From Global Cities to Global Governors: Power, Politics, and the Convergence of Urban Climate Governance

by

David Jeremy Gordon

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Department of Political Science
University of Toronto

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Abstract

Cities are increasingly included in discussions of climate governance and lauded as sources of innovation, leadership, and experimentation. But can they succeed where states have failed in producing meaningful collective actions and effects? To respond to this pressing question requires understanding whether cities can achieve more than rhetorical commitment to coordinated action, whether they can come together and coordinate their actions. To answer this question my dissertation addresses the puzzling ability of the C40 Climate Leadership Group to achieve internal coherence. Leveraging a novel dataset of over 4700 discrete urban climate governance actions, I demonstrate empirically that the cities of the C40 have come not only to cohere around a common project, employ common practices of climate governance, but that the C40 has converged around a common set of governance norms: shared ideas as to the role of cities in global climate governance, the ways in which cities can and should engage in governance, and how governance should be practiced. I introduce a novel conceptual framework that interweaves elements of social constructivism and network analysis with Bourdieu's social field theory, and demonstrate how reconceiving the C40 as a governance field illuminates currents of power that operate beneath the still waters of nominal and voluntary cooperation, and provides a means of explaining how convergence has been pursued, contested, and produced by actors who claim and wield various sorts of power and authority. The dissertation applies this novel conceptual apparatus to demonstrate why contestation was paramount between 2005 and 2010, and how convergence was produced from 2011 on. Put simply, the C40 only achieved convergence once there was an actor with enough power to overcome resistance and secure

complicity from its members, with such power translated into influence through the mechanism of recognition.

Acknowledgments

I began my PhD with a keen desire to better understand the role that cities might play in the global response to climate change. I quickly came to realize that I had little idea how to actually go about doing so. That I have made it to here, from there, is a testament to the efforts of all those who have helped me along the way. To them I dedicate this dissertation.

First and foremost, I want to thank my supervisor, Matt Hoffmann, for his many years of support, encouragement, and advice. Working with Matt has been a pleasure and an honor; he is a source of inspiration, both personal and professional, and his confidence in my abilities, my interests, and my ideas as invaluable as I struggled at times to find my way. Alongside Matt, I have been blessed with a dedicated and devoted committee, comprised by Steven Bernstein and Michele Betsill. Both were crucial to shaping and sharpening my argument and analysis, and each bears a measure of responsibility for engendering in me a desire to undertake a PhD in the first place. A big thanks as well to Sara Hughes, whose careful reading helped enhance the clarity and focus of the dissertation, and to Peter Dauvergne, whose support and encouragement helped to carry me over the finish line.

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In the course of carrying out research for this project I have benefitted greatly from the efforts of a great many individuals. First amongst these are my interviewees, who gave freely of their time and energy so as to sit down with me and discuss: the origins and evolution of local climate policy in New York City, Sao Paulo, Johannesburg, London, and Toronto; the inner workings and intricacies of the C40 and CCI; and the broader domain of urban climate governance. I owe a special debt of gratitude to C40 staff, and especially Amanda Eichel and Sarah Potts, who invited

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To Pat and Joe, you have welcomed me as a son, given endlessly of yourselves, and done so at all times with grace, generosity, and good spirits. To my father, for inspiring me to follow my instincts, chase my dreams, and indulge in the occasional impulse. To my mom, for your love, for toiling away to support us, for giving me all the space I needed, and for teaching me the habits of hard work, discipline, and stubborn dedication. My thanks are nowhere near adequate, but I offer them nonetheless. Lastly, and most importantly, this dissertation is dedicated to my family. To Nola, Lleith, and Ellen. Nola, my partner in crime, you came along when I wasn't sure I was ready for you. How quickly I learned that I couldn't do without you. You and Lleith are what keeps me grounded and I can only hope to make you both proud.

Elle, your love lights my way, always and in all ways. We did this. Together.

David Gordon
Winnipeg, MB
16 November 2015

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List of Abbreviations

C40	C40 Cities Climate Leadership Group
CCI	Clinton Climate Initiative
CCP	Cities for Climate Protection
CDP	Carbon Disclosure Project
CETESB	Companhia de Technologia de Ambiental do Estadode Sao Paulo
CGF	Clinton Global Foundation
COP	Conference of the Parties to the UN Framework Convention on Climate Change
EU	European Union
GaWC	Globalization and World Cities Research Network
GCP	Global Protocol for Community-Scale Greenhouse Gas Emission Inventories
GRCO	Gauteng Regional Climate Observatory
ICLEI	International Council of Local Environmental Initiatives
IPCC	Intergovernmental Panel on Climate Change
Metropolis	World Association of the Major Metropolises
NGO	Non-governmental organization
OECD	Organization for Economic Cooperation and Development
OLTPS	Office of Long-Term Planning and Sustainability
UCLG	World Organization of United Cities and Local Governments
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UN-Habitat	United Nations Human Settlements Programme
USDN	Urban Sustainability Directors Network
WRI	World Resources Institute

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Chapter 1
Cities, the C40, and the Global Governance of Climate Change

1. Introduction

October 2005. 18 cities gather in London at the invitation of Mayor Ken Livingstone and agree to join together to "pursue action and cooperation on reducing greenhouse gas emissions."[1] Thus was born the C40 Climate Leadership Group. But the C20, as it was then known, was an entity with little to speak of other than a general objective and orientation, and many cities appear to have joined with little consideration and less expectation.

December 2009. The C40, now a network comprised of 56 cities and engaged in a formal partnership with the Clinton Global Foundation, advances a common front at the Copenhagen Conference of the Parties (COP15) to the UN Framework Convention on Climate Change. The C40 Chair, David Miller, exuberantly proclaims the need to "engage, empower, and resource" cities so as to enable them to participate fully in the global governance of climate change.[2] Yet internally the C40 is riven with conflict. Formal efforts at generating coordinated action and collective effect have produced little, nominal commitments remain largely unmatched by practical engagement, and competing visions persist as to how (and by whom) the network should be governed.

February 2014. Outgoing C40 Chair Michael Bloomberg is feted at the 4th bi-annual C40 Summit, a gathering for Mayor's and chief executives from a network now comprising 70 global cities. Representatives from a variety of international institutions and organization (including UN Habitat, the UNFCCC Secretariat, the World Resources Institute, the World Bank) are on hand, and the C40 is lauded for the practical action undertaken by its member cities, the leadership it demonstrates in terms of fostering collaboration, and the potential it possesses as a source of

[1] www.c40.org/history
[2] C40 2009

global climate leadership.[3] A report issued by the C40 in 2014 serves to underpin the commonplace claim that "cities act while nations talk" by documenting considerable increases in the number, scale, and scope of climate governance undertaken by its member cities.[4]

That the C40 made this transition was by no means a given. Many is the city-network beset by internal divisions and an inability to overcome the disjuncture between nominal commitment and practical engagement.[5] As late as 2009 the C40 itself faced just this challenge and yet it made a successful transition and has come to establish itself at the forefront of networked urban climate governance.[6] This is the puzzle that I set out to address in this project: how did the C40 transition from humble beginnings in 2005, through a period of internal division and disjuncture, to a state of internal coherence? How did the C40 become, in other words, an entity capable of claiming a position of leadership in the global governance of climate change?

To be clear, my intent is not to assess the impact of the C40 in terms of producing environmental outcomes nor is it to provide an evaluation of the efficacy of the C40 as a global climate governance initiative. In focusing on internal coherence as my *explanandum*, however, this project provides a foundation upon which both of these can ultimately be assessed. Internal coherence is a necessary condition for voluntary transnational networks like the C40 to achieve coordinated action or produce meaningful governance outcomes. Understanding how it has been achieved in the C40 and through what sort of causal process is thus the task that I set for myself in this project (see Figure 1.1). I do so in three parts: by developing a descriptive account of coherence and convergence in the C40 over time and space; developing a novel conceptual framework that can account for the role of power and agency in pursuing, contesting, and producing norm convergence, and; applying the framework to explain how the C40 achieved convergence, why it emerged in a particular temporal pattern, and why it converged around a particular set of governance norms.

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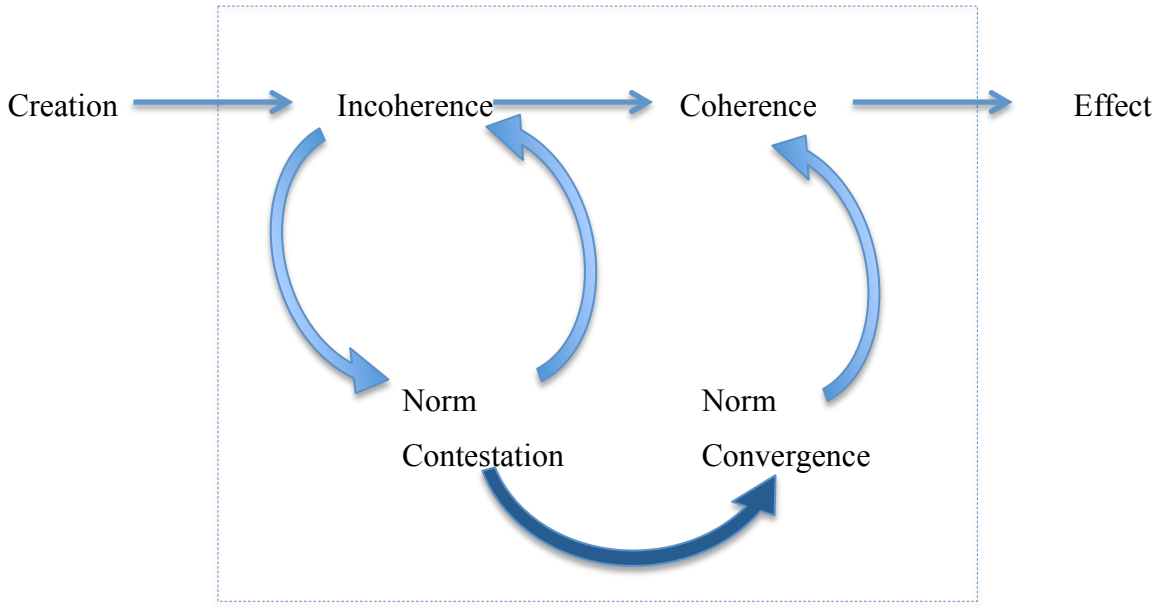
[3] Figueras 2014; Spross 2014; UNEP 2013; World Bank 2011
[4] Arup 2014
[5] Bulkeley & Kern 2009
[6] Compact of Mayors 2014; Acuto 2013a

Figure 1.1. Schematic of Coherence and Convergence in the C40



The descriptive analysis presented in chapter two offers a novel picture of climate governance as it is practiced by C40 cities.[7] Leveraging a dataset compiled for this project, which contains over 4700 discrete local governance actions adopted or endorsed between 2001 and 2014, I demonstrate the extent to which the C40 has in fact transitioned from inchoate beginnings to a state of internal coherence.[8] C40 cities have come, over time, to adopt common practices of local climate governance: they plan, set targets, and measure emissions, for example, in increasingly in similar ways. Beneath this coherence around common practices, however, rests a foundation norm convergence, as cities have come to share a common set of ideas with respect to the role of cities as global climate governors, and more importantly how that identity can and should be *enacted*.

Through the use of cluster analysis, convergence is detected around four governance norms:

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[7] In so doing it contributes to the burgeoning literature compiling empirical evidence in the domain of experimental or transnational climate governance. See for example Hoffmann 2011; Bulkeley et al 2014; Hale et al 2014; Bulkeley & Castan Broto 2012; Castan Broto & Bulkeley 2013. It further compliments existing scholarship that attempts to infer patterns of learning and diffusion in transnational city-networks, such as Lee 2013, 2015; Hakelberg 2014; Widerberg & Pattberg 2014

[8] In so doing I am able to largely confirm the claims advanced by the C40 itself with respect to claims of increased internal coordination. See Arup 2011, 2014

Plural participation: that cities should participate in global climate governance;

Liberal environmentalism: that climate governance rests on a fusing of ecological and economic growth imperatives;

Active governance: that cities should enact the role of global governor in an active and autonomous, rather than a passive, manner; and,

Globally accountable governance: that cities are accountable, as global climate governors, to external audiences.

While convergence in the C40 around norms of plural participation and liberal environmentalism is unsurprising, given the prevalence of these norms across, respectively, the domains of networked urban[9] and transnational climate governance,[10] convergence around the latter two norms - active and globally accountable urban governance - is novel and puzzling. Transnational city-networks (and voluntary governance initiatives broadly speaking) have tended to be proficient in achieving convergence around higher order norms, those that establish a common orientation or generic identity.[11] Convergence around norms that narrow the parameters or possibility, or specify in greater detail what it is counts as acceptable, appropriate, or plausible governance behavior, is considerably more difficult to attain.[12] The presence of such convergence in the C40, as a result, is a phenomenon both puzzling and in need of explication. As is the temporal pattern of in which convergence has unfolded around these norms. Convergence, rather than evolving in a smooth manner, has been uneven; it emerges in fits and starts rather than following a stable progression. Between 2005 and 2010 convergence is limited, and contestation over competing norms in evidence. From 2011 to 2014, on the other hand, contestation subsides and convergence expands.

In this light I set out to answer two specific research questions in this project:

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[9] Bulkeley 2010
[10] Bernstein 2001; Hoffmann 2011; Bulkeley et al 2014
[11] Since such generic norms are more readily adapted to meet the imperatives of local context and thus offer a greater degree of flexibility, a quality that is central to instances of voluntary governance. See for example Krook & True 2012, Weiner 2009, Acharya 2004.
[12] Krook & True 2012

Research Question #1: Why and how has the C40 achieved norm convergence, both in general and in a particular pattern across time and space?

Research Question #2: Why has convergence emerged around the particular configuration of governance norms that is has, and not another?

In addressing these two questions, and in order to specify the terms of my inquiry, that which I am bracketing out of my investigation should be noted. My focus, firstly, is on norm dynamics in the C40, and more specifically on the *production* of norm convergence. As such, the empirics presented in chapters five and six, while they include the perspectives and perceptions of local officials from various C40 member cities, are leveraged so as to understand whose norms have come to form the ideational structure around which the C40 is organized, and how this has happened. I put to the side, for the purposes of this project, how such norms are experienced, localized, and enacted in specific urban contexts[13] so as to focus on explaining how particular ideas are taken up as norms in the first place. Secondly, I focus in this project on accounting for the production of norm convergence *in the C40*. The explanatory framework that is developed in chapter four, and applied in chapters five and six, is explicit in situating the C40 in a broader context of global climate governance and other transnational urban climate governance initiatives (this interaction, between what happens within the C40 and how it relates to its context, is essential to the causal story that is to be presented). My emphasis, however, rests on explaining what happens *inside* the C40, why, and with what effects.

While a norm-based account is imperative, I find the extant norms-based scholarship ill-suited to the task of explaining norm dynamics in the domain of networked urban climate governance and answering questions related to the why, how, what, and who of convergence. I turn, as a result, to Bourdieusian field theory and develop in chapter four a novel framework that can illuminate the politics and power dynamics of norm contestation and convergence in the C40. Re-conceiving the C40 as a governance field – a social space consisting of a set of actors organized around a common object of governance (climate change in this case) but engaged in contestation over how, and to what end, to govern – I am able to identify what counts as power, who is able to

[13] There is a rich literature on localization, adoption, and enactment with which future research on norm localization in C40 cities could engage. For example see Acharya 2004; Wiener 2007, 2009; Krook & True 2012

wield it, and how it is employed to produce convergence around particular governance norms in the C40.

In so doing I push analysis beyond the simply assertion that initiatives such as the C40 "provide opportunities for participants not only to share knowledge and experience but also to collaborate, learn, and socialize"[14] and serve as a platform for cities to "improve, in a continual model."[15] What such statements leave out is where I seek to intervene, by identifying the political dynamics operating between participating actors, and recognizing that the social space constituted by networks like the C40 is deeply infused with power, struggle, contestation, and conflict, albeit conflict that operates in "quieter registers" as opposed to the "brash counterparts of command and constraint."[16] Rather than lionizing the ability of networks like the C40 to embody a distinct form of apolitical cooperation, I set out to illuminate the essential role of power in bringing disparate and diverse cities together voluntarily around common interests, objectives, and governance norms and practices. I do so to provide a means of assessing the extent to which cities, and city-networks more generally, can fulfill ambitious claims to global leadership and contribute to producing a more effective form of global climate governance.[17]

In the remainder of this chapter I set out to provide some context for this inquiry. I first establish the case for an analysis of cities in general, and the C40 in particular, from the perspective of international relations and global politics. I then provide an overview of the C40, and introduce in brief the field theoretic framework that I have developed for this project. The chapter concludes with an overview of the remaining six chapters, and gives the reader a sense as to where things are headed, and how they will proceed.

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[14] Lee 2013: 110
[15] Slaughter 2013. For a similarly optimistic and apolitical perspective on the ability of cities to produce global governance see Barber 2013
[16] Allen 2010: 2900
[17] Acuto 2013d; Bloomberg 2011; Barber 2013

2. Global Climate Governance: Friction, Openings, and the Role of Cities

Global climate governance is in a state of fragmentation,[18] resulting in part from what Depledge refers to as the "ossification" of international negotiations operating under the aegis of the UNFCCC.[19] The inability of this process to convert the early negotiating successes of the initiating convention in 1992 and the Kyoto Protocol signed in 1997 into binding and effective international treaties,[20] and the steady upward march of global greenhouse gas emissions in spite of such efforts,[21] have produced a fracturing of climate governance.[22] The complexity of the global climate regime, comprised of various and multiple international institutions, organizations, and actors, renders the coordination challenge incredibly difficult.[23] Couple this with the "super wicked" nature of climate change as an issue area – one defined by the political nature of problem and solution definition, the high degree of economic/social/cultural dependence on fossil fuel consumption, the need to find pathways to transformation in the face of not only indifference but active resistance by those who fear the negative social, political, or economic effects of change, and a finite amount of time in which to develop an effective response[24] – and the prospects for effective inter-state coordination appear slim.

One result of this impasse, however, is the explosion of what Hoffmann refers to as "governance experiments" emerging outside of formal systems of political authority.[25] Such initiatives

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[18] Biermann et al 2009 argue that all global governance arrangements are fragmented, and so it is the extent or type of fragmentation that matters. In this, they are in general accordance with the Regime Complex framework presented by Keohane & Victor 2011. I use the term here in its broader application, whereby fragmentation indicates a fracturing of actors, interests, objectives, and institutions and the interaction between relatively incoherent or uncoordinated actors and initiatives. See Zelli & van Asselt 2013.

[19] Depledge 2006, Bernstein & Ivanova 2007. While the 2014 US-China Joint Announcement on Climate Change, and the shift towards a "bottom-up" approach based on independent national determined contributions (or INDCs) may offer a means of advancing the inter-state process at COP21 to be held in Paris in December 2015 (see White House 2014) there is a general broadening of focus with respect to the role of non and sub-state actors in global climate governance, and the need for coordination or some form of orchestration in order to achieve meaningful results. See for example Hale & Roger 2014, Chan & Pauw 2014, Chan et al 2015

[20] Busby 2010

[21] Olivier et al 2012, IPCC 2014

[22] Bernstein et al 2010; Monsel & Asselt 2012

[23] Keohane & Victor 2011; Zelli & Van Asselt 2013; Abbott 2012, 2013

[24] Levin et al 2012; Rittel & Webber 1973

[25] Hoffmann 2011; see also Bulkeley & Castan Broto 2012; Bulkeley et al 2014; Jordan & Huitema 2014

operate largely, as per Okereke et al, "beyond the climate regime"[26] and employ non-hierarchical levers of authority, legitimacy, and influence in an effort to achieve collectively meaningful action and produce collectively meaningful effects.[27] A relatively recent phenomenon, governance experiments move beyond advocacy and lobbying and instead consist of steering activities (making rules, creating norms, developing standards, forging partnerships, offering incentives) enacted outside of the formal inter-state system.[28] They comprise "…a plethora of forms of social organization and political decision-making that are neither directed towards the state nor emerge from it."[29] Such experiments include, *inter alia,* market-based certification schemes,[30] insurance industry initiatives,[31] regional emissions trading schemes,[32] regional climate governance coordination between provinces and states,[33] and, most cogent to this project, national and transnational city networks.[34] Importantly, Hoffmann and others demonstrate that this plethora of governance experiments is neither chaotic nor entirely ad hoc, but rather exhibit patterns in terms of their functional orientation and internal dynamics.[35]

There remains, however, a pressing need, both conceptual and practical, to understand how such novel governance initiatives work internally, fit together, and interact to produce (or not) such meaningful aggregate effects. Emphasizing the novelty and non-hierarchical nature of experimental activities should not blind analysts to the fact that they are comprised of actors with diverse interests and ideas with respect to the *what* and the *how* of climate governance, nor to the possibility that coordination may take place in concert with contestation, and that cooperation may run in parallel with conflict as actor struggle to establish shared ideas as to who can act, what kind of problem they face, and how to act in response.

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[26] Okereke et al 2009
[27] Bernstein & Cashore 2012; Cashore 2002; Andonova et al 2009
[28] Hoffmann 2011; Rosenau 1997
[29] Dingwerth & Pattberg 2006: 191
[30] Auld, Renckens & Cashore 2015
[31] Jagers & Stripple 2003
[32] Paterson et al 2013; Betsill & Hoffmann 2011
[33] Selin & VanDeveer 2009; Rabe 2004
[34] Betsill & Bulkeley 2003; Gore 2010; Robinson & Gore 2005; Lindseth 2004; Davies 2005; Bulkeley & Kern 2006, 2009; Gordon 2013; forthcoming 2016a, b
[35] Hoffmann 2011; Bulkeley et al 2014; Bulkeley & Castan Broto 2012

3. Why Cities

I focus in this project on one particular corner of this experimental universe, that populated by cities and city-networks. Cities are important sites of population, economic productivity and consumption, to the extent that our current era has been labeled the "century of the city."[36] They are collectively home to over 50% of global population, a figure projected to increase substantially by mid-century,[37] and are recognized as key centers of innovation and economic productivity, centrally important to the vitality of national economies.[38] The manner in which economic activity is spread across cities is, however, highly uneven.[39] The largest 600 cities in the world collectively account for over 20% of global population and more than 50% of global GDP; the largest 100 cities alone account for nearly 40% of global GDP.[40] These highly connected, productive, and consumptive cities are central to both global and domestic economies.[41]

A great deal of thinking has taken place over recent decades regarding the factors that influence why some cities succeed in accumulating stocks of capital, talent, and tourism, while others fail to do so.[42] However, much less attention has been paid to the manner in which actions and activities undertaken in and by cities have implications that go beyond the "local."[43] As cities are

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[36] Pierce et al 2009; Khanna 2010a, b. Sassen places cities at the "forefront" of a number of global governance challenges that all manifest, are produced by, and to which cities must develop and implement effective responses, including immigration, crime, public health. Sassen 2009.
[37] UNDESA 2010
[38] Brookings 2010; Glaeser 2011, Dobbs et al 2011, Florida 2005, 2008; Jacobs 1961
[39] Economic activity across cities follows a power law distribution, which is a characteristic of complex, self-organizing systems or networks and consist of a large number of low-impact or marginally connected entities along with a small number of very connected entities ("hubs") as compared to Gaussian distributions that follow the well-known bell-curve distribution around a mean value. See Barabasi 2003. Interestingly, scholars at the Santa Fe Institute have demonstrated that city metabolism, in terms of the amount of infrastructure needed to support population and economic productivity, also operates on the basis of power-law distribution such that larger cities are more efficient than smaller ones. See Bettancourt & West 2010.
[40] Dobbs et al 2011; Brookings 2010
[41] Sassen 2001; Taylor 2004, 2008. There is some disagreement over whether global cities represent a particular genus of city, or whether all cities are, to greater or lesser degrees, becoming global. This project focuses solely on those cities commonly assigned, within the literature, with major global city status and thus avoids entanglement in this debate. Future research that looks to extend analysis to track diffusion/convergence patterns amongst larger sets of cities offers one possible opportunity to empirically evaluate this question, in terms of the political interdependence and engagement in global networks.
[42] Sassen 2001, Taylor 2005, Friedman 1986, Jacobs 1985
[43] cf. Calder & Freytas 2009, Acuto 2013a, Betsill & Bulkeley 2003; Barber 2013; Ljungkvist 2015. Note that Bulkeley and colleagues invert this orientation, and focus on uncovering what happens when diverse actors

increasingly home to the majority portion of global population, it is imperative to better understand their interests, actions, and intentions and how these intersect with, and influence, various issue areas of international politics.

That cities are key to addressing issues related to long-term sustainability is becoming a commonplace assertion.[44] Cities possess formal levers of jurisdictional authority and face a strong imperative to engage in pragmatic problem-solving, responsible as they are for public services that impact directly on the day-to-day lives of large portions of the population. As global actors, cities operate unbounded by the constraints of sovereignty and are relatively free to engage one another across national and regional borders in novel efforts at coordination and collective action. They are as often as not, as US Secretary of State John Kerry recently put it, "ahead of their national governments"[45] and his is one of a growing chorus of voices calling for official recognition and integration of cities into the global climate governance regime.[46] As put by Elinor Ostrom, there is much potential inherent in a "heterogeneous collection of cities interacting in a way that could have far-reaching influence on how Earth's entire life-support system evolves…" and the possibility of "a global system of interconnected sustainable cities."[47]

Cities have been shown to demonstrate super-linear dynamics, a product of the proximity of people to one another that endows cities with economies of scale that both reduce consumption of urban commodities and infrastructure[48] and create opportunities for the positive inter-mingling and individuals and ideas.[49] While cities are characterized by ecological footprints that extend well beyond the physical territory that they occupy[50] they also offer an intriguing and potentially high-impact opportunity for rupture – a break with the practices and principles of the (ecologically unsustainable) present - and the possibility that new patterns of consumption,

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congregate around cities so as to govern climate change in and through cities. See Bulkeley et al 2015, Bulkeley & Castan Broto 2012, 2013; Bulkeley et al 2012; Bulkeley, Castan Broto, Maasen 2013

[44] Glaeser 2011; Rozensweig et al 2011; Khanna 2010; OECD 2010; World Bank 2010; Owens 2009

[45] Biron 2015

[46] OECD 2014; Lauritsen 2014

[47] Ostrom 2012

[48] Bettencourt & West 2010

[49] Glaeser 2011; Florida 2005, 2008

[50] Rees 1996; Satterthwaite 2009

mobility, and production can take hold.[51] Such possibility is most evident in active efforts by cities to join together in networks that span regional and national borders, of which the C40 is a most interesting instance.

4. Why the C40?

I focus in this project on assessing how such dynamics play out in the realm of networked urban climate governance by looking exclusively at the experience of the C40 Climate Leadership Group. The C40 is distinct in that it brings together cities that are, for the most part, the "spikes" in the global distribution of economic activity, innovation, and productivity. C40 member cities reside atop the global city hierarchy[52] and thus offer a promising point of entry to assess the dynamics, effects, potential and limitations inherent in networked urban climate governance. The C40 brings together cities with a combined population of over 540 million, an aggregate GDP of roughly $15 trillion (USD), and total GHG emissions/year of over 2.3 billion tons.[53] To put this in perspective, C40 cities account for just over 8% of global population, generate nearly 25% of global GDP and produce roughly 10% of annual global GHG emissions.[54] Given these figures, there is a case to be made that meaningful change driven by actions at the city level will invariably have to pass through this small sub-set of urban centers around the world.

The C40 was created in 2005 and includes a diverse roster of member cities; not only usual suspects of innovative local governance like Portland, San Francisco, Seattle and Stockholm but also large megacities such as Mumbai, Lagos, Lima and Moscow.[55] The C40 draws together cities from countries that have undergone periods of inter-state conflict or have tense relationships (US-Venezuela and India-Pakistan, for example); cities located in countries that have experienced substantial internal turbulence in recent history (Cairo, Karachi, and Athens for instance); and cities that face vastly different local challenges and possess substantially different governance capacity (for example New York, London or Paris as opposed to Ho Chi Minh City,

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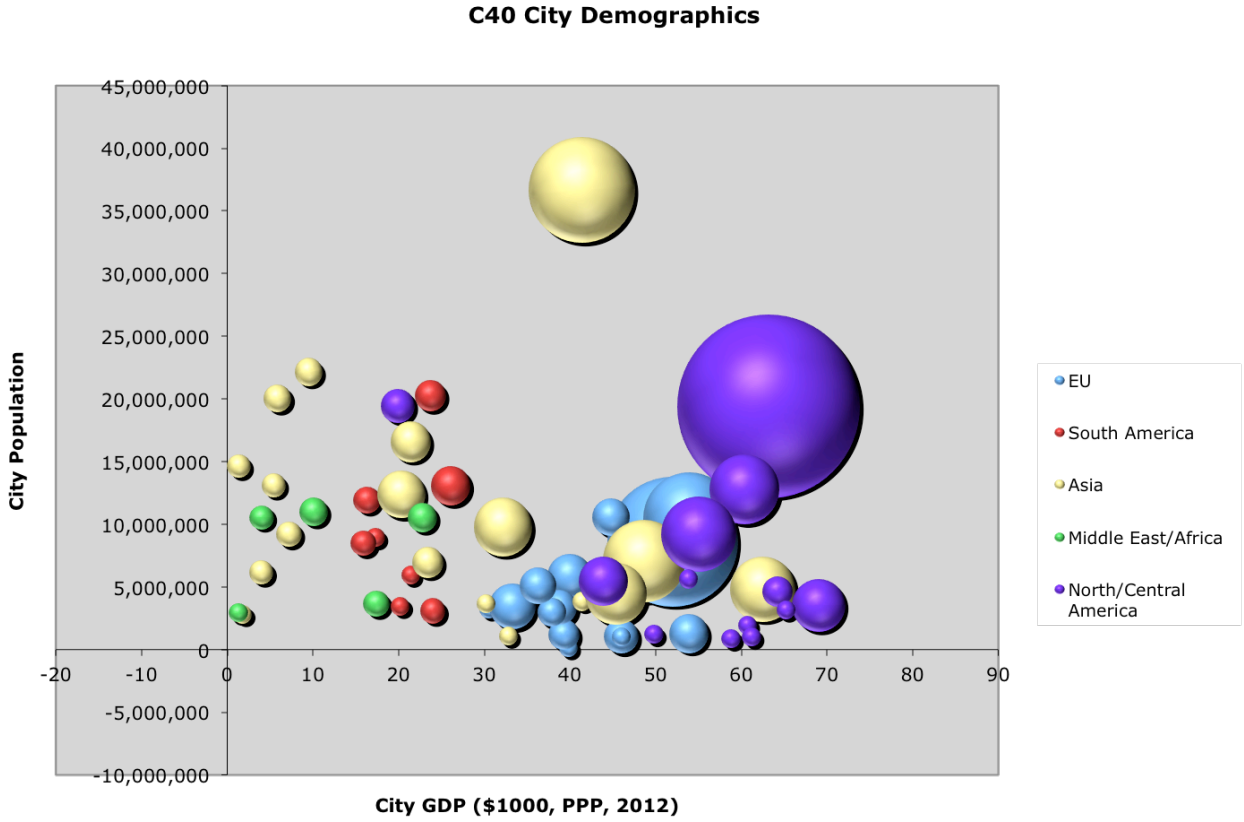
[51] Sassen 2015; Toly 2008; Barber 2013
[52] World Bank 2010; GaWC 2012; A.T. Kearney 2012
[53] CDP 2014
[54] C40 2012b. These figures have further increased with the expansion of C40 membership that has taken place over the course of 2015. The C40 now accounts for 25% of global GDP and over 8% of global population. See www.c40.org/cities
[55] See Appendix A for a full list of C40 cities

Addis Ababa, or Manila). This gives the C40 a considerable degree of internal diversity, with respect to level of economic prosperity, population size, and global city rank (Figure 1.2).

Figure 1.1. C40 Member Demographics: GDP/Capita, Population, Global City Rank



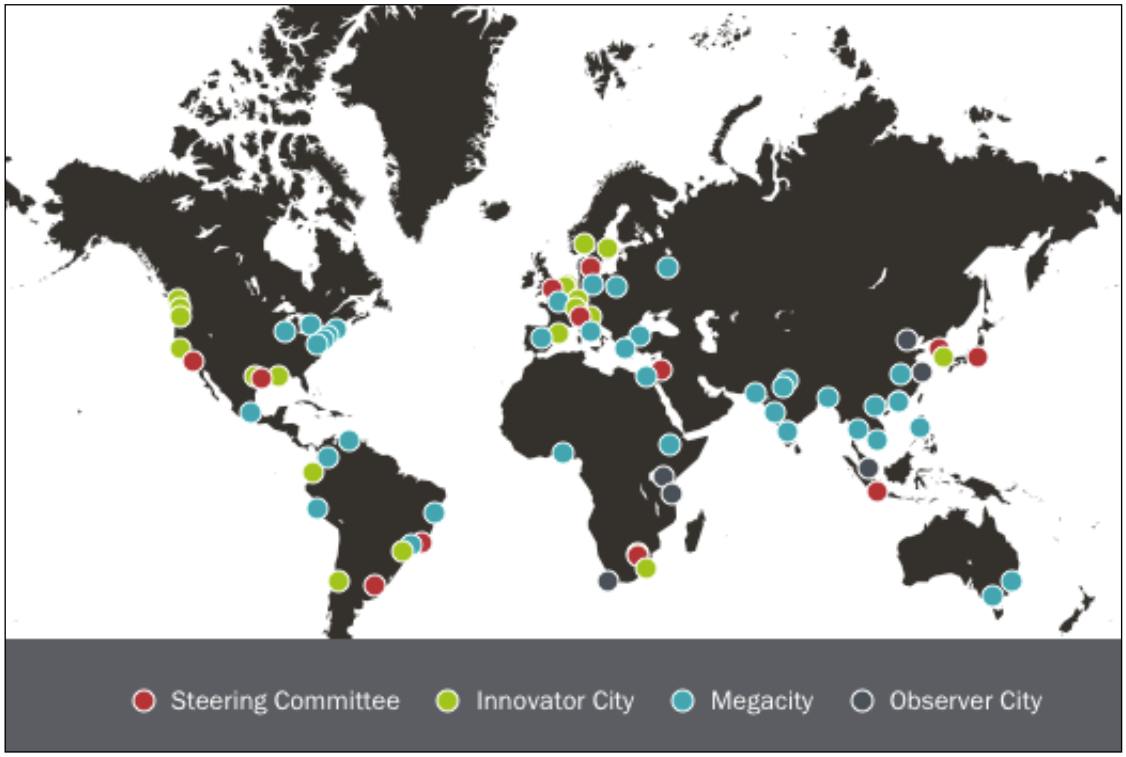
This rather unlikely group of cities is not one, circa 2005, that would have been expected to hold together, let alone achieve a meaningful degree of internal coherence. And yet it has. The C40 lost but one member city between 2005 and 2014, an affiliate member at that (Salt Lake City), and added, over that time, 52 new cities.[56] The network has managed to retain participation and engagement from most member cities in spite of local political transition, turmoil, or turbulence. Furthermore, cities that have emerged as active participants in the network, and engaged actively in local climate governance, are distinct from those identified in earlier scholarship on cities and climate governance.[57] No one, for instance, would have mistaken Sao Paulo, Rio de Janeiro,

[56] The C40 has since grown to include 80 cities with the addition of Amman, Durban, Jaipur, Quito, Salvador, Bengaluru, Dubai, Quezon City, Guangzhou, and Nanjing over the course of 2015.
[57] Betsill & Bulkeley 2003; Harvey 1993

Jakarta, Johannesburg, Seoul, or New York City for climate governance "leaders" in the early 2000s.[58] Yet, as of January 2014, all six were found to occupy key positions within the C40, and all have engaged aggressively in local climate governance.[59] As illustrated below (Figure 1.3[60]) C40 cities have a wide geographic dispersion, at both the general level of membership and along membership categories (where steering committee members have an active role in network governance; megacity and innovator cities represent different classes of city as defined by population and GDP; and observer cities represent those cities that have recently joined the network).[61]

[58] Bulkeley & Kern 2009
[59] Setzer & Biderman 2013; Bulkeley 2013; CDP 2013
[60] This map is reproduced from the C40 website, available at http://www.c40.org/cities
[61] For a full description of C40 membership categories see C40 2012

Figure 1.2. Map of C40 Member Cities (as of December 2014)



The C40, moreso, actively proclaims to have produced a "network effect" manifest in increases over time in the number of cities engaged in local climate governance, the number of actions undertaken by C40 cities related to climate governance, and the scope and ambition of such actions.[62] And yet, while the C40 claims to the mantle of global leadership are underwritten by such demonstrations of network efficacy, the extent to which such claims are valid – and whether the C40 has in fact managed to overcome barriers to voluntary coordination set out above – remains unclear. Official documents prepared and released by the C40 are extremely useful, but are crafted to serve a particular narrative, and to maintain sensitivity to the politics inherent in keeping cities ranging from Beijing to Barcelona, Caracas to Cairo, Hanoi to Houston united around a common cause. Considerations of anonymity, and an emphasis on establishing the bona fides of cities as global climate governors (which is an interesting aspect of the network that will be taken up and assessed in the chapters that follow) thus make it challenging to square the claims of coordination with actual levels of coherence within the network. I thus set out in

[62] Arup 2014: 6; Pierce et al 2013

chapter two to assess the validity of just this claim, to assess whether and to what extent the C40 has in fact succeeded in achieving a measure of coordination from 2005 to 2014.

5. Theorizing Cities, City-Networks and Global Climate Governance

This descriptive task is matched by a concurrent conceptual challenge. Only recently have scholars begun to carve out a place within which to recognize cities as actors in, and agents of, global governance. For the most part, where cities have been explicitly addressed within the IR literature they have been treated as either historically-situated stages of political organization,[63] nested political entities subsumed within the sovereign state, or empty containers that gain relevance solely as a result of their role in (re)producing systemic logics of capitalism or globalization. The subsumption of the municipal within the national remains the typical, and most prominent, approach to the analytic treatment of cities within international relations.[64] Simply put, cities have been relegated analytically to the realm of the national, and assumed to operate as "takers" of interests and objectives from higher levels of government.[65]

Cities, as such, are primarily conceptualized as "nested" within the state, with the result that attempts to bring them into the conceptual fray tend to end up treating them with the analytic tools of interest group politics, as actors engaged in lobbying and efforts to influence the interests and actions of the state rather than as agents in their own right.[66] In terms of international politics, cities are treated as lacking autonomy and agency as authoritative actors in their own right, and are denied status as units of analysis within international relations. Sassen captures this dynamic well in noting that cities are commonly, within the scholarship as well as in policy circles, "flattened into one scale—the "local," the bottom of the institutional hierarchy that runs through the national state."[67]

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[63] Tilly 1992
[64] cf. Alger 1990; 2010; Curtis 2011, 2014
[65] Sancton 2006; Shultze 2003. This approach parallels the theoretical treatment of cities as sites of interest group contestation within the literature on urban studies. The classic treatment here is Dahl 1957. See Taylor & Eidelman 2010 for an excellent overview.
[66] Moravscik 1997; Putnam 1988
[67] Sassen 2013: 238

Even in scholarship focused exclusively on the transnational linkage of cities they are often marginalized with respect to their capacity for agency. The scholarship on global cities, for instance, while diverse, sophisticated, and thought-provoking, rests on an analytic prioritization of corporate, non-state and nation-state actors rather than cities.[68] The result is that, paradoxically, *cities* aren't really all that important within the confines of global city scholarship.[69] In part this is a product of the theoretical shadows cast by its structural Marxist heritage and the corresponding structural-functionalism that this entails.[70] Cities are rendered irrelevant; empty sites that serve as the stage on which private economic actors ply their trade. Taylor puts it most succinctly: "*cities* do not create city networks".[71] Even those critics who raise issue with the ways in which the global cities literature tends to essentialize and reduce the complexity of the city down to a single dimension[72] remain relatively unbothered about the fact that the city itself (i.e.: the municipal civil service, elected politicians, and bureaucracy) are evacuated from the analytic landscape.[73] This tendency has seeped into recent efforts to adapt and apply the global city framework to the field of global environmental governance. In such a telling cities are accorded a central and important position but serve, in the final analysis, solely as geo-spatial containers within which to identify and assess the activities of a host of state (diplomatic office, UN agencies) and non-state (ENGOs, MNCs, philanthropic organizations, and so on) actors.[74]

A burgeoning literature on cities and the global governance of climate change emerged in response to such limitations, and has done a great deal to challenge prevailing presumptions with respect to who acts, and how governance operates, when cities engage issues that span local, regional, national, and global scales.[75] This body of work, though, has not yet provided a satisfactory account of the factors that shape *whose* or *which* ideas and practices inform

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[68] Taylor 2005; Sassen 2001
[69] Salomon 2009, Acuto 2009; Smith 2012
[70] Smith 2012: 4
[71] Taylor 2005: 706 my emphasis. For an insightful critique on this point see Salomon 2008
[72] Robinson 2002; Massey 2013
[73] cf. Vliets 2002. Sassen is cognizant of problems related to the conceptual framework that she has had a part in developing and has undertaken some writings to address the local political dimensions, but who still refrains from acknowledging a role for local government. See Sassen 2010 on the ecological dimensions of global cities
[74] Amen et al 2011; Boutiligier 2012; Calder & Freytas 2009
[75] Betsill & Bulkeley 2003, 2004; Bulkeley 2005; Bulkeley & Schroeder 2011; Bulkeley et al 2014; Bulkeley et al 2015; Bouteligier 2013; Johnson et al 2015

governance in city-networks like the C40, nor has it developed a satisfactory means of accounting for the power dynamics that operate within such networks and serve to influence how and whose norms are diffused, contested, or achieve convergence.[76] Power must, however, be included in any discussion of experimental governance[77] and studies that seek to establish patterns of interaction, learning, or socialization between cities suffer in neglecting the factors that shape or influence *what* is learned, shared, socialized, or emulated.[78]

5.1 The C40 as a Governance Field

As a result of these limitations, which will be explicated in greater detail in chapter three, I develop a field theoretic framework as a means of addressing the phenomenon of norm convergence and explaining both how it has been produced and why it takes a particular form in the C40.[79] Drawing broadly on Bourdieu's sociology, and taking inspiration from Sending's recent and insightful work on the creation of authority in transnational governance, I reconceptualize the C40 as a governance field - a social space organized around a particular object of governance but within which different and divergent ideas co-exist with respect to "how to define and govern that object of governance."[80] While governance fields are organized, at least initially, around a particular objective they are subject to contestation over the specification and substance of governance norms that shape and inform the identity and interests of participants.[81]

As Sending suggests, field theory situates the analysis of global governance towards the competition between various actors over the capacity to shape "what is to be governed, how, and why,"[82] focusing attention on the processes through which governance objects are defined,

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[76] For efforts at doing so see Andonova et al 2009 and Okereke et al 2009
[77] Hajer 1995; Bulkeley 2012
[78] Lee 2013; Lee & van de Meene 2012
[79] In so doing I draw considerable inspiration from recent path-clearing work applying field theory to re-orient analyses of international relations and world politics. See Adler-Nissen 2012; Sending, 2015; Bigo 2011; Epstein 2008; Leander 2003, 2011. On the application of Bourdieu more general in IR see Pouliot 2008, 2011; Adler & Pouliot 2011.
[80] Sending 2015: 30. In an early application of Bourdieu in American sociology DiMaggio (1983: 149) draws attention to Bourdieu's understanding of fields as comprised of "both common purpose and…arena[s] of strategy and conflict."
[81] Finnemore & Sikkink 1998; Epstein 2008, 2013
[82] Sending 2015: 175

governance practices are established, and governance norms are entrenched.[83] Such processes are all the more important in novel governance initiatives, where answers to such questions are necessarily opened up (albeit to varying degrees) for active debate and configuration.[84]

The framework that I develop is organized around the interaction of four core concepts, those of nomos, habitus, capital, and recognition. I present them briefly here to give the reader a sense as to the contours of my conceptual contribution and explanatory approach, and provide a full discussion in chapter four. Fields are, firstly, comprised of a distinct nomos – a configuration of governance norms that shape how actors perceive their role, task, and menu of possible, plausible, and proper actions.[85] Nomos is the ideational structure of a governance field, and shapes the identity and orientation of actors.[86] Habitus, on the other hand, capture the particular disposition that actors bring with them into the C40 governance field. Habitus reflects the internalization of nomos.[87] In novel governance fields like the C40, which are borne of a fundamental rupture with the status quo, I employ habitus to capture the particular configuration of ideas and practices that actors bring with them into the new field.[88] Habitus is that which actors of different stripes work *from* as they attempt to infuse a new field with ideational and practical substance. And so, in the case of the C40, not only the member cities but also organizations like the Clinton Climate Initiative, Bloomberg Philanthropies, and the C40 Secretariat all bring with them, and endeavor to have entrenched in field structures, specific ideas as to how climate change should be governed by, and in, cities.

The extent to which individual actors are able to successfully *produce* convergence around their particular ideas and practices is a function of the co-constitution of capital and recognition in the C40 field. Capital represents the medium of currency in a field[89] and those able to successfully combine claims to various types of capital (of which I specify three distinct sub-types:

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[83] Epstein 2013
[84] Fligstein 2001; cf. Hopf 2010
[85] Finnemore & Sikkink 1998; on practical norms as a distinct kind see Ambrosetti 2010
[86] Epstein 2013
[87] Emirbayer & Johnson 2008. In standard applications of field theory to domains of social conduct habitus is used to understand why/how actors conform to prevailing structures in the absence of formal systems of coercion. It is the structure that actors internalize, although there is disagreement over the extent to which there always remains some degree of space for independent agency. Cf. Hopf 2010, Bigo 2011.
[88] Bigo 2011
[89] Pouliot & Merand 2012

institutional, agential, and structural) are more likely to occupy positions of dominance within the field. It is only, however, through the mechanism of recognition that capital is converted into power and influence.[90] Those actors able to secure *external* recognition for the C40 field as a whole are most likely to have their authority recognized within the field, and as a result to induce adherence to the particular set of governance norms and practices. Locating novel governance fields like the C40 in a broader context of governance fields (those of networked urban climate governance and global climate governance most importantly) sensitizes analysis to both the structuring effects of extant fields and the interactive dynamics that impact relations of authority, power, and influence within specific fields like the C40. With respect to the latter, recognition is the mechanism through which capital is translated into power and influence, the "engine" as it were that drives field theory.[91] In novel governance fields like the C40 the unifying force binding actors together is the desire *for* external recognition; cities desire recognition from outside actors since recognition brings with it existential legitimacy (in the form of status as a global governor) along with increased access to political authority, capital investment, and influxes of tourism and talent. The ability to secure external recognition at the same time empowers particular claims to authority within the governance field, as most evident in the ability to set the terms on which recognition will be granted to field participants.[92] As for the former, the structuring effect of prevailing governance fields on novel fields like the C40 serves to orient analysis to the manner in which they challenge, or reproduce, deeply entrenched governance norms.[93]

Bringing together the concepts of habitus, nomos, capital and recognition offers a means of accounting for the politics inherent in producing norm convergence in the C40. It parallels the fundamental insight of network theory, that power is a function of position in relational structure, but expands it beyond the limited domain of social-relational ties.[94] A field theoretic approach, as will be illustrated, has the potential to provide a more nuanced analysis of hybrid governance

[90] Wacquant 2006; Leander 2011
[91] Sending 2015
[92] Sending 2015
[93] Bernstein 2001; Toly 2008
[94] Hafner-Burton et al 2009; cf. Carpenter 2011

initiatives like the C40.[95] It is ontologically amenable to assessing the interaction and relations that take place between diverse types of actors such as those that occupy the C40 – cities as well as philanthropic organizations; management consultancies as well as international financial institutions; ENGOs as well as MNCs – without *a priori* privileging any or subsuming them within standard categories of state/non-state, or level of governance. Instead, each actor is assessed with respect to their particular habitus, ability to claim to various types of capital, and efforts to bridge external and internal field recognition.

Approaching the C40 as a governance field further sensitizes analysis to the different sources of authority that can serve to empower particular actors in their efforts to produce order. Doing so can help to augment institutional analyses that focus attention on the formal levers of authority available to actors within a governance network[96] by acknowledging the interplay between formal/institutional and other types of capital.[97] It also opens the door to a nuanced analysis of the ways in which political authority is being reconfigured in novel (and perhaps not so novel) ways in the nascent social spaces constituted by networks like the C40.[98] It offers, in other words, a means of responding to Betsill & Bulkeley's call for a new kind of theorizing so as to better understand and evaluate the new kind of politics taking place around the urban governance of climate change.[99]

6. Objectives and Contributions

A diverse chorus of voices can be heard to proclaim that we are living in an "urban age,"[100] experiencing the onset of a "metropolitan revolution,"[101] in need of addressing an "urgent urban agenda,"[102] and witnessing the "triumph of the city."[103] "If only Mayor's ruled the world," states Benjamin Barber, the world would be more capable of responding effectively to complex global

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[95] Bulkeley & Schroeder 2011
[96] Selin & Vandeveer 2007
[97] Wacquant 2006
[98] Bulkeley & Schroeder 2011: 20; Bulkeley & Jordan 2013; Sending & Neumann 2006
[99] Betsill & Bulkeley 2013: 146
[100] Burdett & Rode 2011
[101] Bradley & Katz 2013
[102] World Bank 2010
[103] Glaeser 2011

governance issues such as climate change, migration, terrorism, and public health.[104] Yet if cities aspire to the status of global governor and aim to address wicked problems such as climate change that have bedeviled inter-state efforts,[105] they must produce collective efforts that generate collective effects. They do so in the face of considerable differences that range from culture to climate; institutions to interest groups; population size to political context; and material wealth to multilevel interactions. They must overcome challenges common to all instances of voluntary coordination, wherein the ability to achieve meaningful collective action is beset by low barriers of exit,[106] the absence of formal authoritative claims over one another,[107] and a dearth of material capacity to incentivize or enforce compliance with rhetorical commitments.[108] Such initiatives are left reliant on indirect levers of influence such as demonstration effects, providing information, curating best practices, and making moral appeals.[109]

Much has been made of the potential inherent in such mechanisms – such that transnational governance networks are presumed to offer those who join them open-ended opportunities for better and more communication, inspiration, sharing, and learning, all of which are expected to lead, supposedly, to a sort of meritocratic sorting of ideas and policies.[110] While communication, inspiration, sharing and learning all undoubtedly take place in networks, the notion that these activities are apolitical serves to divert attention from the power relations that exist within network structures as well as the processes through which networks are brought together around particular ideas, interests, and objectives.[111]

As a result, I set out in this project to re-orient the analysis of cities, city-networks, and global climate governance in this direction. My goal is to subject to critical analysis the notion that cities can, in fact, be global climate leaders; to assess what it takes for city-networks to achieve a

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[104] Barber 2013
[105] Rittel & Webber 1972; Levin et al 2012
[106] Potoski & Prakash 2006
[107] Bulkeley & Kern 2009: 309-310
[108] Gordon, forthcoming 2016a
[109] Selin & Vandeveer 2007
[110] Slaughter 2013; Lee 2013; Barber 2013
[111] Carpenter 2011: 73. This notion has its origins in early typologies of networks as distinct modes of social or commercial organization as compared with markets and hierarchies. See for example Powell 1990, Thompson 2003

meaningful degree of internal coherence, and what implications result if, and when, they do. By bringing to bear a critical perspective on the notion that cities can contribute meaningfully to producing an effective, legitimate, and timely response to the complex issue of global climate governance I hope to temper expressions of unrealistic or ungrounded enthusiasm, not so as to deny the importance of integrating cities in the discipline of international relation as well as the study and practice of global governance but rather to help establish a sounder foundation on which to do so.

In focusing in particular on the C40 there are four distinct contributions that I provide in this dissertation. First, it is imperative to gain a better understanding of the C40 itself, as it is the highest profile city network engaged in global climate governance and the driving force behind inter-network initiatives like the Compact of Mayors. The ability to better understand how the C40 has achieved the transition to internal coherence offers a means of assessing its governance potential and the possibility that it will in fact deliver on its proclamations of global climate leadership and urban transformation. While I do not, in this project, focus on assessing the efficacy of the network in terms of achieving particular outcomes I do believe, as noted above, that such efficacy must be comprehended as a function of the internal coherence of the network.

While the C40 differs from other city-networks in that it has a limited and invitation-only membership comprised largely of global cities that meet particular GDP and population thresholds, it nonetheless shares a common set of foundational characteristics with many other transnational city-networks: voluntary participation, horizontal rather than hierarchical authority relations, a lack of formal coercive or compliance enforcing authority.[112] Explaining how, and why, the C40 has been able to achieve internal coherence provides a foundation for assessing the potential role that cities, and city-networks, might play in a decentralized or fragmented global climate regime moving forward,[113] a task made all the more pertinent by recent claims with respect the governance potential that they possess.[114]

As cities in the C40 have come to cohere around a common, shared project and practices of climate governance it is imperative to understand the manner in which coherence around these is

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[112] Bulkeley & Kern 2009
[113] Zelli & van Asselt 2013; cf. Abbott 2013
[114] Compact of Mayors 2014; Bloomberg 2014; Pattberg & Widerberg 2015

likely to translate into the pursuit and production of systemic outcomes. Identifying and explicating convergence around particular governance norms offers a means of assessing whether and in what way internal norm dynamics in networks like the C40 interact with, open up, or close down particular pathways to transformative change in the broader system.[115] Lastly, and most generally, the analytic and conceptual tools developed in this project might be applied to the broader domain of voluntary transnational governance in order to identify the politics and power relations inherent in efforts to achieve coordinated action and collective effect.

7. The Way Forward

The dissertation proceeds as follows. Chapter two steps back to provide the descriptive analysis and empirics upon which the claims of internal coherence and norm convergence are based. Drawing on extensive primary research, and a database of over 4700 discrete governance actions, I present a detailed picture of climate governance in the C40 between 2001 and 2014. Employing frequency analysis I demonstrate the extent to which the C40 has transitioned from inchoate beginnings to achieve internal coherence around a particular set of governance practices. I then employ cluster analysis to infer the presence of four governance norms, and patterns of convergence around those norms, from the particular ways in which governance practices are combined by C40 cities across both space and time.

I then step back in chapter three to consider whether the internal coherence detected in chapter two might be explained without recourse to norm convergence. Grounding the chapter on a discussion of the literature on cities, city-networks, and global climate governance, I explore whether patterns of convergence can be understood through recourse to structural (ecological modernization) or agential (diffusion through learning, competition, socialization, or network-relational bridging) accounts. I employ cluster analysis to assess the viability of as causal narratives derived from each, and illustrate that each offers only a partial and ultimately unconvincing account.

Having established that other accounts are unsatisfactory, I return to the need for a norms-based explanation in order to adequately address the phenomenon of internal coherence in the C40.

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[115] Bernstein & Hoffmann, n.d.

Chapter four begins by establishing the limitations inherent in standard norms-based accounts, and the case for an alternative approach. Field theory is introduced as an alternative norms-based framework, one that offers a means of addressing these limitations with which the extant scholarship has as yet struggled: the role of agency in processes of norm contestation, and how power shapes the outcomes of such contestation. I set out the basic elements of field theory, define in greater detail the key concepts of nomos, habitus, capital and recognition and set out how they are employed so as to provide a means of explaining why convergence has been produced in the C40, and why it has emerged around particular set of norms and practices.

The field theoretic apparatus is then put to use in chapters five and six, in which the concepts developed in the preceding chapter are applied to provide an account of norm convergence in the C40. Drawing on a variety of primary sources - interviews conducted with officials from a subset of C40 cities, the C40 Secretariat and organization, the Clinton Climate Initiative, and other stakeholders, as well as extensive primary document analysis, and observations made while attending the 2014 C40 Summit held in Johannesburg, South Africa - I apply the field theoretic framework so as to uncover how various actors (the Clinton Climate Initiative, London, Toronto, the C40 Secretariat, New York City, Bloomberg Philanthropies) sought to produce convergence, and why between 2005 and 2010 this led to contestation and incoherence within the C40, whereas from 2011 to 2014 it resulted in coherence and convergence.

Chapter five takes the story from the point of C40 creation in 2005 up to 2010, and demonstrates that the field lacked actors able to successful link claims to capital to the promise of external recognition, and so remained mired in state of norm contestation. In chapter six the story is carried forward from 2011 to 2014, a period of time in which the C40 achieved internal coherence and convergence around norms of active and globally accountable urban governance is most pronounced. The field theoretic framework illustrates the importance of an historically contingent combination of New York City and Bloomberg Philanthropies, the ability of these two actors to successfully claim multiple sources of capital within the field, and the successful manner in which such capital was fused to both the securing of external recognition for the field, and a set of specific norms and practices around which recognition was to be granted within the C40 field. In so doing New York and Bloomberg were able to produce convergence around a particular configuration of governance norms between 2011 and 2014.

The dissertation concludes, in chapter seven, by assessing the explanatory value-added gained through application of a field theoretic approach, and reflecting on the implications, both practical and scholarly, of this project with respect to both the C40 in particular, and the broader domain of networked urban climate governance, and several promising pathways along which it can be extended in the future.

Chapter 2
Putting the C40 under the Microscope: Parsing Coherence and Convergence

1. Introduction

The C40 has made much, since 2011, of its ability to achieve coordinated action and collective effort. The network offers evidence of increases in the number of its member cities engaged in climate governance, the number of actions undertaken by those cities, and the scale and scope of those actions.[116] It is on this basis that the C40 positions itself as a leader in the global governance of climate change, a source of innovation, inspiration, and ultimately of meaningful governance impact.[117] That the network is able to make such claims, and that they are widely accepted, is an impressive and puzzling phenomenon. Impressive in that it suggests that the C40 has managed to transition from humble beginnings (recall from chapter 1 that the member cities of the C40 were initially chosen on the basis of geopolitical representation and global stature and a large portion had only marginal experience in or commitment to urban climate governance, if any at all) through a period of internal incoherence and towards a state of coherence and collective capacity. Puzzling in that the C40 has done so in the face of considerable internal diversity and numerous barriers to achieving such internal coherence.[118]

In this chapter I set out to assess the veracity of such a claim, establish that the C40 has in fact come to cohere around a common set of governance practices, and that such coherence is underpinned by a parallel phenomenon of norm convergence. The C40, as I will show, has come to converge around a specific set of climate governance norms that constitute shared understandings as to what is possible and appropriate with respect to the role of cities as global climate governors. The role of norms, and the notion of norm convergence, is a relatively commonplace supposition with respect to city-networks organized around the issue of climate governance. A variety of scholars have demonstrated that norms are employed by networks as a

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[116] Arup 2011, 2014. The C40 also makes claims with respect to its ability to engender policy-specific instances of convergence, such as a 500% increase in the number of cities that have developed bike-sharing programs, and advances these as means of demonstrating the "effect" that the network is having on local climate governance. See Arup 2014: 6

[117] Arup 2014

[118] Vogel 1995; Hobbes 2005

means of both steering their members[119] and contesting broader systems of global governance[120] and extant analyses of urban climate governance networks illustrate widespread uptake amongst member cities of particular governance norms, especially those related to the participation of cities in global climate governance in the first instance[121] and adherence to what Bernstein labels the "compromise of liberal environmentalism"[122] in which ecological preservation is fused to the pursuit of economic development and growth.[123]

My supposition, which will be subjected to critical evaluation in chapter three, substantiated and given clearer form in chapter four, and then operationalized and assessed over the course of chapters five through seven, is that voluntary transnational city-networks such as the C40 are only likely to achieve coherence as a function of convergence around common understandings as to whether they have a right to govern, what it means to govern, and how to govern. In the absence of coherence imposed by the "shadow of the state" initiatives like the C40 are only likely to achieve such coherence insofar as they are able to converge around common governance norms.

Put simply, if the C40 is to live up to claims of global leadership and effective climate governance it needs to achieve internal coherence; and if the C40 is to be internally coherent it must achieve convergence around a common configuration of governance norms. A common and shared set of norms – even in instances where they emerge out of practice rather than through negotiated interaction or explicit dialogue[124] – provide the context in which governance actions are imagined, envisioned, and enacted. They provide the normative and cognitive parameters within which actors "act" and only in instances of convergence are such actions likely to align around common orientations and objectives.

As such my goals in this chapter are twofold. I first provide a descriptive picture of climate governance as it is practiced by the cities of the C40. Leveraging a novel dataset prepared for this

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[119] Selin & VanDeveer 2007; Kern & Bulkeley 2009; see more broadly Bernstein & Cashore 2000
[120] Toly 2008, Curtis 2014
[121] Betsill & Bulkeley 2006, Hakelberg 2014
[122] Bernstein 2001
[123] On this see Toly 2008, Bulkeley 2010. On convergence around the norm of liberal environmentalism more broadly in the domain of transnational climate governance see Hoffmann 2011.
[124] See Axelrod 1984 on this point

project that contains over 4700 discrete climate governance actions adopted and enacted by members of the C40 between 2001 and 2014, I demonstrate that the C40 has in fact transitioned from an inchoate and loosely organized collection of cities into a coherent city network organized around a common set of governance practices. Doing so provides an autonomous confirmation of C40 assertions, and allows me to demonstrate how, and to what extent, the cities of the C40 have come to adopt and enact particular practices of climate governance. I then turn to the phenomenon of norm convergence. While patterns of coherence can be observed empirically, here I rely on cluster analysis to tease out the presence of norm convergence by identifying how C40 cities have come to adopt particular combinations of governance practices over time.

In doing so I infer the presence of four particular governance norms around which the members of the C40 have come to converge:

> *Plural participation*: that cities should participate in global climate governance;
>
> *Liberal environmentalism*: that climate governance rests on a fusing of ecological and economic growth imperatives;
>
> *Active governance*: that cities should enact the role of global governor in an active and autonomous, rather than a passive, manner; and,
>
> *Globally accountable governance*: that cities are accountable, as global climate governors, to external audiences.

The first two of these - norms of participation (cites as global climate governors) and orientation (liberal environmentalism) - are foundational and widely shared across the broader domain of networked urban climate governance. The latter two illustrate convergence in the C40 with respect to how, exactly, cities should go about "being" global climate governors (actively and autonomously from other levels of government) and in what ways cities should "do" climate governance (through globally accountable action). Convergence, in the case of the former, is relatively unsurprising; convergence, in the case of the latter, represents a source of novelty and I focus my analysis, as a result, largely on these two norms.

The analysis presented in this chapter serves two purposes. It offers, firstly, a novel contribution to the extant scholarship on cities and global climate governance. This scholarship has remained largely reliant on in-depth investigation of single or limited number case studies, an approach that has yielded important insights but offers little sense of broader patterns of governance in cities and city-networks.[125] Where recent work has shifted towards a systemic or broader perspective it has tended to subsume cities within broader patterns of "experimental" governance at both the transnational[126] and local[127] scales of governance. Providing a descriptive picture of governance patterns as they have emerged within a single city-network like the C40 serves as a complement to such studies, and offers a means of placing individual case studies into a broader context and gaining a sense as to how the actions of individual cities add up (or not) to constitute a form of global climate governance.[128] It further serves as a supplement to recent, critically-oriented, scholarship on the C40 and can offer a means of assessing claims advanced with respect to the internal governance dynamics operating within the network.[129]

Secondly, developing a descriptive picture of governance and norm convergence patterns in the C40 across time and space offers the necessary foundations on which to base my investigation into nature of power in voluntary city networks such as the C40. Gaining a clearer understanding of the *kinds* of patterns that have emerged in the C40 is the first step in explaining *how* such patterns have emerged and discerning *why* particular patterns are present and not others. Linking coherence to norm convergence is, after all, only the first step and merely establishes the explanatory task undertaken over the remaining chapters: to explain why the C40 has been able to achieve norm convergence, in a particular way, and around a particular set of governance norms.

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[125] Betsill & Bulkeley 2003; Bulkeley & Schroeder 2011; Bulkeley et al 2009; Johnson et al 2015; cf. Lee 2013, 2014; Hakelberg 2014
[126] Hoffmann 2011; Bulkeley et al 2014; Hale & Roger 2014
[127] Bulkeley et al 2015; Bulkeley & Castan Broto 2012, 2013
[128] This project thus shares a great deal of affinity with ongoing work conducted by Bulkeley and colleagues (Bulkeley & Castan Broto 2012, 2013; Bulkeley et al 2015). In both cases we are interested in developing large-n datasets, conducting comparative analysis of action taking place in and across cities, and engaging in systematic analysis of how climate change is being enacted in local contexts. But whereas Bulkeley et al aim to understand how climate governance is practiced locally, through what kind of interventions, and by what kind of actors; my focus is on understanding what sort of power is required to overcome barriers to inter-city coordination, and what sort of effects such power has both collectively and for individual cities.
[129] Acuto 2013a; Bouteligier 2012

The chapter starts off by outlining the meta-theoretical foundations on which my investigation is based. It then outlines the practical aspects involved in data collection, and describes in detail the research design utilized in this project, the practical aspects of data coding and compilation, and the methods employed to discern and detect patterns across space and time. The heart of the chapter sets out the results of descriptive analysis, illustrating both how the cities of the C40 have come to cohere around a common set of governance practices and converge around the particular configuration of climate governance norms as set out above. The chapter concludes by circling back to the initial puzzle – the need to account for the transition of the C40 into a coherent entity – and poses the question to which the remainder of the dissertation is oriented: how did the C40 do it?

2. Foundations

If global governance is defined as a process of "authoritative steering towards shared social objectives"[130] then my interest is in assessing how actors are "steered" towards particular understandings, objectives, and actions within the particular "sphere of authority" that is the C40, who does the steering, and why are some actors able to enact the role of "steerer".[131] This project is therefore couched at the level of cognitive and normative analysis (what is thinkable, what is appropriate) and is most interested in the social construction of shared ideas with respect to the role of cities in global climate governance. I draw on a social constructivist ontology for its emphasis on *becoming rather than being*, and for the analytic leverage that is gained by recognizing that individual agents are both participants in the (re)construction of social meaning and subject to the disciplining effects of the structures of meaning in which they exist.[132]

Such an approach orients analysis towards processes of social interaction and meaning-making through which norms are produced, adopted, and enacted[133] as well as the structuring effects that norms exert, not only in "set[ing] the terms for what can be said and done" by actors with a particular identity, but also in defining "what has to be said and done in order to be regarded as a

[130] Betsill 2009: 9; Andonova et al 2009
[131] Rosenau 1992
[132] Giddens 1984; Wendt 1999; Finnemore 2003
[133] Finnemore 1996

certain kind of actor."[134] Both are essential, since my interest in this project is in uncovering how norms have been established within the C40, and how they have come to inform, condition, and constrain the interests and actions of member cities.[135] While the bulk of constructivism in IR has remained firmly grounded in the disciplinary presumption of state-centricity[136] there is no logical reason why this approach cannot be profitably applied to the activities of cities as they engage in the global governance of problem such as climate change.[137] Furthermore, such a constructivist ontology is fully compatible with the precepts of field theory in that both envision an interactive dynamic between structure and agency, recognize the constructed nature of social reality, and focus on uncovering historically contingent processes through which identities are forged, interests are defined, and actions are rendered thinkable or desirable.[138]

Rather than looking for the diffusion of a *particular* norm across a body of pre-given entities[139] this project focuses analytically on the extent to which cities have come to share a set of particular understandings and engage in common practices– what could be termed a norm configuration[140] – with respect to global climate governance.[141] The concept of a norm configuration or complex provides an analytic tool with which to focus on the linkage between deeper and more ephemeral norms (those related to who gets to participate in global governance versus those related to how governance is enacted, for instance[142]) and helps orient analysis towards both the interaction of novel and prior norms and the manner in which prevailing norms are contested as well as reproduced.[143]

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[134] Towns 2012: 187
[135] Bulkeley & Schroeder 2011: 10; Betsill & Bulkeley 2003
[136] Wendt 1992, 1999; Katzenstein et al 1996
[137] Curtis (2011: 14-15) advances an interesting argument along this vein, but pushes farther in suggesting that the construction of novel international structures by states-as-agents may in fact lead to "unforeseen consequences" including the "restructuring and consequent weakening of the state as the unchallenged unit across all of the domains of the international systems" thus allowing for the "emergence of other units, which have begun to take on some of the modern state's functions." The global city is offered as a prime illustration of this trend.
[138] Adler & Pouliot 2012; Pouliot 2007, 2008, 2010; Adler-Nissen 2012
[139] Keck & Sikkink 1998; Risse et al 1999; Tannenwald 1999; Price 1995
[140] Epstein 2013. Bernstein (2001: 6; see also Ruggie 1998) uses the concept of a norm complex to denote a similar combination of multiple norms into a stable configuration.
[141] Hodson & Marvin 2010
[142] Harris 2013, Bernstein 2001, Florini 1996
[143] Bernstein 2001, Finnemore & Sikkink 1998

What this means, practically speaking, is that I am not interested in this project in the diffusion of concrete policies related to local climate governance. I do not trace out the diffusion of specific climate governance projects or policy actions (such as Bus Rapid Transit systems, bike-sharing programs, or landfill waste gas capture initiatives, for example) but rather am interested in leveraging these actions analytically in order to get a clearer understanding as to how cities approach the task, and engage in the authoritative practice, of climate governance.

Divining the ideational dimensions of governance presents a considerable challenge, given they operate in the background and can be (often are) taken-for-granted or remain unconsciously recognized by actors. One possible means would be to employ discourse analysis as a means of interpreting shared norms, understandings, and identities from the public and private statements issued by individual actors (city officials and politicians, private sector organizations, non-state officials, and so on).[144] In this project I eschew such an approach for reasons both logical and practical. Logically, I see no reason to believe that norms must find explicit discursive expression. As per Giddens, and in line with the "logic of practice" propounded by Pouliot amongst others, norms can reside and operate in the practical consciousness of actors, thus finding expression in *action* rather than in expressed thought.[145] Norms, as Onuf suggests, are evident in the regularity of practices as much as in verbal expression or explicit naming.[146] Drawing on Bourdieu, Leander makes a similar point in advancing the case for a sociologically grounded mode of investigation in which ideational structures are made evident in the things that actors do, rather than what they say.[147] From a practical standpoint the linguistic diversity of C40 cities renders discourse analysis a difficult task, serving to limit the possibility of developing a true cross-network descriptive analysis.

As a result I have chosen to read ideational patterns off of concrete practices. How actors understand the problem, their identity as governors, and the manner in which they can/should enact that identity are inferred from the practices they employ. Sending, for instance, suggests that looking at the practices that actors employ allows one to discern underlying ideational

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[144] Hajer 1995; Milliken 1999
[145] Giddens 1984; Pouliot 2008, 2011
[146] Onuf 1998
[147] Leander 2008

structures, since those "categories recognized as authoritative will be used to design and establish governing practices."[148] In other words, it is possible to use practices as a means of moving abductively from the things that cities "do" to the norms around which actors in the field are organized and have been "structured" to varying degrees.[149]

Such an abductive, rather than a purely inductive, approach offers a useful methodological point of entry. Abduction calls for a back and forth movement between evidence and theoretical expectation.[150] In the absence of clear *a priori* expectations as to what kind of patterns might emerge, abduction allows for a manner of "soaking"[151] in the practices adopted by cities as they govern climate change locally. At the same time, it demands a process of reflection whereby individual practices are linked up with particular categories or types of ideational analysis that can themselves help to inform and discern patterns in the data. In this project, the categories that I brought into abductive analysis relate to basic governance norms: who governs; what does it mean to govern (what kind of problem; what kind of governor); and how to govern.[152]

Lastly, I adopt in this project a thin definition of convergence, one that eschews emphasis on an identifiable end-state or condition that can be assessed quantitatively (such that convergence is equal to a certain, specific proportion of adoption by the total population of potential adopters). Instead I approach convergence as a process of "*becoming* rather than a condition of being more alike."[153] As do Holzinger et al, I approach convergence as indicated by a consistent "increase in the similarity between one of more characteristics of a certain policy…or in the similarity of the policy repertoire in a certain field…across a given set of political jurisdictions…over a given period of time."[154] While Holzinger et al focus their analysis on policy rather than norm convergence, the underlying premise is readily transferred.[155]

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[148] Sending 2014: 40
[149] Bernstein (2001: 30 my emphasis) notes as much in suggesting that norms can be identified through "behavioral traces and verifiable evidence in the form of treaty commitments, *action programs, politics and policy instruments,* and so on."
[150] Friedrichs & Kratochwil 2009
[151] Fenno 1986
[152] These categories are similar to those employed by Bernstein (2001: 31) in his analysis of global environmental governance.
[153] Bennett 1991: 219 my emphasis
[154] Holzinger et al 2008: 556
[155] Gilardi 2012a

2.1 From Practices to Norms

At the outset of this project, my intent was to assess the extent to which cities in the C40 could be sorted into particular types, or clusters, of urban climate governance.[156] However, as I spent more time in the data, and as analysis proceeded in an abductive fashion, the patterns I found suggested not the clustering of cities into specific models of governance but rather the presence of a common foundation of practices across the network. That this was the case led me to surmise the presence of norm convergence as a process underpinning the observed patterns of increased coherence. I then set out to look for evidence of norm convergence by assessing the adoption of groups of practices across time and space in the C40, for which cluster analysis proved especially useful.

The strategy I adopted thus involves a twofold interrogation of the empirical data gathered on urban climate governance actions by cities of the C40. I first identify patterns with respect to the adoption or uptake of specific governance practices over time and space – whether cities are undertaking common types of governance practices such as: comprehensive or integrated planning; establishing citywide targets and measuring particular segments of citywide emissions; intervening in specific sectors of the urban political economy or social system; enacting particular modes of authority as means of pursuing or producing change; and so on. I then infer the presence of particular norms, and of convergence around those norms, from the empirical evidence adduced above. To do so I rely on cluster analysis in order to detect the presence of governance norms in the ways that cities of the C40 engage in practices of climate governance.

Consider, for instance, the following brief vignette with respect to convergence around a norm of globally accountable urban climate governance (to be discussed in detail below). The presence of this norm is evident in the manner in which cities engage in particular combinations of climate governance practices, those of not only reporting, and public disclosure to particular audiences (global capital markets, international financial institutions or funding agencies, international organizations) but also those that indicate a managerial orientation towards the task of urban climate governance (comprehensive strategic plan, objective emissions reduction target, preparation of local emissions inventory, standardized methodology for measuring local

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[156] See Hoffmann 2011. The C40 recently, in collaboration with Arup and with support from University College London, published a report that aims to do just this. See Arup 2015

emissions). In isolation the presence of patterns with respect to the uptake of each of these practices can allow for an observation of coherence in the network. In combination, however, these practices suggest the presence of an underlying shared understanding – a governance norm - that constitutes cities in similar ways with respect to how they should "do" global climate governance. In this chapter I introduce a variety of data points and descriptive analytics that provide a window onto the governance norms adopted by C40 cities, the extent to which cities are, or are not, "becoming more similar" in terms of the adoption and enacting of such norms, and the particular norms around which convergence or clustering has emerged.

3. Methods

In order to fulfill this task, and in light of the absence of pre-existing data of this sort, I developed for this project a novel dataset detailing both the formal and practical aspects of climate governance as undertaken or adopted by C40 cities between 2001 and 2014. The resulting dataset contains records for each of the 65 cities that were members of the C40 as of 2014 but does not include those cities that joined in or after 2014.[157] Data was gathered through an online search of all C40 member city websites in order to identify both current positions on climate governance (including objectives, inventories, and transparency mechanisms) as well as any and all city plans containing an explicit orientation towards climate governance.[158] A total of 70 English language plans (24 cities had more than one such document) that either focus explicitly on climate change (climate change action plans) or include climate change as an organizing concern or key component (city-wide sustainability, energy, or master plans that have a clear and explicit orientation towards climate governance) are included in the dataset.[159] All data gathering efforts were supplemented by a careful review of the secondary literature, and

[157] I have included Salt Lake City even though it left the network in or around 2011, as well as Singapore, Venice, Vancouver, Washington (who joined in 2012). I have not included Cape Town, Nairobi, Dar es Salaam, Boston, Wuhan, Shenzhen, or Tshwane (all joined the C40 in 2014) nor Amman, Durban, Jaipur, Quito, Salvador, Bengaluru, Dubai, Quezon City, Nanjing, and Guangzhou (all joined the C40 in 2015).

[158] Where information on prior objective, activities, or plans was unavailable searches were conducted on internet archives so as to ensure as complete a record as possible. Internet Archive Wayback Machine is available at: https://archive.org/web/

[159] Where information was either incomplete or unavailable, direct contact was initiated with city representatives or C40 regional staff. I was unable to find English language translations of the following plans, and they are as a result excluded from the dataset: Bogota (2013), Beijing (2008), Buenos Aires (2009) Changwon (2006), Oslo (2005, 2008, 2011).

cross-checked against policy reports issued by third party organizations engaged in cataloguing local sustainability and climate governance initiatives.[160]

The dataset is divided into *formal* and *enacted* practices. In the *formal* dataset, each city was coded with respect to the presence of:

1. A local climate action plan (yes/no)
    a. For those cities with a plan (or multiple plans) each is coded as either narrow (focused exclusively on addressing climate change through the reduction of emissions or adaptation to potential effects) or comprehensive (whereby climate change is integrated into, and used to organize, broader city objectives and strategies);
    b. For cities with a plan (or with multiple plans) the year it was adopted is coded as well so as to allow for temporal analysis;
2. An emissions reduction target for city operations, also known as a corporate target (yes/no);
    a. For those cities that have a corporate target, each is coded as either low (20% or lower planned reduction), moderate (20 to 50% reduction), or high (50% or greater reduction) ambition;
3. An emissions reduction target for the entire urban agglomeration, also known as a community target (yes/no)
    a. For those cities that have a community target, each is coded as either low (20% or lower planned reduction), moderate (20 to 50% reduction), or high (50% or greater reduction) ambition;
4. An inventory of GHG emissions from city operations, also known as a corporate inventory (yes/no)
    a. For those cities that have prepared at least one community inventory, each is coded with respect to the scope of emissions included and methodology employed;
5. An inventory of GHG emissions for the entire urban agglomeration, also known as a community inventory (yes/no).
    a. For those cities that have prepared at least one community inventory, each is coded with respect to the scope of emissions included and methodology employed;
6. Disclosed local climate change emissions, activities, and/or plans as part of annual CDP/C40 reports in 2011, 2012, 2013, 2014 (y/n)

These six dimensions of formal climate governance were selected since they constitute the most fundamental of urban climate governance practices and allow for an initial evaluation of whether, in what way, and when cities have engaged in formal practices of governance. In order

[160] Siemens 2009, 2010a, b, 2011; World Bank 2010; OECD 2010; Metropolis 2010

to assess trends over time, each of these dimensions is coded at three distinct points: 2005, 2010, and 2014. Doing so allows for a combined analysis that includes both synchronic (across space at particular points in time) and diachronic (across time) dimensions.

Each city in the dataset was coded for a variety of potential causal factors that were considered as potential means of accounting for increased coherence in the C40. These include:

1. City GDP/Capita 2008: Data for 2008 listed in $M USD at PPP;[161]
2. City GDP/Capita 2012: Data for 2012 listed in $M at PPP.[162]
3. Geographic region: Each city is coded as either belonging to one of five possible regions: North America, South America, Europe, Asia, or Africa;
4. Global City Rank: Each city is coded into one of ten global city categories, signifying in descending order their respective centrality in the global city hierarchy: Alpha++, Alpha+, Alpha, Alpha-, Beta+, Beta, Beta-, Gamma+, Gamma, Other. Categorization and rankings drawn from the Globalization and World Cities research group.[163]
5. C40 Membership Type: Each city is coded as either a Full or Affiliate member of the C40.[164]
6. C40 Organizational Position: Each city is coded as a C40 Chair, member of the Steering Committee, or regular network member.

The analysis conducted in chapter 3 will draw on these aspects of the dataset as a means of testing the validity of alternative, non norms-based, accounts of increased coherence in the C40.

In the second, *enacted*, dataset C40 cities are coded individually with respect to the practices that they have adopted or employed as means of governing climate change locally. As such, there are records only for those 42 cities that had at least one climate-related plan as of 2014. It should be acknowledged that there is a natural limitation inherent in the strategy adopted in constructing this dataset. In choosing to limit the dataset to only those governance actions included in a planning or strategic document explicitly oriented towards climate change, I was able to both

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161 Data is drawn from Price Waterhouse Coopers Global City GDP Rankings, 2008-2025. http://www.ukmediacentre.pwc.com/Media-Library/Global-city-GDP-rankings-2008-2025-61a.aspx

162 Data is drawn from Brookings Metro Monitor 2012 Report, Appendix B: The Economic Performance Index, Recovery Status, and Other Economic Data for the largest 300 Metropolitan Economies. Available at: http://www.brookings.edu/research/reports/2012/11/30-global-metro-monitor

163 Globalization and World Cities (GaWC). 2008. The World According to GaWC 2008. Available at: http://www.lboro.com/gawc/world2008.html (accessed 23 September 2014)

164 The C40 updated membership categories in 2012 so as to differentiate between Megacities (member cities with population of 3 million or more or top 25 ranking in terms of GDP output), Innovator cities (member cities that do not meet either of the two criteria above but have demonstrated environmental/climate governance leadership), and Observer cities (those not yet granted full access to the network). See C40 2012

direct my data gathering efforts and put some limitations on the data collection process. In so doing I feel confident that I was able to retain fidelity to the intended purpose of the project, namely to search for patterns of coherence in the C40 over time and space. However, this approach does run the risk of missing climate governance practices adopted or implemented in C40 cities but that are *not* included in a plan oriented towards climate change (i.e. those that reside in master plans, transportation plans, air quality plans, or otherwise). As such, my dataset may be (indeed certainly is) incomplete. However, given the number of actions that are included and the breadth of coverage I feel nonetheless this to be a reasonable trade-off.

As the aim is to provide a window onto the ways that C40 cities are *doing* local climate governance, for each of the 42 cities with at least one plan an individual record was compiled, with each climate governance action coded for the following characteristics:

1. Year of the plan in which it is included;
2. Mode of authority employed: Each action is coded as relying on one of six possible sources of authority, four of which are drawn from Bulkeley et al 2009, while the latter two were added over the course of data encoding;
    a. *Command*: Efforts to induce change through the use of formal powers to establish regulations (zoning, standards), to sanction or penalize particular behavior (through punishment and enforcement), or to repurpose or reconfigure the allocation and appropriation of space within the city;
    b. *Enabling*: Efforts to induce change by "steering" or "nudging" actors towards lower emission actions, technologies, or investments through the use of education, outreach, information initiatives, the provision of financial incentives (competitions, rebates, tax incentives, subsidies), or the provision of advice to businesses/individuals on how to reduce emissions;
    c. *Provision*: Efforts to induce change through direct intervention such as provision of infrastructure and services. Core areas of provision include transportation, power generation, water, and waste.
    d. *In-house*: Efforts to induce change by demonstrating the viability or benefits of particular actions related to improving energy efficiency in operations or facilities, shifting to lower emitting fuels or alternative modes of transportation, and reducing consumption and/or waste.
    e. *Capacity Building*: Efforts to increase local governance capacity without actually intervening in a direct manner. Includes, for example, commissioning research on climate effects or possible interventions, creating new organizational or institutional capacity, setting aside funds to fund future actions.
    f. *Advocacy*: Efforts to induce change through active and explicit appeals to other levels of government (regional, national), international bodies (such as the UNFCCC), or non-state actors (such as the private sector).
3. Sectoral focus of interventions: Each action is coded on the basis of the sector being targeted. Possible sectors are: transportation; energy; buildings; waste; water; green

> infrastructure; spatial form; air quality; food; information and communications technology; or education;

The resulting dataset contains 4762 unique climate governance actions adopted or endorsed by a C40 city between 2001 and 2014.[165] Once compiled, the actions coded for each city were aggregated in two ways so as to allow for cumulative or network-wide analysis. First, for each city the absolute number of governance actions per mode of authority and sector were calculated. Second, for each city the relative allocation of actions between mode of authority and sector were calculated in order to provide a comparable metric to use in cross-city cluster analysis. This procedure allowed me to run descriptive analytics, as discussed in the following section, so as to identify specific governance patterns that have emerged within the C40.

Simple frequency tests are employed in order to assess the degree and extent of coherence in the C40 between 2005 and 2014. In the sections below I present uptake and adoption patterns over time for a variety of governance practices in order to illustrate the transition of the C40 from an inchoate into a coherent entity. I then deploy cluster analysis in SPSS as a means of inferring the presence of particular governance norms, and searching for patterns of convergence around those norms.

Cluster analysis offers a means of mining data in order to identify patterns that result when pieces of data are grouped together such that within-group variation is minimized while between-group variation is maximized.[166] For example, consider the following table.

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[165] The selection of 2001 as a cut-off date is somewhat arbitrary but was required in order to place a limit on the data collection process while providing a picture a how cities were going climate governance prior to the creation of the C40 in 2005.

[166] Garson 2012

Sample Table

City	Target – Corporate	Target – Citywide	Inventory – Corporate	Inventory - Citywide
A	X		X	
B		X		X
C	X		X	
D		X		X

Cities, in this case, group into two clear clusters. Cluster #1 (A and C) evinces a strong emphasis on governance through demonstration, given their shared focus on measurement and targeted reduction of corporate (municipal operations) emissions. Cluster #2 (B and D), on the other hand, exhibits a more active approach to local climate governance, favoring the measurement and targeting of GHG emissions at the broader city-wide scale. This simple illustration reveals a clear bimodal distribution (in this hypothetical four-city set) that would otherwise remain hidden if relying solely on frequency counts and aggregate network-wide patterns.

Cluster analysis is especially useful when the number of groups or clusters within a population is not known beforehand, as is most certainly the case in this project. At the outset I was uncertain as to both the veracity of official C40 claims with respect to a "network effect" leading it to induce more, and more coherent climate governance from its member cities over time.[167] I began, furthermore, with a presumption that the increased level of city "action" documented by the C40 reflected a clustering of cities around different models of climate governance[168] and only after spending considerable time with the data came to recognize an alternative pattern of convergence around a common set of governance norms.

Cluster analysis was employed in an iterative process of selecting input variables (for example, corporate target, community target, corporate inventory, community inventory) and utilizing a

[167] Arup 2014; Pierce et al 2013
[168] Kern & Bulkeley 2009

two-step, rather than hierarchical or k-means, clustering technique in SPSS. Two-step clustering was employed as it is better able to identify stable clusters in large datasets, and can handle both continuous (City GDP/capita, for example) and categorical (whether a city has or does not have an action plan) variables, both of which are included in the datasets constructed for this project.[169] The output is generated as cases (cities in this instance), which are grouped together based on the values of researcher-defined input variables. In all cases clustering was performed multiple times and data were re-sorted in between cluster runs in order to ensure that clusters were replicable and robust (and not skewed by the order in which the data was analyzed).

Over the course of repeated iterations – in which clustering was tested on the basis of different combinations of the various elements of urban climate governance set out above (planning, targeting, measurement, reporting and well as modes of governance employed by cities with respect to authority mechanisms, sectoral emphasis, and reliance on partnership with other actors) – stable patterns were identified around particular combinations of governance practices. This was not an entirely random process, as I approached cluster analysis with some expectation in terms of which combination of governance practices might be indicative of a particular governance norm (for example, a norm of globally accountable action would likely be indicated by some combination of planning, target-setting, measurement, reporting, and public disclosure). Nonetheless, I approached the data with as open a mind as possible and assessed the data in a variety of combinations in order to assess the presence and strength of clustering patterns.

Once stable patterns were identified at particular points in time, I re-engaged the data in order to assess their stability across time. All data points in the dataset of urban climate governance compiled for this project are coded for date of adoption, and so I was able to identify how clusters of particular governance practices emerged and shifted across both time and space. This was accomplished by adding the "date" variable and re-running cluster analysis to assess how cities moved into, or out of, particular clusters over time. This allowed for an abductive process of periodization. I approached the data expecting to find a point of distinction in which convergence would experience a "phase change" of sorts, indicating a tipping point in the process of norm convergence, but was uncertain as to when this might be.

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[169] Garson 2012

4. A Tale of Two Networks: From Incoherence to Coherence between 2005 and 2014

Quantitative analysis of climate governance practices undertaken by C40 cities between 2001 and 2014 reveals a tale of two networks. In this section I will provide empirical evidence to illustrate my primary descriptive claim: that the C40 underwent a meaningful transition between 2005 and 2014 that begs of explanation and greater understanding. The C40 was, from the moment of creation in 2005, saddled with a disjuncture between what it sought to be and what it in fact was. The network was inchoate and internally disjointed, and its member cities largely unengaged in the actual practice of local climate governance. By 2009 the C40 had acquired some degree of coherence, but much as Bulkeley & Kern identify in their study of transnational city-networks engaged in climate governance in Europe, it was internally divided between a minority camp of leaders and a majority of laggards.[170] By 2014, however, the C40 had come to acquire a considerable degree of internal coherence as indicated by the widespread uptake of a variety of discrete climate governance practices.

This internal transition can be seen, in the first instance, in a pattern of increased engagement in climate governance action amongst C40 cities over the course of 2005 to 2014. In accordance with proclamations put forth by the C40 itself, there is a demonstrable increase in the amount of climate governance enacted by C40 cities over time (Figure 2.1). From limited beginnings, the C40 exhibits an eight-fold increase in the amount of governance undertaken by member cities, with two noticeable spikes in activity (2007-2009 and 2011-13).[171]

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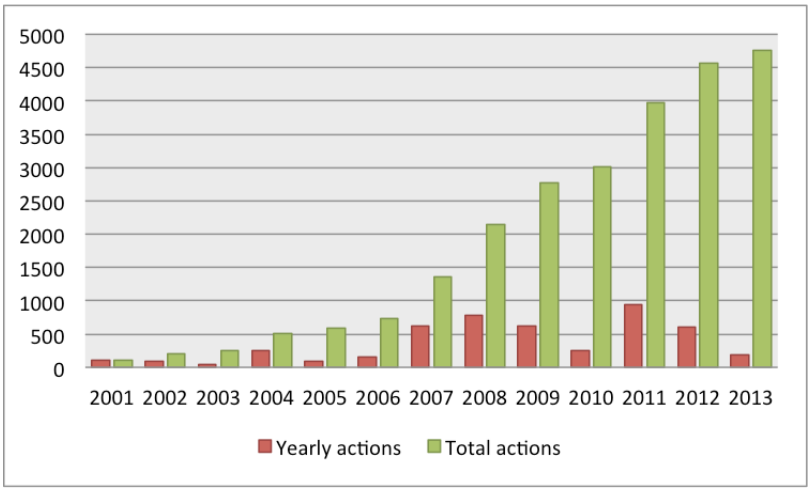
[170] Bulkeley & Kern 2009; Gore & Robinson 2010; Hakelberg 2014; Gordon, forthcoming 2016a

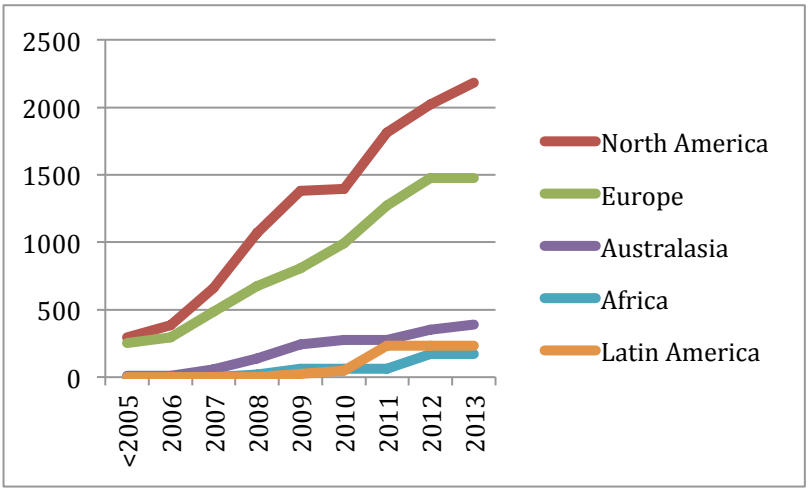
[171] This finding correlates with patterns in member city governance actions documented by the C40 and Arup, which indicate an increase of over 460%, from 520 in 2005/06 to 2414 actions in 2009/10 to 8068 as of 2013 (Arup 2011: 17-19; Arup 2014: 6). Together this represents an increase of just over 1500% since 2005 (Arup 2014: 6).

Figure 2.1. Total and Annual City Climate Governance Actions: 2001-2014



This increase, while distributed unequally across C40 cities and regions, is nonetheless apparent in all segments of the network. As illustrated below (Figure 2.2) the number of governance actions undertaken has increased in C40 cities across geographic regions, albeit at different points in time and at different rates of increase.

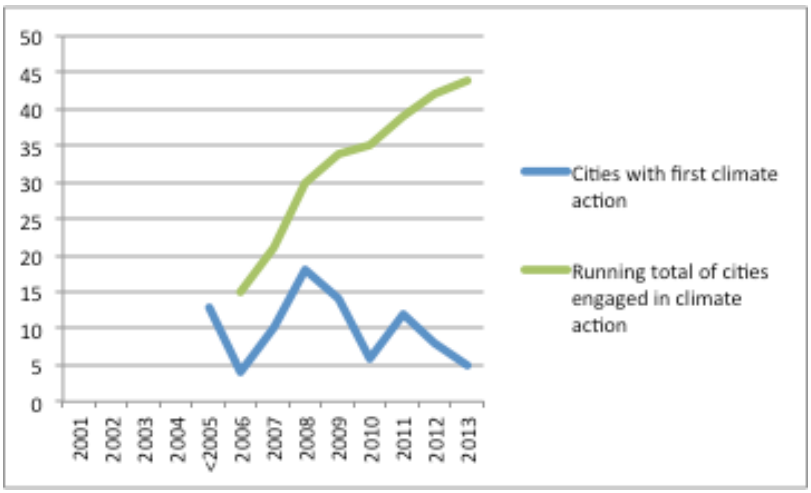
Figure 2.2. Governance Actions by Geographic Region: <2005-2014



As illustrated the member cities of the C40 did not, for the most part, enter into the network as pioneers or leaders in the local governance of climate change (Figure 2.3). Only thirteen cities (comprising 20% of the network) were already engaged in some form of climate governance upon the creation of the C40 in 2005. Between 2007 and 2009, however, we see a sharp increase in the number of cities engaging for the first time in some form of climate governance activity,

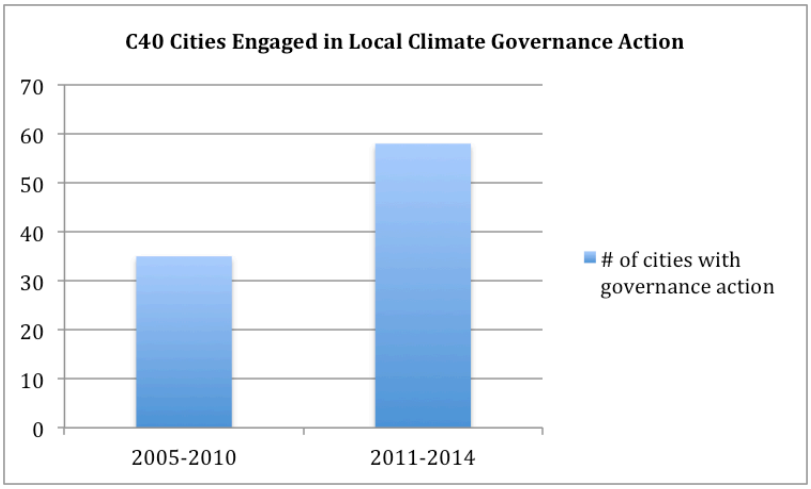
and again between 2010 and 2012. As a result there are, circa 2014, 44 cities actively engaged in governance actions, a figure that constitutes roughly 70% of the entire network.

Figure 2.3. First Local Climate Governance Action in C40 Cities: <2005-2014



We can see, as well, that not only was there an increase in the number of governance actions adopted by C40 cities over this period of time, there was a parallel increase in the number of cities engaged in such actions, nearly doubling from 34 up to 58 (Figure 2.4).

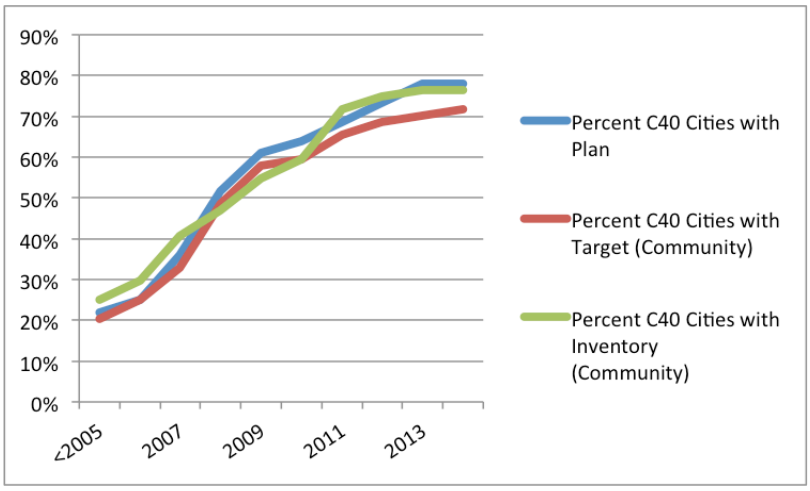
Figure 2.4. Number of C40 Cities Engaged in Climate Governance: 2001-2014



Increased coherence in the C40 can be further detected through the particular practices that C40 cities have come to adopt. For instance, the number of cities that have established a local emissions reduction target for the city as a whole, the number that prepare a local emissions

inventory for the city as a whole, and the number that have adopted a local climate action plan have all increased substantially over time (Figure 2.5) to the extent that they are practiced by nearly, or greater than, three quarters of the network (72%, 78%, and 77% respectively).

Figure 2.5. Cities with Climate Plan, Community Target, Community Inventory: <2005-2014



Not only are C40 cities coming to adopt common practices of target-setting, measurement, and planning, they can be seen to increasingly update these practices to render them more similar. Consider, for instance, local emissions reduction targets and inventories (Figure 2.6). What is evident is a pattern of not only increased adoption of target-setting at the citywide scale, but an iterative process of updating as cities amend such targets over time so as to increase, for instance, their level of ambition (Figures 2.7 and 2.8)

Figure 2.6. First and Updated Community Targets: <2005-2014

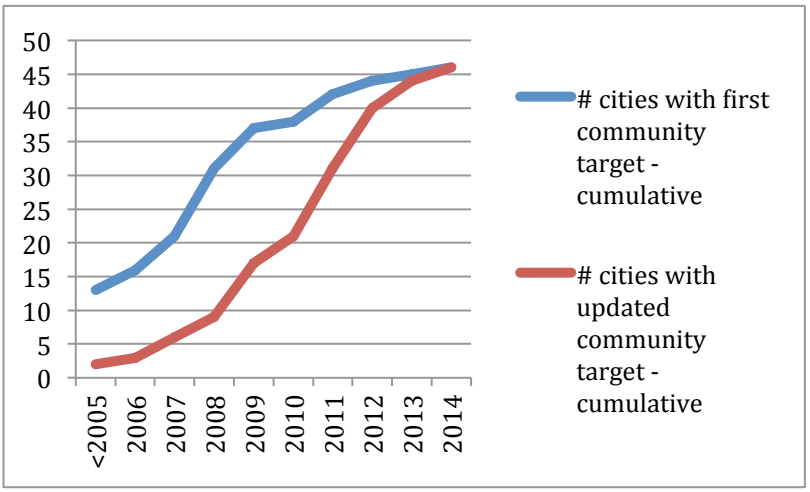


Figure 2.7. Emissions Reduction Targets: 2005-2010, 2011-2014

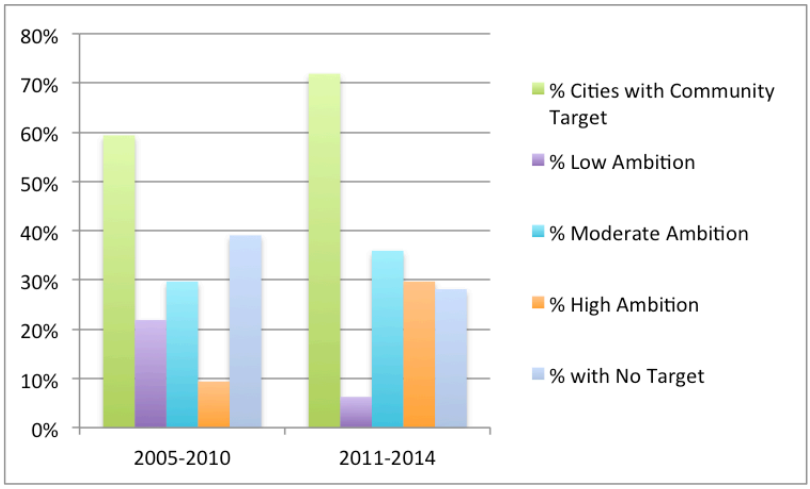
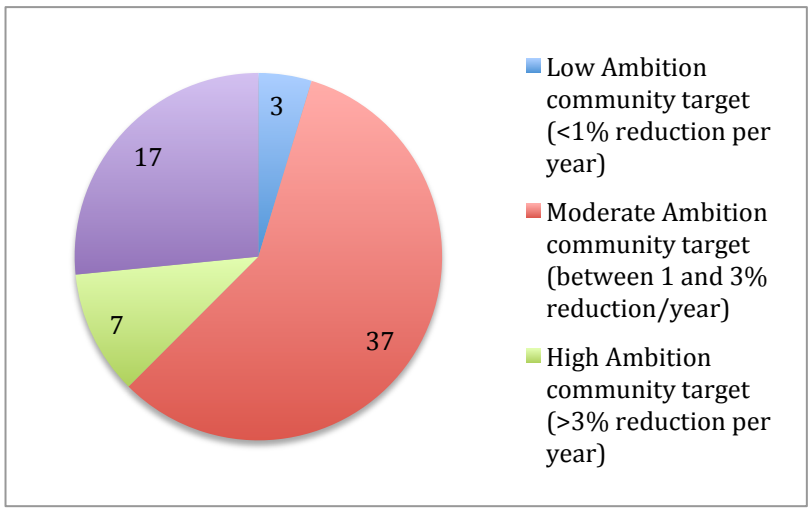
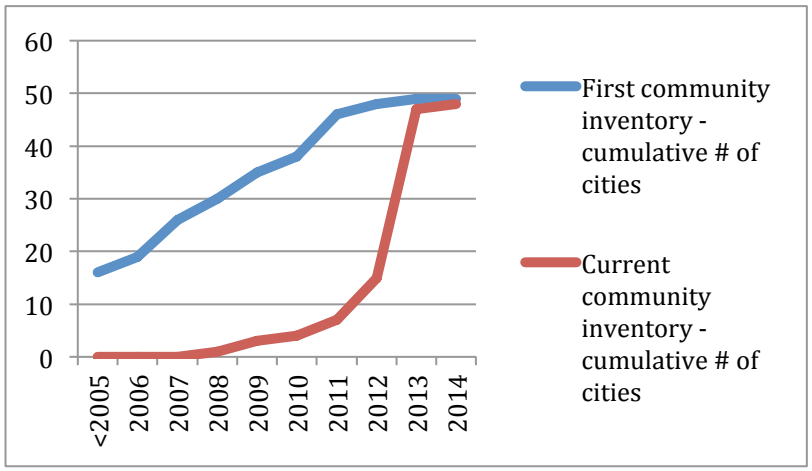


Figure 2.8. Level of Ambition, Community GHG Target circa 2014



A similar pattern is evident with respect to the preparation of local citywide emissions inventories. A handful of cities entered the C40 having already adopted this practice. We see, however, a steady increase between 2005 and 2014 in both the number of cities preparing an inventory for the first time (increasing from 16 to 49) and, from 2011 onwards, a sharp increase in the number of cities updating their local inventories (Figure 2.9).

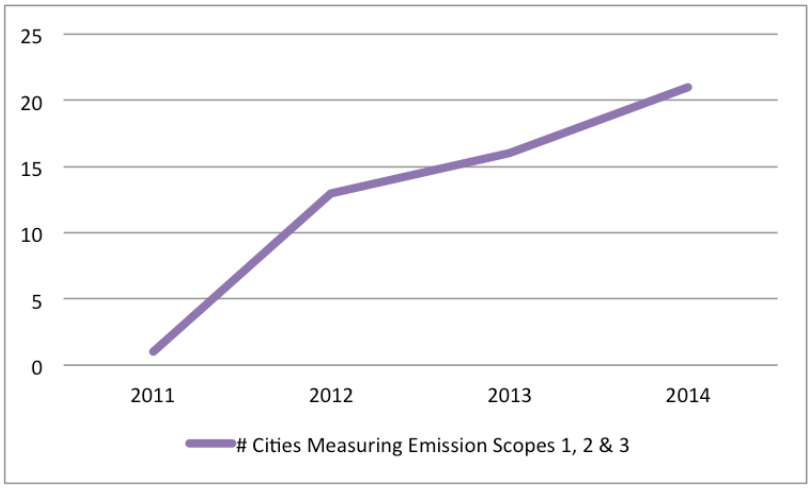
Figure 2.9. Community Emissions Inventory, First and Current Versions: <2005-2014



Such updating is matched by an increased uptake of standardized methods of emissions measurement and reporting. While there remains considerable diversity across C40 cities, we can nonetheless see a move towards common approaches to counting, and accounting for, urban GHG emissions (Figures 2.10 and 2.11). Although the total number of cities measuring emissions generated both directly within the city and indirectly as a result of consumption decisions and actions made by urban households and businesses remains relatively low as of 2014 (33% of all C40 cities) there is a steady and considerable increase apparent from 2011 to 2014 (from 1 to 21 cities).[172]

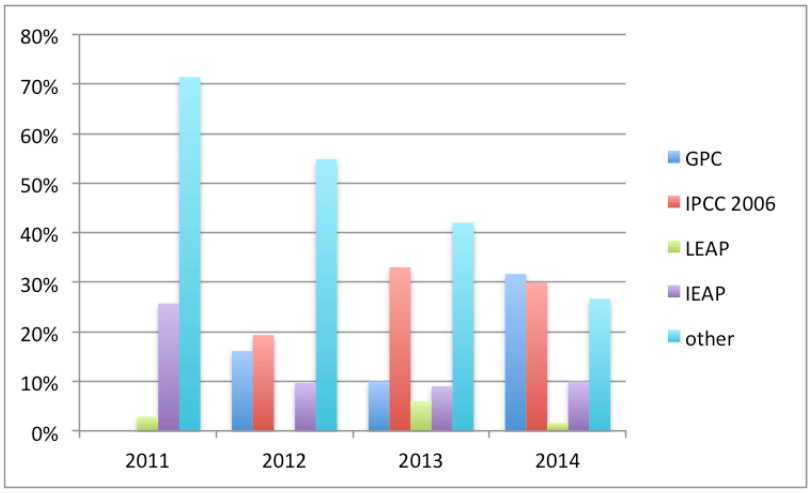
[172] Scope 1 emissions are those produced directly by city households, businesses, or organizations. Scope 2 emissions are indirect emissions generated outside city borders as a result of consumption of heat or electricity within the city. Scope 3 are indirect emissions generated outside city borders as a result of non-energy related consumption (travel and transportation, embodied emissions in goods and services, and so on). See Kennedy et al 2011.

Figure 2.10. Scope Coverage, Community Emissions Inventory: 2011-2014



C40 cities also, between 2011 and 2014, moved in the direction of adopting a standard methodology for quantifying and assessing local GHG emissions. Contra the prevailing trend in the broader domain of urban emissions measurement, where fragmentation and incommensurability are commonplace,[173] C40 cities from 2011 to 2014 adopted a limited number of measurement methodologies, and most importantly exhibit increased adoption of the Global Cities Protocol, a new standard developed in 2012 by a consortium comprised of the C40, World Resources Institute, and ICLEI.

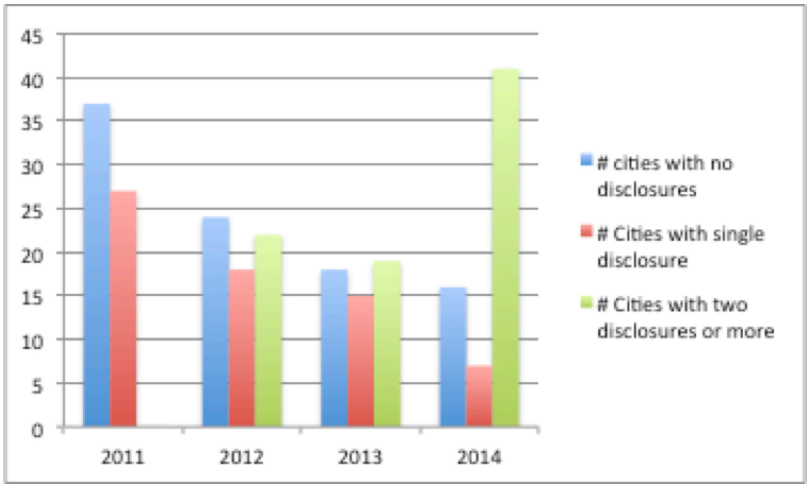
Figure 2.11. Community Emissions Measurement, Methodologies: 2011-2014



[173] Bader & Bleschwitz 2009

Lastly, C40 cities have increasingly come to adopt practices of reporting and disclosing local GHG emissions. First piloted in 2008 the practice of public disclosure is enacted in the C40 through disclosure to the Carbon Disclosure Project (CDP) with results published in an annual CDP Cities Global Report.[174] From 2008 to 2014 the number of C40 cities disclosing community emissions increased substantially, such that 48 member cities had disclosed at least once by 2014 (Figure 12.2). A full 41 (63%) disclosed local emissions at least twice over this same four-year period.

Figure 2.12. Community Emissions Disclosure: 2011-2014



The evidence thus presented illustrates the varied ways in which the C40 has achieved an increased level of internal coherence between 2005 and 2014. Simply put, the cities of the C40 have come to practice climate governance in similar ways: through increased practical action and local engagement; with such actions embedded in an approach to governance organized around setting targets, adopting plans, and measuring and disclosing emissions increasingly counted and accounted for in standardized ways.

This is not, however, to imply that the C40 is internally homogeneous in the manner that its member cities engage in practices of climate governance. There remains a persistent degree of incoherence within the C40, as indicated by both the breadth and scope of local climate planning

[174] CDP 2011, 2012, 2013, 2014

efforts (Figure 2.13), and the diverse sectoral focus of local governance interventions (Figure 2.14).

Figure 2.13. Cities with Narrow, Comprehensive Climate Action Plans: <2005-2014

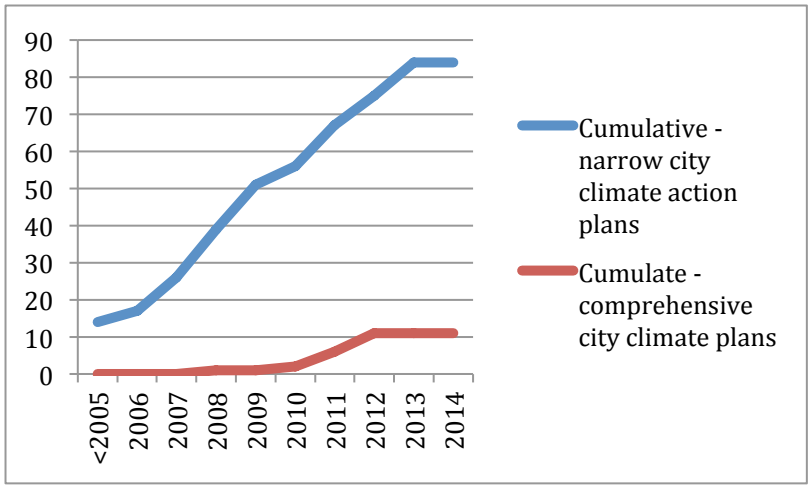
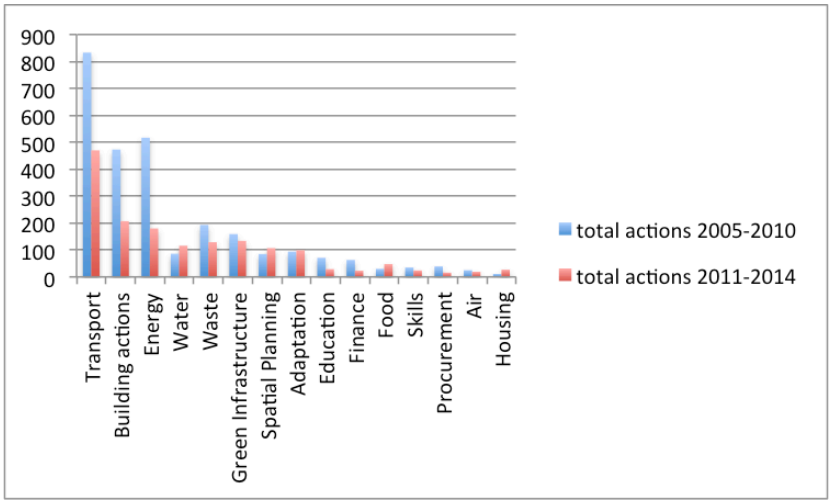


Figure 2.14. Sectoral Focus of Climate Governance Actions: 2005-2010, 2011-2014



This presence of ongoing customization amidst a clear process of increased internal coherence is an intriguing finding and, although I focus in the remainder of this project on explaining the latter I will return to briefly consider the former in the concluding chapter.

5. From Observing Coherence to Inferring Convergence

As noted above, over the course of analyzing the data gathered and compiled for this project it became apparent that, rather than being beset by persistent internal divisions the C40 was instead

characterized more by commonality. This is evident in the broad uptake of common governance practices across the network between 2005 and 2014. Given the absence of formal coercive authority and the inability of network actors to enforce compliance with network "rules" what this suggested was the presence of an underlying foundation of governance norms around which C40 cities had come to converge. Such governance norms, however, are neither evident nor obvious – they cannot be "observed" per se, and so the challenge was to develop a method with which to infer their presence in the C40 and assess the extent to which convergence is present. As outlined above, to do so I infer the presence of norms from the practices adopted by C40 cities, and employ cluster analysis to identify governance norms (and patterns of contestation or convergence) by assessing the manner in which concrete practices of governance are combined.

Such analysis led me to identify convergence around the four distinct governance norms set out above. Convergence around norms of participation (cites as global climate governors) and orientation (liberal environmentalism) are foundational and widely shared across the broader domain of networked urban climate governance.[175] Convergence around such norms is, in other words, expected as both a logical necessity (in the case of the norm of plural participation in global climate governance) and structural imperative (in the case of adherence to the norm of liberal environmentalism). As a result I provide considerably less evidence in support of their presence, and rely instead on extant scholarship to establish the extent to which they serve as a shared foundation on which rest all instances of networked urban climate governance.

The bulk of the discussion provided below thus focuses on the latter two governance norms, those of *active* and *globally accountable urban climate governance*. Convergence around such norms, which serve to not only constitute cities as particular kinds of actors but also to condition or inform the ways in which cities can and should enact this novel identity, is a novel phenomenon that needs elaboration and explication.

[175] This is largely reflected in what Bulkeley (2010) refers to as the "first wave" of urban climate governance that emerged through the early 1990s and into the early 2000s.

5.1.1 More of the Same I: Plural Participation, or Cities as Global Climate Governors

There is, firstly, a clear pattern of convergence in the C40 around what I refer to as a norm of plural participation in global climate governance. Put simply, C40 cities have converged around a common understanding of the legitimate role of cities as global climate governors, in so doing contesting both prevailing norms of state-centricity[176] and picking up on, reproducing, and reinforcing norms related to the legitimacy of cities as global climate governors that first emerged in the early 1990s and have been widely adopted since.[177] The C40 was forged around this norm, and the goal of further establishing a role for cities in the broader inter-state climate governance regime,[178] and both the steady increase in network membership (from an initial 18 cities in 2005 to 80 cities as of 2015) and lack of membership defections are indicative of convergence around this generic governance norm.

5.1.2 More of the Same II: Liberal Environmentalism, or How Climate Change Is Governable

If cities have largely sought to contest prevailing global norms with respect to "who" governs global climate change, and to carve out a legitimate role of cities as global climate governors, they have at the same time conformed with, and reproduced to a large extent, what Bernstein refers to as the compromise of *liberal environmentalism*.[179] This orientation underpins much of global climate, environmental, and sustainability governance and is predicated on the integration of economic or development imperatives with the objective of increased ecological sustainability. In other words, it leaves unquestioned the long-run viability or desirability of perpetual economic growth and productivity and instead operates on the assumption that such

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[176] Hoffmann 2005 :7

[177] Toly 2008; Bulkeley 2010 provides a succinct overview of the evolution of urban climate governance. For early scholarship that tracked the emergence and diffusion of this norm see, for instance, Harvey 1993, Kousky & Schneider 2003, Betsill & Bulkeley 2003.

[178] C40 2005. See also C40 2009; Arup 2011

[179] Bernstein (2001) deploys the concept of liberal environmentalism to signify a combination of particular norms (a specific norm-complex). My use here, however, treats this broader complex as a single norm, one that designates the relationship between economic and ecological imperatives in the domain of climate governance. For a similar usage see Hoffmann 2011.

growth is both inherently good and capable of producing innovations and inventions that can reconcile such growth with the need for smaller and smaller ecological imprints.[180]

Evidence of convergence is found, for example, in survey data compiled by the London School of Economics Cities institute in partnership with ICLEI and the Green Growth Initiative, as well as in self-reporting by C40 cities to survey questions posed by the Carbon Disclosure Project Cities initiative. The LSE Cities institute, in a set of surveys conducted with over 300 cities in 2011/12 (which included 31 C40 cities[181]) found that 93% of cities expected "their green policies to have a positive economic impact."[182] A clear majority (63%) of cities positioned economic development/growth as the "primary goal of their green policies", while nearly all the remainder (31%) saw economic development as a secondary objective of green policies.[183] The emphasis of cities on local sustainability through technological innovation and deployment is also clearly indicated in the LSE report, with 84% of cities surveyed indicating a high level of importance on sustainability through technology.[184]

In a similar vein, C40 cities reporting through the CDP Cities platform demonstrate clear convergence around the idea that climate governance is approached as an opportunity for local economic development.[185] In this way the C40 balances the contestation of *some* deeply held norms of global climate governance (the assumed state-centricity of the extant climate regime) with adherence to others (the combination of environmental preservation with economic development and growth) related to the compatibility of ecological objectives and economic imperatives. Such convergence around norms of liberal environmentalism within the C40 is relatively unsurprising, mirroring Hoffmann's finding of similar convergence within the broader universe of climate governance experiments.[186] And yet its presence does raise questions as to

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[180] Mitchell 2006; Dauvergne 2010; Klein 2014
[181] C40 cities included in the LSE Cities report are: Amsterdam, Austin, Barcelona, Berlin, Bogota, Boston, Buenos Aires, Cape Town, Copenhagen, Curitiba, Hong Kong, Joburg, London, Melbourne, Mexico City, New York, Oslo, Paris, Philadelphia, Portland, Rome, Salt Lake City, San Francisco, Seattle, Sao Paulo, Seoul, Singapore, Stockholm, Tokyo, Toronto, Vancouver, Washington, DC.
[182] LSE Cities 2013: 27
[183] Ibid
[184] LSE Cities 2013: 30
[185] CDP 2012: 60
[186] Hoffmann 2011

the deep transformative potential that some scholars identify with networked urban modes of global climate (or otherwise) governance.[187]

5.2 And Now for Something Different

While the C40 largely conforms to, and reproduces, prevailing governance norms with respect to the role of cities as global governors and the need to govern climate change in accordance with core presumptions about economic development and growth, it has entered novel territory in achieving convergence around governance norms that constitute cities as particular kinds of climate governors employing particular kinds of climate governance. The C40 has, in other words, achieved convergence around not only the *whether* but also the *how* of networked urban climate governance.

In this sense it is important to note the open-endedness that prevailed in 2005 with respect to how cities were to govern climate change globally. A substantial proportion (44%) of C40 cities joined the network with neither a formal commitment to climate governance nor a local objective, plan, or institutionalized allocation of resources prior to 2005. While cities joining the C40 in 2005 committed nominally to the shared network objective of "taking action to reduce greenhouse gas emissions"[188] it was unclear whether this commitment would translate into practical actions, and whether and how C40 cities would enact the role of the city as global climate governor. I want, in this section, to highlight two distinct patterns of norm convergence – around the norms of *active* and *globally accountable* urban climate governance - that serve to answer these questions, and elaborate for each the manner in which convergence has unfolded over time.

5.2.1 Active Urban Climate Governance

In this and the subsequent section I set out to further interrogate the patterns of individual governance practices taken up across the C40 between 2005 and 2014, so as to infer presence of, and convergence around, a norm of active urban climate governance. By this I mean to indicate a particular enacting of the identity of city as global climate governor, one that constitutes cities as

[187] See for example Toly 2008, Barber 2013. Bernstein (2001: 235) advances such concerns with respect to global environmental governance more broadly conceived.
[188] http://www.c40.org/about

active governors engaged in direct effort or action in the pursuit of both local climate outcomes and global objectives.

The presence of this norm is inferred in three ways: the scope of C40 city climate governance practices (as between an orientation towards city government versus citywide emissions and objectives); the extent to which C40 cities substantiate nominal engagement in local climate governance with foundational governance practices (as indicated by practices of citywide climate planning, target-setting, and emissions measurement); and the manner in which cities enact authority as a local climate governor (as between passive modes of authority such as in-house or advocacy, soft modes of authority such as enabling, and hard modes of authority such as service provision or regulation).

Consider, firstly, the shifting balance over time between governance aimed at corporate (those generated by city government operations and facilities) as opposed to community (those generated by the entire city) emissions. This distinction was a cornerstone of early ICLEI-CCP efforts at getting cities to put climate change on the local agenda, since corporate objectives and actions are much lower cost and amenable to cost-savings benefits and can thus serve as a wedge to open up space for broader, city-wide engagement.[189] As illustrated below (Figure 2.15) the early phase of the C40 was clearly dominated by this distinction, with the number of cities adopting a combined corporate-community approach increasing from 7 to 28. The trend, however, gets harder to discern between 2010 and 2014, with only an additional four cities entering this cluster. The corporate-community distinction would thus appear to be largely an artifact of early engagement by front-running cities, those that adopted the ICLEI-CCP approach but have, to varying degrees, abandoned it in the intervening years.[190]

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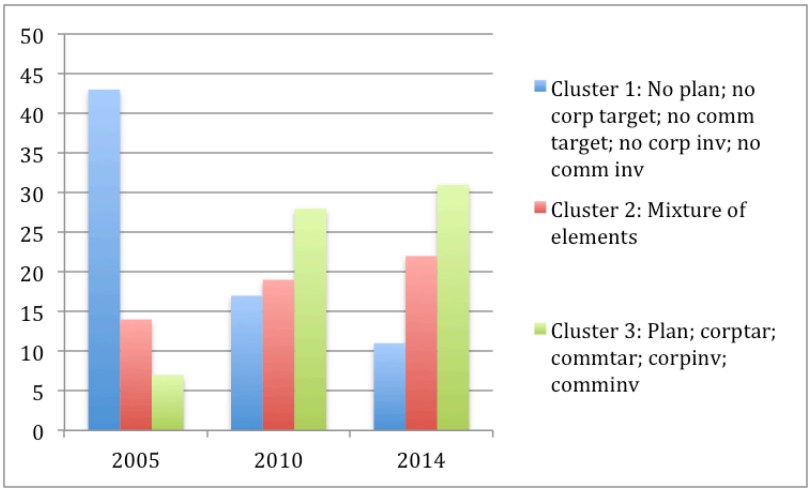
[189] Confidential interview with senior ICLEI-Canada official, Toronto, March 2010. See also Wilbanks et al 1996

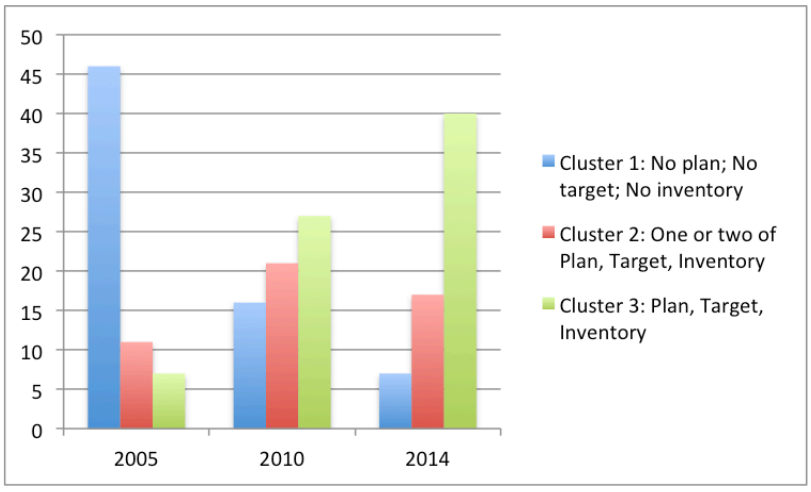
[190] While ICLEI efforts at fostering networked urban climate governance expanded considerably in terms of the number and geographic diversity of member cities over the course of the 90s and early 2000s, it has remained (as is the case for other collective city initiatives, such as the US Mayor's Climate Protection Agreement) largely symbolic in nature, unable to achieve internal consolidation or engender a consistent translation of nominal commitments into practical actions and effects. See Gore & Robinson 2005, 2010; Bulkeley & Kern 2009.

Figure 2.15. Combination of Corporate and Community Governance: 2005, 2010, 2014



The manner in which C40 cities combine practices of citywide climate planning, emissions reduction targets for the entire city, and community emissions inventories, offers further indication of convergence (Figure 2.16). A small number of cities (7) entered the C40 with this combination in place. Between 2005 and 2010 there is a first wave of convergence, as the number of cities combining these three elements increases to 27. Between 2011 and 2014 there is a second wave of convergence as another 13 cities adopt this combined approach, bringing the total number to 40 (constituting 63% of all C40 cities at the time).

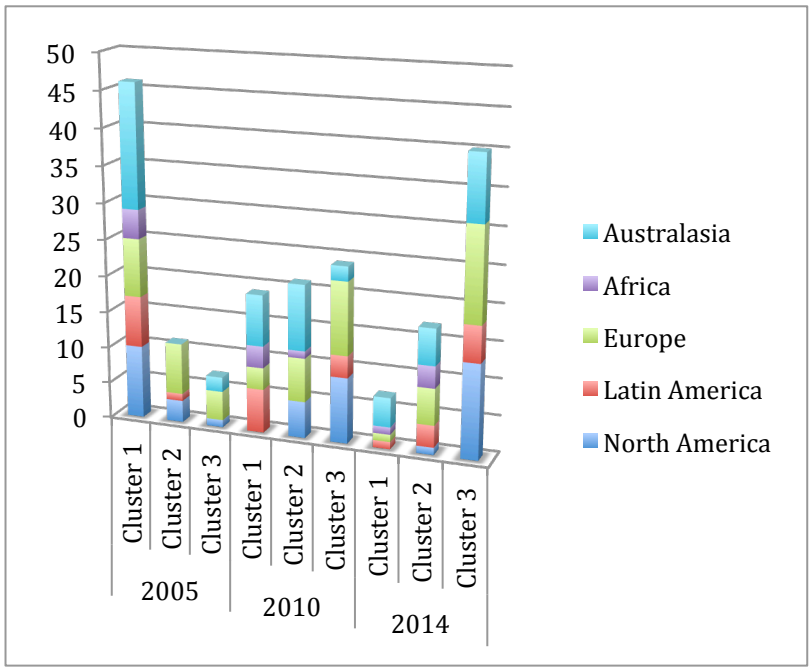
Figure 2.16. Combination of Plan, Community Target, Community Inventory: 2005, 2010, 2014



Looking at how these practices are combined across geographic regions in the C40 we see (Figure 2.17) that C40 cities from all regions converge around this norm between 2005 and 2010

(as indicated by the composition of clusters 2 and 3 as of 2010). Notable here is the shift across clusters by Latin American cities (none of which were included in cluster 3 at 2005) and cities from the Australasian region (especially those of East and South Asia). By 2014 the number of cities in cluster 3 (in which cities engage in active planning, have targets, and prepare inventories) has increased substantially and, aside from the absence of African cities, widely across the C40.

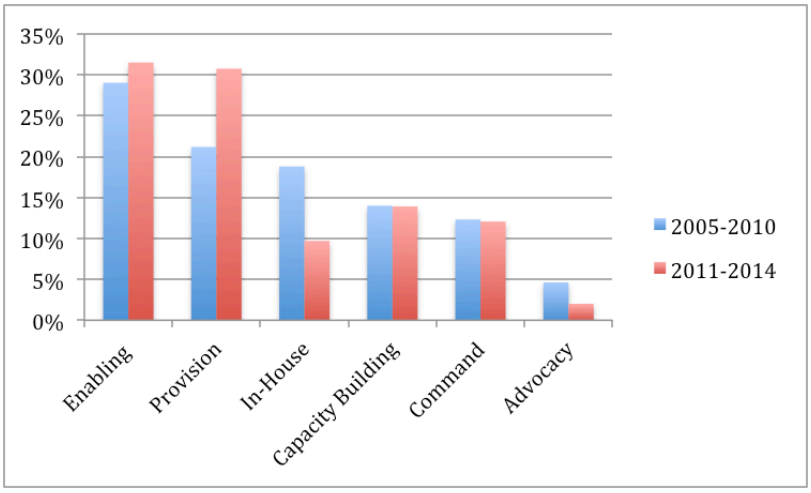
Figure 2.17. Combination of Plan, Community Target, Community Inventory by Region: 2005-2014



We can also find evidence of convergence in the mode of authority employed by C40 cities as they engage in practices of local climate governance (Figure 2.18). The number of governance actions relying on either in-house or advocacy modes of authority drops off considerably in the 2011-2014 period, from 19% to 10% in the former and from 5% to 2% in the case of the latter. At the same time the number of actions relying on active modes of governance (provision especially) shows a considerable increase (from 21% to 31% of all actions).[191]

[191] This finding correlates with the assertion, in a 2014 C40/Arup report, that C40 cities have meaningfully increased, from the 2011 to the 2014 reporting period, the number climate governance actions undertaken at a "transformative or citywide" scale. Arup 2014: 37

Figure 2.18. Governance Mode of Authority: 2005-2010, 2011-2014



Together, these patterns are indicative of convergence around a norm of active urban climate governance in the C40 between 2005 and 2014. Such convergence, as we can see, proceeds not smoothly but rather emerges in two distinct waves. Between 2005 and 2010 convergence around this norm is partial and uneven while, between 2010 and 2014, convergence is substantial and extends across the majority of the C40 network. Cities across all regions are converging around a shared idea as to the way in which cities can, and should, engage in the project of global climate governance.

5.2.2 Globally Accountable Urban Governance

The second pattern inferred from the clustering of observed governance practices is convergence around a norm of globally accountable urban governance, or the notion that climate governance by C40 cities requires a commitment to quantification, disclosure, transparency, and responsibility to *external* audiences.[192] While the first of these – quantification – has long been a staple of local climate governance initiatives, most evidently in the ICLEI-CCP five-milestone framework developed in the early 1990s, it has been traditionally employed as a means of enhancing and improving local planning and decision-making.[193] As such, there was, in the early

[192] For an extended discussion of this phenomenon see Gordon forthcoming 2016a.
[193] Betsill & Bulkeley 2003

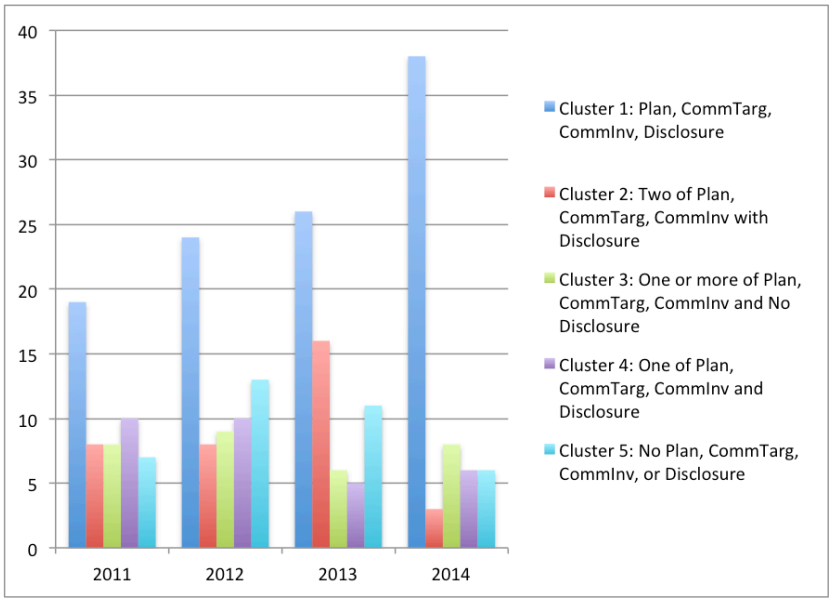
years of the urban climate governance, little indication of inventory standardization allowing for comparison, aggregation, or outside evaluation amongst cities prior to 2011.[194]

I focus on the combination of these various elements –increased regularity, standardization, and public disclosure of community emissions inventories – as a means of inferring the presence of a norm of globally accountable urban governance. I employ cluster analysis, and the combination of formal elements of local climate governance (the presence of a climate action plan, local community-wide emissions reduction target, and community-wide emissions inventory) with the practice of public disclosure. If cities are, after all, to adopt the governance norm of accountability in a meaningful way – in other words if they are to be *globally accountable actors* – it would seem logical that they must engage in efforts to plan, measure, target, account, and disclose. I focus exclusively on the presence of community-wide rather than corporate targets and inventories since it is around community-wide action that (as illustrated above) C40 cities have converged from 2005 to 2014.

The results of cluster analysis suggest a process of convergence as indicated by the combination of these four practices from 2011 to 2014. The number of cities combining regular disclosure with planning, target-setting, and emissions measurement (Cluster 1) increased substantially between 2011 and 2014, from 19 to 38, the latter constituting 58% of all network cities.

[194] Bader & Bleschwitz 2009; CDP 2011: 20

Figure 2.19. Combination of Plan, Community Target, Community Inventory, Dislosure: 2011-2014

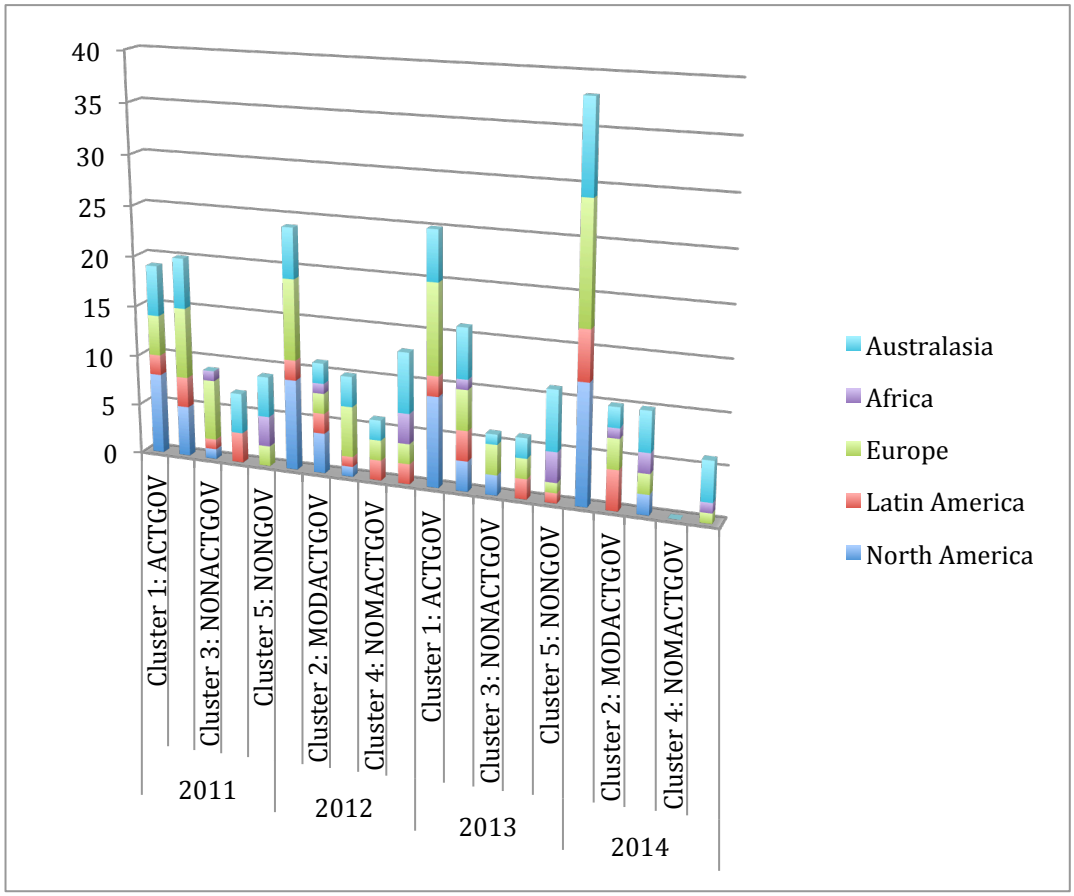


Further evidence of this norm is inferred from the presence of cities that adopted the practice of disclosure but did not actually engage in practices of planning, emissions measurement, or target-setting (Clusters 2 and 4). This suggests a normative imperative at play, such that cities may have felt the need to comply absent a meaningful capacity to actually be accountable. Notably, these clusters diminish in size from 2011 to 2014 (from 17 to 9 cities) while at the same time there is a clear transition of cities into Cluster 1 and the full combination of disclosure and managerial practices. Convergence around a norm of global accountability is clearly suggested, with these cities first adopting the practice of disclosure and only then supplementing their capacity to actually *be* accountable by adopting a plan, target, and/or inventory. As of 2014 only a handful of cities (Clusters 3 and 5) appear resistant to the norm of accountability, and their number decreases modestly (from 15 to 13) from 2011 and 2014.

This pattern is prevalent across geographic regions as C40 cities from across the breadth of the network converge between 2011 and 2014 around the clustered practices of target-setting, planning, measurement, and disclosure (Figure 2.20). Those clusters that combine practices of measurement, target-setting, planning, and disclosure (Clusters 1 and 2) exhibit a substantial increase in both the number as well as the diversity of cities (with respect to geographic region) in each. We see cities from all regions (and thus with divergent levels of economic development,

risk exposure, and local capacity) moving into these two clusters, which further suggests the presence of norm convergence.

Figure 2.20. Combination of Plan, Community Target, Community Inventory, Disclosure by Region: 2011-2014



In combination with the patterns set out above, both increased standardization in the preparation and reporting of city emissions inventories (Figure 2.11) and a broadening of the scope of emissions accounted for by cities (Figure 2.10), there is a strong case for inferring the presence, and prevalence, of a novel, external orientation amongst cities of the C40 towards external audiences. A globally accountable orientation, in which cities engage not as local actors whose actions have global effect, but as global governors engaged simultaneously in the governance of issues local and global in scale.

6. Conclusion

Claims advanced by the C40 such as those outlined at the outset of this chapter do, it would seem, reflect an increased ability to engender more, and more similar, climate governance practices from its constituent member cities. There are, however, two distinct phenomena that I have illustrated over the course of the preceding discussion. Nearer to the surface there is a pattern of increased coherence in the C40, as indicated by member cities coming to adopt a variety of common climate governance practices. Running beneath such patterns, however, is a phenomenon of norm convergence. Employing an abductive approach, and engaging in a back-and-forth interrogation of the large and complex dataset of governance practices compiled for this project, I infer the presence of convergence around a configuration of course governance norms from the clustering of particular governance practices over time. Temporally, both coherence and convergence emerge unevenly. Rather than a linear and steady process, there are two distinct waves of convergence: an early phase (2005 to 2010) of limited coherence and norm convergence, and a later phase (2011 to 2014) where both increase substantially and emerge at a network-wide scale. In the early phase the C40 exhibits a clear internal disjuncture between a minority of cities actively enacting the role of climate governor and a majority who were not.[195] From 2011 onwards, however, the C40 not only engendered a second wave of convergence – one that saw an increase in the number of cities engaged actively in climate governance as well as an augmenting of such action in terms of ambition, scope, and comprehensiveness – it also achieved convergence around norms of active and globally accountable urban governance that delineate with greater specificity exactly how cities should enact the role of global climate governor.

While in this chapter I present evidence for parallel processes of increased coherence and convergence around a set of governance norms, the case for a norm-based account remains to be made. In the chapter that follows I step back and consider whether coherence might be adequately accounted for in other ways. Coherence, after all, might emerge as a function of other factors and it is imperative to establish why such accounts are, in the end, inadequate before moving on to consider in greater detail how a norm-based account can offer the most satisfying explanation.

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[195] Bulkeley & Kern 2006; Kern & Bulkeley 2009; Hakelberg 2014; Gore & Robinson 2010

Chapter 3
How to Account for Coherence in the C40? Assessing Alternative Explanations

1. Introduction

The preceding chapter established an empirical pattern of increased internal coherence in the C40 from 2005 to 2014, as indicated by the increased uptake amongst member cities of a particular set of governance practices. It was suggested that this transformation in the C40 occurred at the same time as, and is a product of, convergence around a set of four distinct governance norms. And yet it remains possible that coherence is a function of something else altogether. In consideration of this possibility, I set out in this chapter three causal stories that could plausibly be expected to account for observed patterns of coherence in the C40. Ecological modernization offers a structural story in which coherence is expected to follow linear pathways of development and progress. The scholarship on policy diffusion - and the mechanisms of learning, competition, and socialization - offers an agential account in which coherence is predicated on proximity, exposure, interaction or inter-connection. Lastly, network theory provides a more nuanced perspective in which coherence is proposed to result as a function of the power exerted by particular actors (located in key positions within the relational structure of network) to shape or control the flow of ideas and information.

My goal is to assess the viability of these three causal narratives as a means of accounting, in a satisfactory way, for patterns of increased coherence identified in the preceding chapter.[196] I am not, as such, engaged in hypothesis testing nor am I seeking to conclusively demonstrate or invalidate the validity of these three approaches. I set out, instead, with the more modest goal of specifying the kinds of patterns (across time and space, and in terms of content) that are expected to accompany each causal narrative, and assessing these against the patterns that have been detected. What the analysis suggests is that each of the aforementioned causal stories captures some, but only some, aspect of intra-network dynamics of coherence. All are seen to suffer from

[196] On this approach to assessing causal claims see Ruggie 1998, Bernstein 2001

limitations that render them either indeterminate or incomplete, and thus incapable of providing a coherent and compelling explanation. As a result, this chapter serves, ultimately, to solidify that case for a norms-based explanation and sets the stage for the introduction of a novel field theoretic framework in the chapter that follows.

2. The Backdrop: Scholarship on Cities and Climate Governance

This project speaks, and contributes, most directly to the literature on cities and climate governance. As a result, I propose to first situate this project within this scholarship, and provide on overview of the major contributions made by scholars in this domain, and the contributions that this dissertation aims to make to this body of work. Doing so sets the table, so to speak, for the evaluation of casual narratives that will follow.

As does this scholarship more generally, I draw inspiration from academic inquiry in the discipline of international relations that expands the focus of inquiry to include actors other than the state, but take umbrage at the fact that, as Okereke et al so nicely put it, "the state is still seen to have the ultimate (sovereign) authority and much of the account is couched in terms of the roles of other groups of actors in influencing state actors *rather than in being "governors" in their own right*."[197] Situating cities at the center of analysis is a difficult task, since they possess both formal and informal authority and operate both within and outside the state.[198] However, as Bulkeley & Schroeder argue, that cities "straddle the boundaries between state/non-state, public/private authority" constitutes not only an analytic challenge but also an opportunity, since cities thus "provide an important window through which to examine" contemporary processes of global governance.[199]

Building from early work that identified and described the engagement of a handful of pioneering cities[200] a body of scholarship emerged in the early 2000s that aimed to understand how cities might, and in fact already do, engage in the governance of complex issues that cut

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[197] Okereke et al 2009: 62 - emphasis mine . Illustrations of this state-centrism can be clearly seen, for example, in the scholarship on climate regime complexes such as Keohane & Victor 2011 and Green 2013 and governance fragmentation such as Biermann et al 2009; Zelli et al 2012.
[198] Andonova et al 2009
[199] Bulkeley & Schroeder 2011: 10
[200] Harvey 1993; Lambright et al 1996

across local, national, regional, and global scales.[201] Such work generated important insights into local factors that impact whether cities engage in climate governance,[202] the importance of linking climate governance to other issues on the local agenda,[203] and the structural imperatives that increase the likelihood of policy engagement and network participation.[204] Furthermore, it addressed the question as to why, given ample opportunity, cities choose to engage in climate governance rather than free-ride, as one might expect them to do.[205] Lastly, it specified different levers of authority that cities have at their disposal as means of driving change locally[206] and provided important insights into the voluntary, pioneer-driven nature of early efforts at collective or networked urban climate governance.[207]

While immensely important, this body of work suffers from a number of limitations that have been readily acknowledged by its own progenitors[208] and have been addressed, to varying degrees, by a new generation of scholars.[209] Firstly, whereas early scholarship reflected the voluntarism of "first wave" urban engagement the ways in which cities take on the task of climate governance have since shifted.[210] Bulkleley and Betsill point out that cities are increasingly engaged in political contestation with other levels of government (regional and national governments for example) and have come to link the broader agenda of urban development to climate governance and sustainability. And so, while early research found that participation in transnational city networks such as ICLEI was largely a means of legitimating actions already undertaken locally or accessing sources of funding the extent to which this continues to hold true is unclear.[211] The scholarship, after all, tended to focus on *whether* and

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[201] Bradford 2004
[202] Betsill & Bulkeley 2003; Bulkeley & Schroeder 2008; Schreurs 2008; Lindseth 2004; Davies 2005; Gore & Robinson 2005
[203] Betsill 2001; Rutland & Aylett 2008; Schreurs 2008; cf. Sippel & Jennsen 2009
[204] Zahran et al 2008
[205] Kousky & Schneider 2003; Engels 2006; Schreurs 2008
[206] Alber & Kern 2008; Bulkeley et al 2009
[207] Bulkeley & Kern 2006, 2009; Betsill & Bulkeley 2003
[208] Bulkeley & Betsill 2013; Betsill & Bulkeley 2007
[209] Setzer 2009; Aylett 2013; Acuto 2013a, b; Bouteligier 2013; Hakelberg 2014; Lee 2013; Gordon 2013, forthcoming 2015; Gordon & Acuto 2015
[210] Bulkeley 2010: 232; see also Bulkeley 2013
[211] Betsill & Bulkeley 2004

why cities engaged in climate governance, saying less about how they did so.[212] As a result, how cities engage one another via the mediating context of the C40 – and how these interactions operate in cities of the global South as well in cities of the global North[213] - and with what implications, are questions that remain largely unaddressed within this body of scholarship to date.[214]

Conceptually, this is in part a result of the presumption, imported from scholars of transnational activist or epistemic networks, on identifying the ways in which networks can, and do, shape or influence the interests, identity, and actions of the state.[215] Okereke et al link this to an underlying tendency in the literature to fall back on the foundational assumptions of state-centricity, such that power is understood in terms of "the roles of other groups of actors in influencing state actors rather than in being 'governors' in their own right."[216] And so, while scholars have identified the need to consider how the local authority to govern climate change is constructed through processes of interaction and contestation between a variety of state/non-state, public/private actors the level of analysis remains primarily bounded within the analytic frame of the local.[217] Participation in networks such as the C40 may be included in analyses as a source of legitimacy, information, and material resources that local actors can draw upon in their efforts to orient action towards particular sorts of objectives.[218] But the selection of a local lens through which to explore the sources and expression of authority to engage in local climate governance neglects consideration of the ways in which participation in such networks constitutes entry into a novel social space within which norms, ideas, and practices circulate, accrete, and are subject to contestation. By adopting a methodological approach that focuses on qualitative analysis of a limited number of cities, even those studies that aim to account for the substance of local climate governance remain bounded within the particularities of those cities

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[212] cf. Slocum 2004, 2005
[213] Betsill & Bulkeley 2007; cf. Romero Lankao 2007; Holgate 2007; Puppim de Oliviera 2009; Setzer 2009; Setzer & Biderman 2013; Setzer & Macedo forthcoming; Dhakal 2004; Qi et al 2008; Dhakal 2009
[214] cf. Bouteligier 2012; Acuto 2013a, b. Betsill & Bulkeley (2004: 490) do, to be fair, explicitly acknowledge the need to direct attention to transnational networks as sites of governance, and to investigate the processes and mechanisms of network governance.

[215] Keck & Sikkink 1998; Risse et al 1999; Haas 1992; Bernstein & Cashore 2000, 2012; Selin & VanDeveer 2009
[216] Okereke et al 2009: 62. See also Bulkeley 2010: 237
[217] Bulkeley & Schroeder 2011: 16; Bulkeley & Castan Broto 2013; Betsill & Bulkeley 2003
[218] Bulkeley & Schroeder 2011: 17; see also Betsill & Bulkeley 2003; Romero Lankao 2007; Holgate 2007

that have been selected.[219] In this sense, there is a need to move beyond the local in order to explore the political dynamics that result as cities (and other actors) enter hybrid transnational governance spaces such as those constituted by city-networks.

As Bulkeley suggests, networks like the C40 are "a means through which norms concerning what governing climate change should be about are made concrete," and analytic attention can thus be profitably oriented towards the making, operationalization, and uptake of such norms.[220] Such an approach can shed light on whether there exists a parallel process through which the issue of climate change – what kind of problem it is, how it can/should be governed – is being constructed in the transnational spaces in which cities are connected, and can help assess how coherence in such domains is a function of political interaction, negotiation and struggle.[221] It can also extend the basic insight, that "rather than being a technical issue...the interpretation and implementation of climate protection locally is a political issue, where different actors and groups seek to have their understanding of the problem, and its solutions, acted upon"[222] to included processes of political interaction, contestation, and resolution taking place *within the context of transnational city-networks like the C40*.

As cities are increasingly accepted as essential components of the global climate regime[223] and proposed as the most promising sources of meaningful global action[224] there is a clear need to expand the analytic approach and conceptual framework in order to account for, and explore, the tension that may result when inter-city collaboration combines with the political contestation that arises as different actors seek to "have their understanding of the problem, and its solutions, acted upon." This constitutes the context for my contribution, in the form of inquiry into the relational dynamics between cities and the implications of inter-city networking on the substance of local climate governance.

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[219] Lee 2013: 119
[220] Bulkeley 2010: 238
[221] Hodson & Marvin 2010: 481
[222] Betsill & Bulkeley 2003: 185
[223] Figueras 2014; UNFCCC NAZCA n.d.
[224] Barber 2013; Barber et al 2014

3. The Explanatory Challenge

To recap, the goal I have set out is to explain how and why the C40 has achieved internal coherence and why coherence has emerged around a particular set of governance practices and not others. Several possibilities exist, three of which I focus on as deserving of careful consideration. Coherence, firstly, may be a function of commonly experienced structural forces – a particular pathway of development common to all cities. Conversely, it may be a product of the flow and accumulation of particular policies and practices, as shaped by geographic proximity, inter-city competition, or increased opportunities for interaction (with each leading to opportunities for learning, persuasion, or socialization). Or coherence may be a function of the ability of some actors to control the content and flow of information across the network. While it was suggested in the introductory chapter that field theory offers a most useful means of addressing the research questions and unraveling both of the empirical puzzles from which they stem, in the sections that follow my goal is to establish why such a conceptual innovation is needed; why, in other words, the question of coherence cannot be answered through recourse to other, perhaps more obvious, modes of explanation such as those set forth above.

In the sections that follow I set out in detail three distinct causal stories – ecological modernization, policy diffusion, and network governance - and illustrate why none is capable of providing a satisfactory explanation. These three approaches have been selected as they represent three distinct points of analytic entry and explanatory leverage, locating causality at the level of structure (ecological modernization), agency (policy diffusion), and social relations (network governance). In evaluating each, my focus is on deriving a particular kind of causal or explanatory story inherent in their respective basic premises and postulates.[225] I discuss each by providing an overview of the causal propositions derived from each explanatory framework, and then employ cluster analysis to assess the ability of each to convincingly account for patterns of coherence over space and time around those practices of governance identified in chapter two.

[225] While doing so is intended to offer a means of setting out and assessing a particular causal narrative, I do recognize that the discussion of each is necessarily incomplete and leaves out other possible means of both operationalizing causal variables and assessing their relationship with observed patterns of increased coherence in the C40.

3.1 Ecological Modernization: A Structural Account of Coherence in the C40

While coherence *may* be produced by the transmission of ideas and practices it is equally plausible that such patterns reflect coincidence or common responses to broader structural forces. As such, it is worth considering whether coherence should be expected as a function of more fundamental structural imperatives or pressure.[226] Ecological modernization offers one such approach. This framework, a derivative of classic modernization theory and the premise of linear progress from lower to higher order forms of culture and social organization,[227] posits a similar theme of natural progress towards a common orientation towards environmental governance. The end-point in this telling is a symbiotic marriage between the imperatives of economic development and those of ecological preservation and consciousness.[228] Of most interest in the context of this project is the underlying expectation of coherence (by states typically, but potentially cities) around common ideas and practices of environmental governance.

Ecological modernization leans heavily on the concept of the Environmental Kuznets Curve (EKC).[229] The EKC posits a natural process whereby economies move along a curvilinear (u-shaped) pathway from environmentally-efficient/low-development to environmentally-inefficient/moderate development to environmentally-efficient/high-development. The EKC is primarily utilized as a means of hypothesizing the relationship between economic development and environmental quality, such that, for example, GHG emissions per unit of economic output are proposed to decline as economic output increases past a certain threshold (the so-called decoupling of GHG emissions from economic activity).[230] Matthew Kahn argues that a similar dynamic can be observed in cities, such that as they pass a wealth threshold they produce lower and lower levels of pollution.[231] The question is whether progress along the EKC corresponds with coherence around common practices of local climate governance.

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[226] This is similar to Realist claims within IR with respect to the epiphenomenal nature of international organizations in the face of state interests and material capacities. See, for example, Mearsheimer 1994-95
[227] Rostow 1960; Lipset 1959
[228] Mol 2002: 94

[229] Kuznets 1955; Cole & Neumayer 2005
[230] But see Wagner & Müller-Fürstenberger 2005
[231] Kahn 2006; see also Bettencourt & West 2010

The scholarship on ecological modernization suggests that this is, in fact, the case. As Mol puts it, the "basic premise of ecological modernization theory is the centripetal movement of ecological interests, ideas and considerations in social practices and institutional development."[232] In other words, there is an expectation of coherence across space and time around practices of ecological preservation and sustainability, and the marriage of these to the objective of economic development. And while "ecology induced transformation" is presumed neither inevitable nor linear, Mol does suggest that it possesses a degree of "permanency" that is "difficult to reverse" and has a universalizing effect on the way in which countries "experience and design environmental reforms."[233]

It is thus plausible to extrapolate an expectation that coherence will take place as cities develop economically, although the threshold at which it might be expected to take place is impossible to specify in advance. This is in some sense a null hypothesis, where coherence should take place in a sequential pattern with wealthy cities as first adopters and developing cities adopting similar practices as they develop economically, as a function of similar response to common problem pressures rather than having anything to do with the spread or "travel" of particular practices or the effects of network participation.

In order to assess this claim, I ran cluster analyses to assess the relationship between level of city GDP/capita (2008) and patterns of clustering around practices of target setting, planning, and measurement at three different time intervals (2001, 2010, and 2014).[234] Two results are worth highlighting.[235] First, coherence in cluster 4 (full adherence to these four practices) is accompanied by a very modest decline in average GDP/capita. At the same time, the average GDP/capita declines considerably for the clusters of partial coherence (clusters 2 and 3). This suggests, potentially, the presence of an economic threshold below which coherence in the C40 remains difficult to attain, a finding that accords with the common sense notion that a minimum

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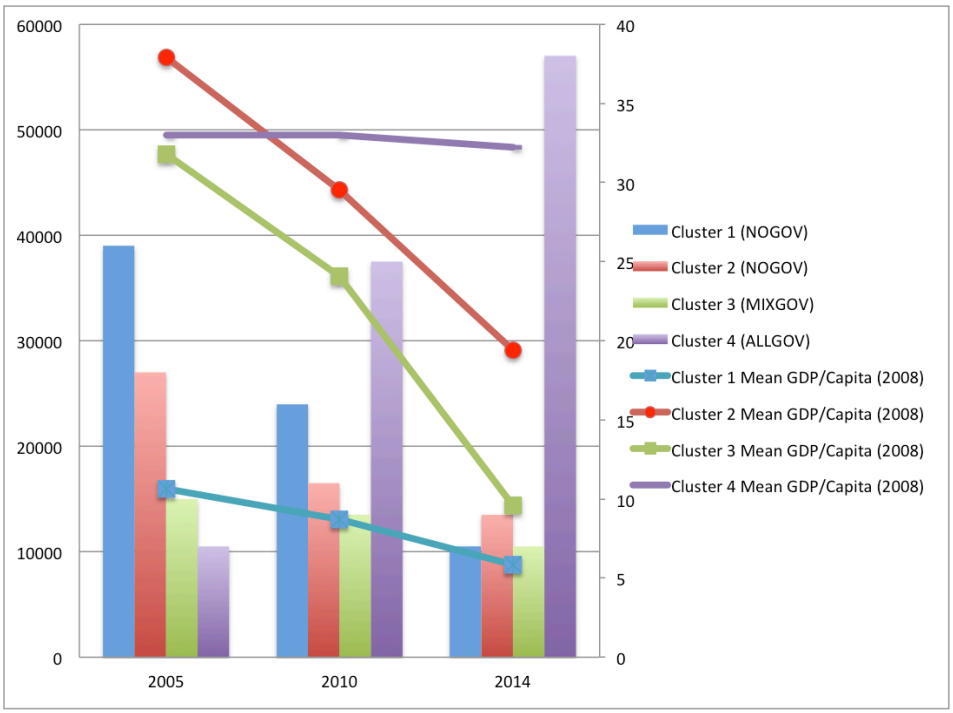
[232] Mol 2002: 93
[233] Mol 2002: 94
[234] Cluster analysis was re-run using 2012 figures for city GDP/capita so as to check against the possible effects of the financial/economic recession that began in late 2007. The results did not vary with any meaningful significance.
[235] The bars represent the number of cities in each cluster, while the lines track the average GDP/capita for each cluster across time.

level of material capacity (or economic development) is required in order for cities to engage in active governance.

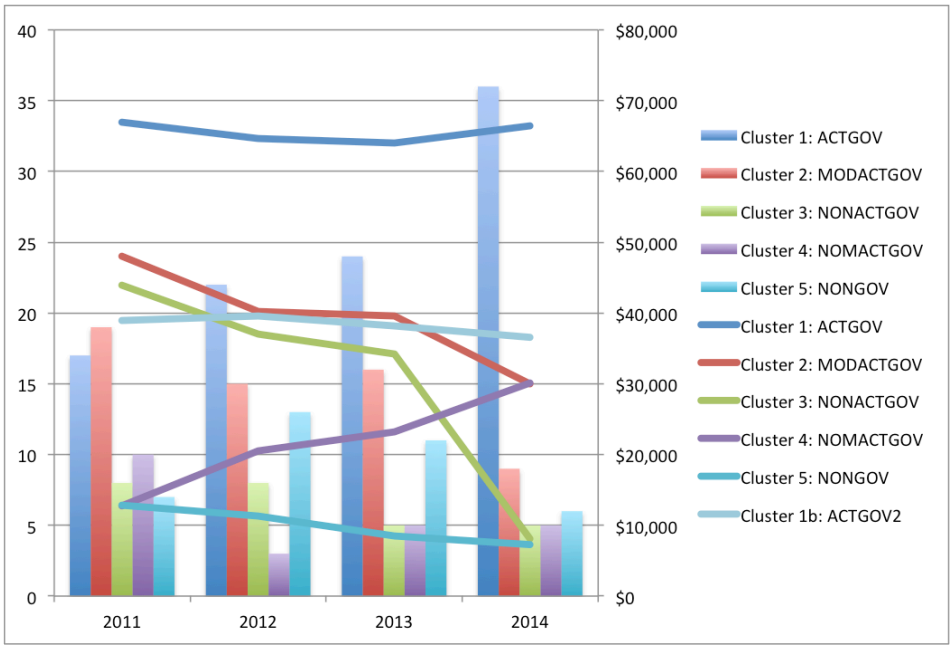
Figure 3.1. Coherence around Practices of Target-Setting, Planning, Measurement (2005, 2010, 2014) and GDP/Capita (2008)



At the same time, that clusters 2 and 3 have such high levels of average GDP/capita circa 2005 ($57,000 and $48,000 respectively) belies the notion of a necessary relationship between level of development and coherence around particular governance practices.

Similarly, if we look at the relationship between level of economic development and coherence around the practices of reporting and disclosure (Figure 3.2) we see at best a partial relationship. The relationship between material capacity and coherence is largely ambiguous. The cluster of cities exhibiting strongest coherence (cluster 1) is split between two distinct levels of development, as indicated by the dark (relatively constant at $34,000/capita) and light blue (similarly constant at $19,000/capita) trendlines. Those cities that exhibit moderate (cluster 2) and nominal (cluster 4) coherence to these exhibit the greatest degree of change over time in terms of average GDP/capita, decreasing in the case of the former, increasing in the latter.

Figure 3.2. Coherence around Practices of Disclosure (2011-2014) and GDP/Capita (2008)



Together, these two figures suggest a necessary but indeterminate relationship between level of development and increased coherence within the C40. Levels of development reveal little other than the need for some minimum material capacity for cities to actively engage in, and thus coherence around, concrete practices of governance. As well, ecological modernization offers little in the way of accounting for the timing of coherence, why it emerged piecemeal and partial up to 2010 and then accelerated in 2011, nor, most importantly, why coherence emerged within the C40 and appears to be largely absent in other city-networks.

3.2 Policy Diffusion: A Process-Oriented Account of Coherence in the C40

The structural account provided by ecological modernization is seen to be lacking, and so I turn in this section to consider coherence as a function of the diffusion of practices and policies[236] between actors in the C40. This explanation hews most closely to proclamations issued by the C40 and its proponents, such that increased interaction, exposure, and communication lead to an

[236] It is worth mentioning that there is a distinct application of the concept of governance by diffusion, as a distinct mode of global governance as compared with international negotiation and hierarchical imposition. Helge Jorgens and Per-Olof Busch (2005, 2012) argue that governance by diffusion represents a potential means of achieving coordinated and effective governance in complex and challenging issue areas such as climate change in the absence of formal coercive authority or hierarchical relations.

enhanced ability to learn from, cooperate with, and coordinate amongst one another.[237] Broadly defined, diffusion is a process whereby ideas or practices spread between interdependent actors. Interdependence, in this sense, refers to a condition in which "the goals, strategies, and decisions of political actors are shaped by the goals, strategies, and decisions of other political actors."[238] As Gilardi notes, while diffusion scholarship has tended to prioritize states and dynamics of international diffusion, "diffusion does not occur only at the international level…national governments are not the only relevant units…and it is not only specific policies that diffuse."[239] In other words, diffusion dynamics equally apply to concrete practices as they do to the "spread of new standards of behaviour and new expectations about what [particular actors] are supposed to do."[240]

Diffusion, it should be noted, does not imply intentionality. Being in a condition of interdependence means that the sensitivity of actor B to the objectives, practices, and actions of actor A is *not* conditioned on explicit efforts by the latter to influence the former but rather is premised on a sense that the actions, interests, and ideas of some particular set of others are both relevant and significant.[241] Diffusion, as a result, can take place not only through active processes of interaction, communication, and persuasion[242] but also through increased levels of awareness as to the actions, interests, and objectives of actors that are seen as peers or potential competitors.

Diffusion scholars have reached broad consensus on the presence of four ideal-typical mechanisms through which ideas and policies diffuse, each of which is differentiated on the

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[237] Arup 2014; Pierce et al 2013; Barber 2013; Slaughter 2013
[238] Gilardi 2010: 650; Simmons et al 2006: 787
[239] Gilardi 2012a: 454. Note that there is a rich body of scholarship that focuses on the diffusion, both horizontal and vertical, of policies and norms within federated states such as the US. This work has not, to my knowledge, been extended and applied to transnational city relations. See, for example, Walker 1969; Volden 2006; Shipan & Volden 2006
[240] Towns 2012:185
[241] This mirrors the claims of norm-diffusion scholars such as Finnemore & Sikkink that norm entrepreneurs need not be consciously engaged to have this effect. Finnemore & Sikkink 1998. As I will suggest in chapter 4, I actually see this agnosticism as an inherent limitation in diffusion scholarship, since it appears to obscure or marginalize the extent to which diffusion often does operate on the basis of strategic intent or explicit agency.
[242] Risse 2000

basis of its respective logic of interaction.[243] *Learning* is characterized as a "process whereby policy makers use the experience" of others to inform or shape local governance actions.[244] *Competition* generates diffusion when policy actors update or adopt particular practices so as to "anticipate or react to the behavior" of others so as to "attract or retain economic resources."[245] *Coercion* produces diffusion through the efforts of some actors to "impose their preferred policy solutions" on others.[246] And *socialization*, lastly, produces diffusion on the basis of "the normative and socially constructed properties [of particular governance actions] instead of their objective characteristics.[247] These mechanisms appear robust and have been tested empirically across a variety of settings and issue areas, including but not limited to, environmental regulation,[248] tax and competition policy,[249] constitutional content,[250] and gender inclusion.[251]

This scholarship has as yet been little applied to assess the transnational dynamics operating between cities. While some have acknowledged this omission,[252] they only go so far as to suggest the need to study inter-local policy transfer within national systems, thus neglecting consideration of the city-city relations that take place beyond national borders.[253] Reflecting and reproducing the state-centricity of mainstream political science, and the disciplinary chasm between studies of urban politics, international relations, and federalism,[254] this has resulted, in ways parallel to scholarship on cities and climate governance discussed above, in a lack of

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[243] Gilardi 2012a; Dobbin et al 2006; Graham et al 2013: 690; Bennet 1991; Elkins et al 2006. These four mechanisms are, however, difficult to distinguish empirically, and the relationship between particular diffusion mechanisms and particular diffusion outcomes is as yet weakly specified.

[244] Meseguer 2009
[245] Gilardi 2012a
[246] Graham et al 2013: 692
[247] Gilardi 2012a

[248] Holzinger et al 2008
[249] Elkins & Simmons 2004
[250] Elkins 2009

[251] Bush 2011
[252] Stone 2004; Dolowitz & Marsh 2000
[253] McCann 2010: 111; cf. Koski 2010; Shipan & Volden 2006, 2008
[254] Graham et al 2013

consideration as to how cities interact with one another, how ideas diffuse between cities, and with what effect or results.[255]

As such, I set out here to assess the possibility of increased coherence in the C40 as a function of particular diffusion mechanisms. Each of these is treated, in the sections that follow, as analytically distinct whereas, in reality, multiple diffusion mechanisms likely operate simultaneously and in combination. I nonetheless present two distinct versions of a diffusion narrative – one based on proximity (both geographic/linguistic and social/interactive) and one based on embedding in a competitive global economic structure – as a means of assessing their respective capacity to plausibly account for the increased coherence in the C40.[256]

3.2.1 Diffusion by Learning

Learning, as noted above, is supposed to produce diffusion via a rational process of defining ends, gathering information about means, and applying these to local contexts.[257] Learning can be oriented towards policy or political dimensions of local governance[258] and scholars such as Hall[259] and Sabatier[260] propose that learning can take place at different levels of abstraction. First-order learning involves policy settings or the technical configuration of specific policy tools; second-order learning emphasizes selection of policy instruments to achieve pre-existing goals; and third-order learning focuses on the selection and hierarchy of those very objectives.

Diffusion via learning thus relates to a considerable extent on awareness and access. If we follow Lee and van de Meene and think of learning as consisting of three phases - information-seeking, adoption, and policy change[261] - then for cities to learn from others they must be aware of their policies and practices. This suggests that opportunities for interaction and communication are likely to increase the potential for diffusion. One possibility, then, is to expect increased

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[255] Cf. Paterson et al 2014 and the concept of polycentric diffusion for a recent effort to address this very problem.
[256] In assessing proximity in both spatial and social dimensions I recognize that they both, *ex ante*, create opportunities for learning or socialization as diffusion mechanisms.
[257] Gilardi 2012a

258 Benz & Furst 2002
[259] Hall 1993

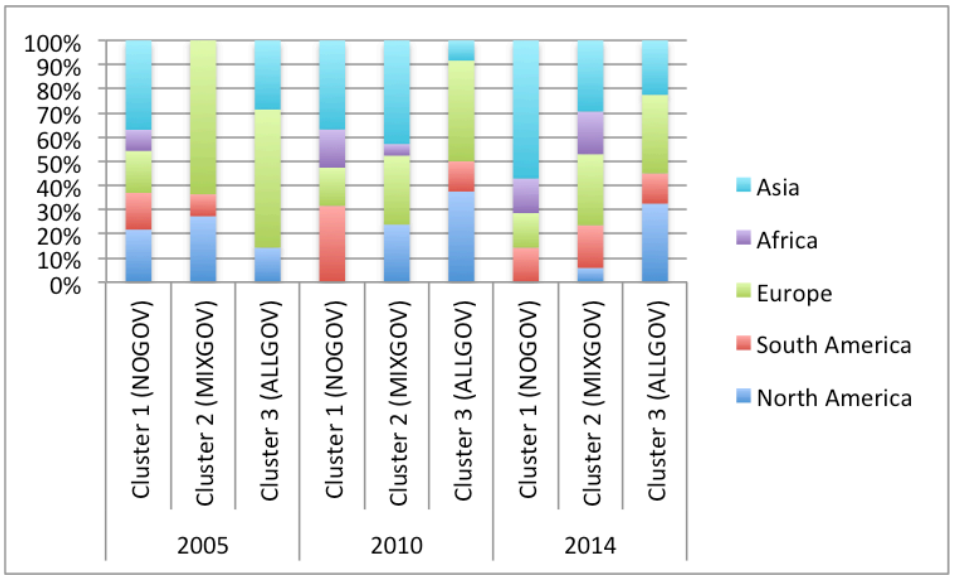
260 Sabatier 1988
[261] Lee & van de Meene 2012: 204

coherence to first emerge around factors such as geographic proximity and linguistic similarity.[262]

To assess this possibility I coded each C40 city into one of five possible regional clusters (Africa, South America, North America, Europe, and Asia) derived from the macro-categorization utilized by the UN Statistics Division.[263] The objective being to assess whether coherence clusters were internally homogeneous or heterogeneous with respect to geographic region. Considering first the link between geographic proximity and coherence around practices of target-setting, planning, and measurement. Analysis indicates a weak relationship between these two factors (Figure 3). The cluster of cities that have not adopted these practices circa 2005 (cluster 1) is heterogeneous with respect to geographic region, and while it does become more homogeneous (there are no more North American cities by 2014) it remains internally diverse. Conversely, the cluster of cities adopting these practices circa 2005 (cluster 3) is comprised of cities from North America, Europe, and Asia (a region that I have coded to include Australian cities). The internal diversity of clusters across time does not indicate support for a causal narrative of proximity-based learning and coherence since only North American cities have moved uniformly towards the adoption of these practices (clusters 2 and 3) while cities from other regions are distributed across each of the three clusters.

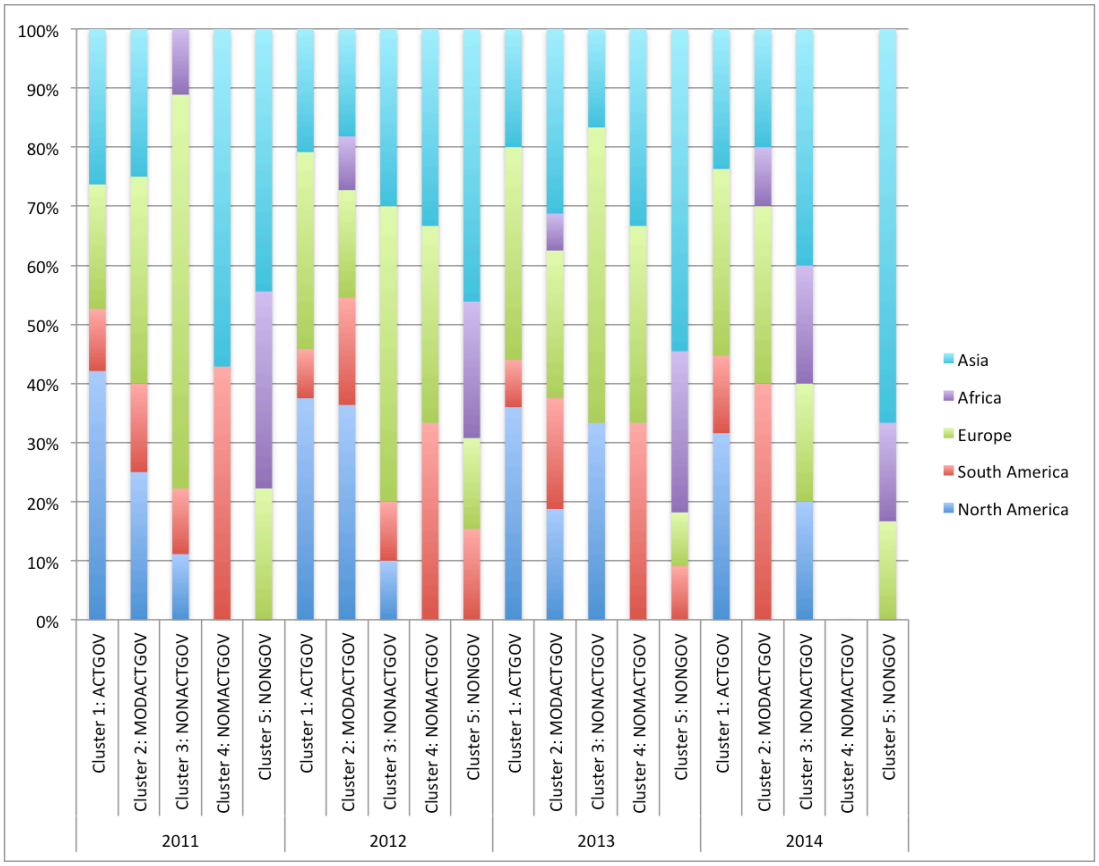
[262] Volden & Shipan 2008; Zhukov & Stewart 2013. In the latter the authors provide an overview of this literature, while also challenging some of the presumptions made with respect to what counts as "proximity". This is especially the case in thinking about transnational diffusion dynamics between cities if taking seriously Hodson & Marvin's (2009) notion of splintered urbanism and emergence of an inter-connected global urban archipelago.
[263] http://unstats.un.org/unsd/methods/m49/m49regin.htm

Figure 3.3. Practices of Target-Setting, Planning, Measurement (2005, 2010, 2014) and Geographic Region



A similar picture emerges in looking at the relationship between geographic proximity and coherence around practices of disclosure and reporting (Figure 3.4). The internal diversity of the cluster of cities that have adopted these practices (cluster 1) is present from the outset in 2011, undermining the notion that coherence has a firm grounding in a particular geographic location from which it spreads. In fact, each of the five clusters contains cities from two or more regions, and four of the five from three or more regions (cluster four being the exception).

Figure 3.4. Practices of Disclosure (2011-2014) and Geographic Region



Another possibility is to operationalize proximity as a function of the interaction opportunities (or degree of exposure) between cities within the C40. Checkel for instance suggests that learning is more likely in instances where individuals have the opportunity to engage one-another more frequently or with greater intensity.[264] The C40, and especially the events, workshops, and initiatives that have brought together network cities to varying degrees since 2005, thus offer a means of opening up novel pathways of diffusion. To assess this proposition I developed a dataset that compiled each instance of city attendance at C40 network events (topical workshops, summit meetings) or participation in network initiatives (issue-specific sub-networks organized around particular aspects of urban climate governance such as waste, transportation, climate finance) between 2005 and 2013. Doing so allowed me to map the number of instances of co-participation or co-attendance for all pairs of C40 cities over this period of time. I divide the C40 into four equal segments on the basis of the strength of inter-city

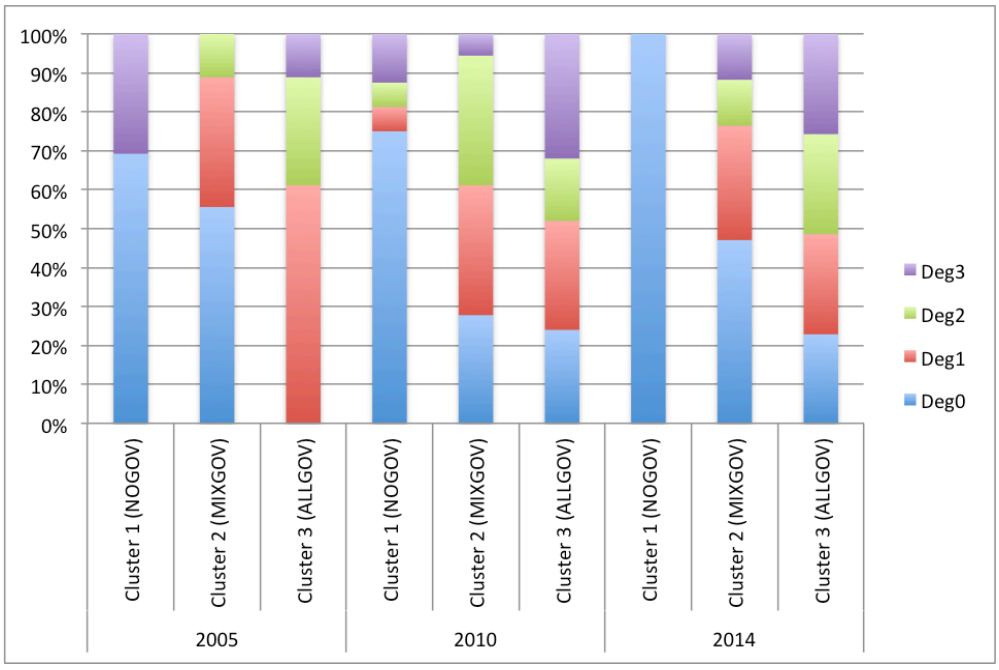
[264] Checkel 2005

linkages (highly connected, moderately connected, modestly connected, minimally connected) and use this as a proxy for opportunity to interact.[265] The expectation is that cities with higher degrees of connectivity within the C40 should be more likely to manifest coherence around common practices over time, in spite of the presence of geographic divides.

Looking first at the patterns of coherence around practices of target-setting, planning, and measurement two patterns are apparent (Figure 3.5). On one hand, there is little obvious link between opportunities for interaction and increased coherence. The cluster of cities that has adopted these three practices (cluster 3) is comprised in 2005 of cities both heavily engaged in network events and initiatives as well as those only weakly so. By 2014 this cluster is increasingly heterogeneous, with even those cities with the lowest amount of city-city interaction coming to cohere around these practices. On the other hand, there does appear to be some relationship between those cities with the fewest opportunities for interaction and non-adoption of these practices (cluster 1). In 2005 the non-conforming cluster is comprised almost entirely of non-connected cities, and by 2014 it is entirely so.

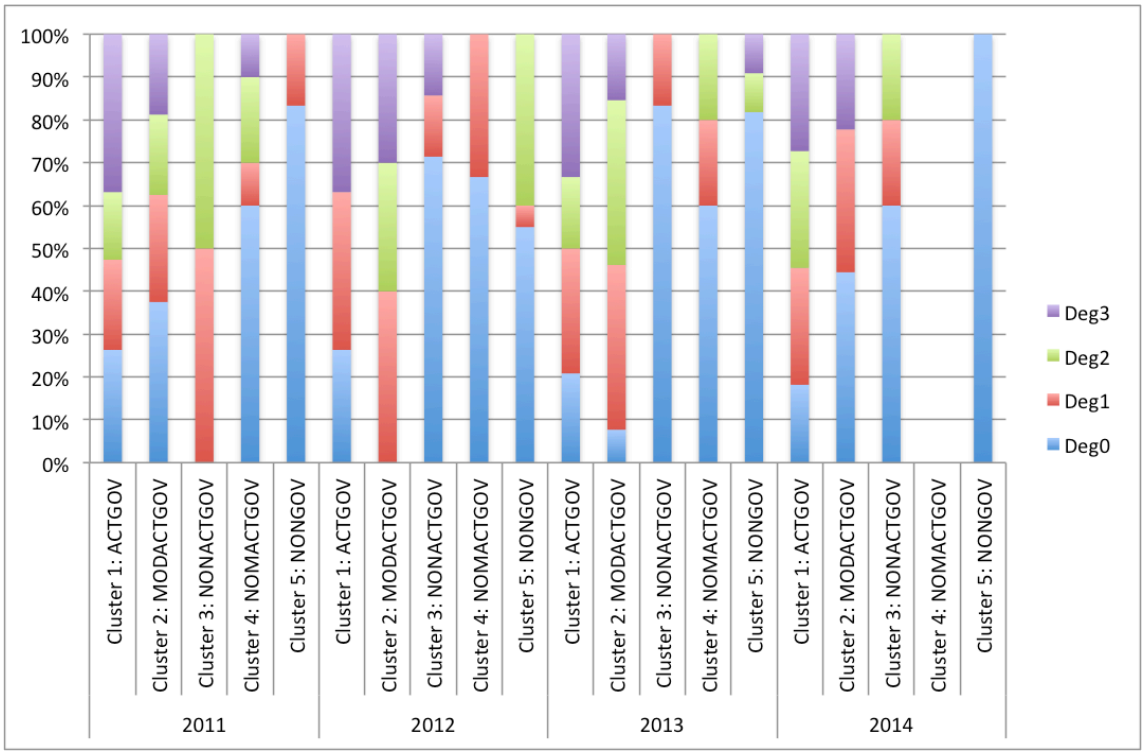
[265] I use the measure of degree centrality since this provides an indication of the extent to which each city is in fact "connected" to the network (as a function of the number of ties that each city has to other network cities), on the assumption that more and stronger connections should increase opportunities for socialization to take place. I then code each C40 city into one of four segments, representing quartiles of network connectivity, and label each as either Degree 0 (least connected quartile), Degree 1, Degree 2, and Degree 3 (most connected quartile) and use these measures in cluster analysis. For a similar approach see Paterson et al 2014

Figure 3.5. Relational Position and Practices of Target-Setting, Planning, Measurement (2005, 2010, 2014)



Almost the exact same pattern is observed when looking at the link between city-city interaction and coherence around practices of disclosure and reporting (Figure 3.6).

Figure 3.6. Relational Position and Practices of Disclosure (2011-2014)



The findings presented thus offer little in the way of support for the notion that increased coherence is a function of proximity-driven learning. That cities share a common geographic region, or have increased exposure to one another through network events and initiatives, relate weakly to early stages of coherence around practices of target-setting, planning, and measurement or practices of disclosure and reporting (which both feature across rather than within-region composition) and more importantly (since learning should be expected to produce diffusion over time) to later patterns of clustering (which are, for the most part, more rather than less internally diverse). Where proximity appears to matter most is in the concentration of non-adherent cities in particular world regions – mostly subsets in Asia and Africa – and in the weak connectivity of a subset of concentration of non-adopting cities. None of this is intended to reject the notion that learning or socialization take place within the C40, as the analysis presented is neither suited to such a task nor logically precludes such a possibility. What it suggests, though, is that an account of increased coherence through recourse to diffusion via by either learning or socialization is fundamentally incomplete. The mechanisms of learning and socialization, on

their own, are unconvincing in terms of providing a means of explaining which practices diffuse (or not) and why.[266]

3.2.2. Diffusion by Competition

Broadly defined, competition is expected to produce diffusion as a result of the imperative acting upon policy makers to take actions that increase their capacity to attract or retain economic investments.[267] The proposition that results is that a competitive dynamic between cities might drive them towards adopting similar governance practices, investing in similar sorts of infrastructure, engaging in similar sorts of spatial development, and implementing similar types of laws and regulations.[268] As Penavla argues, "the internationalization of the city supposes a certain standardization, and therefore each international city must be highly equipped so as to respond to the requirements deriving from its part in the world system."[269] The question, then, is whether such a proposition might account for patterns of increased coherence in the C40.

If cities desire to increase competitive positioning vis-à-vis one another one might expect, as Towns suggests, a situation in which those with "lower" rank look to emulate and adopt practices adopted by …those that are "higher ranked."[270] Insofar as Lee demonstrates a relationship between the "global-ness" of cities and their propensity to join networks such as the C40[271], it may be inferred that increased coherence is likely to take place around practices adopted by cities that reside atop the global cities hierarchy such as New York, London, and Tokyo.[272] To

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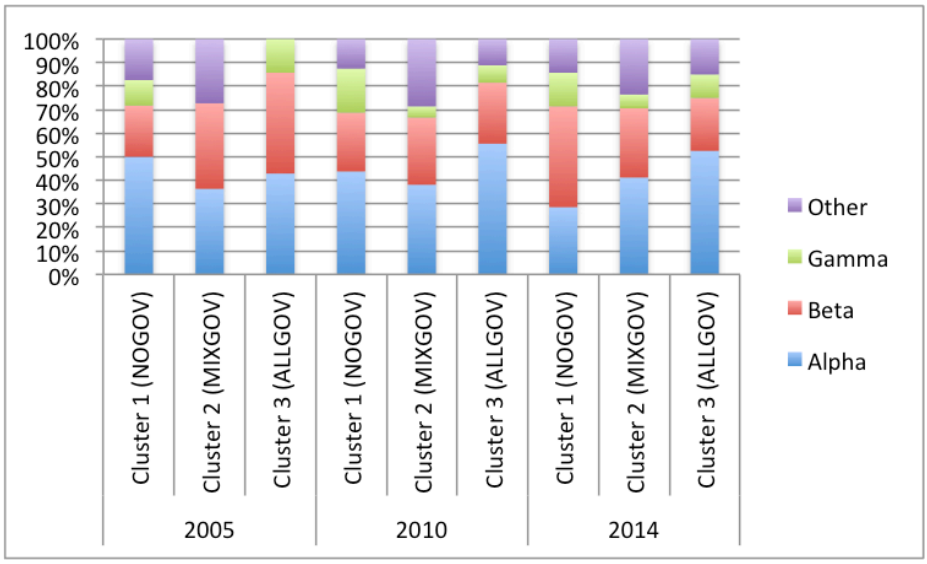
[266] McCann & Ward 2010. A causal account based on such diffusion mechanisms also has little to say about the politics of coherence, and the possibility of contestation, resistance, or domination in relation to which practices are mobilized and which are not.
[267] Gilardi 2012a, b
[268] Sassen's argument (2001: 349) does not imply the wholesale homogenization of global cities, since such a possibility is conditioned by "the weight of their institutional, political, cultural histories, the inertia of the built environment, the different roles played by the state" all of which create unique local conditions and barriers to coherence. However, Sassen does expect that certain dimensions of global cities face substantial pressure to adopt particular kinds of practices (the emphasis on advanced service provider firms, and the connective infrastructure required to attract and service these actors). The question that remains open is whether this dynamic should be expected to translate into the realm of climate governance undertaken by the city.
[269] Penavla 1988
[270] Towns 2012: 204
[271] Lee 2013
[272] GaWC 2008, 2012; Derudder et al 2008; Sassen 2001

assess this proposition, I ran cluster analyses to assess the relationship across time between the coherence around governance practices and the "global-ness" of C40 cities.[273]

Condensing city rankings into four basic categories – Alpha being those most highly ranked, followed by Beta, Gamma, and a residual category of non-ranked cities labeled Other – it is immediately clear that the composition of coherence clusters in the C40 quite diverse from the outset, and remain so over time (Figure 3.7). Highly ranked Alpha cities can be found in both the early cluster of cities that adopted practices of target-setting, planning, and measurement and the cluster of cities that have yet to adopt any of these practices. Similarly, non-ranked Other cities are found in both the non-adherent cluster of 2005 and the fully adherent cluster in 2014.

Figure 3.7. Global City Rank and Practices of Target-Setting, Planning, Measurement (2005, 2010, 2014)

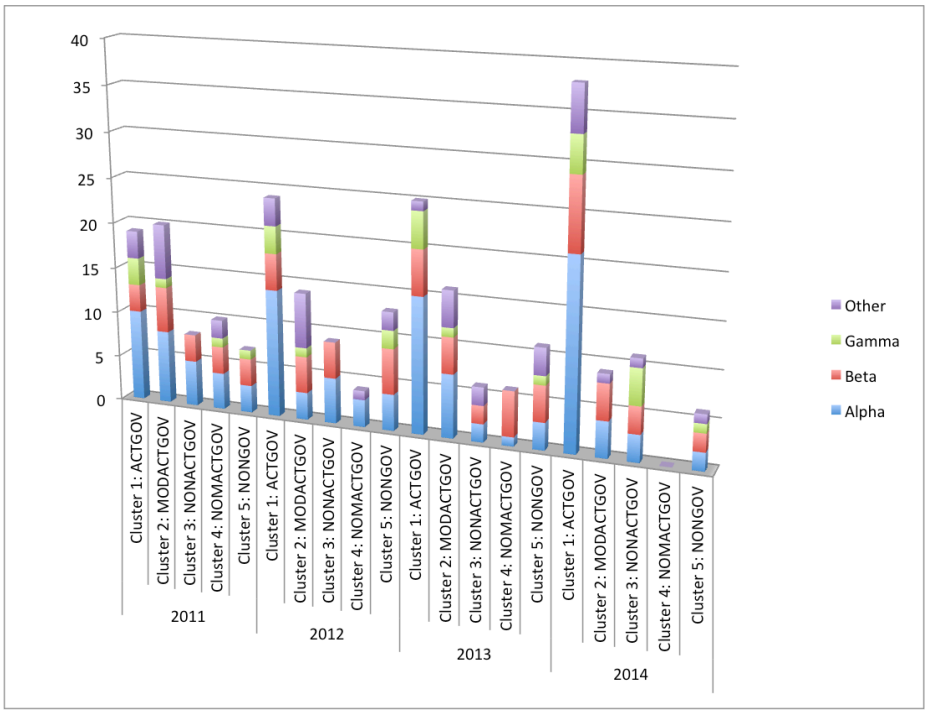


Looking at the link between global city rank and coherence patterns around practices of disclosure and reporting a similar relationship is evident (Figure 3.8). The cluster in which these practices are widely adopted (Cluster 1) is comprised of cities drawn from each of the four global city categories, and the cluster of cities that adopts none (Cluster 5) includes Alpha, Beta, and Gamma ranked cities. By 2014, whereas inter-city competition might have been expected to lead

[273] I use as a measure of Global City ranking the metrics produced regularly by the Globalization and World Cities research group

to increased coherence amongst, for instance, Alpha cities, we see instead that cluster composition has little-changed. While the absolute size of Cluster 1 (those cities that have adopted practices of disclosure and reporting) has increased, there remains a relatively equal distribution of cities (in terms of global city rank) across all clusters.

Figure 3.8. Global City Rank and Practices of Disclosure (2011-2014)



The patterns presented above point to a central problem in drawing on the notion of competition as a means of accounting for patterns of increased coherence. It isn't immediately clear what exactly drives the competitive impulse: a desire to emulate highly ranked global cities, or a desire to differentiate from them. Early adoption practices of disclosure and reporting by low-ranked cities (those in the Other category) may indicate that these cities took measures to differentiate themselves vis-à-vis other cities, kick-starting a process whereby ranked cities responded in kind. On the other hand, early adoption of these practices by highly ranked global cities may have driven all other cities towards adoption as a means of "keeping up with the Jones'."

As a result, while inter-city competition, underpinned by a structural imperative to attract and retain capital and financial investment, offers a compelling means of accounting for the existence

of increased coherence in the C40 it appears limited in its explanatory leverage. This is the case not only due to the limited empirical support identified above, but also given that an explanation of increased coherence as a function of competitive interaction is indeterminate with respect to when cities should be expected to adhere to, or challenge and depart from, governance practices adopted by those cities sitting astride the global city hierarchy. In other words, competition-based diffusion could equally be expected to produce coherence *and* incoherence, since the desire to compete can lead to an imperative to both conform and counter those practices adopted by other cities. The underlying proposition, however, that power or authority may accrue to those cities that occupy strategic or privileged positions within emergent global city networks is worthy of further consideration given that it suggests a possible source of coherence-generating capacity within the C40.

3.3 Network Theory: A Relational Account of Increased Coherence in the C40

Each of the approaches reviewed above share a common omission – they lack a means of adequately accounting for, or theorizing, the role of agency and, more importantly, authority in producing increased coherence in the C40. Ecological modernization is fundamentally about power but favors a structural imperative over expressions of agency, and thus has trouble accounting for the presence of contestation and persistent incoherence across different initiatives, as well as the particular practices around which patterns of increased coherence are detected. Policy diffusion, on the other hand, is all about agency but lacks sensitivity to the role of power in determining who learns from whom, who competes with whom, who socializes and who is socialized, and why some actors or ideas emerge as dominant while others do not.[274]

Combining agency and structure, and developing a means of identifying and understanding the nature of power in the C40, is thus essential to redressing the limitations outlined above and developing an adequate response to the puzzling ability of the C40 to achieve considerable internal coherence. This proposition, in suggesting that coherence does not simply "happen" but rather is *made* to happen, is central to the argument that I aim to present in the chapter that follows. However, it raises challenging questions with respect to what, exactly, counts as power

[274] On this point see Gilardi 2012a: 470-471

and authority in such settings and why some actors are able to produce coherence while others are not, how such power is practiced, and why it is resisted or accepted by others.[275]

There has been, in recent years, an explosion of interest amongst IR scholars in thinking about world politics through a network perspective.[276] Such an approach must be disentangled from earlier work in IR that focused on networks as novel additions to the *dramatis personae* of world politics; actors capable of exerting influence on states, organizations, or private actors through assertions of authority based on expert knowledge, moral legitimacy, or functional capacity.[277] As noted above, the bulk of scholarship on cities and global climate governance falls into the latter category, tending as it does to see city-networks as discrete actors or autonomous entities undertaking efforts to "steer" cities through some combination of capacity-building, socialization, persuasion, or demonstration effects.[278]

A common and consequent thread running through early instances of scholarship on network governance in IR is the inattention paid to the internal goings-on that take place *within* networks. Carpenter sees in this a failure to move beyond a caricaturized presumption of network relations as horizontal, voluntary, reciprocal, and apolitical instances of information sharing and normative consensus.[279] By focusing on the ability of the "network" to govern its members much contemporary analysis give little attention to either the power relations that exist within network structures or the processes through which networks are brought together around particular ideas, interests, and objectives.

This limitation has sparked an effort to re-orient network analysis in IR towards better understanding the internal dynamics operating within transnational governance or advocacy networks.[280] This scholarship, which draws heavily on the methods of social network analysis, approaches networks as "structures that enable or constrain constituent nodes, conferring power

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[275] Bouteligier 2012; Okereke et al 2009
[276] Kahler 2009; Hafner-Burton et al 2009; Cao 2006; Slaughter 2004; Carpenter 2007a, b, 2011; Carpenter et al 2014; Wong 2012. Such work has emerged, in part, in response to the weaknesses or limitations inherent in the diffusion scholarship as set out above.
[277] Avant et al 2009; Finnemore & Sikkink 1998; Sikkink 2012; Risse et al 1999
[278] Selin & VanDeveer 2007; Andonova et al 2009; Bernstein & Cashore 2000, 2012
[279] Carpenter 2011: 73. This caricature has its origins in early typologies of networks as distinct modes of social or commercial organization as compared with markets and hierarchies. See for example Powell 1990, Thompson 2003
[280] Carpenter 2011: 73; see also Carpenter 2010; Carpenter et al 2014; Wong 2012

and influence on some at the expense of others."[281] In other words, such work aims to "open up" networks in order to assess whether, and how, the positions occupied by actors within a network create differential opportunities to exercise control over the flow of information, to link together network actors that would otherwise remain disconnected, or to leverage superior access to diverse and varied sources of information.[282] This relational dimension of power operates on the basis of opportunity and access, and those actors that have disproportionate amounts of either (or both) are seen to possess "social power" relative to other network actors, a source of power that offers them the opportunity to shape or control the substance and flow of ideas and information.[283]

However, while there is much to be gained from the claim that it is "visibility in a particular network, not …resources per se" that endow some actors with power over others[284] such a claim suffers from both ambivalence and incompleteness. What, for instance, counts as centrality, and thus as power, within a relational network? Conceptually, network theory places a hefty wager on the ability to infer power from the interaction between actor position and the overall structure or shape of the social network. Such a proposition is likely to be problematic in network where multiple actors share positions of centrality. Consider, for example, the social network that operates within the C40. Drawing on a relational matrix comprised of instances of co-attendance at C40 events and co-participation in C40 initiatives between 2005 and 2013, I mapped the C40 social network on the basis of degree centrality, such that cities with the highest percentage of total relationships in a network are those with the highest weighted degree centrality scores. Centrality, in this measure, indicates access and opportunity for direct interaction with the widest set of other network actors, and power derives from having a large number of strong ties to other actors in a network.[285]

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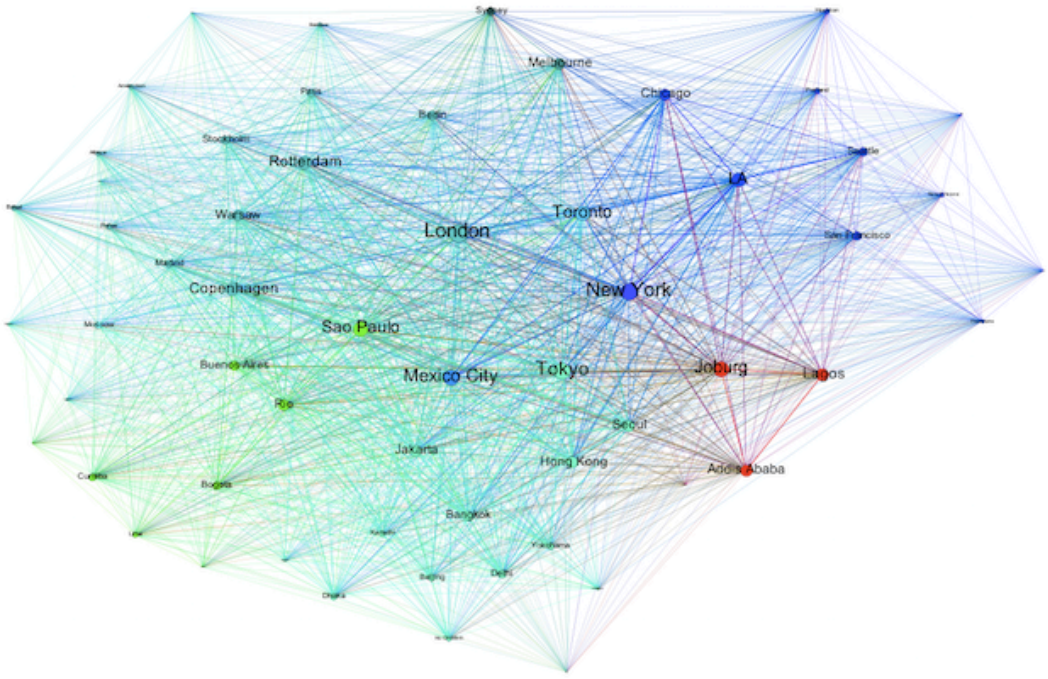
[281] Carpenter 2011: 73
[282] Montgomery 2010; Carpenter 2011; Wong 2012
[283] Hafner-Burton et al 2009: 19; Lake & Wong 2009; Burt 2000; Granovetter 1973
[284] Carpenter 2011: 74
[285] Hafner Burton & Montgomery 2010: 2. I also assessed C40 cities in terms of betweenness centrality, which is function of how important any one particular node is in terms of linking otherwise disconnected or disparate segments of a network. Since the network does not break down into distinct or disparate segments, this measure of centrality has little variance and thus little analytic value in terms of identifying actors with bridging power.

Looking first at the network in terms of the total number of connections between participating cities, we can see that the C40 is rather densely constituted (Figure 3.9) with the entire membership at least minimally connected to one another. There is, however, a clear distinction between those cities located at the core of the network (those with the highest number of connections to other members) and those at the periphery.[286]

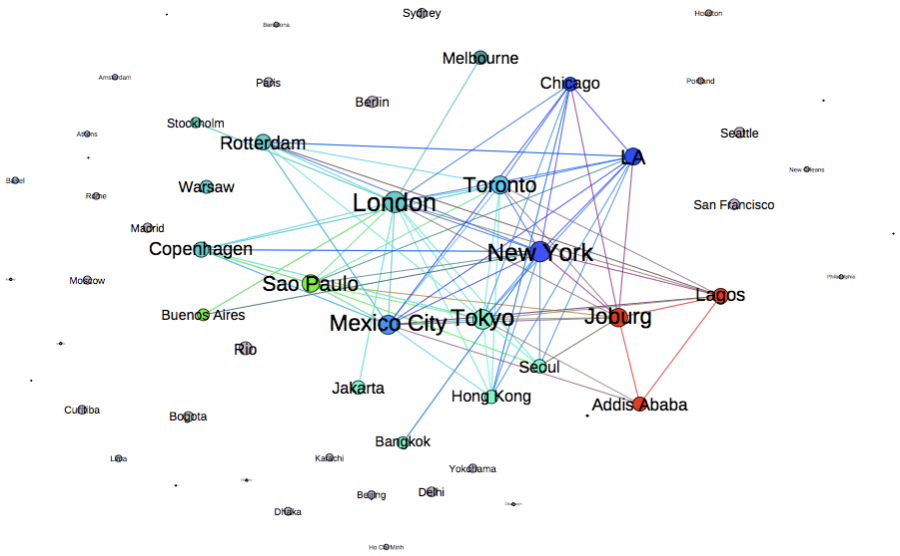
Figure 3.9. C40 Degree0 Social Network (minimum one tie) circa 2013



If we raise the threshold, so as to show only those cities with at least ten ties to one another, a clearer sense of the distinction between highly and weakly connected cities is evident (Figure 2.10). There are only a handful of cities that are highly connected within the C40 network – although interestingly enough there is a roughly even geographic distribution of these cities across the five regions set forth above.

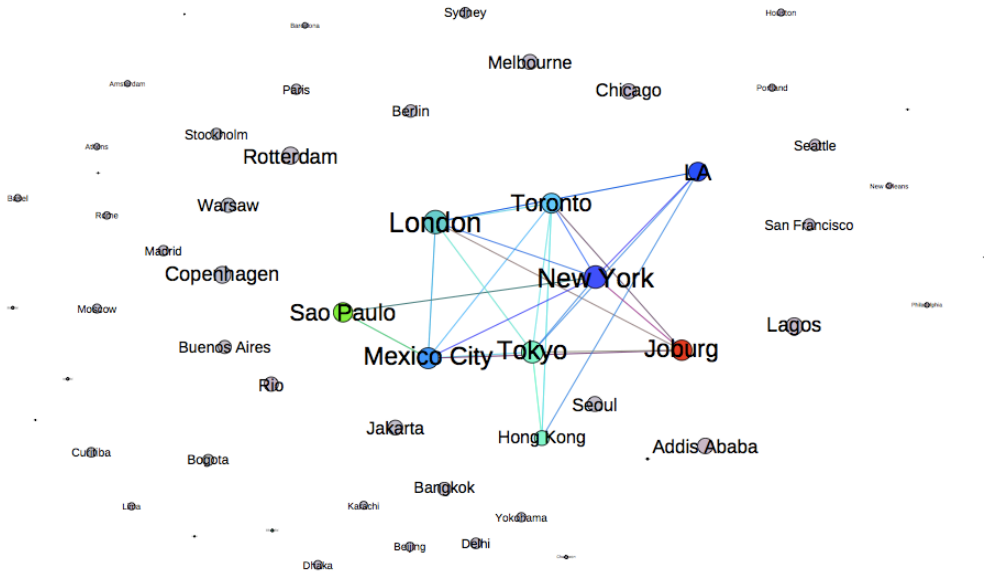
[286] Cities are color-coded on the basis of geographic region: North America (Blue); South America (Green); Africa (Red); Teal (Europe); Purple (Asia)

Figure 3.10. C40 Degree2 Social Network (minimum 10 ties) circa 2013



And if we raise the threshold further, to include only those cities with a minimum of 15 ties to one another, we get a clear sense as to which cities possess positions of centrality within the relational network (Figure 2.11).

Figure 3.11. C40 Degree3 Social Network (minimum 15 ties) circa 2013



Yet while these network maps provide a sense as to the distinction between those cities heavily engaged in city-city interactions, those moderately so, and those that have but the weakest level

of connection, their use in terms of providing a means of identifying who has power, and how power can be used to produce increased coherence, is limited in four ways. First, the C40 social network does not break down into distinct segments but rather appears to possess a hub and spoke relational form. At a threshold of 15 shared connections the C40 maintains a core that is connected more to itself than to any other segment of the network. And so while it is possible to identify a set of cities that occupy positions of centrality in the network, it is difficult to specify which of these cities has power relative to the others, and why that might be the case. By relying entirely on relational position to infer power, network theory as a result fails to consider, let alone integrate, other possible sources of power that actors may bring with them into network settings.

A second, and related, limitation derives from the fact that relational ties are not "out there" to be discovered and counted but rather must be inferred through available proxy measures represents a significant methodological challenge in all instances of social network mapping and analysis.[287] Given that such analysis are used to infer who has power and who does not, the fact that a great deal, likely the vast majority, of city-city interaction taking place within the C40 is entirely opaque to outside observers seriously undermines confidence in the basic proposition. There is thus a considerable risk of basing analysis of relational structures on information that is readily available rather than theoretically grounded – searching under the lamppost for keys sitting at the bottom of the lake if you will. This may help account for the weak relationship between network position and patterns of coherence identified above (see Figures 5 and 6) whereby increased uptake of practices of target-setting, planning, measurement, disclosure and reporting originate not within the core of tightly interconnected cities but rather across a swathe of core and marginally connected network members.

Lastly, in conceiving of power as derivative of social position the explanatory emphasis of network theory is lodged primarily at the level of structure at the expense of agency, since it is the structure of a network that determines where power is located and who has access to it.[288]

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[287] On this point compare Bouteligier 2012 and Lee 2014.

[288] There is room for agency within this conceptual approach since individual actors can engage in tactical actions with respect to modifying their position within network structures. Nonetheless, the explanatory logic is largely structural in that it seems to be assumed that those actors within a network that do not occupy positions of structural

Furthermore, approaching networks from this perspective is problematic in that it tends towards a static explanation in which the relational structure of a network is identified and analyzed at a particular point in time. There is little inherent in this approach to focus attention on the historical processes through which networks are formed, and how actors enter into and position themselves within network settings over time.

And so, while network theory offers a means of addressing the inability of other approaches to specify the role of agency in producing increased coherence in the C40, and links agency to particular forms of power that operate in network settings, it remains unconvincing in terms of providing a satisfactory means of accounting for the observed puzzle.

4. Conclusion

In this chapter I set out to explore three causal narratives and assess each in terms of their respective ability to provide a convincing account of the empirical puzzle set forth in chapter 2. While each appears to address part of the puzzle, none has proven capable of offering a full and satisfactory explanation. The preceding analysis sets out why each suffers from logical limitations, and illustrates these empirically by assessing the relationship between proposed causal proxies and observed patterns of coherence in the C40 around particular governance practices. None of the three approaches is seen to offer a satisfactory means of explaining why, and how, the C40 been able to achieve increased coherence around a particular set of governance practices. This is because none offers a means of combining structural imperative with actor agency in novel governance spaces such as the C40. None, in other words, offer a means of adequately conceptualizing the link between power, position, and internal coherence. Yet locating and assessing power is essential to understanding not only the presence of such coherence but also why it emerges at particular times, and around particular practices, and not

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privilege have the interests or preferences of those that do occupy positions of structural privilege forced upon them. Hafner-Burton et al (2009: 573) explicitly acknowledge as much.

others.[289] While network theory, and the notion that power resides in the position that actors occupy vis-à-vis one another in relational networks like the C40, offers one means of redressing this limitation it seems capable of offering only a partial, and ultimately unsatisfying, account.

What this suggests is that there remains a need to take up Betsill & Bulkeley's call for novel ways of identifying, explaining, and assessing the "new politics of climate change emerging in the urban arena."[290] This chapter highlights a continuing need to "loosen further … ties to static and scale-based assumptions of how governance is achieved, and instead consider the processes through which the political spaces of urban climate politics come to be configured and contested."[291] The C40 constitutes just this sort of novel "political space" and the analysis to be developed in the chapters that follow introduces a set of conceptual tools and propositions that can help provide a clearer understanding of how various actors come together to construct and contest what it means for member cities to "be" climate governors, and to "do" climate governance. To do so I turn back to a norms-based account, and develop a novel explanatory framework built around the central precepts of field theory.

[289] Bouteligier 2012: 59-60
[290] Betsill & Bulkeley 2013: 146
[291] Betsill & Bulkeley 2013: 150

Chapter 4
Producing Norm Convergence: The C40 as a Governance Field

1. Introduction

If coherence is the *what*, and norm convergence the *how*, the *why* remains to be explained. Having established the limitations inherent in explanatory narratives that account for the puzzle of increased internal coherence through recourse to either structural imperative, agential diffusion, or network relations, I ended the preceding chapter by re-stating the case for a norms-based account, one that acknowledges the impact of structural imperative but retains analytic space for the agential production, reproduction, and contestation of such structures. The underlying premise I am putting forward is that, for transnational governance networks like the C40 to attain internal coherence, produce coordinated action, and achieve collective effects, they must come to converge around what Ruggie refers to as shared social purpose, but could be more generally postulated as a coagulating normative structure.[292] That such convergence should emerge unintentionally or in an apolitical, bottom-up manner is both unlikely and unconvincing. What is needed, instead, are concepts and causal mechanisms that identify and theorize sources of authority and power operating in governance initiatives like the C40, and identify how both are employed to contest, and produce, convergence around particular governance norms.[293]

Constructivism is thus well suited to the task, oriented as it is towards the co-constitution of agents and structures, the need to treat identity and interests as contingent and inter-subjective, and the role of norms in constituting particular kinds of actors and sanctioning particular types of action.[294] As set out in chapter two, I infer, alongside the observation of increased coherence in the C40, an underlying phenomenon of convergence around a specific configuration of governance norms (plural participation, liberal environmentalism, active governance, and global

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[292] Ruggie 1982
[293] To be clear, I equate field strength with convergence around a particular configuration of governance norms. As such, while I prefer the concept of convergence the two terms are used interchangeably throughout this and subsequent chapters
[294] Finnemore 1996; Adler 1997

accountability). Yet to illustrate and ascertain the effects of such convergence is one thing, to explain it something altogether different.

With respect to this, the task of explaining the pattern and content of norm convergence in the C40, the extant IR norms scholarship offers less assistance.[295] Standard models of norm convergence, such as the norm life cycle,[296] provide a compelling *process* through which norms move from introduction to widespread adoption, yet rely on ad hoc suppositions with respect to when convergence is achieved and why[297] and are relatively silent with respect to which (or whose) ideas achieve normative status.[298] Other approaches, such as Bernstein's socio-evolutionary model, directly address the interplay between newly proposed norms and the broader normative structure of world politics.[299] In so doing Bernstein offers conceptual tools with which to make sense, in broad strokes, of the puzzle of norm convergence in the C40 (the particular norms around which convergence has emerged "fit" with the prevailing normative context; convergence has been attained around norms advocated for by actors seen as legitimate and authoritative) but leaves open a number of explanatory gaps:[300] why some actors are construed as authoritative while others are not; the role of agency in processes of norm uptake and convergence; and, the particulars of norm contestation that takes place in the context of broader social structures, especially with respect to how novel norms are *made to fit* through

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[295] I provide here only a brief assessment and evaluation of what is a rich and varied scholarship within IR on norms and world politics. In so doing my goal is simply to establish space within which the field theoretic approach developed below can fit. I will, over the course of this and subsequent chapters, signal points of intersection, dialogue, and differentiation between a field theoretic and other constructivist frameworks, and highlight the distinctive contribution or value-added offered by the former.

[296] Finnemore & Sikkink 1998

[297] The norm life cycle, for instance, says little about why/when/which norms achieve structuring status (i.e. cascade and head towards institutionalization) other than the ad hoc proposition of a 1/3 adoption threshold or the role of particular "critical" states. Neither of these, to my mind, is defensible on logical grounds, nor is it clear how exactly they might be applied to hybrid governance contexts like the C40 where what counts as "powerful/influential actor" is not immediately obvious but rather constitutes an empirical question to be answered. See Finnemore & Sikkink 1998: 901

[298] For example, Haas (1992) relies on the proposition that such norms emanate from epistemic communities that are, themselves, unified around particular knowledge and normative claims, while Keck & Sikkink (1998) locate the source and content of global norms in the work of transnational activist networks. While both offer important theoretical and empirical contributions, they each leave unquestioned which norms such actors put forth, how such norms are selected over others, and how such the process of norm-selection plays out.

[299] Bernstein (2001) advances an argument premised on the importance of "fit" between newly proposed norms and the prevailing normative context of international politics as a means of accounting for the ascendance of particular norms in global environmental governance. See also Florini (1996)

[300] In this sense, the theoretical framework proposed here serves to complement prevailing constructivist accounts.

dynamics of domination, resistance, struggle, and complicity.[301] For these reasons, and to address these limitations, I turn to field theory as an alternative constructivist approach, one that offers a means of theorizing the emergence of norms, the sources and operation of power and authority in producing norm convergence, and a plausible causal mechanism with which to account for the resolution of contestation and the production of convergence in the absence of recourse to overt coercion, formal authority relations, or teleological determinism.

Upon picking up a magnet for the first time, the holder may be surprised to find that it draws some objects closer, while pushing others away. The effect, seemingly magical to the uninitiated, is the product of a field of forces that surrounds the magnet, forces that make an item move even though we observe (with our naked eye) no obvious interaction. Magnetic fields have no immediately obvious boundaries, and yet we can recognize their presence, reach, and strength through the effects they have on objects that move through them. While there are considerable and meaningful differences between the natural phenomena of magnetic (or other) fields and those that exist in the social world, I argue in this chapter that field theory – and reconceiving initiatives like the C40 as governance fields - offers a great deal of analytic and explanatory purchase, and a means of redressing the conceptual and theoretical limitations identified both above and in chapter three. Field theory provides a set of conceptual tools to help understand why the C40 has achieved norm convergence, why such convergence only truly emerged after 2011, and why convergence has emerged around a particular set of norms and practices and not others.

Whereas the effects of magnetic, or other natural, fields are mechanical or kinetic (objects move, gain mass, and so on) the effects of governance fields are manifest in how actors come to (a) understand particular governance problems (b) recognize their own interests or identity as governors, and (c) engage in particular forms of governance and enact particular types of governance practices. As the magnet creates the field, and the field then influences objects that pass through it, governance fields exert a structuring effect on actors by delimiting what is

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[301] My interest in this project is on the pursuit, contestation, and production of norm convergence in transnational domains like the C40. I do recognize, however, the important insights generated by scholars whose work focuses on dynamics of contestation as norms are translated from global/transnational domains into local settings. See, for example, Wiener 2007, 2009; Acharya 2004; Cortell & Davis 2005; and various contributions to the Journal of International Relations and Development (2015) special issue on norm diffusion, contestation and localization in the Western Balkans.

considered thinkable and proper, informing what is held to be common-sense or normal and demarcating what is deemed out of bounds. A field theoretic perspective, however, recognizes that the answers to such questions emerge not naturally but rather as the result of ongoing processes of contestation, struggle, domination, and complicity.

What field theory provides, then, is both a general orientation towards the social world as well as a set of conceptual tools (habitus, nomos, capital, and recognition) with which to uncover how that world is made to "hang together."[302] It offers a conceptual language with which to move beyond the presumption that power rests in either institutional characteristics[303] or the identity of particular actors (endowed, ex ante, with moral, epistemic, or delegated authority)[304] and acknowledges instead that "the authority to govern does not emerge a priori from actors and their institutions"[305] but rests on the particular resources that actors can claim, and have recognized, within a particular field.[306] It, lastly, provides a means of theorizing how actors claim authority, which ones are likely to prevail, and how such authority is operationalized or enacted.

This is a novel application of a complex theoretical apparatus to a complicated terrain, and so some conceptual spadework is in order.[307] What follows is undertaken in the spirit of theory-building, and my goal is to present a set of propositions, developed abductively[308] to account for the empirical puzzle of norm convergence. That is to say, I am engaged in neither hypothesis generation/testing nor in the assessment of deductively generated statements of causality. Instead I set out in this chapter to detail how field theory can be employed to tell a convincing and compelling story with respect to the presence, and substance, of norm convergence in the C40. To do so I provide, firstly, a background discussion of field theory, establishing its origins, setting out its foundations, and identifying how it has been adopted and employed by scholars of global governance and international relations. I then set out, in greater detail, four key concepts –

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[302] Ruggie 1998
[303] Bachrach & Baratz 1962
[304] Avant et al 2009
[305] Bulkeley & Schroeder 2011: 20
[306] Pouliot & Merand 2012: 36
[307] For recent work that has imported field theory into the discipline of IR see Sending, forthcoming 2015; Adler-Nissen 2012; Epstein 2008. On Bourdieu in IR more generally see Pouliot 2007, 2008 and Pouliot & Adler 2011. After an exhaustive search, the only extant attempt to apply field theory to global climate governance that I have been able to locate is Hughes 2013.
[308] Friedrichs & Kratochwil 2009

nomos, habitus, capital, and recognition – that I draw from the field theoretic toolbox in order to develop a novel analytic framework and explanatory account. These four concepts, in combination, provide an analytic framework with which to identify the nature and use of authority, understand the production and patterns of norm convergence in the C40, and specify possibilities for contestation and resistance. The chapter concludes with a discussion of the methodological application of field theory, providing the reader with a sense as to how the conceptual apparatus introduced is to be applied and employed in the chapters that follow.

2. Field Theory: An Overview

It is a fundamental mistake, both conceptual and practical, to assume that networks – because they are voluntary, lack formal hierarchical arrangements of authority and tools of enforcement, and are constituted by nominally egalitarian relations between members – are apolitical. Power, as the IR literature has come to recognize, is plural in its sources, uses, and effects and can operate in ways that are easy to identify or that operate along subtler frequencies.[309] What this means, in practice, is that power asymmetries can and do exist "even where different actors or groups of actors claim that they are working in consensus."[310] As such, it is imperative to consider how networks such as the C40 manifest the tension between "power with" one another (this is what brings cities to the network in the first place, after all) and "power over" one another that is not only made possible once the network is constituted but on which the coordinative capacity of the network itself depends.[311]

As noted in the preceding chapter, the extant scholarship on cities and climate governance has not yet succeeded in so doing. This body of work has not yet provided a satisfying means of understanding *how* and *why* initiatives like the C40 come to define the issue of climate governance, the role of cities in responding to it, and the sorts of practices deemed appropriate for them to undertake. While the broader literature on global climate and environmental governance acknowledges the socially contingent nature of ideas regarding "who" should govern and how, there has been limited application of these ideas to the realm of cities and climate

[309] Barnett & Duval 2005
[310] Okereke et al 2009: 65; cf. Slaughter 2013
[311] Allen 2010

governance.[312] Instead, city-networks are presumed to hold, *ipso facto*, particular ideas as to what cities should "do" and employ various levers of authority in an attempt to get them to "do it". The internal ideational, normative, and cognitive dynamics of transnational city-networks, in other words, remain under-explored.[313]

This is a limitation shared more broadly across the scholarship on global governance, which, as Sending argues, has made important contributions but lacks "an account of the anatomy and *politics* of the transnational networks involved in global governance."[314] Barnett & Duvall locate the roots of this limitation in the tendency to assume, ex ante, that global governance initiatives embody "the institutionalized coordination or collaboration of people's and states' activities in ways that achieve more desirable—positive sum—outcomes."[315] This presumption, as a result, leads "many scholars to diminish or overlook the role of power."[316] The result is that scholars have paid limited attention to the task of "unpacking and theorizing what these governance networks look like on the inside – through what mechanisms they change or are stabilized, [or] how the different actors within them relate to each other."[317]

Field theory offers a means of redressing this limitation. Fields are analytic constructs that help to orient analysis in particular ways.[318] Developed by Bourdieu, amongst others, this approach is built on the premise that the social world is comprised of a variety of overlapping social fields that constitute the nature, and organizing rules, of particular domains of human existence. Art, culture, sport, and finance but also French literature, family-life, and private organizations have all been conceptualized as fields.[319] What is common to all is a tension between domination and resistance, continuity and change, complicity and contestation. Fields provide order – they are a means of accounting for the presence of stability in a world shot through with conflicting

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[312] Hoffmann 2005; Bernstein 2001; Litfin 1998; Stevenson 2011
[313] Cf. Acuto 2013a, b; Lee 2013; Bouteligier 2012
[314] Sending 2009: 6, my emphasis. For recent attempts by IR scholars to address this limitation see, for example, Wong 2012; Carpenter 2011.
[315] Barnett & Duval 2005: 57. Note that there examples of global governance scholarship that run counter to this trend. See, for example, Bernstein 2001
[316] Barnet & Duval 2005: 57; see also Avant et al 2010; Sending & Neumann 2006
[317] Sending 2009: 6
[318] Hilgers & Mangez 2014: 5
[319] Bourdieu 1969, 1984, 1988; Dimaggio & Powell 1983

interests, inequality and injustice – and are deeply and inescapably political. Approaching the social world as one comprised of fields thus directs attention to the nature, function, and effects of power.

While it shares much with other novel theoretical frameworks that have been imported into the field, such as actor-network theory[320], Foucauldian governmentality[321] or neo-Gramscian hegemony[322], it differs from each in its emphasis on producing a "sociologically informed account of authority."[323] Such an approach has wide potential applicability in the domain of global governance since it can account for multiplication of novel governance actors[324], the unsettling of traditional institutions and practices of governance[325] and emergence of novel ones[326] while remaining sensitive to the power dynamics that operate between actors within such novel and emergent settings.

Before proceeding further it should be noted that field theory is an ambiguous analytic and theoretical framework. Bourdieu himself did not develop a fully formed set of propositions as to what a field was, how it could be identified, or how fields interact with and relate to one another.[327] As a result, I follow the various contributors to Adler-Nissen in using the conceptual vocabulary of field theory as a source of inspiration, a "thinking tool" that can light up those corners of transnational urban-networked governance previously rendered to the shadows.[328] And while field theory is most often organized around the individual as unit of analysis, I follow Fligstein & McAdam in asserting that actors populating a field can be individual or collective,

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[320] Acuto 2013a
[321] Bulkeley & Schroeder 2011; Bulkeley 2012
[322] Okereke et al 2009
[323] Sending, forthcoming 2015: 4
[324] Ruggie 2004; Rosenau 2003
[325] Sassen 2006
[326] Jorgens & Busch 2005, 2012
[327] Adler-Nissen 2012: 13
[328] Adler-Nissen 2012: 13; see also Bigo 2011: 226; Dingwerth & Pattberg 2009. Sending (forthcoming, 2015) adopts a similar approach of selective application of Bourdieu's field theory to develop insights into phenomena of global governance, a process that Emirbayer & Johnson (2008: 2) refer to as a "generative reading" aimed at "transpos[ing Bourdieu's] ideas onto a new intellectual and professional terrain while preserving what is most fruitful and exciting about them."

and thus adopt as a unit of analysis the latter (which includes cities, ENGOs, philanthropic organizations, and so on).[329]

A field, at its most general is a "*social space* within which different actors seek to vie for advantage, and where dominant groups seek to institutionalize certain rules in an effort to perpetuate their position vis-a-vis others."[330] It is important, as such, to recognize not only how actors are affected by the presence of a field, but also "…how particular groups come to define a social terrain" in the first place.[331] Fields, while they can be "small or large, more or less important, more or less autonomous" are all "social spaces" that need to be assessed in terms of how actors interact within them, and the manner in which, through those interactions, understandings, objectives, and orientations are produced and come to be shared.[332]

The concept of a field thus suggests the benefits of treating the C40 as a novel social milieu, and helps orient analysis towards intra-network relations of power, domination, complicity and contestation - to identify how actors within the C40 are positioned relative to one another and engage in what Kauppi calls a "topographical" mode of analysis.[333] It offers - by recognizing, as Pouliot & Merand suggest, that agents have an interest in "reinforc[ing] their positions in [a particular] field as well as the strength of their field vis-à-vis others"[334] - a promising means of exploring the power dynamics that arise when new fields are constituted, and what counts as common-sense, expected, or normal is unsettled and open-ended.[335]

As per Fligstein, a field is indicated, most generally, whenever a group of actors orient themselves, their actions, and their interests towards one another.[336] More specifically, a field is a "constructed mesolevel social order in which actors (who can be individual *or collective*) are attuned to and interact with one another on the basis of shared (which is not to say consensual) understandings about the purposes of the field, relationships to others in the field (including who

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[329] Fligstein & McAdam 2012. See also Go 2008
[330] Fligstein 2001 p. 108 - my emphasis
[331] Fligstein 2001: 109
[332] Pouliot & Merand 2012: 32
[333] Kauppi 2003
[334] Pouliot & Merand 2012: 34
[335] Bigo 2011: 241
[336] Fligstein 2001: 108; Martin 2003

has power and why), and the rules governing legitimate action in the field."[337] This conceptual starting point has immediate appeal with respect to the study of cities, transnational city-networks, and the global governance of climate change since it is agnostic as to what "kinds" of actors matter or deserve standing as units of analysis in an attempt to theorize and understand world politics. In fields there are "no privileged actors as such, but rather relations of dependence, contestation, or distinction…that depend on the positions occupied by agents in the field."[338] Ontologically speaking this helps to overcome a fundamental shortcoming inherent in the various alternative explanatory frameworks identified and assessed in the preceding chapter.[339] It is difficult, within the confines of ecological modernization, policy learning, inter-city competition, or even network theory to integrate an analysis of the power available to diverse actors (cities, network secretariat, corporate actors, philanthropic entities) within the realm of the city-network. In other words, since a field is not a predefined "thing" composed of a particular category of actors it can accommodate analysis of heterogeneous collections of agents all of whom both produce, or are subject to, "field effects."[340] Furthermore, such an approach helps analysis step outside the limits of adopting a particular "level of analysis"[341] and avoids the *ex ante* prioritization of any particular type of actor.

In this project I adopt Sending's notion of *governance* field – a social milieu defined by a historically and temporally particular struggle over basic elements of collective action: what is to be governed, what is the objective of governance, what are the tools of governance, what does it mean to be a governor.[342] In recognizing that "the definition and meaning of any given task—humanitarian relief, peacebuilding, population, development, health—is *endogenous* to the process by which actors seek and are recognized as authorities on how to act on and/or represent others" field theory helps to shift from "a focus on the cast of actors involved to also include how it matters for the *contents* of governance arrangements."[343] These are fundamentally political

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[337] Fligstein & McAdam 2012: 9 - my emphasis
[338] Pouliot & Merand 2012: 32
[339] On such shortcomings see also Jackson & Nexon 2013.
[340] Leander 2011: 299; Emirbayer & Johnson 2008: 7
[341] Hooghe & Marks 2003
[342] Sending 2015. A similar, baseline definition is offered by Epstein (2012: 176 fn 3) who defines a field as: "a particular set of issues or practices, discursive and non-discursive, that bring actors together and around which they interact in specific ways."
[343] Sending 2015

processes in that actors engage in "contestation and competition over the meaning and stakes of the organization of this social space."[344] Governance fields are thus social spaces organized around a particular objective but which are subject to contestation over the specification and substance of the configuration of norms that guide and shape identity, interests, and action for those who occupy them.[345]

Similar, then, to fields in the natural world, the presence of a governance field is evident primarily in its effects. One can discern the presence of a governance field in the impact that it has on actors that constitute it and reproduce its boundaries. In so doing field theory opens analysis up to the political and power dynamics that operate in novel or hybrid governance spaces – those that defy simple state/non-state or private/public binaries[346] and that constitute emergent public domains in world politics.[347] It offers a means of understanding what happens when diverse actors come together voluntarily in novel social spaces, such as the C40, oriented towards the governance of complex global issues like climate change.

In emphasizing the role of ideas, and focusing analysis on "what/why norms and interests are what they are, mean what they do, are expressed as they are and have the consequences they do"[348] field theory largely reflects and mirrors extant constructivist scholarship. Where it presents a novel contribution is twofold. First, it offers a means of accounting for patterns of convergence and clustering, and the presence of consent and contestation, in governance initiatives such as the C40. Thinking the C40 as a governance field not only directs analysis and empirical inquiry towards uncovering "how, why and with what implications governing is conducted and dominance achieved" but also provides (through the mechanism of recognition, as will be set out in the subsequent section) a means of explaining how and why the consensus (and complicity) necessary to govern in the absence of explicit coercion is achieved and

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[344] Sending 2015: 29
[345] Sending 2015: 30. In an early application of Bourdieu in American sociology DiMaggio (1983: 149) draws attention to Bourdieu's understanding of fields as comprised of "both common purpose and…arena[s] of strategy and conflict."
[346] Bulkeley & Schroeder 2011
[347] Ruggie 2004; Risse-Kappen 1995. While my focus is on applying field theory to novel transnational governance initiatives, it could equally be applied to long-standing governance domains of world politics.
[348] Leander 2011: 299

maintained.[349] Field theory, furthermore, offers analytic tools with which to identify both the various or plural sources of authority that actors claim while directing attention to the process through which such claims are enacted, put into practice, and translated (or not) into power and influence used to produce or resist convergence.

A second contribution offered by a field theoretic account rests in its recognition of the multiplicity of governance fields. This analytic move opens up space with which to consider more explicitly the interaction effects that take place between governance fields. Inasmuch as field theorists approach social life as constituted by numerous fields – art, politics, economics, science, sport, music, and so on – the C40 as a governance field must be understood as embedded in a broader constellation of governance fields. Transnational climate governance, in other words, can be conceptualized as a combination of fields (experimental and inter-state; city, sub-national, corporate, citizen, investor) that operate with varying degrees of autonomy from both one another and from the dominant inter-state field of climate governance best illustrated by the UNFCCC.[350] As Fligstein suggests, "[t]he emergence of *new fields* occurs when a significant number of members of different groups see new opportunities."[351] Hoffmann adopts, albeit in different conceptual terms, a similar position[352] in seeing the explosion of experimental governance initiatives as, at least in part, a systemic response to what Victor refers to as "global warming gridlock".[353] Friction, in this account, creates space for innovation. However, whereas Hoffmann's account focuses primarily on the systemic dynamics of the "experimental" system, I draw on field theory so as to assess the inside-out interplay between embedding in broader governance fields and the production of convergence within specific fields like the C40.

Fields, in other words, are never constituted in isolation but rather emerge in response or opposition to, and interact with, one another.[354] The result is that all fields, most acutely at the

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[349] Bulkeley & Schroeder 2011: 20; Murray Li 2007
[350] Bernstein et al 2010; Zelli & van Asselt 2013
[351] Fligstein 2001. Note that this is something of a departure from Bourdieu, who proposed that "for change to occur…an 'objective crisis' is necessary, one which 'breaks the immediate fit between subjective structures and objective structures, and destroys self-evidence practically" (Bourdieu 1977: 168-169, quoted in Hopf 2010: 546)
[352] Hoffmann 2011
[353] Victor 2011
[354] A similar point, using different conceptual language, can be found in Bernstein 2001. See also Levy & Newell 2005

outset but in some sense at all times, experience a tension between retaining continuity with norms and practices inherent in prevailing fields and challenging, contesting, and ultimately creating novel norms and practices that come to shape shared expectations and understandings in the new field. New fields face, once formed, a struggle to develop and stabilize novel "rules of interaction" and avoid "extinction."[355] They must also balance the tension between differentiating from, but ensuring acceptance by, extant governance fields. Collective city initiatives like the C40, as Curtis notes, cannot be studied in isolation from the broader systems of states in which they are embedded.[356] Rather there is a need to remain sensitive to the inside-out dynamics that operate as actors seek to balance pressures that are "first internal to the…field and the second external to it."[357] This is a notion that will be more fully developed in the section below on recognition as a causal mechanism through which external/internal field boundaries are traversed.

3. Key Concepts: Nomos, Habitus, Capital, Recognition

In this project I draw inspiration from, and deploy in combination, four field theoretic concepts - nomos, habitus, capital, and recognition. I use these to provide an explanatory framework with which to make sense of the pattern and content of norm convergence in the C40. In this and the following section I provide a definition of each, and elaborate the manner in which I have defined and deployed each. In the subsequent section I set out how these four can be combined and operationalized.

3.1 Nomos

Nomos is the structuring dimension of a field. It is comprised of the set of interlocking norms that embody the distinction, within a field, between what is thinkable and what is not; what is normal and what is not; what is proper and what is not.[358] It is the ideational structure that shapes – at least potentially – how actors within the C40 field come to understand, approach, and enact

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[355] Fligstein 2001: 115
[356] Curtis 2014: 16
[357] Kauppi 2003: 11; see also Acuto 2013a, b
[358] Epstein 2013. While nomos is one of the lesser-referenced and employed concepts in the field theoretic literature, I follow Epstein in using the concept to denote a configuration of norms (what Bernstein 2001 refers to as a norm-complex) around which a field is organized. Nomos serves to delineate what practices are deemed normal (and thus what is acceptable, appropriate, and desirable) and which are not within a particular field.

the role of climate governor. Nomos is comprised of norms, but directs analysis towards the manner in which they are configured within a field rather than studying them individually or in isolation.[359] In this sense nomos offers a means of assessing how specific norms "fit together" to constitute a coherent normative structure. Importantly, nomos is neither natural nor does it have a necessary form and content. Nomos is an artifact, an ideational embodiment of the capacity or privilege of some actors to "draw the lines" that determine what is normal and what not within a particular field.[360] Yet once nomos takes hold, it disappears into the background and comes to form the "taken-for-granted"[361] that constitutes the structuring effect that operates in governance fields.

3.2 Habitus

If nomos represents the structuring aspect of the C40 field, then *habitus* represents the particular identity, interests, and practices – often referred to as a set of dispositions or inclinations - that actors carry with them. This is not to confuse habitus with unfettered agency or pure individuality. On the contrary, habitus represents the accumulated experience that agents carry with them as they operate within, and move across, particular fields. It captures the internalization of field structures within an actor.[362] This internationalization may instill in actors a sense of field-specific "'self-evident' or 'natural' logic of action" but it is essential to note that what is "self-evident" in one field is not likely to be so in another.[363] As such, I employ the concept so as to capture the particular set of governance ideas, interests, and practices that actors bring with them into the C40 field. Conceiving of cities, and other participating organizations, as possessors of a particular habitus thus offers a means of distinguishing, analytically, the particular set of dispositions (ideas, practices, expectations) related to urban climate governance that various actors (cities, philanthropic organizations, private corporations, and so on) bring with them into the C40 field, tracking the trajectory of such dispositions, and tracing the path between such dispositions and the content of field nomos over time.

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[359] Epstein 2013. In this sense the concept of nomos parallels Bernstein's (2001) notion of a "norm-complex"
[360] Epstein 2013
[361] Finnemore & Sikkink 1998
[362] Emirbayer & Johnson 2008
[363] Pouliot & Merand 2012: 31

And yet it is necessary to note that, while habitus represents the internalization of those norms and practices that comprise a particular field nomos, it never implies a complete structuring of individual actors. In a manner similar to Hoffmann's account of the tension between structuring norms and individual norm enactors,[364] habitus retains some amount of space for what Bigo refers to as "regulated improvisations."[365] Habitus is structur*ing* but is "never a monolith, immutable, or predictable"[366] and as such it can produce "both social continuity and discontinuity."[367] This is most evidently the case as actors enter into (or create) new fields, which opens up space for a reconstitution of what, exactly, is "taken for granted" in the new field. In other words, there exists, in novel governance fields, a considerable amount of space between the habitus that individual actors bring with them into that field and the nomos around which the field is organized. The greater the "space" between habitus and nomos, the more room there is for innovation and experimentation but the less likely there will be convergence. Only in closing down the space between habitus and nomos – bringing them into a greater degree of alignment – is convergence achieved. Nomos and habitus are thus opposite sides of the same analytic coin, whereby habitus informs the formation and form of a specific field nomos, is structured by and reproduces it, but may also represent a source of contestation and change due to the incomplete nature of field-habitus integration.[368]

3.3. Capital

If convergence in a governance field is a function of the alignment between the habitus of individual actors and the nomos of that field, the concept of *capital* provides a means of accounting for whose ideas and interests come to inform the substance of those shared norms and practices. Capital is the currency that constitutes, within any particular field, how actors are positioned relative to one another.[369] As common sense would dictate, those with more capital

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[364] Hoffmann 2011
[365] Bigo 2011: 242
[366] Bigo 2011: 242
[367] Wacquant 2006: 7
[368] I focus, in this project, on the outward relationship between habitus and nomos and the ability of actors to translate a particular habitus into field nomos as a means of producing norm convergence. A field theoretic framework, however, could equally be employed so as to focus on the inwards relationship, as actors with particular habitus experience, operationalize, and localize field norms. I will discuss the possibility of such an approach in the concluding chapter.
[369] Pouliot & Merand 2012: 36

occupy positions of dominance relative to those who have access to less capital. The challenge arises in the fungibility of capital from field to field.[370] Actors within a field are empowered to the extent that the capital (i.e. the resources) they claim are recognized as relevant.[371] And so, as with both habitus and nomos, capital is subject to a condition of structuration wherein actors are empowered not only by those resources on which they can draw but also on their ability to have those resources count (and be counted) – to shape what counts as capital, how to count capital, and how capital is distributed amongst actors.[372]

What capital *is* in the C40 governance field, and who has more or less of it, cannot as a result be determined in advance or through a process of deductive reasoning. Guzzini cautions that capital rests "not in the resource as such, but [in how it] is defined through its role within the field."[373] Specific fields will have different rules or shared understandings as to what "counts" as capital (money or assets in economic fields, talent or taste in cultural or artistic fields, and so on) and, as many a field theorist is quick to note, what counts as capital in one field (money in an economic field) may not be convertible into another (cultural or art field).[374] While Bourdieu proposes a variety of types, or species, of capital (economic, cultural, material, and so on), what it is, and who has it, are questions that can only be answered through a careful analysis of field creation (or genesis) and evolution. Only by returning to the point of creation and tracing its evolution forward from is it possible to identify competing claims as to what counts as capital and unravel how capital comes to take the particular forms that it does.

In light of this I set out to specify the kinds of resources that actors can claim within the C40. Drawing inspiration from Allen's assertion that "powerful cities…stand at the intersections"[375] and derive their power from the ability to bring and hold together a network[376] I suggest that treating "position" as equal to power requires conceptual specification. Actors can be empowered, after all and as per Barnett & Duval, as a result of who they are, what they do, or

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[370] Baldwin 1979
[371] Pouliot & Merand 2012: 36; Bourdieu 1986
[372] Sending, forthcoming 2015: 6; Bigo 2011: 237; Leander 2011: 304
[373] Guzzini 2012: 80
[374] Guzzini 2012: 80; Bigo 2011: 237
[375] Allen 1999: 187
[376] Allen 2010: 2896

where they are located.[377] My proposition, generated abductively in the process of empirical investigation and theoretical reflection, is that there are three broad types of capital that actors can claim within the C40 field - structural, agential, and institutional. In so doing my aim is to provide a reference point with which to situate empirical analysis rather than to set forth a priori generate deductive hypotheses or specific propositions with respect to power and influence.

3.3.1 Capital in Three Forms: Institutional, Structural, and Agential

Institutional capital is the most concrete source of capital in that it is associated with the organizational structures inherent in the field. Institutional capital is akin to what Bachrach & Baratz refer to as the capacity to set a governance agenda and resides in the particularities of decision-making procedures (who is involved in decision-making, how are decisions made), membership standards, and organizational rules.[378] Institutional capital is also grounded in the formal initiatives and operations of the organization – the initiating, siting, and participant-vetting related to meetings, workshops, or events, for instance, or the selection of best practices and the preparation of public materials. While institutional capital is non-coercive in nature (adherence is always optional) it nonetheless empowers those who are able to set network standards at the expense of those who are forced into a Hobson's choice of adoption.[379]

In the C40 field the network Chair is the primary holder of institutional capital. While the C40 has no formal tools with which to enforce network standards or member commitments, the Chair does possess a near-unilateral ability to determine membership standards, forge network partnerships with other governance actors[380] and shape the organizational structure of the network. Other sources of institutional capital do, however, exist and are available to actors other than cities. The creation of a Board of Directors in 2014, for instance, provides actors other than cities (funding and strategic partners, for instance) with formal levers of authority and decision-making influence. In addition, the organizational entity of the C40 network is a source of institutional authority that accords to the network itself, resting on the capacity to endorse particular governance ideas or practices adopted by member cities, employ organizational

[377] Barnett & Duval 2005
[378] Bachrach & Baratz 1962
[379] Grewal 2008; Barnett & Duval 2005
[380] Avant et al 2009

resources to engage and connect particular cities, and to forge relationships between member cities and outside organizations.[381]

In each case institutional capital offers a means of selecting, emphasizing, and projecting particular norms and practices – shaping field nomos in other words - regarding how cities should understand the issue of climate change, define their roles as climate governors, and practice climate governance locally. It also provides actors who are able to claim institutional authority with the ability to create formal expectations, sanctioning mechanisms, and monitoring mechanisms with respect to implementation and uptake.[382] In other words, institutional capital can afford certain actors the opportunity to, as per Carpenter, both set and vet the network agenda[383] and "program" the network agenda.[384]

Structural capital, on the other hand, derives from the positions that actors occupy in extant fields and refers to the "accumulated prestige or honour" that they set out to claim as a result. Cities, for example, are bequeathed with varying levels of visibility and reputation as a function of their position within global city hierarchies[385] or geopolitical configurations. This offers a potential source of capital that can serve to enhance the actions, interests, or ideas of some cities (those with higher global city rankings) and discount those of others (those with lower global city rankings).[386] Similarly, non-state actors such as private corporations, philanthropic organizations, management consultancies, and environmental organizations will have access, in varying degrees, to structural capital as a function of their brand recognition, market-valuation, or operational reach. Yet while structural capital may be located in various possible sources, which of these are recognized as a source of authority within a particular field is indeterminate

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[381] To what extent the institutional capital inherent in the C40 organization is independent of the institutional capital of the C40 Chair, as per Barnett & Finnemore 1999 is an open question.
[382] Finnemore 1993; Finnemore & Sikkink 1998: 899-900
[383] Carpenter 2010, 2011
[384] Castells 2011
[385] Sassen 2001; Taylor 2005; A similar proposition is elaborated by Acuto (2013a: 143) in his characterization of cities as actants that "have a 'actively passive' impact on the geographies of global governance. See also Amen et al 2011.
[386] There is, here, a clear affinity with the discussion on diffusion driven inter-city competition introduced in chapter 3. In turning to the influence of global city hierarchies here I want to stress that these constitute one of multiple possible sources of authority that cities can claim, and attempt to operationalize, in the C40 field. And so, rather than seeing competition as a mechanism that produces an outcome, I treat it instead as a component part of a broader effort to secure authority, claim power, and exert influence.

from the outset. In each case structural capital indicates a latent capacity, an ability to be empowered rather than an active expression of power.[387] It operates in the background, but can stand to differentiate those actors who are in a position to make claims to other sources of capital from those who are not.

Agential capital captures those resources that individual actors are able to employ and deploy as they seek to assert influence or power within a particular field. It can be thought of as containing both material and performative dimensions. The former reflects such mundane factors as the financial and epistemic capacity to which various actors have access. Too little local capacity and an actor – city or otherwise - is unlikely to have the ability to effectively claim influence or authority within the field. At the same time, the ability to draw on extensive financial (as in the case organizations like Bloomberg Philanthropies or the World Bank) and/or epistemic resources (as in the case of organizations like Arup and the Carbon Disclosure Project) offer actors the ability to underwrite and enact particular norms and practices, and engage in efforts to shape and strengthen the structuring elements of the field over time. While material resources are the most fungible of all possible sources of capital, epistemic authority is subject to the ability of actors to have particular types of expertise recognized as authoritative within the C40 field.

The latter, on the other hand, reflects a source of capital that resides in the acquisition of "'expert status' or recognition for being proactive about climate change action."[388] This performative dimension of agential capital reflects the ability of actors to leverage the perceived legitimacy, efficacy, or efficiency of prior efforts (whether local climate governance initiatives, instances of intervention in other governance domains, or activities related to climate governance) as a means of underwriting claims to authority and influence.[389] It is closely linked with the notion of credibility, which, as Keohane & Nye suggest, is both a resource and a source of power in

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[387] Barnett & Duval 2005
[388] Okereke et al 2009: 63
[389] There is a similarity with Keohane & Raustiala's (2010) notion of economies of esteem as a means of encouraging/enabling/explaining leadership in the provision of global public goods. This idea provides a means of understanding the performative dimension of power. Cities engage in activities and project them globally so as to access economies of esteem, which then constitutes a source of power/influence for those cities within the network/diffusion context. Performative capital is similarly akin to Blatter's (2009) account of "political performance" as a mechanism through which actors seek to drive change in transboundary environmental governance. In both cases, the advantage gained from situating this concept in a field theoretic framework is to see performative capital in a broader context of other sources of capital, which then opens analysis up to how they are combined or relate.

transnational governance settings.[390] In the C40 this is most clearly illustrated by the presence of smaller and less decidedly global cities with strong reputations as effective and innovative local climate governors (such as Portland, Stockholm, Oslo, or San Francisco). Note, however, that as set out above what exactly "counts" as performative capital (or credibility) is open-ended not pre-determined. In this sense, it rests on the ability of various actors to have particular claims to performative capital recognized within the field.

While what counts as capital cannot be ascertained in advance, other than in broad strokes, what capital *does* is much clearer. It offers actors, firstly, the potential to shape or influence the substance of shared ideas and practices with respect to what is to be governed, to what end governance is pursued, and what counts as governance – to shape, strengthen, and give specific content to field nomos. In newly formed governance fields, like the C40, the ability of actors to claim capital is essential if they are produce shared understandings as to how cities can govern climate change and what it means to be a climate governor. Capital, in other words, provides a means of producing convergence within a field such as the C40. It is only, however, through the mechanism of recognition that capital realizes such potential.

3.4 From Capital to Power: The Intersection of External and Internal Recognition[391]

Recognition, while not formally included in the field theoretic arsenal, represents a medium of exchange through which the potential inherent in capital is converted into authority, power and influence within a governance field.[392] The desire for recognition is, as Sending argues, the "engine behind field dynamics."[393] It stems from the role that recognition plays as both the means through which power and influence are acquired and deployed (by those able to set the terms upon which recognition is granted) *and* the rationale for others to be complicit in their own domination and accepting of those terms (since they misrecognize those specific terms as universal or generic, and thus as "natural" conditions for achieving recognition).

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[390] Keohane & Nye 1998: 89
[391] I draw considerable inspiration, in this section, from Sending's work on the politics of authority. However, whereas Sending focuses on the production of authority within particular governance fields, I deploy the concept of recognition to capture the interaction between fields and how such interaction influences claims to authority (and thus the production of order) within them.
[392] Sending 2015: 27
[393] Sending 2015: 7

Recognition, as such, provides an alternative micro-foundation on which to account for the production of norm convergence. The majority of norms scholarship is premised on norm-adherence as a result of instrumental reasoning (a logic of consequences) or rule-following (a logic of appropriateness).[394] Such a distinction is difficult to sustain both empirically (there is a practical challenge in differentiating which operates at any particular moment) and logically (the logic of appropriateness, for instance, evacuates agency and renders norm-followers structurally determined).[395] A logic of recognition, on the other hand, provides an alternative mechanism, one premised on the assumption that all actors seek what might be termed existential affirmation. All actors, in other words, seek to be recognized as meaningful, relevant, legitimate entities. That they do creates a medium through which power operates in governance fields and a mechanism with which agency and structure are intertwined.

Why, in particular, might cities desire recognition? On one hand, individual city officials (bureaucrats as well as, and especially, politicians) seek to be recognized as a means of legitimating or authorizing their standing in local contexts.[396] Recognition by outside audiences offers local officials a source of political capital that can be employed to enhance the ability to secure support for particular objectives, ideas, or practices.[397] This is, as it were, a weak force since while such external recognition can improve or augment the electoral appeal of politicians vis-à-vis potential opponents at either the local, regional, or national levels of government, it can also have the opposite effect and take on a negative valence. Regardless, the desire to acquire recognition so as to serve locally-oriented interests or objectives can create an incentive to align or be complicit with those standards of evaluation upon which such recognition is based.

On the other hand, the desire for recognition derives from the universal interest possessed by cities with respect to securing investment and augmenting authority. With respect to the former,

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[394] Finnemore & Sikkink 1998; March & Olsen 1998. The shift here is from an attempt to discern the internal mechanics of actor decision-making to a focus on that which motivates actors to act. A logic of recognition obviates the need for recourse to determining whether actors comply with norms via a process of strategic calculation (March & Olsen 1998), normative imperative (Finnemore & Sikkink 1998; Katzenstein 1996) or pre-rational practice (Pouliot 2008). Recognition provides a different kind of micro-foundation, one that allows for any of the aforementioned logics to operate but instead illustrates or illuminates the fluid, tendentious nature of norm compliance (since norms must always be accepted/enacted through agency) and the inter-linked aspect of norm enacting and adherence

[395] Krook & True 2012

[396] Bulkeley & Betsill 2013: 147

[397] Risse et al 1999; Betsill & Bulkeley 2003

cities around the world are faced with a common condition of financial incapacity with respect to both service provision and infrastructure investment[398] as a result of the subordinate position that they occupy (with respect to both fiscal capacity and jurisdictional authority) vis-à-vis other levels of government and the functional imperatives created by global trends of urbanization and inwards migration (not to mention the increased impacts of climatic variability in the form of extreme and unpredictable weather events). And so, while cities invariably compete for inwards investment – to secure both stocks and flows of global capital as they circulate through inter-city networks[399] – they nonetheless share a common desire to be recognized by both the private sector and global capital markets as desirable or "investable". As for the latter, although the particulars vary from country to country, cities are nonetheless uniform in their desire for increased jurisdictional authority and recognition by upper levels of government. Such recognition carries with it the possibility of reversing "downloading" trends that have seen municipal governments absorb greater functional responsibilities absent matching increases in fiscal and jurisdictional capacity.[400] In this light, the imperative to acquire external recognition represents a strong force acting upon cities, since all are subject to the desire for increased authority and material investment.

That there is a common desire for recognition leaves open the question as to how it is translated into the authorizing of some to dominate and the willingness of others to comply. As Sending suggests, answering this question requires shifting from a conception of domination and subordination that relies on exogenous or prior claims to authority or legitimacy and instead asking "on what grounds recognition is sought and accorded from others, and in particular how some actors are able to impose the evaluative criteria that others are compelled to seek recognition in accordance with."[401] And so, while recognition is a common imperative it is at the same time a site of contestation and struggle, as actors bring to bear the particular volume and combination of capital they are able to claim within the field so as to determine *what it means to be recognized*, and on *what terms recognition is to be granted*.

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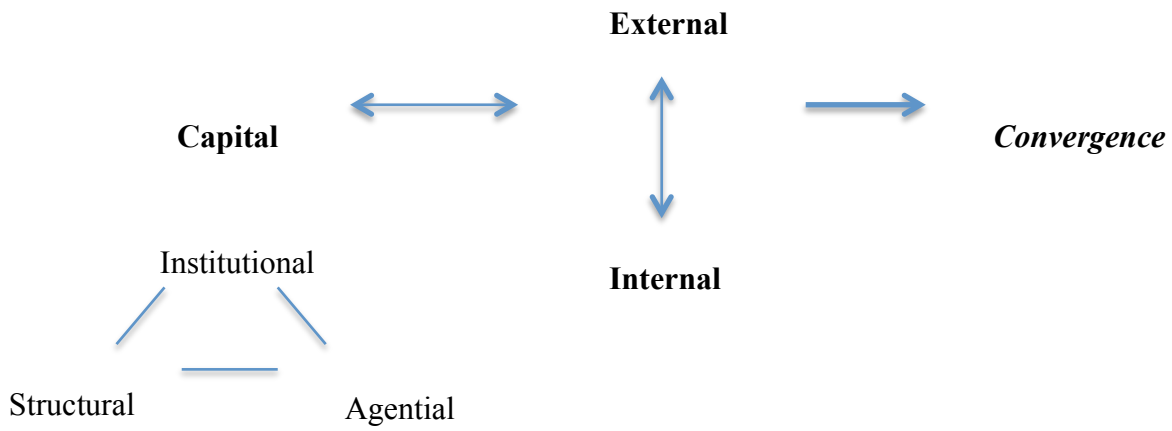
[398] http://www.conferenceboard.ca/press/speech_oped/15-01-02/canada_is_still_under- investing_in_its_cities.aspx. Note that the World Economic Forum estimates the global infrastructure gap at roughly $1 trillion USD per year, Available at: http://www.weforum.org/news/new-report-provides-blueprint- close-infrastructure-financing-gap
[399] Sassen 2001; Taylor 2005
[400] UN Habitat 2009, p. 14. See also Bird 2001
[401] Sending 2015: 7-8

Figure 4.1. Schematic of Field Theoretical Conceptual Framework



4. Authority, Power and Producing Convergence

Conceptualizing the C40 as a governance field can help shed light on how the nominal egalitarianism that defines such voluntary networks is just that, and illustrate how, in practice, there are internal hierarchies that exist and have meaningful effects in terms of why convergence is present at some times and in some places and not in others; whose interests and ideas are ascendant and whose are marginalized. Accepting that novel governance fields like the C40 have an interest in not only differentiating, but also in securing recognition, from extant governance fields renders clear the presence of a functional imperative for internal asymmetry. Put another way, the C40 requires some force capable of producing internal order and creating enough centripetal force to overcome the centrifugal impulse that impedes the collective capacity of all voluntary governance initiatives.[402] This has important implications, since it suggests that the legitimacy of actors is not be what really matters. As Sending suggests, there may not be unanimity with respect to *who* should have authority yet "some actors do have more resources (capital) than others to impose standards against which assessments of authority are made."[403] Some actors, in other words, are able to make more credible claims with respect to securing external recognition than are others.

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[402] Toly 2008
[403] Sending 2015: 39

As noted above, this is not a simple matter of equating more capital with more power since no single source of power is necessarily dominant or efficacious within and across particular fields. As in Baldwin's classic critique, power is not necessarily fungible across different settings, contexts, or issue areas.[404] Actors do bring with them various sorts and sources of capital as they enter novel fields, yet these matter only insofar as they are accepted and acknowledged. Capital is multi-faceted yet its conversion into power depends on the particularities of the field itself at particular points in time and on the ability to credibly secure (or claim to secure) external recognition for the field as a whole.

Employing the conceptual language and tools of field theory thus offers a means of appreciating the extent to which it is neither coercion, consent, nor contract but rather a sort of "legitimate domination"[405] that undergirds the capacity to hold the field together. As Sending suggests, "[d]ominated or subordinate actors defer to the dominant *not* because of coercion or because of the incentives offered, but because dominated actors" in essence accept "the rules or standards against which all actors are evaluated."[406] In other words, field theory offers a distinct starting point for thinking about the mechanics of power relations in the C40. Power with and power over bleed into one another such that domination within the network operates through the implicit consent of the dominated – what Guzzini refers to as "internalized acceptance"[407] - as they adopt unconsciously the criteria, understandings, and objectives of the dominant in the pursuit of recognition and inclusion.

Specific to the C40, cities initially joined together under the generic imperative of securing a role as (and accordingly the resources required to be) global climate governors. United around this generic objective, participants in the novel field nonetheless engaged in contestation and competition over the ability to claim and wield the power to determine what would be required to achieve recognition as legitimate, authoritative, or appropriate within the field.[408] Such power is neither overt nor explicit. It rests, instead, on the resources (the volume and combination of

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[404] Baldwin 1979. see also Guzzini 2012: 80
[405] Guzzini 2012: 86
[406] Sending 2015: 33
[407] Guzzini 2012: 86
[408] Bourdieu (2000) refers to this as symbolic capital, a usage that I avoid here in order to reduce conceptual confusion.

capital) upon which individual actors are able to draw[409] and the credibility of the claim that external recognition (and associated benefits) can be secured and granted through the adoption of particular norms and practices.[410] The interests or ideas of some actors are thus, as a result, "*misrecognized* as the rules or standards against which all actors are evaluated."[411]

Domination and complicity are thus co-constitutive, the power of the dominant itself a product of the willingness of others to be dominated, and subordination is premised on the ability to link a particular configuration of field nomos to the benefits associated with recognition. What this means, in practice, is that dominant actors are able to set the terms on which recognition is both pursued (externally) and granted (internally). They are able to "impose their own categories as authoritative for the field" and thus they are in a position to "impose recognition" on others.[412] And yet, since domination and complicity do not necessarily result from a process of norm internalization or socialization[413] – since there always remains a space between field structures and individual habitus – the power to bind domination and complicity is unavoidably contingent if often highly stable and persistent.[414] Domination, insofar as it rests on a belief in the link between particular standards of behavior or evaluative criteria, is fragile and can be unsettled if the promise of recognition remains unsatisfied or alternative terms of recognition are put forth.

4.1 Bringing the Pieces Together

Applying field theory, as set out above, leads me to propose two analytic and explanatory propositions. It suggests that only those actors able to successfully claim a combination of institutional, structural, and agential will have the authority needed to produce convergence in the C40 field. A combination of capital is thus proposed as a necessary condition for norm convergence. To evaluate such a proposition indicates the need to situate actors of various sorts (cities, ENGOs, financial institutions, management consultancies, philanthropic organizations) relative to one another within a governance field as a function of their respective ability to claim sources of institutional, structural, and agential capital. Doing so, in the case of the C40, provides

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[409] Sending 2015: 39
[410] Friedman 1990, p. 64. See also Sending 2015: 27
[411] Sending 2015: 33 – my emphasis
[412] Sending 2015: 33
[413] Finnemore & Sikkink 1998
[414] Bigo 2011; cf. Hopf 2010

a means of assessing how cities and other field participants are oriented with respect to one another, identifying which actors have access to multiple sources of capital and which do not, and ascertaining whether or not there is a relationship between observed patterns of convergence, contestation, and clustering and the presence of particular configurations of actors within the field.

Such a process is useful in three distinct ways. First, it can help to identify the internal ordering of the C40 field in terms of how actors within at are positioned relative to one another. This can be used to engage in both synchronic and diachronic mapping of relational positioning in the C40 field, giving a sense as to how actors occupy the field at specific points in, as well as across periods of, time.[415] Mapping the field, heuristically, along the three dimensions of institutional, structural, and agential capital offers a means of moving beyond simple presumptions of North-South asymmetry or expectations that relational centrality necessarily equates to power and influence, by linking the ability of any one actor, or combination of actors, to combine meaningful amounts of all three sources of capital at particular points in time to the presence of particular patterns of convergence or field consolidation.

It further opens analysis up to the simultaneous processes of constituting *and* claiming the three types of capital. As noted above, what counts as capital within any given field is neither objectively given nor universally pre-determined, but rather emerges through process of social construction and contestation. Thus while actors within the C40 field can be plotted relative to one another at particular points in time with respect to the type and amount of capital they are able to claim, it is imperative at the same time that the analyst reflect upon, and remain sensitive to, what counts (or is counted as) institutional, structural, and agential capital. None of these are givens, and as in Calvinball the rules can be changed once the game is well underway.[416] Analysis must, in other words, reflect on the manner in which capital can be used to challenge, or reinforce, what counts as capital. This points, as well, to the contingency of power and influence

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[415] I employ the term "mapping" in a loose sense, here, as a means of signaling the need for sensitivity to the relational positioning of actors within a field as a means of assessing the respective capital each is able to claim rather than quantitatively positioning actors within a specified field matrix. The latter, however, would offer an interesting foundation on which to develop a comparative framework and may be amenable to the fuzzy-set methods as developed in Ragin (2000)

[416] Calvinball: a game invented by Calvin (of Calvin & Hobbes cartoon series) wherein you make the rules up as you go along.

within governance fields like the C40, whereby particular configurations of institutional, structural, and agential capital may come together and then pull apart. At the same time, such contingency does not necessarily result in instability. Actors, individually or in combination, can employ capital to specify and strengthen field nomos. This process of field strengthening offers a means of accounting for continuity in terms of what counts as capital, and in what ways governance is oriented, organized, and practiced.

Lastly, it raises the proposition that we might think about the three sources of capital not only as empowering resources but also as objects of desire for actors within a field. Recall that actors within a governance field not only compete over what counts as capital, they compete for a greater allocation *of* capital within a field. All actors in a field, in other words, desire more structural, agential, and institutional capital. Accepting this proposition leads to the expectation that power and influence are likely to rest on the ability of actors to effectively link the possibility of increased access to structural and agential capital (from outside the field) to adoption of, and adherence with, particular norms and practices within the field. Here we see, in effect, a means of placing the mechanism of recognition into the broader context of field dynamics.

Thus the role of recognition. My argument, in brief, is that the ability to secure external recognition provides the key link between the capital claimed by particular actors and their ability to produce convergence within a field (by setting the terms upon which recognition is granted). Only those actors that can secure, for the C40 as a whole, recognition as legitimate and authoritative global governors (and thus the associated existential and material benefits) will have the authority to secure the complicity of actors within the field, in the form of convergence around a particular set of governance norms.

This proposition reiterates the importance of inter-field dynamics, for my argument is that recognition serves as a bridge in the C40 between the capital claimed by particular actors, external claims vis-à-vis broader governance fields, and the internal production of convergence and order. The ability to produce norm convergence in a field – to give substance and strength to field nomos - rests on the presence of particular actors who are able to credibly claim the ability to secure external recognition so as to authorize the capacity to determine what “counts as” recognition within the field. Herein lies the capacity to bridge the span that otherwise divides the

allure associated with voluntarily pursuing "power with" one another and the requisite "power over" needed to scale barriers that otherwise stand in the way of both coordination and collective action. In this manner it is possible to make sense of the imperative or interest of actors in according to, or complying with, the standards established by those in positions of power within the field. The credible claim to be able to secure external recognition gives such actors the ability to establish the "evaluative criteria" upon which actors/actions are deemed proper, desirable, or effective within the field[417] thus shaping and strengthening the normative-cognitive parameters – what is normal and what is not – of field nomos.[418] It represents the process through which governance operates within fields like the C40.[419]

Recognition also provides a conceptual tool with which to identify "which actors pays [sic] the price for the semblance of control and sovereign agency on the part of those that construct categories through which to govern."[420] Such is the phenomenon of "misrecognition" wherein the desire to be recognized is thus converted into the willing complicity or passive acceptance of someone else's terms – to *mis*recognize the interests or objectives or ideas of others as representative of one's own.[421] And yet, while misrecognition connotes a relationship of domination it avoids structural determinism as well as explicit coercion, as compliance may be tactical or habitual.[422]

The capacity to credibly claim the ability to secure recognition and the corresponding ability to establish the terms upon which recognition will be granted, is a subtle form of power, one that operates in what Allen refers to as the "quieter registers"[423] that constitute Lukes' third dimension of power.[424] Power, in this case, operates on actors not through the *structural* effects of collectively shared beliefs with respect to what is possible, what is normal, what is acceptable, but rather through the *structuring* effects of the promise/desire for recognition. The latter serve

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[417] Sending 2015
[418] Epstein 2013: 171
[419] Sending & Neumann 2006: 188
[420] Sending 2015: 181

[421] Steinmetz 2008
[422] Friedman 1990: 64, quoted in Sending 2015: 27; cf. March & Olsen 1998
[423] Allen 2010
[424] Lukes 1974

as a bridge between a strengthened and specific field nomos and the complicity of actors in accepting and adopting particular norms and practices as their own.

The structuring effects of field nomos, in other words, do not simply "exist" *ipso facto* from the moment the new field is constituted but rather they are constructed and invested with structuring capacity by particular actors who are able to bind the promise of recognition to the obligation of complicity.[425] Nor is the ability to set the conditions on which recognition is granted, and thus impose order upon the field, possessed, *ex ante*, by any particular actor. It emerges, rather, in the shared belief or acceptance that *some actor(s)* are more capable of securing such recognition than are others, and a corresponding willingness to accept *their terms* (as embodied in the particular order that they impose on the field through the specification and strengthening of its nomos) rather than those put forward by others.[426]

5. Applying a Field Theoretic Approach

Employing field theory to the domain of world politics presents a number of challenges, not least among them the problem of detecting field boundaries, specifying what counts as capital, and finding a way to identify markers of habitus and nomos.[427] Applying field theoretic concepts to a novel empirical domain such as the C40 only serves to further complicate matters. In this section I set out the basic precepts that guide my effort at "doing" a field theoretic analysis of norm convergence in the C40.[428] This constitutes the second half of the research design, the first of which (oriented towards identification of the specific configuration of norms that constitute the field nomos) was presented in chapter 2. Here I set out the qualitative methods employed to identify: the dispositions and positions of various actors within the C40 field, as well as efforts undertaken by various actors to claim capital within the field and to secure and grant recognition as a means of producing norm convergence.

In what follows I remain guided by an abductive approach, moving back and forth between immersion in primary data and field theoretic concepts (habitus, nomos, capital, and

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[425] Bourdieu 1990: 138
[426] Wacquant 2005: 134, in Sending 2015: 36
[427] Pouliot & Merand 2012
[428] In so doing I draw especially on Leander 2008

recognition), and the goal of setting forth a convincing and compelling causal narrative. Causal narrative offers a means of understanding how observed social realities came to be as they are, and not otherwise and as such is a useful tool for the task at hand.[429] I set aside, in other words, the possibility of uncovering capital T "truths" and instead orient my efforts towards providing a rigorous and empirically-grounded story that can account for patterns of convergence around a particular configuration of governance norms. In this light, the tools set out below are employed so as to illuminate and explain the production of norm convergence in the C40 over space and time. As noted above, my investigation thus brackets out how field nomos interacts with, is perceived or experienced by, and impacts the habitus of particular actors, focusing instead on actor efforts to give shape, substance, and strength to field nomos (and thus produce the patterns of norm convergence identified in chapter 2).

The first element in my application of a field theoretic approach is to combine synchronic and diachronic modes of analysis, holding in tension the temporal specificity of the field at particular points in time and the dynamic evolution of the field across time.[430] The former is essential since it is by "…analyzing the formation of a field—including how its boundaries, logic, and hierarchy were established" that we can " yield important insights into how and why some groups have emerged with a dominant position relative to others."[431] The latter equally so since fields are neither stable nor are they static structures – they are, instead, constituted by reproduction *and* struggle, consent and domination.[432] To do so I have set out to study the C40 from the point of inception in 2005 up to the present (analysis was concluded in 2014), thus covering the full span of its development and evolution. More specifically, such an approach allows me to map what Kauppi refers to as the "social topography"[433] of the field - who participates and what habitus do they bring with them into the field, what sort of capital they attempt to claim, what capital they effectively do claim – at particular points in time, and across the 2005-2014 time span.

I employ, as a result, process tracing as a means of conducting my analysis, and a means of linking the claims that actors make within the C40 field (to capital, to recognition), the habitus

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[429] Pouliot 2007
[430] Sending 2015: 31
[431] Sending 2015: 38
[432] Leander 2011: 298
[433] Kauppi 2003

that they carry with them into the field, and the ability to infuse field nomos with specific content. Process tracing, while an analytic method premised on the "unfolding of events or situations over time", must be combined with careful descriptions of those events or situations "at one point in time" if it is to be effective.[434] It requires "good snapshots", as Collier puts it, at a "series of specific moments" so as to allow for causal analysis of change (or the absence of such change) over time and space.[435] Moreover, process tracing provides a method for assessing the viability of the proposition set out above with respect to recognition as a linking mechanism through which capital is converted into a capacity to produce norm convergence in the C40 field.[436] Such an approach is amenable to a combination of quantitative (through which norm patterns were identified in chapter 2) and qualitative (interviews, primary document analysis, participant observation) data and analysis. The former serves as an empirical foundation upon which I base the claim of norm convergence in the C40; the latter the bedrock upon which I set out to describe and explain the presence of such patterns.

Given that my objective is the production of norm convergence, and the proposed relationship between capital and convergence, I limit my investigation to those actors deemed most likely to successfully claim various sorts of capital in the C40 field.[437] Analysis thus came to focus on those actors who have engaged actively in efforts at shaping the field, and who have held the position of C40 Chair (London, Toronto, New York) or claimed other sources of institutional capital (the Clinton Climate Initiative, the C40 Secretariat, Bloomberg Philanthropies).[438] In order to gain an alternative perspective on field dynamics, two additional cities (Sao Paulo, Johannesburg) were selected on the basis of their long-standing participation in the C40 (both joined in 2005) and involvement, as well as their distinctive geographical, economic, political, and institutional characteristics as compared with the cities set out above. I also engaged various C40 stakeholders (partner organizations such as the CDP and World Bank; city officials from other C40 cities) so as to both broaden my perspective and "check" the findings generated from

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[434] Collier 2011: 824
[435] Collier 2011: 824
[436] Bennett & George 2005: 206; See also Checkel 2008
[437] This determination was itself arrived at abductively, following the collection and analysis of data presented in chapter #2 and a preliminary investigation into actor participation and relations in the C40
[438] These actors were also revealed, through primary network analysis, as centrally positioned within the social matrix of C40 relations

other sources. In selecting this set of actors as the foci of my primary research and analysis I was thus able to "see" the C40, and the processes of convergence and contestation, from various perspectives and points of view (of those involved in the production, and contestation, of norm convergence and of those who experienced these processes).

Practically speaking, I conducted three types of research in the service of these goals. First, a total of 41 semi-structured interviews were conducted, between 2010 and 2014, with key officials (past and present) from London, Toronto, New York, Sao Paulo, and Johannesburg, as well as the C40, CCI, CDP, and World Bank.[439] These interviews allowed for insight into the origins and development of the C40, and were oriented towards uncovering the relationship between perceptions of the C40 over time and space (what did the C40 mean to you, what impact did it have, what were its strengths/weaknesses) and self-perceptions of the C40 (what was the C40 trying to do, what were its objectives, how did it approach and perceive of cities and the broader domain of global climate governance). Secondly, interviews were supplemented by exhaustive primary and secondary document analysis, including public reports and statements, C40/city/stakeholder press releases and websites, C40 research reports, city climate plans and strategic documents, and internal city memos. These were analyzed abductively so as to specify the particular habitus that actors brought with them into the C40 field (as identified by the particular practices adopted or endorsed by cities, and the values embodied, in such documents[440]), the evolving nomos of the C40 field, and the interaction over time between actor habitus and field nomos. These were combined, lastly, with participant observation at the 2014 C40 Summit held in Johannesburg, at which I attended by plenary summits, workshop sessions, and informal network gatherings. Doing so provided a means of assessing the status of the field circa 2014, and more specifically the presentation and reproduction by a variety of actors (city representatives, C40 officials, various stakeholders) of specific norms around which the field could be seen to have converged.[441]

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[439] All interviews were conducted under the condition of anonymity so as to adhere to, and ensure, considerations of confidentiality

[440] I follow Leander (2008: 22) in using statements or quotes from specific individuals as indicators of the group habitus (or what could be referred to as the collective habitus of corporate actors such as cities, private organizations, and so on)

[441] Evidence gathered from each of these three primary sources were triangulated as a means of cross-checking, assessing, and enhancing both the rigor of analysis and validity of findings. On triangulation see Lamont 2015. On rigor in qualitative and interpretive research in political science see Yanow & Schwartz-Shea 2006.

Primary data gathered through each of these three methods was organized into descriptive narratives for both the actors set out above and the field as a whole. Data was parsed into identifiable claims advanced with respect to: various sources of capital (efforts to claim and deploy institutional authority, expertise, global stature, recognition as an innovator or effective governor, material resources, and so on as identified by both the claims made and the perceptions of such claims by other field participants) put forward by particular actors; the particular ideas, identities, and practices – or habitus - that actors brought with them into the C40 field (as identified by both practices adopted or endorsed in local action plans, policy statements, press releases, and prior initiatives); efforts to secure external recognition as a means of claiming authority (through specific claims regarding legitimacy or access to particular benefits from external audiences) and as a means of imposing order internally (through specific terms upon which recognition would be attained). The various claims to capital advanced by actors within the field were cross-checked against independent sources so as to ascertain the relationship between such claims and their underlying basis.[442]

In combination these three methods provide a means of process-tracing claims to capital and authority, efforts at securing and imposing recognition, and identifying the relationship between field nomos and actor habitus at particular junctures and across time and space. They also offer a means of specifying instances of contestation within the field (as between divergent claims to capital, the interaction between diverse actor habitus, and distinct recognition claims) and to assess when, how, and why these were resolved. Employing these tools, I develop, over the course of chapters five and six, a causal narrative of coming-together, contestation, and convergence in the C40 from 2005 to 2014. I deploy the conceptual tools set forth above to see whether they offer a useful means of accounting for the presence, patterns, and particular substance of convergence in the C40. In chapter five, I focus my attention on explaining why the C40, from 2005 to 2010, exhibited minimal convergence, and hone in on the presence of internal contestation between actors unable to claim enough capital so as to secure external recognition and produce internal convergence. In chapter six I pick up the story and assess why, and how, the

[442] For instance, claims to various sorts of capital were triangulated against independent, third-party measures: structural capital as indicated by global city rankings (GaWC 2008, 2012; AT Kearney 2012), claims to performative capital were assessed against rankings of global cities with respect to climate and environmental governance (Siemens 2009, 2010, 2011a, 2011b), and claims to agential capital were assessed against city GDP rankings (Brookings 2010, 2012)

C40 shifted between 2001 and 2014 from contestation to convergence around a particular configuration of governance norms comprised of pluralistic participation, liberal environmentalism, agential urban governance, and globally accountable urban governance.

6. Conclusion

To "see" the C40 as a governance field is to open analysis up to the complexities of trans-border coordination undertaken voluntarily by a multitude of actors operating beyond the boundaries of their formally defined authority. It is to see the C40 as a field of forces – a configuration of norms and practices, or nomos, that establish how a particular object can, and should, be governed - and to recognize that the effects induced by such a field are a function of the ability of some actor(s) to give the field shape, specificity, and strength. Field theory, as set out above, offers a conceptual apparatus with which to identify how power is allocated in a field, the different wavelengths along which it works, and the effects that it has in terms of achieving (or delimiting) convergence and field consolidation. But can it do what other explanatory approaches could not? Can it provide an adequate account of convergence in the C40? Employing field theory as a means of doing so takes this analysis into untested waters. The remainder of this dissertation will set out to assess whether, and to what extent, it stays afloat.

Chapter 5
Constituting the Field, Contesting its Boundaries: The C40 from 2005 to 2010

1. Introduction

From 2005 to 2010 the C40 was a city-network with global profile and a diverse membership comprised of large cities from around the world, but one with little demonstrated capacity to generate meaningful collective action or effect. It was beset by a persistent gap between leaders and laggards, and suffered an inability to transition splashy public pronouncements, novel partnerships with private sector organizations, and small-scale pilot initiatives into broad, network-wide uptake.[443] While we know the story to have a different ending, and the C40 to have overcome such limitations, in this chapter I set out to explain why contestation was the dominant theme over this period of time, and why the C40 failed to achieve convergence around a clearly elaborated configuration of climate governance norms and practices.

That contestation, and not convergence, prevailed during these years is, after all, somewhat surprising. There were actors within the C40, such as the Clinton Climate Initiative (CCI), the World Bank, and cities such as London, Tokyo, and Toronto, with global stature, material capacity, and demonstrated leadership in local climate governance. There was, in addition, ongoing failure in the broader field of global climate governance as manifest most evidently by the disappointing inability of states to come to agreement on a comprehensive international climate treaty at COP15 in December of 2009. And yet, in spite of this, the C40 was only able to consolidate around generic norms of pluralistic participation and liberal environmental governance – norms already well-entrenched in the extant fields, respectively, of networked urban climate governance and global climate governance but that provide precious little guidance as to *how* cities were to be global governors.[444]

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[443] The CCI/C40 Energy Efficiency and Buildings Retrofit Programme and Electric Vehicle Initiative offer two illustrations.

[444] The governance context in which the C40 emerged was, after all, already structured around particular governance norms. Most importantly for this analysis are the norms of pluralistic participation (around which cities had

As such, this chapter offers a first test of the validity and credibility of a causal narrative generated through application of the field theoretic framework set out in the preceding chapter. To do so I develop a narrative of the C40 as a governance field, one comprised of actors who bring with them into the field diverse habitus (ideas, interests, and practices) with respect to the governance of climate change, and who seek to resolve dissonance between such habitus and the emerging field nomos (the configuration of governance norms that delimit what is to be governed, how, and to what end). Specifically, I set out assess how application of the concepts of capital and recognition offer a means of both illuminating, and accounting for, the presence of contestation over governance norms and the inability of any particular actor (or set of actors) to produce norm convergence in the C40 between 2005 and 2010. As compared with standard constructivist models, which emphasize norm diffusion and convergence but downplay the contested nature of norm convergence, a field theoretic account provides the tools with which to recognize the politics taking place as actors with divergent ideas, understandings, and orientations engage with one another in novel socio-political contexts in an effort to construct a collective endeavour in the absence of clear authority relations or institutional rules that set out how/who has the capacity to determine the substance and content of collective effort and action. Field theory thus sensitizes analysis to the *political* dimension of norm convergence in the C40, and the struggles taking between actors seeking to shape the normative content of the field in particular ways and thus produce convergence around particular governance norms.[445]

Thinking the C40 as a governance field thus orients analysis towards those political struggles taking place "even where different actors or groups of actors claim that they are working in consensus,"[446] and of linking the inability of any particular actor(s) to produce convergence around a particular set governance norms to the dynamic relationship between securing external

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converged throughout the 1990s and early 2000s as a result of the efforts of first-generation city-networks such as ICLEI and its Cities for Climate Protection initiative) and liberal environmentalism (around which convergence emerged in the 1990s). On the former see Betsill & Bulkeley 2003; on the latter see Bernstein 2001

[445] This is a major advantage gained through application of a field theoretic approach, in that it directs attention to and provides a means of explaining the interaction of competing norm variants or interpretations, as compared with models of norm evolution that focus on the interaction between relatively static new and extant norms. See Krook & True 2012 for an elaboration of this critique.

[446] Okereke et al 2009: 65; cf. Slaughter 2013

recognition for the field as a whole and establishing the terms upon which such recognition is granted internally to field participants. In the C40 field contestation is a function of the inability of any particular actor(s) to successfully claim, have recognized, and combine enough capital so as to induce others to adopt as their own a particular set of governance norms, and thus give specificity and strength to field nomos.

The chapter proceeds by first placing the C40 into the broader context of climate governance fields within which it was created (and to which it responded). Recall that, as noted in chapter 4, fields emerge in response or opposition to, and interact with, one another. This leads to tension between retaining continuity versus challenging those governance norms and practices entrenched in extant fields. Developing a causal narrative of C40 formation is undertaken so as to identify how such tension played out circa 2005, whereby the C40 was faced with an imperative to reproduce norms of pluralistic participation entrenched in the field of networked urban climate governance, and liberal environmentalism as entrenched in the field of global climate governance. It also provides a means of illuminating the normative space[447] in which contestation within the C40 field would soon emerge, with respect to how the generic norms of pluralistic participation and liberal environmentalism were to be enacted or operationalized – addressing what, in other words, it should mean for cities to "participate" in global climate governance.

The remainder of the chapter provides an account of this period of contestation, and an explanation for why it remained unresolved (and thus the field nomos remained weak and poorly specified). The chapter first describes two competing norm variants with respect to how cities should govern climate change; two competing efforts, in other words, to produce convergence around a particular configuration of governance norms. The protagonists associated with each – the Clinton Climate Initiative and the C40 Secretariat/Chair – are subsequently discussed in detail so as to identify the specific ideas and interests that they pursued (their respective habitus), the power (the capital claimed by each) through which they attempted to produce norm

[447] I use this term to capture the ambiguity with respect to how cities should govern climate change, within the broad remit that they "should" do so and subject to the structuring parameters of liberal environmentalism. Early city-networks such as ICLEI had largely avoided efforts to establish such specific governance norms, choosing instead to allow flexibility with respect to how cities should govern climate change in order to increase convergence around the norm that they should govern at all. See Betsill & Bulkeley 2003, Bulkeley 2010. On norm ambiguity and convergence see Krook & True 2012

convergence in the C40 field, and why neither was able to bridge the divide between securing external and internal recognition so as to overcome contestation.

2. A Field is Forged: The Creation of the C40

The C40 was formed in the context of two extant governance fields.[448] On one hand, it was forged in response to the perceived failings of climate governance circa 2005, failings that created a considerable degree of "friction"[449] or "fragmentation"[450] and opened up space (and demand) for both alternative governance initiatives as well as contestation of prevailing governance norms. At the same time, the C40 was created in response to the perceived limitations of extant instances of networked urban climate governance. Cities, at this time, were engaged in "lots of parallel action, but [there was] no real interaction and learning between city officials….and no active diffusion between cities."[451] Initiatives like ICLEI were widely seen by city and other stakeholders interviewed for this project to have "failed"[452] by 2005, so much so that a former C40 city Mayor suggested that the formation of the C40 was a direct response to these perceived shortcomings.[453]

Such friction opened up space for novelty and innovation, as what was once deemed normal (that cities were to participate in global climate governance through regional initiatives, that information was to be shared through the hub-and-spoke structure of networks like ICLEI/CCP, that cities were addenda to the inter-state effort and subordinate to it) became open to challenge.[454] It is in this context that that the C40 as a new field was created.[455]

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[448] I use the concepts of a networked urban climate governance field to refer to the full universe of city-networks engaged in climate governance (ICLEI, Metropolis, Covenant of Mayors, Energie-Cites, Climate Alliance) and a global climate governance field to capture the meta-field within which all instances of global climate governance can be organized. One could, of course, elaborate many more than these two governance fields. However, for the purpose of this analysis, these two are the most relevant with respect to accounting for dynamics of norm reproduction, challenge, contestation, and convergence that take place within the C40 field between 2005 and 2014.
[449] Hoffmann 2011
[450] Biermann et al 2009; see also Zelli & Pattberg 2013, Pattberg 2014
[451] Interview with former C40 City Mayor, New York, November 16, 2011
[452] Interview with former C40 City Mayor, New York November 16, 2011; Interview with former senior official, ICLEI Latin America, Sao Paulo, April 19, 2013; Interview with former GLA senior official, London, October 28, 2013; Interview with former Sao Paulo city official, Sao Paulo, April 18, 2013; Interview with Johannesburg city officials, Johannesburg, February 10, 2014; Interview with former Office of Long-term Planning and Sustainability officials, New York City, New York, November 10, 18, 2011
[453] Interview with former C40 City Mayor, New York, November 16, 2011
[454] Fligstein 2001

The proximate force responsible for the creation of the C40 was a group of individuals working within the Greater London Authority (GLA).[456] The city sought to augment its claims for greater autonomy in domestic politics by promoting the national and *global* leadership of London on the issue of climate change.[457] The Mayor at the time – Ken Livingstone – was convinced that there was political capital to be had by gaining recognition for the many ways that London was already a global leader in local climate governance.[458] The city leveraged its global stature and prior relations with other global cities to attract cities to the initial 2005 C20 Summit.[459] The annual G20 summit meeting held in Gleaneagles, Scotland in 2005 created a geopolitical opening that London was further able to exploit.[460] From the outset the C20 (as it was initially called) was designed to mirror the G20 – cities were invited on the basis of representing each of the G20 member countries[461], the intent and objectives were linked explicitly to those areas in which states were deemed to be failing, and the C20 emphasized the extent to which cities were already engaged, and could increasingly augment the inter-state project of climate governance.[462]

The C40 was intended from the outset to challenge prevailing norms and practices. As a former C40 official put it, the "strategy of C40 Summit was to…illustrate an *alternative way to "do"*

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[455] Bulkeley (2010) captures this phenomenon in different terms as an epochal transition from *first* to *second* wave urban climate governance, emphasizing the shifting scope, ambition, and orientation that this transition has entailed.
[456] The GLA is the governing body for the metropolitan London created in 1999 to provide an overarching authority for the entire region.
[457] Interview with former GLA senior official, London, October 29, 2013
[458] London was widely perceived circa 2005 as a leader in local environmental governance as a function of the congestion system that it implemented in 2003 and adoption of the 2004 London Plan.
[459] Interview with former GLA official, Winnipeg, September 10, 2011. See also Bouteligier 2012; Acuto 2013a
[460] An additional, if contingent, contributing factor was the 2012 Summer Olympics and the impact this had in contributing to the unsettling of local habitus and opening up space for identity reconfiguration in New York and London. Both cities (along with Paris, Madrid, and Moscow – all future C40 members) submitted bids in 2004 for the 2012 games (the selection of the London bid was made in summer 2005). This created both an opportunity and incentive for both cities (along with other shortlisted cities) to develop sustainability, transportation plans as part of the bid package. The results of the bid process served to lock London into its plans, and created a window for sustainability and climate engagement in New York. Interviews with former OLTPS officials, New York, November 8, 10, 18, 2011. See also Lauermann 2013

[461] London, Barcelona, Beijing, Berlin, Brussels, Chicago, Curitiba, New Delhi, Madrid, Melbourne, Mexico City, New York, Paris, Philadelphia, Rome, San Francisco, San Paulo, Shanghai, Stockholm, Toronto, and Zurich
[462] Interview with former C40 official, Oxford, October 24, 2013; Interview with former C40 city Mayor, New York, November 16, 2011. See also C40 2005

global politics"; a "bottom up approach"[463] based on "demonstrating [the] capacity of cities to act, and [their] penchant for *acting rather than talking or negotiating.*"[464] The C40 would lead by example and drive change in the broader world – in other cities and at upper levels of government[465] – by "taking decisive and radical action."[466] In making claims such as these the C40 and its member cities, as Acuto suggests, sought to "problematize themselves as key elements (obligatory passage points) in the 'race' against climate change, highlighting how the issue at stake – environmental security – puts them is [sic] a particular position vis-à-vis states and other more traditional actors."[467] In this light, cities set themselves to a common task and established the joint, if decidedly ambiguous, goal of working "together to lead efforts to reduce greenhouse gas emissions and adapt to climate change."[468]

This common cause serves to account for the presence of some measure of convergence between 2005 and 2010. The C40 was not beset by internal chaos – it could not have survived if it were – nor did it represent a wholesale or radical departure from the prevailing configuration of governance norms.[469] Instead the field, as illustrated in chapter two, conformed wholeheartedly with the deep structuring norm of liberal environmentalism[470] such that "[c]ity and business leaders…recognize the economic benefit of taking climate action."[471] As per a former city official, there is a basic presumption in the C40 that "economic growth, improving the quality of life and improvements to the environment are all the same thing."[472]

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[463] Volans 2010 – my emphasis
[464] Interview with former C40 official, Oxford, October 24, 2013 - my emphasis
[465] Interview with former C40 city Mayor, New York, November 16, 2011
[466] Gavron 2008: 21
[467] Acuto 2010: 430
[468] C40 2005

[469] The C40, which has "subscribed to much of the dominant environmental governance discourse that underpins the international response to climate change" (Acuto 2013b: 9) can be usefully contrasted with the International Solar Cities Initiative (ISCI) in this respect. The latter set out to contest not only who governs climate change but also how climate change should be governed, organized as it was around the principle of contraction and convergence and thus rejecting the norm of liberal environmentalism. ISCI was, prior to disbanding, incapable of gaining recognition nor of attaining convergence around its proposed configuration of norms. On ISCI see Toly 2008.
[470] Bernstein 2001
[471] C40 2007
[472] Rohit Aggarwala, as quoted in Revkin 2010 - my emphasis.

And yet in spite of a common cause the C40 lacked a substance of its own; it lacked a clearly defined configuration of norms setting forth how climate change was to be governed by cities, and by city-collectives like the C40. As illustrated in chapter two, the C40 remained, circa 2010, beset by an inability to consolidate around a common approach and orientation towards the task of climate governance. This chapters will explain why this was the case.

3. Contested Convergence in the C40: 2006 to 2010

As noted above, the inability to produce convergence in the C40 around a particular configuration of governance norms was not the result of a lack of effort. A variety of actors sought, over this period of time, to specify and strengthen the nomos of the field, close down the gap between nomos and the individual habitus of participating actors, and impose a degree of order on the field; to, in other words, produce convergence around governance norms with respect to what to govern, how to govern, and to what end.

While the diversity of actors participating in the C40 ensured a corresponding diversity of ideas and interests as to what the C40 should be, I have distilled these into two competing camps[473] and two associated protagonists: the CCI and the C40 Secretariat/Chair.[474] Nominally these two were supposed to be partners. The partnership between the CCI and the C40 was "*intended* to provide operational support for the network" but, as an interviewee put it, in actuality, "the C40 and CCI were *largely operating in parallel* with little coordination and limited communication."[475] Contestation between the two ran deep enough that "[t]he loosely coordinated system at times left city officials confused and employees of the groups working at cross purposes"[476] and as time went on "the two initiatives…began to experience some tension as the C40 started to assert a different set of ideas regarding what the network should be vis-a-vis

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[473] The two competing camps were identified through an abductive process of immersion in primary data (interview transcripts, primary documents, field notes) and the development of causal narratives. The presence and normative substance of the two camps emerged through an iterative process of coding primary data so as to establish the particular norms promoted and placing these into dialogue with the empirical patterns set out in chapter two.
[474] I treat the C40 Secretariat and Chair as a single actor here based on the close alignment between the two from 2006 to 2010. A third member of the C40 organizational structure is the Steering Committee, created in 2007. I have chosen to exclude it the subsequent discussion and analysis as research indicates it has not played an active role in either the creation or evolution of the C40 field.
[475] Interview with former senior C40 official, Oxford, October 24, 2013
[476] Anonymous quote from officials at CCI and C40 in Barbaro 2011

what the CCI was using it for.[477] Such statements are a first indication of active contestation ongoing between the two, with the CCI seeking to entrench in the field a specific configuration of governance norms and practices and the C40 Secretariat and Chair not only challenging CCI claims to authority but also putting forth a distinct alternative.

In the sections that follow I set out to provide a detailed description of each side of this struggle, detailing the particular interests and ideas (their respective habitus) that each brought into the field and from which each worked to produce convergence around particular governance norms, the various types of capital that each claimed so as to empower their efforts, and the manner in which each attempted to secure both external and internal recognition. In the concluding section I reflect on the relationship between the capital claimed by each side and the ability to deliver on the promise of recognition as they key to understanding why neither side was ultimately able to prevail.

3.1 Habitus

To understand the particular norms and practices around which the two competing camps attempted to produce convergence in the C40 it is necessary to identify the ideas, interests, and practices that they brought with them into the field, or the habitus of each.

3.1.1 CCI

The habitus of the CCI was, first and foremost, shaped by the prior organizational experience of its parent organization, the Clinton Global Initiative (CGI), in the field of AIDS/HIV governance. Working, since 2002, at the interface of private sector, government, and NGO organizations, the CGI helped negotiate price reductions for a variety of AIDS/HIV medications.[478] The CGI approached the problem from a market-barrier perspective, and helped develop a purchasing consortium that was able to cut the Gordian knot of low demand/under supply/over pricing and open up a virtuous cycle of unlocked demand, increased supply, reduced price. This experience created in the CGI a sense that they "had stumbled onto something bigger than an AIDS program." As Clinton stated in an interview conducted in 2007

[477] Interview with former CCI official, London, October 28, 2013
[478] Rauch 2007. See also Clinton Foundation, n.d.

> [t]he longer I've done this, the more I've become convinced that the AIDS drugs were just the tip of the iceberg—that basically there are a huge number of what I call public-goods markets that are disorganized, where the consumer knowledge is imperfect, to say the least, and parenthetically they're almost all underfunded. But if they were better organized and there was more demand for the service or product they were providing, the funding would be there. This is something we can do!"[479]

Clinton and Ira Magaziner (his second-in-command at CGI) felt that "the market-making model needed a second act, preferably bigger than the first and in a completely unrelated field. In late 2005, Clinton and Magaziner hit upon global warming."[480] The CCI carried with it into the C40 field in 2006 a set of ideas and practices oriented towards market-driven transformation and the use of joint procurement as a means of unlocking latent demand and driving down market prices. This "model" shaped CCI expectations as to how transformation could be achieved in climate governance and informed the practices that CCI was to pursue in the C40 field.[481] It led the CCI, for instance, to focus on "provid[ing] technical assistance and bargaining power to the participating cities…employing the *same model* it has used to lower the price of AIDS medicine for poorer countries."[482] It is also evident in the ideas that the CCI brought with it into the C40 field with respect to the problem of climate governance, such that "[w]hen it comes to climate change, the hurdles we face aren't technological, they're *organizational*."[483] This is a particular understanding of, and approach to, the problem of climate governance, one that evacuates the question of political struggle, resistance, or contestation and instead envisions the solution in apolitical, managerial terms.

A second relevant dimension of CCI habitus as it entered the C40 field was an emphasis on governing through a project-based, technology-oriented approach that envisioned cities as test

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[479] Rauch 2007
[480] Rauch 2007
[481] Rauch 2007
[482] CCI 2006 – my emphasis
[483] CCI 2007a – my emphasis

beds and sites of experimentation for novel, high-potential technologies.[484] The CCI sought to "get results quickly… make symbolic interventions, big announcements, generate public interest and produce political benefits" and "thought they could do so by coordinating cities in the procurement decisions and using collective purchasing power to drive changes in the market."[485] In this there lies, somewhat ironically, a deep sense of skepticism regarding the agential capacity of cities. Cities are from the very start understood by the CCI as complements to, or catalysts of, global climate governance rather than meaningful, autonomous governors.[486]

3.1.2 C40 Secretariat and Chair

The C40 Secretariat embodied, from 2006 to 2010, its own particular set of ideas and practices with respect to the objectives, approach, and practices of climate governance in the C40 field. Most importantly, the Secretariat, with a habitus heavily influenced by its tight link to the GLA[487] and to the C40 Chair between 2006 and 2010[488], saw the need for climate governance based on "open source" interaction, whereby cities would "demonstrate leadership by doing something, forging relationships with other cities, expressing a joint voice to other levels of government to demand more action, more investment, more autonomy."[489] Grounded in an essentially urban perspective, the Secretariat approached climate governance as a problem of "local resistance" and the corresponding solution in "us[ing] the network as a means of enabling cities to overcome local resistance and mitigating the risk of local climate governance action by demonstrating proof of concept in other…cities."[490]

The C40 Chairs, from 2005 to 2010, were GLA Mayor Ken Livingstone (2005 to 2007) and Toronto Mayor David Miller (2008 to 2010). Livingstone was not perceived as being deeply engaged with the issue of climate change, seeing the issue as a means of securing other local

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[484] Interview with former CCI offical, New York, November 18, 2011
[485] Interview with former CCI official, London, October 28, 2013
[486] This is perhaps most clearly stated in the CCI press release issued upon the formal announcement of the CCI/C40 partnership, in which the CCI admits, in a muted tone distinctly different from the assertiveness of the C40 circa 2014, that it is "unclear how much [the C40] initiative can achieve in the absence of broader mandatory limits on greenhouse gases." CCI 2006
[487] The Secretariat was created at the impetus of GLA officials, and was housed in the GLA Department of Environment up to 2010.
[488] Interview with former senior C40 official, Oxford, October 24, 2013
[489] Interview with former C40 city Mayor, New York, November 16, 2011
[490] Interview with former senior C40 official, Oxford, October 24, 2013

objectives such as social inequality and city services."[491] The habitus carried into the position of C40 Chair by Livingstone is thus tightly linked to the local context in which his ideas and interests were formed. A lifelong politician, deeply embedded in the partisan politics of the UK, Livingstone sought to establish autonomy and credibility vis-à-vis the national government, with collective efforts oriented more towards achieving local objectives rather than producing collective effects.

Toronto Mayor David Miller brought with him to the position of C40 Chair a similar set of ideas and interests, formed through his long experience in municipal politics in the city of Toronto.[492] While Miller was heavily engaged in the C40, and worked tirelessly to further the collective agenda[493] he brought with him a particular set of ideas as to what the C40 could, and should, be. Miller had a more symbolically-oriented approach such that the engagement of local governments in climate governance offered a means of demonstrating leadership through action, and collective city governance a means of sharing information and expressing a collective voice vis-a-vis other levels of government and demanding more action and more investment.[494]

In this both the Secretariat and Chair possessed a habitus that saw the objective of the field as augmenting city claims to more resources, authority, and inclusion in national and inter-state governance processes. Cities, in other words, were to be *symbolic* leaders testing out ideas, demonstrating viability, and catalyzing action by those with greater degrees of capacity.[495] The habitus of the Secretariat and Chair, from 2005 to 2010, was premised on the belief that cities *cannot* govern climate change collectively but rather can contribute to the efforts of other, ultimately more important, efforts.

3.2 Contested Efforts to Produce Norm Convergence in the C40

We now have a clearer, albeit stylized, sense of the protagonists. The two camps sought to bring specificity to the ambiguous field *nomos* of the C40 in different and distinctive ways; to give shape to deeper norms of pluralistic participation and liberal environmentalism; and thus to

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[491] Interview with former GLA senior official, London, October 28, 2013; cf. Bulkeley & Schroeder 2008: 10
[492] Miller's involvement in municipal politics in Toronto dates back to 1991.
[493] Interview with former city of Sao Paulo official, Sao Paulo, April 18, 2013
[494] Interview with former C40 city Mayor, New York, November 16, 2011
[495] Interview with former C40 city Mayor, New York, November 16, 2011; See also Bouteligier 2012

produce convergence around particular governance norms with respect to what was to be governed and how.

3.2.1 What Kind of Problem, What kind of Actor

At the most basic level there was deep disagreement and contestation over what kind of problem climate change was understood to be, as it pertained to cities and the collective urban initiatives like the C40. The CCI, on one hand, sought to have the problem understood as one of *market* blockage; a chicken-and-egg conundrum that served to block widespread uptake of a wide variety of transformative technologies. From this basic understanding, the CCI sought to position the C40 (and its member cities) as market makers; a collective capable of unblocking market demand, rewarding technological innovation and overcoming the irrationality of a fragmented market.[496] This is most clearly illustrated in the heavy emphasis placed by the CCI on the collective goal of "pool[ing] the buying power of cities in order to lower the prices of energy saving products and to accelerate the development and market deployment of new energy saving technologies."[497]

The C40 Secretariat/Chair pursued, on the other hand, an altogether different understanding of both the nature of the climate governance problem and the kind of role that cities (and the C40 collectively) should play as governors. The problem of climate governance, put simply, was one of *political* blockage at upper levels of government. This understanding is present from the outset, whereby the engagement by cities in a global enterprise is necessitated by the inability of states to overcome whatever it is (the influence of special interests, the irrationalities of political institutions, the absence of political leadership) that impedes meaningful engagement both domestically and in the international climate regime. “Cities act, while nations talk” as C40 cities loudly proclaimed at the 2009 Conference of the Parties (COP15) held in Copenhagen, Denmark[498] - but they act so as to get nations to stop talking! The challenge, with the problem

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[496] This approach is well illustrated in efforts by the CCI to push practices of quantification and standardization across the C40. A standardized platform for measuring local emissions was developed by CCI along with private sector partners Microsoft and software designer Autodesk and offered *ipso facto* to cities for adoption. This initiative – developed under the rubric of Project 2 Degrees – was ultimately abandoned in 2010 as a result of city resistance, thus underscoring and illustrating the presence of intra-field contestation.
[497] CCI 2007b
[498] C40 2009

thus defined, is to find ways of "unblocking" national governments; a problem to be approached through political leadership, innovative and tangible local action, and by demonstrating that such action can be politically as well as functionally rewarding.[499]

3.2.2 How to Govern

If there was deep contestation over what kind of problem climate change was, a second fissure cutting across the field emerged around how cities and the C40 should govern climate change. Stemming directly from the manner in which it sought to define the nature of the problem itself, the CCI pursued a vision of governance that positioned cities as inter-linked webs of experimentation and market-based transformation – as *passive objects of coordination* rather that partners in coordination. The CCI approached cities as relevant only insofar as they offer potential test-beds for various technological innovations. Cities, in other words, were to be standard*ized* to the expectations of the CCI model, their individual agency and autonomy further rendered subordinate to those of the CCI. This idea is evident in the project-based orientation adopted by the CCI,[500] and the emphasis on achieving high visibility "big wins, quickly"[501] through pilot projects and major partnership announcements.[502] Governance, in the words of a former CCI program director, was to take place through "flagship demonstration projects" in which CCI experts set out to "build awareness...then offer policy and financial analysis and frameworks, as well as provide local training so that projects can be sustained long after our direct involvement ceases…"[503]

The underlying expectation was that collective governance would emerge through the demonstration, and subsequent diffusion, of effective technological solutions. Collective governance in the C40 governance field was envisioned as a function of market mechanisms (lowered prices) and a combination of better information and reduced uncertainty about the

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[499] Interview with former C40 city Mayor, New York, November 16, 2011; Interview with former senior C40 official, Oxford, October 24, 2013
[500] Interview with former CCI program director, New York, November 18, 2011
[501] Interview with former CCI official, London, October 28, 2013. See also Rauch 2007
[502] CCI 2007a; CCI 2009
[503] CCI 2011: 5

benefits and effects of technology adoption[504] rather than through active coordination (which was, in the CCI work programme, almost completely absent).[505] An illustration of this orientation is the initial ask, made by the CCI upon entering the field, to increase the size of the network through the addition of a number of smaller (mostly American and West European) cities,[506] cities that were expected to demonstrate the viability of innovative local policies and interventions.[507]

The C40 Secretariat and Chair, on the other hand, sought to entrench an alternative interpretation of how cities and the C40 should govern climate change in individualistic, city-specific terms. To do climate governance was, first and foremost, to draw on and enact local authority. Cities, in other words, are understood as *local governors* first and foremost, endowed with various degrees of capacity, placed in contexts with differing degrees of opportunity, and exhibiting different degrees of engagement.[508] The Secretariat "adopted a tactical approach to driving diffusion, using the network as a means of *enabling cities to overcome local resistance* and mitigating the risk of local climate governance action by demonstrating proof of concept in other C40 cities."[509] The goal of collective engagement in the field was thus oriented towards empowering local champions to overcome barriers to local action, offering examples to show that local climate governance can be done and can be beneficial, and providing resources to assist in local experimentation and action.[510] Collectively, governance was to take place by "enabl[ing] coalitions of the willing and capable to organize around specific issue areas or problems in ad

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[504] There are close parallels here with the scholarship on socio-technical transitions and its essentially apolitical stance with respect to social transformation. See for example Upham et al 2014.
[505] Interview with former CCI officiar, New York, November 18, 2011
[506] Interview with former C40 city Mayor, New York, November 16, 2011
[507] Cities that were neither "global" nor "mega" that joined the C40 in 2007 included Portland, Seattle, Houston, Austin, Curitiba, Rotterdam, Heidelberg, Salt Lake City.
[508] Interview with former C40 city Mayor, New York, November 16, 2011. See also Ishinabe 2010: 12
[509] Interview with former senior C40 official, Oxford, October 24, 2013 – my emphasis. A further illustration of this position can be seen in the adoption by the C40 Chair and Secretariat of an orientation towards demanding that states "empower, enable, and resource" cities, a discursive construction that emphasizes the individuality of cities, and their reliance on upper levels of government to help overcome barriers to action.
[510] Interview with former senior C40 official, Oxford, October 24, 2013; Interview with former C40 city Mayor, New York, November 16, 2011. Pragmatically, this orientation is evident in the emphasis, by the C40 Secretariat and Chair, on thematic workshops as a means of stimulating and supporting local policy champions. Thus the spate of C40 workshops organized between 2007 and 2010 (2007 in London on transportation; 2008 in LA on aviation and airport operations; 2008 in Rotterdam on ports; 2008 in Tokyo on adaptation; 2009 in Basel on accessing carbon finance.

hoc and voluntary constellations that form and break apart as interest grows and fades."[511] The cities of the C40, in other words, could do little more than "direct our efforts to the delivery of working examples of GHG reducing projects in transport, energy- generation, waste, etc. – we need to get those examples up and running and then we use them as a catalyst for other cities so they can follow suit."[512]

Contestation is, lastly, evident in competing visions with respect to how governance in the C40 was to be individually and collectively practiced. As above we see evidence of a fundamental split that derives from and aligns with the tensions identified in the preceding sections. The CCI set out to establish novel practices of climate governance, primarily in the form of coordinating the procurement policies of participating between cities as a means of achieving transformative change. This was, after all, the approach that had served the CGI so well in the field of AIDS/HIV and in their efforts to drive down the price of AARV for developing countries.[513] The vision pursued by the CCI was to survey the technology universe, identify a basket of technologies deemed to have the most transformative potential, and then use collective, coordinated procurement of C40 cities to bringing new products with transformative potential to market as a means of driving down emissions.[514] The CCI position ran into strong resistance in C40 cities.[515] As a former city official put it, the "joint procurement initiative ran into considerable sovereignty-related barriers…and was not a feasible possibility as procurement authority was just too complex to get agreement and coordinate with other cities."[516] There was additional local resistance from procurement officials[517] and a sense that "early C40/CCI

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[511] Interview with former C40 city Mayor, New York, November 16, 2011. This notion raises a thought as to whether Bulkeley & Kern's (2009) functional assessment of transnational city-networks as largely "for/by pioneers" might be re-cast as a particular normative configuration oriented towards a specific set of values and beliefs with respect to how cities can and should coordinate their actions, and in the service of what ends.
[512] Volans 2010
[513] Rauch 2007
[514] Interview with former CCI official, New York, November 18, 2011.See also CCI 2007b
[515] The notion of formal coordination of municipal government purchasing power as a powerful lever to drive uptake of, create new markets for, and reduce cost of innovative technological solutions for the reduction of GHG emissions continues to be voiced by cities within and outside the C40. See for example the Global Lead Cities Network on sustainable procurement announced at the 2015 ICLEI World Congress (Sustainable Procurement Resource Centre 2015)
[516] Interview with former city of Sao Paulo official, Skype, November 9, 2013
[517] Interview with former consultant to the city of Johannesburg, Johannesburg, February 7, 2014

initiatives such as the joint procurement program were not seen as useful or appropriate."[518] In this there is an indication of ongoing space between field nomos (around which contestation was taking place) and the individual habitus of C40 cities. The CCI was unable to secure the complicity of cities in accepting, and adhering, to the particular governance norms around which it was trying to produce convergence. Why this was the case, and why the C40 Secretariat/Chair were equally incapable of so doing, can be understood as a function of the disconnect between the capital they sought to claim and the recognition they were unable to secure for the network as a whole.

3.3 Capital

Identifying the particular claims to institutional, agential, and structural sources of capital advanced by both the CCI and C40 Secretariat/Chair offers a means of assessing how the two actors were positioned within the governance field, and of explaining why neither was able to prevail. The inability of either to have their claims to capital fully recognized within the field, in other words, provides a means of explaining why contestation rather than convergence was the outcome over this period of time.

3.3.1 The CCI

The CCI, upon entering the field in 2006, made specific and observable claims to structural, agential, and institutional sources of capital. The claim to *structural* capital, firstly, was based on its association with former US President Bill Clinton. The Clinton name was widely (though not universally) seen as an imprimatur of substance and political heft[519] and was, in fact, an effective source of authority helped to open doors, secure meetings for CCI officials with city Mayors and high-ranking officials[520], and provide the CCI with legitimacy and appeal.[521]

The CCI, in addition, brought with it the authority associated with expert knowledge and proven success, both primary sources of agential capital acquired in other fields. Agential capital was,

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[518] Interview with Tokyo Metropolitan Government senior official, Skype, November 18, 2013
[519] Interview with former C40 city Mayor, New York, November 16, 2011; Interview with former CCI official, Sao Paulo, April 18, 2013; Interview with former senior official, ICLEI Latin America, Sao Paulo, April 19, 2013
[520] Interview with former CCI official, London, October 28, 2013
[521] Interview with former CCI official, Sao Paulo, April 18, 2013; Interview with former senior official, ICLEI Latin America, Sao Paulo, April 19, 2013; Interview with city of Johannesburg senior official, Johannesburg, February 10, 2014

firstly, claimed on the basis of successful work in the field of AIDS/HIV. This performative dimension of agential capital was grounded on the claim that what worked in the AIDS/HIV field could be directly translated into the C40 field.[522] Intertwined with this performative claim, the CCI prided itself on having the ability to "assemble talent very quickly,"[523] and promoted its unique capacity to "provid[e] technical assistance and bargaining power to the participating cities."[524] The CCI set out to "[m]obilize the best experts in the world to provide technical assistance to cities to develop and implement programs that will result in reduced energy consumption and greenhouse gas emissions.[525] In both instances, the CCI augmented claims to agential capital by linking it to material resources in the form of a funding commitment that supported most of the C40 operational budget between 2006 and 2010.[526]

Lastly, while the CCI was unable to claim institutional capital at the outset it quickly set out to alter what counted as institutional capital within the field. Upon signing the partnership agreement with the C40 in 2006, the CCI "hired a number of city directors…as a means of opening up network-city relationships."[527] At its peak, the CCI had city directors in 32 C40 cities in addition to project-specific staff employed to operate specific CCI initiatives related to transportation, waste, buildings, LED lighting, and urban development.[528]

3.3.2. The C40 Secretariat/Chair

The C40 Chair constituted, from 2005, the primary claim to institutional capital in the C40 field. The authority of the Chair is located in its ability to set the network agenda, forge relationships or partnerships with outside organizations, and establish network standards and expectations.[529] The C40 Secretariat was created by the GLA in 2006 to mediate network-city interactions and as a response to CCI attempts to assert control over the network.[530] In response to CCI efforts, noted above, to create and claim novel sources of institutional capital the C40 Chair created the

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[522] Rauch 2007
[523] Rauch 2007
[524] CCI 2006
[525] CCI 2007b
[526] Interview with former CCI official, Sao Paulo, April 18, 2013
[527] Interview with former senior C40 official, Oxford, October 24, 2013. See also Acuto 2013b: 10
[528] Interview with former CCI official, New York, November 18, 2011
[529] Interview with former C40 advisor, Skype, January 9, 2012
[530] Interview with former senior C40 official, Oxford, October 24, 2013

Secretariat (and housed it in London City Hall).[531] The Secretariat, from 2006 to 2010, served as a rearguard against efforts to alter what was to count as institutional capital in the C40, and was endowed with a modicum of institutional capital of its own in the form of agenda-setting authority over the siting of C40 events and workshops, as well as the selection of best practices and case studies published on the C40 web platform.[532]

The C40 Secretariat, however, had little ability to claim either structural or agential capital in the C40 field, subordinate as it was to the position of C40 Chair. The Secretariat was housed within (and originally funded by) the GLA and had minimal financial and epistemic capacity.[533] As a result, while it "worked hard to leverage its limited material capacities" the Secretariat was "limited in its capacity to facilitate or encourage city-city interactions…had no budget to be proactive in terms of bringing cities together (or even knowing what cities were actually doing)…[and was] essentially passive."[534]

The C40 Chairs over this period of time, on the other hand, had differing claims to both structural and agential capital. London, as a pre-eminent global city, major financial center, and national capital, had both visibility and global stature in the C40 field.[535] Capital that, for instance, enabled it to draw the field together in the first instance. Toronto, on the other hand, was less capable of making a claim on structural capital, being a regional rather than global hub and endowed with less status and recognition as a global city.[536]

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[531] As part of the broader dynamics of intra-field contestation between the C40 and CCI the Secretariat established the C40 Steering Committee in March 2007. This was done to create stronger links between the network and key cities (defined as those with high levels of symbolic visibility and importance to the legitimacy of the field) and to undercut efforts by the CCI to consolidate the field around its own norms and practices. This further illustrates contestation within the field over what was to count as capital, with CCI organizing its claims around structural (Clinton prestige) and agential (business consultants, prior successes) capital whereas the C40 advanced a particular claim to institutional capital (and who could have access to it) in the field.

[532] Interview with former C40 advisor, Skype, January 9, 2012; Interview with former senior C40 official, Oxford, October 24, 2013

[533] The Secretariat was allotted a budget of $160k/year and a permanent staff of two. Interview with former senior GLA official, London, October 28, 2013; Interview with former senior C40 official, Oxford, October 24, 2013

[534] Interview with former senior C40 official, Oxford, October 24, 2013; Confirmed in interviews with senior C40 official, Skype, November 20, 2012; former C40 policy analyst, Skype, January 26, 2012; and former external network consultant, Skype, November 14, 2013

[535] Sassen 2001; Derudder et al 2010

[536] Derudder et al 2010

Both Toronto and London, during their tenures as C40 Chair, had a mixed ability to claim agential capital in the field. Both were able to claim performative capital on the basis of a positive reputation for local innovation and governance (based, in London, on the successful implementation of a congestion charge system in 2003 and the early adoption of climate change targets in 2004 and, in Toronto, on a history of local engagement dating back to the early 1990s.[537] At the same time, both were constrained by a lack of material capital and a limited interest in, or ability to, direct resources to the C40.[538]

4. Explaining Contestation: External Recognition and Fragmented Capital

Both the CCI and C40 Secretariat/Chair were engaged, from 2005 to 2010, in active efforts to claim capital within the field - to shape what was to "count" as capital and have particular claims recognized – and to leverage such claims as a means of exerting power over the normative structure of the field. The preceding sections sets out the various claims made by both actors in their efforts to do so, but these need to be linked to the mechanism of recognition in order to understand why neither succeeded in their efforts.

The drive to differentiate the C40 from other governance initiatives created in the C40 a shared interest in securing external *recognition* from outside actors; recognition that cities could "lead" the process of global climate governance.[539] Recognition was widely seen, within the C40, as the key to "gaining political visibility and authority and legitimacy."[540] In Sao Paulo, for instance, there was a sense that the city "joined the C40 in 2005 …to gain access to legitimacy, visibility…to find ways to dispel negative perceptions of Sao Paulo in the rest of the world, improve its' global reputation and ability to attract people, talent, investment"; the C40 offered the promise of "legitimacy"[541] and means of gaining positive recognition for city leadership, both domestically and internationally.[542] There was, in other words, a "desire to keep up with

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[537] Bulkeley & Schroeder 2008; Harvey 1993
[538] GLA 2006
[539] Volans 2010 – my emphasis
[540] Interview with former senior GLA official, London, October 24, 2013 – my emphasis
[541] Interview with former Sao Paulo city official, Skype, November 9, 2013
[542] Interview with former Sao Paulo city official, Sao Paulo, April 18, 2013

London and New York and secure recognition as a true global city."[543] Similarly, in Johannesburg the primary appeal of participation in the C40 was in getting "international, national, and local recognition for actions...taken by the city."[544] In New York a similar dynamic was at play. While the motivation behind local engagement in climate governance was largely local[545] and the decision to join the C40 in 2005 not all that deeply considered,[546] it nonetheless encouraged the city to begin "scanning existing and proposed local policies and practices so as to pull out and highlight their climate governance dimensions… the city was doing a lot (in the areas of transportation, buildings, and infrastructure but it just wasn't framed as climate change governance."[547] The city sought to gain recognition as a climate governor so as to gain reputation and prestige, but also to keep up with other global cities such as London. Such, then, was the *allure* of recognition that brought the C40 together.

It is the inability to deliver on this promise that helps account for contestation in the C40 during these early years. Neither the CCI nor the C40 Secretariat/Chair was able to link a promise of external recognition to a particular configuration of governance norms. Neither, in other words, was able to leverage the promise of external recognition to secure the complicity of actors in adhering to a particular set of terms upon which such recognition was to be granted within the field.

Two factors help account for this outcome. On one hand, we can look to the type of external recognition claims advanced by both the CCI and C40 Secretariat/Chair. The former advanced what was essentially a residual claim, such that the C40 would be recognized externally as a function of the effects of local interventions on global markets (for electric vehicles, buildings, street lighting, waste treatment, public transportation, and so on) and partnership arrangements with private sector companies. The CCI advanced what was in essence a limited claim with respect to external recognition, one reflecting a circumscribed version of what Roman

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[543] Interview with senior WRI official, Sao Paulo, April 22, 2013
[544] Interview with senior Johannesburg city official, Johannesburg, February 10 2014
[545] Interview with former OLTPS official, New York, November 10, 2011
[546] Interview with former OLTPS official, Skype, January 9, 2012; Interview with former OLTPS policy advisor, New York, November 18, 2011
[547] Interview with former OLTPS official, New York, November 10, 2011

characterizes as "governance from the middle."[548] In this sense, the CCI, in focusing its efforts on securing recognition on a city-by-city basis in the form of direct relationships with corporate actors and international financial institutions, eschewed making a strong claim for the C40 *as a whole* to be recognized by external actors.[549] The C40 Secretariat/Chair adopted an inverse approach, and sought actively to secure external recognition for the C40 as a whole from both national and international climate actors. This is most clearly illustrated in the "empower, enable, resource" meme that was deployed aggressively in the run-up to, and aftermath of, COP15 in December 2009.[550] In so doing the C40 Secretariat/Chair sought to secure for the C40 both recognition of the important and essential role of cities in the global governance of climate change, and the need for such recognition to be enacted through increased allocation of both jurisdictional authority and material resources.[551] This claim, however, rested on a foundation that circumscribed the very legitimacy and authority it purported to secure for the field. Claiming external recognition for the C40 on the basis of empowerment and enabling positioned cities as subordinate to, and dependent upon, upper levels of government. In so doing it reflected the habitus of the Secretariat/Chair, as set out above, but undermined the ability to effectively secure the external recognition to which it aspired.

The substance of recognition claims must, however, be placed in dialogue with the combination of capital that the CCI and C40 Chair/Secretariat were able to claim. Most importantly, at no point was either the CCI, the C40 Secretariat/Chair, or any other actor (or configuration of actors) able to draw simultaneously on all three sources of capital. There was, in other words and in spite of efforts by both sides (and especially the CCI) to consolidate their claims to capital, a *fracturing* of capital within the C40 field from 2005 to 2010.

Consider firstly the CCI. Not only did its efforts to create and claim institutional capital fail, the structural and agential capital claimed by the CCI degraded considerably between 2006 and 2010. While the global stature of the Clinton "brand" provided the CCI with substantial claims to

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[548] Roman 2010
[549] This is evident, for instance, in the disavowal by CCI staff of active engagement in lobbying or advocacy on behalf of cities vis-à-vis other levels of government, and in the technical orientation of CCI initiatives towards local policy, rather than political, contexts. Interview with former CCI Program Director, New York. November 18, 2011
[550] Climate Summit for Mayors 2009
[551] C40 2007, 2009

structural capital, its currency was uneven across the field, as several interviewees noted a downside resulting from this association. In Chinese and Indian cities the Clinton association was deemed to be a major impediment, a detriment rather than a source of authority in the C40 field.[552]

In a similar manner the CCI proved unable, despite its best efforts, to successfully claim agential capital in the C40 field. The CCI thought they had, in the joint procurement approach, a "model" with wide-ranging application and transformative potential. Yet transposing this model from the field of AIDS/HIV governance to the C40 field reflected, in the words of one interviewee, a case of flawed learning[553] and ultimately served to undermine, rather than enhance, CCI claims to agential capital. Similarly, while program directors and consultants working for the CCI were seen as legitimate sources of epistemic authority, the network of city directors through which the CCI sought to deliver information and influence city actions was widely seen to be weak and ineffective, with city directors lacking in expertise, experience, and access to local decision-makers.[554] As for the material dimension of CCI claims to agential capital, the organization was hit the effects of the financial crisis that emerged in late 2007 to early 2008. As a result the financial capacity of the CCI was reduced, and the network of City Directors and dedicated CCI staff were both cut dramatically as a result.[555]

In developing a connective infrastructure of city directors the CCI attempted to contest and reconfigure what counted as institutional capital in the C40 field as a means of imposing its "own agenda."[556] The CCI challenged the concentration of institutional capital within the position of C40 Chair, a move that provoked both resistance from C40 cities and a counter-response from the GLA (as C40 Chair). With respect to the latter, the GLA created first the C40 Secretariat (established in late 2006) and subsequently the C40 Steering Committee (established in 2007) as

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[552] Interview with former CCI official, Sao Paulo, April 18, 2013; Interview with former senior C40 official, Oxford, October 24, 2013; Interview with Tokyo Metropolitan Government senior official, Skype, November 18, 2013
[553] Interview with former C40 city Mayor, New York, November 16, 2011
[554] Interview with former senior GLA official, London, October 28, 2013; Interview with former member of the New York City Sustainability Advisory Board, New York, November 11, 2011; Interview with former senior C40 official, Oxford, October 24, 2013; Interview with former consultant to the city of Johannesburg, Johannesburg, February 7, 2014; Interview with senior Johannesburg city official, Johannesburg, February 10 2014
[555] Interview with former CCI official, New York, November 18, 2011; Interview with former CCI official, Sao Paulo, April 18, 2013. See also Broder 2011
[556] Interview with former CCI official, London, October 28, 2013

a means or reinforcing the notion that institutional capital was only to be held by cities in the C40 field. As for the former, there was a sense amongst city officials that the CCI, and its City Directors, were "irrelevant"[557], "ignored"[558], and "not a good fit"[559] with local interests and priorities. More generally, the CCI approach, and its related claims to institutional capital, was perceived by city officials interviewed for this project as "culturally insensitive"[560], one in which the CCI set out to "tell cities what to do"[561], and one that suggested that the CCI just "did not get" cities.[562]

At the same time, critical limitations are evident in claims to capital made by both the C40 Chair and Secretariat over this period of time. Both sought to claim institutional capital as a means of grounding their efforts to both contest the CCI and pursue a particular vision of field consolidation. Yet the same institutional fracturing that limited CCI efforts also inhibited the C40 Chair and Secretariat. The formal agenda-setting, partnership forging, and convening powers associated with the institutional capital of the Secretariat and Chair were severely undermined by the almost complete absence of material and performative capital in these two bodies. As one interviewee put it, there really was, prior to 2010, no C40 *per se*[563]*;* there was a collection of cities, and there were formal institutional positions, but there was no capacity to actively employ the associated sources of capital in order to "network the network".[564] The C40 Secretariat and Chair were widely seen as passive and reactive[565], "limited in the capacity to facilitate or encourage city-city interactions and exposure" and lacking a "budget to do much active/proactive in terms of bringing cities together (or even knowing what cities were actually doing)."[566] A variety of C40, CCI and city officials indicate as much, noting that there was, in the early days of the network, "little staffing [and] hardly any money."[567] The C40 was perceived, variously, as

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[557] Intervierw with former OLTPS senior policy advisor, New York, November 18, 2011
[558] Interview with former OLTPS senior official, Skype, January 9, 2012
[559] Interview with Tokyo Metropolitan Government senior official, Skype, November 18, 2013
[560] Interview with former senior C40 official, Oxford, October 24, 2013
[561] Interview with former senior GLA official, London, October 28, 2013
[562] Interview with former C40 city Mayor, New York, November 16, 2011
[563] Interview with senior C40 official, Skype, November 20, 2012
[564] Gordon forthcoming.
[565] Interview with senior C40 official, Skype, November 20, 2012
[566] Interview with former senior C40 official, Oxford, October 24, 2013
[567] Interview with former CCI official, London, October 28, 2013

"irrelevant" [568], "not relevant at all"[569] and "of little impact."[570] Furthermore, while, as a result of the transition from London to Toronto in early 2008, the C40 Chair gained a measure of agential capital based on the reputation accorded Toronto as a local leader in climate governance,[571] Toronto was able to draw on substantially less structural capital than London. In combination with the limited material capital on which Toronto was able to draw, the Chair was seen, from 2008 to 2010, as well intentioned but of limited influence.[572]

In both cases we can sense the co-constitution of claims to both external recognition and capital, and the inability of both the CCI and C40 Chair/Secretariat to fuse these together so as to secure internal recognition and produce norm convergence. More than a simple inability to claim and combine institutional, agential, and structural sources of capital within the field, it was the interaction between such claims and the substance of recognition claims that limited the capacity of each camp to secure and grant recognition, and thus to transpose a particular set of norms and practices onto the field.

5. Conclusion

Neither the CCI nor the C40 Secretariat/Chair were able to leverage enough capital to produce a particular order within the field up to 2010, leaving the C40 stuck in a state of limited convergence and general contestation. Whereas climate change was defined by the CCI as a market problem, with cities situated as key *sites* of intervention capable of cutting the Gordian knot of low demand-lack of supply the C40 Chair and Secretariat operationalized climate change as a problem of politics, with cities situated as key if ultimately constrained *agents* capable of removing political barriers (most importantly those operating at upper levels of government) by demonstrating the political, economic, and environmental benefits of policy engagement.

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[568] Interview with former OLTPS official, New York, November 10, 2011; Interview with former OLTPS senior policy advisory, New York, November 18, 2011
[569] Interview with former city of Sao Paulo official, Sao Paulo, April 22, 2013
[570] Interview with city of Johannesburg senior officials, Johannesburg, February 10, 2014
[571] Interview with former senior C40 official, Oxford, October 24, 2013
[572] Interview with former city of Sao Paulo official, Skype, November 9, 2013

And yet the C40 field neither fragmented nor fall apart. That it did not is, in part, a function of the embeddedness of the C40 within broader governance fields (networked urban climate governance and global climate governance). This created structural imperatives acting upon the C40. As per Jay Carson, former executive director of the C40, "[a]s it's become clearer that there's not going to be much action at the [US] federal level, the importance of C40 grows."[573] At the same time, extant city networks like ICLEI and Metropolis were widely perceived, by city officials interviewed for this project, as incapable of responding to this imperative for action and opportunity for leadership.

As a result, there remained a clear sense within the C40 that "[c]ities must …be bolder. We must be more collaborative. And we must be more determined. Together, we have to fill the vacuum of leadership ourselves."[574] In other words, ongoing weaknesses and frictions constituted a source of exogenous pressure that served to maintain the demand for a C40 field, even if the field itself had thus far proven incapable of consolidating around a clear and coherent collective objective and set of norms, values, and practices. Nonetheless, as of early 2010 the C40 remained internally fractured and deeply unsettled, an ad hoc amalgamation of cities and other non-state organizations committed to a generic proposition and ambiguous objective. That was about to change.

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[573] Jay Carson, quoted in Revkin 2010.
[574] Keynote speech given by Mayor Bloomberg at the 2010 C40 Meeting in Hong Kong. Emphasis mine. See Bloomberg 2010.

Chapter 6
Blazing a New Trail: From Contestation to Convergence

1. Introduction

The preceding chapter left off with a paradox and a promise. The paradox is evident in the suspension, circa 2010, of the C40 field in a state of unresolved contestation. As has been shown, the C40 was robust enough to hold together but riven internally by competing visions as how to go about governing. While there was convergence around a sense of shared purpose – that something had to be done, that cities could do something, that cities could gain from doing so – and around foundational norms of pluralistic participation and liberal environmentalism, the field lacked clearly specified and shared governance norms with respect to how cities should *do* global climate governance. As a result, the C40 circa 2010 was widely perceived as "ineffective;"[575] mired in a state of "mere potential" and hamstrung by the lack of material capacity, governance authority, and influence needed to shift from nominal commitments to practical effects.[576]

The promise, on the other hand, rests in the knowledge that the C40 has blazed a different trail. From 2011 onward the C40 overcame such limitations and achieved meaningful convergence around a particular configuration of norms and practices. It transitioned from governance field that was weak and ambiguous to one both strong and specified; prior tensions were resolved as the C40 converged around governance norms of agential and globally accountable urban governance. The question, then, is why. What changed? Why convergence after 2011 but not before? And how was convergence achieved? And so, whereas the preceding chapter focused on contestation in the C40 up to 2010, and identified the inability of both the CCI and C40 Secretariat/Chair to fuse together both capital and a claim to external recognition, in this chapter I turn the field theoretic framework towards the task of explaining how, and why, the field achieved convergence from 2011 to 2014.

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[575] Interview with former OLTPS official, New York, November 10, 2011
[576] Interview with former consultant to the City of Sao Paulo, Skype, June 3, 2013

I focus specifically on the role of New York City and Bloomberg Philanthropies – and the unique configuration of these two actors – as they key to answering each of the aforementioned questions. To do so I first set out to describe the particular ideas, interests, and practices – the habitus – that each brought with them into the C40 field, as these were to provide content for convergent field nomos. I then step back to identify the particular claims to capital advanced by New York and Bloomberg, and the extent to which these two actors, together, were able to combine all three sources of agential, structural, and institutional capital. Having done so I then focus, in the remainder of the chapter, on the manner in which New York and Bloomberg fused together a combination of capital and a novel claim to external recognition so as to secure acquiescence, within the field, to the imposition of particular terms on which recognition was to be granted. I set out, in other words, to explain how New York and Bloomberg were able to produce and endow with structuring power a particular configuration of governance norms so as to strengthen and specify the field nomos and delineate that which was normal and acceptable with respect to the how cities should govern global climate change.

2. From Contestation to Consolidation

Two important factors help to explain what happened so as change the course of the C40 and result in the patterns of norm convergence outlined in chapter 2. One is the persistent structural imperative acting upon the C40 (and other such initiatives); the other contingent developments in the local and national politics of New York City and the United States. With respect to the former, the C40 was, circa 2009, at the forefront of a broader movement[577] that emerged in the context of a failed effort by states to successfully negotiate a post-2020 international climate treaty at COP15 in December, 2009.[578] This movement saw an increased emphasis on bottom-up,[579] polycentric,[580] or experimental[581] climate governance as undertaken by a host of non-state actors. Yet while initiatives like the C40 brought with them a sense of optimism and opportunity, they remained largely aspirational and the basis of their claims to legitimacy and authority – as meaningful sources of effective global climate governance – were tenuous. The C40, as such,

[577] Bernstein et al 2010
[578] Dmitrov 2010
[579] Jordan et al 2015
[580] Ostrom 2010
[581] Hoffmann 2011

was well-positioned to take advantage of this opening in the broader field of global climate governance as a result of the meme that "cities act while nations talk" but, ironically, could only ground such a claim by talking about all of the actions cities were taking.

As to the role of contingency, 2010 saw Michael Bloomberg over-turn the New York City term limit law and win a third term as Mayor.[582] Bloomberg, first elected in 2001, had been pursuing relatively seriously the possibility of a presidential campaign.[583] However, the partisan realities of US national politics, and the rising influence of the Tea Party, effectively nullified his chances.[584] As a result, Bloomberg put his energy and resources into continuing his work as Mayor of New York and, more importantly, began to increase his own efforts –through Bloomberg Philanthropies, a grant-giving foundation with nearly $3 billion (USD) in assets as of 2010[585] – to exert influence, and create a legacy, on issues local, national, and global.[586] Following upon his re-election in 2010, in a second and related development that proved to be most important for the future of the C40, Bloomberg, at the urging of his staff[587], campaigned successfully for New York to be selected as the incoming Chair of the network.

As the year turned, and 2010 gave way to 2011, these two actors, New York and Bloomberg Philanthropies, were united in the position of C40 Chair. The unique configuration of the two, the particular ideas, practices, and claims to authority they brought with them to the position, and the manner in which they were able to leverage the structural imperative set out above, were to prove transformational over the years to come. In the sections that follow I set out the habitus that each brought with them into the C40 field, the claims to capital advanced by each as well as the manner in which they were combined, and the manner in which a particular claim to external recognition was pursued and leveraged so as secure internal recognition and enact power and influence over field nomos.

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[582] Chen & Barbaro 2009; Barbaro & Chen 2008
[583] Pappu 2011
[584] Sherman 2012
[585] Escarfullet 2012. Note that Bloomberg's personal wealth is estimated, as of 2015, at over $37 billion (USD). See http://www.forbes.com/profile/michael-bloomberg/
[586] Sherman 2012; Orden 2011
[587] Senior staff in OLTPS were actively, as of early 2010, encouraging Bloomberg to pursue the position of Chair, so as to reform, reshape, and "improve" the C40. Interview with former OLTPS senior official, Skype, January 9, 2012

2.1 Habitus

Taking the reins in late 2010 from David Miller, Bloomberg and his senior staff entered the C40 with clear ideas as to both its limitations and what needed to be done. To understand the change that they wrought it is important to first identify the ideas and practices that they brought with them into the field.

2.1.1 Bloomberg Philanthropies

Michael Bloomberg, the philanthropic organization he heads, and his key staff, all brought with them to the C40 a particular and distinct set of ideas and interests with respect to the governance of climate change. Most importantly, Bloomberg and key associates (such as Dan Doctoroff, the Deputy Mayor who headed up the development of the city's long-term sustainability and climate change initiative) were political neophytes as compared with lifelong politicians such as Livingstone and Miller. Both came into politics directly from the financial sector, and brought with them a specific set of business-sector norms and practices that shaped their orientation towards governance.[588] Bloomberg and Doctoroff were perceived by city officials as embodying values and practices derived from private sector imperatives: innovation, performance, efficiency, return on investment ("if you can't measure it, you can't manage it"); an emphasis on data and evidence-based action; and a disdain for political partisanship.[589] Mayors, as per Bloomberg, "do things, [they] make things happen"; they "don't have the luxury of giving speeches and making promises."[590] They also brought with them distinct sensibilities and perceptions regarding the role of cities with respect to the governance of complex and cross-cutting issues.[591] Bloomberg has been characterized, in this respect, as "almost a Greek city-state guy" who "believes cities are where you can make the most change."[592] Former deputy Mayor of New York and key Bloomberg advisor Kevin Sheekey provides a clear illustration of Bloomberg's orientation and approach, stating, in 2011, that "[i]f you address the problems of

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[588] Interview with former OLTPS official, New York, November 3, 2011
[589] Sherman 2012; Pappu 2011. As Sherman puts it, "Bloomberg's politics are non-politics – it's all about the numbers."
[590] As quoted in Sherman 2012.
[591] Interview with former OLTPS senior official, Skype, January 9, 2012; See also Chan 2007
[592] This characterization is provided by Sierra Club chairman Carl Pope, as quoted in Pappu 2011.

the cities, *there will be no need for China and India to sign onto some international accord*. And thank God, because that's not going to get done."[593]

2.1.2 New York City

Contemporary climate governance in New York City originated in land-use and infrastructure planning process begun in 2004.[594] The City was spurred by the need to think about its capacity to accommodate projected population increases and as a result began a process of long-term population and city growth planning.[595] Most importantly, neither climate change nor sustainability figured in early discussions or inter-agency efforts.[596] By 2006, however, the process had been re-organized and re-framed as a sustainability initiative.[597] Climate change was appended to the plan rather than central in its development, and actions related to transportation, public space, the built environment, and urban form were re-cast so as to highlight their climate impacts and implications, rather than constituting points of departure in the development of local policy. In the words of a former senior city official, both Bloomberg and Doctoroff (who oversaw the process) "seized, eventually, on the idea that climate chance, and sustainability, offer[ed] an umbrella under which to organize, legitimate, and tie together the city-development agendas emerging around the issue areas of energy, transportation, housing, and infrastructure.[598] Climate change was seen as a means of developing uniform metrics across multiple issue areas and local sectors – a common and single means of measuring the impact and efficacy, and thus of both assessing and communicating the value of, a wide variety of local interventions.[599] The city released its first city-wide GHG inventory in 2007, and has since issued updates on an annual basis.

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[593] Kevin Sheekey, as quoted in Broder 2011 - my emphasis
[594] New York first engaged in local climate governance in the late 1990s but this early commitment was largely rhetorical and the city entirely abandoned the issue following the 9/11 terror attack. See Bagley & Gallucci 2013
[595] Interview with former OLTPS official, New York, November 10, 2011; Interview with former OLTPS official, New York, November 3, 2011
[596] Interview with former OLTPS official, New York, November 3, 2011; Interview with former senior policy advisor OLTPS official, New York, November 18, 2011
[597] Interview with former senior policy advisor OLTPS official, New York, November 18, 2011
[598] Interview with former OLTPS official, New York, November 3, 2011
[599] Interview with former senior policy advisor OLTPS official, New York, November 18, 2011

New York, early on in the process, organized local climate policy around norms and practices of measurement, accounting, reporting, and disclosure. Such practices were not, on their own, novel but rather represented both a reproduction and reconfiguration of those adopted and endorsed by other city-networks. ICLEI and the Cities for Climate Protection initiative, for instance, had long advocated for local emissions measurement and monitoring.[600] And yet the manner in which these practices were configured (especially the alignment with novel practices of disclosure and transparency drawn from the corporate climate governance sector) and deployed (in the context of a norm of globally accountable governance) were novel and challenged the prevailing normative context. The orientation of PlaNYC illustrates this in its emphasis on pragmatics, transparency and accountability; PlaNYC is built around discrete and identifiable actions (there are 127 of them in the 2007 plan) and the performance of the city in achieving the goals associated with each is publicly assessed on an annual basis.[601]

2.2 Claiming and Combining Capital

What the preceding chapter helped illustrate is that the ability to produce convergence in the C40 – to transpose a particular set of ideas and practices into the structuring nomos of the field – is a function of the capital that actors are able to create, and claim. As Wacquant asserts, the capacity of actors to assert authority within a particular field lies not only in the volume but in the *composition* of capital possessed by each.[602] Importantly this is not a matter of collecting or assembling capital as it exists "in the world" but rather involves an iterative process of employing capital to *influence what counts as* capital within the field.[603]

As the subsequent sections will set out, the New York/Bloomberg configuration is unique in its ability to do what both the CCI and the C40 Secretariat/Chair previously could not; to claim and combine agential, structural and institutional sources of capital in the C40 field. In this we can begin to understand why the two interlocked actors - who approached the C40 with a "particular vision regarding how to network megacities"[604] – were able to succeed where others had failed,

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[600] Betsill & Bulkeley 2003
[601] City of New York 2007
[602] Wacquant 2006: 7
[603] Bigo 2011: 237; Guzzini 2012: 80
[604] Interview with former OLTPS senior official, Skype, January 9, 2012

resolving intra-field contestation and producing meaningful convergence around a specific configuration of norms and practices.

2.2.1 Agential Capital

New York was not a pioneer in the urban governance of climate change. The city, while it committed in the late 1990s to putting climate change on the local agenda, did not actively engage in local climate governance until 2005. It is only at this point that the city began to think seriously about climate change as an issue of local concern.[605] There was, as one interviewee put it, a clear sense that the city was "late to the table"[606] and thus started off with a dearth of performative capital with respect to climate governance.

Recall that performative capital, as defined in chapter 4, is derived from subjective perceptions regarding which cities are deemed competent, effective, or leaders in the project of climate governance. It is a product of "political performance" intended (or not) to demonstrate to some audience the capacity, seriousness, and thus legitimacy of claims to leadership or authority.[607] The release of PlaNYC, the cities' comprehensive citywide sustainability and climate change plan, in April 2007 immediately conferred upon the city a reputation for seriousness, ambition, and excellence. PlaNYC was widely seen as a "big deal" with respect to changing ideas as to how cities tackle the challenge of being more sustainable.[608] Cities, large and small, from the United States and abroad, contacted and visited New York on a regular basis once PlaNYC was released.[609] A former senior policy advisor estimates an average of three delegations per week between 2008 and 2010, all interested in discussing the origins and particularities of PlaNYC and local sustainability and climate governance initiatives.[610]

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[605] Interview with former senior policy advisor OLTPS official, New York, November 18, 2011; Interview with former OLTPS official, New York, November 10, 2011
[606] Interview with former senior policy advisor, Office of the Mayor, November 8, 2011
[607] Blatter 2009
[608] Interview with former member of the New York City Sustainability Advisory Board, New York, November 11, 2011
[609] The extent of this claim to performative capital is similarly illustrated in Lee & van de Meene (2012: 216) who report in their study on inter-city learning in transnational city-networks that New York is ranked first in a survey of C40 city officials as a source of information and an object of learning with respect to local climate policy.
[610] Interview with former senior policy advisor OLTPS official, New York, November 18, 2011

In the goal of claiming performative capital New York took active steps. The Office of Long Term Planning and Sustainability (OLTPS) worked with the ICLEI-USA to publish a report encouraging other cities to learn from (and emulate) their experience and actions.[611] PlaNYC was also translated into Chinese and Japanese in an attempt to broaden its exposure and reach.[612] The effort to claim performative capital has further been linked to the positive impacts associated with its efforts; the claim that "New York…had achieved clear results" and was a viable model for others to follow.[613]

The strength of New York's claim to performative capital was evident in interviews with officials in both Sao Paulo and Johannesburg. In Sao Paulo former officials involved in drafting the 2009 Climate Legislation and 2011 Climate Action Plan indicated New York as one of the major reference cities (along with London and Paris) with respect to identifying best practices and transferrable policies, and as benchmarks against which Sao Paulo should measure itself.[614] Where Sao Paulo officials reached out to a variety of cities, it mostly focused on New York and London as "these were the key cities that were looked to for ideas, as sources of legitimacy and expertise and relevance.[615]

If New York effectively claimed performative capital, the overlap between Bloomberg and OLTPS provided a basis on which were made claims to epistemic and material elements of agential capital. OLTPS was created in 2006, within the remit of the Mayor's Office in New York, as the central city agency tasked with developing, coordinating, and overseeing the implementation of city-wide sustainability initiatives (as embodied in PlaNYC).[616] OLTPS was able to attract a committed and talented senior staff, drawn from both the private and public sectors, and possessed a credible capacity to claim epistemic authority within the field. At the same time, Bloomberg Philanthropies, as noted above, was endowed with nearly $3 billion (USD) in assets as of 2010, an amount that ensured (and continues to ensure) that "every big,

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[611] Interview with former senior policy advisor OLTPS official, New York, November 18, 2011. See also ICLEI-USA 2010
[612] See City of New York, Mayor's Office of Sustainability n.d.
[613] City of Hong Kong 2010: 2
[614] Interview with former senior official, ICLEI Latin America, Sao Paulo, April 19, 2013; Interview with former consultant to the City of Sao Paulo, Skype, June 3, 2013
[615] Interview with senior WRI official, Sao Paulo, April 22, 2013
[616] Interview with former OLTPS senior advisor, New York, November 22, 2011

medium, and smaller-size city all…look to spend time with" him.[617] Bloomberg was, after all, "not only an elected official….he's got a big pocketbook."[618] In early 2011, Bloomberg Philanthropies opened that pocketbook and committed $6 million (USD) annually to funding C40 operations[619], an amount that has since been increased to $10 million (USD) per year.[620] Doing so allowed the city to "essentially [take] over" by creating a new C40 organizational body and filling it with OLTPS and Bloomberg Philanthropies staff.[621] The material capital wielded by New York was perceived by a former C40 city Mayor as giving it (and Mayor Bloomberg) the "ability to drive and implement [a particular] vision" of more coherence amongst and between C40 cities, and collective action to produce more aggregate results.[622] This was enhanced by the tight link between OLTPS and C40 staff, characterized by a senior C40 official as "open and active" and illustrated in particular by the substantial degree of staff movement between the two over the course of New York's tenure as C40 Chair.[623] It is possible, here, to discern the tight link between the material capital wielded by Bloomberg Philanthropies and the epistemic capital claimed by OLTPS/Bloomberg staff. The former endowed the newly formed C40 organization with epistemic capacity and competence, enabling it to minimize city fears through effective outreach and communication.[624]

2.2.2 Structural Capital

While Bloomberg was able to claim and deploy considerable sums of material capital in the C40 field, he (and his organization) were relatively dependent upon their association with, and simultaneous ability to embody, the structural capital available to New York City. In a variety of

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[617] Mayor of Philadelphia Michael Nutter, as quoted in Sherman 2012
[618] Mayor of New Orleans Mitch Landrieu, as quoted in Sherman 2012
[619] Interview with former senior C40 official, Oxford, October 24, 2013; Interview with former C40 city Mayor, New York, November 16, 2011. Note that Bloomberg Philanthropies also provides funding support to C40 partner organization the Carbon Disclosure Project Cities initiative. See CDP 2013b
[620] C40 2013
[621] Interview with former senior policy advisor OLTPS official, New York, November 18, 2011
[622] Interview with former C40 city Mayor, New York, November 16, 2011
[623] Interview with senior C40 official, Skype, November 20, 2012. Senior OLTPS staff who ended up working, and affiliated, with the C40 organization include: Rohit Aggarwala (Director; Special advisor to the C40 Chair); Adam Freed (Deputy Director; C40 consultant); Amanda Eichel (Senior Policy Advisor; Director, C40 Initiatives and Regions); Rishi Desai (Associate; C40 Director, Research Projects); Michael Marinello (Senior Advisor, Bloomberg Philanthropies; C40, Director, Global Communications).
[624] Interview with Tokyo Metropolitan Government senior official, Skype, November 18, 2013

global rankings New York City consistently occupies the top position.[625] The primacy of New York (alongside London) as the pre-eminent global city is thus well established.[626] This provides New York with a source of symbolic capital *virtually* unmatched by all other cities in the C40. New York is widely understood, as per one interviewee, as "central" to the general discourse of cities and global sustainability and climate governance due to the visibility and symbolic stature that the city possesses.[627] The impact of New York's engagement in climate governance, accordingly, is that it can and in fact did change the broader discussion on cities and sustainability.[628]

The effects of this symbolic capital manifest in a variety of different ways. In Sao Paulo, interviewees remarked on the extent to which the city "looked to New York and wanted to emulate [PlaNYC] and gain their recognition."[629] Locally, the idea of engaging in climate governance was sold to politicians and city departments on the basis of "keeping up" with cities like New York, London and Paris, and situating Sao Paulo within this global city peer group.[630]

2.2.3 Institutional Capital

New York, upon assuming the position of C40 Chair in late 2010, immediately set out to reconfigure the nature, source, and form of institutional capital with the field. This took the form of creating a new C40 staff organization and phasing out the C40 Secretariat.[631] Thus began a process of "internal transition within the C40" one that saw a fundamental shift from a focus on "projects to systemic intervention" and was

> accompanied by a structural shift [in which] the network has moved to create links between key city staff individuals in member cities [so as to] build networks of

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[625] GaWC 2008, 2012; Dobbs et al 2011; Foreign Policy 2012
[626] Sassen 2001
[627] Interview with World Bank consultant, New York, November 11, 2011
[628] Interview with World Bank consultant, New York, November 11, 2011
[629] Interview with former senior official, ICLEI Latin America, Sao Paulo, April 19, 2013; Interview with former senior advisor, Department of Environment, City of Sao Paulo, Sao Paulo, April 24, 2013
[630] Interview with senior WRI official, Sao Paulo, April 22, 2013
[631] Interview with former C40 senior advisor, Skype, January 9, 2012

> staffers that can work within member cities, exchange information across or between them, and drive change when local opportunities arise.[632]

New York/Bloomberg set out, in other words, to eliminate the fragmentation that had plagued the field ever since Livingstone created the Secretariat as a means of countering CCI efforts to claim novel sources of institutional capital.

The new C40 organization immediately marginalized the role and authority of the Secretariat and by 2011 had dismantled it entirely.[633] Whereas the C40 agenda had previously been developed within the Steering Committee, Bloomberg began to "centralize agenda-setting" upon taking over as Chair in late 2010.[634] A similar process played out with respect to the institutional capital that had previously been claimed by the CCI. As one of the conditions on which New York accepted the position of Chair, Arup was commissioned to conduct an internal review of the C40 so as to assess its efficacy and efficiency and develop a strategy for enhancing its capacity.[635] The internal review served to render legible what had previously been obscure, in terms of the jurisdictional authority and capacity of cities across specific governance sectors.[636] This constituted a novel source of institutional capital created by New York/Bloomberg, one based on the capacity "know" the network and rationally connect up pieces of it as part of a broader effort at fostering collective capacity.[637] As a former C40 official put it, possession of this "data" allowed C40 staff to "suggest priorities" to cities, and to "suggest to cities" that they join or participate in various specific thematic initiatives.[638]

The process of internal review also led to a reconstitution of the C40 Steering Committee, changes to the internal decision-making procedures, and "signalled the end of the CCI influence vis-à-vis C40 and its member cities."[639] The network of city directors established by the CCI in 2007 was "absorbed" into the new C40 organization with city directors eliminated and a select

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[632] Interview with former Sao Paulo city official, Sao Paulo, April 18, 2013
[633] Interview with senior C40 official, Skype, November 20, 2012; Interview with former senior C40 official, Oxford, October 24, 2013
[634] Interview with former C40 city Mayor, New York, November 16, 2011
[635] Interview with former CCI official, New York, November 18, 2011
[636] Interview with former C40 senior advisor, Skype, January 9, 2012
[637] Interview with senior C40 official, Skype, November 20, 2012
[638] Interview with former C40 staff member, Skype, January 26, 2012
[639] Interview with former CCI official, New York, November 18 2011. See also Pappu 2011

number of CCI staff incorporated into new C40 sub-networks.[640] Authority was simultaneously concentrated within the newly constituted C40 staff organization, and key OLTPS staff were installed and authorized to pursue the reconfiguration of institutional infrastructure.[641] This included the pursuit of partnership arrangements that would provide the C40 with increased financial capacity moving forward. The C40 secured long-term matching financial commitments from the Children's Investment Fund for the Future (CIFF), RealDania, and Bloomberg Philanthropies, thus providing the C40 with the financial stability required to increase the size and scope of the new staff organization.[642]

New York, at the same time, reconfigured both the composition and requirements of city membership. While the C40 had a

> technical responsibility to ensure that all major decisions (such as those regarding membership standards) be sent to a vote in the "general assembly" (the biannual summit of all members) the reality is that there are [circa 2011] no actual procedures or rules regarding how this actually happens. And so, when the C40 put forward a set of new membership requirements at the Sao Paulo Summit in 2011 mandating that member cities measure and report emissions to the C40 on an annual basis the Chair [Bloomberg] read them off at the end of the day and they were accepted by default. There are no procedures for discussion, for negotiation, for amendment, or for voting.[643]

At the same time, membership categories were reconfigured to emphasize the distinction between megacities and innovator or observer cities, and the C40 committed to expanding membership to eventually include all megacities as defined by either the size their population or local economy.[644]

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[640] Interview with senior C40 official, Skype, November 20, 2012
[641] Interview with member of the C40 Board of Directors, London, October 28, 2013
[642] C40 2013
[643] Interview with former C40 senior advisor, Skype, January 9, 2012
[644] Interview with former C40 senior advisor, Skype, January 9, 2012. See also Aggarwal 2010

3. Combining Capital

The sections above set out the particular claims to capital – and thus influence – advanced by the amalgam of New York City and Bloomberg Philanthropies. The proposition I am putting forth is that only the historically contingent combination of these two allowed for a sufficient combination of capital so as to secure a credible claim to external recognition and thus overcome internal contestation so as to produce norm convergence in the C40 between 2011 and 2014. One might well ask, though, whether it is not simply the material influence of Bloomberg and his many billions that was responsible for observed convergence outcomes. Is it really the *combination* of capital that matters, or might we account for convergence on the basis of financial influence or institutional authority?

In the manner of a three-legged stool, the absence of any one undermines the integrity of the entire entity. It is unlikely that Bloomberg could have created, or claimed, institutional capital in the C40 without the ability to simultaneously claim and draw upon the agential (in both performative and material dimensions) and structural capital associated with New York City. As noted above, cities such as Sao Paulo and Johannesburg looked not to the dictates of particular foundations or individuals, but to specific cities – those, such as New York, that were perceived as important, influential, or effective. For that matter, institutional capital was only (up until very recently – a point that will be discussed in in the concluding chapter) available to a particular subset of cities in the C40.[645]

And so New York and Bloomberg were able, between 2011 and 2014, to successfully claim and combine structural, agential, and institutional sources of capital so as to underwrite their efforts to produce convergence in the field around norms of agential and globally accountable urban governance. *How* they were able to do so rests on the relationship between capital, authority, and the co-constitution of securing, and imposing the terms of, recognition.

4. Capital, Recognition, and the Production of Convergence

Newly installed in 2011, New York and Bloomberg staff brought to the C40 the goal of "break[ing] away from city-city connections based on factors such as proximity and language

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[645] C40 2012c

and…actively "shap[ing]" the network in ways that can maximize the opportunities for positive learning and interaction between member cities."[646] They set out to "increase the rigor of the C40..."[647] thus moving away from "the old model which was based more on piloting approaches in small numbers of willing cities or providing the opportunity for cities to forge linkages" and instead working to more effectively "bring cities together."[648] New York and Bloomberg, in other words, set out explicitly to produce convergence in the field around specific governance norms.

Recognition is the causal mechanism that helps explain how they were able to do so; how the combination of capital claimed by New York and Bloomberg served to co-constitute, along with the particular claim advanced with respect to securing external recognition for the C40, a form of power and influence that allowed them to "govern in the absence of explicit coercion."[649] While the allure of external recognition has, as noted earlier, been the proverbial carrot since the formation of the C40 in 2005, in this section I illustrate how New York and Bloomberg leveraged their claims to capital to advance a credible claim that they could secure such recognition, which in turn allowed them to set the terms on which such recognition was to be granted; to specify the configuration of governance norms that comprise the field nomos, and strengthening the structuring effects of the field vis-à-vis its constituent members.

The argument proceeds in four parts. First, I illustrate the manner in which New York/Bloomberg linked the allure of external recognition to the imperative for internal ordering and consolidation in the field. Second, I identify the manner in which institutional capital was reconfigured so as to strengthen the capacity of the C40 organization to render cities "recognizable". Third, I document the alignment strategy employed by New York/Bloomberg as a means of enhancing the credibility of its claims to securing external recognition. Lastly, I link these to the specific norms of agential and globally accountable urban governance around which convergence was pursued, and produced.

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[646] Interview with senior C40 official, Skype, November 20, 2012
[647] Interview with former OLTPS official, New York, November 3, 2011
[648] Interview with former C40 staff member, Skype, January 26, 2012. The origins of this consolidation lie in the 'Hong Kong Strategy', adopted at the 2010 C40 Summit, which set out the goal of increasing the internal cohesion of member cities, coordinating their actions, and making 'the C40 a more visible and effective leader in urban sustainability'. See Acuto 2013b: 11
[649] Bulkeley & Schroeder 2011: 20; Murray Li 2007

4.1 External Recognition/Internal Ordering

Beginning in 2011 New York/Bloomberg undertook to reconfigure the collective claim advanced by the C40 for external recognition. The C40 was to be not just a subordinate player in the process (as the C40 Secretariat/Chair had previously advocated) nor a passive site for market-disruption intervention (as per the CCI proposition) but was to be "the world's leading, and most indispensable, climate change organization."[650] In so doing New York/Bloomberg set out to acquire not only a "place in the international process" and but to secure recognition for the C40 as an essential "player in global climate governance."[651]

To do so New York/Bloomberg drew an explicit link between the external recognition claim and the criteria of joint action, efficacy and demonstrable effect. In asking that the C40 "be recognized as an official voice of the world's megacities that are committed to real, measurable climate action"[652] external recognition was fused to the ability to achieve, and catalogue, meaningful action and effects. As discussed in greater detail below, this entailed a renewed and recalibrated emphasis on practices of measurement, reporting, disclosure, and standardization, linked together through the norm of globally accountable governance.[653] In this New York/Bloomberg reproduced the earlier meme that "cities act while nations talk" but refined it to reinforce a particular understanding as to what kind of action cities undertook; it created a need to catalogue the number, scale, scope, and total emissions reductions achieved from city actions[654] In attending the 2014 C40 Summit I was struck by the emphasis placed on situating the C40 at the forefront of global climate governance, and the shared perception that recognition of such was to be secured solely on the basis of converting individual and collective commitments into actions and cataloguing the results.[655]

And so the goal of producing convergence within the field was explicitly linked to the credibility of external recognition claims, such that efforts to render the activities of member cities legible, comparable, and cumulative were at the same time "aimed at selling and telling the story of what

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[650] Bloomberg 2011 – my emphasis
[651] Interview with former Sao Paulo city official, Sao Paulo, April 18, 2013
[652] C40 2011
[653] Bloomberg 2010
[654] Bloomberg 2014
[655] Personal observation

cities are doing...to increase the general perception regarding the importance of cities...[and enhance] claims for increased resources, capacity, and participation in international climate negotiations."[656]

4.2 Rendering the Field Recognizable

At the same time, New York/Bloomberg undertook an active strategy aimed at increasing the capacity to render the field recognizable. A communications branch was created, in 2011, so as to manage the public image and "brand" of the network; to ensure control over the public message generated by C40 events and initiatives and to provide cover and support for city staff and politicians in C40 cities.[657] Partnerships were forged with various media organizations, including National Geographic,[658] CNN,[659] and Cities Today,[660] and with the Clear Channel Outdoor advertising company.[661] Agreement was reached with Siemens, in 2013, to create the City Climate Leadership Awards as a means of "provid[ing] global recognition to cities that are demonstrating climate action leadership."[662] Each of these measures served to augment the capacity of the C40 organization to deliver the benefits of recognition so desired by local official and politicians while at the same time imposing recognition on those cities less active and less engaged.

The C40 organization could increasingly render public commitments un-kept as well as those made whole, poor performance as well as demonstrations of "climate action leadership". The capacity to document the latter was created by New York/Bloomberg through partnership agreements with Arup and CDP. Arup provided, in the form of a comprehensive process of data collection that has been leveraged to produce two major public reports, a "picture" of what C40 cities were able to do and what they were doing with respect to climate change.[663] This data has been employed by the C40 organization to foster particular sorts of actions in C40 cities – to not only "suggest priorities in terms of most impact for least cost" but also to "help cities to identify

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[656] Interview with former C40 staff member, Skype, January 26, 2012
[657] Interview with former C40 senior advisor, Skype, January 9, 2012
[658] National Geographic, n.d.
[659] C40, n.d.
[660] Cities Today, n.d.
[661] Business Wire 2014
[662] Siemens 2014
[663] Interview with former C40 senior advisor, Skype, January 9, 2012

what their priorities should be."[664] In a similar manner, the relationship between the C40 and CDP was forged so as to provide the C40 organization with a means of identifying which cities were, and more importantly were not, living up to nominal commitments as it offered a means of applying indirect pressure so as to bring them into the fold.[665]

In both cases we see an effort to render the field legible – a necessary precursor to rendering it subject to order.[666] As per a senior official, the C40 worked to develop this "picture" of city actions and emissions inventories so as to be better able to "make the case that cities are having positive effects and are taking positive actions",[667] and in so doing enhancing the ability to shape what counts as both positive action and positive effect. The impact of this effort to link the allure of recognition to the structuring imperative pushing cities to be complicit in adopting particular norms and practices is well illustrated in Johannesburg. The C40 has become, in the words of local officials, better at keeping the city "locked in" through initiatives like the Climate Leadership Awards and message management or global branding.[668] Events like the awards are seen to increase the buy-in and commitment of local politicians by providing them with global stature and enhancing standing in local political contexts.[669] At the same time, the awards and communications efforts constitute a source of "peer pressure" since they serve to enhance (through positive recognition) or undermine (through non-adherence) city efforts to compete effectively for capital investments and global stature. The latter is evident in adoption of practices of emissions accounting, standardization, and public disclosure by the city. The city had not, prior to 2013, engaged in any of these and yet by 2014 it had (with material and technical assistance provided by both Siemens and the C40) prepared its first city-wide emissions inventory, adopted the GPC emissions accounting standard, and demonstrated adherence with both the norm of globally accountable governance and its attendant practices of reporting and disclosure. The inventory, which was prepared in order to be ready to present at the February 2014 C40 Summit hosted by Johannesburg, is seen by local officials as a means of demonstrating the seriousness and legitimacy of the city in the context of transnational efforts

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[664] Interview with former C40 staff member, Skype, January 26, 2012 - my emphasis
[665] Interview with former C40 senior advisor, Skype, January 9, 2012
[666] Scott 1998
[667] Interview with senior C40 official, Skype, November 20, 2012
[668] Interview with senior Johannesburg city official, Johannesburg, February 10, 2014
[669] Interview with senior Johannesburg city official, Johannesburg, February 10, 2014

like the C40.[670] Furthermore, the obligation of reporting on local emissions to CDP was understood by local officials as a powerful source of peer pressure operating at the Mayoral level in Johannesburg, one that helped "keep local political engagement through a sense of inter-city accountability."[671] In this we get a sense as to how the desire to be recognized creates a strong imperative to adhere to emerging criteria of evaluation.

4.3 Credibility

To further enhance the capacity to impose order on the field, New York/Bloomberg undertook efforts to enhance the credibility of the claim that they could secure for cities the recognition that they desired. This was done primarily through the formation of strategic partnerships with a host of non-state actors, including most importantly the World Bank, Arup, Siemens and CDP.[672] Consider, for example, the relationship between the C40 and World Bank, one "urged" upon the World Bank by Bloomberg.[673] The two entities signed a formal agreement with the C40 during the 2011 Sao Paulo Summit, with the Bank offering C40 cities a direct access funding window provided they adhere to novel membership requirements related to standardization, measurement, transparency, and reporting.[674] The partnership was characterized from the start as a means of "giving credibility to climate projects to attract private capital"[675] and enhancing "the ability [of cities] to get access to climate finance."[676] As one interviewee revealingly suggested, the entirety of efforts at consolidation within the C40 are oriented towards the search for a secure funding basis for the network and its cities.[677] By securing from the World Bank the "landmark recognition of the leadership the world's great cities are taking to meet the challenges of climate

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[670] Observation at C40 Bi-Annual Summit, 5 Feb 2014; Interview with senior Johannesburg city official, Johannesburg, February 10, 2014
[671] Interview with senior Johannesburg city official, Johannesburg, February 10, 2014
[672] Gordon & Acuto 2015
[673] Pappu 2011
[674] Interview with former C40 senior advisor, Skype, January 9, 2012
[675] Peirce 2011
[676] Interview with former C40 city Mayor, New York, November 16, 2011
[677] Interview with member of the C40 Board of Directors, London, October 28, 2013

change"[678]– New York/Bloomberg substantially enhanced the credibility of their recognition claim.[679]

Such credibility was used to link the promise of external recognition, by actors such as the World Bank (and private capital markets by association), to *particular standards* upon which such recognition would be granted (and thus to convergence around particular governance norms within the C40 field). In this we see an indication of the co-constitutive dynamic between securing external recognition in other governance fields *for* the C40 and securing internal recognition *within* the field for particular governance norms. The power to produce norm convergence, as illustrated below, rests at the intersection of these two, interlocking processes.

Consider the following statement by then-C40 Chair Bloomberg: "this new partnership …[is] going to go a long way toward leveraging private capital [and is] made possible by C40's commitment to standardizing how we report on the climate change plans in our cities."[680] Leveraging what Bloomberg referred to as the "tremendous opportunity" offered to "C40 cities to obtain vastly greater technical and financial support…[as well as] private capital, too" the partnership offered a means of encouraging "'less active C40 members' (an expression used in many instances by C40 and World Bank executives at the Sao Paulo summit) and affiliate cities" to not only take up "more extensive actions" but also to drive convergence around particular sorts of norms, beliefs, and practices.[681] The agreement with the World Bank, after all, was premised on use of a single standard of measurement and common commitment to reporting and disclosure as requisites for gaining access to the direct funding window on offer.[682] Here we see the credible claim to recognition fused to convergence around particular norms and practices. Convergence puts C40 cities, in the words of UNFCCC Executive Secretary Christiana Figueras, in the position to "benefit from the various incentives and financial mechanisms that are being constructed both inside and outside the climate change convention."[683] The power of this claim lay in the considerable allure of increased access to financial resources. In Johannesburg Mayor

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[678] Bloomberg 2011
[679] Then President of the World Bank Robert Zoellick stated in his speech to C40 delegates that "it is no stretch of the imagination to believe that cities will take the lead in overcoming climate change". See Zoellick 2011
[680] Bloomberg 2011 – my emphasis
[681] Acuto 2013b: 14
[682] Interview with former C40 senior advisor, Skype, January 9, 2012
[683] Figueras 2014

Tau has remarked that it has been "nearly impossible" for the city, up to the present time, to access international climate funds to support its local climate policies.[684] The possibility that such barriers might be overcome thus serves as a compelling incentive for cities to be complicit in adopting as their own those norms and practices set forth as the terms upon which recognition would be granted.

4.4 Specifying and Strengthening Field Nomos

Efforts such as those identified above produced, in the C40, convergence around a particular configuration of governance norms. In the sections below I set out to link the specific habitus of New York/Bloomberg to the content of field nomos circa 2014.

4.4.1 What Kind of Problem, What kind of Actor

Since 2011 the C40 has come to converge around a shared understanding of climate change as an urban, rather than a market, problem. Climate change, in other words, is not only amenable to but actually *requires* an urban (read city-led) response. Yet whereas the earlier orientation of C40 Secretariat and Chair (as occupied by both London and Toronto) was towards symbolic urban leadership, the need to overcome political barriers (both local and national) achieved through catalyzing actions, these have been replaced by the notion that cities are actors of equal stature and standing as any other engaged in global climate governance. Not only are the C40, and its member cities, "player[s] in global climate governance"[685] they hold "the future in their hands"[686] and see themselves as "the world's leading, and most indispensable, climate change organization."[687]

In Sao Paulo this was evident in the orientation of the climate action plan, released in 2011, towards not only local and regional but also "*the international communities*…"[688] and the desire to illustrate "[Sao Paulo's] leadership as a *global* climate governor."[689] In Johannesburg, a

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[684] Personal observation, 2014 Summit. The quote is from Mayor of Johannesburg Parks Tau
[685] Interview with former Sao Paulo city official, Sao Paulo, April 18, 2013
[686] Bloomberg, as quoted in Peirce 2011
[687] Bloomberg 2011 – my emphasis
[688] City of Sao Paulo 2011: 7 – my emphasis
[689] Interview with former senior advisor, Department of Environment, City of Sao Paulo, Sao Paulo, April 24, 2013 – my emphasis

similar pattern is evident, whereby the city came to link together aggressive local climate governance with the pursuit of "recognition of the growing role that Johannesburg, and the African continent, can play to find solutions to the most pressing issues facing our globe."[690]

4.4.2 How to Govern

The C40 was, as noted in chapter 5, split circa 2010 between two competing interpretations of what, exactly, it should mean for cities of the C40 to be climate governors. The CCI envisioned cities as potential sites of intervention, endowed with the ability intervene locally in global markets. Collective action was proposed to emerge organically, with market dynamics driving systemic diffusion. The C40 Secretariat/Chair, on the other hand, pursued a vision of cities as local actors capable of linking local interests to the global phenomena of climate change. As a result, coordination was to be variable and ad hoc, with fluid "coalitions of the willing" forming, dissolving, and re-forming within the "open source" infrastructure of the C40.[691] More than anything the objective of city engagement was to encourage, inspire, or otherwise catalyze governance engagement at upper levels of government.

Upon the ascendance of New York/Bloomberg to the position of C40 Chair in 2011 both of these positions were subsumed by novel governance norms of agential and globally accountable urban governance. Cities of the C40 have come, as illustrated in chapter 2, to understand the role of global climate governor as requiring both agential and globally accountable urban governance. Here one can clearly divine the influence of New York/Bloomberg is linking recognition to a particular understanding as to what it means for cities to be climate governors. The habitus that Bloomberg brought with him into the field – an emphasis on data-driven decision-making, an emphasis on pragmatic problem-solving, a disdain for the politics of negotiation and compromise, and an interest in achieving measurable and demonstrable results – all find expression in the particular governance norms around which the C40 has converged.

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[690] Tau 2013
[691] Interview with former C40 city Mayor, New York, November 16, 2011

4.4.2.1 Agential Urban Governance

Since 2011 there is a clear pattern of consolidation within the field around the norm of agential urban governance, one actively projected by New York/Bloomberg from 2011 onwards. In this, cities are understood as legitimate governors, "increasingly driving meaningful action" in opposition to those "national governments and international bodies [who] are unable to have a significant impact."[692] Cities of the C40, as such, are not simply demanding a seat at the table or seeking to influence those at the table, they are actors in their own right - global governors to use Avant et al's formulation[693] - engaged in concrete and meaningful practices of governance. They "…have many of the powers necessary to mitigate climate change, and adapt to it.…[and] are already using those powers to take action to reduce greenhouse gas emissions.."[694]

In Sao Paulo, while early climate governance was described by interviewees as largely a relabeling of previously-adopted initiatives,[695] there was a sense that, from 2011 on, the city "become more aware of its *role as a global governor.*"[696] In Johannesburg there was a similar transition. Early climate governance was inconsistent and largely a process of reframing existing projects[697] with little interest in adopting a "global" role[698] but rather seen as a means of reducing energy consumption and demand, creating positive co-benefits for local citizens (especially in the transportation sector), and taking measures to reduce or ameliorate negative impacts of climatic change.[699] By 2014, however, the city has come to adopt the novel governance norm. Urban development and planning objectives have come to be cast in the language of climate governance[700] and the city has taken a distinct interest in demonstrating leadership as a means of increasing continental and international visibility, securing its position

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[692] C40 2011
[693] Avant et al 2010
[694] Arup 2011: 4
[695] Interview with former senior official, ICLEI Latin America, Sao Paulo, April 19, 2013; Interview with policy analyst at CETESB, Sao Paulo, April 23, 2013
[696] Interview with former Sao Paulo city official, Sao Paulo, April 22, 2013
[697] Interview with former consultant to the city of Johannesburg, Johannesburg, February 7, 2014; See also Phalatse 2008
[698] Interview with senior Johannesburg city official, Johannesburg, February 10 2014; Interview with city of Johannesburg senior official, Johannesburg, February 10, 2014; Interview with Gauteng Regional Climate Observatory (GRCO) senior staff, Johannesburg, February 10, 2014
[699] Masondo 2008
[700] City of Johannesburg 2014: 15

as a leading city within the continent, and using climate change to further the city development agenda.[701]

4.4.2.2 Globally Accountable Urban Governance

Cities in the C40 are not only agential climate governors, they are to be globally accountable, to one another and to other external audiences (capital markets, international organizations, the international community) for their commitments, their actions, and their effects.[702] Early on in his tenure as Chair, Bloomberg asserted to the cities of the C40 that,

> [b]y joining C40, each of our cities has made a commitment to action – a commitment that must be matched by an equal willingness to be judged by our progress, and be *100 percent accountable*. So let's publicly identify all the initiatives that we're undertaking.,,Let's set clear, *quantifiable benchmarks* for implementing them. And let's *regularly and openly assess our experience* with them.[703]

Consolidation around this governance norm did not take hold absent conflict and contestation. There was, according to a former CCI official, explicit disagreement circa 2010 over whether or not such accountability was possible given the shifting realities of local politics[704] and the challenges of, as one C40 official put it, transitioning from a "voluntary, low to no expectations membership" to one based on commitment, responsibility, and accountability.[705] The very idea of holding cities to shared commitments and obligations was seen to be a "non-starter" since it would as likely as not fracture the network and drive cities away.[706] There was also contestation over whether accountability was desirable, with the CCI and C40 Secretariat each suggesting that

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[701] Interview with senior Johannesburg city official, Johannesburg, February 10 2014
[702] CCI 2011: 2. In the words of Paul Dickinson, CEO of CDP, "[w]ith cities at the forefront of our global response to climate change, it is critical that they have access to the same proven process [public disclosure and accountability]..."
[703] Bloomberg 2010 – my emphasis
[704] Interview with former CCI official, New York, November 18, 2011
[705] Interview with senior C40 official, Skype, November 20, 2012
[706] Interview with former C40 city Mayor, New York, November 16, 2011

such a transition in orientation would reduce the flexibility and local responsiveness of participating cities.[707]

Yet by 2014 a major report issued by Arup and the C40 simply states that, "C40 Cities are holding each other accountable."[708] This idea, that cities "need to be accountable *to one another* in terms of the promises they've made, and the impacts they've had" as it was put by Mayor Tau during the 2014 C40 Summit hosted by Johannesburg[709] has been tied to the need for "internal coherence and conver[sion of] rhetorical commitments into concrete and measurable actions."[710] Accountability has thus come be seen as essential to ensuring that member cities aren't lagging behind and the C40 agenda continues moving forward. It also provides a means of generating peer pressure on member cities, and holds cities to their promises and targets.[711]

Convergence around governance norms of agential and globally accountable urban governance – as illustrated by statements such as the above regarding the need for coherence between claims and actions, quantifiably demonstrated local governance action and effects, and public disclosure of both - have, at this point, been fused to the promise of securing both the material and existential benefits proposed by Bloomberg/New York. In Johannesburg, for instance, they are explicitly linked to the possibility of increased access to sources of global climate finance, and to demonstrating the centrality of Johannesburg as a leading city in South Africa, the African continent, and the world.[712]

4.4.3 How to be a Governor

Lastly, there has been convergence in the C40 field around practical dimensions of field *nomos*. Beginning in 2011 the C40 began to coalesce around collective practices of quantification, reporting, and standardization, practices that constitute and enact the norms of agential and globally accountable governance as set out above.

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[707] Interview with former CCI official, New York, November 18, 2011; Interview with former senior C40 official, Oxford, October 24, 2013
[708] Arup 2014: 7 – my emphasis
[709] Personal observation, 2014 C40 Summit of a speech given by Johannesburg Mayor Parks Tau. See also Powell 2014
[710] Interview with member of the C40 Board of Directors, London, October 29, 2013
[711] Powell 2014; SLoCaT 2014
[712] Dlamini 2014; Mitchell 2014

4.4.3.1 Quantification and Reporting

If the mantra of the C40 circa 2009 was "cities act, while nations talk" then by 2014 it had without doubt become, "if you can't measure it, you can't manage it." During the course of the 2014 C40 Summit hosted by Johannesburg, this phrase was voiced repeatedly over the course of the three-day conference, by the Chair of the C40 Board of Directors (former Mayor Michael Bloomberg), the current C40 Chair (Mayor Eduardo Paes of Rio de Janeiro), various C40 City Mayors in attendance and numerous city officials.[713] In this we get a sense as to convergence around practices with respect to how C40 cities should do global climate governance.

Beginning in 2011 the C40 adopted what one interviewee described as a "business oriented approach" oriented towards "outcomes, results, and the use of data to measure and assess network performance."[714] Bloomberg and key staff drawn from OLTPS in New York "worked hard" upon taking over as C40 Chair, "to shift C40 to a data-driven model of governance – a direct move away from the CCI approach that has been organized around specific projects and programmes."[715] Climate governance, as practiced by cities, was subsequently re-oriented, "set …on a path toward *consistent and measurable* reductions in carbon emissions."[716] This new path was organized around a "data-driven model of governance' one that directly rejected and "move[d] away from the CCI approach that has been organized around specific projects and programmes" such as the Energy Efficiency and Buildings Retrofit Program, Joint Procurement consortium, and Electric Vehicle Network.[717] Yet while this process of consolidation met with ""substantial resistance from CCI people"[718] the material capital that Bloomberg brought with him allowed New York to "muscle aside the [CCI] staff members" and marginalize the role of the CCI within the field.[719] As a former Clinton Foundation official put it to New York Times reporter John Broder, "what are we going to do, fight him? They have the money; the golden rule applies."[720]

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[713] Personal observation, 2014 C40 Summit
[714] Interview with member of the C40 Board of Directors, London, October 28, 2013
[715] Interview with former Sao Paulo city official, Sao Paulo, April 28, 2013
[716] Broder 2011 – my emphasis
[717] Interview with former CCI official, Sao Paulo, April 18, 2013
[718] Interview with former C40 staff member, Skype, January 26, 2012
[719] Interview with former CCI official, Sao Paulo, April 18, 2013. See also Broder 2011
[720] Broder 2011 – as in "who has the gold, rules."

Linked to the promise of external recognition, quantification is held forth as a means of bringing "city-level gains to the national conversation"[721] and of demonstrating the governance bona fides on which such recognition has been premised by New York/Bloomberg. For without quantification, or "solid data" with respect to actions and effects, "[w]e [the members of the C40] will never meet the ambitious goals we set as an organization."[722] At the city-level, for instance, Johannesburg is using a "baseline study and monitoring the energy and water usage to measure energy and water consumption" to assess performance and effects produced by its Cosmo City Climate Proofing initiative with "data [to] be used to calculate carbon savings arising from the project in order to raise carbon finance in the carbon market."[723] Johannesburg also released its first citywide emissions inventory in 2013, an action that "would not have happened without the impact of the C40" and the "political imperative to do it" that it provided.[724] In Sao Paulo, in spite of some retrenchment in local engagement in climate governance the city remains committed to local emissions measurement and accounting, and released an updated citywide emissions inventory in 2014.[725]

4.4.3.2 Standardization

A final element of convergence with respect to how climate governance should be practiced in the C40 is evident around standardization of measurement and reporting practices. These have, since 2011, emerged as an essential aspect of networked urban climate governance based on the link forged between "[e]stablishing a single global standard for reporting greenhouse gas emissions" and the ability of local governments to "access funding for mitigation and adaptation projects."[726] As such, New York/Bloomberg undertook efforts to produce convergence around standard measurement and reporting methodologies that would allow for "comparing emissions across cities around the world."[727] An alignment was organized in 2011 by New

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[721] Figueras 2014
[722] Bloomberg 2010. See also C40 2015
[723] Tau 2015
[724] In an interview with senior Johannesburg city official, Johannesburg, February 10, 2014 it was indicated that "the C40, along with Siemens, also provided much needed technical support to the City of Johannesburg as it prepared the inventory."
[725] Setzer et al 2015: 105
[726] Bloomberg, as quoted in Business Green 2011
[727] Business Green 2011

York/Bloomberg between the C40, ICLEI and the World Resources Institute (WRI), with support provided by the World Bank, UN-Habitat, and UNEP, so as to infuse both the C40 field as well as the broader field of networked urban climate governance with a single standard of emissions measurement and reporting.[728]

The Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories (GPC) was developed in due course. This new standard, jointly developed by the C40, ICLEI, and the WRI,[729] is organized around a familiar principle - that "you can't cut what you don't count"[730] - and aims explicitly to universalize local practices of measurement, reporting, and disclosure.[731] As such, this interpretation of authoritative climate governance is clearly linked to the governance norms outlined above. The new standard is expected to "help cities see what climate strategies are working, better target their resources, and hold themselves accountable for results."[732] As stated by the City of Johannesburg (which has adopted the new standard) "[t]he GPC…offers the City an internationally accepted management tool to help to compete globally and to make informed decisions about climate change."[733]

5. Bridging External and Internal Recognition; Fusing Power With and Power Over

In each of the above there is a clear sense as to the active and intentional effort undertaken by New York/Bloomberg – through the position of C40 Chair and the newly constituted C40 organization – to fuse together the possibility of external recognition to terms on which such recognition would be granted. Recognition serves as the medium of exchange through which the combination of capital claimed is converted into the "quieter registers"[734] of power, influence,

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[728] Peirce 2011
[729] The GPC thus has the markings of a bridging mechanism, and potentially a means of translating capital claims and thus power, between the particular governance fields constituted by particular city networks (C40 and ICLEI) and broader fields (networked urban climate governance, global climate governance) in which they are embedded.

[730] GPC pilot cities: Buenos Aires, Durban, Lagos, Lima, London, Melbourne, Mexico City, Rio, Stockholm, Tokyo. GPC Beta version cities: Addis Ababa, Joburg, Oslo, Portland, Quito, Toronto, Tshwane, Vancouver. See http://www.ghgprotocol.org/city-accounting.
[731] Bates 2012
[732] Michael Bloomberg, as quoted in ICLEI 2014
[733] City of Johannesburg 2014: 13
[734] Allen 2010

and domination. New York/Bloomberg were able to employ capital so as to render more credible their recognition claim, and link it to a particular set of governance norms and practices that served to give specific content to the configuration of governance norms that together constitute field nomos.

Recognition, as such, provides a conceptual tool to pry open the complex relationship between the allure of "power with" that draws actors together in voluntary initiatives like the C40 in the first place, and the reality that coordination and collective action can only result when actors are willing to be complicit with their domination by some actor (or group of actors) with "power over" the shaping of collective objectives, values, beliefs, and practices.[735]

6. Conclusion

External imperatives pushing the C40 towards convergence have been present from the outset. These include a functional need to respond to a problem that is more immediate, and obvious, at the urban scale as well as a political opportunity to assume leadership in the face of abstention and inaction by national governments. Once formed, the C40 was faced a further structural imperative, the need to legitimate the authority claims on which it is based: that cities, individually and collectively, "matter" and can make a difference as climate governors. These structural imperatives help to understand why the C40 was formed, and why it had held together. Yet they can neither account for why convergence happened between 2011 and 2014 and not earlier, nor can they help understand why convergence has emerged around a particular configuration of understandings, objectives, identity, and approaches.

To do so is to acknowledge the role of agency and the importance of contingency– and in particular the contingent agency of New York City and Bloomberg Philanthropies - in *producing* convergence within the C40 field. The unique amalgamation of these two actors in the position of C40 Chair endowed them with a combination of structural, agential, and institutional capital that was heretofore unknown in the field. The importance of this combination of capital, as illustrated above, lies in the ability to link the promise of recognition to the imposition of particular terms on which such recognition would be granted.

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[735] Bulkeley & Schroeder 2011

Recognition thus provides the mechanism through which capital is converted into influence and power within a field. It also helps understand why actors are willing to be complicit in their own domination – adopting the norms and practices of others as their own – by specifying that such complicity is intimately tied to structural imperatives that drive cities to desire such recognition (and the material/political benefits that come with it). Lastly, it provides a foundation on which to both assess opportunities and limitations of collective action within the C40 field, a task to which I turn as part of the concluding component of this project.

Chapter 7
Implications, Contributions, and Charting a Course Ahead

GLENDOWER

I can call spirits from the vasty deep.

HOTSPUR

Why, so can I, or so can any man;
But will they come when you do call for them?

1. Introduction

Much like Glendower in *Henry IV*, the C40 has long made vociferous and proud statements as to its ability to call forth collectively meaningful climate governance. And yet, as Hotspur keenly responds, the value of such claims rests on whether what is *proposed* (joint action, leadership, coordination) matches up with what is *produced*. In the case of the C40, the challenge lies in demonstrating not the individual or project-specific successes attained by particular cities, but rather in establishing a capacity to achieve coordination, to produce collective action and effect. Doing so is no small feat, for cities – those particular "spirits of the vasty deep" of interest in this project - are diverse in their interests, characteristics, and capacities, and tenuous are the ties that bind them together in collective endeavours like the C40.[736]

And yet the C40 has seemingly overcome such barriers to achieve coordinated action and effect. The C40 achieved internal coherence between 2005 and 2014 as its member cities adopted common practices of climate governance related to target-setting, planning, measurement, reporting, and disclosure. The C40 has, in other words, seemingly answered Hotspur's challenge: it has called, and the spirits they have come.

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[736] Bulkeley & Kern 2009

Scratch beneath the surface of those nominal claims with respect to more local governance and greater amounts of inter-city sharing and cooperation, and one finds – as presented in chapter 2 – deeper patterns of convergence around shared understandings as to the nature of the problem, the role that cities play as global governors, the manner in which cities should govern, and the practices of governance deemed requisite, appropriate, and essential. The ability of the C40 to achieve internal coherence reflects, in other words, the ability of the C40 to achieve convergence around norms of plural participation, liberal environmentalism, active urban governance, and globally accountable urban governance.

To account for this empirical puzzle, and answer the research questions set out in chapter 1 – why and how the C40 has achieved norm convergence, both at all and around a specific configuration of norms and practices – I have turned in the preceding chapters to field theory. Re-conceiving the C40 as a governance field offers a means of illuminating processes of struggle and resistance, domination and complicity, and explaining how actors with diverse ideas and interests interact to produce convergence around particular governance norms. Through the application of a field theoretic framework it becomes possible to "see" the C40 in a novel manner, highlighting the interplay between the C40 and the broader domain of global climate governance, the presence of contestation over which norms would be become entrenched within the field, why actors such as the CCI, London, Toronto, and the C40 Secretariat were unable to prevail while others, such as New York City and Bloomberg Philanthropies, were able to produce (and shape the substance of) norm convergence over time and space.

In this concluding chapter I want to step back and consider the implications of the argument that has been presented, the ways in which this project offers valuable contributions of interest to both scholars and practitioners of global climate governance, and the many interesting yet unaddressed questions that have inevitably arisen over the course of conducting and writing up this project. Setting out the directions in which this project can be extended and expanded offers a means of circling back to the starting point, and allows me to conclude with some reflections on the possibility and potential possessed by the C40, and cities more broadly, as sources of transformative and timely global climate governance.

2. Implications

The C40, as chapters 5 and 6 have demonstrated, can be profitably re-conceptualized as a governance field: a social space organized around a particular set of objectives, norms, and practices that serve, over time, to structure the interests and actions of actors operating within it. Importantly, in novel governance fields like the C40 the substance of this structure – the specific configuration of norms that collectively forms the field nomos - is neither given nor natural but rather is socially conditioned, by the broader normative structures in which it emerges), and socially constructed, as various actors seek to endow it with particular normative content. Actors bring with them into novel governance fields a particular set of ideas, interests, and practices – a habitus – that reflects the formative experience of those fields from which they come. They also bring with them, and attempt to have recognized, particular claims to authority and influence - capital. Generally speaking, the more capital actors are able to claim, the more authority they have in the field; authority that can be used to imbue the field nomos with both specificity (a particular configuration of governance norms) and strength (such that actors come, over time, to conform with and adopt those norms as their own).

Norms of agential and globally accountable urban governance, and practices of quantification, measurement, reporting and disclosure, are neither necessary nor self-evidently obvious foci of urban climate governance. As per Bulkeley et al "the emphasis on emissions inventories as the first step for climate change strategies and action locally may be misplaced" since "the actions required to reduce emissions of GHG locally – increasing energy efficiency, switching energy sources, and reducing demand for energy (in both buildings and travel) – are well known."[737] It is only as a function of the link fused between the promise (and a powerfully alluring one it is) of securing the intangible benefit of legitimacy and the tangible benefits of financial investment, resources, and access that C40 cities have come to converge around these norms and practices, on the basis that doing so represents the terms on which such recognition will be granted.

The specific theoretical innovation introduced here is the mechanism of recognition – and the bridge between external and internal recognition – as the link between actor's claims to capital and capacity to produce norm convergence. In so doing I draw inspiration from Sending, who

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[737] Bulkeley et al 2009: 13

places recognition at the core of a field theoretic framework used to account for the production of authority within a variety of global governance fields.[738] My use of the concept, however, departs slightly in emphasizing the link between a collective desire (within novel governance fields like the C40) for recognition *by* other governance fields in which they are embedded (the field of global climate governance), and the effort and ability of actors to link such external recognition to the production of a particular kind of order (or, in other words, a particular field nomos) *within* the field. Recognition and capital are thus co-constitutive, as actors make claims to capital so as to strengthen and support their ability to secure external recognition. At the same time the credibility of such claims to external recognition serve to constitute internal claims to authority and endow actors with the ability to inform the substance and enhance the strength of governance norms around which the field is organized; to impose, in other words, order of a particular sort on the field, an order based on the willing submission of some actors to misrecognize as their own the interests and ideas of others to be complicit in their own domination.[739]

Over the course of the preceding two chapters I have illustrated the value-added of a field theoretic framework in terms of not only sensitizing analysis to the presence of power relations and processes of struggle, contestation, super and subordination, but as also offering a causal story to explain how convergence is produced in nominally non-hierarchical initiatives like the C40; a means of explaining who is able to produce convergence, around which norms and practices and why. What the analysis illustrates is a fluid and interactive process through which convergence around particular norms is pursued by various actors subject to both the structuring effects of broader normative structures, their respective capacity to claim, and have recognized by other actors, institutional, structural, and agential capital, and the manner in which they are able to fuse external recognition (from other governance fields) to the terms on which such recognition is to be granted internally to actors within the C40 field.

This helps to explain why the C40 has been able to achieve convergence in ways both novel and surprising, why convergence emerged unevenly such that the C40 only really differentiated itself from 2011 onwards, and why convergence emerged around a particular set of norms and

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[738] Sending 2015
[739] Steinmetz 2008; Bulkeley & Schroeder 2011

practices rather than another. Put simply, there was no actor (or configuration of actors) able, prior to 2011, with enough capital so as to be able to credibly claim an ability to secure recognition. Neither the CCI nor the C40 Secretariat/Chair (as held by London and Toronto) – actors who brought with them particular ideas with respect to what is to be governed, what is the objective of governance, what are the tools of governance, and what does it mean to be a governor - was able to claim enough capital, nor to successfully fuse external and internal recognition, to imbue the field nomos with specific content. The C40, as a result, remained mired in a state of contestation, active internal conflict, and minimal demonstrated effect.

What changed - what rendered the C40 different - was the historically contingent access of New York City and Bloomberg Philanthropies to the position of C40 Chair in late 2010. Empowered by the structural and agential capital on which New York was able to draw (as a pre-eminent global city and well-received and respected local climate governor) and the agential capital carried by Bloomberg (in the form of $3 billion USD in assets and an active interest in driving transformative change in and through cities) and New York (in the form of its recognition as an innovator and aggressive local climate governor, and the epistemic resources dedicated by the city to C40 activities) into the field, the two were able to both leverage, and create/claim, the institutional capital accorded to the position of C40 Chair. Together they were able to draw on a sufficient volume and combination of capital so as to credibly claim the ability to secure recognition and thus produce order in the field. This order is embodied in the specification of governance norms around which the field was organized, and the convergence of actors around these from 2011 to 2014.[740]

In the following sections I draw out a set of implications associated with the analysis and argument thus presented: for the C40 specifically; for the broader domain and enterprise of networked urban (climate and otherwise) governance; and, for the larger project of global climate governance.

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[740] Although I have chosen to bracket it out of the analysis, there may well be a causally-relevant relationship between the content of norms propounded by New York/Bloomberg and capacity to produce norm convergence in the field – as an intervening factor interacting with efforts to secure external recognition for the field as a whole and produce order of a particular sort within the field. I suspect, for instance, that New York/Bloomberg could not have produced convergence around governance norms that would mandate formal emissions reduction obligations for member cities, nor those that would require equal commitments across all city members. In this one can sense the conditioning effect of deeper governance norms and the imperative to "fit" novel norms into such a context (as per Bernstein 2001)

2.1 Implications I: The C40

The dance between power with and power over is a delicate one, and the argument presented raises important questions with respect to whether the C40 can maintain convergence over time, and what happens when the unique combination of New York and Bloomberg is no longer in place? The crux of my argument, as noted above, is that convergence would not have taken place in the C40 absent the unique and contingent configuration of New York/Bloomberg between 2011 and 2014. This configuration has since come undone; Bloomberg is no longer the Mayor of New York (having been replaced by Bill de Blasio in 2014); New York is no longer the C40 Chair (having been replaced by Mayor Eduardo Paes of Rio de Janeiro in early 2014). What, then, might this mean for convergence in the C40?

Three points are worth making in response. First, while the power of a particular actor (or set of actors) is essential in novel fields that are, as yet, inchoate or weakly organized, once fields are filled with specific content and strengthened through the link to recognition they take on a structuring effect independent of those actors who imbued them with both in the first place. That there is contingency in the causal chain that lies behind convergence in the C40 should be expected – as Tilly puts it, "*when* things happen in a sequence affects how they happen." The question, then, is whether and to what extent "[o]utcomes at a given point in time" between 2011 and 2014 in the C40, in this case, serve to "constrain possible outcomes at later points in time."[741]

The structuring effect that fields have on their participants is well recognized in field theoretic analysis.[742] A strong field nomos can come to reconfigure the individual habitus of actors within a field – either what they think[743] or what they "do" as a matter of habit, routine, or regularized practice.[744] In either case - and which of these plays out constitutes a possibility for future investigation - the question is whether the C40 field has a strong enough nomos so as to exert a

[741] Tilly 1984: 14. Put another way, the question is whether and to what extent a strong and specified field nomos creates path dependencies with respect to how climate governance is understood, approached, and practiced within the C40.
[742] Hopf 2010
[743] Friedman 1990
[744] Pouliot 2008

structuring effect into the future in the absence of the combined leadership of New York and Bloomberg.

A second point, however, highlights the ongoing dynamism of the field as actors jockey to create and claim capital, and thus assert authority and influence. In this the major development in the C40 since early 2014 is the creation of a new source of institutional capital in the field. A Board of Directors was created in 2014, and Michael Bloomberg appointed as Chair of the Board immediately upon handing over his duties as C40 Chair.[745] In addition, the C40 organization was progressively strengthened between 2011 and 2014, and is tightly linked to Bloomberg Philanthropies.[746] In both of these we see an effort by Bloomberg Philanthropies to create and claim novel sources of capital within the field and offering a means of maintaining the particular order imposed on the field from 2011 to 2014.

What this means moving forward is hard to discern at the present moment. The capacity of Rio to claim the institutional capital traditionally associated with the position of C40 Chair is clearly undermined by a limited capacity to claim agential or structural capital in the field. Furthermore, the alignment strategy adopted by Bloomberg Philanthropies and the C40 Organization – through partnership agreements with funding partners (RealDania and CIFF) and international financial institutions like the World Bank amongst others – may serve to maintain the coherence of the field by strengthening the relationship that has been forged between external recognition and the particular configuration of governance norms and practices identified in this study.[747] On the other hand, should the members of the C40 come to see such a link as a means of domination – should, in other words, the fusion of power with and power over unravel so as to sensitize actors to the experience of the latter – actors in positions of subordination within the field (those unable to have claims to capital recognized; those with alternative ideas as to how climate change should be governed by cities; those with interests that diverge from those propounded by field nomos) could provoke a return to contestation within the field.

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[745] PRN 2013

[746] A number of former New York City and C40 officials have since begun working for Bloomberg Philanthropies.

[747] An illustration of this can be found in the recent report issued by the C40 and Arup, in which the link between external recognition and a particular type of urban climate governance, organized around the norm configuration identified in this project, is reinforced. See Arup 2015

Lastly, the argument that I have presented with respect to the role of recognition as the mechanism that fuses the allure of power "with" one another inside the C40 to willingness to be complicit in allowing some to have a measure of "power over" others so as to impose order, is premised on the credibility of the recognition claim advanced by particular actors. A recognition claim deemed credible authorizes power over within the field by increasing the possibility of acquiring the material and political benefits associated with adhering to particular terms on which recognition is granted. Yet, and this would appear crucial, the credibility of recognition claims rests to some extent on the ability to convert those claims into the actual delivery of material and political benefits.

Johannesburg, as noted earlier, has been highly susceptible to the allure of increased access to sources of capital investment and climate finance due to both local conditions (the need for financial capacity to enable much-needed infrastructure and service-delivery investments) and prior experience (the difficulties of accessing CDM or capital-market funds). This has opened the city up to adopting and enacting field nomos locally (as evident in an orientation towards active participation as a global climate governor, external accountability, and practices of quantification, accounting, disclosure, and standardization of local GHG emissions). A similar interest in gaining access to material (economic) benefits was noted by one interviewee with respect to the interest expressed by several Chinese cities in both establishing and increasing engagement with the C40. Given that Chinese cities have long remained at arms-length within the C40, maintaining a considerable space for the expression of local habitus, this constitutes a considerable opening for increased convergence within the field. And yet in both cases should the promise of recognition go unmet, should there be no greater success in gaining legitimacy in broader governance fields, or in accessing sources of international finance or investment, this would seem likely to call into question the willingness to accept such terms of recognition, and thus erode the foundations on which convergence has been built.

2.2 Implications II: Networked Urban (Climate) Governance

Whereas the analysis conducted in this project has focused exclusively on the C40, the lessons learned are relevant to the broader universe of networked city initiatives operating not only in the

domain of global climate governance but also on issues ranging from sustainable development[748] to security;[749] health[750] to gender.[751] What the findings generated in this project suggest are that networks across each of these domains all, at least to the extent that they seek to do more than engage in advocacy oriented towards shifting the actions or interests of states or inter-state institutions, face a common coordination challenge.

This suggests that domination is essential if networks like the C40 are to overcome the considerable barriers to internal coordination – those related to the impact of local and national politics and the competing imperatives operating on city officials – and produce meaningful collective effects. And yet most popular writings on city-networks and global governance approach such initiatives as technocratic and apolitical, benign spaces in which ideas circulate of their own volition and are taken up on their own merits, where coordination emerges naturally or of its own accord.[752]

Absent a "shadow of the state"[753] that might otherwise impose order, enforce commitments, and punish non-compliance, city-networks of all sorts and all stripes are only likely to achieve collective effects and internal coordination if they are populated by an actor, or set of actors, with the ability to create and claim enough capital so as to secure for participants those benefits that can induce complicity and allow for a form of democratized domination to emerge. The conceptual approach developed and applied in this project thus offer a means of critically assessing the potential of initiatives such as the Global Parliament of Mayors[754], Metropolis, or the UN Compact of Mayors[755] insofar as they have the capacity to induce coordination and convergence amongst their participants.

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[748] Urban SDG, n.d.
[749] Ljungkvist 2015
[750] Acuto & Morissette 2015
[751] http://www.uclg.org.eng
[752] Barber 2013; GSN 2014
[753] Borzel 2010
[754] http://www.globalparliamentofmayors.org/
[755] Compact of Mayors 2014

2.3 Implications III: Global Climate Governance

May 24th, 2014. Michael Bloomberg, the UN Secretary General's Special Envoy for Cities and Climate Change, steps up to deliver a keynote speech at the United Nations headquarters in New York City. Conveying a theme he has repeated and refined since he started making it in 2010, Bloomberg confidently asserts to a room full of national representatives that "[t]ogether, cities have emerged as the leading force for action on climate change. They have the power to lead the charge – and they have the will."[756] Global climate leaders. Possessors of the "power" and the "will" to succeed where others have failed. Such claims have great appeal, especially given the dismal track-record of national governments who have failed in their efforts to develop comprehensive domestic policies and to negotiate a comprehensive global climate treaty. In a time of uncertainty with respect to the global response to the threat of climate change, cities offer themselves up as authors of an alternative governance approach and as agents of effective governance.[757]

The deep question motivating this project is an interesting in understanding and assessing whether the great many things that city networks like the C40 promise, and indeed the many things that participating cities actually do with respect to climate governance, constitute a meaningful possibility of producing effective global climate governance. Can city-networks coordinate the actions of member cities in ways that open up the potential for transformative change in patterns of energy consumption and the production of greenhouse gases?

The short and tentative answer, based on the analysis conducted here, is yes they can. The C40 illustrates that coherence is possible in experimental, hybrid governance collectives that span national and public-private borderlines. As part of a broader interlocking system of global climate governance, however, the pathways between collective inter-city governance and systemic transition curve quickly out of sight. Several possibilities can, however, be supposed. The C40 itself, if conceptualized as part of a broader field of networked urban climate governance, may be able to leverage the allure of recognition so as to induce a broader constellation of cities to adopt as their own the particular norms and practices around which the

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[756] UN ECOSOC 2014
[757] Arup 2014, 2015

network has come to converge. There is, in fact, already some evidence of such a phenomenon, in the uptake of novel standards of emissions measurement and reporting[758], and public disclosure.[759] Recent efforts to create meta-networks engaged in global climate governance, such as the aforementioned UN Compact of Mayors, are also suggestive of the possibility that the power to produce convergence (now vested in both the normative structures of the C40 and underwritten by the capital claimed by both Bloomberg Philanthropies and the C40 organization) might be extended so as to envelop other city-networks, such as ICLEI and the UCLG, that have traditionally struggled with the challenge of coordination.

3. Contributions

Below I assess both the contributions offered by this project and the pathways along which this research can, and will, be extended in the future. I want to highlight here two key contributions offered by this analysis and argument, and the empirical foundation on which it is based.

3.1 Empirical/Descriptive

This project offers, in the first instance, a novel descriptive analysis of urban climate governance as it is practiced by cities participating in the C40. In compiling, coding, and subjecting to cluster analysis a unique dataset of over 4700 climate governance actions adopted or endorsed by C40 cities between 2005 and 2014 I have been able to abductively identify governance patterns present in the C40 over time and space. In so doing this project complements existing large-n studies undertaken in recent years[760] by developing a cross-temporal picture of climate governance as it is understood and practiced within the "archetypal" instance of a transnational climate governance city-network.[761] The descriptive picture of climate governance in the C40 represents a novel contribution since extant studies of the C40 are largely qualitative[762] or assess its' influence from the vantage point of climate governance in specific cities.[763]

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[758] http://www.ghgprotocol.org/city-accounting
[759] https://www.cdp.net/cities
[760] Lee 2013; Hakelberg 2014; Bulkeley et al 2015; Bulkeley & Castan Broto 2012, 2013; Pattberg et al 2014; Hoffmann 2011
[761] Bulkeley & Schroeder 2012
[762] Hodson & Marvin 2010; Bouteligier 2012; Acuto 2013a; Roman 2010
[763] Bulkeley & Schroeder 2008

The descriptive patterns identified are themselves interesting and represent a meaningful contribution to extant scholarship: the observed combination of convergence around norms of pluralistic participation, liberal environmentalism, agential and globally accountable urban governance - and specific practices of quantification, reporting, disclosure, and standardization - provides empirical evidence to substantiate the oft-voiced claim that city-networks like the C40 *can* engender coordination and internal coherence. The descriptive analysis also indicates the subtle ways in which deep structuring norms are being reconfigured and reinterpreted so as to authorize modes of urban climate governance that are both different from those adopted in the inter-state regime and in other ways much the same.[764]

That these patterns of conformity co-exist alongside patterns of customization is a second finding of interest. While the explanatory emphasis of this project has been on the convergence side of the ledger, that cities in the C40 continue to exhibit diversity and individuality in the manner that they engage in concrete practices of local climate governance is interesting and worthy of further investigation and explanation (more on this below). This finding, after all, challenges, or at least provides an empirical point of departure from which to question, the proposition that convergence is more likely to operate at the level of technical details or policy specifics than objectives[765] and challenges the proposition that city-networks are doomed to an internal division into small groups of "pioneers" and large contingents of "laggards."[766]

In each of these ways, the descriptive work presented here serves to complement recent empirical/descriptive work conducted in the field. Where Bulkeley and colleagues[767] focus on the urban as a particular scale of governance in which various actors come together to experiment with novel efforts at engendering (or resisting) transformative change in this project I offer a means of assessing and understanding patterns in the ways that city governments understand, approach, and enact climate governance. The approach adopted in this project remains sensitive, analytically, to the role and influence of actors other than city-governments (this being one of the benefits associated with adopting a field theoretic perspective, as will be

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[764] cf. Toly 2008; Hoffmann 2011
[765] Hall 1991
[766] Bulkeley & Kern 2009
[767] Bulkeley et al 2015; Bulkeley & Castan Broto 2012, 2013; Bulkley et al 2012, 2014

discussed below) but remains focused on the city government as the key actor in the local governance of climate change.[768]

In focusing empirically on the practices adopted and endorsed by city governments I am able to orient my analysis towards uncovering the political dynamics that shape and influence the objectives, approaches, and practices employed by cities as they engage in local climate governance. The descriptive analysis thus responds to the call for more detailed understanding of whether participation in city-networks actually influences the content of urban climate governance.[769] Furthermore, by including all cities in the C40 who have made public local climate governance actions and commitments the dataset addresses the absence of data related to local climate governance in cities of the global "south", an early limitation identified in the scholarship on cities and climate governance.[770] In this, the dataset provides a sense as to how patterned governance operates across spatial divides that demarcate inter-state climate politics, and provides a means of addressing questions related to whether novel governance initiatives are in fact reproducing the "North-South" divide.[771]

3.2 Conceptual and Theoretical

This project proposes and applies a novel way to think about cities and global governance, and illustrates how a field theoretic perspective offers a means of redressing the inattention to power documented in the extant scholarship, and can provide a nuanced and compelling account of governance as it takes place within voluntary or hybrid governance initiatives like the C40. Field theory is demonstrated as offering a promising means of, as Sending proposes, "[u]nearthing how the competition for positions of authority shapes the contents of governance arrangements" and thus can "move scholarship…beyond a focus on the cast of actors involved to also include how it matters for the *contents* of governance arrangements."[772] In so doing this project complements the broader social constructivist scholarship on global climate and environmental

[768] Acuto 2013a, b, c
[769] Johnson et al 2015: 240
[770] Betsill & Bulkeley 2007
[771] Acuto 2013a, b; Bouteligier 2012
[772] Sending 2015: 9

governance[773] and contributes to this scholarship by illustrating an alternative means of theorizing the relationship between ideas, identity, authority, and action in transnational climate politics. As compared with extant norms-based accounts, field theory offers a means of focusing analysis on the power dynamics that take place as normative structures are constructed, as actors engage in contestation over the substance of such structures, and how/why such norms come to be endowed with particular content and structuring force.

Situating cities as participants in a novel governance field, one created in dialogue with (and in response to the limitations, weaknesses, or imperative of) extant fields of global climate governance, networked urban climate governance, and domestic political governance allows for recognizing that cities are engaged in complex relations with a variety of other actors (ENGOs, philanthropic organizations, MNCs, IFIs, states, and international organizations) and provides conceptual tools with which to interrogate the *political dynamics* through which governance fields are both invested with meaning and substance, and serve to shape the identity, interests, and ideas enacted by participating cities.

Applying the concepts of nomos and habitus, capital and recognition offer a means of illuminating the extent to which the C40 is shot through with struggle and resistance, contestation and complicity with respect to "what climate change should mean and for whom."[774] It offers a response to Bulkeley & Betsill's call for theoretical and conceptual apparatus other than multilevel governance in order to understand and assess the "'new politics' of climate change emerging in the urban arena"[775] and provides a conceptual toolbox with which to both identify, investigate, and understand the "processes through which the political spaces of urban climate politics [like the C40] come to be configured and contested" and engage in a "critical interrogation of the discursive and institutional terrains through which climate change comes to be an issue on urban agendas."[776]

In so doing, a field theoretic approach challenges prevailing accounts of network politics, and the commonplace assertion in the literature on social network analysis that power is a product of the

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[773] Hoffmann 2005, 2011; Bernstein 2001
[774] Bulkeley & Betsill 2013: 149
[775] Bulkeley & Betsill 2013: 146
[776] Bulkeley & Betsill 2013: 150

relative degree of connectivity that actors have vis-à-vis one another that enables them to play the role of broker or bridge.[777] Power, instead, is understood in pluralistic terms; as a co-constitutive process of drawing on capital so as to both create and claim capital. It is also understood as multi-dimensional, comprised of multiple sources rather than reduced to the single dimension of positionality in social-relational structure.

A field theoretic approach thus accepts Bulkeley's assessment of climate governance networks as providing "structured social relations and rules, which enable and constrain policy change, through allowing some actors, and some ideas into the policy process while excluding others"[778] but pushes the analytic and explanatory objective back one level by seeking to uncover how those structures were constituted in the first place, whose ideas were allowed and whose excluded, what enabled the ideas of some to prevail over the ideas of others, and how structures actually structure the interests and behaviors of actors who are committed voluntarily to such joint initiatives. The explanatory leverage to be gained through application of field theory is thus far-reaching. It offers a conceptual toolbox with which to assess how particular "governance objects – security, climate, reproduction, trade, migration - emerge with their distinct attributes and are differentiated from other objects of governance through the competition between different actors, or subjects of governance, to establish some level of authority to govern them."[779] More to the point, it provides a means of stepping outside the state/non-state distinction that cuts across much scholarship on world politics by locating actors of all sorts within a single conceptual/explanatory framework.[780]

While illustrating the potential value to be gained from importing field theory into the study of global climate governance, this project also contributes back to the scholarship on applied field theory. This is a perspective that has only recently been imported into disciplinary International Relations[781] and has not yet, to my knowledge, been applied to the domains of global climate governance or networked global governance.[782] This is largely a function, I suspect, of the

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[777] Carpenter 2011; Wong 2012; Hafner-Burton et al 2009
[778] Bulkeley 2000: 744
[779] Seabrooke 2014
[780] Bulkeley & Schroeder 2011; Andonova et al 2009; Okereke et al 2009
[781] Pouliot 2007, 2008, 2011; Adler-Nissen 2013; Hopf 2010; Bigo 2011; Sending 2015
[782] cf. Hughes 2013

ambiguity inherent in Bourdieu's own writings and application of field theory[783] as well as the fact that Bourdieu did not himself engage in the analysis of world politics or international relations.[784] Field theory thus offers a conceptual arsenal but is, as one of its key proponents in IR acknowledges, notoriously difficult to operationalize methodologically.[785] What counts as a field and where fields end/begin, and how fields relate to one or interact with one another, are as yet ill-defined in the extant scholarship and in need on additional specification and conceptual sharpening. In this project I hope, in drawing upon and applying Bourdieusian concepts to the domain of networked urban climate governance, to illustrate not only the explanatory leverage that can be gained as a result but also to advance the scholarly conversation with respect to how these concepts can be applied to better understand and more adequately account for real-world phenomena related to global governance (of the climate, environment, or otherwise).

4. Looking Ahead

As is the case in such things, the analysis presented here produced, over the course of research and writing, many more questions than answers and many a tangential line of inquiry had to be ignored so as to remain focused on answering the particular question that motivated it in the first place Looking up from the task at hand at hand, I want to conclude by highlighting four key questions, and four accompanying avenues along which this research might be extended in the future.

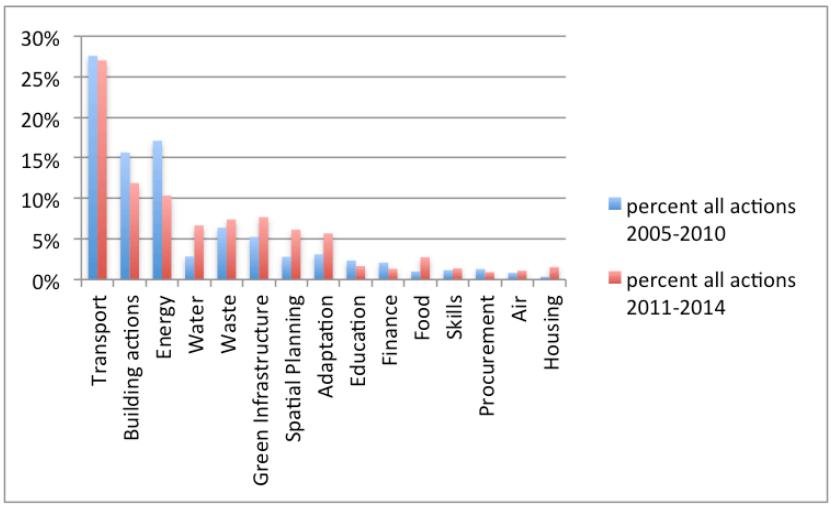
4.1 Customization and Clustering: Maintaining Space for Regulated Improvisation

While norm convergence is detected in the C40 between 2005 and 2014, the field, as hinted at in chapter 2, has neither fully homogenized nor has it fractured apart. The network has maintained space for its member cities to adapt shared norms to local contexts, customize practices of governance to local needs, and adjust interactions in response to the vagaries of local politics. That such space exists is indicated, for instance, by the sectoral orientation of climate governance undertaken by C40 cities. Alongside increased convergence around governance norms outlined

[783] Adler-Nissen 2013: 13
[784] Pouliot & Merand 2013
[785] Pouliot 2013

above, the specific actions adopted by C40 cities have become more rather than less diverse over time (Figure 7.1).

Figure 7.1. Sectoral Focus of Climate Governance Actions (2005-2010, 2011-2014; Percent total)



Governance actions emerge, in the second time period, in sectors (Food, Housing, Water, Adaptation, Green Infrastructure) that were weakly represented in the first (this patterns is apparent in both the percentage of actions per sector and in the absolute number of actions per sector). Furthermore, while the Transportation, Buildings, and Energy sectors account for the lion's share of governance actions in both periods, the percent of total actions in these three sectors declines from 60% as of 2010 to 49% as of 2014.[786] Now both of these findings might be expected, given that C40 cities such as Lagos, Johannesburg, Bogota, and Ho Chi Minh City, all of which face urban contexts, development imperatives, and climatic conditions distinct from western, developed cities, began to converge around governance norms only after 2011. Nonetheless, it remains both interesting and somewhat surprising that convergence in the C40 does not necessarily beget more convergence. One might expect, for instance, that convergence around the norm of globally accountable governance and corresponding practices of quantification and standardization would lead to a decrease in governance actions focused on sectors that are only weakly susceptible to such practices. Yet actions related to food production

[786] This finding corresponds with Bulkeley & Castan Broto's (2012: 10) identification of a distinct emphasis on transportation and energy production/consumption in the built environment in their dataset of urban climate governance experiments, but suggests the presence of counter-currents operating in the C40.

and consumption, water, housing, and green infrastructure, despite the fact that they are difficult to quantify in climate-related terms and offer a weaker fit with principles of accounting and market-oriented governance actually increase between 2011 and 2014.[787]

The possibility that the C40 can maintain this balance lends some heft to the notion that meaningful global climate governance can, in fact, emanate from outside the corridors of inter-state negotiations, and can achieve some degree of meaningful scale with respect to the ultimate objectives of decarbonization and adaptive resiliency. Yet it remains just that, a possibility. There is thus a need to more carefully investigate the ways in which convergence is constrained within governance fields like the C40. In the course of research three possible factors have been identified, each of which stands in need for further research: the field-habitus disjuncture; the impact of inter-field friction; and the role of relational capital.

4.1.1 Fields and the Limits of Structural Power

Habitus is the inscription of field characteristics within actors, the product of socialization into particular beliefs, values, and common sense practices. And yet the two are not coterminous. Field does not "equal" habitus, nor does it determine the beliefs, values, and practices adopted and employed by actors. This is the case for two reasons. First, actors belong not to single fields but find themselves instead embedded in multiple, different fields at the same time. This creates the possibility for tension and dislocation, and generates room for reflection, imagination, and agency. Second, as proposed by Antje Weiner amongst others, the process of norm transposition and operationalization is inherently marked by contestation as a structures are given meaning (in action or thought) through the habitus of particular agents.[788] Actors are always invested with a mixture of agential autonomy and structural imperative. Furthermore, while fields like the C40 are characterized by the condition of domination (by those who have access to requisite volumes/combinations of capital and thus "makes the rules" that structure the field) and subordination (of those who "play by" and internalize those rules) such domination is never complete nor are those rules ever fully accepted.[789] The result: there is always space for

[787] Bulkeley & Betsill 2013: 142
[788] Wiener 2004, 2007, 2014
[789] Leander 2011: 299; Wacquant 2006: 7

"regulated improvisation"[790] entailed in the incomplete overlap between habitus and field[791] although the extent of this space (which I conceptualize as the field-habitus gap) can of course be larger or smaller, more or less permissive.

This dynamic is most clearly illustrated in the wide variety of climate policies enacted by C40 cities between 2005 and 2014 (see chapter 2). While cities have converged around a shared understanding of climate change as an urban problem, a common identity as agential and globally accountable climate governors, and practices of measurement, reporting, and disclosure, the manner in which these have been translated into concrete, local governance practices remain idiosyncratic and highly contextualized. And so, while the C40 "has been, and is, helpful to city Mayors in terms of convincing them of the need to take action, to 'do the right thing', cities still have to sell actions locally which constitutes an ongoing challenge."[792] In this sense local habitus of C40 cities is influenced by divergent local contexts, interests, and political demands – creating "different political contexts" that are seen by local officials as creating "huge barriers to learning between cities" and generating active "resistance [to C40 efforts at identifying and shaping city priorities] based on the intersection of local needs and C40 identified priorities."[793] This persistent disjuncture between the structuring effects of the C40 field and the impervious elements of city habitus have at times "frustrated" C40 staff[794] as they aim have pursued the objectives of increased coherent, consistency, and intra-field convergence. Yet this disjuncture is both inescapable and, in terms of maintaining space for flexibility and local innovation, adaptation, and experimentation, essential to managing the tension between field convergence and customization.[795] The language of field theory may thus offer a means of interrogating the relationship (which, as mentioned above, has largely been bracketed out of the analysis conducted in this project) between the content of particular governance norms and the capacity to produce convergence within a governance field such as the C40.

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[790] Bigo 2011: 242
[791] Pouliot 2008: 274
[792] Interview with senior policy advisor with the GLA, London, October 29, 2013
[793] Interview with former C40 staff member, Skype, January 26, 2012
[794] Interview with senior official, Department of International Relations, City of Sao Paulo, Skype, December 20, 2013
[795] On the role of ambiguity in enabling norm diffusion see Krook & True 2012

4.1.2 Inter-field Friction

A second constraining force operating to create space for customization amidst convergence in the C40 field results from the fact that actors are embedded not in a single field but rather within multiple fields that intersect and interact in different ways.[796] These interactions, and the manner in which fields are related to or influence one another, can and do serve as both a mediating force as norms are transposed from the C40 field into local settings and a means of disrupting claims to capital (and thus power and influence) within the C40 field.

With respect to the former, interviewees indicated that cities, regardless of their degree of engagement with the C40, remain embedded in meaningful ways in domestic political-institutional fields. This creates "barriers" that include "different party affiliations or national governments not recognizing the potential that a city can play in helping them to realize their international targets" and points to the pressing need to figure out "how cities can best work with their national governments."[797] Other barriers related to inter-field friction noted by interviewees as limiting factors on intra-field power relations and the production of convergence include geopolitical tensions (the ability of the C40 to engage Chinese cities has been limited, and some interviewees indicated the close affiliation between the C40 and the US/UK as a persistent barrier[798]; distinctive political institutions operating at the national level (one former C40 official suggested that the C40 model "cannot work directly in China [due to] state-imposed barriers operating on cities, both political as well as rules limiting the international travel and inter-city interactions of city officials";[799] and language barriers.[800]

National climate politics and policy also serve as a source of inter-field friction. Whereas this friction has (as noted at various points in the preceding discussion) created a sustained imperative for city engagement and adoption of the role of global climate governor, it also serves as a semi-permeable barrier with respect to intra-field convergence around particular governance

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[796] Pouliot & Merand 2013: 34
[797] Interview with former senior C40 official, Oxford, October 24, 2013
[798] Interview with former senior C40 official, Oxford, October 24, 2013; Interview with former CCI official, Sao Paulo, April 18, 2013; Interview with CDP officials, London, October 28, 2013
[799] Interview with former senior C40 official, Oxford, October 24, 2013; Interview with former policy analyst involved in C40 network evaluation, Skype, November 14, 2013; Interview with Tokyo Metropolitan Government senior official, Skype, November 18, 2013
[800] Interview with CDP officials, London, October 28, 2013. See also Lee & van de Meene 2012 on this point

norms and practices. In Sao Paulo there is a sense that national-level policy positions, and a lack of active commitment to driving domestic reductions in GHG emissions, serves to undermine what the city can do, and the type of actions it can undertake.[801] In Johannesburg, while there is a much stronger sense of synergy between national and local actions related to climate governance[802] there is little to no active coordination between the two levels of government (nor, for that matter, with regional governments such as that of Gauteng Province in which Johannesburg is located) that has limited local governance capacity and limited the capacity of the city to effectively adopt and implement the role of active climate governor.[803]

4.1.3 Ungoverned Spaces and "Social" Capital

A third, and final, source of constraint that might limit convergence in the C40 is the presence of what Scott refers to as "ungovernable" spaces.[804] Fields such as the C40 are premised on an explicitly social relational foundation - the C40 is, after all, a "network" organized around the inter-connection of cities with one another as well as with other non-city organizations and actors. These relational ties may constitute a source of "social capital" that can be used to resist convergence and circumvent the structural imperative of field *nomos*.

Social capital, derived from the web of social relations possessed by each actor in a field, are inherently resistant to control since they can be, and often are, opaque. As put by a former senior C40 official, "[c]onnections may be made at C40 events, but these can then lead to off-the-grid networking directly between individuals that may influence local policy…it's *very hard to get a sense as to whether this is occurring or not.*"[805] And so the reality is that "most interaction in the C40 is informal and ad hoc, between Mayors and key advisors…circles of Mayors form and

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[801] Interview with policy analyst at CETESB, Sao Paulo, April 29, 2013; Interview with former Brazilian politician, Skype, June 3, 2013
[802] Interview with city of Johannesburg senior official, Johannesburg, February 10, 2014; Interview with senior Johannesburg city official, Johannesburg, February 10, 2014
[803] Interview with former consultant to the city of Johannesburg, Johannesburg, February 7, 2014; Interview with senior Johannesburg city official, Johannesburg, February 10, 2014. See also Mokwena 2008, McNamara 2013.
[804] Scott 2009
[805] Interview with former C40 senior advisor, Skype, January 9, 2012

operate informally"[806] with the result being a "network [which] remains informal, fluid, hard to access for some, and reliant on personal engagement.[807]

This "lack of institutionalization of city-network relations" and the "personalization of the city-network relationship" is perceived as both a strength *and* a weakness of the C40 since it renders the field with flexibility to accommodate divergent local interests, policy dynamics, and levels of engagement, a flexibility that comes at the cost of limiting the ability to produce convergence and generate coordinated action.[808] Officials in Johannesburg illustrated this tension in action, sensing that "Johannesburg needs to learn from, interact with, and communicate with other developing world cities" while worrying that "solutions proposed by C40 will tend towards those adopted in cities like London and New York."[809]

Officials within the C40 are well aware of this limitation, and have undertaken measures to render the field of social relations legible by "formaliz[ing] and institutionaliz[ing] their sub-network [so as to] get a better picture of who is involved, who is connected, and what kind of information flows along these pathways."[810] Whether the C40 will succeed in so doing is difficult, as yet, to ascertain. The formal adoption of novel communication platforms such as WhatsApp as a means of facilitating (but also measuring and monitoring) inter-city relationships suggests an enhanced capacity to render social capital legible and subject it to the influence and authority of the C40 organization.[811] The C40 has also developed an internal communications platform for sharing and posting documents and information (the C40 Virtual Exchange) and is actively working to identify and measure inter-city connections and instances of information-exchange.[812]Nevertheless, it remains the case that inter-city relationships and connection (both those within the C40 per se as well as those that cross over to cities and actors in the broader field of networked urban climate governance) remain at their core an alternative source of

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[806] Interview with former C40 city Mayor, New York, November 16, 2011
[807] Interview with former C40 senior advisor, Skype, January 9, 2012
[808] Interview with former Sao Paulo city official, Skype, November 19, 2013
[809] Interview with city of Johannesburg senior official, Johannesburg, February 10, 2014; Interview with senior Johannesburg city official, Johannesburg, February 10, 2014
[810] Interview with former C40 senior advisor, Skype, January 9, 2012
[811] C40 2014
[812] Presentation by C40 Director of Research Seth Schultz to the CCXG, March 2015. See http://www.oecd.org/environment/cc/ccxg-globalforum-march-2015.htm

capital, one that, while it may not provide actors with the capacity to make the rules, can endow them with the capacity to resist them.

4.2 The Local Effects of Convergence

A second line of inquiry would involve turning inwards and assessing the effects of consolidation within the C40 field on the politics of climate governance taking place within participating cities.[813] As climate governance is increasingly rendered in the language and practices of accountability and efficacy, quantification and accounting, disclosure and transparency, this raises all sorts of questions with respect to how these translate into concrete priorities and policies of governance undertaken in specific local settings.[814] Governance norms around which convergence has been produced in the C40 have their origins in, and are closely aligned with, the values and practices of the private sector. In this sense they reflect the interests of particular urban actors, and may come at the expense of others. As Markell argues, efforts to "organize the human world in ways that make it possible for certain people to enjoy an imperfect simulation of the invulnerability they desire [can and often do end up] leaving others to bear a disproportionate share of the costs and burdens in social life."[815]

To what extent, then, do non-elite groups within cities "pay the costs" of elite efforts to pursue capital investment and sources of international finance, since the benefits of external recognition are likely to accrue unevenly to local populations?[816] To what extent, for that matter, do some cities, those marginalized within initiatives like the C40 or those excluded entirely from them, "pay the costs" of adopting as their own particular objectives, norms and practices of urban climate governance?[817] The concept of "symbolic violence" offers a possible means of addressing such questions and trying to "unpack and critically examine which actors pays the price for the semblance of control and sovereign agency on the part of those that construct categories through which to govern."[818] In so doing there is an opportunity to leverage the field theoretic perspective applied in this project to gain explanatory leverage on both the process

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[813] Johnson et al 2015
[814] While et al 2009; Hodson & Marvin 2010
[815] Markell 2003: 22
[816] Bulkeley et al 2015
[817] Bouteligier 2012; Acuto 2013a
[818] Sending 2015: 181

through which transnational norms are operationalized in local context[819] as well as the ethical, political, social and cultural implications of local governance actions that stretch beyond the singular goal of mitigating local and global GHG emissions.[820]

4.3 The Outward Effects of Convergence

A corresponding, question inverts the orientation of inquiry and would ask about the outward effects that consolidation in the C40 has had, or might have, on two fields in which it is partially nested. By placing the C40 as a field located within (and indeed created in dialogue with, or response to) a wider universe of fields – other city-networks, transnational experimental governance initiatives – and embedded within a larger meta-field (transnational and inter-state climate governance) it is possible to identify and assess the nature of inter-field dynamics of recognition, authority, and struggle.[821] It is imperative, on one hand, to consider how the C40 relates to the broader universe of networked urban climate governance initiatives, one that includes initiatives including the EU Covenant of Mayors, Metropolis, ICLEI, and the UCLG amongst many others.

There has been, as late, a trend towards consolidation here in the broader field of networked urban climate governance, as evident in the formation of meta-networks like the Compact of Mayors[822] and the creation of global standards such as ISO 37120.[823] There is thus an opportunity to apply the conceptual tools introduced in this project to this broader domain so as to assess whether, how, and by whom power is being claimed so as to establish shared objectives, understandings, and practices of global urban climate governance. Are the norms and practices established within the C40, for example, being taken up and adopted across city-networks? Is the space for innovation and customization shrinking, or are there alternate inter-city infrastructures along which different sets of norms and practices are circulating? The research conducted for this project, both descriptive and conceptual, offer a foundation on which to address questions such as these.

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[819] cf. Wiener 2004, 2014; Cortell & Davis 2005; Acharya 2004
[820] Bulkeley et al 2015
[821] Such broader questions, while raised here, are only assessed in passing as the bulk of analysis in this dissertation focuses in specifically on the nature and implications of field-dynamics as they operate within the C40.
[822] http://www.compactofmayors.org/
[823] http://www.iso.org/iso/catalogue_detail?csnumber=62436

On the other hand, this research can also be leveraged and extended so as to engage with emerging and innovative scholarship focused on the relationship between initiatives like the C40 and inter-state institutions of climate governance like the UNFCCC.[824] Does convergence in the C40 impact efforts to incorporate cities and city-networks like the C40 into the broader project of global climate governance, and can it produce not only coordinated actions but governance effects (reduced emissions especially) that are meaningful at a global scale.[825] Recognition would seem, here, to provide a potential explanatory toehold as it offers a means of investigating the role of "orchestrating" actors like the UNFCCC Secretariat, the World Bank, the OECD, or CDP in supporting and shaping efforts to strengthen, consolidation, and coordinate experimental initiatives like the C40.[826]

4.4 The Transformative Potential of Convergence

A final opportunity for additional research stems from a glaring omission that lies at the core of this project. An exciting development in scholarship of a recent vintage on the topic of global climate governance is the growing interest on tracing the empirical outlines of a broad universe of experimental initiatives so as to understand both how they fit together and what effects they might have.[827] Conceptualizing how the pieces fit together, however, demands at the same time a deeper understanding of what happens within the various component parts of the system. Can efforts to voluntarily coordinate the actions of disparate and disconnected actors succeed? Can they accomplish, from the bottom-up, what has proven so difficult from the top-down? Can they be, not individually but in combination, global climate leaders?[828]

The C40 asserts that it can, and that same Michael Bloomberg quoted at the outset of this chapter has asserted that the network will be the "most indispensable" in the global climate effort.[829] City-networks like the C40 are in this respect both intriguing and in need of critical evaluation. Their novelty offers a source of hope to those who see in global climate governance a series of cascading failures and frozen initiatives; that perhaps the precarious institutional position

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[824] Widerberg & Pattberg 2015; Oxford Martin Commission 2013; Yale Climate Change Dialogue 2015.
[825] Jordon et al 2015; Chan & Pauw 2014
[826] Abbott et al 2015; Hale & Roger 2014
[827] Hoffmann 2011; Bulkeley et al 2014; Hale & Roger 2014; Abbott 2013; Bernstein & Hoffmann n.d.
[828] Acuto 2013a
[829] Bloomberg 2011

occupied by cities can provide them a means of catalyzing the kinds of cognitive, normative, and behavioral transformations that are on a scale that matches that of the problem.[830] That they "act while nations talk" as goes a common C40 refrain, suggests a capacity for results; an interest in practical engagement rather than political optics.

If they are to succeed in fulfilling such claims, the C40 must thread a difficult needle. They must engender coordination and convergence in a social setting that is, by definition, horizontal, voluntary, and non-binding;[831] they must achieve, through novel geographies of transnational engagement, collective effects while remaining embedded in the status quo of domestic politics and an international system.[832] That the C40 has to some extent is encouraging. What remains, now, is to better understand how it has managed to navigate such rocky straights, and what this might mean for climate, and urban, governance moving forward.

While the research and analysis presented here document the production of convergence within the C40 around particular norms and practices, no link is established between such convergence and either actual policy interventions adopted and implemented by cities, the material effects of such policies on reducing energy consumption or production of GHG emissions[833], the ideational effects of such policies on the values and beliefs of local citizens[834], or the potential inherent in all of this to open up (or not) what Bernstein & Hoffmann refer to as "transformative pathways to decarbonization."[835] Each of these represents a pressing need for better data, more empirical analysis, and careful critical analysis of the links (actual or potential) between individual policy interventions, governance norms, and tangible effects.

One might assess, for instance, recent steps undertaken by the UNFCCC towards formal inclusion of cities in the international negotiating process, and the global climate regime organized it. Recent years have seen the creation of a "Friends of Cities" initiative as part of the

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[830] Toly 2008
[831] Thompson 2003
[832] Sassen 2006; Curtis 2014
[833] Jordan & Huitema 2014; cf. Erickson & Tempest 2014 for a prospective analysis of the contribution cities might make to global efforts at emissions mitigation.
[834] While et al 2009; Paterson & Stripple 2012
[835] Bernstein & Hoffmann, n.d.

annual Conference of the Parties main negotiating session,[836] as well as the Non-State Actor Zone for Climate Action (NAZCA) created in partnership by the UNFCCC and Peru in the run-up to COP 20 in 2014.[837] Such initiatives may represent, after all, a means of reinforcing claims to capital and authority within individual governance fields like the C40 and thus increasing their ability to produce and maintain convergence (and thus coordination). On the other hand, they may serve to re-embed novel governance initiatives within the broader field of global climate governance from which they initially emerged, thus undermining the potential inherent in friction, disjuncture, and innovation within the system at large. How these two possible futures interact and unfold constitute essential openings and opportunities for future (and future-oriented) research.[838]

5. Final Thoughts

That cities are central to contemporary problems of global governance is widely recognized; that they can join together in voluntary governance initiatives like the C40 so as to "do" something about to such problems is loudly celebrated; that doing so can produce meaningful collective effects is not. This study has aimed to contribute to ongoing efforts to provide an answer to this latter question, and in so doing to better understand the role that cities, and city-networks, do, can, and might play as global governors. This project will, it is hoped, help to move this discussion forward, offering as it does an illustration of, and means of understanding through the application of a field theoretic framework, the political dynamics that characterize such voluntary endeavors despite the fact that they purport to rise above them. These political dynamics differ fundamentally from those that characterize and constitute inter-state politics, but power, struggle, domination and complicity are present nonetheless.

Understanding what counts as power, how power operates, and to what extent it is employed, and can be resisted or constrained, is essential to understanding whether and to what extent city-networks can govern the globe. Re-centering analysis around these fundamental concerns and considerations of political science provides a means of setting free unrealistic proclamations of a post-political technocracy and re-establishing the distance to assess, with a critical eye, the forces

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[836] ICLEI, n.d.
[837] UNFCCC NAZCA, n.d.
[838] Levin et al 2012

that lead city-networks like the C40 to both contest and conform with prevailing ideals and beliefs, creating a novel future while maintaining continuity with the recent past. That they do so is not a reality to be lamented but should instead provide some manner of comfort since utopianism of any sort is to be feared and "[i]mperfect improvements upon unsatisfactory circumstances are the best that we can hope for, and probably all that we should seek."[839]

The C40 represents just this sort of imperfect improvement, marked as it is by struggle, domination, and self-interest. It also represents a source of novelty and experimentation in the global governance of climate change, a means of producing disruption in a system highly resistant to change. The tension between these two imperatives, and the manner in which it is addressed and resolved, will do much to determine whether and to what extent city-networks like the C40 can make a positive contribution.

[839] Judt 2009

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Appendix A: C40 City Membership

City	Date Joined	Membership Type
Addis Ababa	2007	Megacity
Amman	2015	Megacity
Amsterdam	2008	Innovator City
Athens	2008	Megacity
Austin	2007	Innovator City
Bangkok	2007	Megacity
Barcelona	2005	Innovator City
Basel	2009	Innovator City
Bengaluru	2015	Megacity
Beijing	2005	Observer City
Berlin	2005	Megacity
Bogota	2007	Megacity
Boston	2014	Megacity
Buenos Aires	2006	Megacity
Cairo	2006	Megacity
Cape Town	2014	Observer City
Caracas	2006	Megacity
Changwon	2009	Innovator City
Chicago	2005	Megacity
Copenhagen	2005	Innovator City
Curitiba	2007	Innovator City
Dar es Salaam	2014	Observer City
Dhaka	2006	Megacity

Delhi	2007	Megacity
Dubai	2015	Megacity
Durban	2015	Innovator City
Guangzhou	2015	Megacity
Hanoi	2009	Megacity
Heidelberg	2007	Innovator City
Ho Chi Minh City	2009	Megacity
Hong Kong	2009	Megacity
Houston	2007	Megacity
Istanbul	2006	Megacity
Jaipur	2015	Megacity
Jakarta	2007	Megacity
Johannesburg	2006	Megacity
Karachi	2007	Megacity
Lagos	2007	Megacity
Lima	2007	Megacity
London	2005	Megacity
Los Angeles	2006	Megacity
Madrid	2005	Megacity
Melbourne	2006	Megacity
Mexico City	2005	Megacity
Milan	2009	Megacity
Moscow	2007	Megacity
Mumbai	2008	Megacity
Nairobi	2014	Observer City

Nanjing	2015	Megacity
New Orleans	2007	Innovator City
New York	2005	Megacity
Oslo	2012	Innovator City
Paris	2005	Megacity
Philadelphia	2009	Megacity
Portland	2007	Innovator City
Quezon City	2015	Megacity
Quito	2015	Innovator City
Rio de Janeiro	2007	Megacity
Rome	2005	Megacity
Rotterdam	2007	Innovator City
Salt Lake City	2007	Former*
Salvador	2015	Megacity
San Francisco	2005	Innovator City
Santiago	2009	Innovator City
Sao Paulo	2005	Megacity
Seattle	2007	Innovator City
Seoul	2006	Megacity
Shanghai	2007	Observer City
Shenzhen	2014	Megacity
Singapore	2012	Observer City
Stockholm	2005	Innovator City
Sydney	2007	Megacity
Tokyo	2005	Megacity

Toronto	2005	Megacity
Tshwane	2014	Innovator City
Warsaw	2006	Megacity
Washington, DC	2012	Megacity
Wuhan	2014	Megacity
Vancouver	2012	Innovator City
Venice	2012	Innovator City
Yokohama	2009	Megacity