14   Conclusion: Pioneers, leaders, followers in multilevel and polycentric climate governance re-assessed

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Introduction

As the world's gaze has turned to focus increasingly upon the climate change crisis, there has been a growing clamour – both within academia and beyond – for leaders to marshal resources and guide us towards an effective response to this complex global challenge. In acknowledging not only the need for financial and technological support to developing countries, but also how 'developed country Parties shall continue taking the lead' (article 4.4), the architecture of the Paris Agreement is explicit about the need for leadership. Indeed, the commitment under the Paris Agreement to make 'rapid reductions' in greenhouse gas (GHG) emissions (article 4.1) is complemented by a mechanism to facilitate 'the exchange of information, experiences and best practices'. This mechanism thus creates an institutionalised channel for leading states to influence other countries' strategies. Indeed, all states share a commitment to the 'highest possible ambition, reflecting its common but differentiated responsibilities and respective capabilities, in the light of different circumstances' (article 4.3) when preparing their Nationally Determined Contributions (NDCs).

Previous work has theorised what we mean by an environmental 'leader' or 'pioneer' (e.g. Young, 1991; Underdal, 1994; 1997; Andersen and Liefferink, 1997; Andresen and Agrawala, 2002; Jänicke, 2006; Liefferink and Wurzel, 2017; see also Chapter 1 in this volume) while an increasing number of studies has used such concepts to assess climate governance (e.g. Oberthür and Roche Kelly, 2008; Jordan *et al.*, 2012; Wurzel, Connelly and

Liefferink, 2017; Wurzel, Liefferink and Torney 2020). The existing literature on environmental leaders and pioneers has almost exclusively focused on economically highly developed countries (i.e. the Global North) while largely neglecting the emerging economies in the Global South as well as the role of followers across the globe. This edited volume deliberately explores both the Global South and North, and traverses pioneers, leaders and followers alike. The outcome, we hope, is a collection of chapters that provides a more comprehensive exploration of the actions of the key players in global climate governance, especially those pushing for and demonstrating greater ambition, whilst also enabling greater analytical clarity through a guiding theoretical framework that is applied throughout the book.

As outlined in Chapter 1, the core analytical themes of this book are: the conceptualisation of pioneers, leaders and followers within multilevel governance (MLG) and polycentric (climate) governance structures. These conceptual framings are overlapping and mutually supportive in the quest for greater analytical purchase. Specifically, as most cases exhibit different forms of leadership and pioneership – and even, perhaps simultaneously, followership and possibly also laggardness – MLG and polycentricity permit such complex identities to be located and examined in detail, by enabling the multifaceted 21st century state to be examined from multiple angles. The theoretical insights and empirical findings obtained across this book suggest that while pioneership and leadership may be more commonly associated with the Global North – especially following the explicit allocation of primary responsibility for climate action to developed 'Annex I' states via the 1997 Kyoto Protocol – they may be increasingly found across the globe. Indeed, as the chapters in this volume show, there are instances of climate leadership and pioneership within the Global South and followership within the Global North, as well as the other way round. Although the 2015

Paris Agreement emphasises again the principle of Common But Differentiated Responsibilities (CBDR), it requires all parties to put forward voluntary pledges in the form of NDCs. Climate leadership and pioneership from countries in both the Global North and South will therefore be important for achieving the Paris Agreement's goal of keeping global temperatures to well below 2°C and to pursue efforts to limit it to 1.5°C. In order to find instances of ambition, the book's use of MLG and polycentricity as guiding themes enables contributing authors to find climate leadership and pioneership beyond the 'usual suspects', and to acknowledge both the guidance of the state, and the importance of non-state actors.

In this concluding chapter, we summarise and build upon the preceding chapters as follows. We begin by exploring the examples of pioneership and leadership identified by the chapter authors, focusing explicitly on the different leadership types explained in Chapter 1 (structural, entrepreneurial, cognitive and exemplary). From here, we turn to the followers, exploring the factors that led to such stances and their implications for global climate action. Second, we analyse the role of MLG and polycentricity in enabling new actors to shape policy-making, as well as their capacity to interrogate the actions of those that have previously evaded the analytical spotlight. Third, we draw together the innovations developed within this book including the 'emotional leadership' sub-type of cognitive leadership (see below) introduced by Hall in Chapter 5, and the theorisation by Lederer *et al.* in Chapter 6 on the application of leadership types to pioneership, and the significance of the vertical dimension within their usage. Our penultimate section compares Global North and South actors, before highlighting those actors and processes that merit further exploration. Finally, we conclude the book. Looking to the pursuit of the 2030 and other targets, we call for further research on the important role of leaders, pioneers and followers during this most

pivotal of decades – which has started so tragically with the COVID-19 pandemic – in the struggle to mitigate and adapt to climate change effectively.

Pioneers, leaders and followers

In this volume we have followed the distinction provided by Liefferink and Wurzel (2017: 952-953), whereby pioneers are 'ahead of the troops', while leaders explicitly seek to lead or obtain followers. Furthermore, the chapters differentiated between the following four types of leadership (Liefferink and Wurzel, 2007, Wurzel, Connelly and Liefferink, 2017). *Structural leadership* draws from an actor's economic and/or military power, the latter of which is usually of little relevance for environmental governance. *Entrepreneurial leadership* reflects the use of diplomatic or negotiation skills to broker new agreements. *Cognitive leadership* encompasses the promulgation of new ideas or concepts that alter understandings or approaches in response to challenges. Finally, *exemplary leadership* occurs when an actor provides an example that others may emulate. Wurzel, Liefferink and Torney (2019: 11) note, leaders can combine combinations of these four manifestations of leadership, as, indeed, we have found in this book. Indeed, while leaders have often been identified in the literature as affluent states, this leadership status has been hindered somewhat during the challenging global context following the 2008 Global Financial Crisis (Burns, Tobin and Sewerin, 2019; Burns, Eckersley and Tobin, 2020), while Global South countries have exhibited numerous instances of leadership in this volume. Yet, the structural challenges these states face remain real. Indeed, as Underdal (1998: 107) claimed, '[a]ll being equal, therefore, the smaller and poorer the country, the more rarely can it (afford to) mobilize the amount of expertise and diplomatic activity needed to play a leading role' even in purely cognitive environmental leadership terms. However, Underdal uses the term instrumental leadership to capture

analytically what we have divided conceptually into cognitive and entrepreneurial leadership types (see also Liefferink and Wurzel, 2017; Wurzel, Liefferink and Torney, 2019).

The COVID-19 crisis is likely to make it even more challenging for countries in the Global South – and, quite possibly, the Global North as well – to offer cognitive climate leadership/pioneership, which is often resource intensive and usually takes time to generate (e.g. on the basis of scientific findings). Below, we examine the primary instances of pioneership and each form of leadership in turn, noting that new locations for ambition are arising across the world, but also the difficulty of becoming a leader in an arena that comprises every state, business and individual. We then reflect upon the role of followers.

Pioneers

The chapters in this book identify numerous examples of pioneering climate action across the globe. Pioneers take actions that endeavour to address collective action problems that are hindering a wider community from reaping potential joint benefits (cf. Young, 1991). Pioneers differ from leaders in that only the latter explicitly try to attract followers although the former may nevertheless be emulated by others (Liefferink and Wurzel, 2017; Wurzel, Connelly and Liefferink, 2017). Development and dissemination of solutions and strategies at the national level is often a precondition for successful transfer to the international level and/or diffusion to other countries (Jänicke, 1995; Andersen and Liefferink, 1997). Without detailed research, it is often challenging to establish the motivations behind the actions of leaders and pioneers. It may even be the case in some situations that what appeared to be 'pioneership' would have been 'leadership' had the actor had greater resources to encourage other actors to follow, particularly in the case of those based in the Global South. Here, the chapter by Urban *et al*. (Chapter 4) is illustrative, as they find both Costa Rica and Vietnam

to be pioneers, despite their being less economically developed than those cases that had previously been seen as leaders (e.g. Liefferink *et al.*, 2009). Relatedly, the parallel conceptual focus upon MLG enables us to make further distinctions between the two states; while Vietnam's (authoritarian) top-down approach is almost entirely resultant from the actions of government and party officials, Costa Rica's approach is more bottom-up, reflecting a more polycentric approach that involves civil society actors. Hall also finds civil society actors to have been pioneers in New Zealand, with Māori tribal organisations and activist groups hindering the development of fossil fuel extraction, via the cultural concept of *kaitiakitanga*.

In addition, our contributing authors frequently identified cities and municipalities as providing sites of pioneership within states, especially those that have otherwise not been so ambitious on the global stage. Li highlights cities in the southeast coastal areas, especially Shanghai, as playing a pivotal role in China's emissions trajectory. Similarly, Jörgensen posits that Gujarat in India was regarded as a pioneer having created a Department of Climate Change. Finally, Lederer *et al*. show how cities in Brazil assumed pioneering roles in the C40 Cities Group, up until the election of President Bolsonaro who has shown total disregard for climate change.

The election of Brazil's populist right-wing leader is mirrored in the Global North case of the USA. There, Selin and VanDeveer (Chapter 7) explain that polycentric activity need not be one of collaboration and cooperation, but can in fact manifest as contestation and conflict between local level actors, such as the State of California, and the national government. In contrast to car emission regulations, for which California has consistently been able to set the pace for other US states, creating the so-called California effect (Vogel, 1997), its influence

on climate governance seems much weaker. However, Selin and VanDeveer show that the states in the USA have been able to offer cognitive and entrepreneurial leadership, as well as some structural leadership. This leadership has been especially pronounced when states have teamed up, as has been the case, for example, with the Regional Greenhouse Gas Initiative (RGGI), which links up regional emissions trading schemes (ETS).

In other Global North states, climate action has been less actively contested but ambition nonetheless has plateaued – in part due to the impacts of the Global Financial Crisis (Burns *et al.*, 2019, Burns *et al.*, 2020). It is too early to say what impact the COVID-19 crisis will have on efforts to mitigate and/or adapt to climate change throughout the world and at different levels of governance. However, it is likely to hit poorer countries harder than more affluent ones. In the meantime, the negative (differentiated) impact of the 2008/09 financial crisis is becoming clearer. For instance, although Ireland was hit hard, Torney *et al.* (Chapter 12) find that the recent introduction of a Citizens' Assembly on climate governance is an example of pioneering behaviour. The Nordic states and Germany were less heavily afflicted by the financial crisis, and have continued to develop pioneering activities throughout the 2010s. Municipalities in the Nordic states benefit from availability of long-term and affordable credits for green investments from Local Government Financing Agencies (Chapter 11), while Germany's state-owned development bank's provides targeted support for energy-efficiency in the building sector (Chapter 9). Thus, from a multilevel perspective, the capacity of the EU at the global scale to influence negotiations has been galvanised by such actions by its member states. Tobin and Schmidt (Chapter 8) argue that around the time of the 2015 Paris climate conference, despite reductions in influence, the EU was still closer to being a leader than a pioneer, for example as a result of its active shepherding of states via the High-Ambition Coalition.

Leaders

While some countries act as pioneers others have positioned themselves very firmly as climate leaders at least in terms of their ambitions. For example, as Moulton (Chapter 10) explains, the UK 'wants to be a leader much more than it wishes to be a pioneer'. Moulton also points out that especially post-Brexit the UK or, to be more precise, pro-Brexit UK governments have been keen to 'go it alone', on climate action and in other aspects of international collaboration. Thus, leadership may be pursued due to a commitment to see a certain outcome realised, and also because a state wishes to be seen as a leader, and have followers, as part of its perceived status in the world.

Structural leadership

The geopolitical landscape has transformed since the 1992 United Nations Framework Convention on Climate Change (UNFCCC). Brazil, India, and particularly China have since experienced the rapid growth of their economies, GHG emissions and structural power. However, so far, they have rarely used their power to offer structural leadership in international climate governance. As Lederer *et al.* (Chapter 6) argue damningly regarding Brazil's recent facilitation of deforestation despite possible carbon market opportunities, '[t]he central government [of Brazil] thus provided structural leadership, but of the wrong kind.' Thus, this manifestation contravenes the understanding assumed in this book and elsewhere, following Underdal (1998: 101), that leadership should be 'positive' to be considered thus. Jörgensen (Chapter 3) highlights India's capacity for structural leadership, but in contrast to the climate-damaging actions of Brazil, focuses upon the former state's increasing structural leadership in the field of solar power. Finally, while China is regularly identified as a key player at UNFCCC negotiations, Li (Chapter 2) analysed the oft-neglected

internal leadership of the central government, noting that 'preferential policies and resources allocation … [ensure that] pilot cities or provinces have been allocated structural leadership to implement innovative low-carbon practices.' Thus, this book's usage of structural leadership as a guiding concept has enabled the authors who focused on these increasingly influential states to analyse them with greater nuance as to the exact manifestation of their power. Hall (Chapter 5) notes as we might expect that New Zealand lacks structural leadership, except when dealing with Pacific Islands. In so doing, he reminds us that structural leadership need not be global, but can be applicable to actors within a more local context. As such, New Zealand's actions on climate change, although small from a global perspective, can influence surrounding actors, reflecting leadership. China, in contrast, holds the power resources to underpin its ambitions for structural leadership (see Dong, 2017).

The expectation that power may be a necessary but not sufficient condition for structural leadership (Burns, 1978; Young, 1991; Liefferink and Wurzel, 2017) has been confirmed in the chapters on China and the USA (Chapters 2 and 7), which are both very powerful countries and also major GHG emitters. As China is now the largest GHG emitter, it has become an actor of systemic relevance for global climate governance. In contrast to the growing structural leadership potential of Brazil, India and China, and the low potential of New Zealand, the chapters on the Global North countries highlight how structural leadership is diminishing for traditionally influential actors including certain larger European countries. Tobin and Schmidt (Chapter 8) highlight the paradox that if the European Union (EU) succeeds in reducing significantly its GHG emissions, its structural leadership capacity in international climate governance will simultaneously be reduced. The authors use MLG and polycentric theory to focus upon the key actors within the EU – the European Parliament, Germany and Sweden – that strengthened its capacity to exert structural leadership

nonetheless. Germany and Sweden are explored in further detail by Steuwer and Hertin (Chapter 9) and Andersen (Chapter 11) respectively. Yet, as Selin and VanDeveer (Chapter 7) posit, a state with the potential to exert structural leadership will not necessarily do so, or at least, not in a consistent manner at the national governance level, depending on the individuals shaping central policy decisions. Most notably, the decision of President Donald Trump to withdraw from the Paris Agreement undermined the USA's capacity to demonstrate structural climate leadership, despite its enormous latent power to do so.

Entrepreneurial leadership

Liefferink and Wurzel (2017) suggest that entrepreneurial leadership, which involves the use of negotiating and/or diplomatic skills and resources, usually occurs in conjunction with other leadership types. For example, New Zealand has combined entrepreneurial leadership with its usage of 'soft power' in its foreign policy, partly in order to compensate for its lack of structural leadership capacity. Another widely-recognised soft power, the EU, demonstrated entrepreneurial leadership in the run-up to the 2015 Paris climate conference (COP21), having submitted its voluntary pledge (Intended NDCs) to reduce GHG emissions second only to Switzerland (see Chapter 13), followed four months later by New Zealand, which was sooner than the majority of states. Tobin and Schmidt (Chapter 8) build on this point by identifying the EU's Climate Commissioner, Miguel Arias Cañete as being 'the figurehead of the EU's entrepreneurial leadership in Paris', due to his work in liaising with other states, particularly via the creation of the High-Ambition Coalition. Moreover, the EU's capacity to exert entrepreneurial leadership was strengthened by both its status as a *de facto* host, and through the large number of highly-connected Member States, such as France, Germany and Sweden, that could simultaneously push the EU's narrative. Indeed, Steuwer and Hertin

(Chapter 9) highlight Germany's entrepreneurial proficiency, such as its many international energy dialogues and partnerships.

Increasingly, Global South countries seem to offer entrepreneurial climate leadership, especially at the subnational governance level. In China (Chapter 2), cities have been important drivers of entrepreneurial climate leadership by, for example, joining international city networks such as the C40 and Local Governments for Sustainability (ICLEI) networks. Jörgensen (Chapter 3) points out that India's vibrant NGO sector and think tanks have been able to offer some entrepreneurial climate leadership. Finally, Urban *et al.* (Chapter 4) isolate the development of renewables within Vietnam and Costa Rica as being instances of such leadership in the two states. Thus, entrepreneurial activities in these instances need not elicit a large number of followers, but can make important contributions nonetheless.

Cognitive leadership

While the theorisation of cognitive leadership is relatively straightforward, the identification of cognitive leadership within our cases is a more nebulous challenge because it is hard to identify empirically those states that have expressed cognitive leadership, which manifests itself often only over longer time periods. In contrast, structural leadership, for example, can be engaged in more or less instantly, at least by powerful states. It can often take years or longer for ideas to alter behaviour, meaning that any study on cognitive leadership will struggle to identify with certainty which ideas merit the label. Young (1991: 298) argued 'that new ideas generally have to triumph over the entrenched mindsets or worldviews held by policymakers', which usually takes time. Similarly, Liefferink and Wurzel (2017: 595) postulated that 'scientific expertise and experiential knowledge is usually generated on the domestic level only over a longer time period.'

Moreover, with a policy challenge as complex as climate change, multiple actors within a state produce numerous policy ideas at once, meaning that it is especially challenging to demonstrate where an idea came from, and thus where the agency behind the activity was located. As such, future research on cognitive leadership may benefit from using a framework such as Schmidt's (2008) Discursive Institutionalism, which demarcates ideas across three levels in order to describe their status, including an upper 'paradigm' level that corresponds to the kind of cognitive shift implied as being connected the moniker of 'leader'. From this perspective, it is unsurprising that our chapter authors ascribed cognitive leadership to several cases in general terms, but the exact machinations of such behaviour were complicated to track.

Underlining the importance of taking a long-term perspective when examining this leadership type, Andersen (Chapter 11) highlights Finland's introduction of a carbon tax in 1990 as being pivotal in the state's subsequent emissions reductions, not least as the state was followed by Sweden one year later. Tobin and Schmidt (Chapter 8) observe a more recent example of cognitive leadership, applying such status to the EU's championing of a 1.5°C maximum temperature increase at the Paris COP. This idea was simultaneously advocated by a large number of other states within the High-Ambition Coalition and also environmental NGOs, again underlining the importance of viewing such activities from a polycentric viewpoint. Lederer *et al.* (Chapter 6) observed numerous examples of cognitive leadership in Brazil and Indonesia as a result of their sub-state focus, as well as the international linkages sometimes underpinning these leaps; the German development agency was found to play an influential role in capacity building within Indonesia via cognitive leadership, as was the Norwegian government within Brazil.

However, due to the lack of resource opportunities, it was harder to find instances of cognitive leadership that gained influential status within the Global South. Hall (Chapter 5) suggests that 'the Ardern Government has mostly been a taker of ideas, adopting existing frameworks rather than devising its own', be it the legacy of previous New Zealand governments, or the ideas pushed by more influential global actors. While cognitive leadership was identified as 'emerging' in the chapter on China (Chapter 2), a decade or so from the time of writing we may consider that the state has demonstrated even more cognitive leadership than we realise, requiring the benefit of hindsight to be seen. Similarly, we may then be able to discern cognitive leadership from other states that are not yet identified as cognitive leaders. Jörgensen (Chapter 3) points out that 'India exhibited cognitive leadership by introducing the equity principle to the international climate negotiations, which was met with strong approval by fellow industrializing countries'. Global South countries have championed the CBDR principle and other internationally accepted principles that emphasize the importance of justice and equity issues (see Chapters 2 and 3).

Exemplary leadership

In Chapter 11, Andersen posits that exemplary leadership is especially important during international climate negotiations, as such behaviour signals to other actors that a state is committed to acting on climate change. Exemplary leadership is similar to the directional leadership formulated by Grubb and Gupta (2000), except that it may be either intentional or not, and will commonly be combined with entrepreneurial leadership (Liefferink and Wurzel, 2017). For instance, the decision of the EU to submit its Paris Intended NDC early is an indication of entrepreneurial leadership, while its formatting of the target in the exact format preferred by the UNFCCC is identified by Tobin and Schmidt (Chapter 8) as intentional

exemplary leadership. Within the EU, Steuwer and Hertin (Chapter 9) highlight Germany as providing examples to other states through its successful *Energiewende* (energy transition) and also, from a multilevel perspective, via its enthusiastic (but non-binding) uptake of the EU's Energy Performance of Buildings Directive. These examples show the importance of considering MLG within conceptualisations of leadership, particularly within the EU. Relatedly, and as is discussed in more detail in the section on 'Theoretical Innovations' below, Chapter 4 by Urban *et al.* emphasises vertical exemplary leadership, finding many such examples in Costa Rica and Vietnam as a result of the authors' explicit MLG perspective. Indeed, the local level is repeatedly found to be a source for exemplary leadership, as Li shows regarding the Low-Carbon Pilot Cities (Chapter 2) and Lederer and colleagues (Chapter 6) likewise find via individual city initiatives, such as São Paulo's 2009 climate policy and East Kalimantan's forest governance reforms.

Combining different leadership types

Importantly, it is rare for countries to offer only one type of leadership over time. Instead, different leadership types are usually combined (Young, 1991; Underdal, 1998; Parker and Karlsson, 2014: 586; Liefferink and Wurzel, 2017). The specific mix of different types of leadership employed by a particular actor, as well as the different ways in which they may interact varies across issues and may evolve over time (Wurzel, Liefferink and Torney, 2019), or be contradictory, when examining instances across multiple levels.

We may assume that large powerful jurisdictions – such as China and the USA, as well as to some degree the EU – are at least theoretically more easily able to offer structural climate leadership compared to small countries, such as Costa Rica, Ireland, New Zealand and Switzerland or the Nordic countries. This hypothesis derives from much of the existing

literature (e.g. Young, 1991; Underdal, 1998; Parker and Karlsson, 2014: 586; Liefferink and Wurzel, 2017; Wurzel, Connelly and Liefferink, 2017; Wurzel, Liefferink and Torney, 2019) and appears to be supported by several empirical findings put forward in the chapters of this volume. Wurzel, Liefferik and Torney (2019: 15-16) have argued that 'some actors which have relatively little structural power may nevertheless become relatively influential climate governance actors capable of showing leadership or pioneership.' The main reason for this is that actors such as small states may be able to compensate at least partly for their lack of structural leadership capacity by creating considerable entrepreneurial, exemplary and/or cognitive leadership capacities, although this may take a considerable amount of time. Here, we may assume that states follow a degree of path dependence; those areas in which a state is already favourably disposed may become the areas they choose to prioritise regarding their leadership efforts. For example, Sweden is a small, wealthy, export-oriented state that was already highly de-fossilised in its electricity prior to the ascent of climate change as a global challenge. This status lends itself to the country making exemplary climate leader as a dominant feature of its foreign policy identity, which it then builds through further instances of cognitive (e.g. polycentric governance methods) leadership.

Followers

While the bulk of this volume is structured around the actions of leaders and pioneers, several chapters provide valuable insights also for the behavioural patterns and motives of followers. Torney (2019) provides an important conceptualisation for the otherwise nebulous idea of 'the follower', particularly regarding climate governance. There, he defines climate followership as:

> the adoption of a policy, idea, institution, approach, or technique for responding to climate change by one actor by subsequent reference to its previous adoption by

another actor. Note that there must be intentionality on the part of the follower but not the leader/pioneer (Torney, 2019: 169).

The challenge is to identify intentionality on the part of the follower, with specific reference to the actions of a preceding pioneer/leader. Yet, there is a political as well as empirical challenge in identifying such behaviour. As Urban *et al.* argue (Chapter 4), '[p]olitically, Costa Rica is rather isolated in Central America… and no other country in the region ever officially labelled Costa Rica as an example that it wants to follow.' Thus, although Costa Rica has demonstrated greater ambition than its neighbours, this activity has not produced followers. Here, we must note an important dimension in researching climate leadership and followership: just because an actor has developed an innovative policy tool that could be replicated elsewhere does not necessarily mean that others will openly acknowledge that they have followed their lead. This difficulty is particularly pronounced when researching cases at the global level, rather than focusing on relatively homogenous states that are more willing to highlight collaboration and coordination, say within the EU. As a result, Urban *et al.* once again draw from the sibling conceptual framework within this volume by emphasising the importance of MLG, as they find no clear-cut leader-follower relationship. In addition to the political challenge of states being willing to reveal that they have followed others' lead, we must also note in a volume focused on leaders and pioneers that the cases selected to be included in this volume are more likely to be ambitious and/or influential states, making the identification of followers less likely. However, Chapter 11 on the Nordic states (Andersen), notes that Norway is considered a follower rather than a leader, due to its emphasis on flexible mechanisms instituted by EU, rather than domestic action. Moreover, different countries may arrive independently from each other at similar policy solutions in

simultaneous or sequential fashion (Wurzel, Liefferink and Torney, 2019). Establishing empirically climate followership is therefore a challenging task.

However, our authors found examples of followership in both the Global North and South. The leadership shown in the run-up to the 2015 Paris climate conference, and the leadership demonstrated in creating the High-Ambition Coalition, resulted in several instances of followership according to Tobin and Schmidt (Chapter 8). Although non-EU Member States, Iceland and Norway committed to fulfilling their Paris climate pledges via collective delivery with the EU. As Kammerer *et al.* (Chapter 13) echo, Switzerland 'tends to wait for and align itself to the EU positions rather than taking the lead'. Indeed, within the Intended NDCs, The Gambia (2015: 1, 5, 19) noted their gratitude to Germany in particular for its support in the development of their pledge. At this point, we may wish to reflect on the implications of states in the Global South following those in the Global North, and the attendant power differentials that exist within such relationships. At what point does the pursuit of followership become neo-colonial *realpolitik* through other means? Due to a dearth of comparative Global South–Global North studies, we also know little about whether climate leader (and pioneer) countries in the Global South are able to attract followers primarily from other Global South countries or whether they can also persuade Global North countries to follow their examples.

The chapter authors in this volume have found several instances of followership leading to increasing ambitions. Steuwer and Hertin (Chapter 9) note that although France and Flanders were previously followers, they have used this experience as a springboard to become pioneers. Likewise, Vietnam was found by Urban *et al.* (Chapter 4) to have followed the actions of South Korea and China regarding Green Growth and energy policy respectively,

before becoming a pioneer in its own right. There is reason to feel cautiously optimistic that followership can lead to future climate leadership, in the right circumstances. Indeed, New Zealand has placed 'fast followership' at the heart of its climate strategy (Hall, Chapter 5), replicating vehicle emissions standards, 'feebates', and investment vehicles, amongst others. Further research is encouraged in order to trace such patterns in a comprehensive manner, particularly relating to the factors that facilitate and obstruct a follower subsequently becoming a leader.

The need for longitudinal and multi-case perspectives

Although the focus of our book is on climate leaders, pioneers and followers, several chapters have identified also empirical examples of climate laggardship. This identification is perhaps not surprising as environmental leaders and pioneers usually have some blind spots (Wurzel, 2008). Moreover, who acts as a climate leader, pioneer, follower or laggard can change over time (Liefferink and Wurzel, 2017; Wurzel, Liefferink and Torney, 2019). In our volume this reality is best illustrated by the US, whose climate change policy has been 'erratic over time and as internally contradictory', as Selin and VanDeveer have detailed (Chapter 7). The complex nature of climate governance, and the large number of states involved, means that a country's status as a leader or pioneer, particularly if understood in relative terms, may come and go over time. 'Pioneer' and 'leader' are not timeless labels, but positions that must be continuously earned over time, and identified by researchers.

Moreover, due to the limitations of a book-length project, we have not explored the majority of the 195 signatory states of the Paris Agreement. Not every state can be a leader; indeed, it may not be beneficial for every state to attempt to be so, if the outcome is a fragmented and contradictory approach to global climate governance. However, one state's laggardship may

reduce ambition throughout the global community, and understanding why states drag their feet is of vital importance to the study, and policy implications, of climate governance. Moreover, these factors could be beyond the control of the states in question: for instance, the Intended NDC submitted by the state of Jordan in 2015 highlights that Syrian refugees comprise 13% of their population, creating significant pressures on the small state to meet its everyday needs, let alone transitioning to a low-carbon future. As we touch upon later, further studies are needed to explore the intricate nuances of polycentricity and ambition within the states of the world.

Multilevel Governance and Polycentricity

As Wurzel, Connelly and Liefferink (2017) discuss, despite the overlapping shared presuppositions of MLG and polycentric concepts – such as focusing on multiple levels of governance and sources of authority – MLG approaches usually ascribe a higher importance to government, while polycentricity focuses upon broader *governance* (see also Homsy and Warner, 2014; Jordan *et al.*, 2018). Relatedly, the national level is identified as a key locus of power with MLG theory (Marks 1993, Hooghe 1996), whereas, as Ostrom (2010: 552) makes clear, '[e]ach unit within a polycentric system exercises considerable independence to make norms and rules within a specific domain'. In this volume, then, scholars have sought to draw from either or both concepts, as appropriate for their cases in question.

Perhaps it is of little surprise that the chapters that have emphasised either MLG or polycentricity within this volume are federal or quasi-federal jurisdictions. In particular, the chapters (2, 9 and 13) on India, Germany, Switzerland and the EU have each highlighted the importance of considering MLG as for explaining the instances of leadership and pioneership within their borders. In addition, Selin and VanDeveer (Chapter 7) argue that a 'polycentric

turn' is emerging in the USA. Yet, we can also see how more unitary governance models, such as the Nordic states explored in Andersen's chapter (Chapter 11), have pursued their own models of MLG, via the creation of the Nordic Council. China's Communist government has governed via a top-down approach, whereby selected cities are encouraged to experiment with innovative climate governance approaches at the municipal or city level in a learning-by-doing fashion with the aim of finding solutions which can then be up-scaled to the national level. However, the *ecological civilization* conference in Guiyang is identified by Li (Chapter 2) as being founded in a 'bottom-up or polycentric fashion', and was subsequently given a greater status from 2013.

Polycentricity has drawn increasing attention from academic circles and policy-makers alike since the 2010s as a means of facilitating more effective climate action. However, Jordan *et al*. (2015) note that there has never been a 'monocentric' international climate regime, but rather a series of interacting regimes. As such, when making claims about the rise of polycentric governance in some jurisdictions, we are keen to emphasise that the dominant understandings of the policy-making context against which comparisons will be made neglects the degree of polycentricity underway. Moreover, as Rayner and Jordan (2013: 80) point out, the 'the more polycentric a governance system, the greater the likelihood that its component parts pursue different and possibly incoherent approaches'. Indeed, it may transpire that greater polycentric interaction actually enables individuals who wish to *weaken* climate policy ambition to gain a stronger foothold (Boasson, 2018: 131). As such, as we reflect upon the polycentric communities that are examined in this volume's constituent chapters, we are at pains to emphasise that we do not view polycentric governance as being a panacea. Rather, polycentricity can be a potential catalyst for facilitating the kinds of benefits

– experimentation, more robust institutions, new norms, trust-building and so on – that can help to assuage cooperation difficulties (see Dorsch and Flachsland, 2017).

Theoretical innovations

The primary contribution of this volume is the creation of a body of empirical data examining the existing theorisations of leadership types and MLG/polycentricity. Yet, in the process of conducting these analyses, contributing authors have made especially the following three further theoretical innovations. First, Hall (Chapter 5) introduces the concept of 'emotional leadership' to the exploration of national climate leadership types. While 'emotional leadership' has been identified in numerous fields previously (Humphrey, 2002; Loerakker and van Winden, 2017), its introduction to climate leadership types is noteworthy as it brings back the locus of analysis onto the individual level, which has been neglected in more recent climate leadership research. As a result, the conceptualisation is especially complementary with polycentric governance, in the event that multiple 'emotional leaders' may be located within a single network. Hall identifies Jacinda Ardern as a prime example of this leadership type. We may wish to place emotional leadership 'under', or at least in association with, cognitive leadership, due to the need for emotional intelligence to achieve such leadership, which is, after all, a cognitive ability. As such, more research is encouraged in order to theorise how this conceptualisation of emotional leadership interacts with other leadership types.

Lederer *et al.* (Chapter 6) provide a second instance of theoretical innovation in the book, in their work on Brazil and Indonesia. There, they emphasise the importance of vertical interactions between different *governmental* levels within states when examining the four climate leadership types. From here, the scholars then examine the precise nature of

leadership exerted in their cases. For instance, they found that Brazil and Indonesia exerted vertical cognitive leadership through their national plans to tackle deforestation, with effective results, while Indonesia also demonstrated vertical structural leadership via its REDD+ taskforces to develop provincial strategies to be followed by local leaders.

Finally, Kammerer *et al*. (Chapter 13) provide a typology that combines two dimensions that precondition the likelihood of a given policy instrument's adoption. These two dimensions relate to the level of actor involvement (Dimension 1), and the level of agreement in a policy network (Dimension 2). As a result of this innovation, the authors find that the level of belief conflict with regards to the CO_2 tax was high, as shaped by a low level of political feasibility, which they hypothesise may explain why motor fuels were never included in the tax accordingly. Kammerer *et al.*'s innovation enables us to achieve a more nuanced understanding of the policy process, from which future research may in turn be able to situate the roles of pioneers, leaders and followers.

Comparing Global South and North

To date, there has been limited comparison between Global South and North countries regarding the nature of climate leadership and pioneership. In part, this lacuna has been due to the clearly demarcated role for mitigating climate change established in the 1990s and early 2000s, whereby economically developed states were allocated primary responsibility for action. The 2015 Paris climate conference was the first UNFCCC COP in which *all* states were expected to state their commitments towards this shared problem. Thus, until the mid-2010s, any systematic attempt to compare or contrast the leadership behaviours of all states would have been stymied by the reality that cases were operating in entirely different policy contexts. This edited volume has sought to provide one of the first attempts to track the

variegated forms of pioneership and leadership in both the Global North and South. Of course, any such claims are tentative at this stage due to the small number of cases that could be analysed, but we hope that more detailed analyses may be conducted following of this early work.

Here, we note that instances of climate leadership, pioneership and followership have been found across the globe via our chapter authors. The status of a country as a climate leader need not prohibit that state from being a follower. For example, Steuwer and Hertin find that, despite Germany's apparent leadership status with regards to climate change, the state was either a laggard or at best a follower of EU regulations when it came to the building sector. Conversely, despite their relatively minor geopolitical sway in the global arena, and hindered economic development, Costa Rica and Vietnam are both found to be pioneers by Urban *et al.* (Chapter 4) due to their strong governments and effective bureaucracies. Thus, as the UNFCCC shifts to encouraging more and more polycentric climate action that includes as many actors as possible, we can expect the ascribed statuses of states to move away from being starkly divided between 'leaders' and 'laggards'. Instead, we may move towards a more nuanced research landscape in which both the instances of greater action and followership are judged simultaneously.

It is prudent to highlight cases that we could not explore within this volume due to the limitations of space, as future areas of research that merit consideration. In particular, this volume has provided analyses of the Nordic states, Germany, Ireland, Switzerland and the UK, as well as the EU as a whole. However, the complex challenge of mitigating climate change for new EU member states or those countries especially heavily affected by the Global Financial Crisis mean that greater exploration of Mediterranean nations and Eastern

Europe is welcome. Existing work Eastern European states has been provided by Jankowska (2017) on Poland, for instance, and the rising significance of major continental Member States in the EU merits further exploration. Looking beyond Europe, while Brazil, India, China and Indonesia have been examined in this volume, the remaining high-profile, fast-growing state, South Africa, deserves further analysis (Fløttum and Gjerstad, 2012). Likewise, the development of green efforts across Africa, as explored by Death (2016), is increasingly overdue, not only for examination of the roles of Western states in shaping African countries' climate policies as identified in Paris in 2015 (Tobin and Schmidt, Chapter 8), but for instances of leadership that may be replicated elsewhere. We are acutely aware that African countries, many of which have supported the above-mentioned High Ambition Coalition, are not assessed in our volume. There clearly is a need to learn more about climate pioneership and leadership in and from those countries. Finally, we suggest greater exploration of that most Janus-faced of climate actors, Canada, as a simultaneous champion of environmental action and as laggard that is increasing its emissions via tar sands exploitation while frequently stymying action internationally.

Conclusion

Elinor Ostrom (2010: 555), winner of the Nobel Prize for Economics, reminds us that '[s]elf-organized, polycentric systems are not a panacea!' Yet, this volume has sought to provide instances of polycentric governance in order to glean a more nuanced understanding of the empirics supporting this concept. Moreover, the chapters in this volume have identified and examined instances of leadership, pioneership and followership within MLG structures. Time is running out for ambitious steps on climate change that can prevent warming over 2°C, necessitating that the 2020s are a crucial decade of climate action. This volume has identified numerous instances of climate leadership and pioneership across the globe in response to this

shared problem, and provides many causes for optimism. However, we also see stark reminders of how environmental concerns can be pushed down the political agenda when seemingly more urgent problems rise to the fore. The lessons of the Global Financial Crisis are that countries, cities, businesses and networks must continue to develop more and more ambitious environmental protection measures, regardless of the ongoing crises surrounding us. It is in this context that the COVID-19 pandemic that has shaken the world at the start of this new decade is even more worrying. As states rush to grow their economies following the slump that started in 2020, leaders must not forget climate change. And so, we urge that the instances of climate leadership and pioneership identified here are emulated as widely as possible, while new innovations are pursued wherever possible. Polycentricity may not be a panacea, but this volume has shown that inspiring action can be found at all governance levels, and in any country. Mighty oaks from little acorns grow.

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