Book Reviews 197

solving the problems' (p. 3) in practice, the book could have done more to elaborate how this might be achieved and to explain how the book could contribute to such efforts.

International Environmental Law, Policy, and Ethics uses an interesting analytical framework. It looks at developments in international environmental law and policy from the perspective of what motivates environmental action. It will be valuable to those interested in the philosophical and theoretical underpinnings of environmental law and the effectiveness of their utilization to achieve environmental preservation.

Fanny Thornton *University of Canberra (Australia)*

Transnational Environmental Law, 4:1 (2015), pp. 197–202 © 2015 Cambridge University Press doi:10.1017/S2047102515000060

Transnational Climate Change Governance, by Harriet Bulkeley, Liliana B. Andonova, Michele M. Betsill, Daniel Compagnon, Thomas Hale, Matthew J. Hoffmann, Peter Newell, Matthew Paterson, Charles Roger, Stacy D. VanDeveer

Cambridge University Press, 2014, 220 pp, £40 hb, ISBN 9781107068698 hb

It is rare to see a monograph – except, perhaps, an edited collection – with more than three or so authors. *Transnational Climate Change Governance* more than triples that number, to ten. This in itself is an astounding achievement of logistics and academic compromise for a stable of this many scholars. However, this book has much more to offer. The text represents the first comprehensive analysis that ties together the world's continuing concerns and debates about the three major areas of climate change, transnationalism, and governance. It eschews any disciplinary tunnel vision or singular theoretical perspective. Two major contributions of this book, then, are to break down the analytical compartments that usually divide the areas of climate change, transnationalism, and governance, and to revoke privileged positions of theoretical perspective.

Just as importantly, this book persuasively shows the importance of an understanding of transnational governance for climate policy, politics, and law. While some may relegate the study of transnational governance to the normative and political periphery, the authors here demonstrate its significant real-world environmental and economic impacts. They are able to use the cross-sectoral density of the field of climate change to show a variety of forms of transnational governance, the authority it exercises, and the resources it commands.

The basis for this volume is an international and interdisciplinary research network on climate change, initiated by Harriet Bulkeley. One of the group's key outputs has been an extensive worldwide database of 60 key climate initiative case

studies (from states to individuals; from legally binding to voluntary) to address climate change across national borders (p. 20). The analysis of these case studies in this volume is framed by five overarching questions:

- the foundations and nature of transnational climate change governance (TCCG);
- the ambit of its agenda(s);
- the variegated nature of TCCG geographies across regions;
- the ways and means by which the legitimacy and authority of TCCG are established; and
- the effectiveness and impact of TCCG.

In order to frame the analysis around these questions, the authors provide three important preliminaries in Chapters 1 to 3. In Chapter 1, the authors put TCCG in context by exploring its three overlapping fields of study and by explaining how transnationalism, climate change, and governance are applied in the text. The aim is not to replicate or attempt to resolve contested claims in these fields. Rather, they direct the use of their unique database to examine the empirical phenomena of TCCG and use the data generated to inform the existing understandings of the nature and dynamics of the three overlapping fields more generally.

For the authors, *transnationalism* is grounded in its international relations disciplinary challenge to the dominance of realism that started in the 1960s. This gathered significant strength in the mid-1990s, when a significant push got under way to study the conditions under which transnational sub-state and non-state coalitions and actors did or did not influence the behaviour of states and, just as importantly, transnational politics beyond the state. For the purpose of this book, the authors follow Thomas Risse-Kappen's definition¹ of transnational relations as 'regular interactions across national boundaries when at least one actor is a non-state agent or does not operate on behalf of a national government or an intergovernmental organization' (p. 6). These interactions are limited to transnational governance activities in the realm of climate change and do not include transboundary activism that seeks to influence or direct state behaviour in one way or another. One problem with this distinction, however, is that drawing the line between non-state 'activism' and 'governance' may be difficult at the inception of governance or when they continue to overlap.

Before addressing the definition and attributes of governance, Chapter 1 turns its attention to the sorts of activity that are within the realm of *climate change* for the purpose of transnational governance. Climate change, firstly, denotes the complex scientific phenomenon of climate alteration and disruption associated with increasing greenhouse gas (GHG) concentrations in the atmosphere. It is a collective problem that calls for a political/legal solution. More importantly, however, for the authors the main interest is the 'radical indeterminateness' (p. 9) that continues to surround

¹ T. Risse-Kappen (ed.), Bringing Transnational Relations Back In: Non-State Actors, Domestic Structures and International Institutions (Cambridge University Press, 1995).

the vast consensus on the science of climate change – an indeterminacy created by contending perspectives on its meaning and significance, especially as it relates to responsibility across scales, states, sectors, and generations.

The authors then arrive at the concept of *governance* of climate change – the means for governing the problem. Using Mark Bevir's work, ² governance is defined broadly as comprising 'issues of social coordination and the nature of all patterns of rule' (p. 11). The authors maintain that this expansive definition allows for the capture of heterogeneous public domain phenomena surrounding climate change such as multiple actors and configurations, multiple sites of response, variable authority, various methods of its exercise, perceived legitimacy of steering actions, and so on. The downside is that such an open-ended definition can make it hard to locate the line between what is outside the meaning of governance or, indeed, what counts as governance in a particular situation or context. Be that as it may, moving to the transnational, the authors adopt a definition of governance that focuses on three common features: (i) the realization of public goals; (ii) a process of shaping the action of a particular constituency; and (iii) its authoritativeness.

Following the discussion of these three essential organizing concepts, Chapter 2 'maps' the world of TCCG. The major object is to elaborate the design and development of the database around which the book is built. It does so by explaining the data identification and processing protocols as well as the case study selection criteria.

Chapter 2 explains that the authors limited their investigation of governance activities to the role of information sharing as a form of governance and the ways in which transnational initiatives govern through building capacity, including technology transfer and direct funding, and through other forms of regulation (such as targets, monitoring, certification, and binding requirements). In addition, four critical areas emerged from the database analysis that informs the exploration of five major questions about TCCG mentioned above. These four critical areas are: (i) the actors involved in establishing TCCG and the form(s) and function(s) of their activities; (ii) the issue areas of particular focus for TCCG; (iii) the uneven nature of participation in TCCG activities; and (iv) the ways in which TCCG seeks to confer legitimacy and authority on the actors involved.

In Chapter 3, the authors provide a theoretical grounding for the book – 'analytical eclecticism'. They employ what they call three theoretical 'lenses' – an agency-based lens, a social and system dynamics lens, and a critical political theory lens – to focus on different dimensions of TCCG that would otherwise be obscure or invisible. They maintain that these lenses allow the analysis to understand and explain TCCG in all its diversity (actors, institutions, settings), rather than limited by a historical, narrow concern about how transnational actors affect state and interstate relations. These three lenses are weaved into the analysis in Chapters 4 to 8 to illuminate and unpack a variety of aspects of TCCG.

² M. Bevir, 'Governance as Theory, Practice, and Dilemma', in M. Bevir (ed.), *The Sage Handbook of Governance* (Sage, 2011), pp. 1–17.

The three analytical lenses are intended to achieve different objectives. The agency lens helps the authors to evaluate and explain fundamental issues related to the expanding salmagundi of actors, interests, resources, and capabilities that support and drive the functions of TCCG. Coupled with a functional and rational choice analysis, the agency lens helps to identify actors and explain the emergence of TCCG. The agency lens also assists in explaining the uneven geographies of TCCG and to gauge legitimacy and effectiveness. The social and system dynamics (SSD) lens, in contrast, directs attention to the social context in which agents operate, including the motivations, ideas, and norms that influence or direct actions and objectives. The SSD lens provides the ability to focus on the complex, uneven, and adaptive nature of the governance system based on the co-constitutive nature of collaboration, innovation and response. Legitimacy and effectiveness also have a role to play in SSD analysis because they are central to governance relationships and impacts. The critical political theory lens draws mainly on work in critical political economy and Foucauldian critiques to explore the history, constitution and influence of power relations in TCCG. It focuses on the conflicts in interests, identities, norms and so on, in order to expose governance dominance, contradictions, and instabilities.

With these three preliminaries complete, the authors turn to the analysis of the detailed database (Chapters 4 to 8). Chapter 4 sets the stage by discussing the political dynamics resulting in the emergence of TCCG. Through an examination of the historical rise and development of TCCG (including actors, incentives, hybrid initiatives, issue areas, and governance functions), the authors show that it is part and parcel of a wider transformation in global governance. The authors suggest that for climate change, private initiatives involving market and non-state entrepreneurs have had the most significant impact on transnational governance. Hybrid authority (networks or non-state and state actors) equally features prominently in TCCG and reflects the complex and uneven social context of climate governance.

Chapter 5 dives into the heart of TCCG by exploring governance issues and governance spaces. Four sets of issues dominate the initiatives in the authors' database: energy production, supply and consumption; carbon markets and finance; carbon sequestration and forests; and infrastructure. The dominance of these issue sets might seem intuitive, but the authors demonstrate that they are not the natural focus for governance attention. These particular issues appear to have been pushed to the foreground because of pre-existing contexts involving particular actors, interests, incentives, and the structure of contemporary political economy. For the authors, these issues connect with their database initiatives in a variety of ways and allow differing agendas of private, public, and civil society actors to combine to advance the goals of each. The authors show the synergies (and the lack thereof) between initiatives, and how they constitute the issues and construct potential solutions to problems.

In Chapter 6, the authors address the uneven geography of TCCG. A basic lesson is that TCCG is not one and the same thing globally and it is crucial to critically evaluate its form in each case. In general, however, because transnational governance tends to be decentralized, the networks and partnerships that make up such

Book Reviews 201

governance have an uneven presence across regions of the globe. The global geographic patterns that characterize TCCG can be viewed in a general way as running along a North–South axis. However, important regional differences exist in terms of participation and the location in which governance activities are carried out. The initiation and leadership of governance activities seems to be overwhelmingly by actors in developed states. From the point of view of critical political theory, this is part of the structured inequalities of global capitalism, or inequalities of capacity. The structural aspect of initiative and leadership leads the authors to suggest that TCCG may represent and attempt to fill a void in weak state capacity. In turn, this differential in participation raises questions of legitimacy.

Legitimacy and authority come to the fore in Chapter 7. For TCCG, involving non-state actors as it does, a fundamental question is how a network of various actors can 'govern' without legal authority to do so. The aim of the authors is not to establish whether any particular TCCG initiative is or is not legitimate or authoritative in a normative sense. Instead, they attempt to analyze the conditions under which claims of legitimacy are accepted or rejected. In the world of TCCG non-state networks, legitimacy is seen to depend on the strength of 'consent, consensus, and concord'. This triumvirate of concepts provides the authors with a basis for considering how legitimacy is assembled and why others might accord authority to norms generated by a particular TCCG network.

The assembly of legitimacy is largely driven by one or another form of institutionalization. Beyond that, a wide variety of legitimacy arises through a wide array of arrangements and conduct (such as formal ties, legal agreements, membership structures, monitoring, certification, informal codes, and habituation). Several factors impact on the recognition by others of the authority exercised by TCCG initiatives. Claims of legitimacy tend to be based on self-professed expertise, promises of liberal environmental responses, and assertions of the provision of greater efficiencies and/or learning. Moreover, the authors show that authority often arises through a constellation of means, rather than through formal ties alone; although in the field of private TCCG involving free agents formal ties seem to be the strongest and indicate that consent is significant for this form of TCCG.

The penultimate chapter (Chapter 9) addresses the difficult questions of the effectiveness and impact of TCCG initiatives. Here, the authors are concerned with TCCG effects on climate change itself (such as the reduction of GHG emissions), but also with the impacts of TCCG on climate governance overall (such as the contribution of TCCG compared with interstate governance). Lawrence Susskind once maintained that, at the end of the day, the effectiveness of any environmental initiative must be measured by the tangible environmental improvement – or at least the cessation of environmental harm – that it achieves. The authors stress the inadequacy and difficulty, if not the impossibility, of measuring emissions reductions attributable to TCCG initiatives. As a result, they use a number of alternative

³ L.E. Susskind, Environmental Diplomacy: Negotiating More Effective Global Agreements (Oxford University Press, 1994).

indicators such as investment patterns and corporate practice, combined with their three lenses, to interpret the actual and potential effect of TCCG on climate change. This includes the contribution of TCCG to increased efficiencies, the way in which TCCG initiatives might scale up or catalyze further responses, and how they might change the terms of debate for action on climate change.

In terms of the contribution of TCCG to climate governance, the authors show that the normativity of TCCG initiatives has significant suasion on the practices and activities designed to respond to climate change; just as much as interstate governance. The authors claim this is almost certainly so in the case of cities, energy technologies, and carbon markets. The interactions between TCCG initiatives and state governance are also important. For instance, the Climate Registry's GHG reporting standards have influenced the design of state standards. Carbon offset initiatives have influenced certification within the Clean Development Mechanism and some city networks are recognized by the United Nations Framework Convention on Climate Change.⁴

The book's final chapter concludes the discussion by looking beyond TCCG. In particular, the authors relate their research on TCCG initiatives to existing and potential research agendas in transnational relations, climate change, and environmental governance. They end on a positive note by highlighting the new opportunities TCCG may present, not as a panacea or even a substitute for state action, but as an emerging normative framework and set of practices that are likely to continue to grow.

Donald K. Anton Griffith University Law School, Brisbane (Australia)

Transnational Environmental Law, 4:1 (2015), pp. 202–205 © 2015 Cambridge University Press doi:10.1017/S2047102515000072

Global Environmental Governance, Technology and Politics: The Anthropocene Gap, by Victor Galaz Edward Elgar, 2014, 208 pp, £70 hb, ISBN 9781781955543

Earth has entered a new geological epoch known as the Anthropocene that is characterized by rapid nonlinear global environmental change.⁵ What is unique about this new epoch is that, for the first time in Earth's history, a single species has

⁴ New York, NY (US), 9 May 1992, in force 21 Mar. 1994, available at: http://unfccc.int.

See, e.g., P.J. Crutzen, 'Geology of Mankind' (2002) 415(6867) Nature, p. 23; W. Steffen et al., Global Change and the Earth System: A Planet under Pressure (IGBP Secretariat, 2004); W. Steffen, P.J. Crutzen & J.R. McNeill, 'The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?' (2007) 36(8) Ambio, pp. 614–21; W. Steffen et al., 'The Anthropocene: From Global Change to Planetary Stewardship' (2011) 40(7) Ambio, pp. 739–61; W. Steffen, J. Grinevald, P. Crutzen & J. McNeill, 'The Anthropocene: Conceptual and Historical Perspectives' (2011) 369(1938) Philosophical Transactions of the Royal Society A, pp. 842–67.