Towards a postcolonial perspective on climate urbanism

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Abstract

The growing interest in urban areas as sites for climate action has led to new ways of conceiving and planning the urban. As climate actions reshape existing understandings of what cities are or ought to be, they constitute new modalities of what recent scholarship has referred to as 'climate urbanism.' This research has framed climate urbanism as a climate-inflected iteration of neoliberal urban development, geared towards the mobilization of 'green' private capital for large-scale infrastructural projects, focused on carbon metrics, and conducive to population displacement through eco-gentrification. In this intervention, we commend these efforts to deliver a critical perspective on how climate change gives rise to forms of urbanism that reproduce urban injustices without addressing the root causes of the climate crisis. However, we warn against two biases in recent scholarship, namely an emphasis on technological solutions and an overreliance on familiar contexts of climate action. The literature on climate urbanism does not yet reflect the diversity of urban responses emerging under the broad umbrella of urban climate action. Adopting a post-colonial perspective on climate urbanism, we call for a greater engagement with the heterogeneous character of climate-changed urban futures.

1. Introduction

Climate change poses new imperatives that shape how we conceive, manage, and live in cities. Climate change discourses have become part of urban strategies, foregrounding new forms of climate-oriented urban governance and interventions (e.g. Betsill and Bulkeley 2006; Bulkeley 2005; Bulkeley and Betsill 2005, 2006; While and Whitehead 2013). New models of low carbon, climate-resilient urbanism have emerged over the last decade (Bulkeley 2013; Long and Rice 2019; Castán Broto et al., forthcoming), fostering alliances between organisations and across institutional scales (Luque-Ayala et al. 2018). This is the brave new world of urban climate action, in which a myriad of actors reconfigure urban transport, energy, water, waste, housing and sanitation, as well as green spaces, redefining cities' everyday life in new ways.

Urban climate action provides openings, and it certainly creates a sense of hope to address global environmental challenges. For celebratory visions of the urban age (Glaeser 2012; Owen 2009) the city

remains a – if the not 'the'- site where climate change needs to be addressed (C40, 2014). However, this enthusiasm for cities' capacity to save the planet has been cut short by critical scrutiny. Long and Rice (2019) argue that urban climate strategies rely on technocratic expertise and patterns of capital accumulation and financialization that hardly address the root causes of the climate crisis. These carbon-focused interventions constitute a distinct form of "climate urbanism." Climate urbanism emerges as a reincarnation of sustainable urbanism discourses (see Hodson and Marvin 2017) whether this is to mitigate carbon emissions (Rice 2010; While et al. 2010) or to protect urban economies from climate stress with defensive infrastructures. This new mode of urban development supports the reproduction of resource-intensive and exclusionary forms of capitalist accumulation in cities. Long and Rice's analysis echoes critical readings of public and private interventions that excuse themselves on the labels 'green,' 'ecological,' or 'low-carbon' while reinforcing entrenched urban inequalities (Anguelovski et al. 2019; Anguelovski et al. 2019; Anguelovski et al. 2018; Blok 2020; Bouzarovski et al. 2018; Dooling 2009; Gould and Lewis 2018; Keenan et al. 2018; Rice et al. 2019; Shokry et al. 2020).

Climate urbanism research has mainly focused on interventions led by institutional public and private actors in North American and European cities, with a few recurring examples in South America and Asia. Existing analyses rarely discuss interventions that are never just neoliberal nor purely radical but that fall somewhere in-between (Bulkeley et al. 2014, MacGregor 2019). A focus on visible and institutionalised forms of climate action overlooks the diversity of urban responses to climate change - particularly those which exceed neoliberal strategies, and that are not led by governments, real estate actors or financial institutions. This observation echoes broader challenges for urban theory, as Parnell and Robinson (2012) have stressed the need to 'look beyond neoliberalism' in theorising contemporary urban transformations. They observe that neoliberal critiques of urban development have tended to focus on "the imposition or extension of commodified forms of social life; the dominance of capitalist-led, pro-growth urban development; and the often experimental development of new forms of social policy to resolve the related crises of capitalist accumulation" (*ibid,* 598).

While a 'neoliberal' lens provides a useful analysis of the operation of contemporary capitalism, it also tends to portray climate urbanism as a relatively homogeneous phenomenon and precludes explorations of potentially transformative and just urban responses to climate change. We thus propose to broaden the scope of climate urbanism research to engage more deeply with the diversity, ambiguities and potential of urban climate action. This argument follows post-colonial theorisations of urban change, particularly in urban political ecology (Lawhon et al. 2014; Silver 2019), which offer a rich analytical vocabulary to trace how everyday attempts to manage, navigate, cope with and adapt to climate change emerge in distinct places. Integrating post-colonial scholarship into climate urbanism research offers two contributions. First, it challenges long-held assumptions about 'where to locate the South' by deploying theoretical frames developed in Southern cities to analyse ecological restructuring and climate action in cities everywhere (Silver 2019). Second, it makes visible below-the-radar modes of climate action that challenge neoliberal urban developments, in often ambiguous, incremental, and sometimes radical way. Current critiques of climate urbanism reveal how exclusionary urban interventions are undertaken in the name of climate action, and post-colonial scholarship can support the development of more plural and, perhaps, more hopeful, theorizations of urban responses to climate change. In what follows, we develop this argument in three parts. First, we assess current debates on climate urbanism and urban climate action and the critical vocabularies emerging from it. Second, we bring to the fore post-colonial theorisations of urban change to discuss their relevance in efforts to theorise climate urbanism in cities everywhere. Third, we draw on these insights to explore how a situated understanding of climate urbanism can help us rethink how we understand urban transformations in a climate-change world.

2. Climate urbanism as just a reincarnation of the neoliberal city?

Urban studies scholars have long criticised climate change strategies and the kind of politics they mobilize (Luque-Ayala et al. 2018). Research has shown that the compromises and trade-offs involved

in climate action prevent a complete overhaul of urban economic development pathways (Chu et al. 2016). While earlier forms of climate governance took different regulatory and collaborative approaches, a key feature of climate urbanism is the re-direction and intensification of financial investments into technological and low-carbon infrastructural fixes for climate mitigation (i.e. greenhouse gases emission reductions) and adaptation to climate shocks and stresses (Long and Rice 2019).

Consultants, international organisations, city networks and research institutes advising on urban climate policies have framed climate change as an economic opportunity, emphasising the need for governments to encourage private sector investments in the delivery climate-proof infrastructures (Goh 2019a; Rapoport 2014; Rashidi et al. 2019, Coalition for Urban Transitions, 2019). The worldwide financing gap for low-carbon infrastructures (within and beyond cities) (Goodfellow 2020) has legitimised the financialization of infrastructure provision through the inclusion of capital markets as important sources of financing, notably through debt raising (Bigger and Millington 2019; Castree and Christophers 2015; Christophers 2018; Long and Rice 2019). Scholars have shown how public and private investments into climate-proof infrastructures contribute to the securitization and thus fragmentation of urban space, through the protection of core urban economic functions and the emergence of ecological enclaves for the rich (Caprotti 2014; Goh 2019b; Graham and Marvin 2001; Hodson and Marvin 2017; Hodson and Marvin 2009; Sanzana Calvet, 2016). This is underpinned by urban planning strategies that exacerbate urban inequalities and shape communities' uneven exposure to climate change impacts, as widely documented by research on climate adaptation planning in cities of the global North and South (Anguelovski et al. 2016; Chu et al. 2017; Shi et al. 2016). Population displacements and uneven exposure to climate risks have also been shown to be regular outcomes of urban greening projects (Anguelovski et al. 2020; Blok 2020; Gould and Lewis 2018; Shokry et al. 2020; Anguelovski et al. 2019).

Furthermore, Foucault-inspired scholars have shown that climate urbanism supports new governmentalities centred on behavioural carbon control affecting how individuals conduct their lives (McGuirk et al. 2014; 2016; Rice 2010; Stripple and Bulkeley 2013; While et al. 2010). As the reduction of greenhouse gas emissions becomes a normative goal for urban policy, the focus on carbon metrics obfuscates issues related to the socio-economic and environmental consequences of climate mitigation agendas (Rice 2010). Climate urbanism thus consolidates processes of exclusion that divide the urban population between the climate privileged benefitting from low-carbon investments, protective infrastructures and green urban amenities, and the climate precarious for whom urban climate action means rising housing and living costs and further exclusion from the low-carbon city (Rice et al. 2020). In US cities, scholarly literature on environmental justice movements has long demonstrated how colonial logics of racial capitalism lies at the heart of urban segregation, making black, latinx, and indigenous people the first victims of environmental harm (e.g. Bullard 2000; Heynen et al. 2006; Pulido 2016a, 2016b; Pulido and De Lara 2018; Ranganathan and Bratman 2019; Silver 2019).

The body of research reviewed here unpacks the constitution of climate change as a discursive device that legitimises entrepreneurial 'green' interventions in cities to protect, reproduce and strengthen capitalist accumulation regimes (Jonas et al. 2011). Certainly, urban climate policies have historically shied away from addressing the inevitable trade-offs involved in pursuing environmental, social justice, and economic objectives simultaneously (Anguelovski et al. 2016; Hodson and Marvin 2017) focusing on the unrealistic aspiration of endless economic growth (Rydin 2013), notably through techno-fixes. The question is, however, is this all there is to climate urbanism? Techno-fixes, capital, and expertise are only available to certain groups of people within cities, and to cities that can afford them. In cities that already lack infrastructure and struggle to provide basic services to their inhabitants the priority is how to reproduce urban life. In our view, analyses of the deployment of neoliberal climate solutions in cities homogenise a phenomenon which is far from settled. A focus on visible practices of carbon and climate risk management only offers a partial account of urban climate action. Climate urbanism emerges from multiple sites, led by a diverse array of actors, and delivers ambiguous results (see also Bulkeley et al., 2014; Luque Ayala 2018). For instance, scholarship on community-based adaptation across Asia, Africa and Latin America has helped to recognize how communities – particularly in low-income self-built settlements - generate knowledge about climate change risks and impacts, sometimes

challenging the structural drivers of inequality (Archer et al. 2014; Ayers and Forsyth 2009; Dodman and Mitlin 2013; Forsyth 2013; Fraser et al. 2017; Leck et al. 2018; Pelling 2002). A narrowly-defined model of climate urbanism serving the reproduction of inequalities and capitalist economies detracts attention from less spectacular responses to climate change.

The potential for climate action that exceeds and challenges a neoliberal development framework has rarely been analysed in emerging examinations of climate urbanism (but see Luque-Ayala 2018). Critical scholarship should seek to capture proposals rooted in people's experiences within their ordinary context of actions. A post-colonial perspective on climate urbanism may help address this. Post-colonial perspectives invite us to expand the geographical remit of analysis to develop new ways of seeing (cf. Robinson, 2016) to reveal multiple understandings of what climate urbanism means and what could it mean, as it becomes a strategy for progressive action (for instance to provide essential services where there are none). Rather than just being another manifestation of the neoliberal urban project, bringing to the fore insights from postcolonial theory can help us read climate urbanism as an ambiguous way of intervening in cities located both within formal institutions and in people's everyday actions, and to recognise its emancipatory potential.

3. For a post-colonial perspective on climate urbanism

The experiences of post-colonial cities have pushed us to think through heterogeneous urban worlds and their dynamics of change (Robinson 2006; Roy 2009 ; Simone and Pieterse 2017). These analyses suggest that 'the South' is never just a location – although places and their histories do matter – but rather, it is a way of seeing and theorising through difference (Robinson 2016). Post-colonial theorisations of infrastructural change support an understanding of climate urbanism as emerging from multiple sites, and as generated by various actors and coalitions. Post-colonial theorisations of infrastructure reveal their incomplete nature: in many cities around the world, fragmented electricity, waste, water, transport and energy infrastructures perpetuate colonial and postcolonial legacies of uneven access to networked services (Castán Broto 2019; Jaglin 2008; Kooy and Bakker 2008; Silver 2015). In this context, many urban dwellers rely on informal energy, water or transport services that fall outside of the 'modern infrastructural ideal' (as defined by Graham and Marvin, 2001).

Urban political ecology has described urban infrastructures as heterogeneous (Lawhon et al. 2018), assembled through makeshift practices that constitute urban ecologies and thus matter for sustainability transitions in cities (Castán Broto 2019; Silver, 2019; Silver and Marvin 2017). Studies of sub-serviced settlements demonstrate that innovative infrastructural configurations result from everyday practices to overcome infrastructural deficits (Silver and Marvin 2017; Pieterse 2008). These include strategies to access electricity services on and off the grid in Maputo (Baptista 2019) and Accra (Silver 2015), or to manage circuits of waste in Kampala (Lawhon et al. 2018) and Dakar (Myers 2016). Urban infrastructures are always being made, remade and maintained through multiple practices of everyday living (Baptista 2019; see also de Bercegol and Gowda 2019; Castán Broto 2019; Furlong 2014; Guma 2019; Kooy and Bakker 2008; McFarlane 2008; McFarlane and Rutherford 2008; Schramm and Thi Thanh Mai 2019; Silver 2014). These analyses invite us to orient our gaze towards the many ways in which urban dwellers adapt to the constraints of their urban environment, even more so in the context of climate change. For instance, in their analysis of the recycling industry in Delhi, de Bercegol and Gowda (2019) show that informal decentralised waste picking networks manage urban waste in ways that support their livelihoods and are more environmentally sustainable than centralised waste-to-energy facilities. This kind of analysis brings to the fore informal practices as constitutive yet often neglected elements of urban ecologies.

The deployment of colonial and post-colonial legacies 'of control, segregation, exploitation and various forms of (under)development' (Silver and Marvin, 2018, 154) shapes low carbon politics everywhere. Silver (2019) has demonstrated how infrastructure politics in Camden, a post-industrial city in the US, can be read through a postcolonial lens. He shows how the lives of the city's black residents are constrained by infrastructural neglect, disinvestment and under-maintenance. In doing so, he asks us to

reconsider "where we locate the infrastructural South." Looking at the creation of a new green space in a deprived, multicultural neighbourhood in Paris, Newmann (2011: 194) argues that "sustainable redevelopment reproduces, if not exacerbates, the spatial segregation and marginalization experienced by France's post-colonial minority populations." This echoes Roy's observation that postcolonial theory is "a method for interpreting and narrating the West" (Roy 2016, 205). For instance, the postcolonial viewpoint can help us to locate 'modernist' low-carbon infrastructure investments in many cities of the North within broader urban landscapes of infrastructural decline, economic collapse and racial and socio-economic inequalities.

Furthermore, postcolonial theory shows the importance of looking at mundane contexts of action to understand the many faces of progressive politics, and the capacity of mundane acts to challenge, subvert, reinforce or contest market-oriented policies. MacGregor (2019) invites us to look for 'transformative potential in the cracks' when investigating urban environmental action. Her research engages with grassroots environmentalism in Moss Side, a stigmatized neighborhood in Manchester where the transformation of the housing market to cater for students' housing needs has led to conflicts over waste collection. In response to waste collection issues, a group of local residents decides to self-organises to clean up the streets out of necessity, to improve their living environment, rather than out of outright political contestation. This type of action often falls under the radar of analysis of urban environmental politics. However, MacGregor argues that

"Insofar as it improves quality of life and builds social connections for ordinary people in capitalism, acting interstitially should be valued as part of the political project of imagining that another world is possible." (*ibid. 14)*

Part of the success of the neoliberal project has been establishing a totalitarian view where all that which does not fit the neoliberal capitalist discourse is made invisible, recedes from view or is analysed as a departure or variation from neoliberalism (Gibson-Graham 2008). Neoliberal climate policies indeed thrive in many locations, but they unfold alongside alternative modes of addressing climate change vulnerabilities, decarbonisation and environmental injustices. Thus, alongside a critical perspective on the operation of power and capital, climate urbanism research must attend to below-the-radar forms of action and explore their transformative potential and capacity to improve living conditions for the urban majority under climate change.

4. Situating climate urbanism.

A postcolonial perspective on climate urbanism is particularly important to avoid theories enunciated through a 'disembodied voice and unmarked location' (Roy 2016: 201, see also Robinson 2006). Climate urbanism can also be located within the lives and practices of urban dwellers, in changing cultures and in ways of living the city (Castán Broto 2019a) which clash against (or at least question) neoliberal models of climate urbanism. To understand how these emerge in ordinary contexts, postcolonial theories articulate proposals for situating urban political ecological transformations within the diversity of urban experiences (Lawhon et al. 2014). Developing a situated understanding of alternative practices requires understanding the extent to which they constitute a response or a challenge to injustices inherited from colonial and postcolonial power relations (Baptista 2018; G. Bridge 2018; Castán Broto et al. 2018).

Situating climate urbanism requires engaging with what Monstadt and Coutard (2019: 2192) call the "multiple interfaces and hybrids between infrastructures," for example, assessing the potential and contradictions of small-scale, low-carbon infrastructural configurations and community-based climate strategies. For instance, off-grid solar technologies can offer much needed energy sources to low-income communities, as documented by Luque-Ayala (2018) in his examination of Do-it-Yourself solar hot water systems in São Paulo. At the same time, Sovacool et al. (2020) warn of the emergence of a 'low-carbon divide' as a result of the uptake of renewable energy technologies. Their analysis of the

solar industry production chain shows how e-waste ends up in Agboloshie (Accra) where low-income urban dwellers bear the toxic burden of low-carbon transitions. In Maputo, large programmes to deliver improved cookstoves have failed to understand the enduring cultural relevance of charcoal as a source of energy in poorer neighbourhoods, highlighting a disjuncture between solutions that are supposed to deliver climate mitigation and health co-benefits and local socio-cultural practices (Salazar et al. 2017). Other analytical categories such as 'finance' and 'politics' can be redefined through a situated analysis of climate action happening at the margins.

According to the World Resource Institute (2010, p. 6) "climate finance will likely flow through multiple financial instruments, including grants, concessional loans, private sector direct and indirect investments, and carbon markets." This only refers to the most institutionalised forms of finance, which have traditionally focused on climate mitigation projects, and of which only a small part actually reaches cities (CCFLA, 2015). Scholarly attention has been paid to donors' preference for investing in large-scale infrastructure projects (Colenbrander et al. 2018) and to local authorities' use of green financial instruments, such as green bonds (Bigger and Millington 2019; Christophers 2018), but access to these types of investments and financial instruments is limited in a majority of cities. The relationship between financial flows and climate action in cities depends on global (green) financial circuits but also (and perhaps even more so) on the multiple forms of finance that are used in people's everyday lives, such as loans, community savings or alternate circuits of financial support provided by families or acquaintances (Gibson-Graham 2014). An exclusive focus on visible climate finance detracts research from examining the diversity of alternative financial arrangements for key service provision, as exhibited by community savings groups (Shand and Colenbrander 2018), or from exploring how socio-cultural relations of debt (Harker 2017) intervene in everyday responses to climate change. We still lack an understanding of how different forms of formal and informal finance are entangled in urban climate transformations.

Situating climate urbanism can also help us rethink long-held assumptions about what transformative politics look like. Citizens' political mobilisation for their environment has been widely documented in studies of environmental justice movements (Bullard 1999, 2000 [1990]; Myers 2008; Pulido 1996), social movements motivated by climate justice (Schlosberg and Collins 2014), eco-communities (Chatterton 2013) but also in studies of more ordinary forms of action, which cannot always easily be labelled as 'environmental,' 'climate-oriented' or even 'political.' In their review of environmental activism in the greater Paris region, Blanc and Paddeu (2018) show that citizens engage in ordinary environmental action in ways that many of them would describe as apolitical. However, small-scale environmental projects contribute to reshaping human-nature relationships across metropolitan territories. Whilst the authors do not deploy a postcolonial framing and engage more specifically with literature on environmental justice, their analysis of ordinary environmentalism (see also Agyeman et al. 2016 on everyday environmentalism) reaffirms the value of looking at contexts of action that fall through the cracks of mass environmental mobilisation against particular projects or policies, as also discussed by MacGregor (2019) in her work in Moss Side. These social movements and everyday practices offer new ways of looking at cities' economic, racial, and socio-ecological relations in a climate-changed world.

5. Conclusion.

"Neoliberalism is everywhere, but at the same time, nowhere," argues Rajes Venugopal in a critical review of the term that exposes its fundamental incoherence (Venugopal, 2015: 165). The theoretical critique of neoliberalism does not make it less real or more palatable. Analyses that demonstrate the dominance of market-led approaches to climate urbanism and resulting injustices show that history repeats itself. What once was the appropriation of urban sustainability agendas (Castán Broto and Westman, 2019) has become the appropriation of low carbon, climate adaptation discourses for capital accumulation.

Attempts to find hope in the current situation, however, are as pervasive as the reproduction of the neoliberal order. New climate change movements are calling for change. Often the question of what

that change entails is not fully explored: the massive mobilizations that we saw before the COVID-19 crisis, associated with youth movements (Fridays For the Future and School Strikes) but also with movements with a strong radical discourse (Extinction Rebellion) have materialised so far in actions like the declarations of climate emergency by municipal and national governments which are strong in rhetoric but weak in clear roadmaps of action.

Our objection to the (sole) focus of climate urbanism research on the critique of neoliberal climate action relates to the realisation that we cannot afford ignoring any alternative available. No matter how small, no matter how marginal, climate change action is needed now and in many variants. The concern that local action is nice to look at but does not add up (see IPCC, 2014) also contributes to justifying approaches that focus on calculating carbon emissions and climate risks in ways that mask the many injustices produced in the name of climate action. Instead, social justice should be put at the core of any discussion of climate urbanism, as already forcefully argued in the literature (Anguelovski et al. 2020; Long and Rice 2019; Rice et al. 2019).

Climate urbanism cannot afford to stop in the critique. Climate urbanism analysis must commit to and reflect upon possible steps to respond to climate change without compromising on social justice demands. Postcolonial scholarship has inspired us to think beyond what other forms of climate urbanism may already be happening outside dominant circuits of knowledge and market-led interventions. Recognising different modalities of climate action and their potential is thus essential for future climate urbanism research. The challenge is that often action happens in the margins, in interstitial spaces (McGregor, 2019), in improvised makeshift practices of everyday living (Silver, 2015), in heterogeneous infrastructure landscapes (Lawhon et al, 2018). These actions are not always visible, not always communicable, not always reproducible in urban policies. Many such actions involve contradictions within themselves as collective projects often need compromises to move ahead. But climate urbanism research will not be comprehensive without acknowledging the multiple ways in which urban dwellers build their landscapes, and the extent to which they enable radical change to emerge where few other alternatives seem possible.

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