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## Cities and the Multilevel Governance of Global Climate Change



*Michele M. Betsill and Harriet Bulkeley*

We explore how the Cities for Climate Protection (CCP) program, a network that is simultaneously global and local, state and nonstate, could be conceptualized as part of global environmental governance. We suggest that traditional approaches to international relations—regime theory and transnational networks—offer limited conceptual space for analyzing such networks. These approaches obscure how the governance of global climate change takes place through processes and institutions operating at and between a variety of scales and involving a range of actors with different levels and forms of authority. We contend that it is only by taking a multilevel perspective that we can fully capture the social, political, and economic processes that shape global environmental governance. **KEYWORDS:** climate change, multilevel governance, global environmental governance, transnational networks.

**T**he threat of global climate change is one of the most significant scientific and political challenges of our time. For more than a decade, the need for action to reduce emissions of greenhouse gases (GHGs), the relative responsibilities of different countries, and the means through which action could, or should, be taken have been the subject of fierce debate. Given the global nature of the problem, answers to these questions have been sought through processes of international negotiation between nation-states. However, it is increasingly clear that nation-states will be unable to meet their international commitments for addressing climate change without more explicit engagement with subnational action. GHG emissions originate from processes that are embedded in specific places, and it is often argued that the local is the most appropriate political jurisdiction for bringing about any necessary reductions in these emissions. Many local governments have considerable authority over land use planning and waste management and can play an important role in dealing with transportation issues and energy consumption. Furthermore, local governments have not just responded to predefined policy goals set within national and international arenas, but are also taking initiatives in their own right; this suggests that

they represent an important site for the governance of global environmental issues.

In this article, we focus on the Cities for Climate Protection (CCP) program, a transnational network of municipal governments seeking to mitigate the threat of global climate change. We explore how such a network, which is simultaneously global and local, state and nonstate, could be conceptualized as a part of global environmental governance by examining the international relations literature on regime theory and transnational networks. In each case, we find that these approaches fail to adequately engage with the concept of governance, especially the increasingly complex interactions between supranational and subnational state and nonstate actors. Moreover, by distinguishing between “global” processes and actors and those that are “local” in origin and scope on the one hand, and between state and nonstate actors on the other, these approaches obscure how global environmental governance takes place through processes and institutions operating at and between a variety of scales, involving a range of actors with different levels of authority. We contend that a multilevel governance approach captures more fully the social, political, and economic processes that shape global environmental governance, as illustrated by an analysis of the modes of governing invoked through and intersected by the CCP program.

### **The Local Dimension of Climate Change Governance**

In international relations theory and practice, global environmental governance is often assumed to take place at the “global” level. We contend that the “local” is also an important site for governing global environmental problems. Here, we use the term *local* primarily to refer to the municipal level. However, many of our points are relevant to discussions about other forms of subnational climate governance involving, for example, states within the United States. The need to address environmental problems at the local level has been a long-standing tenet of green political thought. The 1987 Brundtland Report included a specific chapter on the environmental issues facing cities, arguing that because the majority of the world’s future population will live in urban areas, cities should be central to the pursuit of sustainable development.<sup>1</sup> The focus on cities as a means to address environmental issues was subsequently taken up by the European Union<sup>2</sup> and incorporated in Chapter 28 of *Agenda 21*, which calls for all local authorities to establish a Local Agenda 21 (LA21) through participation with their communities and

encourages the establishment of mechanisms to promote cooperation and coordination between local authorities internationally.<sup>3</sup>

In this context, various commentators have suggested that cities, rather than nation-states, may be the most appropriate arena in which to pursue policies to address specific global environmental problems. For example, on the issue of climate change, cities are seen to be significant for four related reasons.<sup>4</sup> First, in a highly urbanized world, cities are sites of high energy consumption and waste production. The influence of local governments over these processes varies but can include energy supply and management, transport, land use planning, building regulations, and waste management. Second, local governments have been engaging with issues of sustainable development through LA21 in ways that have implications for the mitigation of climate change. Third, local governments can facilitate action by others in response to climate change by fostering partnerships with relevant stakeholders, encouraging public participation, and lobbying national governments. Fourth, some local governments have considerable experience in addressing environmental impacts within the fields of energy management, transport, and planning, and to reduce those impacts, many have undertaken innovative measures and strategies that can serve as demonstration projects or the basis for new experimentation. Through these practices, local governments exercise a degree of influence over GHG emissions in ways that directly impact the ability of national governments to reach targets that they have agreed to internationally. For example, in Australia it has been estimated that local authorities have a degree of influence over half of all GHG emissions.<sup>5</sup>

Local authorities have not been conceptualizing and enacting environmental governance in isolation. One of the key features of the post-Rio era has been the growth in transnational networks of subnational governments, with estimates suggesting that there are at least twenty-eight such networks in Europe alone.<sup>6</sup> One of the largest networks, the International Council for Local Environmental Initiatives (ICLEI), was established in 1990 to represent the environmental concerns of local government internationally. ICLEI's CCP program is one vehicle through which local authorities have developed strategies for controlling GHG emissions. The CCP program, which was established in 1993, today includes more than 675 local authorities in Africa, Asia-Pacific, Latin America, Europe, and North America (with the majority in Asia-Pacific and North America), accounting for more than 8 percent of global GHG emissions.<sup>7</sup> Network members commit to passing through a series of five milestones and receive support from ICLEI in the form of software for

monitoring GHG emissions and information about best practice. The US CCP program estimated that its members reduced their annual GHG emissions by 7.5 million metric tons in 1999 (an average of 100,000 metric tons per city) with a saving of \$70 million in energy and fuel costs.<sup>8</sup> In 2000–2001, Australian councils reduced their emissions by 78,182 metric tons, more than doubling their achievements over the previous year.<sup>9</sup> While GHG emissions in each country have increased, in the context of nation-states that have been reluctant to pursue an agenda of addressing climate change, this is no mean achievement.

Elsewhere, we have discussed the limitations of the CCP program.<sup>10</sup> There is considerable variation in the level of engagement with the network among its members and their ability to access the resources provided by the network. The experience of several local authorities suggests that the process of translating a rhetorical commitment to climate protection into effective policies and programs for controlling GHG emissions is far from straightforward. Nevertheless, we contend that the CCP network represents a new form of environmental governance. Moreover, given that such networks are increasingly common, it is imperative to develop a conceptual framework that can capture their role and impact and hence provide a more complete understanding of global environmental governance.

### **Conceptualizing the Local Dimension of Global Environmental Governance**

While there are many different perspectives and interpretations of the term *governance*, broadly speaking we can say that it involves processes through which collective goals are defined and pursued in which the state (or government) is not necessarily the only or most important actor.<sup>11</sup> Several commentators have noted a shift from government to governance, in which the roles of the public, private, and voluntary sectors are being restructured.<sup>12</sup> The development of a governance perspective involves recognizing the roles of supranational and subnational state and nonstate actors, and the complex interactions between them, in the process of governing.<sup>13</sup> Such an approach is particularly relevant in the context of global environmental issues, where modes of governing are multiple and include processes and institutions that transverse scales as well as networks of actors that cannot be easily characterized by the state/nonstate dichotomy.

In seeking to conceptualize the role that transnational municipal networks, such as the CCP program, play in global environmental governance,

it is necessary to understand the ways in which authority and power are articulated across and between those scales. Within international relations, regime theory and concepts of transnational networks have been developed to analyze processes of global environmental governance. In this section, we argue that these approaches provide limited conceptual space for considering the potential role of transnational municipal networks, and other subnational forms of governing global environmental issues, and thus offer an incomplete understanding of global environmental governance more broadly.

### *International Regimes*

For many international relations scholars, global environmental governance is conducted through the interactions of nation-states, primarily in the formation of international regimes, defined as “social institutions that consist of agreed upon principles, norms, rules and decision-making procedures, and programs that govern the interaction of actors in specific issue areas.”<sup>14</sup> Regimes are usually organized around a set of multilateral treaties on a specific issue (e.g., the United Nations Framework Convention on Climate Change and its Kyoto Protocol in the case of global warming). Analysts who view global environmental politics as a problem of collective action over common resources contend that regimes are formed in a specific issue area to facilitate cooperation by providing information and reducing transaction costs. From this perspective, regimes emerge either through the initiative of a hegemon or through interest-based, interstate bargaining.<sup>15</sup> Regime analysis in this tradition has focused on the conditions under which effective regimes are created and maintained, where “effective” is defined in terms of successful cooperation between nation-states and the coherence of the regime.<sup>16</sup>

Alternative accounts of regimes emphasize the role of ideas in shaping the ways that states define their interests. These “knowledge-based” or “constructivist” perspectives view international regimes as a means through which cognitive and normative aspects of the problem in question are constructed and in turn shape the ways states perceive their interests.<sup>17</sup> This shift in focus widens the scope of regime theory and reconceptualizes the processes through which regime formation and maintenance take place. In particular, nonstate actors, such as intergovernmental organizations, nongovernmental organizations, multinational corporations, and scientists are seen to have an important role in the formation and maintenance of international regimes.<sup>18</sup>

Despite the growing influence of nonstate actors in environmental regimes, for the most part, the significance of nonstate actors is measured

in terms of the extent to which they shape, facilitate, and change the behavior of nation-states.<sup>19</sup> While this is not an unreasonable position—clearly nation-states are critical actors in global environmental governance—it points to fundamental assumptions concerning authority and territoriality underlying this approach that equate political power with the nation-state.<sup>20</sup> In other words, the assumptions of regime theory are more consistent with a government (as opposed to governance) perspective. This has two critical implications. First, the power of nation-states, as territorially bounded entities with a monopoly on the use of (economic or military) force, is seen as most significant on the global stage. Second, given that political power is defined by state boundaries, the internal politics of nation-states is considered to be of little significance. Aside from some interest in the concept of sovereignty,<sup>21</sup> the notion of transgovernmental coalitions,<sup>22</sup> and two-level games,<sup>23</sup> the state remains conceived for the most part as a homogeneous and unitary actor, a “fixed territorial entity . . . operating much the same over time and irrespective of its place within the geopolitical order.”<sup>24</sup> Implicitly, regime theory assumes that subnational governments act under the (sole) influence and direction of national government. While a focus on knowledge and the role of nonstate actors has led to a revision of the nature of interests, politics, and influence operating within regimes, the state remains defined in terms of national government, albeit with potential internal conflicts and the roles of domestic actors noted. Critically, however, the potential role of subnational government is either ignored or implicitly subsumed within the nation-state.

Given its focus on a fixed and uniform territorial notion of political power, transnational networks of local governments, such as the CCP program, are not easily conceptualized within regime theory approaches to global environmental governance. This top-down perspective assumes a vertical relationship between the international, national, regional, and local scales and ignores the role of local governments as an important site of global environmental governance in their own right. As noted earlier, many CCP member governments have initiated policies and programs for managing GHG emissions independent of their national governments. The Australian and US cases are particularly illuminating, given that the national governments in each case have been vocal opponents to current international efforts to address climate change. Moreover, regime theory approaches overlook the emergence of network forms of organization where institutional relationships may bypass levels of governance, taking place directly between the local and the international. Not only do CCP members interact directly with one another across national boundaries, but ICLEI, not national

governments, serves as the voice of local authorities in international climate change negotiations through its observer status at the Conference of the Parties. This suggests the need to move beyond traditional concepts of the state as a national entity and assumptions of political power as necessarily territorially bound in order to understand processes of global environmental governance.

### *Transnational Networks*

Within international relations, there is increasing interest in transnational networks of actors and institutions that operate simultaneously across multiple scales.<sup>25</sup> Such networks involve “regular interaction across national boundaries when at least one actor is a non-state agent or does not operate on behalf of a national government or intergovernmental organization.”<sup>26</sup> Three central network concepts have been developed in relation to global environmental governance: epistemic communities, transnational advocacy networks, and global civil society.

The epistemic communities and transnational advocacy networks approaches stress that political authority accrues to transnational networks through their ability to garner and deploy information, knowledge, and values. Epistemic communities, networks of experts who share a common understanding of the scientific and political nature of a particular problem, are seen as gaining influence within international regimes by virtue of their authoritative claims to knowledge and their ability to create a scientific consensus on the issue at hand, to which policymakers turn under conditions of uncertainty.<sup>27</sup> There is some debate as to whether the Intergovernmental Panel on Climate Change constitutes an epistemic community. A transnational advocacy network (TAN) “includes those relevant actors working internationally on an issue, who are bound together by shared values, a common discourse, and dense exchanges of information and services.”<sup>28</sup> Such networks operate simultaneously within domestic and international political arenas and are most frequently found in issues where there are easily identified principled positions (the Climate Action Network is an example of a TAN working on the issue of climate change). According to Margaret Keck and Kathryn Sikkink, TANs “use the power of their information, ideas, and strategies to alter the information and value contexts within which states make policies.”<sup>29</sup>

These theories offer an alternative to accounts of power focused on the use of economic and military force to direct others and zero-sum concepts in which one actor’s gain is another’s loss. Instead, power is seen to accumulate from multiple sources of authority, including expertise and

moral positions, and to be a relational concept. Nevertheless, in both the epistemic communities and TAN approaches, the power of transnational networks lies in their ability to influence nation-states, which remain the location of governance.<sup>30</sup> Thus, these approaches reinforce an interpretation of global environmental governance where “government” is at the heart of the analysis and in which the nature of the state is effectively “black boxed.”

In a third approach, sometimes labeled “global civil society,” scholars examine the role of transnational networks in a more radical way, which is more in line with a governance perspective.<sup>31</sup> Moving away from state-centered analyses, these approaches consider the multiplicity of actors and institutions that influence the ways in which global environmental issues are addressed across different scales. From this perspective, “governance occurs on a global scale through both the co-ordination of states and the activities of a vast array of rule systems that exercise authority in the pursuit of goals that function outside normal national jurisdictions.”<sup>32</sup> Not only are networks considered influential insofar as they shape the range and extent of state action, but also as an important site for governing global environmental issues in their own right.

Collectively, the focus on transnational networks marks a shift within the discipline of international relations from a preoccupation with hierarchical structures toward an appreciation of the importance of network forms of organization. However, these approaches, with their focus on transnational networks as *nonstate* actors, offer only a partial framework for analyzing the CCP program. Network members do undertake the sorts of lobbying and campaigning activities associated with non-governmental organizations. However, transnational municipal networks, like the CCP program, tend to have close links to government administration at local, national, and international levels and to have state agency through their members, so that it is impossible to categorize them as nonstate actors.<sup>33</sup> While many discussions of transnational networks allow for actors with links to the (national) state to be members of such networks, their significance is tied to their ability to alter the behavior of nation-states rather than their role in enhancing the capacity of local authorities to govern issues such as climate change.<sup>34</sup>

In sum, transnational municipal networks do not fall neatly into such frameworks, suggesting that assumptions about the role of transnational networks in global environmental governance may need more careful scrutiny.<sup>35</sup> Rather than establishing transnational networks as non-state actors, it may be more appropriate to view them as multifaceted, having some of the features of nongovernmental, quasi-governmental, and business organizations.<sup>36</sup>



## The Multilevel Governance of Global Climate Change

The CCP program, as a transnational municipal network, represents a form of environmental governance not easily captured by the perspectives outlined above. In each case, the assumption is made that global environmental governance is essentially a hierarchical process, so that policies are seen as emanating from the top down, where governing is primarily the responsibility of the state. The CCP program highlights the need for these perspectives to engage more fully with the concept of governance and to account for the changing nature of the state and the links between different levels and spheres of authority.

The concept of multilevel governance, with its emphasis on the connections between vertical tiers of government and horizontally organized forms of governance, provides a useful starting point for understanding the ways in which environmental problems are governed within and across scales. Originally developed to analyze regional policy development within the European Union (EU),<sup>37</sup> the concept has since been elaborated and extended. However, research has tended to focus on the development of multilevel governance within Europe and on sectors related to economic or regional policy.<sup>38</sup> In this section, we introduce the concept of multilevel governance before considering how it can inform an analysis of the CCP program as a part of global environmental governance.

### *Types of Multilevel Governance*

In its original formulation, proponents of multilevel governance argued that the role of national governments within the EU was diminishing and that a new, multilevel system of governance was taking shape.<sup>39</sup> From this perspective, this system has emerged for several reasons: nation-states no longer monopolize policymaking, given that supranational bodies have an independent influence over these processes; the need for collective decisionmaking over complex problems leads to a loss of control for nation-states; and supranational, national, and sub-national political arenas are interconnected through policy networks.<sup>40</sup> As a result, decisionmaking competencies are increasingly shared between actors operating at different levels of governance. This perspective draws attention to the importance of considering how political authority and processes of policymaking cross traditional divides between state and nonstate actors, domestic and international spheres.

Lisbet Hooghe and Gary Marks argue that two different, and not necessarily exclusive, approaches to multilevel governance have emerged

since its original conception.<sup>41</sup> The first (Type I) “conceives of dispersion of authority to a limited number of non-overlapping jurisdictions at a limited number of levels.”<sup>42</sup> Federalism, with its focus on the relationship between central and subnational governments, is the intellectual foundation for this form of multilevel governance.<sup>43</sup> However, “what clearly distinguishes multilevel governance from supranational approaches is that it does not regard the EU as [developing into] a state. The idea is not one of governance *above* the state . . . but rather of governance *beyond* the state.”<sup>44</sup> In this nested interpretation, a clear hierarchy between different tiers of governance exists; the nation-state retains the central authority in negotiating between the domestic and international levels. State executives and state arenas remain important (if not the most important) components of systems of governance.<sup>45</sup> However, from this perspective, local governments have a degree of independent agency. For example, in the EU, such actors form transnational networks and associations and can outflank the nation-state in order to pursue deeper levels of policy integration.<sup>46</sup> In the US context, scholars have noted the increasing frequency with which local governments engage in foreign policy matters independent of (and sometimes in contradiction to) the federal government.<sup>47</sup>

Type II multilevel governance “captures both the multiple levels at which governance is taking place, and the myriad actors and institutions which act simultaneously across these levels.”<sup>48</sup> If the first vision of governance focuses on changes in the *tiers* of authority (e.g., distribution to supranational and subnational levels), the second is equally concerned with new *spheres* of authority<sup>49</sup> resulting from interactions between state and nonstate actors. Spheres of authority may not be defined in a neat hierarchy of scales in which the place of the nation-state is easily identified, but, rather, the territoriality of different forms of political authority is itself a matter of definition and contestation. Hooghe and Marks suggest that it is at the boundaries of formal politics, in relations between state and nonstate actors, and between national and international politics, that such forms of governance are emerging.<sup>50</sup>

While the concept of multilevel governance originated in relation to the EU, it has wider applicability. The Type I model may also be considered in relation to federal states, such as the United States<sup>51</sup> and Australia<sup>52</sup> and, if international regimes are taken as a level of governance “beyond” the state, to other contexts.<sup>53</sup> Moreover, Type II models of multilevel governance can be considered relevant in other contexts where horizontal/transnational networks of governance take shape. Given that the CCP program shows that subnational governments and their networks can act as independent transnational actors, a multilevel

governance approach is a useful starting point for developing a new conceptual framework for the analysis of global environmental governance.

### *Multilevel Governance and the CCP Program*

Traditional divisions between state and nonstate, local, national, and global are disrupted by the politics of climate change. Political authority for making decisions related to the mitigation of GHG emissions has been redistributed upward to international organizations and transnational networks, downward to cities and regions, and outward to non-state actors. While the nation-state may be responsible for legitimating and alleviating climate risks, this is a task it cannot complete without addressing the source of risks (energy use) and without the involvement of the institutions and agents responsible for that use (industries and communities).<sup>54</sup> In turn, nonstate actors, which operate at different scales across traditionally discrete policy sectors, share responsibility with the state for defining problems and implementing solutions. The CCP program is one element in the multilevel governance of climate change, where the roles and responsibilities of state and nonstate actors at all levels are being reconfigured.

In one sense, the CCP program could be considered an element of Type I multilevel governance, as a network that mediates between defined political arenas at the local, national, and global levels. However, such an analysis assumes an unwarranted separation and distinction between levels of political authority. We suggest that this transnational network in fact epitomizes the development of Type II multilevel governance, creating a new sphere of authority through which the governance of climate change is taking place and which is not bound to a particular scale. At the international climate change negotiations, ICLEI represents local governments, highlighting the role of CCP members in addressing climate change, which most nation-states fail to fully appreciate, as evidenced by the fact that few of them report on local actions in their national communications to the climate change secretariat. In this way, the CCP bypasses the nation-state and gives local authorities the opportunity to take a position that may go against that of their national governments, thus illustrating that the nature of climate change governance cannot be read hierarchically. However, the CCP does more than mediate between the formal arenas of local government and the global climate regime; it has created its own arena of governance through the development of norms and rules for compliance with the goals and targets of the network. The CCP network also takes on functions that are typically presumed to rest with national governments, such as setting

GHG emissions targets for participants as well as requirements for reporting and monitoring emissions. This suggests that political power and authority not only lie with nation-states, but can accrue to transnational networks operating through a different form of territoriality.

In addition to acting around the state, the CCP program is partly a state-based organization, given that its membership comprises local governments and that it often works closely with national governments and state agencies. In Australia, CCP officials have entered into a partnership with national and local governments and with *Environs*, a non-governmental organization, to adapt the CCP software to local circumstances and to ensure that local authorities have access to this tool. The CCP program also plays an important role in securing financial resources for local climate protection. Although these resources often come directly or indirectly from the state (national or regional), they would not have been made available to local authorities without lobbying on the part of the CCP. Advocacy from the CCP program has led to the creation of national CCP campaigns in a number of countries, and in many cases, the nation-state plays a central role in coordinating the program. This suggests that spheres of authority are not separate from, or alternative to, state-based power but are inextricably bound up with it.

Although states increasingly rely on nonstate actors and networks such as the CCP program, it is equally clear that the state, operating at multiple scales, has been central in determining how climate change has been interpreted as a policy problem and the extent to which actions have been implemented. Rather than indicating that new forms of “governance” have replaced “government” in the governing of climate change, this suggests that multiple modes of governing are present, and the task is to assess how and to what effect these are articulated. At the local level, the state is sometimes the source of innovation in climate protection.<sup>55</sup> For example, in the United States, the city of Denver’s interest in climate protection and its awareness of the link between energy use, air quality, and climate change evolved independently from and in advance of the national debate over climate change and is arguably a function of leadership by Mayor Wellington Webb as well as the availability of financial and administrative resources. In Newcastle (Australia) and Newcastle and Leicester (UK), local government research and initiatives on urban responses to climate change took place ahead of the interest of national governments or the CCP program on this issue.

Moreover, nation-states have significant influence over the capacity for the development and implementation of local climate protection policies in the planning, transport, and energy sectors. In the UK, guidance

from the national government encourages local planners to consider energy use and the location/design of development. However, since it does not *require* such considerations, local officials feel powerless to deny a development application based solely on these grounds. The case of Newcastle (Australia) demonstrates both the benefits of synergy between federal, state, and local policies and the opportunistic nature through which such circumstances arrive. Legislation in the state of New South Wales required that utilities investigate ways to improve energy efficiency and to promote energy conservation. In Newcastle, these programs have enabled the development of demonstration schemes for renewable energy and created a consumer market for green energy. In turn, Newcastle's initiatives and involvement with the CCP program have provided the federal government with a model upon which to base the further involvement of local governments in addressing climate change and, some might argue, a means through which to displace responsibility for the issue from the federal to subnational states. The effectiveness of the CCP network as a means through which to address climate protection objectives therefore varies considerably from place to place.<sup>56</sup>

A multilevel governance perspective does not necessarily signal a weakening of the state but rather a redefinition of the scope and scale of state activity. As illustrated in the case of climate change, the role of the state is not governed by some determinate and finite notion of capacity, but instead through negotiations in which actors and institutions mutually define their respective roles. In this way, environmental politics is an argumentative struggle in which "actors not only try to make others see problems according to their views but also seek to position other actors in a specific way."<sup>57</sup> Shifts in the scale of state activity and authority should therefore be viewed as a reorganization of the social relations between actors, a reorganization that may in some cases reinforce the power of the state.<sup>58</sup> Rather than signaling a shift from "government" to "governance," the multiscale politics of climate change involves plural modes of governing, which act to reinforce and negate each other. The multilevel governance perspective we have introduced here provides one means of establishing a new conceptual framework for understanding global environmental governance in which both vertical relations between governments and new horizontal spheres of governance can be brought into view. Such a framework is of particular import in the analysis of climate governance where there is growing recognition that "the future of the climate regime may also lie in strong local and regional initiatives."<sup>59</sup>

## Conclusion

The governance of climate change is a complex, multilevel process. Traditional analytical divisions between international and domestic politics, between local, national, and global scales, and between state and non-state actors no longer suffice. Our analysis of the CCP network demonstrates that global environmental politics are not merely a matter of international negotiation and national policy development, but are also taking place locally. However, the local governance of the global environment is not conducted at a discrete scale, but is constructed by relations of power and influence between subnational and national state and nonstate actors, and through the creation of new spheres of authority.

We have argued that the perspective of multilevel governance offers an alternative analysis to that provided by international regimes and transnational networks. Not only does a multilevel governance approach create conceptual space for considering the role of subnational governments in global environmental governance, it also highlights the multiple forms of government and governance in world politics. Such an approach illuminates the ways in which the nature of the state has been taken for granted within much of the literature on global environmental governance, with discussion often limited to whether it does or does not remain center stage in the formation of international regimes. The multilevel governance lens highlights the complexity of the state and the reduced ability of national level state institutions to control the policymaking process. As such, it serves to direct our attention toward other arenas within which the governance of global environmental problems is taking place.

Furthermore, adopting an interpretation of multilevel governance as a polycentric arrangement of overlapping and interconnected spheres of authority shifts the analysis of global environmental governance away from a hierarchical model in which rules, responsibilities, and norms are passed up or down the chain of command from global to local or vice versa, toward a recognition of the ways in which the scaling of political authority is in itself a contested process. The CCP program is but one illustration of how our familiar scales of analysis—international, national, regional and local—are disrupted by emerging forms of environmental governance that transcend or operate beyond these boundaries. As Matthew Paterson and colleagues argue, global environmental governance “is a fundamentally political process involving struggles over who has the authority and legitimacy to propose rules guiding the practices” of different actors and institutions.<sup>60</sup> Such struggles take place within, across, and between spheres and tiers of governance and result in the redefinition of the roles of different actors and their relationships in governance processes.

Future research should examine how these struggles take place and their implications for the effectiveness and legitimacy of global environmental governance. ☉

## Notes

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