1. Global governance

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INTRODUCTION

Climate change is a critical issue for global governance as the challenges are mounting up to pose a highly significant problem (Levin et al. 2012; Bernauer 2013) and climate change politics has become a lynchpin for overall international cooperation (Andresen 2013, pp. 314ff.). Could global governance be a solution to all these problems? The term ‘global governance’ on the one hand implies the normative notion that global problems should be dealt with at the global level. On the other hand it refers to ‘the entirety of regulations put forward with reference to solving specific denationalized problems or providing transnational common goods’ (Zürn 2013, p. 408). The notion of global governance thus goes beyond ‘international’, as neither the latter’s state-centrism nor its hierarchical connotation is accepted as an a priori description of world politics. Global governance never has evolved into a theory (Zürn 2013, p. 401), but there has been a highly fruitful exchange between the literature on global governance in general and the one on climate change in particular (for a good overview of the genealogy of the term and how it has been used in the academic debate about environmental issues, see Strippel and Stephan 2013, pp. 148ff.).

More and more scholars, as well as practitioners, argue that the global level is overrated in its problem-solving capacity and that both normatively and analytically we should move beyond global governance. For example, recent literature in the broader field of international relations states that global governance faces a ‘gridlock’ (Hale et al. 2013), that that we live in a ‘no one’s world’, where the twenty-first century ‘will belong to no one’ (Kupchan 2012, p. 3) and that it is a ‘G-Zero World’ (Bremmer 2012). Should we therefore give up on the notion of global governance of climate change, both as a normative project as well as an analytical undertaking? This chapter will try to flesh out possible answers to this question by moving forward in three steps. First, the chapter briefly describes how the literature on global governance of climate change evolved and why its overly optimistic outlook can no longer be upheld. Second, the chapter will provide an overview of current perspectives, differentiating between those who see the effective and legitimate global governance of climate change as a ‘glass half full’, those who are agnostic about it and, finally, those who argue that the glass is almost empty. Third, the conclusion will provide possible scenarios of where the real world of global governance of climate change might move to and what follows for academic debate.

HOW DID WE GET HERE?

The literature regarding liberal institutionalism, multilateralism and regime theory dominated the early discussions about the global governance of environmental issues in

general (for overviews, see Morin and Orsini 2013; Chasek et al. 2014) and climate change in particular (for a good overview, see Hoffmann 2013, pp. 7ff.). In the 1980s and 1990s, scholars were primarily focused on identifying the conditions under which international institution-building, in the form of regimes (defined as ‘sets of implicit or explicit principles, norms, rules and decision-making procedures around which actors’ expectations converge in a given area of international relations’, in Krasner 1983, p. 2) can happen. Participants in this debate referred to the former literature that had analysed formal organizations in world politics across all policy fields, but they now also tried to get a hold on the informal institution building that did not teleologically end up in a formal organization (Martin and Simmons 2013). The independent variables that were used to explain the formation or development of regimes were demand within a given issue area, the level of transaction costs, and hegemony or ideological convergence (Hasenclever et al. 1997). Later on, the literature focused on the effectiveness of environmental regimes and stated that compliance, and even problem-solving, could be judged to have been high (Breitmeier et al. 2011). Overall, the regime approach of the 1980s and 1990s was thus characterized by a strong state-centrism, a positivist epistemology and a rather positive evaluation of the prospects of finding an institutional solution to environmental problems.

For these early authors on global governance and climate change, the setup of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992, and subsequently of the Kyoto Protocol in 1997, proved an endorsement of their perspectives. The international climate change regime proved to be very effective in setting technical standards and, to some extent, in developing procedures for negotiations. For a while, it did not seem unrealistic that, within the UNFCCC process, a global deal could be found, as it provided various advantages, such as the promise of, inter alia, binding commitments and strong signals to the private sector (Falkner et al. 2010, p. 255). The ozone regime particularly served as a very successful example (Parson 1993) and most observers hoped that a similar achievement would be possible also in the area of climate change. It was thus no surprise that most public, political and scientific attention has been given to the multilateral UN process that centred on Kyoto (e.g., Grubb et al. 1999).

As is well known, the climate change regime, however, has failed ever since to deliver on substance, as global greenhouse gas emissions have increased 2.2 per cent per year from 2000 to 2010 (IPCC 2014, p. 6). Andresen thus characterizes the regime as having ‘few achievements, but many challenges’ (2014, p. 21, see also Andresen this volume). The Kyoto Protocol itself was halfway successful as at least most of those countries that ratified it have delivered on their reduction pledges (Tol 2013). However, the United States did not become a member of the Kyoto Protocol, neither did major emerging countries have any reduction targets. Bringing the US and particularly China on board in a meaningful way failed in the now iconic setting where US President Obama discussed with the BASIC group (Brazil, South Africa, India and China) the so-called Copenhagen Accord at the Conference of the Parties (COP) 15 in 2009 that, at best, showed that the multilateral process has not (yet) completely broken down (Dimitrov 2010). Nevertheless, the Copenhagen climate summit proved to be a turning point, not only for climate change politics but also for regime literature, as a consensus emerged that international negotiations would not initiate a strong regime. The 2010 Cancún and the 2011 Durban Agreements were much better at delivering on technical issues, as well as in bringing

negotiations to a new time track where, by 2015 (COP 21 in Paris), a new legally binding agreement should be negotiated that should enter into force by 2020, all of which has to happen with unanimity. Reduction commitments will have to be found through a (most likely) voluntary pledge and review mechanism and ought to take into account the 2°C target upon which the international community has agreed. All this is very unlikely to be effective, in the sense that it will mitigate greenhouse gases in a substantial way. The United Nations Environment Programme (UNEP 2012) has reviewed all pledges and identifies a severe ‘emission gap’. It thus seems appropriate to argue that global climate change governance is facing a severe gridlock (Victor 2011; Hale et al. 2013, ch. 4). However, how can we make sense of the current situation from an academic perspective?

WHERE ARE WE NOW?

Today we have a significant variety of perspectives that describe ‘global governance architectures’ (for an overview, see also Biermann et al. 2009). In an ideal typical fashion, three perspectives can be detected that currently dominate the discussion. These partially overlap and some authors could easily be categorized into more than one group but, as a first heuristic device, the following separation is hopefully helpful. There are those who see the glass of global governance and climate change as half full and thus argue that the global level, in particular the UN negotiations around the UNFCCC, should and could play a pivotal role. Second, there are those who are agnostic about the possibilities of global governance, arguing that under specific conditions, some progress can be maintained but that it is not evident that progress will occur. To a large extent this is where neo-institutional regime theorists can be situated today. Finally, there are those who claim that we have to move beyond the idea of global governance, at least in the issue area of climate change, as the structural impediments are simply too strong for the global level to work effectively. Authors in this field are also those who, in general, have most trust in other fora, be that clubs, states or the subnational or individual level. The following will primarily focus on the first two perspectives, as various chapters throughout the *Handbook* deal with the third one.

THE GLASS IS HALF FULL

There is a group of scholars who have not given up the idea of global governance evolving into a mechanism for effective and legitimate problem-solving for climate change and they also argue that the UN system is the most likely place where solutions can be initiated (e.g., Hale et al. 2010). As one example, Falkner et al. (2010, pp. 258ff.) have argued for a ‘building block approach’ that is incremental but under the umbrella of the UNFCCC; it could be built on various national and subnational pillars, as well as including treatments that cover specific sectors, such as technology, deforestation or adaptation. The possibility of free-riding in such an approach cannot be excluded but, nevertheless, international cooperation and global governance would be key and the UNFCCC would be the central institution. Others are less optimistic about the UN process but argue that cooperation per se is still possible at the global level. Particularly, Messner et al. (2013) have recently

pointed out that the prospects for international cooperation do not look as bad if one takes the more significant lessons from natural sciences, particularly from evolutionary biology, where it has been shown that basic mechanisms such as reciprocity, trust, communication and enforcement work much better than we usually assume.

Also, those who focus on norm entrepreneurship either at the individual or at the institutional level argue that global governance can work. Individuals can initiate norm cascades at the international level and these norms gain salience under specific conditions within domestic arenas (Finnemore and Sikkink 1998). Similarly, international donor activities, particularly the money they provide, might evolve as a game-changer in the climate change policy of some states (Fuhr 2010). Regarding institutions, the role of bureaucracies has gained attention (Biermann and Siebenhüner 2009; Siebenhüner this volume) and, in particular, the UNFCCC secretariat has been rather successful in coordinating the highly complex negotiations, as it provides important input for weaker state delegations (Depledge 2005, ch. 6; Busch 2009).

Contrary to the first generation of regime scholars, these authors argue that we either have to understand the internal dynamics of global institutions (and not just assume that their existence will lower transaction costs, etc.) or that the domestic political context has to be taken into account. Global multilevel governance thus includes regional, national and local states as well as non-state actors that all exercise authority (for an overview, see Zürn 2012). Also, the state is still perceived to be a major site of authority but without falling back into methodological nationalism that claims that this is necessarily so from an ontological or normative standpoint. Global multilevel governance of climate change is thus no longer perceived as a linear process.

IT IS TOO COMPLEX TO SAY WHETHER THE GLASS IS HALF FULL OR HALF EMPTY . . .

The largest group of international relations scholars would currently appear to be in limbo. On the one hand, they argue that there is simply no denying that the global level has not fulfilled its promises and that some of the literature that was previously discussed might be too idealistic. On the other hand, the mainstream states that the global level cannot be completely discarded, for normative as well as for analytical reasons. It is thus no surprise that we have various terms on offer that all try to make sense of the current situation; not relying on linear versions of regime theory but not giving up on it completely, either. These include: fragmentation, institutional interplay, regime complex, polyarchy and orchestration, and each will be now briefly introduced.

Starting with the term ‘fragmentation’ seems to be reasonable because all of the later approaches agree that the global governance of climate change is not only highly complex but also strongly segmented and partially fragmented, vertically as well as horizontally (Biermann et al. 2009; Zelli 2011; Zelli and van Asselt this volume). Whereas fragmentation in popular discourse is often only employed pejoratively, academic debate is more nuanced and argues that within a fragmented institutional landscape, positive effects such as fostering institutional competition and innovation can also occur (Cohen and Sabel 1997). However, regulatory uncertainty, high transaction costs and a race to the bottom,

as well as the creation of hollow institutions are potential drawbacks that are particularly visible in the field of climate change (Hale et al. 2013, pp. 46, 211ff.).

To avoid some of the negative connotations of the term 'fragmentation', many authors now speak of 'institutional interplay'. The term nicely captures the fact that the climate change regime is becoming much more hybrid, with many more state and non-state institutions involved beyond the UNFCCC (Moncel and van Asselt 2012). This literature builds on the notion of regime interplay as introduced by Oberthür and Gehring (2006; see also Stokke and Oberthür 2011). Climate change is seen as a prime example where we witness a 'multi-institutional nature of this area of governance' (Oberthür and Gehring 2011, p. 28). The literature can be divided into those that either focus on the interplay with other environmental sectors such as biological diversity, desertification and the ozone regime, or those sectors that analyse the interaction with non-environmental sectors such as trade, aviation and health (see Oberthür and Gehring 2011, pp. 28–29 for more details). One of the big questions that remains is whether interplay can somehow be managed and for some, the UNFCCC is still seen as an important catalyser, agenda-setter and facilitator for bringing about legitimate governance (Moncel and van Asselt 2012, p. 163). Similarly, Dimitrov (2010, 2013, p. 350) points out that the international level and the global negotiations indirectly initiate similar national responses towards a low-carbon framework, even though there is no common legal agreement. It is evident that these approaches have some overlaps with the building block approach discussed within the first 'glass half full' camp.

Another, and currently very prominent, group of approaches is more pessimistic and argues that a single international regime cannot be established; instead we shall see the evolution of a 'regime complex' for climate change (Van de Graaf and De Ville 2013). Raustiala and Victor (2004) introduced the term for describing the institutional interplay in the field of plant genetic resources (for a good overview of the literature, see Orsini et al. 2013) and Keohane and Victor (2010, pp. 2, 14) adopted the term for climate change, characterizing regime complex as a 'loosely coupled collection of independent regulatory elements'. For Keohane and Victor, the regime complex for climate change evolved because of the high problem and interest diversity inherent to climate change. Although it might foster gridlock, could be dominated by veto points and could lead to a race to the bottom, the authors argue that a regime complex is better than an integrated but highly dysfunctional regime. A regime complex might thus be more flexible across issues and more adaptable over time (Keohane and Victor 2010, pp. 18ff.). What can, however, be criticized vis-à-vis this approach is that, besides its strong reliance on states, it can only *ex post* explain in a rather functionalist perspective why we witness the evolution of such a regime complex in a specific issue area.

Very similar to the notion of a regime complex, but giving up on state-centrism, is the polycentric approach to climate change governance, or 'polyarchy' (Ostrom 2010, 2014; Cole 2011). The polycentric governance approach is characterized by a multitude of actors (state and non-state) that provide common goods at various levels and in various combinations. It builds on the earlier work of Ostrom's (1990) notion of 'governing the commons'. In the field of climate change governance, we are said to have a weak, polycentric approach that includes the UNFCCC process, national and subnational approaches, as well as non-state initiatives. The big question is, however, whether the lack of any effective oversight system and the sheer scale of the climate change regime make it

incompatible with managing the commons approach that defined exactly these two issues as important design principles.

Another approach that resonates most with the general discussion of international relations scholars, who are also in other policy fields, is 'orchestration' (Abbott and Snidal 2009; Abbott 2012). Hale and Roger (2014, pp.60–61) define the concept as a 'process whereby states or intergovernmental organizations initiate, guide, broaden, and strengthen transnational governance'. They show that this is, by now, a highly relevant process, as about one-third of identified transnational governance initiatives in the issue area of climate change involved orchestration of one form or another. Similarly to polyarchy, the approach thus recognizes the strong role of non-state actors but stresses much more the necessity of coordination that has to be undertaken by governments or international organizations. Orchestration thus combines hierarchical and vertical elements of governance. The advantage of such a perspective is that the dichotomy between state/non-state actors is, to some extent, overcome and the hybridization of global governance arrangements is much better captured.

These conceptual innovations of the mainstream of global climate change governance research allow a much more nuanced picture of the current situation than the overly simplistic and too optimistic version of regime theory. However, this comes at a price. Firstly, good concepts are not yet theory. Thus, Zelli and van Asselt (2013) argue for a more theoretical approach that takes up power-based, interest-based or cognitive approaches from regime theory, allowing more insights into the causes and effects of the evolving global governance landscape. Second, there are those who claim that the conceptual innovations are blind to what is really going on and that the heyday of global governance is over, no matter how you frame or theorize it.

THE GLASS IS HALF EMPTY, AT BEST

The final group of authors has abandoned almost all hope that the global level, at least in the form of UN conferences, will deliver any substantial progress and thus stresses that, if anything at all, only bottom-up approaches are promising avenues for climate change governance (e.g., Hoffmann 2013). In this group, we can differentiate between those who argue for state-based, bottom-up politics and those who claim that both the global level and the state has lost much of its appeal, and that thus non-state activities should be the way to go.

After the experiences of the perceived failure of the conference of the parties in Copenhagen in 2009, policymakers and some scholars have stated that we should rethink the role of individual state action. Their point of departure is unilateral domestic action, as some individual countries have made significant pledges in how to reduce emissions or at least to slow their growth; for example, Brazil or China. The evolving pledge and review mechanism does not, of course, solve the free-riding problem and there will always be states that will make much lower commitments than they should under a system that takes the 2°C objective seriously. Nevertheless, it is a second-best option compared to a world where neither unilateral nor global commitments are being made (Rayner 2010; Victor 2011).

Building on these individual state actions, some have speculated that small clubs of

countries or coalitions of the willing could evolve, which provide the collective good of climate stabilization without waiting for the international caravan to join in (McGee 2011; Eckersley 2012). The question most debated within this stream is whether clubs should replace the UNFCCC process (Victor 2011) or whether they would provide transformational input that would then be uploaded to the global level (Weischer et al. 2012). Prominent examples of existing clubs are the Asian Pacific Partnership and the Major Economies Forum on Energy and Climate Change; both were initiated by President George W. Bush in the hope of bypassing the international UNFCCC process (for details, see Keohane and Victor 2010). Both clubs are, however, currently rather toothless. Nevertheless, the notion of clubs should not yet be abandoned, as some have argued that, from a game-theoretical perspective, informal cooperation by a few key countries could lead to a tipping point at the international level, inducing other states to join (Heal and Kunreuther 2011). The most convincing example given is that of China and the European Union (EU) together initiating a new boom in green energy, particularly solar, and thus creating a momentum from which a more efficient international equilibrium between all states could be reached. Another club is the group of BASIC countries that is gaining more and more power within the negotiations, as well as within the policy field overall, and is thus setting a new standard for the group of developing countries (Never 2012; Lederer 2013a).

Similarly, state-oriented scholars argue that single states unilaterally take up a front-runner position in a climate-related field that is then potentially replicated by a larger number of countries. In particular, the German energy transition has been identified as a potentially leading example (Lederer 2013b). This relates the global governance literature back to the notion of leadership that can be exercised by powerful states such as the US (Falkner 2005; Bang this volume) or organizations such as the EU (Gupta and Grubb 2000; Oberthür and Roche Kelly 2008). Weaker states or coalitions can become influential leaders, 'borrowing external power' (Betzold 2010). Overall, today's climate change leaders are, however, much more in need of followers and there are strong doubts that individual actions will lead to a global collective effort.

Finally, a more radical group of scholars argues that, academically as well as regarding policy, we should completely abandon the notion of global governance and move beyond regimes in order to conceptualize the politics of climate change. Some criticize the strong state bias of the regime literature and thus argue for a stronger focus on the transnational level (Biermann 2010; Hale et al. 2013, p. 268; Hoffmann 2013; Dingwerth and Green this volume), whereas others are critical of the term regime itself (Conca 2006). Striiple and Stephan (2013, p. 159) nicely speak of an 'emerging climate order' and thus maybe provide the most neutral and, at the same time, most comprehensive term to capture current developments that are no longer relying on states to govern globally.

CONCLUSION: WHERE MIGHT WE END UP?

This chapter has argued that the notion of the global governance of climate change has lost much of its appeal and that currently we are, at best, developing good concepts for the evolving institutional complexity that surrounds us. But what are the possible scenarios for the future and how should academia react to these?

The first scenario seems to be the most unlikely and might be labelled ‘global governance against all odds’. In this scenario, a coherent intergovernmental regulatory regime emerges out of the current regime complex and the regime is able to initiate collective action on climate change. In other words, COP 21 in Paris in 2015 (or whenever it officially ends) becomes a stunning success. This is not what most people would expect but then again most observers were also quite surprised when, in the autumn of 2013, the Doha Round of international trade negotiations came to a rather far-reaching agreement. The latter was, however, shortly afterwards put into question by the Indian government, showing that no global success is possible without also the approval of the emerging economies. The second scenario (labelled ‘transnational actors save the world’), which is almost as unrealistic as the first one, also predicts successful action but much more from a bottom-up or transnational level where climate change experiments (Hoffmann 2011) are initiated and are then successfully scaled up.

The third, and most likely, scenario is the continuation of the status quo, which can best be characterized as ‘muddling through’. Initiatives from the local, the regional and the national level contribute to governing the global, but coordination is low and results in even more fragmentation and complexity. Nevertheless, some emissions are avoided and some learning takes place. Unfortunately, a fourth scenario (labelled ‘climate change governance as the living dead’) cannot be ruled out, predicting that the system implodes and becomes even more dysfunctional than it already is (Geden 2012). For some, the current status of carbon markets is already perceived as having contributed more bad than good and is thus an example of such ‘ungovernance’. We are thus witnessing ‘Carbon Market zombies stumble on’ (Reyes 2012, p. 28). In this last scenario, if the COP in Paris in 2015 does not deliver any substantial agreement and the voluntary pledges do not add up to a substantial slowdown of global emissions, multilateral international negotiations and thus the core of global governance are indeed the ‘living dead’ at best.

What then follows for the academic treatment of climate change and global governance? A first recommendation would be to take the notion of global multilevel governance even more seriously (Zürn 2012). Too much of the literature on global governance still perceives the global level to be normatively superior and/or independent from domestic politics but, as the literature regarding comparative environmental economics has shown, domestic politics plays a major role in whether governance structures are established and how successful they are (see, e.g., contributions in Steinberg and Van Deveer 2012). The literature regarding global governance is still not global and thus does not take the Global South seriously enough. There have been various excellent treatments of the role of the South in climate change politics (e.g., Roberts and Parks 2007; Gupta this volume) but, so far, these have either lamented the unfair treatment the South gets overall, or that the rise of new powers will complicate issues. Perhaps more attention should be paid to potentially positive developments that the South can bring towards low-carbon development overall (see contributions in Held et al. 2013).

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