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Transnational Institutions and Networks

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This chapter reviews the literature on transnational institutions and networks in earth system governance research over the past decade. We organize our review around the issues of emergence, effectiveness and legitimacy of transnational governance and outline key debates and controversies surrounding the shifting authority between public and private actors. We also identify major research lines and open questions and provide an outlook towards the most promising directions in future research. Our review is based on a set of articles selected by using keyword search from an original dataset containing all 2,521 articles (co)authored by fellows of the Earth System Governance Project up to November 2016 (found in Web of Science). This approach rendered around 200 articles in total. To include publications from the last two years (2017 and 2018) we extended our search by examining the research output of those fellows who identify transnational governance as a key area of their interest, yielding an additional 15 articles. In this review, we highlight key insights from this burgeoning literature.

Conceptualization

We define transnational governance as the transboundary institutional arrangements emerging from the interaction among private actors or between private and public actors that steer actors' behaviour in an issue-specific area (Falkner 2003). We consider private actors to include civil society organizations as well as business actors and their associations, and public actors to include states, international organizations and substate actors, such as cities and regions. Transnational governance is characterized by two main aspects. First, the state is not the main actor involved in rule making; instead, it is especially private actors that develop rules (Auld, Renckens and Cashore 2015). Second, transnational governance is voluntary and relies on market forces and public scrutiny to exert pressure on the target group and generate public benefits (Kalfagianni and Pattberg 2013). In the

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past decades, transnational governance has become particularly prominent in the sustainability domain, which connects environmental, social and economic dimensions of development (World Commission on Environment and Development 1987). Examples include individual codes of conduct and reporting standards to international certification programmes, public–private partnerships and city networks signifying that transnational governance varies widely in the forms it takes (e.g., Cashore 2016; Green and Auld 2017).

Transnational governance has been met with enthusiasm as well as critique. Early on, supporters underlined its contribution to public policy objectives, particularly in areas where governments may be unwilling or unable to regulate (Cashore, Auld and Newsom 2004). Critics contended, however, that transnational governance may circumvent or undermine public national and international law (O'Rourke 2003) and stressed its potentially pre-emptive character, especially, in the absence of effective monitoring mechanisms (Greven 2004). In this context, scholars continue to warn that transnational governance may be preventing stricter government rules from developing, thereby contributing to an overall 'race to the bottom' (Fuchs, Kalfagianni and Haringa 2011). Below, we explore the variation of transnational governance and debates around its effectiveness and legitimacy, particularly as they have developed over the past 10 years.

The Emergence of Transnational Governance

Transnational governance has become increasingly common for regulating global markets and other spheres of earth system governance. Private actors have begun to create, implement and enforce rules to address problems, such as global warming, deforestation and biodiversity loss, beyond the nation-state (Fuchs 2007; Green 2013). This section discusses how earth system governance researchers have analyzed the emergence of transnational governance by focusing on three key forms, namely: (a) voluntary certification programmes; (b) public–private partnerships; and (c) subnational networks among, for example, cities and regions.

Voluntary Certification Programmes

Voluntary certification programmes – organized and coordinated by private actors – are the most substantial effort of transnational governance. They are a market-based mechanism resting on the idea that if suppliers disclose information and certifiers guarantee the compliance to specific standards, buyers are willing to pay a higher price for their products (Gupta 2008). In turn, if buyers refrain from purchasing (non)certified products, they may endanger the financial viability of

the supplier and of the certifier as well (Koenig-Archibugi and Macdonald 2013), thus providing an incentive towards sustainable market behaviour.

Certification programmes define *product* and *process* standards related to the conditions under which items are produced or traded (Gupta 2008; Koenig-Archibugi and Macdonald 2013). An example of product standards from the food sector is colour and size specifications of the final product. An example of process standards from the same sector is specifications regarding the process of producing a final product with organic rather than conventional methods. To the extent that they remain private and voluntary, certification programmes are compatible with the rules of the World Trade Organization. For example, governments can implement technical regulations based on certification, such as carbon-neutrality, as long as they do not discriminate against products with a different country of origin or form an unnecessary obstacle to free trade. However, 'green' unilateralism through transnational governance has been the subject of much heated debate: The Global South has accused firms and countries in the Global North of using environmental standards as 'trade weapons' (Quark 2013: 5) to retain their dominance in global markets.

The origins of voluntary certification at the transnational level can be traced to the forestry sector after the adoption of an international forests agreement failed at the 1992 United Nations Conference on Environment and Development (also known as the Rio Earth Summit, see Bartley 2007; Chan and Pattberg 2008). Since then, certification has diffused to multiple other sectors as diverse as fisheries, greenhouse gas emissions, mining, and tourism, to name a few. Scholars debate the reasons behind the emergence and diffusion of transnational governance in the form of voluntary certification. Early on, Haufler (2003), for example, focusing on business actors explains commitment to certification as a result of 'the twin threats': first, environmental activism that targets the public reputation of specific firms and industry sectors as a whole and, second, the 'shadow of hierarchy' or continuous negotiations among governments on command-and-control types of regulation (Haufler 2003: 248). As a response to these threats, business actors, particularly multinational corporations, care about and even export human rights and environmental norms by adopting relevant labelling and certification schemes. Similar observations have been made more recently by others (e.g., Bingen and Busch 2006; Bartley 2007; Hickmann 2017b; Bartley 2018).

Scholars have debated the motivation not only of businesses but also of non-governmental organizations to participate in transnational governance (Bartley 2007; Betsill and Corell 2008; Pattberg, Betsill and Dellas 2011). Since the 1990s, an increasing number of non-governmental organizations has changed from strategies of 'naming and shaming' to more collaborative approaches (Haufler 2003). Non-governmental organizations, such as the World Wide Fund

for Nature, are participating in multi-stakeholder certification schemes to develop ethical market alternatives. Voluntary certification programmes led by non-governmental organizations tend to be more ambitious than business-led programmes. In this context while non-governmental organization-driven initiatives, such as the Forest Stewardship Council, are considered possibly to have been intrinsically motivated, business-driven initiatives are often considered to be much more responsive. In the forestry sector, after the Forest Stewardship Council had already been established, for instance, members of timber (processing) industries created their own certification, without participation of public actors or non-governmental organizations (Gulbrandsen 2014). Such industry-driven certification schemes were originally conceived to counter the influence of the more ambitious pioneer schemes (Dingwerth and Pattberg 2009). In particular, the Programme for the Endorsement of Forest Certification is seen as an industry response to the environmental non-governmental organization-based Forest Stewardship Council. The Programme for the Endorsement of Forest Certification is an umbrella organization that gathers 35 independent national forest certification schemes and is considerably less ambitious than the Forest Stewardship Council (Gulbrandsen 2014; McDermott, Irland and Pacheco 2015). However, critical voices also point out that non-governmental organizations engaging in certification may themselves result from and reproduce the (neoliberal) structures and discourses that generated sustainability concerns in the first place instead of initiating real transformational change (Tucker 2014).

The role of government is also widely debated in the emergence and diffusion of voluntary certification. Governments often actively support the implementation of certification through public procurement policies which request that state agencies or state-owned companies purchase only certified products (up to 20 per cent of total timber consumption, for example) (Gulbrandsen 2014). Likewise, governments also provide funds to assist market actors in adopting voluntary certification, such as New Zealand's Environmental Certification Fund, offering grants to fisheries to pay up to 75 per cent of the costs of certification with transnational private schemes (Washington and Ababouch 2011). Finally, governments may also co-opt voluntary certification under public management and ownership, thereby enabling its wider uptake and support. A prominent example here is the adoption of the Marine Stewardship Council guidelines by the Ecuadorian government as the basis for reforming its fisheries policy (Kalfagianni and Roche 2017).

Public–Private Partnerships

Besides governance through voluntary certification, private actors are also increasingly involved in international politics, for example, in the form of public–private

or multi-stakeholder partnerships (Mert 2009; Pattberg and Widerberg 2016). Transnational partnerships can be defined as an institutionalized cooperation between state and non-state actors from different countries, with the aim to produce political output (Kaul 2006; Partzsch 2007). They are voluntary and largely based on the self-interest of each partner who independently joins. For the most part, they have a horizontal structure with public and private actors as equal partners. They set and enforce rules that the international community considers as binding (Börzel and Risse 2005).

Such partnerships came to prominence in the early 2000s (Whitfield 2001: 281). At the 2002 World Summit on Sustainable Development in Johannesburg, public–private partnerships were officially introduced as a new tool of global governance. Besides intergovernmental agreements, such as the Johannesburg Plan of Implementation, partnerships were presented as official summit outcomes. These partnerships broke with the purely inter-*governmental* system of sovereign states. In short time, more than 340 partnerships for sustainable development registered with the United Nations (Andonova and Levy 2003). An example of such transnational partnership is the Global Alliance for Improved Nutrition, set up in 2002, which works against vitamin and mineral deficiencies in developing countries. While the Global Alliance for Improved Nutrition received some funding from the US Agency for International Development, the Canadian International Development Agency and the German and Dutch governments, it was mainly set up and funded by the private Bill and Melinda Gates Foundation (Kaan and Liese 2011). Although the official status of such public–private partnerships in international law was never clarified (Partzsch 2007), the partnership approach is currently being emulated in many other issue areas of global governance, such health, water and climate change (Pattberg and Widerberg 2016). Partnerships are also key for the implementation of the recently adopted Sustainable Development Goals, a set of 17 global goals and 169 targets that aim to reduce poverty and inequality, foster environmental sustainability and develop resilient livelihoods for all by 2030 (Biermann, Kanie and Kim 2017; Kanie and Biermann 2017). Goal 17, more specifically, is about 'Partnerships for the Goals'.

Subnational Networks

In parallel to the emergence of 'private authority' (Green 2013), we also see a trend towards more decentralized public governance. While globalization first appeared to produce incentives for large-scale territorial governance, for example observed in the creation of the World Trade Organization, we increasingly witness also activities by subnational actors, such as regions and cities, in transnational governance (Bulkeley and Betsill 2013; Kronsell 2013).

As the number of transnational networks between cities has grown, an increasing number of earth system governance scholars has engaged with the topic. Already in 2004, Bulkeley and Betsill (2004: 472) called for more attention to be spent on 'networks of local government', claiming that they were a 'significant phenomenon in environmental politics'. The authors trace the emergence of subnational networks to the 1992 United Nations Conference on Environment and Development ('Rio Earth Summit'), including the development of a Local Agenda 21 suggesting that 'Cities . . . are key sites in the production and management of energy use and waste production, through processes over which local authorities have a (varying) degree of influence' (Bulkeley and Betsill 2004: 477). Bansard and colleagues (2017: 229) suggest that a 'popular leitmotiv' has emerged wherein cities might have advantages over states in addressing sustainability issues, at least in terms of climate governance. Some of the city networks have become incredibly large. The C40 for instance, a climate change network, consists of 96 cities that produce 25 per cent of global GDP. The Global Covenant of Mayors engages over 9,000 cities, representing nearly 800 million people or 10 per cent of the global population.

In sum, certification programmes, partnerships and subnational networks are prominent types of transnational initiatives that occupy various institutional spaces in earth system governance. Few transnational institutions emerge in an institutional vacuum, however. They interact both with each other and with existing international institutions, creating 'transnational regime complexes' (Abbott 2014; Widerberg and Pattberg 2017). Accordingly, many earth system governance scholars now study the quality of the institutional structure framing the debate with terms such as fragmentation, polycentrism and orchestration (Zelli and van Asselt 2013; Jordan et al. 2015; Kleinschmit et al. 2018; see also Chapters 8 and 11). Emphasizing interrelational aspects of multisectoral governance arrangements, particularly those that involve public and private actors, Ponte and Daugbjerg (2015) speak of hybrid governance (also Kuyper, Linnér and Schroeder 2018). Accordingly, the literature on emergence is now moving away from studying individual transnational governance initiatives to the study of the entire transnational governance architecture.

The Effectiveness of Transnational Governance

According to the Earth System Governance Project's first science plan, institutional sprawl could influence the performance of both individual institutions and the system as a whole, recommending that 'research on architecture should ask how the performance of environmental institutions is affected by their embeddedness in larger architectures' (Biermann et al. 2010: 281). This section discusses how earth

system governance researchers have evaluated effectiveness in transnational governance architectures. It reviews how the earth system governance literature has measured effectiveness, whether transnational governance has increased effectiveness and how to improve effectiveness in increasingly complex institutional architectures.

As Kramarz and Park observe, adding actors, rules and norms does not automatically have positive effects on the environment (2016: 1). The fifth Global Environment Outlook seems to support their argument, noting that '[e]fforts to slow the rate or extent of change . . . have resulted in moderate successes but have not succeeded in reversing adverse environmental changes. Neither the scope of these nor their speed has abated in the past five years' (UNEP 2012: 6; see also UNEP 2019). Hence, despite pockets of success (e.g., reduction of ozone depleting substances, recovery of some fish stocks and increased forest cover), the overall state of the environment across land, water and the atmosphere is in worse shape than before the rise of transnational governance. Effectiveness, however, is a multifaceted concept, and few earth system governance scholars actually measure the environmental impacts of their research objects. Instead, other criteria for measuring effectiveness are more popular, such as quality and quantity of transnational rules and norms, changes in behaviour and consequences of interplay between transnational institutions. The findings suggest a more nuanced picture, different from the Global Environment Outlook.

Measuring and Explaining Effectiveness

Measuring effectiveness in earth system governance is complicated and subject to extensive scholarly debates (e.g., Miles et al. 2001; Breitmeier, Underdal and Young 2011; Young 2011). Measuring the impact of transnational institutions on environmental state indicators (e.g., biodiversity levels, greenhouse gas concentrations in the atmosphere or fish stocks) generally suffers from lack of data, absence of good state indicators or difficulty in establishing a causal link between an institution and the observed change in environmental state. Randomized controlled experiments, often considered the gold standard of measuring effectiveness in science, are not available to earth system governance researchers due to the difficulty of treating and controlling the real world in which transnational institutions operate. Instead governance scholars must revert to other conceptualizations of effectiveness and methodologies for establishing the influence of institutions.

How effectiveness is defined determines if something can be considered effective. In research on environmental institutions, effectiveness is commonly thought about as the extent to which institutions are able to alleviate or resolve the problems that motivated their creation (Young 2011). Beyond this broad conceptualization,

effectiveness can be measured against some hypothetical ideal, such as a 'collective optimum' (Miles et al. 2001); against a (politically feasible) counter-factual scenario; or against an institution's own goals (Hale and Held 2011: 24; Bernstein and Cashore 2012: 586). Moreover, political scientists choose what to study by separating effectiveness into three different levels (Easton 1957). Output-level effectiveness pertains to the quality and quantity of commitments, rules, norms and decision-making procedures; outcome-level effectiveness concerns changes in behaviour by actors resulting from the outputs; and impact-level effectiveness measures the results of the behavioural changes by actors.

Relaxing the criteria for what to consider effective, from impact-level indicators to output-level indicators, changes the norm for what to consider effective. The earth system governance literature has primarily been occupied with output-level effectiveness, often studying the *potential* for an institution to have desired outcomes and impacts. For example, in their study on five transnational rule-setting organizations in the global governance of fisheries and aquaculture, Kalfagianni and Pattberg (2013: 125) operationalize 'conditions for effectiveness' as: problem structure; comprehensiveness and stringency of standards; quality of audits; access of relevant societal actors to decision-making venues and procedures; and uptake of standards by relevant actors (2013: 127). Chan and colleagues (2016) use a 'function-output fit' assessment, measuring whether transnational climate institutions produce outputs that are consistent with their self-stated functions (also Pattberg et al. 2012). This assessment framework thus operationalizes effectiveness as whether transnational initiatives carry out what they have set out to do, similar to international regime effectiveness research (see Chapter 2). The earth system governance scholarship converges around institutional design features, participation and institutional and problem context as determinants for transnational institutional effectiveness (Szulecki, Pattberg and Biermann 2011; Kalfagianni and Pattberg 2013; Pattberg and Widerberg 2016).

However, factors explaining the effectiveness of individual institutions may be insufficient to explain the effectiveness of the institutional architecture. There are, in fact, few architecture-level analyses of effectiveness in transnational governance, yet the initial results are sobering. Some projects have taken a large-*n* comparative approach, for instance on partnerships for sustainable development (Pattberg et al. 2012) and transnational climate partnerships (Pattberg 2010; Bulkeley et al. 2014). The findings suggest a limited impact of transnational institutions, even though more recent cases suggest some sustainability improvements (Chan et al. 2016).

Similarly, regarding voluntary certification, research from forestry reveals that transnational forest institutions in the Brazilian Amazon failed to prevent deforestation for three main reasons (McDermott, Irland and Pacheco 2015). First,

higher prices for certified timber could not prevent the expansion of agriculture as a main driver of deforestation. Second, the costs of certification turned out to be too high for smallholders, excluding them from sustainable forest management, with additionally negative effects of market concentration. Third, the complexity of supply chains and products was higher for tropical timber export products than for European and North American timber products sold at domestic markets. As a consequence, forest certification schemes 'favor large producers and concentrated supply chains destined for external markets ..., while extensive legal requirements inhibit local benefit-capture' (McDermott, Irland and Pacheco 2015: 134). For global business, transnational labelling schemes for tropical timber harmonized environmental standards, and they have the same effect as a cartel: potentially harmful competition in voluntarily self-restricted markets is avoided (Holzinger and Sommerer 2011: 316). A lack of control, divergence of national rules and dependence on the certifiers are the main points of criticism, especially with regard to voluntary certification (Kleinschmit 2015: 85). As a consequence, we see growing criticism about the effectiveness of transnational institutions – especially in the forestry sector but also more generally.

Some authors have also criticized the neglect of economic and social consequences, especially in the Global South, in transnational institutions and their impact evaluations (McDermott, Irland and Pacheco 2015). For instance, studying Honduran community forestry groups producing furniture and kitchenware for Danish design markets, Nygren (2015) suggests that transnational governance, particularly in the form of certification, creates images of Southern community producers as authentic and exotic 'others', portrayed as people who cherish local traditions and toil for their living. The stories behind the products are crucial to the sale of certified products, and images of people are carefully selected. For example, people sawing timber barefoot or carrying planks on their shoulders on muddy slopes are not chosen. The terms of the participation of Southern producers in global markets are rarely considered, however, and the same holds for the distribution of benefits and constraints among actors involved. While the 'distance' between Northern consumers and Southern producers may be shortened, the transnational institutions in this case study do not challenge asymmetrical trade relations (Nygren 2015).

The studies reviewed above, however, put limited focus on the possibility that the sum of transnational governance institutions may be greater than its parts and that institutional embeddedness may influence the effectiveness of an institution on the architecture of transnational governance (but see Hoffmann 2011). Climate governance provides another illustrative example. For transnational climate institutions, reductions in greenhouse gas emissions have been a central indicator for effectiveness (Blok et al. 2012; UNEP 2015; Hsu et al. 2016). However, van der

Ven and colleagues (2016: 6) consider evaluation criteria such as greenhouse gas emissions, other goals or intended outputs too narrow, arguing that it could lead to situations where subpar performance 'lead[s] policy-makers to prematurely abandon good ideas because of short-term failures to "measure up"'. Instead, scaling (how initiatives create scalable solutions) and entrenchment (how initiatives create durable solutions) are important performance criteria, challenging evaluators to expand the conceptual toolbox beyond traditional effectiveness criteria (van der Ven, Bernstein and Hoffmann 2016). Scaling and entrenchment could be considered system-level indicators where the evaluation is less concerned about how an intervention affects a target population but rather how it affects the system. Such calls for taking a system-level perspective are echoed by Abbott and colleagues (2016) in their study on how emerging 'private transnational regulatory organizations' are interacting with public governance. According to the authors, private transnational regulatory organizations could reinforce and complement public governance; provide natural experiments for governments and international organizations to learn; and offer venues for private actors to participate in international governance (Abbott, Green and Keohane 2016: 272).

In sum, reviewing the literature, three observations can be made considering measuring and explaining effectiveness in governance architectures characterized by a high number of transnational institutions. First, while earth system governance research has generated an impressive amount of descriptive data on individual institutions, including under what conditions institutions perform best, there are few system-level studies, in particular, taking impact-level effectiveness into account. Second, the rise of transnational governance challenges researchers to consider new indicators for effectiveness that take system-level effects into account, such as scaling. Third, system-level evaluations require more focus on the interplay between transnational institutions, considering their effects on each other and on the established international institutions.

Improving Effectiveness

After ten years of research, could earth system governance research provide decision-makers with recommendations on how to improve transnational governance? Orsini and colleagues (2013) pose the question in terms of institutional structure: Should one prefer 'fragmented, centralized, or dense' network structures in global governance? When searching for an answer, it is sometimes hard to separate analytical from normative claims in the literature (Jordan and Huitema 2014). Scholars writing in the tradition of Ostrom (2010), describing governance architectures in terms of polycentricity, have been keen on emphasizing the benefits of polycentric systems, including improved policies through learning and

innovation over time, and improved cooperation through more interaction and communication (Cole 2015). Others have been more hesitant about the benefits of polycentricity, claiming that there is limited proof that a polycentric structure, where transnational governance plays a significant role, would outperform a monocentric structure, where governments play a more important role (Jordan et al. 2015).

Some scholars are developing a middle path between the monocentric and polycentric systems perspectives by focusing on how multilateral institutions need to change to integrate transnational actors and institutions into their work. Abbott (2014) argues that the links between the various institutions and organizations should be strengthened and better coordinated. A stream of research focuses on how to create synergies between the expanding universe of transnational climate governance and the existing multilateral institutions, most notably the United Nations Framework Convention on Climate Change (Betsill et al. 2015; Hickmann 2017a). Abbott's ideas build on 'orchestration', defined as a mode of governance whereby international organizations use non-state and subnational actors as intermediaries to enhance global governance (Abbott and Snidal 2009). Orchestration seems to have played a role in the run-up to the Paris Agreement, at which international organizations mobilized non-state and subnational actors to create a positive momentum, instilling confidence among governments to negotiate an ambitious climate agreement (Chan et al. 2015; Hale 2016; Widerberg 2017; Hickmann et al. 2019). Andonova and Hoffmann (2012: 61) make a similar argument that '[i]nternational environmental regimes can establish platforms to promote broader accountability and integration of private and hybrid governance solutions that are up to the task, and facilitate their up-scaling and more equitable distribution'. According to the middle path, improving effectiveness is thus about linking the transnational and international levels of governance, finding ways to coordinate and cooperate between transnational institutions, and for the international system to harness positive transnational forces.

The Legitimacy of Transnational Governance

The increasing importance of private actors in earth system governance raises questions about its legitimacy. Scholars observe, for instance, an increasing power of transnational corporations in governance architectures (Fuchs 2007). Individuals, such as Bill and Melinda Gates as heads of their foundation (Partzsch 2017) as well as some celebrities and social entrepreneurs, also increasingly influence global governance (Partzsch 2014, 2018). As a result, some scholars raise concerns that private actors are eroding state sovereignty and bypassing regulation based on democratic decision-making, even in their countries of origin

(Quark 2013; Kramarz 2016). Simultaneously, others argue that private actors are democratizing global governance particularly through the involvement of civil society organizations and citizen initiatives providing a space for previously marginalized voices (Kuyper 2014). This section discusses how earth system governance research has evaluated the legitimacy of transnational governance. It reviews how earth system governance research has measured legitimacy, whether transnational governance is considered legitimate and how to improve legitimacy beyond the state.

Measuring and Explaining Legitimacy

Legitimacy is considered as the property of a situation or behaviour that is defined by a set of social norms as correct or appropriate (Scott 1995). It refers to the perception by the actors of the overall quality of the social order, which includes institutions, norms and rules (Risse 2002). In modern democracies, legitimacy tends to rely on two pillars (Scharpf 1997), one based on input-oriented arguments, that is, government by the people, and one based on output-oriented arguments, that is, government for the people. According to input-oriented arguments, legitimacy derives from democratic procedures and formal arrangements, whereas according to output-oriented arguments, legitimacy derives from the effectiveness of the specific governance institution in designing policies that promote the public good.

The literature identifies three broad criteria as important for examining the democratic legitimacy of transnational governance: participation, transparency and accountability (Porter and Ronit 2010). Participation relates to the types of actors included in decision-making. Participation can be examined from the point of view of the democratic principle of inclusion in decision-making (Kalfagianni and Pattberg 2013). According to this principle, those who have to abide by the law need to participate in its creation. In modern democracies, this principle is satisfied on the basis of representation rules through the electoral process. In transnational governance, a key question is the representativeness of a global public within governance architectures. In this context, scholars propose different criteria for participation, such as the scope and quality of participation (Dingwerth 2007). Scope requires that those affected by decisions need to participate in their creation (Dingwerth 2007; Scholte 2008), while quality requires that participants are actively engaging in decision-making rather than being simply consulted (Sénit, Biermann and Kalfagianni 2017). Further, a distinction is made between physical and discursive representation, the latter inquiring not into who participates in decision-making but whose discourses are represented and deliberated (Dryzek 2012; Dryzek and Pickering 2017).

Transparency, in turn, refers to the provision of timely, reliable and comprehensible information (Fuchs, Kalfagianni and Havinga 2011). Scholars distinguish transparency in terms of procedures, that is, the openness of governance processes such as decision-making or adjudication; outcome, that is, the openness about regulated or unregulated behaviour (Auld and Gulbrandsen 2010); and substance, that is, the access to and dissemination of information related to the substance of decision-making (Sénit, Biermann and Kalfagianni 2017). It is an important dimension of legitimacy that aims to enhance public scrutiny and visibility and eventually strengthen meaningful participation and accountability in transnational governance architectures (Fuchs, Kalfagianni and Havinga 2011). In relation to participation and accountability, transparency has attracted more attention in transnational governance. Thus, scholars observe that transparency has taken on the aspect of a new global norm signifying a procedural turn in global politics (Gupta 2008) and a trend towards governance by disclosure (Haufler 2010).

Accountability refers to the willingness to accept responsibility or to account for one's actions (Biermann and Gupta 2011). It is related to the notion of responsibility and answerability and, thus, sanctions and redress are considered core dimensions of accountability (Bäckstrand 2008). Accountability is a relational concept between two or more actors often thought of in the form of a principal holding an agent accountable (Widerberg and Pattberg 2017). Scholars distinguish between internal and external accountability. Internal accountability refers to the presence of mechanisms of responsibility when principals and agents are institutionally linked (Widerberg and Pattberg 2017), such as between the board members of an organization and their constituents (Fuchs, Kalfagianni and Havinga 2011). External accountability refers to the relationship between decision-makers and the public (Biermann and Gupta 2011). An important prerequisite of external accountability is the ability of the public to intervene and adjust the governance institution either directly or through representatives (Fuchs, Kalfagianni and Havinga 2011). Accountability in transnational governance differs from accountability in democratic state governance where the public has the potential to vote decision-makers out of office. Rather scholars identify different forms of accountability such as peer, reputational and market accountability and highlight the need to consider plural forms of accountability when it comes to transnational forms of governance (Bäckstrand 2008).

In short, measuring and explaining the legitimacy of transnational governance involves asking questions about who participates in the development of rules and norms for sustainability, how transparent the process is, the substance and outcomes of decision-making, and which mechanisms to use to hold decision-makers accountable. While a similar set of questions applies to evaluating the legitimacy of state-led governance, the exact criteria based on which

legitimacy is operationalized for transnational forms of governance differs. Particularly problematic measurement aspects include identifying who the relevant public is and how to translate legal forms of accountability into mechanisms applicable to voluntary and less formalized institutional arrangements beyond the state.

When evaluating the legitimacy of transnational governance along the three criteria of participation, transparency and accountability, some authors are rather optimistic. Kuyper (2014), for instance, argues that as we move away from single regimes to 'regime complexes' (Raustiala and Victor 2004; see also Chapter 7), the opportunities for increased participation and accountability surge. Much of the literature, however, remains sceptical. In terms of participation, scholars note obstacles to the provision of equal opportunities to influence the norms and rules that govern sustainability, particularly for civil society, developing country actors and marginalized groups (Fuchs and Kalfagianni 2010). Transparency is also generally lacking, and its implementation does not always produce the desirable results. Scholars note, for instance, the often-selective nature of transparency in transnational institutions (Dingwerth and Eichinger 2010), the drawbacks of drowning in too much information and the potential of powerful actors controlling information disclosure to their benefit (Gupta 2010). Finally, accountability is also problematic in transnational governance. Scholars note, in particular, the lack of accountability and redress mechanisms (Hachez and Wouters 2011), while they are concerned especially with regard to accountability to the public (Fuchs, Kalfagianni and Havinga 2011).

Improving Legitimacy

Developing measures that provide legitimacy for transnational governance is admittedly difficult. It is a challenge to create a level playing field in participation, for instance. While several transnational institutions try to improve Southern participation and inclusion of marginalized groups in their structures, the involvement of the latter remains primarily consultative (Hachez and Wouters 2011). Indeed, such an endeavour would require support for those facing resource or collective action problems hindering their participation in the first place. To address this problem, some scholars underline the importance of developing online platforms and information and communication technologies that can enhance the participation of civil society in particular (Davies and Chandler 2012). The problem remains, however, how to ensure inclusion and how to guarantee that the voices of all will be recognized and heard equally. Research on the use of information and communication technologies during the consultation around the Sustainable Development Goals reveals that this cannot be a panacea and similar

problems with onsite participation apply (Gellers 2016; Sénit, Kalfagianni and Biermann 2016).

Creating transparent transnational institutions is also challenging. Particularly in cases where corporate actors dominate, transparency as defined in this chapter is an incredibly difficult norm to establish (Haufler 2010). It is also difficult to create mechanisms for accountability and the global attribution of responsibility of transnational actors. Some directions are provided by Ruggie (2013), who emphasizes the importance of strengthening grievance mechanisms alongside educating and training the potentially affected actors in the use of such mechanisms for their own benefit. Other proposals include the explicit recognition of the affected public by public actors, thus creating the conditions for the inclusion of their interests when these are negatively impacted upon by transnational governance institutions (Kalfagianni 2015); the creation of innovative spaces for discursive representation (Stevenson 2014); and an effort towards incremental improvement within specific issue areas instead of adopting a one-size-fits-all approach to legitimation (Kuyper 2014).

Conclusions and Future Directions

Transnational governance – with all its promises and pitfalls – is not likely to wane soon. We expect that the issues underlined in this chapter will continue to inform earth system governance scholarship for years to come. However, the focus of attention may change.

While many scholars dealt with the emergence of new forms of transnational governance in the late 1990s and early 2000s, more recent research is primarily concerned with questions of effectiveness and legitimacy. However, many questions of emergence and development of transnational governance remain unaddressed. For example, scholars continue to be puzzled about why private actors are more committed in some areas, such as forestry, compared to others, such as mining (e.g., Hilson 2014). Also little differentiation is made between earlier initiatives, such as the Forest Stewardship Council, and later ones, such as the Programme for the Endorsement of Forest Certification (for an exception see Dingwerth and Pattberg 2009). Future research needs to explain better the variation among transnational initiatives both across sectors and over time. The role of public actors therein, particularly in terms of orchestration, also gains prominence. Recent scholarship pays increasing attention to the state in providing direct incentives for private actors to create and to commit to new forms of transnational governance, for example, through public procurement and other supportive policies (Gulbrandsen 2014; Sarfaty 2015).

For scholars studying the influence and effectiveness of transnational governance, it is becoming increasingly difficult to decompose the system into discrete

units. Instead, effectiveness must be understood in a relational sense. For instance, Eberlein and colleagues (2014) suggest that system-level effects include the interaction between various elements in the architecture. Effectiveness is then not so much a matter of what the final impact is on the problem that an institution is aiming to solve, but instead how the elements influence each other's regulatory capacity and performance. It echoes Biermann and colleagues (2009) suggesting that all global governance architectures are fragmented but that there can be synergistic, cooperative or conflictive outcomes of the institutional interactions. Questions regarding performance for future generations of scholars of earth system governance should encompass how one initiative relates to other initiatives in the institutional architecture and how they influence each other. This in turn poses challenges for future research designs and methodologies, but there are promising avenues such as the use of network approaches for mapping and analyzing transnational governance (Widerberg 2016; Widerberg and Pattberg 2017).

For scholars studying legitimacy, focusing alone on the institutional design elements of transnational governance will prove inadequate. Instead, legitimacy needs to be examined more systemically, particularly in relation to power. Global power relations intersect with legitimacy concerns, including discrimination against vulnerable groups (Schlosberg and Collins 2014) and the privileged position of some interest groups (e.g., business) over others in the transnational arena. Where power is exercised to exclude minorities or marginalized groups, exclusion reduces diversity in representation in decision-making (Earth System Governance Project 2018; see also Burch et al. 2019). Addressing legitimacy concerns, then, means simultaneously addressing power inequalities. In this context, promising future research can include attention to the extent to which transnational governance helps to curb abuses of power; whether transparency-driven approaches empower smaller actors or perpetuate inequalities; and the extent to which power inequalities can be exposed through transnational governance initiatives.

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