Austerity Programme which required local authorities re-prioritize local spending and investment the park budget for Newcastle had been cut by approximately 91% – reduced from 2.6 million in 2010/2011 to £87,000 in 2017/2018 (Duncan & Hussain, 2017). After working with the National Trust during 2015 and 2016, NCC became a “national pathfinder” for developing a charitable trust model for parks (Naturvation Interview, 2017). [Figure 1](#) outlines

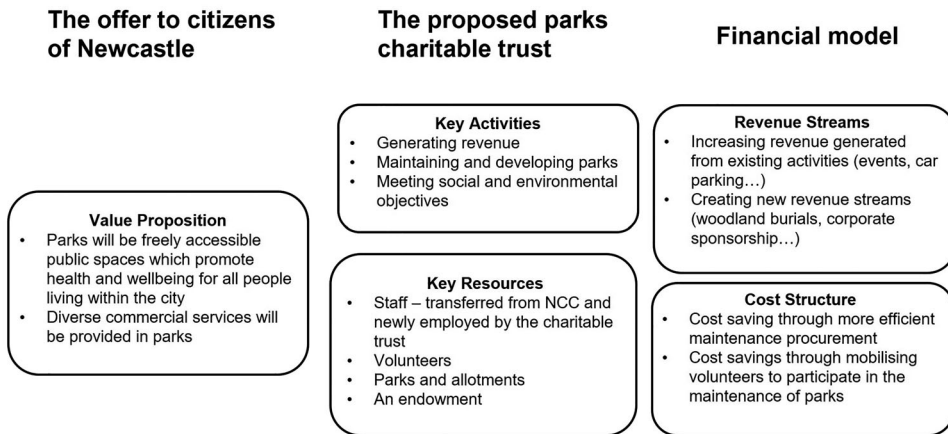


Figure 1. The proposed new business model for Newcastle's parks.

the key aspects of the charitable trust model for Newcastle's parks and allotments. A consultation process took place between February and April 2017 with only one option on the table, and some interviewees saw this as “tokenistic”. Indeed, a failure to consider alternatives, such as an endowment model, led to reports in local media that “the council have just made their mind up, if there were other options, surely those should have been included in the consultation” (Chronicle Live, 2017). Such an approach which gives the appearance of asking for citizen endorsement of a decision already made can in turn erode trust in participatory processes involving institutions and citizens.

Others were concerned that the shift away from municipal authority management of parks to a charitable trust model had accountability implications whereby the “clear political mechanisms of going to your local councillor if you're not happy with how things are being run” may be lost (Naturvation Interview, 2017). The underpinning logic of using the charitable trust model as a means through which to accelerate the marketization of public, natural space was another key concern because the parks are viewed as

one of the only remaining spaces for all people to be without feeling they need to pay money ... [because] even if it is a charitable trust they will look for funding streams that will include making the parks an income generator, which is fundamentally not what they should be. (Let's Talk Parks, 2017)

Concern about the monetization of natural space relates to deeper issues such as a fear that the shift to a charitable trust would generate new kinds of exclusion whereby some may not be able to afford the charges for parking and activities in the park. For interviewees, there was an implicit understanding that parks are “convivial” open spaces where people are free to enjoy nature and be able to navigate the space as they wish without restriction. Shifting to a charitable trust model troubles that perception of public space because it serves to introduce elements of privatization both in terms of how decisions are reached and who parks are for, in turn generating a sense of loss of public ownership.

Another issue of concern stems from the historic value of parks which is particularly strong in the UK context as many date back to the Victorian era when local authorities were encouraged through various Public Health Acts to create parks for public enjoyment, health and wellbeing. The legislation arose due to squalid living conditions and overcrowding in many industrial towns and cities and “civic pride determined that these newly public green spaces were maintained to a very high standard as symbols of municipal power and excellence” (Crowe, 2018, p. 59). As volunteers/friends from a park in Newcastle explain:

Our parks have been managed by the Local Authority since the 19th Century. Much of the land was acquired with covenant and through philanthropy, on the understanding that it is maintained under the stewardship of elected representatives. The Charitable Trust model seriously jeopardizes and compromises the democratic principle of accountability. We believe the Charitable Trust model offers at best a short term economic solution that cannot guarantee long term sustainability on behalf of users. (Naturvation Interview, 2017)

In their view, the new business model for parks breaks the continuity of stewardship dating back to the nineteenth century, “jeopardises and compromises” accountability and is a short-term solution which overall, does not guarantee sustainability. Here we see clearly the temporal dimensions of the debate i.e. the contestations that arise when a historic public good, viewed as a commonly held resource available for all is threatened. As a municipal employee – commenting on the consultation – explained:

... some of the events were very, very challenging, because you have got some very passionate groups out there, who really think they could do things differently, but how they could that differently, we haven’t really got to the bottom of. It was always a case of well why create a trust, the council should run it, and then you have that sort of discussion about well the reason we are doing this is because we haven’t got the money, and we got “well you must have some money”, so it is all sort of discussions. (Naturvation Interview, 11)

Despite concerns being raised about the justice implications of the new business model for parks in Newcastle, NCC with such a drastic reduction in budget for parks had very little option but to pursue this pathway and in November 2017, NCC Cabinet agreed to create Newcastle Park’s Trust. However, it was not until 1 April 2019 that the trust started operating across the city, with a new name “Urban Green Newcastle” and a website for Urban Green Newcastle was launched in 2020.

Two Rivers Urban Park, Cape Town

Two Rivers Urban Park is at the confluence of the Black River and the Liesbeek River. This geography is a suitable metaphor for Cape Town; the Liesbeek River runs through affluent neighborhoods as it snakes down from Table Mountain to the ocean and has been substantially rehabilitated through the work of the privately funded non-governmental organization. The Black River, on the other hand, runs through disadvantaged and racialized suburbs in the Cape Flats and has been substantially altered to accommodate outflow from a wastewater treatment plant. At Two Rivers Urban Park (TRUP), on land mostly owned by the City of Cape Town and the Western Cape Province, the rivers meet. Close to downtown with large open space, it has been a prime target for redevelopment since the 1990s. Existing uses include an eco-village,

Valkenburg Psychiatric Hospital (which has operated on the site since 1891 originally as two racially segregated hospitals on either side of the river), a medical technology park and a private recreation club and golf driving range. At the time of research, the green and blue space in the TRUP area was open space, accessed by some and not others, wild/dangerous in some regards, marginally used for recreation, and had high levels of pollution. Proposals for the site emphasize the need for private intervention to develop part of the land to provide the resources necessary to rehabilitate and restore urban nature so that it generates public benefits (Figure 2).

The Western Cape Government worked with the City of Cape Town to create a joint redevelopment plan in 2011. The original intention was to develop a mixed-use area that would have low/no car use and use rainwater harvesting and decentralized electricity generation. The river and green space would be a centerpiece of the development and provide fundamental ecosystem services. Through the various proposals, some of these original intentions have retreated in importance (Naturvation Interview, 2018). Development would be mixed use and concentrated in areas where development already exists, although they would be higher density e.g. seven stories rather than one or two. This government-driven vision for the site prioritizes density and access to housing, transportation and economic opportunities while envisioning recreation opportunities in rehabilitated green space. It focuses on the creation of accessible housing and green space close enough to the downtown core to address the structural inequality of Cape

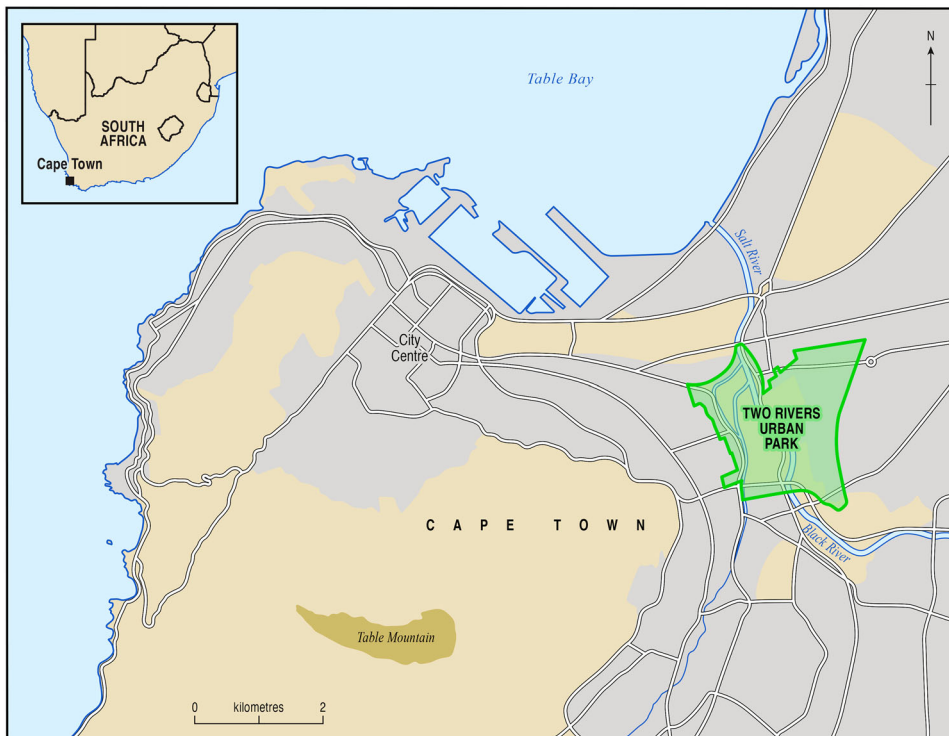


Figure 2. Proposed location for Two Rivers Urban Park, Cape Town. Source: Cartographic Unit, Durham University.

Town's uneven development by providing housing for middle-income residents and access to green space for low-income residents. Stark inequalities and spatial segregation in Cape Town make housing in particular a politically charged social justice issue, but poor access to green space is also an environmental justice issue. A City of Cape Town representative explained how this relates to government-driven proposals for the site:

People in the township and whatnot have access to the one rail line, it's a hop, skip and a jump, or they can walk, it's not that far [to the TRUP site]. It's just an amazing opportunity, but now we're not going to be able to make anything special out of it because of the facilities that are unable to be. So the park for me was an important potential catalyst, and the idea was that we would create a world-class park, as well as a facility close to Cape Flats. (Naturvation Interview, 2018)

These early proposals for the TRUP site envision blue/green space that is, in many ways, more functional and more public, with a focus on making it safer, providing specific ecosystem services, and serving to enable development, but at the same time relies on urban nature being both partly privatized and tamed to fit within the visions of controlling urban development that dominate the vision for the site. As such, they also serve to diminish the value that some people find in the existing urban park landscape and its historical and wild character.

These contested visions of what nature in the city should be came to the fore during a series of co-design workshops throughout 2016 were the primary vehicle for public participation in creating the vision for TRUP. The technical team presented stakeholders with two diverging scenarios. However, a number of stakeholders (particularly members of nearby resident's associations) were dissatisfied with the way in which this captured their input into the process and their key concerns for the site. A third scenario developed by community groups representing existing residents near TRUP was presented as an alternative. This scenario sees the site maintained as open green space with densification around the edges of the park in sites that are already developed: "We support the idea of development densification as long as it's done in consultation, and in a quality way, which retains the heritage to an appropriate degree – and that includes the environment" (Naturvation Interview, 2018). A representative from the Oude Molen Eco-village elaborated:

We know that we need some development, but we don't necessarily need this development here ... The city wants to densify because they want to accommodate more people closer to work but there's a lot of other areas that have already got a hard footprint. You don't need to be taking green space and putting a hard footprint on green space. We've got too little green space to compromise.

Local medium to low density proposals for communities along the edge would be pursued, but the design sees the area is the last large green space close to the city that should be rehabilitated as an open natural area.

The development of TRUP will have a number of impacts with justice implications, depending on which vision for the site is carried out. From the perspective of City of Cape Town representatives, the site offers the opportunity to pursue more socially just urban development that, to some extent, addresses the structural inequality of apartheid that continues to relegate racialized communities to distant townships (Naturvation

Interview, 2018). The site is close to employment opportunities, largely publicly owned, and large enough to add significant housing. However, there is skepticism about how much affordable housing would actually be included (Naturvation Interview, 2018). There is distrust among the community that the government will deliver affordable housing to benefit middle-income citizens as well as publicly accessible green space since similar developments in the past have resulted in luxury private development. The development of luxury apartments, with green space rehabilitated by developers for residents, would privatize much of the green space and likely move it behind fences for “security”. Leaving the green space open with no development, however, would likely maintain much of it as what one person called a “wasteland” (Naturvation Interview, 2018).

Competing visions for TRUP have different publics in mind. Depending on which public is being considered, there is disagreement about how much and what kind of private intervention is needed in order to make TRUP into functional urban space and there is tension around how much intervention existing nature requires to make it accessible. The top-down nature of the consultation effort led to competing visions about the future, as evidenced by the creation of an alternative development scenario by community groups composed of existing nearby residents, but the bottom-up vision for the site does not necessarily represent the interests of non-residents according to government stakeholders emphasizing housing provision and accessible green space. Across these different visions for the site, there is a tension related to whether green space is lost or enhanced, and for whom.

Hellenikon Metropolitan Park, Athens

Hellenikon, a contested plot of land of 620 ha on the coastal front of Athens used to host the National Airport of Greece up until 2001. A development plan for Hellenikon has been debated since 1995 but the period since the onset of the financial crisis in Greece in 2008 has marked its fate. As part of the conditions for Greece’s financial bailout through the first Memorandum of Understanding (structural adjustment program) in 2010 with the country’s international lenders (the EU and IMF), Hellenikon was a public asset that had to be privatized and exploited in order to create new investment environments (Konstantinidis & Vlachau, 2018). While in 1995, legislation (233/1995) was put in place to safeguard the creation of a “metropolitan green zone” in Hellenikon, in 2003, the government launched an international competition including the development of the area, comprising business buildings, residences, restaurants, etc. The idea of including economic activities to allow for self-funded park maintenance was already part of the circulating plans and narratives over Hellenikon, but a public and openly accessible green element remained central to planned developments. Gradually, however, and as accelerated legal processes facilitated the privatization of Hellenikon, public/green elements were giving way for gray developments, targeting investors, elite buyers and upper-class consumers (Velegrakis & Frezouli, 2016). In 2011, the Hellenikon site was moved into the Hellenic Republic Asset Development Fund and soon after, the shares of Hellenikon were moved to the Hellenikon SA Company, whose mission was to administer, manage and develop its land, premises and facilities. In 2012, a plan was proposed for new infrastructure, which according to new legislation (Law 4062/2012) could

expand to cover more than 50% of the overall plot. In 2014, the shares of Hellenikon SA were obtained by the private developer LAMDA.² The legal agreement signed in 2016 between Hellenikon SA and LAMDA declared that the project would not differ substantially from the investment plan that was proposed in 2014, but which never became public and available for debate. In the midst of summer 2016, LAMDA's final project plan was released. Comprising 2,500 pages and going through fast-track consultation for only 20 days (less than any environmental plan would legally require), meant that this lengthy, yet vaguely written plan, escaped any meaningful public debate (Naturvation Interview, 2017).

In the resulting and approved Master Plan (IDP, 2017), 200ha are designated as the so-called Hellenikon Metropolitan Park, including sports centers, art and exhibition centers and others, leaving less than 150ha of open green space (Figure 3).

Importantly, the type of urbanization planned around it comprises of exclusive villas and luxury apartments, a casino, 7-star hotels, entertainment venues, shops, and restaurants (IDP, 2017), following an obsolete model of flagship architecture and locally detached tourist-based economy that does not bring much benefit to local residents (Doucet, 2007). At the same time, developers kept emphasizing that the planned park would be "open for all".³ Indeed, legislation mandates that the park as well as the 1 km of beach in part of the coastal front shall be openly accessible to all publics. However, neither the park nor the beach was ever proclaimed as publicly owned. While the majority of the land in Hellenikon will remain forever private (Law 4062/

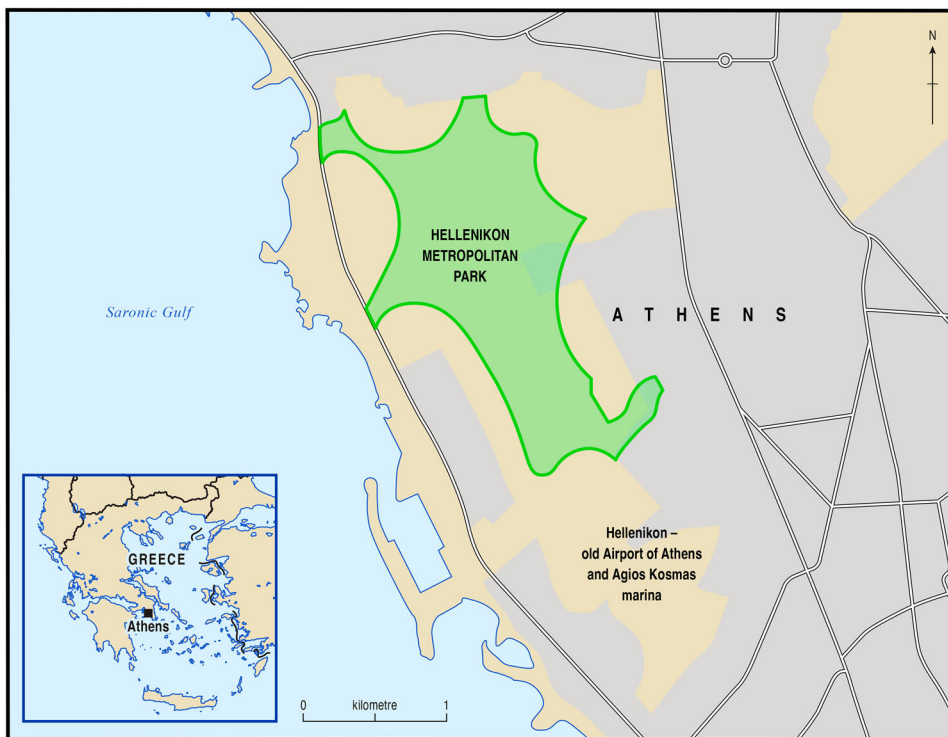


Figure 3. Hellenikon Metropolitan Park, Athens. Source: Cartographic Unit, Durham University.

2012), non-developed land (streets, squares, the park) will be returned to the Greek state after 99 years. There is no clarity on what the property status will be of the 2.5 km of coastline where the development of hotels, private marinas and houses has been planned (Naturvation Interview, 2017).

Beyond issues of legal ownership, the decisions taken around Hellenikon and its re-naturing have disrupted and re-defined the notion of public/private with what regards to accessibility, usage, experience and representation connected to urban natural space. In terms of direct accessibility, the plan foresees no direct connection of the surrounding municipalities with the coast, while their connectivity with the park remains limited both in terms of public roads as well as due to the private infrastructure that surrounds and delimits it (Naturvation Interview, 2017). It is not clear what kind of access the new hotels and villas will have, for example, allowing passers-by to access the park, or what security mechanisms will be installed in their premises, impacting the sense of freedom and surveillance of the general public. This is especially worrying as the maintenance and management of all open communal spaces in Hellenikon, including the park, will be assigned to private entities and not to municipal authorities that usually handle this responsibility (Naturvation Interviews, 2017). This creates confusion over how behavior, policing and surveillance in those spaces will be governed, as they uncomfortably fall in the pseudo-public sphere (Shenker, 2017). As one interviewee told us:

The parts that are for public use, as it is defined, will be managed by a private body that will be created with a public tender. Maybe there will be a door that locks at night. Maybe there is an event and access is restricted. This cannot be done systematically, but reasons can be created for doing so. (Naturvation Interview, 2017)

Like other high-end and tourist-oriented developments, the park is likely to develop an elitist character which deters ordinary people from making use of it, as it will not represent their everyday experiences, needs and values. It is, in fact, obvious in the communication materials of LAMDA that the audience envisioned for this new development is white, high-income and consumption-oriented.⁴ As outlined by the city-wide movement that formed in 2010 to demand the protection of Hellenikon as a public asset and its transformation into a public park, there has been no public dialogue and participation process on Hellenikon's privatization or on the subsequent design and development of the park (Member of the Struggle Committee for the Metropolitan Park, Nov 2017). According to activists, what has been at stake in Hellenikon is not only the level of public access, inclusive use and distribution of benefits stemming from the creation of the park, but a wider question of democratic accountability over what used to be a public asset (Apostolopoulou & Kotsila, 2021). As one interviewee told us:

What is taking place here is that one of the last free public spaces in the Attica basin is changing hands. The loss of public control is very important, not only for the municipalities that surround it but for the whole of all Attica. (Naturvation Interview, 2017)

Seen from an environmental justice lens, the Hellenikon case falls in the "classic" category of brownfield development and greening that fails to address past inequities of chronic lack of green space (Dillon, 2014), as it is particularly felt by low-income residents of densely urbanized neighborhoods with limited access to private green. In

Hellenikon, it was not only the distributional aspect of justice that got compromised by a drastic reduction of green open space, but also procedural and recognition aspects as reflected in the decision-making process and the final composition and character of the overall development.

Reconfiguring the public/private divide with urban nature

Rather than only being a place at which public/private divides in the city come to be made, analysis of these case studies suggests that urban nature-based solutions provide an arena within which what constitutes the public and the private, their standing, value and meaning, are constituted and contested. Urban nature, in all its forms, is largely regarded as a matter of and for the public – for public management, concern, and benefit. Yet, as all our case studies show, even where urban nature appears to be fully public in nature, we find that in practice, dynamics concerning ownership/control, physical accessibility, as well as a lack of democratic participation and accountability serve to limit its publicness. While there was nominal commitment to public access of nature in each of the three cases presented in this article, we detect three overarching trends: ownership or management moving out of public hands and into private ones; access shifting to accommodate particular publics and not others (e.g. elite tourists or high-income renters versus low-middle class local residents); and concerns being raised about inadequate democratic participation in the decision-making around these urban natures.

We find these projects are each to some degree pursuing a “pseudo-public” (Mitchell, 2017) path where sites are framed as public but are managed or owned privately, or accessibility becomes conditional and exclusive, even where, for example in the case of Newcastle, that is done “in trust” for the public at large. This reconfiguration of the public echoes what Madden (2010, p. 203) calls “publicity without democracy... [which] is neither militarized nor inauthentic, but... is centred upon surveillance, control, commerce, and consumption [and]... is the increasingly dominant conception of the public in the cities of today”. We can see this dynamic at work clearly when it comes to considering the terms and degree of access to urban nature. In Newcastle, the commitment to access came in the framing of developing the Trust in order to keep public parks open, while in Cape Town and Athens each project proclaimed its intentions to make nature more functional and hence more accessible. Residents and community groups expressed concern that, while technically open to “the public”, the design of the interventions would serve to be exclusionary. In Newcastle, criticism was raised that monetization would exclude publics not able to pay from participating, while in Cape Town and Athens there was concern that the redevelopment would be designed in such a way so as to “gate” who had access to nature, along with concerns that private surveillance and security measures would serve to police public access. In this sense, even when the resource (the land hosting the parks) was not completely privatized, the use and access to the related benefits of such natures were largely bound to private actors’ decisions. This has consequences for justice and urban politics not only in terms of property relations and how space is reconfigured in private/public domains, but also in how then the possibility of such space to “act” politically is also reconfigured.

Further, across these case studies, we find that a degree of privatization of nature is regarded as not only legitimate in its own right, but necessary in order to ensure the enduring publicness of urban nature. With the withdrawal of public funding, the parks in Newcastle will fall into disrepair and the health, well-being, and environmental benefits of parks will be lost without private intervention. In Cape Town, Two Rivers Urban Park is thought to need private intervention to bring nature from being a “waste-land” to a useful set of assets. In Athens, Hellenikon is regarded as requiring privatization to generate the long-term viability of the public realm. Such logics underpin the wider discourse on nature-based solutions that seek to secure private investment in order to realize both direct returns and secure public benefits, such as responding to climate change, enhancing biodiversity, enabling well-being or addressing air pollution. Yet involvement of private interests in these cases, introduced a motivation to maximize profit with significant implications on where responsibility would lie to redress inequalities. The funding model for maintenance and investment in Newcastle parks, for example, introduced a concern that parks in wealthier areas would generate more money and therefore receive more investment, while parks in poor areas would not, in turn exacerbating existing inequalities in park quality, with implications for the health and well-being benefits for the surrounding neighborhoods. Not only is the private provision of urban nature contested in its own right, such interventions also serve to reveal and further open up cracks in any universalized notion of the public benefit of nature-based solutions.

This is particularly starkly illustrated in the case of the TRUP, Cape Town, where competing visions for the site were founded in different notions of which publics should benefit, and what kinds of public benefit should be generated through the redevelopment of the site. Community group representatives on one hand argued that preservation and enhancement of open green space should be the priority, while government-led proposals stressed that putting some of the land to use for housing would allow more diverse residents access to both economic opportunities and urban green space. These different visions of the kinds of problems that nature should be a solution to, who should benefit, when and where, were in turn tied to very different notions of just how private nature needed to become – government plans envisaged a far bigger role for the private sector in order to deliver the kinds of investment in housing and access to green space that lie beyond its remit and capacity, whereas for community representatives much could be left as it is, with a stronger role for government in securing and managing existing green space. However, in limiting their concerns to the mainly local residents of the TRUP area and surrounds, the community vision also serves to limit who it is who is deemed a relevant public, potentially restricting access to lower income, racialized communities who currently inhabit areas of the city with poor quality housing and limited access to urban nature. Here it is clear to see that the private-ness and public-ness of urban nature is highly relational, continually produced and always contested, and that how this plays out in practice has profound consequences for social and environmental justice.

Beyond the complex question of who accesses the benefits of urban nature, its complex public/private provision raises questions of procedural justice and democratic accountability. The case studies demonstrate the different types of participation involved in the reconfiguration of public space (i.e. consultation, forums, and community

representation on new governance arrangements), but in these cases, as is also widely reported in the literature, there are controversies around participation. The consultation in Newcastle offered citizens only the option of transferring the parks to a Trust, while in Cape Town a top-down consultation processes created little space for alternatives and in Athens participation was minimized in order to fast-track development, while long standing activist claims and proposals were dismissed. Across these cases, participation was then at best tokenistic and at worst almost fully absent. In part, this speaks to the lack of capacity amongst public actors to govern urban nature, but also points to the ways in which matters of efficiency and ensuring “smooth processes” come to dominate when private interests are at stake. Relatedly, a crucial point of contention in the cases was the loss of democratic oversight. The redevelopment and management plans for each of the cases involved a transfer of ownership or management of publicly owned green space into private control, with limited provision for publics to hold private interests to account. This matters not only because of a loss of democratic control over a set of public assets, but also because even where urban nature comes to be designated as in private control, ownership or management, it still generates public goods – whether this be carbon sequestration, biodiversity, air quality or watershed management. Ensuring that private interests enact their responsibilities for the public goods generated through their urban nature assets is a collective challenge that cannot be left to individual private actors alone.

Overall, our analysis suggests that attending to the ways in which the public and private are constituted and contested in urban nature-based solutions is crucial for ensuring that they adequately address the distributive, procedural and recognition dimensions of social and environmental justice. Bringing private stakeholders into the provision of urban nature is increasingly seen as a necessary means through which to scale up the delivery of nature-based solutions, yet the terms on which this should take place and the consequences of reconfiguring the public/private ownership, control and accountability for urban nature rarely figures in these policy discussions. These cases show that even where the transfer of public assets to a benign, not-for-profit entity such as a Community Trust, deep questions of accountability are raised, and that the inclusion of for-profit business interests can seriously undermine the quality and equality of urban nature provision. At the same time, the inclusion of some communities is no guarantee that the interests of the often diverse and unequal publics that need to be taken into consideration can be realized. In this sense, adjustments to procedures of decision-making – such as those proposed in co-design and co-development methodologies – are a necessary but insufficient step for ensuring that nature-based solutions deliver public benefits for they are unlikely to be able to sufficiently include under-represented groups and cannot represent future communities whose interests are not yet known. When coupled with the recognition that even ostensibly private nature-based solutions generate public goods which may or may not be realized to their full potential, our findings point instead to the need for governance arrangements that can support the long-term stewardship of nature in the public interest and with due accountability. These arrangements could involve, first, safeguarding key urban naturescapes through either public or common ownership or the use of covenants to protect land under private ownership in the future, second, explicit assessment of the impacts of urban greening on gentrification and social exclusion and a requirement for measures to be

introduced to counteract such impacts, and finally long-term participatory and deliberative processes that enable ongoing and meaningful public debate, co-production and engagement with urban nature landscapes as they change over time. While the precise instruments and mechanisms through which such forms of governance can be enacted will vary across urban contexts, such forms of governance are likely to ensure the long-term stewardship of nature in the public interest and with due accountability.

Notes

1. NATURVATION, led by Durham University, involves 14 institutions across Europe investigating the contribution of nature-based solutions to urban sustainability between 2016 and 2021. One part of the project undertook fifty-four case-studies of the design and implementation of nature-based solutions in eighteen cities internationally. The research was funded by the European Commission's Horizon 2020 research and innovation programme under grant agreement no. 730243.
2. It is worth noting that the price LAMDA paid (915 million euros nominal value) was only a third of what was the estimated value of Hellenikon according to the Technical Chamber of Greece.
3. Available promotional material of LAMDA on Hellenikon: <https://thehellinikon.com/the-metropolitan-park/>.
4. See the main promotional video: <https://www.youtube.com/watch?v=mbJLILbGrDA>.

Acknowledgements

The authors would like to thank the editors for their support and the two anonymous reviewers for the constructive comments made on the previous versions of this paper. We are also thankful to the participants from each case study area.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The authors are grateful for the financial support received from the European Union's Horizon 2020 Research and Innovation Framework Programme who funded the project [grant agreement No. 730243]. Dr Kotsila acknowledges the support of the Juan de la Cierva-Incorporacion programme of the MINECO, Spain [IJC2019-040934-I], the WEGO-ITN Marie Skłodowska-Curie [grant agreement 764908-WEGO 2018-2021], and the "María de Maeztu" Programme for Units of Excellence of the Spanish Ministry of Science and Innovation [CEX2019-000940-M].

ORCID

Andrea Armstrong  <http://orcid.org/0000-0003-4685-7715>

References

- Anderson, S. T., & West, S. E. (2006). Open space, residential property values, and spatial context. *Regional Science and Urban Economics*, 36(6), 773–789. <https://doi.org/10.1016/j.regsciurbeco.2006.03.007>

- Anguelovski, I., Brand, A. L., Connolly, J. J. T., Corbera, E., Kotsila, P., Steil, J., Garcia-Lamarca, M., Triguero-Mas, M., Cole, H., & Baró, F. (2020). Expanding the boundaries of justice in urban greening scholarship: Toward an emancipatory, antisubordination, intersectional, and relational approach. *Annals of the American Association of Geographers*, 110(6), 1743–1769. <https://doi.org/10.1080/24694452.2020.1740579>
- Anguelovski, I., Connolly, J. J., Masip, L., & Pearsall, H. (2017). Assessing green gentrification in historically disenfranchised neighborhoods: A longitudinal and spatial analysis of Barcelona. *Urban Geography*, 39(3), 458–491. <https://doi.org/10.1080/02723638.2017.1349987>
- Apostolopoulou, E., & Kotsila, P. (2021). Community gardening in Hellinikon as a resistance struggle against neoliberal urbanism: Spatial autogestion and the right to the city in post-crisis Athens, Greece. *Urban Geography*, 43(2), 293–319. <https://doi.org/10.1080/02723638.2020.1863621>
- Austin, R. (1998). Not just for the fun of it: Governmental restraints on black leisure, social inequality, and the privatization of public space. *Southern California Law Review*, 71, 667.
- Beebeejaun, Y. (2017). Gender, urban space, and the right to everyday life. *Journal of Urban Affairs*, 39(3), 323–334. <https://doi.org/10.1080/07352166.2016.1255526>
- Blomley, N. (2004). Un-real estate: Proprietary space and public gardening. *Antipode*, 36(4), 614–641. <https://doi.org/10.1111/j.1467-8330.2004.00440.x>
- Blomley, N. (2008). Enclosure, common right and the property of the poor. *Social & Legal Studies*, 17(3), 311–331. <https://doi.org/10.1177/0964663908093966>
- Bodnar, J. (2015). Reclaiming public space. *Urban Studies*, 52(12), 2090–2104. <https://doi.org/10.1177/0042098015583626>
- Bondi, L. (1998). Gender, class and urban space: Public and private space in contemporary urban landscapes. *Urban Geography*, 19(2), 160–185. <https://doi.org/10.2747/0272-3638.19.2.160>
- Brain, D. (2019). Reconstituting the urban commons: Public space, social capital and the project of urbanism. *Urban Planning*, 4(2), 169–182. <https://doi.org/10.17645/up.v4i2.2018>
- Bulkeley, H., Carmin, J., Broto, V. C., Edwards, G. A., & Fuller, S. (2013). Climate justice and global cities: Mapping the emerging discourses. *Global Environmental Change*, 23(5), 914–925. <https://doi.org/10.1016/j.gloenvcha.2013.05.010>
- Carrington, D. (2017). UK's cash-starved parks at tipping point of decline, MPs warn. *The Guardian*. Retrieved September 2020, from <https://www.theguardian.com/cities/2017/feb/11/uks-cash-starved-parks-at-tipping-point-of-decline-mps-warn>
- Chronicle Live. (2017). £110 m Newcastle parks overhaul not proving popular with everyone. Retrieved accessed July 26, 2017, from <http://www.chroniclelive.co.uk/news/north-east-news/110m-newcastle-parks-overhaul-not-13346034>
- Connolly, J. J., & Anguelovski, I. (2021). Three histories of greening and whiteness in American cities. *Frontiers in Ecology and Evolution*, 9(12), 101. <https://doi.org/10.3389/fevo.2021.621783>
- Crowe, L. (2018). Policy review – the future of public parks in England: Policy tensions in funding, management and governance. *People, Place and Policy*, 12(2), 58–71.
- Davis, M. (1990). *City of quartz: Excavating the future in Los Angeles*. Verso.
- Dillon, L. (2014). Race, waste, and space: Brownfield redevelopment and environmental justice at the hunters point shipyard. *Antipode*, 46(5), 1205–1221. <https://doi.org/10.1111/anti.12009>
- Dooling, S. (2009). Ecological gentrification: A research agenda exploring justice in the city. *International Journal of Urban and Regional Research*, 33(3), 621–639. <https://doi.org/10.1111/j.1468-2427.2009.00860.x>
- Doucet, B. (2007). *Flagship regeneration: Panacea or urban problem* [Paper presentation]. EURA conference: The vital city (pp. 12–14).
- Duncan, T., & Hussain, F. (2017). *Development of a Charitable Trust to deliver Newcastle's parks and open spaces* (Cabinet Report 17th July 2018).
- Eidelman, T. A., & Safransky, S. (2021). The urban commons: A keyword essay. *Urban Geography*, 42(6), 792–811. <https://doi.org/10.1080/02723638.2020.1742466>
- Flusty, S. (1994). *Building paranoia: The proliferation of interdictory space and the erosion of spatial practice*. Los Angeles Forum for Architecture and Urban Design.

- Fraser, N. (1990). Rethinking the public sphere: A contribution to the critique of actually existing democracy. *Social Text* (25/26), 56–80. <https://doi.org/10.2307/466240>
- Gandy, M. (2013). Marginalia: Aesthetics, ecology, and urban wastelands. *Annals of the Association of American Geographers*, 103(6), 1301–1316. <https://doi.org/10.1080/00045608.2013.832105>
- Gandy, M. (2019). The fly that tried to save the world: Saproxylic geographies and other than human ecologies. *Transactions of the Institute of British Geographers*, 44(2), 392–406. <https://doi.org/10.1111/tran.12281>
- Gareau, J. (1991). *Edge city: Life on the new frontier*. Doubleday.
- Gieseking, J. J., Mangold, W., Katz, C., Low, S., & Saegert, S. (Eds.). (2014). *The people, place, and space reader*. Routledge.
- Glazer, N. (1992). Subverting the context: Public and space and public design. *The Public Interest*, 109(3), 3–21.
- Gould, K., & Lewis, T. (2017). *Green gentrification: Urban sustainability and the struggle for environmental justice*. Routledge.
- Greenberg, K. (1990). The would-be science and art of making public spaces. *Architecture and Behaviour*, 6(323), 338.
- Hancox, D. (2019). Revealed: Creeping privatisation of London parks in the summer. *The Guardian*. Retrieved September 2020, from <https://www.theguardian.com/cities/2019/jul/05/revealed-how-london-parks-are-partly-privatised-festivals-wireless-finsbury-park>
- Hinchcliffe, S., Kearnes, M., Degen, M., & Whatmore, S. (2005). Urban wild things: A cosmopolitical experiment. *Environment and Planning D*, 23(5), 643–658. <https://doi.org/10.1068/d351t>
- IDP. (2017). *Integrated development plan for Hellenikon*. Lamda Development SA.
- Irwin, E. G. (2002). The effects of open space on residential property values. *Land Economics*, 78(4), 465–480. <https://doi.org/10.2307/3146847>
- Jansson, M., Vogel, N., Fors, H., & Randrup, T. B. (2018). The governance of landscape management: New approaches to urban open space development. *Landscape Research*, 44(8), 952–965. <https://doi.org/10.1080/01426397.2018.1536199>
- Jones, K. R. (2018). The ‘lungs of the city’: Green space, public health and bodily metaphor in the landscape of urban park history. *Environment and History*, 24(1), 39–58. <https://doi.org/10.3197/096734018X15137949591837>
- Jones, M., & Reed, R. G. (2018). Open space amenities and residential land use: An Australian perspective. *Land Use Policy*, 75, 1–10. <https://doi.org/10.1016/j.landusepol.2018.02.056>
- Konstantinidis, C., & Vlachau, A. (2018). Appropriating nature in crisis-ridden Greece: Deepening neoliberal capitalism, part 2. *Capitalism Nature Socialism*, 29(2), 108–121. <https://doi.org/10.1080/10455752.2016.1264712>
- Lang, S., & Rothenberg, J. (2017). Neoliberal urbanism, public space, and the greening of the growth machine: New York City’s high line park. *Environment and Planning A: Economy and Space*, 49(8), 1743–1761. <https://doi.org/10.1177/0308518X16677969>
- Lets Talk Parks. (2017). *Where should the money come from?* Retrieved July 26, 2017, from <https://letstalkparks.co.uk/explore/money/>
- Lorimer, J. (2016). Rot. *Environmental Humanities*, 8(2), 235–239. <https://doi.org/10.1215/22011919-3664333>
- Low, S. (2016). *Spatializing culture: The ethnography of space and place*. Routledge.
- Low, S. M. (2006). The erosion of public space and the public realm: Paranoia, surveillance and privatization in New York City. *City & Society*, 18(1), 43–49. <https://doi.org/10.1525/city.2006.18.1.43>
- Madden, D. J. (2010). Revisiting the end of public space: Assembling the public in an urban park. *City & Community*, 9(2), 187–207. <https://doi.org/10.1111/j.1540-6040.2010.01321.x>
- Mandanipour, A. (Ed.). (2010). *Whose public space? International case studies in urban design and development*. Routledge.
- Mitchell, D. (1995). The end of public space? People’s park, definitions of the public, and democracy. *Annals of the Association of American Geographers*, 85(1), 108–133.

- Mitchell, D. (2017). People's park again: On the end and ends of public space. *Environment and Planning A*, 49(3), 503–518. <https://doi.org/10.1177/0308518X15611557>
- Mol, A., & Law, J. (2005). Boundary variations: An introduction. *Environment and Planning D*, 23(5), 637–642. <https://doi.org/10.1068/d350t>
- Newman, O. (1996). *Creating defensible space*. US Department of Housing and Urban Development.
- Pearsall, H., & Pierce, J. (2010). Urban sustainability and environmental justice: Evaluating the linkages in public planning/policy discourse. *Local Environment*, 15(6), 569–580. <https://doi.org/10.1080/13549839.2010.487528>
- Prentou, P. (2012). More Athenian sociospatial injustice in the works? Creating a metropolitan park at the former Hellinikon international airport of Athens. In *Planning to achieve: The need for new discourses and practices in spatial development and planning. Proceedings of the AESOP 2012 Conference* (pp. 11–15).
- Rigolon, A., & Nemeth, J. (2020). Green gentrification or 'just green enough': Do park location, size and function affect whether a place gentrifies or not? *Urban Studies*, 57(2), 402–420. <https://doi.org/10.1177/0042098019849380>
- Robbins, P. (2004). *Political ecology: A critical introduction* (Vol. 20). John Wiley & Sons.
- Roy, S., Byrne, J., & Pickering, C. (2012). A systematic quantitative review of urban tree benefits, costs, and assessment methods across cities in different climatic zones. *Urban Forestry and Urban Greening*, 4(11), 351–363. <https://doi.org/10.1016/j.ufug.2012.06.006>
- Shenker, J. (2017, July 24). Revealed: The insidious creep of pseudo-public space in London. *The Guardian*.
- Sibley, D. (1995). *Geographies of exclusion: Society and difference in the west*. Psychology Press.
- Sorkin, M. (1992). *Variations on a theme park: The new American city and the end of public space*. Hill and Wang.
- Staeheli, L. A. (1996). Publicity, privacy, and women's political action. *Environment and Planning D: Society and Space*, 14(5), 601–619. <https://doi.org/10.1068/d140601>
- Tozer, L., Hörschelmann, K., Anguelovski, I., Bulkeley, H., & Lazova, Y. (2020). Whose city? Whose nature? Towards inclusive nature-based solution governance. *Cities*, 107, Article 102892. <https://doi.org/10.1016/j.cities.2020.102892>
- Velegrakis, G., & Frezouli, E. (2016). Environmental conflicts and social movements: 12 case studies from Greece. *Imprint*. Retrieved April 2021, from <http://radicalgeography.gr/wp-content/uploads/2016/11>
- Wachsmuth, D., & Angelo, H. (2018). Green and grey: New ideologies of nature in urban sustainability policy. *Annals of the American Association of Geographers*, 108(4), 1038–1056. <https://doi.org/10.1080/24694452.2017.1417819>
- Whatmore, S. (2002). *Hybrid geographies: Natures, cultures, spaces*. Sage.
- Wolch, J. R., Byrne, J., & Newell, J. P. (2014). Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough'. *Landscape and Urban Planning*, 125, 234–244. <https://doi.org/10.1016/j.landurbplan.2014.01.017>