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Urban Governance and the Politics of Climate change

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Summary. — Cities and urban areas are increasingly recognized as strategic arenas for climate change action. Processes of urban governance addressing climate change reconfigure the politics of climate change. Practitioners and scholars may be interested in the transformation of urban governance that follows global advances in climate change and urban policy. They may specifically be interested in how the urban governance of climate change is achieved and with what consequences for international development. This review evaluates the deep changes in urban governance that follow attempts to address climate change and how, in turn, attempts to govern climate change in urban areas reconfigure discourses informing the politics of climate change. The review shows that efforts to institutionalize climate change governance in urban areas reflect the conditions of specific contexts; that cities and sub-national entities have gained traction in international climate policy through heterogeneous forms of network governance; that governing climate change in urban areas relates to the production and deployment of new climate rationalities, or governmentalities; and that governing experiences in cities are reconfiguring discourses of climate change governance toward an increasing emphasis on experimentation as a means to deal with the open ended processes of governing urban areas.
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1. INTRODUCTION

International development policy in 2015 delivered a consolidated view of cities and urban areas as strategic arenas for climate change action. The 2015 Sustainable Development Goals (with the inclusion for the first time of an explicit urban goal) emerged linked to a radical change toward a pro-urban policy consensus in sustainable development (Barnett & Parnell, 2016). The 2015 Paris Agreement for Climate Action underscores the importance of subnational levels of implementation. Alongside the Agreement, Anne Hidalgo, Mayor of Paris, and Ignazio Marino, Mayor of Rome, hosted the Climate Summit for Local Leaders, a series of side events under the auspices of the Secretary General's Special Envoy for Cities and Climate Change, former New York City mayor Mike Bloomberg, which emphasized urban areas as innovation testing zones and showcased climate action at the local level. The underlying assumption in these initiatives is that cities and urban areas can help bridge the gap between the aggregate national intended contributions agreed in Paris, and the actual requirements of emissions reductions needed to keep temperature changes under 1.5 degrees. The New Urban Agenda (NUA) was adopted in Quito, in October 2016, at the III United Nations Conference on Housing and Sustainable Urban Development. NUA represents a definitive abandonment of perspectives that cast urbanization as a challenge to be controlled in favor of those which emphasize the opportunities for living sustainably in an increasingly urban future (Parnell, 2016) and recognizes the efforts to deliver climate change action in cities.

Today, transitions to sustainability emerge inevitably related to the possibilities opened for action in urban areas (Bulkeley, Castán Broto, Hodson, & Marvin, 2010; Frantzeskaki, Castan Broto, Coenen, & Loorbach, 2016). Simultaneously, this interest in urban areas casts a new light on global environmental politics, as Solecki and Leichenko (2006) predicted. In the international policy arena, climate change has most often been presented as a global problem requiring global solutions (Bulkeley, 2013; Bulkeley &

Newell, 2015). For example, climate change action was delinked from the emphasis on local action that followed sustainability agendas from the 1992 Rio Declaration on Sustainable Development to the Local Agenda 21, despite international efforts to coordinate what was often perceived as two separated realms of action (e.g., Gebre-Egziabher, 2004). The spectacular failure of international negotiations in the 2009 COP15 in Copenhagen has often been regarded as an inflexion point in climate politics. Copenhagen marked a radical shift toward voluntary commitments for climate action in country states and away from multilateralism. Social movements' abandonment of the meeting made visible the disconnection between public attitudes to climate change and the seemingly cynical positions of negotiators. Yet, Copenhagen was also a success because for the first time, the COP showcased the possibilities for action outside the international climate regime, for example, in cities (Hoffmann, 2011; Jones, 2012). A series of high profile international reports on cities and climate change followed, all emphasizing the possibilities opened up in urban areas to mitigate climate change and adapt to climate changing futures (IPCC, 2015; UN-Habitat, 2011; Hoornweg, 2011).

The combination of voluntary approaches to climate change policy and a growing interest in local action has supported a politics of climate change where multiple forms of governance, rather than a regulatory understanding of governing, play a fundamental role (Newell, Pattberg, & Schroeder, 2012). Governance relates to mechanisms directed toward the coordination of multiple forms of state and non-state action (Rosenau, 2000). In this vein, governance implies a recognition of the multiple actors who intervene in the purposive steering of society, toward low carbon, resilient or sustainable objectives (Newell et al., 2012; Okereke, Bulkeley, & Schroeder, 2009). For debates on cities and climate change,

this means, first, a recognition of the role of local governments alongside other forms of state-control; and second, a turn of attention toward the multiple actors that intervene directly or through hybrid arrangements in urban governance, including the business sector, public–private partnerships, civil society organizations and community groups, and other diverse networks of actors who routinely change urban trajectories. Their actions, however, are hardly circumscribed to arbitrarily-defined administrative boundaries of cities: while reshaping metropolitan areas and their hinterland, efforts to govern climate change in cities are also creating new forms of transnational governance (Bulkeley, Andonova *et al.*, 2014).

While actions to govern climate change in cities can be found in cities all over the world, regardless of their geographical location and state of development, they emerge associated with the specific conditions that shape the context of implementation. The manner and impacts of climate change governance are shaped by the local conditions to the extent that any generalization will likely be inaccurate. Broadly speaking, there is a divide between cities with high levels of consumption and those in which the majority of population live in informal settlements or areas with great deficiencies in service provision. This is akin to highlighting a difference between places where the priorities of climate change governance are to reduce emissions and those where the priority is to reduce structural vulnerabilities. In the latter case, actions to adapt to climate change and to deliver cleaner energy tend to emphasize co-benefits, especially urban health (Smit & Parnell, 2012). However, differences between populations may also exist within a single city, such as in Bangalore, India, where cosmopolitan communities of IT and offshore professionals, with high carbon lifestyles, are contiguous to communities of subsistence farmers and informal workers who lack basic services (Benjamin, 2000). What is common everywhere is the need to address the political and governance matters associated with a tremendous socio-ecological and technological transformation (Simon & Leck, 2015). While urban areas open indeed numerous opportunities to address climate change, they are also sites of political struggle where the politics of climate change become manifest.

The aim of this review if to evaluate both how climate change politics have led to deep changes in urban governance, and in turn, how new attempts to govern climate change in urban areas are further reconfiguring global environmental politics. For the purposes of this review, governance is understood as a broad concept that relates to intentional actions or interventions to address a specific problem, in this case, climate change. Governance represents a recognition of the multiple actors that perform acts of governing, rather than a move away from the State as the sole source of authority. The review engages with two complementary, but also somehow opposed notions of environmental governance. The first perspective engages with governance as a process resulting from specific attempts to mobilize resources and actors to address climate change. Taking a normative stance that assumes a need to align efforts to address climate change challenges, the notion of governance as a process raises question about the means to improve existing forms of governance. The second perspective engages with governance as a means to build authority and support actors' attempts to gain control over different realms of urban life. Taking a critical perspective that questions how the politics of climate change reshape environmental battlefields, the notion of governance as a means of control directs attention to the political struggles that emerge as a result of actions to address climate change.

These two distinct notions of governance structure the argument in this review. While from a normative point of view urban areas offer grounds for hope about possible transformations toward low carbon, climate resilience futures, a critical perspective maps a political environment in which climate change has already refashioned the possibilities and consequences of climate-oriented urban development. Both perspectives offer insights into how climate change imperatives are shaping urban governance as well as how actions in urban areas shape global climate politics (key themes are summarized in Table 1). The review engages first with the normative perspective looking into the processes of institutionalization of climate change action; and then, into the organization of cities into networks and other structures of standing in global climate politics. Then, the argument moves into the critical perspective, to examine how climate change discourses have generated new forms of urban governance; and then, to look into how climate change politics has consolidated forms of experimental governance as the dominant means to deliver sustainable futures.

2. GOVERNANCE AS A PROCESS WHEREBY DECISIONS ARE MADE AND IMPLEMENTED

Urban governance discussions are intrinsically linked to debates about who has responsibility to deliver climate change action and analyses of actors' motivations to participate in acts of governing. Accepting climate change action as an imperative, the question is how to improve urban governance processes to address it. Initial discussions on political leadership, transfer of resources and capacity building have evolved into analyses of the institutional conditions that enable effective climate action. The political question emerges in relation to the management of governance institutions who have both the motivations and capacities to deliver climate action. Cities have become implicated in new forms of urban governance that have broader expression in the global arena. Network governance has emerged as the key mechanisms whereby cities make visible their influence on transnational climate change politics.

(a) *Cities, climate action and international development discourses*

How to prioritize different areas of intervention is a central question for the governance of climate change in urban areas. The division between climate change adaptation and mitigation, and the potential conflicts that can emerge between the two, has shaped debates about what kind of action is most appropriate (Laukkonen *et al.*, 2009). This separation, however, has hindered the development of integrated action. While trade-offs between specific mitigation and adaptation actions may exist, in practice, effective action will most often address both simultaneously (Moser, 2012). Nevertheless, such division has shaped debates on climate change governance, as explained in the section below.

Adaptation has most often been framed as a local issue. Urban climate change hazards are not only increasing in severity and frequency, but also, they are likely to have a profound impact in a wide range of urban infrastructures, services, the built environment, and supporting ecosystems (Revi *et al.*, 2014). The impacts of maladaptation may last decades (Fatti & Patel, 2013). Over the last two decades, empirical research has consistently emphasized the close relationship between poverty, urban inequality, and the vulnerability of urban pop-