From Urban Resilience to Abolitionist Climate Justice in Washington, DC

Malini Ranganathan

School of International Service, American University, Washington, DC, USA; malini@american.edu

Eve Bratman

Environmental Studies, Franklin and Marshall College, Lancaster, PA, USA; ebratman@fandm.edu

Abstract: What would abolitionism mean for climate justice? "Resilience" is proposed by experts as a solution to climate change vulnerability. But this prescription tends to focus on adaptation to future external threats, subtly validating embedded processes of racial capitalism that have historically dehumanised and endangered residents and their environments in the first place. This article focuses on majority Black areas said to be vulnerable to extreme weather events and targeted for expert-driven resilience enhancements in America's capital city, Washington, DC. Drawing on key insights from Black radical, feminist, and antiracist humanist thought, we reimagine resilience through an abolitionist framework. Using archival analysis, oral histories, a neighbourhood-level survey, and interviews conducted between 2015 and 2018, we argue that abolitionist climate justice entails a centring of DC's historical environmental and housing-related racisms, the intersectional drivers of precarity and trauma experienced by residents beyond those narrowly associated with "climate"; and an ethics of care and healing practiced by those deemed most at risk to climate change.

Keywords: abolition ecologies, antiracist humanism, intersectional feminism, ethics of care, urban political ecology, climate justice

Introduction

Public discourse in the US has recently acknowledged the unequal raced and classed geographies of extreme weather events. In the aftermath of the 2017 hurricanes that tore through the Caribbean islands, Florida, and Texas, for instance, the media recognised the rootedness of disasters in histories of colonialism, racialisation, and real estate capitalism (e.g. Buncombe 2017; Hobson and Bassi 2017; Misra 2017; Tharoor 2017). Yet, when the dust had settled, "resilience" once again defined the post-disaster landscape. In the wake of Hurricane Harvey, for example, conservative and liberal commentators alike lauded Houston's social, physical, and spiritual resilience, identifying different avenues for channelling billions of dollars to rebuild the region (Solis 2017; Williamson 2017), while ignoring the longstanding exposure to oil refinery toxicity disproportionately borne by

Black and Latinx residents. With its pro-market visions of "building back better" and technological emphasis on green infrastructure, resilience thinking finds wide appeal among architects, planners, non-profits, journalists, and academics. Such visions privilege design solutions and externally imposed ideas for community cohesion, while eliding the structural inequalities that make particular groups vulnerable to climate threats in the first place. Moreover, resilience prescriptions tend to ignore the rooted practices of care and healing from historical trauma that residents already practice.

We put forth a framework of abolitionist climate justice based on Black radical, feminist, and antiracist readings of the environment and of political practice. We aim to contribute to a growing body of humanistic literature that seeks to decolonise climate change praxis. For indigenous scholar Kyle Powys Whyte (forthcoming), climate change praxis cannot be divorced from harm done unto indigenous bodies and their environments through settler colonialism yoked to industrial capitalism. Whyte writes against alarmist and posthumanist Anthropocene narratives wherein all humans are presumed to be responsible for intensifying environmental harm. He shows instead how climate change has historically unfolded through the dehumanisation of indigenous peoples and their lands—not to mention an erasure of this process in public memory. We situate our story of Washington, DC in a longer history of settler colonialism, racial slavery, and federally backed segregation in the region, arguing that contemporary precarity in DC's northeast cannot be separated from the historical dehumanisation of the city's residents and their landscapes. Following the call of this special issue, we argue that abolitionist climate justice entails the centring of (1) DC's historical racisms, (2) intersectional drivers of trauma experienced and understood by residents beyond those narrowly associated with climate, and (3) an ethics of care and healing practiced by those deemed most at risk to climate change.

We explicitly recognise the valence of abolitionism both in the long civil rights history of Washington, DC and within Black radical thought. As we show here, descendants of 19th century Black abolitionists in Washington, DC continue to centre notions of abolition and freedom in their community activism. A city whose grandeur was built on slave labour, DC was a centre for abolitionism in the years leading up to the American Civil War (Asch and Musgrove 2017). In the 20th century, abolitionism provided the trope through which African American scholars and activists fought for myriad not-as-yet won freedoms. W.E.B. Du Bois (2014) outlined an abolition democracy, involving the institutionalisation of antiracism in political and policy spheres. Angela Davis (2005) adapted the term to speak to modern mass incarceration, calling for the abolition of the prison industrial complex wrought in and through racial capitalism. Drawing on her longstanding political-economic analysis of carceral geographies, Ruth Wilson Gilmore (2017:228) has recently defined abolition broadly as "unfinished liberation ... [from] processes of hierarchy, dispossession, and exclusion that congeal in and as group-differentiated vulnerability to premature death"; in short, what Cedric Robinson (2000:xxxi) imagined as an "overthrow of the whole race-based structure". Nik Heynen's (2016:842) call for "abolition ecologies" brings this muchneeded optic to the fields of urban political ecology and environmental justice,

arguing that we "work through intellectual silos" to imagine "nature free from white supremacist logics".

In this article, we ask how abolitionism might translate to environmental and climate justice. Conversely, we ask how actually existing climate justice praxis might inform abolitionist thought. While "climate justice" has been a rallying call for frontline, indigenous, and people of colour activists in the US, it lacks definitional specificity. More troublingly, it tends to be coopted in politically blunt ways by international environmental organisations. We focus on Washington, DC's northeastern Ward 7, part of the broader Anacostia River watershed (Figure 1a and 1b). A low-lying area subject to mid-Atlantic weather extremes, this is where expert-driven climate resilience is being operationalised in city plans. It is also an area with a culture of activism, in which housing, employment, health, and environmental inequalities have long been tackled by below-the-radar practices, trauma counselling, and an ethics of care focused on the wellbeing of seniors and children. As such, we frame abolitionist climate justice not only through Black radical thought, but also through feminist and humanist scholarship. Taken together, these traditions insist that we understand oppression as intersectional and that we read the imperative to rehumanise as core to radical politics.

Methodologically, research for this article was carried out between 2015 and 2018. It involved a neighbourhood survey (n = 193) on climate change vulnerability implemented in 2016 in the Kenilworth, Parkside, and Paradise neighbourhoods of Ward 7 in northeast DC; archival analysis on the history of Ward 7 and the wider Anacostia region; and oral histories and interviews drawn from city-level climate experts and Ward 7 residents, leaders, and activists. We start by explaining how what we refer to as "mainstream resilience thinking" has become official policy in Washington, DC. We then move the theoretical gaze from resilience to climate justice, drawing on activist vocabularies and critical-theoretical frames. Next we detail our empirical work by focusing the two subsequent sections on, first, a history of environmental racism in DC's northeast, and second, on an ethics of care that seeks to undo historical trauma, while also launching structural critiques of racism. We conclude with broader implications for our framework of abolitionist climate justice beyond the DC case.

Mainstreaming Resilience in Washington, DC

Stop calling me resilient. I'm not resilient. Because every time you say, "Oh, they're resilient", you can do something else to me. I am not resilient. (Tracie Washington, quoted in Woods 2017)

In the aftermath of Hurricane Katrina which struck New Orleans in 2005, Louisiana-based lawyer Tracie Washington famously objected to being called "resilient" by outside observers, going so far as to launch a poster campaign with the quote above. As she and fellow activists saw it, resilience language normalised the onslaught of external climate and economic threats, assuming the endless capacity of affected groups simply to cope. As Kaika (2017) argues, also referencing Washington's quote, resilience language fails to account for what creates the need

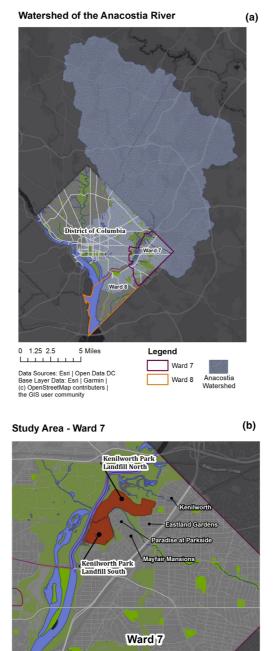


Figure 1: Maps of the Anacostia watershed (a) and study area (b) [Colour figure can be viewed at wileyonlinelibrary.com]

Legend
Ward 7
National Parks

District Parks Kenilworth Landfill

0.25 0.5

Data Sources: Esri | Open Data DC Base Layer Data: Esri | Garmin | (c) OpenStreetMap contributers | the GIS user community

1 Mile

to be resilient *in the first place*. Within the natural sciences, resilience connotes the ability of social systems to weather adversity; to bounce back from unforeseen disruptions or shocks; and, per its original formulation by ecologist C.S. Holling (1973), to adapt to a new normal following disruption. As a "scientific and policy fad" (Tierney 2015:1329), the surge in resilience thinking stems from the damage witnessed from hurricanes and earthquakes in the last decade, even while the concept is being stretched beyond natural disasters to include financial crises, unemployment, and terrorism, among other shocks (Brand and Jax 2007; Fainstein 2015).

Resilience became an official policy strategy in Washington DC in 2016 when the city became part of the competitive 100 Resilient Cities program and launched its Climate Ready DC Plan. The 2016 Climate Ready Plan involves enhancing resilience to future threats, specifically focusing on the spheres of infrastructure, design, and housing. Technical assistance and financial support largely came from the Rockefeller Foundation, while the city's Resilience Strategy is coordinated by the Resilient DC office, housed within the Office of the City Administrator. The initiative broadly seeks to assess current resilience among stakeholders, identify partnerships, and ultimately to address both sudden shocks and longer-term stresses.

While such future-gazing planning recognises the need to assess existing vulnerabilities—and indeed acknowledges racial and economic inequality—such acknowledgement is belied by the actual trajectory of such efforts. Relatively little is done to assess the rooted experiences, knowledges of, and approaches to sudden and slower-moving stressors among frontline communities. Everyday threats, such as gentrification or food insecurity, that do not fall under the categories of environment or climate per se tend to be ignored. The rationale behind such resilience efforts is pitched in terms of the gross economic costs of infrastructure and building damage, more than the psychological and material trauma of displacement. Illustrative here is a 2008 report on the challenges of flooding along the Anacostia and Potomac rivers (NCPC 2008). Instead of focusing on existing realities that we examine closely below—including, crucially, the intersections between housing and food insecurity—climate adaptation is positioned within the domain of technical prescriptions such as improvements to levees and federal floodplain maps (NCPC 2008). Smart growth policies such as revising zoning ordinances, protecting vulnerable areas from new developments, improving storm water management, adapting transportation systems, mitigating urban heat islands, and street design standards are all also discussed as strategies for fostering greater resilience in the face of climate change (EPA 2013; Hoverter 2012; MWCOG 2013).

Such thinking and practice raise two ontological questions: resilient to what? And who is to benefit from resilience? On the first question, resilience discourse tends to focus on "climate proofing" the future, rather than ongoing and historical causes of harm. If the afterlives of historical oppression are erased, and/or if the "here and now" of precarity is poorly understood or wilfully watered down, then resilience thinking necessarily conjures more of the status quo—with only superficial changes as recommended options. On the second question, since

2005 the history of disaster recovery efforts in the United States indicates that the main beneficiaries are private contractors, consultants, architects, designers, and financial and corporate executives who profit from federal resilience-related contracts. Meanwhile, affected residents are forced to act as entrepreneurs to receive funds, while city agencies rubber-stamp community "participation" as part of their sustainable city planning (Adams 2012; Derickson 2014; Gotham 2012; Tierney 2015). In other words, resilience discourse is articulated with neoliberal, market-based fashions influencing planning and architecture. Leitner and colleagues (2018) refer to this assemblage as a "global resilience complex". Perhaps most problematic, resilience may heighten underlying racialised fears. Ansfield's (2015) research, for example, suggests that in post-Katrina New Orleans, historically honed tropes of "contamination" and "uninhabitability" were marshalled via top-down resilience planning into renewed state violence against Black lives, including heightened policing and evictions.

We do not yet know the full ramifications of DC's resilience strategy. At the same time, the suspicion that some Black elected representatives harbour towards it evinces the disconnect between expert-driven visions and the lived experiences and situated knowledges of the city's residents. For instance, in a publicly posted video recorded during an unexpected DC snowstorm, councilmember Trayon White (Ward 8) blamed resilience as part of a charged conspiracy theory about climate manipulation: "And DC keep talking about: 'we a resilient city.' And that's a model based off the Rothschilds controlling the climate to create natural disasters they can pay for to own the cities, man. Be careful" (Jamison and Strauss 2018). The councilmember has reputation as a defender of the city's low-income Black populations. He soon apologised for the anti-Semitic and off-the-cuff nature of his remarks, though he made no further commentary about the conspiracy theory. What was amply clear was the councilmember's scepticism and negativity towards expert-driven resilience. Though this example may represent a fringe view, it should be noted that mainstream resilience is hardly politically neutral in DC, nor separable from the class and racial tensions that have long characterised this and many other American cities.

From Resilience Thinking to Abolitionist Climate Justice

Some scholars suggest that grounded ways of knowing and articulating resilience may help to address these disconnects and render resilience thinking more relevant and meaningful (DeVerteuil and Golubchikov 2016). Others attempt to redeem resilience by focusing on how those who suffer from climate change engage it within an everyday politics (Taylor and Schafran 2016; Wapner 2016). A proposed framework of "resourcefulness", alternatively, might offer a countersystemic approach to framing resilience, one that is also pragmatic and rooted in self-determination (MacKinnon and Derickson 2012). We are sympathetic to this academic debate over whether to keep or not to keep resilience. For instance, frontline activists continue to use the word "resilience" to signal a variety of goals. Thus it is neither practical nor desirable for radical scholars to do away with this

term. However, we find that resilience has left little room for scholars to engage language that is broadly legible to activists, and that can be vested with place-specific ways of knowing and feeling, namely climate justice. Crucially, use of "climate justice" demands attention to history and, counterintuitively, to intersectional processes that are *not* solely associated with climate or the environment. Climate justice's semantics opens up possibilities not always afforded by resilience.

Unlike resilience, the uptake of climate justice has mainly been among grass-roots activists, including Black, Brown, and indigenous groups who draw upon earlier frameworks that understand the environment more capaciously as encompassing labour rights, land rights, housing, toxics, health, and other social justice concerns. Here, climate change is seen as inextricable from broader social, political, and economic processes (Bond 2012; Moellendorf 2012; Schlosberg and Collins 2014). For example, at the 2015 Conference of Parties to the United Nations (COP-21) held in Paris, a delegation representing historically Black colleges and universities co-organised by veteran environmental justice scholar Robert Bullard made explicit connections between Black Lives Matter and climate justice. As one activist present, Sarra Takola, put it:

When you think about a cop shooting you, it's an immediate death ... But climate change—with [related] pollution that's mostly in our backyard—is still killing us. Respiratory diseases, asthma, and various cancers are slower killers, but connecting them to Black Lives Matter is really important. (Quoted in Floyd 2016)

At the People's Climate March in 2017 in Washington, DC, a banner hanging in a neighbourhood protesting evictions in DC read: "Housing Justice is Climate Justice" (Lockwood 2017). The connection between housing and climate justice is a key one also being explored by scholars. As Cohen's (2018) work has shown, a policy committment to affordable housing can yield important carbon benefits, and as Rice et al., (2019) have argued, unless urban climate planning explicitly addresses housing equity issues, it can risk reinforcing gentrification trends (Rice et al. 2019; Cohen 2018). At the event, youth from Soil Generation, a Philadel-phia-based collectivity of Black farmers, used street theatre to draw connections between police brutality and climate change, summarising the move simply as "we're not just here for climate justice". Bullard himself had earlier called for environmentalism to be "broadened to incorporate organisations and groups that may not necessarily have 'environment' in their name" (Floyd 2016, emphasis added), a sentiment strongly echoed by our own research in Washington, DC.

How can radical scholarship contribute to thinking and praxis surrounding climate justice, especially the notion that climate justice is "not just about climate", and calls for confronting racism and environmental harm together? Articulated with the abolitionism found in Black radical thought, we identify three key insights drawn from feminist and humanist scholarship.

First, feminist scholars have long insisted that oppression and struggle must be understood as intersectional—not only in the sense of overlapping identities (e.g. race, class, gender, age, faith, ability, sexuality, etc.), but also in the sense of materialities and lived experiences (e.g. Collins and Bilge 2016; Crenshaw et al. 2012; hooks 2015; Taylor 2017). The notion that climate vulnerability is historical,

intersectional, and multidimensional has also been recognised in the interdisciplinary and critical social science literature (Hardy et al. 2017; Malin and Ryder 2018; Thomas et al. 2018). As a case in point, in northeast and southeast Washington, DC, gun violence, police brutality, and substance abuse compound with income and food insecurity to impede the ability of youth to physically and psychologically weather all manner of crises, including eviction (more frequently) or extreme weather events (less frequently). Similarly, a lack of public transit and grocery stores is felt especially acutely during inclement weather in areas with a large aging demographic, as is the case in northeast. It is thus incumbent on scholars who seek to understand climate change to look to a host of intersecting "not-the-usual-suspect" materialities and identities that mark the lived experience of climate change (Kaijser and Kronsell 2014).

Second, from feminist scholarship, we know that political struggle must be rooted in the experience of home, neighbourhood, and workplace (Combahee River Collective 1977; Taylor 2017). Feminist geography has long insisted that the intimate and personal matter for geopolitics (Mountz and Hyndman 2006; Pratt and Rosner 2012), and, specifically, that environmental justice struggles reflect embodied harms (Doshi 2017; Truelove 2011). As an extension of this argument, feminists contend that political agency does not always come in loud acts of protest, defiance, or mass movement (Weheliye 2014), but rather can be articulated through a subtle ethics of care rooted in nodes of domestic, youth, or elder care (Lawson 2007; Williams 2017). These may be illegible to outside experts, but ultimately go a long way in healing wounded cities (Till 2012). Thus, as we have found in northeast DC, narratives and practices of trauma healing and care are neither loud, nor do they necessarily register as environmental. Yet we contend that they are invaluable for moving us towards abolitionist climate justice.

Third, and finally, the conjoining of Black Lives Matter with environmental activism suggests that antiracist humanism is paramount to contemporary environmental justice movements. What is at stake here is reclaiming what it means to be human. Black humanist scholars such as Sylvia Wynter have critiqued the universalising assumptions of liberal humanism and liberal environmentalism, questioning how "Eurocentric Man" came to stand in for the figure of the human, while non-white others have been rendered primitive or even sub-human through processes of colonial exploitation, capitalism, and patriarchy (McKittrick 2015; Wynter 2003). Like Whyte, Wynter argues that historical dehumanisation via colonialism and capitalism can be seen as concomitant with ecological harm. Along these lines, Austin Zeiderman (2019:172) has recently argued that a "re-engagement with humanism is necessary for confronting the unequal distribution of precarity in the Anthropocene". Working through his research on Afro Colombians and racialised dispossession along the coast, Zeiderman draws on Paul Gilroy's (2018:14) argument that a "reparative humanism"—a humanism that speaks to and redresses the experience of antiblackness—can build a more refined political ecology against the flattening ontologies given by the Anthropocene frame. As we discuss below, this rehumanising imperative undergirds narratives of healing from historical trauma and an ethics of care in Washington DC's Ward 7.

In sum, narratives from the frontlines deploying climate justice as a frame help bolster scholarly engagement with the term because of atypical connections made between the environment and social and political life. Conversely, scholarly insights into intersectionality, an ethics of care, and a rehumanising politics help frame and bolster the intellectual underpinnings of climate justice. We turn next to a history east of the Anacostia River.

Environmental Racisms East of the Anacostia River

all that change-the-world cheek rubbed raw by power in the end, all that politics, when you see it from this side of the river, polluting the air like the smoke that used to rise from Kenilworth, all the city's trash burned in the city's marshes, beside the river. That dump is a park now, but still the stench of war boils up from downtown buildings, roiling clouds of wasted lives and cash. (Joe Lapp 2006b, 'The war from this side of the Anacostia River')

Two rivers run south through the District of Columbia emptying into the Chesapeake Bay: the Potomac, located to the west and bordering wealthy white neighbourhoods, and its smaller tributary, the Anacostia, which borders the far northeast and southeast neighbourhoods of Ward 7 and 8 respectively (Figure 1). The latter two wards are where a majority (> 90%) Black population is concentrated in flood-prone flats (Asch and Musgrove 2017:5). Not surprisingly, these areas underscore the city's stark racial geography. Ward 7 experiences nearly double the rate of poverty compared to the District average (US Census Bureau 2017), making it a piece of the "Third World" within the "First" (Bratman 2011). This is an area associated with "trash", "dump", and "stench", as Joe Lapp, an anti-Vietnam War activist and a long-time resident of Kenilworth, penned in his poem 'The war from this side of the Anacostia River', referencing the ward's legacy as host to an open-burning incineration facility.

From this side of the Anacostia—among the marshes bobbing with discarded plastic bottles—we get a sense of the city's settler colonial history. It is here that the Nacotchtank tribe of the Piscataway Nation, native peoples of the region, once farmed, fished, and traded. This land, seized and divided by European settlers in the 1600s, was cultivated for tobacco for over two centuries on plantations laboured on by African slaves. Ultimately, this landscape gave way to military and industrial projects, toxic waste, 20th century housing segregation, and 21st century gentrification. From this side of the Anacostia, America's capital can more properly be seen as sedimented with settler colonialism, racial slavery, militarism, and racial segregation. It can also be understood to continue as an internal colony with respect to the rest of the nation, given its lack of democratic representation in Congress, and the political and economic disenfranchisement of its African American residents (Bratman 2011; Williams 2001).

In this article, we understand environmental racism as the result of a "diversity of racisms" (Pulido 2000:13), both past and present. To understand the production of the Anacostia region's historical political ecology, we focus on three racial

projects: (1) plantation slavery and the ruination of the Anacostia watershed (late 1600s–late 1800s), (2) post-war segregation (1940s–1960s), and (3) the establishment and inadequate closure of the notorious Kenilworth open-burning dump, a site declared highly toxic by the US Surgeon General (1960s–1980s). While the discussion here is necessarily brief, the goal is to highlight pivotal junctures that have contributed to socio-ecological precarity in far-east DC.

By the late 1600s, European settlers had established tobacco farms all along the Anacostia rivershed, relying on its deep channel to transport harvests to the ocean and back to England, and deploying chattel slavery to turn a profit (Smithsonian 2012; Wennersten 2008). Over the next 150 years, tobacco rose and fell as the area's primary economic driver. Bladensburg Port in Maryland at the head of the Anacostia gained prominence in the 1740s as a regional trading centre, with tobacco grading, sorting, and shipping as its main activities. However, a century of plantation capitalism later, massive soil erosion and siltation had set in. The Anacostia's silted up shores gradually collapsed and cascaded into its waters, filling in the deep shipping channel. Tobacco plantations left marginal, unfertile soils in flat and rocky lands, which came to be settled by freed slaves with the end of the American Civil War. It also left a watershed denuded of forests, vulnerable to flooding. In this way, DC was not unlike the US's southern Gulf Coast, where the roots of flood disaster were set in motion two centuries before Katrina. The earliest recorded flood near Bladensburg occurred in 1889; nearly 40 years later, another severe flood destroyed 100 homes "occupied by colored people" (Biddle 1953:319-320). Today, areas surrounding the Anacostia River are predicted to be at risk of flooding and storm surges (DC Department of Energy and Environment 2018).¹

With plantation capitalism resulting in erosion and flooding, by the early 1900s, the federal government had relegated the Anacostia River as a repository for the city's sewage, animal waste, and effluents generated by naval stations, industries, and the Benning Road power plant (today, a decommissioned power plant). Simultaneously, the federal government upgraded the Potomac River (which had also been polluted at the turn of the 20th century) as a source of DC's drinking water through purification, dam, and aqueduct projects. The racial and spatial politics of the region played out in the diametrically opposing imaginaries of the two rivers, separating west from east DC. Compounding the west-east colour line, slum removal from downtown areas, highway building, residential redlining, and restrictive covenants all played significant roles into the early 1940s (Green 1976). So blatant were removal efforts displacing Blacks to eastern parts of the city that a group of Black civic associations called for the abolishment of the Alley Dwelling Authority in the 1940s, issuing complaints to the Real Estate Licensing Board over the restrictive racial covenants and mortgage redlining practices which perpetuated real estate prejudice.

During and after World War II, however, government agencies redoubled their efforts at segregation, pushing highway building and city beautification in the post-World War II period. The building of the Kenilworth Avenue Freeway and Anacostia Freeway, for instance, resulted in eminent domain-based seizure and destruction of over 30 homes, along with a church, a nightclub, and a community centre, despite local opposition (Lapp 2006a). The Anacostia Freeway also had the

result of fragmenting the community: as Angelé Doyne, long-time resident of Ward 7 and community organiser, reflected on this history: "so many things were done to us ... the freeway was intentionally built to separate the community". The Redevelopment Land Authority demolished entire Black downtown neighbourhoods, including businesses, churches, and well maintained homes in the name of city beautification (Thursz 1966). While highway and neighbourhood demolitions were resisted in white neighbourhoods, poor Black neighbourhoods were not able to resist them as successfully. The net result was that more than a quarter of displaced Black families were corralled into crowded and substandard housing conditions east of the Anacostia, setting in motion conditions that we see today.

As working class white families left for the suburbs—lured by mortgages, ordinances, and covenants that Blacks were excluded from—the Ward 7 neighbourhoods of Kenilworth, Eastland Gardens, and River Terrace turned into predominantly Black communities. Later, a tide of Black middle class out-migration from far-east DC also occurred, with higher income Black families moving out of established neighbourhoods in Kenilworth into Prince George's County, further east in Maryland (Lategola 1996:9). Formerly white and Black middle class housing in Kenilworth began catering to younger, poorer Black tenants with larger families, eventually becoming Section 8 housing in the contemporary moment (ibid.). Once nicknamed "Chocolate City", the historically Black majority in the District later experienced an 11% loss of the African American population between 2000 and 2011, largely from gentrification-related dynamics (Morello and Keating 2011).

While these details give a sense of acute spatial segregation, the city's environmental history is incomplete without the story of the notorious Kenilworth trash incinerator, which illustrates the pervasive racism borne by the communities that are the focus of this paper. With the Anacostia River being condemned as contaminated and silt-laden, the Army Corps of Engineers began a massive reclamation project to dredge and fill in portions of the Anacostia riverbed in the mid-20th century. It finished this project—the Kenilworth Park, a section of the Anacostia Park—just in time for another major problem that was besetting the District: municipal solid waste. City commissioners reported in 1942 that trash was "overwhelming the city's limited incinerator capacity" and that Maryland and Virginia counties would no longer accept DC's waste (Board of Commissioners 1940:102). Eventually, they settled on Section G of Anacostia Park, behind the then newly constructed Black middle class residential complex, Mayfair Mansions, built by famed Howard University architect Albert Cassell. The decision to locate the dump here was rooted in the long-time association of the Anacostia with waste, regardless of the presence of Black middle class families in the area.

Kenilworth dump, overseen by the National Park Service, become emblematic of America's urban waste and pollution problems: "an ugly, enormous, burning pile of solid waste, befouling the air of our nation's capital with great plumes of smoke" noted the Surgeon-General (Stewart 1967:iii). By the 1960s, 250,000 tons of waste was burned on site annually. In July 1967, US Surgeon-General William H. Stewart held a conference on solid waste management, recognising explicitly the mercury and dioxins released into the air by burning at Kenilworth, and set a

deadline for the site to be converted to a capped sanitary landfill (ibid.). Less than a year later, a seven-year-old boy playing near the dump fell by accident. He was engulfed in the flames and died (Wennersten 2008:183). His death sparked outrage and renewed action from the community, including mothers lying down in the road to halt the dump trucks from adding to the burning pile (Lapp 2006a:18; Wennersten 2008:184). Kenilworth dump was converted to a sanitary landfill in 1968. In 1970, the landfill was finally capped and reclaimed as "Kenilworth Park" (NPS cIP 2013:6).

But concerns persist about contamination from the landfill, with soils measuring high in polychlorinated biphenyls, methane, hydrocarbons, and other carcinogens as a result of decades of trash burning. By 2013, toxicity testing showed that the growing mound of illegal debris atop the Kenilworth Landfill had toxicity levels up to 100 times greater than Environmental Protection Agency (EPA)-recommended threshold levels, which had already been identified as inadequate in the late 1990s. A series of missteps by the National Park Service (NPS) resulted in downplaying the harm, the failure to conduct environmental assessments, and lax regulation on illegal dumping, which continued at the site. The NPS recommended the installation of another 24-inch cap to reinforce the site in 2012 (NPS 2012), but high costs stalled the cap for five years. Only in 2017 did DC Mayor Muriel Bowser's budget propose monies toward clean-up efforts. The dump remains an eyesore and a source of anxiety for Kenilworth's residents, who must also deal with flooding at the nearby Neval Thomas elementary school, and a decommissioned power plant. Many residents, including Advisory Neighbourhood Commissioner (a locally elected leader), Justin Lini, expressed frustrations about the slow pace of clean-up at the dump site and ongoing illegal dumping in the neighbourhood, and that seeping toxins were likely washing into the neighbourhood during extreme rain events. To Lini, flooding wrought by climate change would make this landscape of toxicity more hazardous for residents living in the vicinity. Environmental justice studies since the early 2000s have shown longstanding inequality in terms of exposure to both point and non-point pollutants in the US more generally and for DC's Black residents (McDonald 2000).

Today, these legacies compound with gentrification ramping up east of the river. In June 2015, a block from the Paradise at Parkside apartments, where most of the neighbourhood's lowest-income populations live, we noticed a sign which pronounced proudly that "Luxury Townhouses from the mid-300s" (\$300,000) are "coming soon". Nearby, similar townhouses were built only a few years earlier. The writing on the wall is clear—change is coming, and it will involve new, wealthier people moving in, while DC remains in a persistent affordable housing crisis that hurts its low-income residents. Mainstream resilience does little to recognise and address these longstanding challenges and more recent gentrification. Environmental gentrification (Checker 2011) produced by resilience thinking can itself be a source of displacement for residents. Environmental gentrification in southwest DC involves redevelopment of new areas boasting "green" interventions and pedestrian malls, bike lanes, organic food, and recreation that promises to bring a "world class lifestyle". Despite important tenant-protection checks (Gallaher 2016) and limited equity housing cooperatives (Huron 2018), research

shows the steady displacement of lower income Black population from west to east of the river and further (Giambrone 2016). Psychological stressors accompany gentrification. As a long-time anti-gentrification activist in Ward 8 described it: "there's so much opulent development around you that it starts to close in on you".

Experiencing, Knowing, and Tackling Intersectional Precarity: An Ethics of Care

Our empirical research sought, first, to understand how climate change was recognised and experienced by residents in the Ward 7 communities of Mayfair Mansions, Kenilworth-Parkside, Eastland Gardens, and Paradise-at-Parkside depicted in Figure 1. Second, it sought to catalogue whether and how grassroots avenues can be tapped for enhancing climate and environmental justice. We selected these areas because they are located within zones forecast to be submerged by rising sea levels, especially at levels of five feet or more, and experience social vulnerability according to governmental reports. Our research aimed to ground such metrics in lived experiences. We conducted a survey of residents (n=193), and compensated participants with a \$25 gift card to Safeway, the only grocery store in the area. We also interviewed and collected oral histories of neighbourhood leaders (interestingly, often referred to as "indigenous" leaders in the local context) and housing rights activists, and attended community meetings and events in Ward 7.

As researchers interested in climate justice, we asked questions related to recent memories of extreme weather events in our survey, hoping to gain insight into how residents coped during these events. Our survey yielded some useful demographic information: among respondents, 60% earned less than \$45,000 a year in combined household income, 70% were renters, and 80% were African American. This is representative of 2017 census demographics, namely that Ward 7 has a median household income of \$40,000 and is 92% African American (US Census Bureau 2017).

However, the most significant finding of our survey was indirect and unanticipated: the Safeway cards we offered as incentive were a major draw precisely because of the lack of food access in the area. As Ashanté Reese's (2018) ethnography of Black food geographies in Ward 7's Deanwood neighbourhood shows, many older residents remember a time of food self-reliance and the flourishing of community gardens, but today are navigating a paucity of grocery stores, and a lack of validation for their gardening efforts in the face of looming gentrification and displacement. One of our survey questions showed that the inability to get to a grocery store was the most serious impact of the last weather emergency. One anonymous survey respondent stated the inter-relatedness of the food access issue with other mobility-related challenges:

Areas east of the river are at a disadvantage during severe weather events because of the lack of grocery/drug stores, restaurants (not fast food), and shops within walking distance. We have to really prepare in advance otherwise we suffer as we wait out the

event. Additionally, side roads flood, are not pretreated, or are the last to be plowed; it's difficult to leave during an event.

As this quote shows, mobility is a major challenge, given the geography and layout of the area. Being constrained by the river as a border, it only has one main access road. Delving deeper into food insecurity, in 2013 the DC Promise Neighbourhood Initiative, a non-profit receiving federal grants, discovered in a survey of Ward 7 that half of households surveyed answered "Very often" or "Often" to the question: "How often in the past month did you ever feel worried that you would run out of food before you have money to purchase more food?" Related questions such as "Do you skip meals or go without eating?" revealed realities of pervasive hunger. Residents at Paradise-at-Parkside and Mayfair Mansions—both of which house a sizable low-income population—also consistently highlighted hunger as a serious challenge, particularly for children and seniors. Ultimately our survey showed that residents face ongoing and intersectional struggles. Sudden weather events themselves are not as central as the interlinked and ongoing issues of violence, transportation access, poverty, and food insecurity (though these challenges are made worse by such events).

It was thus necessary to conduct oral histories and interviews to reveal a range of intersectional challenges that were not adequately captured by our survey. As Parisa Norouzi, Executive Director of Empower DC (an anti-eviction grassroots organisation), put it to us, helping to sharpen a self-critique of our survey:

When I think of vulnerability, it's day to day surviving, the struggle for transportation, to get around, food to eat, jobs, shelter, and, you know, the life struggles. People are just trying to manage and deal with the environment around them. There is really no conversation around the intersectionality of issues. The crisis experienced is the day-to-day of existence, just living.

A similar explanation around the "intersectionality of issues" came up in an interview with Angelé Doyne, Community Partnerships Manager for the East River Family Strengthening Collaborative and a member of the Anacostia Park and Community Collaborative's programs on climate change and inclusion. Angelé recounts her experience speaking with residents:

We were working on campaigning, like grassroots, on the ground, knocking on doors-type stuff, and letting people know, hey, this is going on, but what's your immediate need, what's your immediate concern, what's happening with you? And ... it was: "I just got to eat today." "Oh, my friend's son was shot yesterday." Things like that happen everyday. So those are the pressing issues that people aren't connecting to global warming and sea-level rise as affecting their daily lives. But it does. And when flood season comes here soon, we have to be prepared for that.

Among other issues, several informants also spoke about the threat of gentrification and displacement in Ward 7. Gentrification is multi causal: part of the reason is rooted in inter-generational differences. For instance, Ms Hazel Beatty, an elderly Black woman who has resided in Ward 7 since the early 1950s, said: "The children and grandchildren of the Black Baby Boomers ... don't want their homes". She explained how the younger generation does a minimum to make

the properties habitable, and then rents them to Section 8 tenants who lack the means to refurbish these homes, leading to further decline in property value—thus catalysing profit-driven gentrification. Part of the reason, however, is rooted in aggressive redevelopment in Ward 7 over the last few years, particularly in the Parkside neighbourhood of Ward 7. Corporate real estate firm CityInterests has been steadily redeveloping the neighbourhood via large condominium complexes. In response to its latest project of 400 units near Interstate 295, ANC Commissioner Justin Lini was quoted as saying: "Many people are worried that new development is not for them, but for someone else" (Rushton 2017). One resident we spoke to elaborated on this complaint:

The developer is saying "we're remodelling your place and we're turning it into one or two bedrooms". When we have families of like six people, how is a family supposed to fit into one or two bedrooms? ... The developers are saying there's an affordable housing space right behind there. My friend just got a place and she's paying \$1,800 a month. That's not affordable.

The decision to replace multifamily housing with single-family housing is a racially coded practice. Such practices have a long history in the US. Residents "know" these practices as deeply exclusionary, but such situated knowledge does not feature in city plans.

At a number of points in our conversations with residents, we heard not just about the necessity of connecting ongoing challenges such as gentrification, hunger, and housing with climate harm—much like the activists at the People's Climate March were doing—but also about healing from historical trauma. As Angelé put it to us: "There is a huge disconnect between climate change and the realities people are facing. People are experiencing a lot of trauma. They are just trying to figure out how to survive". This sentiment is at the centre of long-time resident and organiser Bruce Purnell's work, which we see as emblematic of an abolitionist and feminist ethics of care. Purnell traces his family ancestry to abolitionism, Civil Rights activism, and the Underground Railroad, a 19th century network of secret routes, homes, and stops that helped slaves escape to their freedom:

My ancestors were stationmasters for the Underground Railroad. They had homes where they transported people from slavery north to Canada. It was a diverse group of people that believed in freedom. They put everything on the line. One of my great grandparents knew Frederick Douglass and the abolitionist John Brown. They were great friends. John Brown was a white man who chose to hang to make a point. Of course, they said he was crazy. But to know that means there is hope for everybody.

A psychologist by training, Bruce is founder and executive director of the Love More Movement, which aims to help people "heal from the wounds of the past and build communities that actualise the dreams of their ancestors". His work centres the trauma of slavery, segregation, incarceration, the War on Drugs, policing, and, as he sums it, "this era which they call the New Jim Crow". Bruce's reference to policing echoed another Ward 7 organiser in his sixties, Charles Eaves, who spoke about being "indoctrinated in the in the era of Stokely Carmichael" (a

Black Panther leader), but for the younger generation, the "only Black history they have is Trayvon Martin". Dedicated to addressing the "root causes" of trauma associated with new and old racial geographies, Bruce and fellow radical psychologists are prone to using the term "post-traumatic slavery syndrome". At the same time, Bruce insists on hope, love, healing, and interracial solidarity as key tenets for moving forward: "I don't think anybody is healed from these things, but we're healing. It's a process ... we're still moving towards liberation and freedom."

Weekly, Bruce and the Love More Movement bring together Ward 7's seniors under the program "Seniors Offering Unconditional Love" (SOUL) to sing Black freedom songs and share personal struggles. Over food, seniors attending these meetings connect with each other and proudly recognise Black history, while also speaking candidly about contemporary challenges relating to economic and food security. These practices are radical in that they valorise histories of Black freedom. But they are also about quiet acts of compassion, care, and understanding. They represent an abolitionist, feminist, and humanist ethics of care and healing that climate experts call "social cohesion" and that even critical social scientists have identified as necessary to weathering climate emergencies (Klinenberg 2002). Crucially, these practices fall outside of the realm of the "environment" and "climate" narrowly construed but are vital for building climate justice in that they foster networks of solidarity. As one resident reflected on such practices:

There are a lot of social connections that exist. People offer each other all sorts of inkind support in times of crisis; they look after each other's kids, share rides, check in on each other. Now, how do we strengthen those bonds?—that's what we need to focus on. Instead, there's the city's response, which is almost always to bring in outside people and groups in to help.

Another example comes from Ms Tina Beeks, manager of the Paradise-at-Parkside (an affordable housing unit) Community Center for 23 years. Ms Beeks described a key aspect of her work as channelling food donations from churches, food banks, and government programs, or even "hot dogs from [her] own kitchen", for children and elders:

I focus on the children because they will be the ones who suffer. Sometimes kids beg for money to buy ice cream from the truck. I try to share the little that I have. But I also have to focus on my seniors who need a liaison for house maintenance and food delivery.

Her use of the word "my" throughout the interview is telling, revealing an abiding sense of kinship with Paradise-at-Parkside residents, especially since there is widespread belief that "the needs and concerns related to seniors are mostly overlooked or neglected". Ms Beeks laughed that many community residents see her as "momma"—as a social glue and source of stability and strength that keeps Paradise functioning. Building managers like Ms Beeks and the community centres that they run provide connective hubs of information-sharing, convening, and casual encounter. As she recounted to us, this commitment originates in her own challenges as a single mother struggling for housing and employment three

decades ago without a solid financial history. A home-owner in Ward 7 similarly describes community centres as a site of cohesion, and also describes neighbours' care as a form of local "eyes on the street": "Also, when I bought my house, I didn't realise that every block has their own neighbourhood police. We hold each other accountable. I travel a lot and the neighbours are always like, 'this happened and that happened'. We look out for each other".

We observed performances of care, healing, and solidarity on a broader scale at an event organised by the East River Family Strengthening Collaborative in March 2018. Titled "Ward 7 Women of Excellence", the event honoured younger and older women who directly contributed to the wellbeing of Ward 7's residents, including by helping seniors "age in place". The event drew over 300 attendees, the vast majority of whom were African American women. It featured artist Tammarrah Addison's spoken word poem "Pioneer" on her 2017 digital album *Unbossed Unapologetic*. The poem invokes anti-slavery narratives and freedom songs, particularly those of Harriet Tubman and Sojourner Truth: "We women have the natural power to do what needs to be done. We don't need no cape, steel cover, or lasso. See, we're second to none. Know your past". Repeating Sojourner Truth's powerful refrain "Ain't I a Woman?" three times in a row, the poem summons "leaders before us to light the way" and calls on "superwomen" and "mothers of Black boys" to practice self-care because "we need you".

We see these practices and cultural registers as fundamentally rehumanising. They are cognisant of deep histories of oppression and struggle. If as Gilmore (2017:227) puts it, "abolition geography starts from the homely premise that freedom is a place", then these rehumanising registers are also homely practices of Black place-making outside of normalised and official cartographies of power (McKittrick 2011). They demonstrate Williams' (2017) notion of "care-full" justice for healing wounded cities.

Conclusion

In her memoir In the Wake: On Blackness and Being, Christina Sharpe (2016:105) uses the metaphors of weather and climate to discuss the "impossible possibilities" for abolishing antiblackness. To Sharpe, "antiblackness is pervasive as climate" (Sharpe 2016:106).² But also contained within the changing climate are "new ecologies ... political movements that seek to protect the environment". To Sharpe, these new ecologies and movements, including maroon geographies and hidden scripts deployed at the margins, are necessarily unconventional and difficult-to-read from the outside, yet comprise the everyday work of antiracism, abolitionism, and environmental stewardship. While Sharpe is not concerned with the phenomenon of climate change per se, her literary use of climate and weather resonates with the aims of this special issue on abolition ecologies and with our own research. Indeed, the abolitionist approach deployed here recognises that environmental racisms are pervasive, interconnected, and produce effects that are compounding and unpredictable. So too, the search for freedom in this context comes from unexpected places. Just as codes on the Underground Railroad were embedded in songs and stories for slaves to communicate secretly among

themselves, we see relationships built on ethics, solidarity, and healing are not necessarily legible to the mainstream. It is in these relationships, however, where the social fabric necessary to respond to stressors is nurtured.

Beyond the Washington, DC case, this article yields four broad implications for climate justice. First, history is always present. Our study connected the dots between settler colonialism, plantation slavery, housing segregation, urban renewal, and disproportionate toxicity in the Anacostia region with myriad sources of present-day climate precarity. Indeed, there is no other way to understand contemporary climate change—either in its cause or manifestations—than to conduct such deep historical analysis. Rather than assign blame for vulnerability on individual bodies and deficient behaviours via indicators like "poverty", "obesity", and "lack of education", as expert climate plans tend to do, it is necessary to shift the gaze to the historical and multi-causal production of harms.

Second, climate justice is not just about climate. The simplicity and power of this conclusion cannot be overstated. Just as national conversations in the US have started to link climate change mitigation with labour rights and job creation, so too do conversations about climate vulnerability need to be linked with other social, political, and economic arenas. More than is possible with a resilience frame, we find that the term climate justice opens up room for locating climate as one among many—and not necessarily overriding—intersectional drivers that impede the ability of people to lead healthful and dignified lives. While we initially went into our research with a climate vulnerability survey, we quickly learned the limitations of such a single-issue approach. As Gabriela Valdivia (2018) has recently noted, such an approach is common in international development and environmental policies. Yet, people do not live their lives according to single issues. Rarely do those deemed at risk to climate change in official maps and studies "see" or "know" the impacts of extreme weather events on their lives and homes in isolated ways. Qualitative and archival avenues taught us that overlapping arenas of food insecurity, lack of transit, and threats to housing are understood as some of the greatest challenges in Ward 7, in addition to the insidious workings of carceral geographies in which Black residents are disproportionately policed and punished. As such, our approach to abolitionist climate justice valorises situated knowledges, fundamentally challenging the embrace of what mainstream commentators have lauded as "liberal environmentalism" (Bernstein 2002). We take issue with liberal environmentalism. Similar to the single-issue approach, liberal environmentalism tends to isolate "climate" as a discrete scientific stressor that can be distinguished from other arenas—as if somehow an extreme weather event's effects are not fundamentally based on histories of racial inequality and difference perpetuated by the very elites who promote liberalism for some and not all in the first place (Bonds 2019; Ranganathan 2016).

Third, foregrounding an ethics of care also foregrounds an ethics of research. While recognising the very real risk of outside cooptation, there may nevertheless be room to support such ethics of care through intentional and strategic acts. Neighbourhood leaders are cautious about outside researchers; it was not easy for us, as outside academic researchers from a private university in DC's wealthiest ward, to gain access to Ward 7's residents, and for good reason. Offering

information and data that we had gathered first, rather than conducting research as a one-way street, helped to build trust, as did offering compensation for survey participation and profiling the abolitionist work of activists via public writing.

Fourth, and finally, environmental justice goals should be, more broadly, about freedom and liberation. The search for the "the environment as freedom" (Ranganathan 2017) must begin with acknowledging practices that rehumanise marginalised groups and that have already taken root in wounded places. We have tried to show here how abolitionist climate justice seeks to rehumanise environmental concerns. Relatedly, if outside actors are serious about addressing the disproportionate effects of all manner of environmental harms on poorer minorities, then reimagining the environment more capaciously as where people live, work, and play is imperative. A broader understanding of the environment and climate through abolitionist praxis can be leveraged to extend financial and infrastructural support for non-traditionally "environmental" (and, often, by extension, non-white) organisations. This impulse may ultimately be of greater import to environmental and social wellbeing than narrow conservation or greening efforts.

Acknowledgements

We are indebted to the organisers, leaders, residents, and practitioners in Washington, DC interviewed for this research. Special thanks go to Justin Lini for a history of the Kenilworth-Parkside neighbourhoods, and introductions to Ward 7 community members. Our gratitude is also due to Derek Hyra at the Metropolitan Policy Center at American University for financial support, and to Megan Ybarra, Nik Heynen, and Katherine McKittrick for providing opportunities to present and publish this manuscript. We also sincerely thank Tracy Watson, Marissa Lorusso, and Isobel Araujo for conducting archival and qualitative research; Erin Matson for conducting historical research and producing GIS maps; and Abby Schwarz and Nathan Erwin for research and editorial support. Thanks also go to Austin Zeiderman, Kasia Paprocki, and Gabriela Valdivia for invitations to present the draft manuscript at various venues. Finally, our sincere thanks go to Antipode Handling Editor Kiran Asher, Editorial Manager Andy Kent, and anonymous peer reviewers. All shortcomings remain our own.

Endnotes

- ¹ See http://dcfloodrisk.org/ for flood risk indicators and storm surge predictions for the District.
- ² The authors are grateful to Ashanté Reese for pointing this out at the "Anti-Blackness in the American Metropolis" conference in Baltimore in November 2018.

References

Adams V (2012) Markets of Sorrow, Labors of Faith: New Orleans in the Wake of Katrina. Durham: Duke University Press

Ansfield B (2015) Still submerged: The uninhabitability of urban redevelopment. In K McKittrick (ed) *Sylvia Wynter: On Being Human as Praxis* (pp 124–141). Durham: Duke University Press

Asch C M and Musgrove G D (2017) Chocolate City: A History of Race and Democracy in the Nation's Capital. Chapel Hill: University of North Carolina Press

Bernstein S (2002) Liberal environmentalism and global environmental governance. *Global Environmental Politics* 2(3):1–16

- Biddle J F (1953) Bladensburg: An early trade center. *Records of the Columbia Historical Society* 53/56:309–326
- Board of Commissioners 1940 "Report of the Government of the District of Columbia for Year Ended June 30, 1940". House Document No. 24. 77th Congress, 1st Session. Washington, D.C: U.S. Government Printing Office
- Bond P (2012) Politics of Climate Justice: Paralysis Above, Movement Below. Pietermaritzburg: University of KwaZulu-Natal Press
- Bonds A (2019) Race and ethnicity I: Property, race, and the carceral state. *Progress in Human Geography* 43(3):574–583
- Brand F S and Jax K (2007) Focusing the meaning(s) of resilience: Resilience as a descriptive concept and a boundary object. *Ecology and Society* 12(1) https://www.ecologyandsociety.org/vol12/iss1/art23/ (last accessed 22 May 2019)
- Bratman E (2011) Development's paradox: Is Washington DC a Third World city? *Third World Quarterly* 32(9):1541–1556
- Buncombe A (2017) Hurricane Harvey was a natural disaster, but a man-made catastrophe that will hurt the poor the most. *Independent* 3 September
- Checker M (2011) Wiped out by the "greenwave": Environmental gentrification and the paradoxical politics of urban sustainability. City and Society 23(2):210–229
- Cohen D A (2018) Climate Justice and the Right to the City. Penn: Current Research on Sustainble Urban Development. Philadelphia: University of Pennsylvania.
- Collins P H and Bilge S (2016) Intersectionality. Cambridge: Polity
- Combahee River Collective (1977) "The Combahee River Collective Statement." https://americanstudies.yale.edu/sites/default/files/files/Keyword%20Coalition_Readings.pdf (last accessed 16 February 2019)
- Crenshaw K, Gotanda N, Peller G and Thomas K (eds) (2012) Critical Race Theory: The Key Writings That Formed the Movement. New York: New Press
- Davis A Y (2005) Abolition Democracy: Beyond Empire, Prisons, and Torture. New York: Seven Stories Press
- DC Department of Energy and Environment (2018) "Flood Risk Maps."
- Derickson K D (2014) The racial politics of neoliberal regulation in post-Katrina Mississippi. Annals of the American Association of Geographers 10(4):889–902
- DeVerteuil G and Golubchikov O (2016) Can resilience be redeemed? City 20(1):143-151
- Doshi S (2017) Embodied urban political ecology: Five propositions. Area 49(1):125–128
- Du Bois W E B (2014 [1935]) Black Reconstruction in America: An Essay Toward a History of the Part Which Black Folk Played in the Attempt to Reconstruct Democracy in America, 1860–1880. Oxford: Oxford University Press
- EPA (2013) "Using Smart Growth Strategies to Create more Resilient Communities in the Washington, DC Region." Office of Sustainable Communities, Smart Growth Program, US Environmental Protection Agency
- Fainstein S (2015) Resilience and justice. *International Journal of Urban and Regional Research* 39(1):157–167
- Floyd A (2016) Black Lives Matter in a changing climate. *Green America* https://www.gree namerica.org/climate-justice-all/black-lives-matter-changing-climate (last accessed 22 May 2019)
- Gallaher C (2016) *The Politics of Staying Put: Condo Conversion and Tenant Right-to-Buy in Washington, DC.* Philadelphia: Temple University Press
- Giambrone A (2016) Poverty in DC is getting worse east of the Anacostia River, study finds. *Washington City Paper* 29 September
- Gilmore R W (2017) Abolition geography and the problem of innocence. In G T Johnson and A Lubin (eds) *Futures of Black Radicalism* (pp 225–240). New York: Verso
- Gilroy P (2018) "Where every breeze speaks of courage and liberty": Offshore humanism and marine xenology, or, racism and the problem of critique at sea level. *Antipode* 50 (1):3–22

- Gotham K F (2012) Disaster Inc: Privatization and post-Katrina rebuilding in New Orleans. *Perspectives on Politics* 10(3):633–646
- Green C M (1976) Washington: A History of the Capital, 1800–1950. Princeton: Princeton University Press
- Hardy R D, Milligan R A and Heynen N (2017) Racial coastal formation: The environmental injustice of colorblind adaptation planning for sea-level rise. *Geoforum* 87:62–72
- Heynen N (2016) Urban political ecology II: The abolitionist century. *Progress in Human Geography* 40(6):839–845
- Hobson J and Bassi E (2017) How the Caribbean's colonial history shapes hurricane recovery. WBUR 27 September
- Holling C (1973) Resilience and Stability of Ecological Systems. *Annual Review of Ecology and Systematics* 4:1–23
- hooks b (2015) Feminism Is For Everybody: Passionate Politics. New York: Routledge
- Hoverter S (2012) Adapting to Urban Heat: A Tool Kit for Local Governments. Washington, DC: Georgetown Climate Center
- Huron A (2018) Carving Out the Commons: Tenant Organizing and Housing Cooperatives in Washington, DC. Minneapolis: University of Minnesota Press
- Jamison P and Strauss V (2018) DC lawmaker says recent snowfall caused by "Rothschilds controlling the climate", Washington Post. https://www.washingtonpost.com/local/dc-politics/dc-lawmaker-saysrecent-snowfall-caused-byrothschilds-controlling-the-climate/2018/03/18/daeb0eae-2ae0-11e8-911fca7f68bff0fc_story.html?utm_term=.5dda85d193f6
- Kaijser A and Kronsell A (2014) Climate change through the lens of intersectionality. *Environmental Politics* 23(3):417–433
- Kaika M (2017) "Don't call me resilient again!": The New Urban Agenda as immunology, or, What happens when communities refuse to be vaccinated with "smart cities" and indicators. *Environment & Urbanization* 29(1):89–102
- Klinenberg E (2002) Heat Wave: A Social Autopsy of Disaster in Chicago. Chicago: University of Chicago Press
- Lapp J (2006a) "Kenilworth: A DC Neighborhood by the Anacostia River." Humanities Council of Washington, DC
- Lapp J (2006b) The war from this side of the Anacostia River. *Beltway Poetry Quarterly* 7(2) http://washingtonart.com/beltway/lapp.html (last accessed 16 February 2019)
- Lategola A R (1996) "Paradise for Sale: Attempting Low-Income Cooperative Conversion at Paradise Manor Apartments, Washington, D.C". Davis, CA: Center for Cooperatives, University of California. http://www.ucanr.org/sites/sfp/files/143817.pdf
- Lawson V (2007) Geographies of care and responsibility. *Annals of the Association of American Geographers* 97(1):1–11
- Leitner H, Sheppard E, Webber S and Colven E (2018) Globalizing urban resilience. *Urban Geography* 39(8):1276–1284
- Lockwood D (2017) "Clean this place, don't displace": Activists battle for environmental justice in Washington, DC. *Truthout* 19 May https://truthout.org/articles/clean-this-place-don-t-displace-activists-battle-for-environmental-justice-in-washington-dc/ (last accessed 16 February 2019)
- MacKinnon D and Derickson K D (2012) From resilience to resourcefulness: A critique of resilience policy and activism. *Progress in Human Geography* 37(2):253–270
- Malin S A and Ryder S S (2018) Developing deeply intersectional environmental justice scholarship. *Environmental Sociology* 4(1):1–7
- McDonald N (2000) "Our Unfair Share 3: Race & Pollution in Washington, DC." African American Environmentalist Association (AAEA)
- McKittrick K (2011) On plantations, prisons, and a black sense of place. *Social and Cultural Geography* 12(8):947–963
- McKittrick K (ed) (2015) Sylvia Wynter: On Being Human as Praxis. Durham: Duke University Press
- Misra T (2017) A catastrophe for Houston's most vulnerable people. *The Atlantic* 27 August

Moellendorf D (2012) Climate change and global justice. Wiley Interdisciplinary Reviews: Climate Change 3(2):131–143

- Morello C and Keating D (2011) Number of black DC residents plummets as majority status slips away. *The Washington Post* 24 March
- Mountz A and Hyndman J (2006) Feminist approaches to the global intimate. *Women's Studies Quarterly* 34(1/2):446–463
- MWCOG (2013) "Summary of Potential Climate Change Impacts, Vulnerabilities, and Adaptation Strategies in the Metropolitan Washington Region: A Synopsis of Lessons Learned from the Metropolitan Washington Council of Governments' Climate Adaptation Planning Initiatives from 2010–2012." Metropolitan Washington Council of Governments
- NCPC (2008) "Report on Flooding and Stormwater in Washington, DC." National Capital Planning Commission
- NPS (2012) "Feasibility Study Report: Kenilworth Park Landfill, Northeast Washington, DC." National Capital Region Parks—East, National Park Service https://www.nps.gov/nace/learn/management/upload/Feasibility-Report.pdf (last accessed 15 February 2019)
- NPS (2013) "Community Involvement Plan Kenilworth Park Landfill: National Capital Parks East Washington, DC". National Park Service. https://www.nps.gov/nace/learn/management/upload/Revised-Kenilworth-CIP-February-2013_Final.pdf
- Pratt G and Rosner V (2012) The global and the intimate. In G Pratt and V Rosner (eds) *The Global and the Intimate: Feminism in Our Time* (pp 1–27). New York: Columbia University Press
- Pulido L (2000) Rethinking environmental racism: White privilege and urban development in Southern California. *Annals of the Association of American Geographers* 90(1):12–40
- Ranganathan M (2016) Thinking with Flint: Racial liberalism and the roots of an American water tragedy. *Capitalism Nature Socialism* 27(3):17–33
- Ranganathan M (2017) The environment as freedom: A decolonial reimagining. *Social Science Research Council Items* 13 June https://items.ssrc.org/the-environment-as-freedom-a-decolonial-reimagining/(last accessed 22 May 2019)
- Reese A (2018) "We will not perish; we're going to keep flourishing": Race, food access, and geographies of self-reliance. *Antipode* 50(2):407–424
- Rice J, Cohen D A, Long J and Jurjevich J (2019) Contradictions of the Climate-Friendly City: New Perspectives on Eco-Gentrification and Housing Justice. *International Journal of Urban and Regional Research*. https://doi.org/10.1111/1468-2427.12740
- Robinson C (2000) Black Marxism: The Making of the Black Radical Tradition. Chapel Hill: University of North Carolina Press
- Rushton C (2017) Neighbors fight latest Parkside plans: ANC 7D, civic association worry about traffic, grocery. *East of the River DC News* 6 March http://www.capitalcommuni tynews.com/content/neighbors-fight-latest-parkside-plans (last accessed 17 February 2019)
- Schlosberg D and Collins L (2014) From environmental to climate justice: Climate change and the discourse of environmental justice. *Wiley Interdisciplinary Reviews: Climate Change* 5(3):359–374
- Sharpe C (2016) In the Wake: On Blackness and Being. Durham: Duke University Press
- Smithsonian (2012) "Reclaiming the Edge: Urban Waterways and Civic Engagement." Smithsonian Anacostia Community Museum, Washington, DC
- Solis J (2017) Two ways of thinking about "resilience" after Harvey. Houston Chronicle 20 October
- Stewart W H (1967) Foreword. In L Weaver (ed) *Proceedings—The Surgeon General's Conference on Solid Waste Management for Metropolitan Washington, July 19–20* (p iii) Cinncinnati: US Department of Health, Education, and Welfare
- Taylor K-Y (ed) (2017) How We Get Free: Black Feminism and the Combahee River Collective. Chicago: Haymarket
- Taylor Z and Schafran A (2016) Can resilience be redeemed? City 20(1):142
- Tharoor I (2017) Puerto Rico is still a victim of colonial neglect. *The Washington Post* 27 September

- Thomas K, Hardy R D, Lazarus H, Mendez M, Orlove B, Rivera-Collazo I, Roberts J T, Rockman M, Warner B P and Winthrop R (2018) Explaining differential vulnerability to climate change: A social science review. *Wiley Interdisciplinary Reviews: Climate Change* 1 (2):1–18
- Thursz D (1966) Where Are They Now?: A Study of the Impact of Relocation on Former Residents of Southwest Washington, Who Were Served in an HWC Demonstration Project. Washington, DC: Health and Welfare Council of the National Capital Area
- Tierney K (2015) Resilience and the neoliberal project: Discourses, critiques, practices—and Katrina. *American Behavioral Scientist* 59(10):1327–1342
- Till K (2012) Wounded cities: Memory-work and a place-based ethics of care. *Political Geography* 31(1):3–14
- Truelove Y (2011) (Re-)conceptualizing water inequality in Delhi, India through a feminist political ecology framework. *Geoforum* 42:143–152
- US Census Bureau (2017) "Ward 7, DC—American Community Survey 5-Year Estimates." Census Reporter Profile http://censusreporter.org/profiles/61000US11007-ward-7-dc/ (last accessed 16 February 2019)
- Valdivia G (2018) Translations of indigeneity: Knowledge, intimacy, and performing difference in Ecuador. *Development and Change* 49(5):1347–1358
- Wapner P (2016) Climate of the poor: Suffering and the moral imperative to reimagine resilience. In P Wapner and E Hilal (eds) *Reimagining Climate Change* (pp 131–149). New York: Routledge
- Weheliye A G (2014) Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human. Durham: Duke University Press
- Wennersten J R (2008) Anacostia: The Death and Life of an American River. Baltimore: Chesapeake Book Company
- Whyte K forthcoming Way beyond the lifeboat: An indigenous allegory of climate justice. In K-K Bhavnani, J Foran, P A Kurian and D Munshi (eds) *Climate Futures: Reimagining Global Climate Justice*. London: Zed https://papers.ssrn.com/sol3/papers.cfm?abstract_xml:id=3003946 (last accessed 22 May 2019)
- Williams B (2001) A river runs through us. American Anthropologist 103(2):409-431
- Williams M J (2017) Care-full justice in the city. Antipode 49(3):821–839
- Williamson K D (2017) The hope in Houston. National Review 3 September
- Woods M (2017) "Stop calling me resilient": Addressing environmental degradation in Louisiana. *Edge Effects* 9 May http://edgeeffects.net/stop <u>calling-me-resilient/</u> (last accessed 4 January 2019)
- Wynter S (2003) Unsettling the coloniality of Being/Power/Truth/Freedom: Towards the human, after Man, its overrepresentation—an argument. *CR: The New Centennial Review* 3(3):257–337
- Zeiderman A (2019) Low tide: Submerged humanism in a Colombian port. In K Hetherington (ed) *Infrastructure, Environment, and Life in the Anthropocene* (pp 171–192). Durham: Duke University Press