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Analysing bureaucratic behaviour in global environmental governance. How environmental treaty secretariats build global support for educational innovations.

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Abstract

This cumulative doctoral thesis analyses the role of International Public Administrations (IPAs) for international policymaking by focusing on the secretariats of two international treaty conventions: the United Nations Framework Convention on Climate Change (UNFCCC) secretariat and the Convention on Biological Diversity (CBD) secretariat. It starts from the assumption that IPAs can act autonomously and aims at assessing and explaining observable influence exerted by IPAs on environmental governance and educational innovations therein. "Action for Climate Empowerment" serves as an example of an educational innovation within the climate regime. The five articles and the connecting discussion sections demonstrate that IPAs play diverse roles in the climate and biodiversity regimes through which they can influence policies to a certain extent, especially in the policy initiation phase. Focusing on bureaucratic behaviour, the analysis identifies the roles of policy brokers, entrepreneurs, mediators and attention-seekers bureaucracies, which the two treaty secretariats assume in the absence of explicit state delegation. They do this by employing an entrepreneurial administrative style, by drawing on their expert authority and on their positional advantage in networks. They display normative leadership and strategically seek the attention of states.

Kurzfassung

In dieser kumulativen Doktorarbeit wird die Rolle internationaler öffentlicher Verwaltungen (International Public Administrations, IPAs) für die internationale Politikgestaltung untersucht, wobei der Schwerpunkt auf den Sekretariaten zweier internationaler Vertragsübereinkommen liegt: dem Sekretariat des Klimarahmenabkommens der Vereinten Nationen (UNFCCC) und dem Sekretariat des Übereinkommens über die biologische Vielfalt (CBD). Die Arbeit geht von der Annahme aus, dass IPAs autonom agieren können und zielt darauf ab, den beobachtbaren Einfluss von IPAs auf Umweltgovernance und die darin enthaltenen Bildungsinnovationen zu bewerten und zu erklären. "Action for Climate Empowerment" dient als Beispiel für eine Bildungsinnovation innerhalb des Klimaregimes. Die fünf Artikel und die anschließenden Diskussionsabschnitte zeigen, dass IPAs verschiedene Rollen im Klima- und Biodiversitätsregime spielen, durch die sie Policies bis zu einem gewissen Grad beeinflussen können, insbesondere in der Phase der Politikinitiation. Die Analyse konzentriert sich auf das Verhalten administrativer Akteure und identifiziert die Rollen von Policymaklern und -entrepreneuren, Vermittlern und aufmerksamkeits-suchenden Verwaltungen, die die beiden Vertragssekretariate übernehmen, im Kontext der Abwesenheit einer expliziten staatlichen

Delegation. Sie tun dies, indem sie einen unternehmerischen Verwaltungsstil anwenden und sich auf ihre Expertenautorität und ihren Positionsvorteil in Netzwerken stützen. Sie weisen normative Führungsqualitäten auf und suchen strategisch die Aufmerksamkeit von Staaten.

Contents

Abstract	ii
Kurzfassung	ii
1. Introduction	1
2. Concept and methods: International Public Administrations in global governance	5
2.1. <i>IPAs as influential actors in global governance</i>	5
2.1.1. What are IPAs?.....	5
2.1.2. The authority of IPAs	7
2.1.3. Nodality: IPA influence from a network perspective	11
2.2. <i>Methodological approach</i>	14
3. Treaty secretariats in global environmental and educational governance	16
3.1. <i>Administrative styles in global climate governance</i>	16
3.1.1. Conceptual contextualization of the article “Between mandate and motivation: bureaucratic behaviour in global climate governance”	16
3.1.2. Between mandate and motivation: Bureaucratic behaviour in global climate governance	19
3.2. <i>Climate change education in the UNFCCC and social networks</i>	42
3.2.1. Conceptual contextualization of the article “The power of social networks: How the UNFCCC secretariat creates momentum for climate education”	42
3.2.2. The power of social networks: How the UNFCCC secretariat creates momentum for climate education	45
3.3. <i>IPAs as attention-seeking bureaucracies</i>	67
3.3.1. Conceptual contextualization of the chapter “Environmental treaty secretariats as attention-seeking bureaucracies: The climate and biodiversity secretariats’ role in international public policy making”	67
3.3.2. Environmental treaty secretariats as attention-seeking bureaucracies: The climate and biodiversity secretariats’ role in international public policy making	70
3.4. <i>Complexity in global environmental governance</i>	109
3.4.1. Conceptual contextualization of the article “REDD+ finance: policy making in the context of fragmented institutions”	109
3.4.2. REDD+ finance: policy making in the context of fragmented institutions	111
3.5. <i>The role of treaty secretariats in the coordination of a complex global climate governance</i>	133
3.5.1. Conceptual contextualization of the article “Brokering climate action: The UNFCCC secretariat between parties and nonparty stakeholders”	133
3.5.2. Brokering climate action: The UNFCCC secretariat between parties and nonparty stakeholders .	134
4. Conclusion	158
5. References	162
Overview of publications and author contributions	174

1. Introduction

This doctoral thesis aims at advancing the current empirical and theoretical knowledge on the role of International Public Administrations (IPAs) in environmental and educational governance at the international level by focusing on the secretariats of two international treaty conventions: the United Nations Framework Convention on Climate Change (UNFCCC) secretariat and the Convention on Biological Diversity (CBD) secretariat. These conventions do not only set the course for an internationally agreed policy response to the climate and biodiversity crises, but also have far-reaching implications for certain educational innovations as intrinsic elements of these policies. IPAs play a significant role for the success of multilateral negotiations that strive to agree on solutions to the global challenges of our century, such as health, security or climate change (e.g. Barnett and Finnemore 2004; Biermann, Siebenhüner, et al. 2009; Knill and Steinebach 2022; United Nations 2015). As the bureaucratic bodies of international organizations, IPAs are deeply involved in international negotiations, but receive little credit for their outcomes (Jinnah 2014). Recent studies have uncovered that IPAs perform exceptionally important roles in international negotiations and indeed are able to exert autonomous influence on them (Bauer 2006; Bauer, Knill, and Eckhard 2017; Knill and Bauer 2016; Lenz et al. 2015). This doctoral thesis aims at contributing to the vibrant research agenda. It starts from the assumption that IPAs can act autonomously and aims at assessing and explaining observable influence exerted by IPAs on international processes, with a specific focus on environmental governance and educational innovations therein.

This dissertation was written over the course of several years of research, from 2014-2022. The most important scholarly influence on this thesis were the years 2014-2017, during which I was a member of the German Research Foundation's (DFG) project ENVIPA (Behind the Scenes: Mapping the Role of Treaty Secretariats in International Environmental Policy-Making) at the Department for Education and Psychology, which was conducted jointly with the Research Centre for Environmental Policy (FFU) at Freie Universität Berlin. This project was part of the large-scale research group 'International Administrations', which ran from 2014-2020¹. The thesis is based on the data collected and the research findings that resulted from this collaborative project. Motivated by the desire to contribute to the understanding of how international institutions impact the problem-solving ability of actors in global environmental

¹ For details, see www.ipa-research.com. Funding for ENVIPA was provided by the DFG under grants JO 1142/1-1 and KO 4997/1-1.

politics, I was lucky to be part of the ENVIPA team at the Department for Educational Research and Social Systems. The research angle of understanding multilateral negotiations as social systems and inherently relational constructs (e.g. Bodin and Crona 2009; Böhmelt and Spilker 2014; Borgatti 2003; Hafner-Burton, Kahler, and Montgomery 2009; Kolleyck 2014; Kolleyck and Bormann 2014; Lecy, Mergel, and Schmitz 2014; Varone, Ingold, and Fischer 2019) proved to be an important vantage point for my research on the role of international treaty secretariats for global environmental governance. Studying the influence of these actors on the outcome of multilateral negotiations led me to the question of how educational innovations, such as climate change education (CCE), gain traction in environmental policy fields globally. The opportunity to combine the topic of educational innovations in multilateral negotiations with the research perspective of the ‘International Administrations’ group and my interest in globally negotiated policy responses to the climate and biodiversity crises were the central motivators that led me to finalizing this thesis and contributing to the interconnected research agendas on the independent influence of IPAs on global policies, the spread of educational innovations and the policy responses to the climate and biodiversity crises.

The thesis aims to answer the following research questions:

- Which role do International Public Administrations play in the multilateral negotiations on climate change and biodiversity under the UNFCCC and the CBD?
- How do international treaty secretariats influence the outcomes of the multilateral negotiations under the UNFCCC and CBD?
- How do IPAs drive educational innovations in global environmental governance forward?

These will be differentiated into more specific questions in the articles presented below. By drawing on the study of IPAs from a public administration and international relations perspective, I will develop an approach to analyse how educational innovations are put onto the agenda and negotiated in policy areas that are not education-specific. I will exemplify this with educational innovations in environmental governance. Studies have extensively analysed Education for Sustainable Development (ESD) as an educational innovation diffused at the global level (e.g. de Haan, Bormann, and Leicht 2010). The theoretical and methodological approaches rooted in educational science and social systems, namely social network theory (SNT) and Social Network Analysis (SNA) have already greatly added to the literature on the potential for influence that IPAs have from a structural perspective (Goritz, Kolleyck, and Jörgens 2019; Kolleyck 2014; Kolleyck et al. 2017; N. Kolleyck, Jörgens, and Well 2017; Schuster

and Kolleck 2020). While the recent advancement of CCE in international policymaking is increasingly coming into scholarly focus (e.g. Goritz et al. 2019; McKenzie 2021; Thew, Middlemiss, and Paavola 2021), a systematic analysis of the role of IPAs for educational innovations in global environmental governance is currently lacking (but see, e.g. Kolleck et al. 2017). Furthermore, “we still lack systematic assessments on the specific conditions under which this [IPA] agency becomes visible in action” (Knill and Steinebach 2022:3). This thesis helps to close these research gaps in empirical and conceptual terms. The articles and analyses presented in this thesis will thoroughly analyse the role of IPAs in two areas of global environmental governance, describe how they are able to exploit the institutionally fragmented and complex nature of the current state of global environmental governance, and demonstrate in which ways IPAs are able to influence the advancement of educational policies in global environmental policy.

The thesis is built up as follows. In the second chapter, I will give an introduction into the theoretical perspectives and the methodological approach that guided my research. This will firstly entail presenting the state of the art of relevant research perspectives on IPAs and their influence on the outcomes of multilateral processes, focusing on the autonomy, the entrepreneurialism and the social embeddedness of IPAs in networks. Secondly, I will explain the methodological choices I made and describe the data I used. While this thesis draws on a selection of articles that I published together with co-authors using a mixed-methods approach, in this section I will concentrate on those methods that I have mainly contributed to across all publications, namely qualitative semi structured expert interviews, participant observation and document analysis using qualitative content analysis. These methods were combined with survey data analysed with SNA techniques, which is in detail described in the respective articles themselves. The third chapter will present five original research articles, in which the research questions presented above are answered from different perspectives. First, the article “Between Mandate and Motivation: Bureaucratic Behavior in Global Climate Governance” will zoom in on the role of the UNFCCC secretariat² for the outcomes of the Conferences of the Parties (COPs). Second, the article “The Power of Social Networks: How the UNFCCC Secretariat Creates Momentum for Climate Education” will scrutinize the role that the climate secretariat had for putting climate change education, today known as “Action for Climate Empowerment”, onto the agenda of UNFCCC negotiations. Third, and building on the two previous articles, the book chapter “Environmental Treaty Secretariats as Attention-Seeking Bureaucracies: The

² The terms ‘UNFCCC secretariat’ and ‘climate secretariat’ will be used interchangeably. The same applies to the terms ‘CBD secretariat’ and ‘biodiversity secretariat’.

Climate and Biodiversity Secretariats' Role in International Public Policy Making" will empirically add to the previous results by comparing the climate and biodiversity secretariats and provide a conceptual novelty, by further developing the concept of environmental treaty secretariats as attention-seeking bureaucracies. Fourth, the article "REDD+ finance – policy making in the context of fragmented institutions" will add a new dimension to the thesis by providing an in-depth analysis of institutional fragmentation in global climate governance. The section will review the relevant literature on the structure of global climate governance, which is becoming increasingly differentiated and complex. It will then review the implications of this global governance structure for IPAs' potential to influence the negotiations of climate policies. Fifth, building on some of the theoretical implications of the analysis of fragmented institutions in climate policy, the article "Brokering Climate Action: The UNFCCC Secretariat Between Parties and Nonparty Stakeholders" will analyse the role that the climate secretariat plays in global climate governance with a specific focus on the interaction with state and non-state actors. In the conclusion of the thesis in section four, I will discuss how IPAs bridge the divide between administration and politics at the global level and highlight the implications for the success of educational innovations in global environmental policy.

2. Concept and methods: International Public Administrations in global governance

2.1. IPAs as influential actors in global governance

2.1.1. What are IPAs?

International Public Administrations (IPAs) are the administrative bodies of International Organisations (IOs) and are also referred to as international bureaucracies. In this thesis I follow the definition developed by Frank Biermann and colleagues, who posit that international bureaucracies are defined as “agencies that have been set up by governments or other public actors with some degree of permanence and coherence and beyond formal direct control of single national governments (notwithstanding control by multilateral mechanisms through the collective of governments) and that act in the international arena to pursue a policy. In other words, international bureaucracies are a hierarchically organized group of international civil servants with a given mandate, resources, identifiable boundaries, and a set of formal rules of procedures within the context of a policy area” (Biermann, Siebenhüner, et al. 2009:37). A defining feature of IPAs that distinguishes them from national administrations is their context environment, namely the international system (Bauer et al. 2017:182). Unlike for national political systems, in the context of the international order, it is commonly understood that uncontested hierarchical relationships do not exist, making anarchy the decisive feature of international politics (Hawkins et al. 2006). This is the most important difference one needs to take into account when transferring assumptions about national administrations to IPAs (Busch and Liese 2017:98). Bauer and colleagues identify certain features of IPAs resulting from this international context, which turn IPAs into “a new type of bureaucracy at the international level” (Bauer et al. 2017:182). These are representative of different aspects of the current state of the art in the scholarly literature on IPAs and therefore constitute a helpful heuristic to summarize some of the main findings of the literature that are relevant for this thesis and to highlight central IPA characteristics.

First, as a result of the intergovernmental setting in which they operate, IPAs are inherently *autonomous* from their political principals (i.e. nation states). International bureaucracies are more autonomous than national bureaucracies, because it is harder for their principals to control them, due to the “changing opportunity structures and actor relationships in ongoing global affairs” (Bauer et al. 2017:183), which IPAs can aptly exploit to their own benefit. The findings that international organizations are agents in their own right and, more specifically, that IPAs have a high potential for autonomy are central vantage points of current scholarly thinking on

IPAs (Barnett and Finnemore 2004; Biermann and Siebenhüner 2009; Hawkins et al. 2006; Reinalda and Verbeek 1998). Rationalist scholars focus on the dynamic between nation-states, who, as principals, delegate powers to IOs as agents, in a situation in which nation-states are not able to coordinate directly. The principal-agent approach places an emphasis on the problem that arises from incomplete delegation contracts and information asymmetries, which allow IOs as agents to act autonomously, i.e. beyond the scope of the mandate delegated to them by their principals, and to pursue goals of their own (Abbott and Snidal 1998; Tallberg 2010). In this view, the autonomy and influence of the agent is a result of the principal's limited ability to control and sanction it, while the preferences of principals and agents are set a priori (Bauer and Weinlich 2011).

In contrast, sociological institutional looks at factors that are inherent to IOs as sources of influence, such as the normative and cultural roots of bureaucratic influence, resulting in a privileged position in policy networks. IPA influence in this understanding is defined as “the mobilization of authority to shape power relations between states [...] by engaging in activities (knowledge brokering, marketing, etc.) that result in institutional, structural, or productive changes to institutions, relationships, and/ norms/ ideas” (Jinnah 2014:53). The preferences of IPAs as agents are seen as resulting from internal dynamics, rather than being set due to their formal autonomy (Barnett and Finnemore 2004; Bauer and Weinlich 2011; de Wit et al. 2020).

Second, IPAs are *entrepreneurial*. While the concept of bureaucratic autonomy gives insight into how the relationship between IPAs and their political superiors is structured formally, the question of how, in fact, IPAs behave on a day-to-day basis and according to which informal routines they perform their duties is captured by the concept of administrative styles. The behaviour of an IPA can be described as a rather servant-like vs. a rather entrepreneurial administrative style, thereby taking on a rather passive or rather active role in the policy cycle (Knill et al. 2018; Knill, Eckhard, and Grohs 2016). Bauer and colleagues highlight that IPAs are characterized by a high likelihood to display a strong entrepreneurial role, for example by acting as an institutional or policy entrepreneur. By strategically using the institutional and political opportunity structures of the international system, IPAs may aim at surpassing their mandate and shaping the political decisions taken in the respective policy area (Bauer et al. 2017:185).

Third, *expertise and information* are more important tools for IPAs than rules and formal powers. While bureaucracies are in the Weberian definition understood to possess a rational-legal authority, which allows them to define and enforce legal rules, the authority of IPAs in

policy-making activities derives less from their rule-making ability, when compared to national bureaucracies (Bauer et al. 2017:186; Weber 1978). For IPAs, especially when they seek to be active in policymaking, their information and expertise is more important (Barnett and Finnemore 2004; Bauer et al. 2017:186; Liese et al. 2021; Zürn 2018). Their access to expert knowledge and their institutional memory give IPAs a privileged position in policy networks, in which they may aim to influence political decisions, for example by acting as attention-seekers or knowledge brokers (Jinnah 2014; Saerbeck et al. 2017). The substantive and procedural expertise and information IPAs often hold regarding the design and implementation of public policies endows them with a nodality in transnational communication networks (Hood and Margetts 2008). The potential for influence that is derived from nodality stems from data, information and advice an IPA gives as part of an epistemic community (Bauer et al. 2017:186; Haas 1990).

2.1.2. The authority of IPAs

The question of when and under which conditions states accept the authority of IOs and IPAs as legitimate has been subject to a dynamic scholarly debate, which is founded in Weberian social science and frequently returns to these scholarly roots to come to terms with recent developments in global governance architectures (for an overview, see Busch and Liese 2017:98). Weberian social science lays the foundations for scholarly thinking on bureaucratic authority, which often starts out with taking a closer look at his famous definition of of rational-legal authority, which puts a particular focus on administered rules by properly appointed authorities (Weber 1978). A rich body of literature has scrutinized the problem of what kind of bureaucratic authority IPAs possess (e.g. Busch and Liese 2017; Hickmann 2019). The dimensions of delegation, shared norms and expertise as sources of IPA authority stand especially out and will spelled out in more detail below (Barnett & Finnemore, 2004; Bauer, S., 2006; Jinnah, 2014; Littoz-Monnet, 2017).

Zürn et al. (2012) and Tallberg & Zürn (2019) have helpfully distinguished between authority and legitimacy, in order to study how legitimacy can be gained or lost in global governance. In this understanding, while “authority refers to the recognition that an institution has the right to make decisions and interpretations within a particular area, legitimacy refers to the perception that these rights are appropriately exercised” (Zürn, Binder, and Ecker-Ehrhardt 2012:82–88). At the same time, authority and legitimacy are related, in so far as legitimacy only becomes an issue once an institution possesses authority, meaning that “in the absence of authority, there would be no legitimacy problem“ (Tallberg and Zürn 2019:586). As IPAs naturally lack a direct authority over states, Jinnah poignantly characterizes the essence of bureaucratic legitimacy as

being based on “acceptance, rather than obligation” (Jinnah 2014:47), which should be complemented with the element of normative justifications that can explain, why states accept IPAs as legitimate, based on what they conceive of as appropriate (Beetham 1991:64–69; Bernstein 2011:20; Suchman 1995:574; Zürn 2011:606). Legitimacy is therefore a relational property, since it depends on the perception and acceptance of an institution by a specific audience (Hurd 2008:7). The most relevant audience for the case of IPAs, as governors, are states, as the governed, since they define and delineate what IPAs are supposed to do. Furthermore, the audience of IOs includes societal, or non-state actors, which may also hold legitimacy beliefs (Gronau and Schmidtke 2016). This plurality of audiences and principals makes legitimacy variable over time and audiences (Knill, Eckhard, and Bauer 2018; Tallberg and Zürn 2019). This distinction allows us to separate the phenomenon of the growing authority of IOs and their administrations and their perceived legitimacy. Scholars share the observation that, following an unprecedented growth in the authority of IOs, many IOs and IPAs have extended their regulatory scope beyond their original functional mandate and have become more intrusive (Bauer et al. 2017; Hooghe, Lenz, and Marks 2019; Tallberg and Zürn 2019:591; Zürn 2018). Having achieved higher levels of authority, IOs and IPAs also have to conform to higher standards of legitimacy, since it is also likely that they face politicization and attempts of de-legitimation concerning their policy area of engagement. If they fail to live up to these heightened standards, they risk suffering from legitimacy deficits or crises, forcing them to employ legitimation strategies (Uhlin 2019; Zelli 2018). Forms of legitimation that rely on the quality of policy outcomes is typically referred to as an ‘output’ (Scharpf 1999) or ‘performance’ based legitimacy source (Tallberg and Zürn 2019). By contrast, legitimation strategies that emphasize the proper process of decision-making and conformance to procedural standards are referred to as ‘input’ or ‘procedural’ sources of legitimacy (Scharpf 1999; Tallberg and Zürn 2019).

Delegation, norms and expertise as sources of IPA authority

When referring to delegation as an authority type, the authority of an IPA is understood in institutional terms, as resulting from formal or informal delegation of authority from member states to an IPA and pooling of authority in an IPA through collective decision making (Hawkins et al. 2006; Hooghe and Marks 2015; Tallberg and Zürn 2019). Delegative authority is central to bureaucratic behaviour, as it is based on a chain of command and expectations between states and the IPA. States therefore define the elements from which the authority of IPAs flows: They lay down the rules and laws according to which they delegate authority to IPAs, they also define the “regime-specific” ideas that are the basis for the shared norms and

they specify, which kind of expertise they want to be provided with by IPAs (Jinnah 2014:47). The most obvious form through which states instruct IPAs to carry out specific tasks is through their mandate, which is usually defined in treaty texts and refined through subsequent decisions, for treaty secretariats by Conference of the Parties (COPs). When states delegate certain tasks to an IPA, they express their explicit acceptance for its action and grant the IPA a certain zone of discretion, even in the absence of direct tasks. IPAs therefore have the legitimacy for discretionary action, if this is used to pursue tasks (which may be formulated broadly) delegated to them (Barnett and Finnemore 2004; Jinnah 2014:49). However, IPAs can work towards expanding these zones, making also their mandates susceptible to change (Hall 2016). Barnett & Finnemore even posit that “IOs must be autonomous actors in some ways simply to fulfil their delegated tasks”, and that “delegation creates autonomy precisely because being autonomous is the mandate” (Barnett and Finnemore 2004:22). Delegation therefore constitutes a procedural, input-oriented source of legitimacy for IPAs that also covers a certain zone of discretionary action.

Bureaucracies in general, including IPAs, can be seen as institutions “with a *raison d’être* and organizational and normative principles” of their own, being “an expression of cultural values and a form of governing with intrinsic value” (Olsen 2006:3). In this sense, the moral authority of an IPA stems from the IO’s basic principles and the set of moral values, which are found in the IO’s founding documents, such as in treaty texts. When IPAs draw on shared norms to advocate for specific ideas or activities, they claim to represent and defend the values and interests of an international community. Such claims are regarded as legitimate by states if the norms they refer to are seen as endogenous to the respective regime, and thus, originally delegated by the states themselves (Barnett and Finnemore 2004:23; Jinnah 2014:49). The trust into its impartiality is a central source of an IPA’s legitimacy and part of its moral authority. As an important resource for IPA authority it needs to be upheld at all times in order for IPAs to be accepted as a moral authority by states (Bauer et al. 2017:191; Busch and Liese 2017:115). However, impartiality is not equal to neutrality, as IPA staff serve the shared values the respective regime is founded on. Barnett and Finnemore point out the essential problem of such a situation: “The fact that IOs are legitimated by a myth of depoliticization is a source of stress for IOs when impartial action is impossible” (Barnett and Finnemore 2004:21). The reason for this is that IPAs, like IOs, serve a specific social purpose and set of values. Still, they need to appear as impartial and depoliticized, which also needs to reflect in how they exert their moral authority.

Expert authority is regarded by some as the single most important dimension of bureaucratic authority for IPAs (Busch and Liese 2017; Liese et al. 2021). The expertise-based authority of IPAs results from the staff's technical training and scientific and legal knowledge as well as their command of regime-specific 'rules of the game'. Secretariat staff need to combine political, scientific and legal understanding, as they need to provide parties with substantive input, drafting texts and technical advice (Depledge 2005:73). This highly trained staff acquires expert authority by creating and managing knowledge, channelling the flow of information, through which they shape the operation of the respective regime (Jinnah 2014:50). IPAs derive legitimacy from their expertise insofar as they make their action consistent with the specialized knowledge they possess, which again strengthens their depoliticized and impartial appearance (Barnett and Finnemore 2004:24).

Busch and Liese differentiate between two general authority types present in IO scholarship, namely political and expert authority, thereby highlighting the prominence of expert authority. While political authority refers to an actor's ability to make and enforce collectively binding decisions, or issue and implement commands and orders, expert authority stems from the ability to make and communicate competent statements, judgements, assessments, and recommendations on the basis of its knowledge. These authority types can be recognized in practice (*de facto*) or be the result of a formal delegation act (*de jure*) (Busch and Liese 2017:107). Unlike state actors and powerful IOs and UN bodies (such as the Security Council), IPAs typically do not have the authority to set rules and impose obligations, i.e. political authority. The likeliness that IPAs enjoy expert authority depends on three conditions: the demand for expertise by IO members, the performance of the IPA, and the perceived neutrality (depoliticization) of the IPA (*ibid.*). While these hypotheses are helpful in distinguishing the precise level of expert authority when comparing IPAs, scholars agree that IPAs must have some degree of expert authority, since the "deployment of specialized knowledge is central to the very rational-legal authority that constitutes bureaucracy in the first place" (Barnett and Finnemore 2004:24).

With regards to the expert authority of treaty secretariats, Jinnah highlights that understanding and informal knowledge of past state positions and decisions gives IPAs the possibility to draw on legal precedent and political intent. This notion of institutional memory is connected to the specific expertise of international civil servants, who are highly specialized experts with extensive professional experience in IOs and secretariats, generating a comprehensive understanding of the issues negotiated and the complex dynamics of state positions on these issues (Jinnah 2014:50). Littoz-Monnet posits that by drawing on external expert knowledge,

IPAs are able to expand their sphere of authority into new issue domains that belong neither to their mandate nor to their actual field of expert knowledge. By mobilizing external expertise, it becomes possible to gain expert authority in issue areas that states do not expect IPAs to have (Littoz-Monnet 2017).

When IPAs use their expert authority in an entrepreneurial fashion, i.e. when they actively promote substantive questions of policy formulation, concerning the identification and definition of policy problems and the development of solutions (Knill et al. 2017:50), this can be regarded as strengthening their performance-based source of legitimacy. Entrepreneurial IPAs typically aim at enhancing the regime effectiveness, for example by facilitating successful negotiations between member states (Jinnah 2014:52). They use their expertise strategically by drawing on their institutional memory and even mobilizing expertise on topics that might be external, but relevant to their respective regime (Hall 2016; Jinnah 2014:48; Littoz-Monnet 2017). This form of expert authority relies on an IPA's unique position in the complex network within the IO and between the IPA and member states and non-state actors that are relevant to the respective regime, hence the expert authority of IPAs must be understood to be "rooted in position" in global governance networks (Jinnah 2014:50). Additional to this favourable position in governance networks that makes IPAs able to contribute to regime effectiveness, this form of authority also relies on the willingness and the purposive action of IPAs do to so in the absence of an explicit task, or as Littoz-Monnet puts it: on "the strategies of agential bureaucrats" (Littoz-Monnet 2017:594). In summary, the IPA's position in global governance networks, its strategic use of expertise and its entrepreneurial administrative style are elements of an IPA's performance-based source of legitimacy that it can draw on even in the absence of delegation. In the context of private actors in global governance, Green speaks of "entrepreneurial authority", which is closely related to this type of authority (Green 2014).

2.1.3. Nodality: IPA influence from a network perspective

As demonstrated above, an IPA's expert authority results in its nodality, or a privileged position in issue-specific transnational communication networks. Expert authority "places IPAs in a strategic position from which to spread information to their political principals and to their organizational environment" (Bauer et al. 2017:186). This means that "the higher the extent to which an IPA disposes of information and expertise considered essential both within and beyond its organization, the greater its nodality [is] in transnational communication networks" (ibid.) The importance of IPAs' network position warrants a closer look into the role of IPAs in issue-specific networks. This section will therefore introduce the concept of IPA influence from a network theory perspective.

Scholars are increasingly highlighting the importance of policy networks for implementing and negotiating policies at national and international levels (Hafner-Burton et al. 2009; Kenis and Schneider 1991; Mintrom and Norman 2009; Varone et al. 2019). Social network theory allows to analyse an actor's embeddedness, that is, to delineate its position in a network vis-à-vis its relational neighbourhood and to "model human agency as interdependent", which "permits us to account for instrumental constraints and opportunities to their agency" (Christopoulos and Ingold 2015:479). To this end, analysing the network structure can be of relevance (Granovetter 1973) as well as the actor's positional advantage within a network, which it can gain for example by exploiting structural holes and acting as a broker between otherwise disconnected actors (Burt 2005). Such an exceptional position provides an actor with informational advantage and increased options within a network (Christopoulos and Ingold 2015; Ingold and Varone 2012; Sabatier and Jenkins-Smith 1993). Brokers are defined as intermediaries between different actors and "can potentially negotiate the stream of information and bring together ideas that emerge within the network" (Kolleck 2014:55). The concept of brokers has been taken up by IPA scholars and highlighted as one form of an IPA's exceptional agency within a global governance network, via which it has an increased potential for influence (Biermann, Siebenhüner, et al. 2009:45; Jörgens et al. 2017; Saerbeck et al. 2020). Jinnah defines the influence of the IPAs in this context as "the mobilization of authority to shape power relations between states [...] by engaging in activities (knowledge brokering, marketing, etc.) that result in institutional, structural, or productive changes to institutions, relationships, and/ norms/ ideas" (Jinnah 2014:53). Policy brokers engage in trust building to enable the finding of compromises between network actors (Christopoulos and Ingold 2015:481; Sabatier and Jenkins-Smith 1993). A central aspect for IPAs as successful brokers is therefore the trust placed into its impartiality and into the trustworthiness of the information it provides (Barnett and Finnemore 2004:69; Jörgens et al. 2017).

Studies from different fields points to the role of trust for cooperation and achieving (innovative) results in networks (Nooteboom 2002), highlighting its potential for coordination in a modern network society where public and private organizations are increasingly horizontally related (Castells 1996), especially vis-à-vis less promising mechanisms, such as hierarchy rules, direct supervision and regulation (Edelenbos and Klijn 2007; Verweij et al. 2013). Scholars from a network perspective argue that trust may result from the centrality of an actor, i.e. by occupying key positions in the group. In this view, it should be the informational exchange advantages provided by central, powerful actors provide to others that enhances trust (Freeman 1978). By contrast, the social capital approach suggests that actors in denser networks

should trust others more, since they obtain more information about the members and their behaviour, which in turn should increase trust (Coleman 1988; Putnam 1995). Relevant studies for the role of trust in social networks can be found in work that focuses on political trust (Levi and Stoker 2000), inter-organizational trust (Kramer 1999) and trust in complex decision networks, such as public-private partnerships (Edelenbos and Klijn 2007).

Studies analysing how policy ideas and social innovations diffuse through networks highlight the critical role of empirical techniques of SNA for capturing and analysing them (Christopoulos 2008; Hafner-Burton et al. 2009; Lecy et al. 2014). SNA has especially been used to analyse the spread of educational innovations through networks (Fischbach, Kolleck, and de Haan 2015; Kolleck 2014; N. Kolleck et al. 2017; Schuster and Kolleck 2020; Zander, Kolleck, and Hannover 2014). Studies on the role of social networks in the implementation of educational innovations show that both perceptions and relational factors are crucial for the emergence and acceptance of innovations (Kolleck and Bormann 2014).

In line with this, Bauer et al. conclude that for the expert authority of IPAs “the value of pure information as such as decreasing” and that it is “their capacity to filter relevant and trustworthy information about appropriate policy solutions and interconnecting the right sample of relevant actors” is the most significant (Bauer et al. 2017:190). Hence, the positional advantage IPAs have in transnational communication networks regarding the policy in question is an important prerequisite for influencing the negotiation and implementation of global policies. For this, the trust into their own impartiality and consequentially into the information they provide as experts is necessary. Based on their positive effect on regime effectiveness, IPAs can use their position in global governance networks. These are marked by governance “gaps” or “voids”, which again change actor constellations and rules of policy making (Abbott 2014; Hajer 2003). To fill such governance gaps, states rely increasingly on IPAs, since their “unique position in governance networks [...] allows them to operate in this political space” (Jinnah 2014:48). In this context, IPA staff build up a dense web of relationships within and beyond their organisation, contribute to organisational learning and build support for preferred policy outputs and to implement policies (Kolleck et al. 2017; Prideaux 2014; Varone et al. 2019). The fact that IPAs can draw on their network position for their authority results from a diversified global governance architecture (Jordan et al. 2015; Zelli and van Asselt 2013).

A recent addition to this line of reasoning has been the concept of IPAs as orchestrators (Hickmann et al. 2021). Orchestration in global governance is understood as a strategy of IOs and other actors to work via intermediaries, such as civil society or private actors, to indirectly

pursue specific governance goals (Abbott et al. 2015; Hale and Roger 2014). For example, IOs as orchestrators may direct the attention and policy-shaping role of non-state actors to specific topics, thereby indirectly influencing the policy discourse and even the design of institutions, as Hickmann & Elsässer have shown for the climate, biodiversity and desertification regimes (Hickmann and Elsässer 2020). De Wit et al find that “the observed practice of orchestration that emerges in increasingly complex global governance effectively reaffirms the capacity of international bureaucracies to act as agenda setters, policy entrepreneurs or policy brokers” (de Wit et al. 2020:63). Given this importance of understanding strategic IPAs as being embedded in social networks, the following sections will draw on the theoretical background presented in this section.

2.2. Methodological approach

Data for this thesis was collected through qualitative expert interviews, participant observation and large-scale surveys. The data collection was conducted in the context of the DFG-project ENVIPA, which is a sub-project of the DFG research group “International Public Administration”. Qualitative data was collected through interviews and participation in negotiations as well as through the analysis of documents. Relevant documents include official reports, declarations, speeches and legal documents as well as statements issued by the secretariats, party submissions, published papers and interviews relating to the multilateral treaty conferences. These documents were analysed as representative material of the secretariats’ communication strategy and mode of interaction with other actors. 33 semi structured expert interviews as well as participant observations were gathered at UNFCCC negotiations between 2015 and 2022 (namely at COP 21 in Paris, COP 22 in Marrakech, COP 23 in Bonn, COP 25 in Madrid and COP 27 in Sharm El Sheikh as well as at the Subsidiary Body of Implementation (SBI) sessions 42 and 44 in Bonn) and with members of the CBD secretariat in Montréal, Canada and the UNFCCC secretariat in Bonn, Germany. Interviewees included secretariat staff of the UNFCCC and the CBD secretariats from different hierarchical levels and areas of work as well as with party and non-party stakeholders of the two conventions.

Interviewees can naturally only report their own perceptions of events and processes, making a comparison of different perspectives useful and cross-checking these with participant observations and document analysis. Interviewees were asked, among others, about their perceptions on substantive and procedural dimensions of negotiation items, on the role and activities of the CBD and UNFCCC secretariats during and between negotiations, their

relationship to the respective chairpersons and stakeholders as well as about interviewees' motivation for being engaged in the multilateral negotiations. The essential advantage of combining expert interviews and participant observation is the opportunity to record information in real time and to gain first-hand experience of how negotiations develop without having to rely exclusively on the subjective perceptions of individual actors (Bogdan and Biklen 1992; Creswell 2009:179; Merriam 1998).

Semi structured interviews were chosen as an appropriate tool for conducting expert interviews, since they can detect both specific and context-related knowledge and thereby address both the practical and discursive consciousness of the interviewees (Meuser and Nagel 2009). Specific knowledge relates to an expert's own actions concerning the policy process in the UNFCCC and CBD, while context-related knowledge refers to the actions of others, such as stakeholders active in the wider context of the climate and biodiversity regimes. The observations were recorded using an observational protocol, in which descriptive notes were separated from reflective notes. Interviews were recorded, transcribed and anonymized. The qualitative data gathered was analysed using qualitative content analysis according to (Mayring and Frenzel 2014) and supported by the software MaxQDA. For the coding of the data, a list of all represented topics in the data was compiled and similar topics were clustered together and summarized as a code. The relevant text segments were then structured according to the codes and the list of codes was reduced and assembled into larger categories. Finally, the codes and categories were compared (Creswell 2009:181–86).

In terms of quantitative data, Twitter communications were gathered in 2014 and 2015 (see section 3.2.2), a large-scale survey targeting CBD and UNFCCC stakeholders has been conducted between 2014 and 2016 (see section 3.5.2). The specific methods used will be described in each publication in detail. Combining qualitative insights with the results of the quantitative SNA, the presented research considers both network structures as well as actor and issue characteristics for the potential of IPAs to exert independent influence. In this way, the thesis seeks to contribute to the state of the art concerning theories of social influence by IPAs in multilateral conventions with a special focus on educational implications in environmental governance; as well as the re-assessment of the role of international treaty secretariats in environmental and educational policies at the global level.

3. Treaty secretariats in global environmental and educational governance

3.1. Administrative styles in global climate governance

3.1.1. Conceptual contextualization of the article “Between mandate and motivation: bureaucratic behaviour in global climate governance”

IPAs are inherently entrepreneurial, as highlighted above. This article zooms in on this dimension of IPAs, drawing on the theoretical considerations on trust and social influence presented in section 2.1.3. Having contextualized administrative styles into the broader research picture of IPA influence in section 2.1.1, this article analyses the administrative styles of one particular IPA, namely the secretariat of the UNFCCC. The relevance of effective institutions for agreeing on a global response to the increasingly worsening climate crisis can hardly be overstated (International Panel on Climate Change 2018:25). This article offers a case study on bureaucratic behaviour in global climate governance.

As the first author of this article, my main contribution was the choice of the conceptual lens of administrative styles to study the impact of the UNFCCC secretariat, the choice of the UNFCCC secretariat as a case study for studying IPA influence and the analysis and interpretation of data. Interview and participant observation data was collected jointly with my co-author Barbara Saerbeck at UNFCCC COPs and the UNFCCC secretariat. All co-authors provided input and advice to the theoretical and methods sections, drawing on the research approach of our joint project “ENVIPA” and inspired by exchange with colleagues in the research group “International Administrations”. At the end of this section, I will highlight the implications of the current article for studying the diffusion of sustainability in educational policy and practice and thereby conceptually connect this study to the article presented in section 3.2.

The UNFCCC is an international treaty secretariat, a particular type of IPA with a more focused mandate compared to administrations of large IOs, which emphasizes their logistical role in a single issue area (Busch 2009). As administrative arms of international treaties, these issue-specific secretariats typically focus on the early stages of the policy cycle by facilitating the problem definition, agenda-setting and formulation of a given policy. With only a limited role in policy implementation, international treaty secretariats are ideal case studies for analysing to which degree IPAs have an autonomous impact on policy processes (Jørgens et al. 2017:76). The article shows that administrative styles are especially well suited to answer the question of

how IPAs exert influence in multilateral negotiations and position themselves in the climate policy network.

In this analysis, I take bureaucratic behaviour – rather than state delegation – as a starting point for my analysis. The question, in which way IPA behaviour contributes to global governance processes in an autonomous way can be answered from principal-agent, constructivist and psychological perspectives (Fleischer and Reiners 2021). As established above, rationalist explanations focus on the information asymmetries and conflicts of interest between principals and agents (da Conceição-Heldt 2013). Furthermore, organizational analysis inspired by Bourdieu emphasizes social conditions for understanding power relations between and within organizations and their network (Emirbayer and Johnson 2008). Sociological institutionalism focuses on factors inherent to IOs as sources of IPA influence that is rooted in “the normative and culturally significant attributes of rules as symbols, cognitive schemata, social scripts or moral templates that frame meaning and guide human interaction” (Fréchette and Lewis 2011:586; Hall and Taylor 1996; Jepperson 1991). The concept of administrative styles is rooted in this tradition (Knill et al. 2018). According to sociological institutionalism, actors are guided by the “logic of appropriateness”, defined as an action that “evokes an identity or role and matching the obligations of that identity or role to a specific situation” (March and Olsen 1998:951). Purposeful action is guided by identities and the selection of rules, which are constitutive, as well as regulative. As they are embedded in culture, interests are therefore endogenous. Institutions do not only determine the strategic calculus of actors, they constitute the basic preferences of social actors (Hall and Taylor 1996:948). It follows that rationality is believed to be socially constructed, historically contingent and defined by cultural institutions, which delineate preferences and identity. The understanding of institutions includes non-codified, informal conventions and collective scripts that regulate behaviour (Mahoney and Thelen 2010:5) .

Drawing on this theoretical approach that sheds light onto the behaviour of an individual IPA, the article answers two questions. First, *which types of administrative styles can be observed in the UNFCCC Secretariat at different stages of the global climate policy process?* The article shows that the UNFCCC Secretariat is an IPA that, despite its narrowly defined mandate as a technocratic facilitator, has developed a distinctive quality as an actor within the climate regime, clearly displaying the intent to influence the process and outcomes of the negotiation process prior to the adoption of the historical Paris Agreement. The analysis uncovers an entrepreneurial policy initiation and a cautiously entrepreneurial drafting style, both of which show how the climate secretariat has put its formally narrow mandate into practice to advance

global cooperation on climate change, seeking to impact the processes and outcomes of multilateral negotiations. Second, *what motivates the UNFCCC Secretariat to choose a particular administrative style?* The article shows that the choice of an entrepreneurial policy initiation style is motivated by two functional, effectiveness-oriented considerations, namely to advocate for higher ambition in negotiations on the one hand and to stimulate more decentralized, local climate action on the other. The motivation for entrepreneurial action in policy initiation is therefore driven by the wish to further the effectiveness of climate policy both at the level of global rule setting and at the level of national implementation. In hindsight, this has had a lasting impact on climate policy worldwide, since one of the main governance innovations of the Paris Agreement was to transfer the responsibility of both ambition-setting for climate policy as well as for its implementation to the level of the UNFCCC member states in the form of Nationally Determined Contributions (NDCs) (Allan et al. 2021; Chan 2016; Dimitrov 2016; Kinley 2017; UNFCCC 2015). The motivation for the cautiously entrepreneurial policy drafting style is rooted in a desire to reconcile diverging views and drafting ambitious and effective climate policies, using own relevant expertise and institutional memory. The focus on mediating between different political views is typical of a policy broker (Sabatier and Jenkins-Smith 1993). The climate secretariat employed its relevant networks, expertise and acuity in drafting negotiating text, by strategically connecting and partnering with parties. Apart from this functional motivation, positional motivations that are aimed at sustaining the trust into its own impartiality also became apparent, resulting in the policy drafting style of the climate secretariat to contain both entrepreneurial and servant-style elements.

By focusing on administrative styles, the article conceptually contributes to debates on when and why IPAs move from a neutral stance toward impact-seeking behaviour driven by their own preferences and strong political agency. Building on the notion of sociological institutionalism that an agent's preferences are not fixed a priori but influenced by the normative and cultural roots of an institution, this article provides an in-depth assessment of these factors by analysing the motivations to choose a particular administrative style. By implementing a qualitative approach, the article answers to calls for qualitative studies, in order to uncover the motivations of IPAs that display an exceptional form of agency, for example in the form of policy brokers (Jørgens et al. 2017:75; Kolleck 2016). As a case study on bureaucratic behaviour in climate governance, it also adds conceptually and empirically to understanding the building blocks of global governance architectures in earth system governance (Biermann and Kim 2020:7).

The article furthermore demonstrates that studying administrative styles and the motivations to adopt them are useful conceptual tools to study the global negotiation and implementation of policy innovations and therefore constitutes a conceptual innovation that is very well suited to also analyse the spread of educational innovations (Altrichter 2010; Kolleck 2014), including within global climate governance (McKenzie 2021). Combining the findings of the presented article with research on advancing sustainability in education policy and practice would be well suited to study the role of intrinsic motivations and relational factors for the global diffusion of climate change and sustainability aspects in educational policy (Goritz et al. 2019; Jacob et al. 2021; Kolleck and Bormann 2014; Pitton and McKenzie 2022). Administrative styles therefore constitute an excellent tool for studying how educational innovations with regards to climate change and sustainability considerations are set onto the agenda in multilateral negotiations, which warrants future research in this regard.

In addition, this study is an empirical addition to educational governance, by highlighting internal factors that determine the behaviour of the UNFCCC secretariat as an actor that is highly relevant to the educational innovation of climate change education and communication ((McKenzie 2021; Thew et al. 2021) . As the article presented in section 3.2 will demonstrate, the climate secretariat was instrumental in setting the educational innovation of climate change education and communication onto the agenda, known under the UNFCCC as “Action for Climate Empowerment” (Kolleck et al. 2017). Understanding the entrepreneurial administrative style especially in the policy initiation phase of the climate secretariat is therefore an important empirical contribution to the literature that aims at understanding the role of IOs and IPAs in educational governance (Jakobi 2009; Meyer and Rowan 2006; Shahjahan 2012).

3.1.2. Between mandate and motivation: Bureaucratic behaviour in global climate governance

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3.2. Climate change education in the UNFCCC and social networks

3.2.1. Conceptual contextualization of the article “The power of social networks: How the UNFCCC secretariat creates momentum for climate education”

The possession of information and expertise are central for IPA autonomy, as they result in a privileged position in social networks, or nodality, which gives them an ability to influence policy outputs, as introduced above. Having contextualized nodality into the broader research picture of IPA influence in section 2.1.1, the article presented in this section analyses how the climate secretariat exploits its favourable position in communication networks to influence the debate on climate change education (CCE) in the UNFCCC.

In order to find an adequate policy response to the climate crisis, education is considered to be “not just hot air”, but to be an “essential element for mounting an adequate global response to climate change” (UNESCO 2015:3), in that it is critical in enhancing the resilience of populations, especially of vulnerable groups and communities. Education can increase a resilient development by “helping populations understand and address the impacts of climate change, and in encouraging the changes in attitudes and behaviours needed to help them address the causes of climate change, adopt more sustainable lifestyles [...] as well as to adapt to the impact of climate change (ibid.) That being said, on the one hand, education is increasingly recognized as essential for successful climate governance and is regarded as a critical tool for fighting climate change (UNFCCC, 2014), which is represented for example by the Glasgow Work Programme on Action for Climate Empowerment (UNFCCC 2021). On the other hand, education continues to be treated as an issue with a rather low political salience within the UNFCCC (McKenzie 2021), which is conducive for the climate secretariat to leave a fingerprint on educational issues in the climate regime (Biermann and Siebenhüner 2009:335).³

CCE can furthermore be regarded as part of a wider tendency in global governance to highlight the interconnectedness of policy sectors and to understanding social issues (e.g. education) and environmental concerns (e.g. climate change) not as distinct phenomena but as coupled socio-ecological systems. According to Biermann the term ‘environmental governance’ is too limited, because environmental, economic and social issues are profoundly interconnected (Biermann 2021). A more adequate way of viewing the “human-nature entanglement” at a planetary scale (ibid.:69) that pertains to both social and ecological policies is from the perspective of the “Anthropocene”. The geological age of humankind was first coined by Crutzen and Stoermer

³ This finding is further corroborated by participant observation at UNFCCC COP 27 in Sharm El Sheikh, November 14-18 2022.

(Crutzen and Stoermer 2000). Social and ecological sectors are not viewed as distinct from each other, but their “nexus” character comes into focus. Consequently, in this view climate change and education are also interlinked. The integration of social, economic and natural dimensions is reflected in the adoption of the 2030 agenda and its 17 sustainable development goals (SDGs) and in the promotion of Education for Sustainable Development (ESD) (Bolscho and Hauenschild 2006; de Haan et al. 2010; United Nations 2015). If environmental governance is replaced by an Anthropocene perspective, this also has consequences for the role of international organisations and their IPAs, as they need to be “more adaptative in responding to change, both in socio-ecological problems and in our knowledge of their nature and causes” (Biermann, Kim, et al. 2020:313). A case in point for how IPAs tackle this challenge is the way in which the climate secretariat is pushing the integration of educational policies in the UNFCCC, as the article discussed in this section demonstrates.

This article offers insight into the role of IPAs for the global advancement of CCE as a part of Education for Sustainable Development (ESD). It uses a sequential mixed design, in which qualitative and quantitative data are gathered and analysed in consecutive steps (Creswell 2009:208), namely quantitative SNA and participant observation. It therefore complies with calls to treat the study of public administrations from a network perspective in a systematic fashion (Lecy et al. 2014). As the second author of this article, my main contribution was the gathering and analysis of qualitative data on CCE in the UNFCCC, in order to shed a light on the behaviour of the UNFCCC secretariat. Drawing the “meta-inference” (Borgatti and Ofem 2011:18) by combining the two data types was a collaborative effort by all co-authors. I furthermore contributed the section on CCE in the UNFCCC and contributed to the state of the art and methods sections as well as to the final discussion of results. Whereas quantitative SNA is used to analyse the information flows and specific roles of actors in Twitter communications on CCE over time, qualitative participant observations is used to analyse how the climate secretariat exploits its favourable position in the debates on education within the UNFCCC. Put differently, while the SNA structurally shows the social embeddedness of the climate secretariat in transnational communication flows, the participant observation uncovers how this IPA uses its nodality to seek influence on how education-specific policies are shaped in the climate regime.

The article answers the research question: *how does the UNFCCC secretariat become involved in and have latent influence on education-specific negotiations and debates within the UNFCCC?* The result of the SNA is that the climate secretariat has a high potential to influence the education-related communication flows on Twitter over time due to its central network

position (Kolleck et al. 2017:118). This is in line with a recent study on the digital authority of the climate secretariat (Goritz et al. 2022). However, as this finding does not give insight into the strategies with which the climate secretariat exploits its favourable relational position in the debates on education, drawing on participant observation is necessary, in order to understand the secretariat's influence on climate education programs within the climate regime.

The participant observation allows insight into three categories of secretariat activity: normative leadership, facilitation and outreach. More specifically, the potential for the secretariat's influence on CCE becomes visible through the strategic connection to other influential actors; by enabling knowledge and communication flows; by exploiting a unique position in global networks to diffuse the concept of education among many actors; and by exerting normative leadership to frame CCE as "Action for Climate Empowerment" in the UNFCCC as well as to raise ambition for its subsequent implementation (Kolleck et al. 2017:119–21). What is more, by launching the "United Nations Alliance of Climate Change: Education, training and public awareness" together with 13 other IOs that aim to cooperate on CCE (Kolleck et al. 2017:120), the climate secretariat aims to strategically shape its organizational environment on CCE, which is typical for autonomous IPAs (Bauer et al. 2017:188). In sum, the article shows that the climate secretariat went beyond its restricted mandate by strategically connecting with influential actors within the climate regime and attempting to frame debates in line with its policy preferences, thereby making use of its nodality.

The study shows the success of the climate secretariat in increasing the relevance of education in the UNFCCC negotiations at an early stage, especially by nudging stakeholders to adopt the more eye-catching term of "Action for Climate Empowerment". It furthermore shows how the climate secretariat develops an expert authority in education as an issue outside the original scope of the climate regime, thereby displaying a highly entrepreneurial policy style. The article thereby also contributes to the literature on 'mission creep' of autonomous IPAs, who can sometimes expand their authority in areas outside of their mandate and the sphere of their expert authority (Hall 2016; Littoz-Monnet 2017). In addition to contributing to the literature on the influence of IPAs especially in areas outside their mandate, this article contributes empirically and conceptually to studying how the educational innovation CCE as part of ESD is put onto the agenda and negotiated in global environmental governance.

3.2.2. The power of social networks: How the UNFCCC secretariat creates momentum for climate education

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The Power of Social Networks: How the UNFCCC Secretariat Creates Momentum for Climate Education

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and Helge Jörgens**

Abstract

Despite the relevance of education-specific negotiations under the United Nations Framework Convention on Climate Change (UNFCCC) and the influential role of the secretariat therein, research in this area is still scarce. We contribute to closing this research gap by exploring how the UNFCCC secretariat becomes involved in and has latent influence on the education-specific debates surrounding global climate conferences and the related information exchange on Twitter. Our analysis extends previous findings by combining theories and methods in novel ways. Specifically, we apply social-network theory and derive data from participant observations and Twitter, which enables us to analyze the role and influence of the UNFCCC treaty secretariat within education-specific negotiations. We find that the secretariat increases its influence by strategically establishing links to actors beyond the negotiating parties and show that it occupies a central and influential position within the education-specific communication networks in UNFCCC negotiations.

In recent years, scholars have increasingly turned their attention to the impact of international public administrations (IPAs)—that is, the bureaucratic bodies of international organizations (M. Bauer et al. 2016; S. Bauer 2006; Biermann and Siebenhüner 2009b; Johnson 2014). Within this research strand, a particular focus has been the secretariats of multilateral environmental conventions as potentially influential actors in world politics (Biermann and Siebenhüner 2009a; Jinnah 2014).

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Studying the role and impact of international treaty secretariats is relevant because they constitute a least-likely case of IPA influence (Jörgens et al. 2016). Their formal mandates emphasize their logistical role within a multilateral treaty system while explicitly prohibiting them from taking an autonomous part in the negotiations under their treaty or convention. However, despite the increasing visibility of international treaty secretariats, and counter to a growing body of research on their role in global politics, their intentions to exert influence have scarcely been systematically studied over time, because of methodological problems in analyzing behavior that is not openly displayed. This article contributes to filling this research gap by combining theories and methods in novel ways: it proposes social-network theory (SNT) and social-network analysis (SNA) as an adequate theory and method, respectively, for assessing the latent influence of international treaty secretariats. Instead of relying on actors' openly expressed policy preferences, their self-assessments, or their reputation for being influential, SNT and SNA infer influence from their relative position in issue-specific communication networks (Kolleck 2009; Kolleck 2013). Focusing on the issue of climate change education (CCE), we use longitudinal Twitter data on the issue-specific communication flows during the yearly Conferences of the Parties (COPs) from 2009 (COP 15) to 2014 (COP 20). We complement SNT and SNA with participant observations as means to identify the UNFCCC secretariat's potential for autonomous action and the mechanisms through which this potential is exploited.

While CCE is one of the least prominent topics in academia, it has become a high-profile project of the UNFCCC secretariat and has steadily risen on the agenda. Education is considered to be an "essential element for mounting an adequate global response to climate change" (UNESCO 2015, 3). It can increase resilience by "helping populations understand and address the impacts of climate change, and [by] encouraging the changes in attitudes and behaviors needed to help them address the causes of climate change, adopt more sustainable lifestyles ... as well as to adapt to the impact of climate change" (UNESCO 2015, 3). The attention given to education as a tool for ensuring the overall success of the UNFCCC has broadened to reach not only a dedicated community but also a growing number of country representatives and stakeholders. At the same time, because of its low political saliency relative to other agenda items, CCE constitutes an issue area where a proactive and influence-seeking role for IPAs is most probable to materialize. In such a setting, we can expect government principals to relax control of the activities of international bureaucrats, thereby opening opportunities for autonomous action (Biermann and Siebenhüner 2009a, 335). Thus, analyzing the role of the climate secretariat in CCE can shed new light on the influence-seeking strategies of international bureaucracies in global environmental policy-making.

Despite the relevance of education in international affairs and the crucial role that IPAs play in this regard, studies on the role of international secretariats at the interface between education and environmental policy have so far been

missing. Specifically, studies that analyze the ways that education is set on the UNFCCC agenda and how different convention stakeholders push education as a topic in climate change have been lacking.

This article seeks to contribute to this research agenda by studying the role of the UNFCCC secretariat in the negotiations on CCE. Specifically, we seek to answer the following research question: *how does the UNFCCC secretariat become involved in and have latent influence on education-specific negotiations and debates within the UNFCCC?*

In analyzing this question, we aim not only to provide new empirical insights into the mechanisms through which international treaty secretariats exert influence on the processes and outputs of multilateral negotiations by creating momentum for specific issues, but also to contribute to a better understanding of how global educational innovations such as CCE are negotiated and taken forward at a global level. By presenting a methodological approach that uses Twitter data to analyze the role of the UNFCCC secretariat in negotiations on CCE, this article shows not only how scholars can study multilateral negotiations in the field of global educational policies, but also how influence on international policy outputs can be assessed and understood in other policy areas. Drawing on SNT as well as on SNA and techniques of participant observation, this approach explores a secretariat's role by analyzing its actions, behavior, and communication strategies, which are reflected in its positions in issue-specific communication networks (White 2008). Empirically, we extract information on the cooperation structures and behaviors of actors involved in the negotiations using data from participant observations at climate change negotiations from the period 2015–2016, as well as Twitter data covering the UNFCCC COPs from 2009 to 2014.

The article is divided into five sections. The next section gives a brief overview of the role of CCE in the UNFCCC, summarizes the state of the art regarding the role of IPAs in global environmental governance, and introduces SNT as our theoretical framework. The methodological approach based on participant observations and the analysis of Twitter data with SNA techniques is described in the section thereafter. Then we present and discuss the findings. The last section summarizes the major arguments and outlines prospects for future research.

Climate Change Education and the UNFCCC

Although CCE has not been a prominent topic in negotiations under the UNFCCC, in recent years it has in fact risen starkly on the agendas of formal sessions and other events, and it is increasingly recognized as being essential for successful climate governance (UNFCCC 2014a). Article 6 of the UNFCCC, which went into force in 1994, lays the foundation for education in the climate regime, highlighting the importance of educational and public awareness programs and the need to cooperate on these issues at the international level

(UNFCCC 1992, 17). The implementation of this article has subsequently been facilitated by a series of work programs: Parties adopted the New Delhi Work Programme on Article 6 in 2002, and the Doha Work Programme in 2012, thereby also instigating a Dialogue on Article 6, which is held annually and brings together parties and other stakeholders to exchange best practices on the implementation of Article 6, or “Action for Climate Empowerment.” In 2014, ministers adopted the Lima Declaration on Article 6 of the Convention. In 2015, Article 12 of the Paris Agreement was adopted, thereby firmly entrenching education, training, and public awareness as tools for achieving the goals of that agreement. Article 12 stipulates that “Parties shall cooperate in taking measures, as appropriate, to enhance CCE, training, public awareness, public participation and public access to information, recognizing the importance of these steps with respect to enhancing actions under this Agreement” (UNFCCC 2016b, 30).

State of the Art and Theoretical Approach

International Public Administrations in Multilateral Environmental Negotiations

In their seminal comparison of nine international environmental bureaucracies, Biermann, Siebenhüner, and colleagues (2009) laid out the groundwork for understanding the mechanisms of secretariat influence, by highlighting the importance of problem structure, polity, people, and procedures. In particular, they showed that besides an IPA’s “polity”—that is, the “legal, institutional, and financial framework that has been set ... by states as their principals” (Biermann et al. 2009, 51)—an IPA’s leadership and staff, their attitudes, and their strategic actions account for varying degrees of influence over time (Biermann and Siebenhüner 2009a). Building on Biermann et al.’s findings, Jinnah added relational variables that also condition secretariat influence, emphasizing the importance of the positioning of secretariats in the wider governance network (Jinnah 2014, 50–55).

A series of studies have substantiated these findings, suggesting that the role of environmental treaty secretariats may be shifting from rather passive servants of a treaty’s negotiating parties to active and influence-seeking actors in their own right (Jinnah 2010; Jinnah 2011; Michaelowa and Michaelowa 2016).

A case in point is the UNFCCC secretariat. In 2009, Busch found that the climate secretariat was caught in a “straitjacket” of “formal and informal rules” imposed by the UNFCCC parties that “ruled out any proactive role or autonomous initiatives” and led to an “organizational culture that bars staff ... from exercising any leadership vis-à-vis parties and from assuming a more independent role” (Busch 2009, 261). Today this characterization no longer seems accurate, since a number of scholars consider that the climate secretariat is

“breaking out of its straitjacket” (Hickmann 2016; see also Michaelowa and Michaelowa 2016). In response to the failure to reach a globally binding post-Kyoto agreement on climate change in 2009 at COP 15 in Copenhagen (Dimitrov 2010; Giddens 2011), and confronted with a negotiation stalemate in the following years, the UNFCCC secretariat abandoned its passive stance. Instead, it took on a more proactive role by bringing nonstate actors that are supportive of the secretariat’s policy preferences into the UNFCCC negotiations (Chan et al. 2015).

However, while indication is growing that international treaty secretariats deliberately seek to stretch their mandate as a means to feed their own policy interpretations into the negotiations (Jørgens et al. 2017), only limited systematic and comparative knowledge exists regarding treaty secretariats’ influence over time. Although the lack of longitudinal studies has been pointed out in the past (Biermann et al. 2009), systematic studies that assess the influence of secretariats over time using primary data are still scarce. So far, the most ambitious studies have relied on qualitative interviews and secondary data (Jinnah 2014) or on descriptive statistical analyses (Michaelowa and Michaelowa 2016).

Methodologically, studies of secretariat influence are mostly based on document analysis and interviews with secretariat staff and other stakeholders. This approach is problematic, because secretariats do not officially state their preferences or strategies for influence. To preserve a reputation for impartiality on which their authority, and thus their potential influence, depends, treaty secretariats can be expected to downplay their role in international negotiations, thereby potentially leading scholars to underestimate their actual impact. Furthermore, IPA research based on interviews and document analysis carries the risk of conflating the impact of environmental bureaucracies with that of the international organization or the international regime they are part of (Biermann et al. 2009, 45–46; Jinnah 2011, 25).

Social-Network Theory (SNT)

SNT distances itself from the assumptions of both methodological individualism and methodological structuralism by focusing on the interactions between structure and agency. Actors are not regarded as islands, but as being embedded in social structures—hence, the structure and properties of the environment must also be placed at the center of empirical analyses. SNT’s focus on the embeddedness of actors in policy-related networks enables us to better address the proactive and alliance-building role of secretariats that recent studies have identified and to overcome some of the aforementioned methodological challenges that have confronted previous research.

Synthesizing different theoretical constructs in traditional SNT, Borgatti and Lopez-Kidwell have developed an underlying generic theory: the network flow model (Borgatti and Lopez-Kidwell 2011, 40). This model assumes that many variants of network theorizing, such as the seminal works by Granovetter

(1973), Burt (1982), and Coleman (1998), are elaborations of the same underlying theory. Resting on this “conceptual universe” (Borgatti and Lopez-Kidwell 2011, 44), the authors point out two kinds of relational phenomena: the *backcloth* and the *traffic* of a network. The *backcloth* provides the underlying infrastructure that enables or constrains the *traffic*, which again refers to what flows through the network (e.g., information on CCE). The backcloth here is made up of similarities, social relations, or Twitter activities concerning CCE under the UNFCCC. As such, it serves as the conduit through which the traffic or new information flows (Borgatti and Lopez-Kidwell 2011, 44). For example, information exchange is possible on the basis of co-membership in a convention body, which in turn can facilitate certain relations, such as trusting a co-member, which may further increase the probability of information exchange.

For the theoretical framework used in this article, this network theoretical perspective is important because it allows us to neatly distinguish between the structural conditions (e.g., the network density), the actual flows (e.g., information exchange concerning CCE), and the resources that enable and foster issue-specific negotiations (e.g., in-session workshops or more institutionalized working groups and standing committees). In this article, we extend the existing literature by using the flow model to examine latent influence, assuming that influence and information flows are rarely apparent and cannot be analyzed with direct questionnaires (Borgatti and Lopez-Kidwell 2011, 45).

From this theoretical perspective, treaty secretariats have the ability to act as intermediaries (Kent 2014, 209). They are in a position to create momentum and thus to influence the course and outcome of international environmental negotiations. Creating momentum can be seen as a specific way to have latent influence, by setting essential impulses to influence the stream of information. Hence, our analysis also goes beyond the existing literature by conceptualizing influence in relational terms. Influence-seeking actors are, despite “different interests and perceptions of problem(s) and solution(s), ... interdependent of each other,” and thus need to interact with other actors to acquire resources (Verweij et al. 2013, 1036–1037). The network flow model can explain differences in an actor’s (i.e., an individual or collective actor’s) success regarding their performance or achieved rewards. In this understanding, an actor acquires resources, opportunities, or ideas through various relations that directly increase or decrease the actor’s success (Borgatti and Lopez-Kidwell 2011)—for instance, with respect to shaping debates on the implementation of CCE under the UNFCCC.

The advantage resulting from an actor’s embeddedness in a relational neighborhood has been conceptualized in different ways. Where Granovetter (1973) argues that the network structure or “context” in which an actor is embedded matters, others stress the importance of the actor’s position. Burt (1982) developed such a conceptualization of positional advantage as a source of social capital. In his study on structural holes, he finds that an actor increases his or her social capital by being in a unique position, allowing only this actor to

connect several clusters in the network. By exploiting structural holes and acting as a broker between clusters, this actor has an informational advantage and increased leeway for maneuver (Christopoulos and Ingold 2015; Sabatier and Jenkins-Smith 1993). In this article we seek to contribute to this literature by applying its theoretical fundamentals to the empirical analysis of the latent influence of international treaty secretariats in climate education policy.

Methodological Approach

Methodologically, we implement a sequential mixed design, in which qualitative and quantitative data are gathered and analyzed in consecutive steps (Creswell 2009, 208), to allow both sets of inferences to be combined in a consistent “meta-inference” (Borgatti and Ofem 2011, 18). Whereas quantitative SNA is used to analyze the information flows and specific roles of actors therein, through qualitative participant observations we seek to gain insights into the behavior of treaty secretariats.

In the following discussion, we demonstrate how Twitter data can be analyzed with quantitative SNA to trace and visualize a Twitter network’s structure. We then demonstrate how we conducted qualitative participant observations to gain insights into the ways in which the UNFCCC secretariat facilitates multilateral negotiations and pushes education as a crucial topic under the UNFCCC.

Analysis of Twitter Data and SNA

In recent years, Twitter has increasingly been used for communication by politically influential individuals (e.g., Conover et al. 2011; Dubois and Gaffney 2014; Williams et al. 2015), as well as for information distribution and calls for action by nonprofit advocacy organizations (Guo and Saxton 2014). While participating in negotiations, we observed that Twitter has become an important tool for convention stakeholders to exchange information. We suggest that analyzing Twitter data with SNA can provide us with a more comprehensive picture of the UNFCCC secretariat’s role during multilateral negotiations.

Although its main fields of application continue to be in the natural and computational sciences (Borgatti et al. 2009; Lazer et al. 2009), researchers increasingly use SNA in the social sciences to analyze information flows in online networks (e.g., Ingold and Leifeld 2014; Smith et al. 2014). Following Ingold and Leifeld, we assume that SNA is well suited to studying the role of public administrations. Most importantly, we argue that using SNA allows us to assess actors’ influence on the basis of communication networks (Jørgens et al. 2016; Kolleck 2014; Kolleck 2016; Uhl et al. 2017; Xu et al. 2014).

Through Twitter’s openly accessible application program interface, it is not possible to obtain data from the past. Thus, for the purpose of our case study, we purchased nonprotected tweets from “discovertext” for the period from

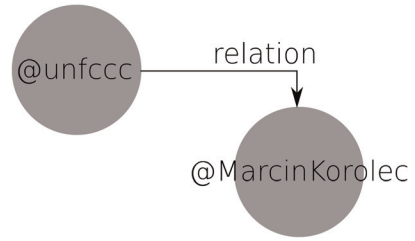


Figure 1

Left: One Example Tweet by the UNFCCC Secretariat During COP 20 Regarding Climate Education. Right: The Resulting “Graph” According to Our Approach.

2009 to 2014, covering the entire duration (2 weeks \pm 2 days) of six annual multilateral climate change conferences: UNFCCC COP 15, COP 16, COP 17, COP 18, COP 19, and COP 20.¹

On Twitter, information flows are represented by “tweets” (short messages). Twitter users can interact with each other in three basic ways: First, “retweets” (i.e., forwarding another user’s tweet without additional comments); second, “mentions” (a tweet that contains another user’s @username); or third, direct “replies” (a reaction to a specific tweet of another user). For SNA, we conceptualize Twitter users as nodes and their interactions as relations between the nodes. If Twitter user A retweets a tweet of user B, the direction of the arrow is from B to A; if user C mentions user D, the arrow points from C to D; and if user C is mentioned in a tweet that is retweeted by user A, then the arrow is directed from A to C (see Mejova et al. 2015). In the example tweet in Figure 1, @unfccc and @MarincKorolec are nodes in our network. Here, UNFCCC is “mentioning” Marcin Korolec, the Polish minister of environment.

To identify the actors with the greatest influence in Twitter communications, we applied the measure of eigenvector centrality. Eigenvector centrality is essential for detecting not only how an actor controls information flows, but also how an actor has access to the resources necessary for achieving an influential position (Ibarra 1993). It indicates how “prominent” an actor is in a network; that is, an actor is important if it is linked to other important actors. Hence, an actor who is connected to various other actors in the network does not automatically have a high eigenvector centrality. Instead, an actor’s eigenvector centrality is only high if the contacts also have a high eigenvector centrality. Such an actor may have only a few, but very important, relations (Leontief 1941; Seeley 1949). In contrast to betweenness centrality, which has frequently been used to study the centrality of actors through assessing the likelihood that

1. We acquired data according to filter criteria such as: #unfccc OR #article6 OR contains:unfccc OR article6 OR “article 6” OR “article six.” In total, we gathered a total of 1,599,162 tweets.

an actor will receive information (Smith et al. 2014, 163–164), eigenvector centrality is particularly suitable for larger networks, such as the social networks of online communities.

Participant Observations

Participant observations allowed us to substantiate the findings derived from Twitter data and review our assumptions on influence-seeking strategies. Data were collected through participation in negotiations and events between 2015 and 2016, as well as through the analysis of documents (official reports, declarations, and speeches). The essential advantages of this method are that researchers are able to record information in real time and to gain insights into how negotiations develop (see also Bogdan and Biklen 1992; Creswell 2009, 179; Merriam 1998).

We conducted participant observations during COP 21 in 2015 and at the Subsidiary Body of Implementation (SBI) sessions 42 and 44, in 2015 and 2016, respectively. A particular emphasis was placed on the events of “Education Day” (December 4, 2015, COP 21) and the Third and Fourth Dialogues on Article 6/Action for Climate Empowerment, which took place respectively during the 42nd and 44th SBI sessions (June 2–3, 2015, SBI 42; May 15–18, 2016, SBI 44; henceforth referred to as the “Third/Fourth Dialogues”). Observations were recorded using an observational protocol in which descriptive notes were separated from reflective ones. Coding of the data comprised four steps, following Creswell (2009, 181–186): First, a list of all topics that arose in the data was compiled. Second, similar topics were clustered together and abbreviated as a code. Third, the appropriate text segments were assembled according to the codes. And fourth, the list of codes was reduced and turned into larger categories. Finally, the data were assembled and compared.

Following this process, we analyzed the ways in which the identified categories and their interconnectedness addressed larger network-theoretical perspectives and how they related to our findings from the quantitative SNA. Through this mixing of methods, we aimed to cross-validate our data and gain a more encompassing and valid understanding of the role of the secretariat in the negotiations on Article 6.

Findings

Analysis of Twitter Data

In the course of preparing the data for this article, we isolated all education-specific tweets from our dataset, which encompassed a total of 1,599,162 tweets, by applying the keywords “education” and “article6” or “article 6,” plus the corresponding replies. In total, we found 3,232 mentions, 768 replies, 3,693 retweets, as well as 1,465 singular tweets that were neither retweets or replies,

Table 1

Total Number of Education-Specific Tweets Across the Yearly Conferences of the Parties (COPs)

<i>Year</i>	<i>COP</i>	<i>Total</i>
2009	COP 15	469
2010	COP 16	610
2011	COP 17	719
2012	COP 18	1,632
2013	COP 19	2,136
2014	COP 20	3,592
<i>Total</i>		<i>9,158</i>

nor contained a mention of another user. Table 1 shows the total number of tweets for each COP.²

The increase of Twitter data on education surrounding the UNFCCC over the years shows that CCE has been discussed increasingly on Twitter. This development is important because the growing number of tweets suggests the relevance of Twitter for scientific analyses. However, it is not an indicator that this topic has gained weight or of the influence of specific actors. Concurrent with the growing relevance of Twitter, the number of tweets on other topics has also increased.

To analyze the role of convention stakeholders with regard to education, we used the techniques of SNA. Table 2 presents the overall network analytical metrics of our dataset for each COP. *Centralization* refers to the average degree of centralization of all nodes. With a value close to 1, this measure already indicates that a small number of users with high centrality values dominate the flow of information in the Twitter network. At the same time, the networks show very low density values (*density* refers to the proportion of existing ties to the total number of possible ties) and high diameter values (i.e., the longest distance between two network participants). Both the density and the diameter assess the speed of information flows within social networks, and thus suggest that the nodes in the network are only loosely connected and that information exchange is rather slow.

To decide whether or not actors are influential, we used eigenvector centrality. A generally accepted numerical eigenvector centrality score does not exist. However, it can be assumed that an actor is central or influential if its

2. In our analysis, tweets, replies, mentions, and retweets were not weighted differently.

Table 2

Network Metrics of the Education-Specific Twitter Communication Across Different COPs

	<i>COP 15</i>	<i>COP 16</i>	<i>COP 17</i>	<i>COP 18</i>	<i>COP 19</i>	<i>COP 20</i>
Twitter users	183	336	520	1,079	1,383	2,605
Relations between users	147	330	487	1,524	1,471	3,734
Centralization	0.97	0.99	0.98	1	1	1
Density	0.0044	0.0029	0.0018	0.0013	0.0008	0.0006
Diameter	3	8	3	6	3	10

eigenvector value is higher than those of other actors within a given network. Hence, we assume that the five actors with the highest eigenvector centrality scores have the highest potential to have latent influence. Another indicator for influence can be seen in high eigenvector centrality scores over time—that is, during nearly all of the conferences analyzed for this article.

Figure 2 visualizes the Twitter network in relation to selected COPs. Nodes represent Twitter users that post, reply, or retweet a tweet containing the term “education,” “article6,” or “article 6”; the links between the nodes depict their relations.

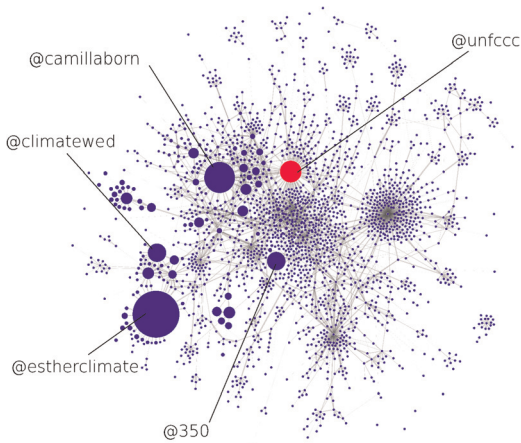


Figure 2
Education-Specific Twitter Network of All Selected COPs

Each node’s size is proportional to its eigenvector centrality, visualized using the Force Atlas 2 algorithm in Gephi.

The data were visualized using Gephi's Force Atlas 2 algorithm. To determine the nodes' sizes, we calculated the eigenvector centrality for each Twitter account and COP using R and the *igraph* package. If a Twitter account was not present during a specific COP, we set an eigenvector centrality of 0. Next we weighted the mean value for each account by its appearance at each COP. In this way we could take account of the fact that some Twitter accounts appear very prominently during one COP, but do not participate in climate education discussions in any other COPs. In Figure 2 and Table 3, only the five most highly rated nodes are labeled. These results suggest that the UNFCCC is one of the most dominant actors within the Twitter network, along with other actors active in the debate on climate change education (such as international organizations, individuals, and youth associations). Esther Agbarakwe (@estherclimate), who is Special Adviser to the Nigerian minister of environment, and Camilla Born,

Table 3

Top Five Accounts in Terms of Their Eigenvector Centrality Values

<i>Twitter Account</i>	<i>Self-Given "Account Description"</i>	<i>Eigenvector</i>	<i>Present at COPs</i>
@estherclimate	Founder & Director, Nigerian Youth Climate Coalition (NYCC), Social Climate Researcher, Climate Policy Expert and an Advocate for Sustainable Development.	0.133205	4
@camillaborn	@PowerShiftUK coordinator for the @ukycc. Particular interests include climate change, geography, theatre, politics and saving the world.	0.084862	3
@unfccc (former: un_climatetalks)	UN_ClimateTalks provides information and personal points of view on the latest developments in the climate change negotiations.	0.057648	4
@350	Join a global movement that's inspiring the world to rise to the challenge of the climate crisis. 350=safe upper limit of CO2 in atmosphere.	0.048233	3
@climatewed	#ClimateWednesday is weekly tweet conversations by @NigYCC on climate change and related matters that aim at building a climate-smart generation in Africa.	0.048098	2

Policy Advisor at E3G (NGO for sustainable development) are rated with higher eigenvector centralities than the UNFCCC. Both @estherclimate and @unfccc appeared at four of the six COPs.

Due to its relational position connecting different stakeholders, the UN climate secretariat was in an ideal position to make itself heard and affect the way in which other stakeholders related to each other in Twitter communications. This finding is also illustrated in Figure 3, which depicts the development of the education-specific negotiations over time. Not only do more and more actors engage in communication on education with the UNFCCC on Twitter, they are also increasingly well connected to each other. As noted, the UNFCCC account was present in the Twitter network during four of the observed COPs.

Overall, our analyses demonstrate the high potential of the climate secretariat to influence the communication flows on Twitter over time. While these findings enable us to draw conclusions on a structural level, they do not provide any insights into how the secretariat has exploited its favorable relational position to influence the debates on education. Thus, in a second step, we used participant observations to gain a better understanding of how the climate secretariat used its central position in issue-specific information flows to shape climate education programs within the UNFCCC.

Participant Observations

We divided secretariat activities concerning CCE into three large categories: normative leadership, facilitation, and outreach. The following results of our

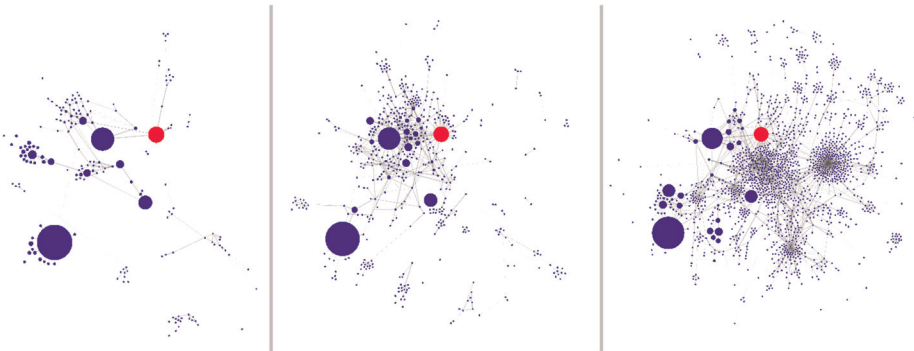


Figure 3
Development of the Education-Specific Twitter Networks over Time.

The Data from Figure 2 Are Separated into Parts. Left: COPs 15–16; Center: COPs 17–18; Right: COPs 19–20; Red dot: UNFCCC

Each node's size represents its eigenvector centrality for the whole time period.

observations demonstrate with which mechanisms the secretariat aims to exploit its favorable central position. First, its activities are aimed at providing *normative leadership*, which is substantiated by the following aspects (or codes):

- *Elevating the importance of Article 6 vis-à-vis other articles of the convention and linking education to the wider goals of the UNFCCC*

To elevate the importance of education as a tool for achieving the goals of the UNFCCC, the secretariat repeatedly stressed that Article 6 should be given a meaningful name that reflects its content and importance, not merely identified using the number of the article. In a speech delivered at the Third Dialogue (climateconference 2015a), former executive secretary Figueres stated that she had been “incredibly frustrated” that the term “Article 6” “doesn’t do justice to the importance of this article” (climateconference 2015a). She thus presented the participants of the Third Dialogue with the following challenge: “Can we commit that ... you will come up with something ... that is truly in accordance with what we are doing here?” (climateconference 2015a). The momentum created for the issue of education, training, and public awareness was well received among the participants of the dialogue, and pursuant to this strong impulse, the new term “Action for Climate Empowerment” was agreed upon (UNFCCC 2016c). Thus, by challenging a term that suggested a marginal role for CCE, the secretariat contributed to the equal linguistic treatment of educational issues vis-à-vis other issues under the Convention (climateconference 2015a; climateconference 2015b).

- *Setting goals for, and increasing ambitions regarding, the implementation of Article 6*

The secretariat aimed at increasing the ambition in relation to CCE by emphasizing that it should be mainstreamed into education at a general level. To this end, Figueres stressed that not only is improving the understanding of climate change in curricula critical, “but it needs to be embedded in the DNA of today’s very education concept” (UNFCCC n.d. [2015a]).

Second, the secretariat played an important role in *facilitating* and providing an enabling environment for discussing CCE activities, by

- *Defining the process of consultation and negotiations*
- *Providing UNFCCC-wide platforms for educational issues*

CCE was brought to the attention of all COP participants beyond the narrow “education community” through side events convened by the secretariat (UNFCCC n.d. [2015b]; UNFCCC 2016a).

- *Addressing challenges in the process, providing procedural support*

During the dialogues, stakeholders had the chance to voice their concerns and discuss the challenges that limit the implementation of Article 6. Among the challenges named were a lack of high-level political support for CCE, the need

for indicators of CCE, the insufficient cooperation between relevant actors, and the necessity to link CCE to the labor sector to improve capacity in adaptation and mitigation (UNFCCC 2015, 7–8). As a response to these concerns, the secretariat provided support by, for example, partnering with the UN Alliance on Climate Change Education, Training and Public Awareness in developing guidelines for national focal points for Article 6 (UNFCCC 2014b, 6); fostering high-level political support; and providing tools for the enhanced coordination of actors.

Third, an important conduit for secretariat influence was *outreach activities*, which comprised diverse aspects, including:

- *Joint initiatives with international organizations (IOs), thus connecting to wider governance frameworks*

At COP 18 in 2012, the secretariat launched the “UN Alliance” with six other IOs, among them FAO, UNEP, and UNESCO. By 2017 the membership of the UN Alliance had increased to thirteen IOs. The objectives of the UN Alliance were to build synergies between the IOs, support UNFCCC parties in their efforts regarding Article 6, and establish a link between the work of the member organizations and the UNFCCC (UNFCCC n.d. [2016d]). In this way, the UNFCCC secretariat fulfilled multiple functions:

It was at the center of the coordination of CCE in twelve other IOs. It also linked the activities under Article 6 to other governance frameworks, and thereby enhanced the visibility of CCE well beyond the climate change regime. Finally, it created incentives for UNFCCC parties to increase their actions with regard to Article 6, since these became relevant to their memberships in other IOs.

- *Focusing high-level attention on educational issues*

Rallying support from prominent actors, such as COP presidents or ministers of the environment, has been an important element in creating momentum for CCE. For example, Education Day was launched by the French ministers for environment and education, and COP 20 President Manuel Pulgar-Vidal gave a keynote speech at this event (UNFCCC n.d. [2015c]). This form of symbolic but high-level support has fostered awareness of activities under Article 6. Another illustration of the importance of high-level support is the Lima Ministerial Declaration on Education and Awareness Raising. It was initiated by Polish and Peruvian party representatives and promoted by former COP presidents.

- *Youth and subnational networks*

Just as the secretariat connected with the highest political level, it also garnered support for CCE at the grassroots level, which became manifest in its engagement with, for example, youth organizations and subnational networks. The secretariat created opportunities for young people to participate in COPs, in the forms of high-level youth briefings by the executive secretary or of

“Young and Future Generations Day” (UNFCCC n.d. [2015d]). Moreover, in an attempt to enhance the “public participation” component of Article 6, the secretariat used different means to address a transnational community of nonstate actors (United Nations n.d. [2015]; see also Hickmann 2016).

Discussion and Implications

In this article, we circumvented the problem of secretariats’ apparent impartiality by analyzing one secretariat’s behavior and strategies with SNT, SNA, and participant observations. We demonstrated that the UN climate secretariat possessed a potentially influential role and broker position, due to its relational position, connecting stakeholders from different subnetworks. The activities accompanying the ongoing negotiations and development of Article 6, which have steadily risen on the UNFCCC agenda, illustrate this influential role. Both participant observations and analyses of Twitter data confirmed that the UNFCCC secretariat strategically connected with other actors and seemed to be increasingly able and willing to transcend its formally restricted mandate, attempting to frame debates in line with its policy preferences. In the case of the education-specific negotiations, the secretariat showed an interest in extending and fostering educational aspects under the UNFCCC through the social media platform Twitter. In addition, the UNFCCC secretariat was successful in increasing the relevance of education in the UNFCCC negotiations. UNFCCC parties are now bound by the Paris Agreement to advance their actions on education.

The topic of CCE has provided the climate secretariat with opportunities to bring in its own values, problem perceptions, and policy preferences, thereby indirectly shaping the ways the fight against climate change is operationalized at global and national levels. More generally, focusing on a topic with relatively low political saliency has enabled the secretariat to gain autonomy from its principals, to actively seek a brokerage role in the CCE-related climate negotiations, and to increase its overall acceptance as a partially autonomous actor within the UNFCCC negotiations.

Information flows are rarely apparent and can often not be revealed with direct questionnaires. Hence, our study also extends the existing literature by using SNT and by conceptualizing influence in relational terms. Furthermore, we have contributed to the literature on SNT by applying it to a new empirical context and combining quantitative SNA of Twitter data with qualitative participant observations. Both the Twitter analysis and the participant observations lend further support to the argument that international treaty secretariats may be gradually moving from a rather technocratic and facilitative role to playing a proactive and influential part in international climate governance. In particular, we found evidence that with respect to CCE, the climate secretariat has increased its political influence by strategically establishing links to actors beyond the formal negotiation parties, and thereby gathering support for its preferred policy

outcomes. Together with normative leadership exerted directly vis-à-vis negotiators, the secretariat has played a key role in increasing momentum for education under the UNFCCC.

This brings us back to some of the mechanisms of influence laid out by Biermann and Siebenhüner (2009a) as well as by Jinnah (2014). We showed empirically that in the case of CCE, influence is likely due to the UNFCCC secretariat's social embeddedness and its unique position in global governance networks. In this way, we go beyond the existing literature in demonstrating empirically that the social embedding of secretariats plays a fundamental role—at least in the case of CCE. However, as our analysis shows, the relational conditions for secretariat influence can be further differentiated. In our case, the chances for influence were based, in particular, on four mechanisms employed by the UNFCCC secretariat: strategically connecting to other influential actors, enabling knowledge and communication flows, exploiting a unique position in global networks to diffuse the concept of education among many actors, and exerting normative leadership to accentuate concepts such as CCE and raise ambition for their implementation.

Although we showed that the UNFCCC secretariat plays a central role in shaping the educational agenda in the UNFCCC, our analysis was confined to the observations made during selected negotiations as well as the interpretation of Twitter data. Generalization of these conditions will require additional empirical evidence on the influence of treaty secretariats. Future research could extend these findings by collecting data on the information exchange and communication flows of convention stakeholders using network-analytical surveys at regular intervals, with the aim of capturing all relevant relations concerning the exchange of information over time. Although we have provided first empirical results regarding the role of the UNFCCC secretariat in education-specific negotiations, many questions still remain open. For example, it would be interesting to complement the results from SNA and participant observations by analyzing tweets and negotiation texts with qualitative methods such as qualitative content analysis or discourse analysis. What are the roles of the different convention stakeholders in advancing education as an agenda item?³ Have educational matters gained weight in these documents over time? To better understand how educational issues are used and shaped by the secretariats of multilateral conventions, further systematic empirical studies are urgently needed.

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3.3. IPAs as attention-seeking bureaucracies

3.3.1. Conceptual contextualization of the chapter “Environmental treaty secretariats as attention-seeking bureaucracies: The climate and biodiversity secretariats’ role in international public policy making”

IPAs are inherently autonomous and set their preference internally, as discussed in section 2.1.1. In many prominent studies, IPAs are understood to use this autonomy in a covert fashion, through “invisible governance” (Mathiason 2007), by “pulling strings behind the scenes”, or by discretely acting behind the “veil of legitimacy” of other actors (Depledge 2007). This chapter takes a different view and argues that IPAs are best understood as attention-seeking actors that aim to use their autonomy by openly seeking attention and support for their policy preferences. It contributes to theory building on the role of IPAs in global governance by further developing the concept of attention-seeking bureaucracy. It furthermore presents an explorative case study to illustrate the plausibility of the model. The two IPAs under scrutiny for this study are the UNFCCC and CBD secretariats, thereby shedding light on how IPAs aim to have an impact in the climate and the biodiversity regime.

The chapter builds on many of the previously presented conceptual and empirical insights and argues that, in order to become influential, international bureaucracies not only need to possess policy-relevant expert knowledge, but also exploit the complex global governance structures in ways to make state actors appreciate and ultimately adopt some of the bureaucracy’s policy positions (Jinnah 2014; Well et al. n.d.:5). In other words, in order to influence the outcomes of multilateral negotiations, IPAs need to actively and strategically seek to attract the attention of states to the problem definitions and policy prescriptions provided by the IPA (ibid.:5). The chapter is based in a research tradition that emphasizes policy outputs and IPAs’ autonomous contribution to the problem-solving capacity of the regime in which it operates (Barnett and Finnemore 2004; Busch and Liese 2017). In this view, IPAs make use of the output or performance dimension as a source of their legitimacy, drawing on an entrepreneurial policy style and their expert authority (Busch and Liese 2017; Knill et al. 2018; Tallberg and Zürn 2019). The chapter develops a heuristic framework for attention-seeking bureaucracies and identifies two pathways of attention-seeking: directly and from the inside, by supplying policy-relevant information to parties, chairs or presidencies of a conference; versus indirectly and from outside of the official negotiations, by facilitating exchange and building support for their problem definitions and policy recommendations via the transnational policy network.

As a first author of this chapter, my main contribution was to revisit and refine the analytical heuristic, which the four co-authors had proposed in a previous publication (Jørgens et al.

2017). This implied further specifying and adapting the heuristic framework for the analysis of policy making in international treaty systems and fleshing out bureaucratic authority and entrepreneurial leadership as the distinctively bureaucratic elements of attention-seeking behaviour (Well et al. n.d.:8–9). In addition, I refine the two pathways of attention-seeking by identifying sub-categories of internal and external attention-seeking (ibid.:10-13). For the internal dimensions, for example, I highlight the role of translation and issue-linkage as forms of normative influence. For the external dimensions, I specify institutional complexity and polycentricity as a conducive environment for IPAs to act as knowledge brokers and exert reflexive leadership, drawing on their embeddedness in transnational policy networks. I furthermore contribute the comparative case-study on the UNFCCC and CBD secretariats, drawing on qualitative content analysis of semi-structured expert interviews, relevant documents and participant observation. Qualitative expert interviews were gathered jointly with Barbara Saerbeck, which I complemented with further participant observations and document analysis.

The case study on the attention-seeking behaviour of the UNFCCC and CBD secretariats corroborates the proposed framework for modelling the role and social interaction of international treaty secretariats with regards to issue-specific negotiations of multilateral treaty conferences. The empirical study shows that international secretariats regularly act according to a logic of attention-seeking (ibid.: 29). It provides a wealth of empirical evidence for the different sub-types of two pathways of attention-seeking as employed by the UNFCCC and the CBD secretariat and thereby sketches some of the key topics under discussion in the relevant multilateral negotiations. It demonstrates that seeking the attention of policy makers both directly and internally as well as indirectly and externally are potent strategies of these secretariats to further the progress of global climate and biodiversity policy and governance (Well et al. n.d.:29). The analysis demonstrates in which way both secretariats show the tendency of leaving an attention-avoiding and neutral stance partially behind and gradually adopting an attention-seeking, outspoken behaviour, thereby deliberately stretching and surpassing the parties' definition of boundaries. It provides a conceptual and empirical confirmation that the behaviour of IPAs can alter knowledge and belief systems and enable political change (Barnett and Finnemore 2004). One example for this is seeking the attention of states through issue-linkage, which has proven to be an important dimension of normative leadership. Secretariats thereby organize support for new or emerging issues that often lie outside of the original mandate of the specific regime, as exemplified by the linkage between biodiversity and business or between climate and security (Well et al. n.d.:18, 27). These

insights provide a helpful conceptual angle from which to interpret the findings presented in section 3.2, which highlighted the issue-linkage between climate and education.

The analytical heuristic developed in the chapter draws on central findings from previous studies, including on the role of public administrations in national policymaking, which were further corroborated by research conducted for the comparison of the attention-seeking behaviour of the CBD and UNFCCC secretariats. One aspect should be highlighted in addition to findings on the actual attention-seeking behaviour. The heuristic emphasizes party delegates' limited capacity to process and prioritize information. Workman first made this argument for the national level (Workman 2015). The chapter defends that his argument is conceptually valid for the international policy process (Well et al. n.d.:6). While the argument is convincing from a conceptual standpoint, the changing nature of UNFCCC and CBD COPs provide further evidence that it is applicable to international policymaking. As conferences that were originally focused on intergovernmental negotiations on specialized topics, today the climate and biodiversity COPs have turned into enormous fairs for ideas, networking, lobbying and political showcasing. For example, while observer organizations have always been part of the climate conferences, the number of accredited organizations in the UNFCCC have rapidly increased, from 177 at COP 1 to 3178 at COP 27 (UNFCCC 2022). Scholars have consequentially put an emphasis on the increasing role of non-state actors in the climate and biodiversity regimes (Allan 2018; Hale 2016; Hickmann and Elsässer 2020; Jacobs 2016; Mederake et al. 2021). The growing number of actors joining the debate on what the COPs should achieve substantially and politically puts additional pressure on state negotiators to process and prioritize information.⁴ This makes a bureaucratic attention-seeking behaviour very likely, as it is conducive for IPAs that wish to feed information and expertise into the negotiating process. As the chapter has demonstrated by highlighting the relational factors of such an influence, what counts is not only the quality of the information international treaty secretariats hold, but the extent to which they manage to bring that information to the attention of the parties to multilateral negotiations and by strategically using their favourable position in governance networks (Well et al. n.d.:5). Unlike other non-state actors, however, secretariats seek the attention of policymakers by drawing on their bureaucratic authority. At the same time, they blur the line between politics (which for the sake of a metaphor Alford defines as “red”) and administration (“blue”) and enter into the “purple zone”, that breaks down this strict separation (Alford et al. 2017). Developing the concept of attention-seeking bureaucracies and

⁴ This finding was further corroborated by participant observations at COP 25 in Madrid and COP 27 in Sharm El Sheikh, which I attended as a party representative of the German delegation.

underscoring it with an empirical plausibility test, as this chapter has done, contributes to this line of research and opens a path for further studies that wish to analyse the role of IPAs as agenda-setters, policy entrepreneurs or policy brokers at the intersection of public policy analysis and public administration.

3.3.2. Environmental treaty secretariats as attention-seeking bureaucracies: The climate and biodiversity secretariats' role in international public policy making

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Environmental Treaty Secretariats as Attention-Seeking Bureaucracies: The Climate and Biodiversity Secretariats' Role in International Public Policy Making

Mareike Well, Helge Jörgens, Barbara Saerbeck, Nina Kolleck

1. Introduction

There is little doubt that international bureaucracies can be influential actors in world politics, as this volume emphasizes. The principal question asked by scholars of International Public Administration is “under which conditions and to what extent international bureaucratic influence emerges autonomously from political superiors” (Bauer and Ege 2016:1021) and what the causal mechanisms are through which this influence occurs. In this chapter we argue that international bureaucracies turn into influential actors at the international level not by covertly attempting to influence international processes, but by actively seeking the attention of states, which we illustrate with two case studies that zoom in on international climate and biodiversity politics. We start from a perspective of bureaucracies as institutions that have “a *raison d’être* and organizational and normative principles of its own” (Olsen 2006:3) and are an essential element of a political system’s decision-making capacity. This contrasts with a different perspective that regards bureaucracies primarily “as a rational tool for executing the commands of elected leaders” (ibid.). From this approach, autonomous bureaucratic influence occurs when bureaucrats hold policy-related preferences that deviate from those of their principals and exploit information asymmetries to shape political programs in accordance with their preferences (McCubbins, Noll, and Weingast 1987:247). Scholars have focused primarily on the conditions under which unintended agency slack occurs and on the design of incentive structures to effectively control it (Hawkins et al. 2006). We suggest complementing the principal-agent perspective, which conceives of bureaucracies primarily as attention-avoiding organizations, with a public policy perspective that emphasizes the attention-seeking character of those bureaucracies, especially when involved predominantly in the formulation rather than the implementation of public policies. We build on a research tradition that is mainly concerned with policy outputs and bureaucracy's autonomous contribution to the problem-solving capacity

of the political system as a whole, based on bureaucratic authority (Barnett and Finnemore 2004; Busch and Liese 2017). In this view, a certain degree of autonomy from governments and parliaments is seen as desirable and as a necessary precondition for bureaucracies to be able to "speak truth to power" and to fulfill their function as an independent political institution (Olsen 2006:3). The bureaucratic authority of attention-seeking bureaucracies emphasizes an entrepreneurial stance and is not primarily delegated from their principals (Green 2014:33; Well et al. 2020:108).

Against this backdrop, we argue that international bureaucracies actively step into the limelight, in order to feed their expert knowledge and policy preferences into the policy-making process of states. Our main argument is that international organizations and multilateral negotiations are not limited by a lack of information, but by the limited capacity of negotiators to process and prioritize the enormous amount of information available. Thus, to influence international multilateral negotiation outcomes, bureaucracies need to attract the attention of state negotiators instead of withholding information from them. In order to illustrate and explore this attention-seeking character of public administrations, we focus on international treaty secretariats as a specific type of bureaucracy that is almost exclusively involved in the early stages of the policy process. Hence, we aim to identify the strategies international treaty secretariats as attention-seeking bureaucracies employ in the early stages of the policy cycle. We describe two potential pathways through which international treaty secretariats may attract the attention of the state parties to multilateral negotiations: a) they can directly seek the attention of negotiators through close cooperation with for example the chairs or presidency of multilateral conferences; b) they can facilitate exchange and build up support for their problem definitions and policy recommendations outside of the official negotiation arenas.

This heuristic framework presented here is relevant not only for international bureaucracies but builds on recent research on the autonomy and influence of regulatory agencies in U.S. policymaking (Carpenter 2001; Workman 2015). What this latter research and our approach have in common is a focus on the role of public administrations during the early stages of the policy process, particularly in processes of problem definition, agenda-setting and policy formulation. With few or no implementation tasks, international treaty secretariats constitute ideal empirical cases for analyzing the mechanisms through which public administrations can have a (partially) autonomous impact on the definition of problems and the design of political programs. Our findings, therefore, will contribute to a recent body of literature studying the role of national as well as international public administrations as agenda-setters, policy

entrepreneurs or policy brokers at the interface of public policy analysis and public administration (e.g. Abbott et al. 2015; Jinnah 2014, in this volume: Bäckstrand and Kuyper; Hall; Hickmann et al.; Saerbeck et al). In order to put our heuristic framework to an empirical test, we conducted two explorative case studies, in which we analyzed the attention-seeking behavior of the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat and of the Convention on Biological Diversity (CBD) Secretariat. The case studies illuminate attention-seeking strategies of these secretariats during and between multilateral negotiations leading to the Paris Agreement on Climate Change in 2015. The next sections outline our heuristic framework, which is followed by an analysis of interaction strategies of the UNFCCC and CBD secretariats with the parties and non-party stakeholders of the respective conventions, using the heuristic framework. The analysis is based on qualitative content analysis of interviews conducted with members of the secretariats and party representatives of the conventions, and of documents that give insight into the interaction strategies of the secretariats, such as treaty texts, decisions and reports. Apart from validating our heuristic framework, the findings of our case studies are relevant for the literature on influence and legitimacy in global governance as well as for current climate and biodiversity governance.

2. Heuristic framework: international secretariats as attention-seeking bureaucracies

From its beginnings, public administration research has been concerned with the political control of bureaucracy and the degree to which bureaucracies can exert autonomous influence on politics and policies (Weber 2018). Normatively, this part of the public administration literature has debated "the appropriate range of discretion for bureaucrats in a democratic polity" (Frederickson et al. 2018:12). Analytically, it has focused on whether and to what extent bureaucracies exert an autonomous influence on the formulation and the implementation of public policies. Contrasting with Wilson's normative postulate of a "politics-administration dichotomy" (Wilson 1887), which implies a strict separation of politics and bureaucracy, empirical analyses have shown that "political control over bureaucracy" and "bureaucratic control over policy" are just two sides of the same coin (Frederickson et al. 2018:18–19). Alford et al. therefore refer to the blurred line between the political and administrative realms as a "purple zone representing where the "red" of political activity overlaps with the "blue" of administration" (Alford et al. 2017:752).

In the past two decades more and more scholars have started to treat international bureaucracies as autonomous and consequential actors and begun to empirically study their role in processes of international public policymaking (Biermann and Siebenhüner 2009; Hawkins et al. 2006; Reinalda and Verbeek 2010). So far, the most influential theoretical approaches for studying the (partially) autonomous role and influence of international bureaucracies are based on principal-agent models. Scholars adopting a principal-agent perspective argue that (international) bureaucracies hold preferences that deviate from those of their principals (i.e. states), thereby creating problems of oversight and control. Based on a distinction between “collective” and multiple” principals (Nielsen and Tierney 2003:247), they outline different potential mechanisms through which “agency slack” may occur in international organizations or multilateral treaty systems. According to this view, bureaucracies become actors in their own right, operating "behind the scenes" without openly articulating their preferences and policy positions (Arrow 1985; Hawkins et al. 2006; Mathiason 2007). By withholding policy-relevant information from decision-makers, they may create or reinforce information asymmetries which in turn are the basis for their autonomous influence. They may also exploit constellations characterized by multiple principals by strategically aligning with selected states whose policy preferences are similar to those of the secretariat (Dijkstra 2017).

This chapter builds on these approaches by stressing the importance of both the possession of policy relevant information and of strategies of alliance-building as the principal sources of autonomy and influence of international bureaucracies. However, our argument differs from these approaches in the way we conceptualize the exchange of policy relevant information between international bureaucracies and negotiating parties. Our main argument is that international organizations and multilateral negotiations are not limited by a lack of information, but by the limited capacity of negotiators to process and prioritize the enormous amount of information available. Thus, in order to influence negotiation outcomes, international secretariats need to attract the attention of state negotiators instead of withholding information from them. Unless they actively feed their policy-relevant information, problem definitions and policy preferences into the multilateral negotiations, information provided by other, competing, organizations will prevail.

Consequently, the possession of policy- or process-relevant expert knowledge alone does not turn international bureaucracies into influential actors at the international level. There are two main reasons for this. First, in multilateral negotiations, the alleged informational advantage of treaty secretariats vis-à-vis the representatives of member states is often much smaller than

principal-agent models hold. National delegations typically consist of experienced negotiators with extensive substantial and procedural knowledge in the issue area under negotiation. They are part of a domestic ministerial bureaucracy that might be complemented with expert consultants, which gives them the same advantages of issue-specific expertise, procedural knowledge and permanence that principal-agent theories see as the main advantage of bureaucratic agents (Barnett and Finnemore 2004; Biermann and Siebenhüner 2009). Thus, in multilateral treaty negotiations the principals of international bureaucracies are mostly themselves national bureaucrats rather than elected politicians, since the latter typically join multilateral conferences only at the final stage of negotiations (the ‘ministerial segments’) (Depledge 2005:194). There may even be tough competition between international and national bureaucrats when it comes to defining processes and policies. Who ‘wins’ such a race for defining key policy and procedural choices may depend more on the individual capacities (such as staff time) national and international bureaucrats can invest into a given subject matter, rather than on the availability of information. The dependence of national bureaucrats on the expert knowledge provided by secretariats is therefore limited and varies according to context (for example on the salience of the topic in national bureaucracy, which again determines how much staff time is allocated to a given matter). While information asymmetries may play an important role in on-the-ground operations of large international financial organizations like the International Monetary Fund (Cox and Jacobson 1973), they are less relevant for treaty secretariats with relatively small staff and few implementation tasks (Biermann and Siebenhüner 2009). Second, the early stages of the policymaking process – problem definition, agenda-setting and policy formulation – are generally characterized by an excess rather than a lack of policy relevant information, including diverging definitions of the underlying problem and competing proposals for feasible solutions (Workman 2015). Thus, even where information asymmetries between treaty secretariats and national delegation exist, they normally don’t imply that negotiators feel dependent on the policy-relevant information held by secretariats and that they will actively seek this information. We therefore expect negotiators, especially those with strong domestic environmental bureaucracies, to recur to secretariat information especially in those cases where the secretariats build close relations to national delegations and actively promotes this information. What counts is not only the quality of the information international treaty secretariats hold, but the extent to which they manage to bring that information to the attention of the parties to multilateral negotiations.

We thus argue that, in order to become influential, international bureaucracies not only need to possess policy-relevant expert knowledge, but also exploit the complex structures and actor

constellations of international organizations or multilateral treaty systems in ways to make negotiators take notice and adopt some of the bureaucracy's policy positions (Jinnah 2014) (Saerbeck et al. this volume). In other words, in order to influence the outcomes of multilateral negotiations, international secretariats need to actively and strategically seek to attract the attention of the negotiating parties to the problem definitions and policy prescriptions provided by the secretariat. Workman developed this argument for the domestic policymaking process: "If the supply of information yields bureaucratic influence, then bureaucracies must be willing to be attention-seeking and attention-attracting organizations, rather than the backroom dealers of subsystem lore." (Workman 2015:3) In this chapter, we defend that this argument also holds for the international policy process.

We argue that international treaty secretariats may best be conceived of as attention-seeking bureaucracies. We develop a heuristic framework that includes two paths by which international secretariats may try to attract the attention of negotiating parties to their own problem definitions and policy recommendations: a) they may try to supply policy-relevant information directly and from the inside by cooperating closely with a convention's chairpersons¹, its presidency, or with individual groups of countries, trying to use these as multipliers; b) they may attempt to build support for their preferred policy outputs by engaging with and communicatively connecting actors within the broader transnational policy network that surrounds multilateral negotiations in order to exert pressure on negotiators from the outside. In both cases, international treaty secretariats act as attention-seeking policy advocates rather than "undercover agents" who try to operate out of the negotiators' sight. The two strategies are not mutually exclusive and can be employed in combination. International treaty secretariats' attempts to influence international policy outputs may be motivated either by self-interest (Niskanen 2017) or by professional ethic reflecting what Barnett and Finnemore describe as "conscientious experts trying to do their job" (Barnett and Finnemore 2004:72). Whereas bureaucratic self-interest is usually linked to the survival of international bureaucracies and to the expansion of their mandates as well as their human and material resources, research on international environmental secretariats has shown that international bureaucrats often draw their motivation from deeply held policy beliefs combined with a professional dedication to the overall goals and objectives of their organization or treaty system (Bauer 2006; Depledge 2005:65). Any combination of bureaucratic self-interest and professional ethic is also possible, for example when the expansion of mandates is rooted in a treaty secretariat's holistic vision of a global policy problem and its potential solutions (Well et al. 2020).

2.1 Treaty secretariats as attention-seeking bureaucracies

International secretariats are created to support governments in subsequent rounds of issue-specific negotiations within multilateral treaty regimes, which are mainly concerned with the adoption of new treaty provisions and the revision and refinement of existing ones (Gehring 2012:51). In these treaty systems, responsibilities for implementation remain mostly at the national level. Thus, if international treaty secretariats wield autonomous influence, we can reasonably expect this influence to occur primarily at the stages of problem definition, agenda-setting and policy formulation. At these stages of the policy process, information asymmetries arguably play a secondary role. The limiting factor is not scarcity of policy-related knowledge, but rather the limited capacity of decision-makers to pay attention to the abundance of problem- and policy-relevant information. As Workman in his study on bureaucratic influence in US policymaking argues, “(i)nterinformation not provided by one entity will assuredly be supplied by another as organized interests, federal bureaucracies, and policy makers engage in the struggle to define the contours of debate” (Workman 2015:59). Instead, bureaucracies compete with other organizations in the provision of policy-relevant information to elected officials.

This constellation – multiple providers of policy-relevant information and a strictly limited capacity for attention on the side of decision-makers – is even more pronounced in multilateral treaty systems. Here, treaty secretariats compete with a multitude of domestic bureaucracies with strongly varying interests and preferences, other international organizations, scientific organizations or non-governmental organizations (NGOs), to name just the most active participants in global policy debates. In order to become influential, international secretariats need to actively compete for the attention of negotiators rather than trying to operate invisibly and underneath their radar. Moreover, due to negotiators’ attention limits, international secretariats are more likely to attract the attention of national delegations if their problem definitions and policy preferences coincide with those brought forward by other organizations such as NGOs or scientific organizations.

Recent studies in the fields of IR and IPAs have implicitly taken this attention-seeking character of international secretariats into account by focusing on their cognitive influence on international policy outputs (Biermann and Siebenhüner 2009). On the one hand, Depledge shows that treaty secretariats may provide policy relevant information to negotiators by closely cooperating with the chairs or presidency of multilateral negotiations (Depledge 2007). On the other hand, Jinnah analyzes how treaty secretariats position themselves at the center of

transnational communication flows that surround official multilateral negotiations, thereby providing policy-relevant information to negotiators from the outside (Jinnah 2014; Jörgens, Kolleck, and Saerbeck 2016). In a similar vein, Abbott, Snidal and colleagues (Abbott et al. 2015; Abbott and Snidal 2010) conceive of international public administrations as “orchestrators”. Rather than trying to adopt and implement binding intergovernmental treaties, international organizations and their bureaucracies acting as orchestrators follow a complementary strategy of “reaching out to private actors and institutions, collaborating with them, and supporting and shaping their activities” in order to achieve their regulatory goals and purposes (Abbott and Snidal 2010:315). Both approaches are similar to our notion of attention-seeking bureaucracies in that they expect IPAs to actively engage in issue-specific policy discourses within and beyond the intergovernmental decision-making that stands at the core of international organizations or multilateral negotiations.

However, studies of IOs as orchestrators do not always draw a clear distinction between the broader IO and the IPA as the permanent administrative body within it. In particular, they often fail to demonstrate that the outreach to private or sub-national actors that characterizes orchestration is an autonomous initiative of the international bureaucracy and not mandated or encouraged by the IO’s member state governments. If international bureaucracies mostly act in line with their principals’ preferences, that is, if their IO’s plenary or council back their efforts to orchestrate the individual actions of a wide range of transnational actors, then the distinction between IO and IPA agency becomes blurred. By focusing on international treaty secretariats, that is, international bureaucracies that are not an integrative part of a broader international organization, we hope to be better able to explore the strategies that IPAs employ to provide policy relevant information to decision-makers.

In the following, we describe two potential pathways through which international treaty secretariats may attract the attention of the official parties to multilateral negotiations: a) they can directly seek the attention of negotiators through close cooperation with the chairs or presidency of multilateral conferences or with selected negotiation parties who share the problem definitions or policy preferences of the secretariat; b) they can facilitate exchange and build up support for their problem definitions and policy recommendations outside of the official negotiation arenas.

When looking at these two pathways of influence, one could easily be reminded of lobbying strategies that NGOs or business organizations might also use to shape the political process according to their political goals. In some ways, these strategies may also resemble that of

nation states, who also build alliances with other authoritative actors in order to further their political goals. So, what is the distinctively bureaucratic element of such attention-seeking behavior? In fact, there is an important distinction between the influencing strategies that state and non-state stakeholders on the one hand may use and the attention-seeking strategy of IPAs on the other. IPAs employ this strategy based on their bureaucratic authority, which is the most important source of their influence. The bureaucratic authority IPAs enjoy sets them apart from other actors, since it helps their “voice be heard, recognized, and believed. This right to speak credibly is central to the way authority produces effects“ (Barnett and Finnemore 2004:20). Bureaucracies can be seen as the embodiment of rational-legal authority, which is a general, impersonal form of ruling that relies on legalities, procedures, and rules that offer order, classification and a division of labor (ibid.) Apart from this rational-legal foundation, IPAs furthermore enjoy legitimate authority due to parties’ delegation of tasks to them, the shared norms or the ‘morality’ which they defend and their distinctive expertise, which can include an institutional memory concerning the treaty convention, technical and scientific, administrative and procedural knowledge as well as normative and diplomatic knowledge (Barnett and Finnemore 2004; Bauer 2006; Busch and Liese 2017; Herold et al. 2021; Jinnah 2014; Littoz-Monnet 2017; Weber 2018; de Wit et al. 2020). The effectiveness of bureaucratic authority based on these sources may further be enhanced by an IPA’s display of leadership. Apart from the rational-legal authority of bureaucracies, Weberian social science points out the importance of charismatic leadership that is deliberately used to enhance a bureaucracy’s authority and thereby leeway of action. The leadership component extends the concept of bureaucratic authority and adds a political element that goes beyond the mere technocratic role of a bureaucracy (Bauer 2006; Weber 2018, see also section 2.3). We argue that attention-seeking treaty secretariats indeed make use of their bureaucratic authority understood as an entrepreneurial stance vis-à-vis their principals (Green 2014:33; Well et al. 2020:108).

2.2 Seeking attention from the inside: treaty secretariats’ cooperation with chairpersons of multilateral negotiations

The first pathway has been described in detail by Depledge (2007) who argues that treaty secretariats and the chairpersons of multilateral negotiations are endowed with complementary resources, i.e. political authority in the case of the chairperson and policy-relevant expertise as well as a certain distance to national governments and their domestically rooted preferences in the case of the secretariat. By combining their respective resources, secretariats and chairpersons can have considerable influence on the outcomes of multilateral negotiations. The

secretariat assists the chairpersons in observing the lines of conflict that emerge between national delegations and propose compromises capable of overcoming policy divides and bringing negotiations to a successful end. Often this can be done through a re-framing of the policy problem at stake or by bringing in new policy solutions that are more acceptable to reluctant negotiation parties than previously debated ones. Due to their expertise and their permanent monitoring activities, secretariats can provide valuable information to the chairs. Furthermore, due to their mandate as neutral and impartial actors, secretariats often refrain from claiming credit for their input. Chairs are free to use the input provided by secretariats in any way they intend. By taking on the ideas provided by the secretariat as their own, chairs endow them with the legitimacy needed to be heard by other negotiators.

Secretariats gain a privileged channel of communication to negotiators. By communicating with the chairs of convention bodies, who again directly address the negotiating parties, secretariats can significantly increase the probability that they are heard by negotiators, albeit in an indirect way. As Depledge (2007: 62) summarizes, "Chairpersons and secretariats are (...) locked into a mutually interdependent relationship: the Chairperson often relies on the secretariat to provide the intellectual resources needed for him/her to exercise effective leadership, while the secretariat depends on an able Chairperson to provide the veil of legitimacy needed for it to input productively into the negotiation process." This symbiotic relationship does not mean that the negotiating parties are not aware of the secretariat's policy-shaping role in this process. In a large-scale survey we conducted in 2015 and 2016 among the participants of UNFCCC and CBD COPs (see also the chapter by Saerbeck et al. in this volume), we found that the two secretariats were not only trusted as providers of procedural information, but also of policy-related expertise.

Different variations of 'supplying information from the inside' into the negotiation process are conceivable. These variations can be understood as subcategories of the internal pathway to gain influence described here. For example, when supplying policy relevant information directly to chairs, a presidency, or parties, secretariats also contribute to *finding compromises* between opposing views. Moreover, it may be less important to supply additional information at a given time during or between negotiations, than to *translate* the content of information into policy-relevant knowledge products, options for negotiation texts or tactics. Information can be translated or applied to a political problem in such a way that it reflects the preferences of the secretariat. Such a translation activity goes beyond the pure passing on of information but can be as seen as shaping assumptions as bases for action of policy makers (Bijker and Latour

1988). Translation actions in the negotiation facilitation can therefore shape both the policy options and the policy discourses that give negotiations a certain character or direction. Another, similar possibility is for secretariat staff to propose an *issue-linkage*, i.e. propose to look closely at a causal connection between one issue of the respective treaty, such as climate change or biodiversity, with an issue that is outside the realm of the treaty, such as health or security (Hall 2016:6; Jinnah 2014:67). Translation and issue-linkage are forms of normative influence in that they can shape procedures, frame issues and define participation (Biermann and Siebenhüner 2009). Finally, treaty secretariats may even go so far as to initiate the *production of information* they want to share with parties, for example by commissioning certain studies.

2.3 Building support from the outside: treaty secretariats as transnational knowledge brokers

Multilateral environmental agreements are characterized by a multi-sectoral and a multi-actor network structure. They can be described as “a system of continuous negotiation among nested governments at several territorial tiers – supranational, national, regional, and local – as the result of a broad process of institutional creation and decisional re-allocation” (Marks 1993:392). They belong to the system of global environmental governance, which is marked by increasing complexity, polycentricity and institutional fragmentation (Raustiala and Victor 2004; Zelli and van Asselt 2013). These dynamics are also driven by a proliferation of international institutions and treaties, all of which are managed by IPAs (de Wit et al. 2020). Based on the phenomenon of ‘multi-level reinforcement’ which was first discussed with regards to the EU (Schreurs and Tiberghien 2007), Ostrom claims that the multi-level and multi-actor systems of global climate governance propose important benefits in terms of fostering innovation, learning about policy alternatives, and achieving “more effective, equitable and sustainable outcomes at multiple scales.” (Ostrom 2010:552). Thus, as Jänicke et al. point out, it is a system which offers an “opportunity structure” in which skilled strategic action would allow an actor to mobilize support for ambitious policy objectives at different levels of governance and by a broad range of actors (Jänicke 2017). One dimension of this opportunity structure are emerging governance voids, which can result in shifting actor constellations and rules of policy making (Hajer 2003). Secretariats are well suited to fill such governance gaps, since their “unique position in governance networks [...] allows them to operate in this political space” (Jinnah 2014:48).

Attention-seeking treaty secretariats can strategically use this multi-level structure to help advance negotiations by acting as knowledge brokers that link broader transnational policy discourses to specific negotiation items. By linking actors that were disconnected before, this strategy may also lead to a form of issue-linkage, i.e. to a connection of a specific negotiation item with the broader policy concern of an external actor (Hall 2016:6; Jinnah 2014:67). The fact that IPAs can draw on their network position for their authority results from the diversified environmental governance architecture, where networks between organizations and actor types are increasingly important for effective governance (Jordan et al. 2015; Zelli 2018). Secretariat staff build up a dense web of relationships within and beyond their treaties and contribute to organizational learning (Kolleck et al. 2017; Varone, Ingold, and Fischer 2019). A similar role of bureaucracy has been observed at the national level by Fernandez and Gould (1994) in a study of the U.S. health policy domain. This study finds that "occupants of (...) 'brokerage positions' will be influential in policymaking to the degree that they facilitate communication among actors who would not otherwise interact" (Fernandez and Gould 1994:1482). In a similar vein, Carpenter identifies organizational centrality, in this case defined as close ties with a large number of public and private organizations in a policy network, as one of the key factors that enable public administrations and hence treaty secretariats to play a brokerage role in issue-specific policy discourses (Carpenter 2001). In a comparative study of three U.S. federal bureaucracies, he shows that bureaucratic autonomy and influence increase with their centrality in broader issue-specific actor and communication networks. Providing linkages, knowledge sources (and even knowledge themselves), public authorities can act as intermediaries and hence, knowledge brokers to promote issues and ensure cooperation in a specific issue discussed under a given framework (Christopoulos and Ingold 2015). In particular in situations of pending stalemate in multilateral negotiations, secretariats can try to bring a new dynamic into the negotiation process by extending the policy debate to external actors² who share the secretariat's general preference of a positive negotiation outcome as well as its specific problem perceptions and policy preferences. By deliberately extending issue-specific policy debates beyond the inner circle of official parties to multilateral negotiations (i.e. national delegations), we expect secretariats to try to build transnational support for the policy issues at stake, thereby raising pressure from the outside on national governments to continue and successfully conclude negotiations.³ An important precondition for this second strategy is a strong embeddedness and centrality of international secretariats in the broader transnational policy networks that surround treaty negotiations. Concerning the engagement with external actors for the purpose of attention-seeking, bureaucratic leadership particularly at the executive level

becomes important. Biermann and Siebenhüner conceptualize ““strong leadership” as the behavior of the leader of an international bureaucracy that follows a style of leadership that is charismatic, visionary, and popular, as well as flexible and reflexive” (Biermann et al. 2009:58, see also Hall, this volume). Leaders’ flexibility and openness to change and the ability to adapt their goals, international processes and the organizational structure to perceived external challenges in learning processes are also considered to be essential for strong leadership in international bureaucracies (Biermann et al. 2009; Hall and Woods 2018).

In sum, we argue that convention secretariats are likely to employ a dual strategy to directly and indirectly draw the attention of negotiators to their own policy-specific knowledge and information. Convention secretariats may act either *directly and internally* via the chairpersons, presidents or parties of multilateral negotiations or *indirectly and externally* via the broader transnational policy network that has evolved around the respective treaty. They may also opt for a combination of both strategies. The following case study of the activities of the CBD and the UNFCCC secretariats explores these potential pathways.

3. The secretariats of the United Nations Framework Convention on Climate Change (UNFCCC) and of the Convention on Biological Diversity (CBD)

In order to better understand the role of international treaty secretariats in issue-specific multilateral negotiations, how they interact with and whether they attract the attention of member states (parties to the convention) and non-party stakeholders, this section follows an inductive and exploratory approach. Methodologically, we drew on twenty-one qualitative semistructured expert interviews with staff of the UNFCCC and CBD secretariats from different hierarchical levels and analyzed documents of UNFCCC and CBD negotiations using qualitative content analysis. Furthermore, we drew on our participant observations of these negotiations between 2014 and 2022. Interviews with the UNFCCC secretariat are marked interviews ‘1-7A’, with the CBD secretariat interviews ‘1-14B’ throughout the analysis. Relevant documents include statements issued by the secretariats, party submissions, published papers and interviews related to the multilateral treaty conferences. These documents were analyzed as representative material of what the secretariat supports to be its key message and mode of interaction with other actors. Semi-structured interviews were chosen as an adequate tool for conducting expert interviews, since they can detect both specific as well as context-related knowledge and thereby address both the practical and discursive consciousness of the

interviewees (Meuser and Nagel 2009). Specific knowledge relates to an expert's own actions concerning the policy process in the CBD and the UNFCCC, while context-related knowledge refers to the actions of others, such as stakeholders active in the wider context of the CBD and the UNFCCC. Interviewees were queried, among others, about the role and activities of the secretariat during and between negotiations as well as their relationship to the respective chairpersons, party delegates and non-party stakeholders and their motivation for being engaged in the multilateral negotiations.⁴ Since interviewees naturally report their own perceptions of events, validating these with participant observations and document analysis was an important additional step (Creswell 2009). The interviews were transcribed, anonymized and combined with the collected documents. The qualitative data gathered from the documents and interviews was analyzed using inductive techniques of qualitative content analysis following Mayring and Frenzel (Mayring and Frenzel 2014). The process of coding followed the rules of qualitative content analysis. Codes were related to the way the international treaty secretariats report to interact with other stakeholders and to shape the global agenda concerning the CBD and the UNFCCC.

The following section analyzes the biodiversity and the climate secretariats' roles within the multilateral negotiations and their use of interaction strategies. Firstly, we find direct attention-seeking strategies, which rely on the internal cooperation between the secretariats and the chairpersons, COP presidency or party delegates. Secondly, we find indirect attention-seeking strategies, which secretariats employ by engaging with a wide range of actors in the broader transnational policy debates surrounding the formal climate and biodiversity negotiations.

3.1 Direct attention-seeking within multilateral negotiations

3.1.1 UNFCCC

The climate secretariat originally has a very specific and rather technocratic mandate to support the UNFCCC negotiations, which are “party-driven” (A1-A5; A7; UN 1992b). Climate negotiations tend to be contentious and have in the past at certain times been on the verge of collapsing, while at the same time being under the pressure of delivering an ambitious result considering the potential for irreversible and catastrophic change (Depledge 2005:20; Kinley 2017). Given this situation – highly politicized, stalling negotiations in the context of high political expectations to deliver an ambitious result – the climate secretariat has in the past drawn attention to its ability to perform tasks that go beyond its classical role of acting “like a secretary” in the background (1A, 6A, 7A, Well, et al. 2020). In 2021, former executive

secretaries and senior staff of the climate secretariat published a journal article entitled “Beyond good intentions, to urgent action: Former UNFCCC leaders take stock of thirty years of international climate change negotiations”. One of their key messages aims to drive the attention of policymakers towards what they, according to their experience as former executive staff, deem necessary:

“‘Business as usual’ in climate change negotiations will mean failure to avoid dangerous climate change. Fuller engagement by leaders is crucial to ensuring an all-of-government approach. The UNFCCC process should address its unwieldiness and act in line with the urgency of the issue.” (Kinley et al. 2021:593). Although this was published by the group of former executive secretaries, it is in line with the increasingly vocal and attention-seeking role the climate secretariat assumes.

This section will sketch the evolution of the climate secretariat’s attention-seeking behaviour in the context of the negotiations leading up to the Paris Agreement in 2015 and during the ‘post-Paris’ years. In this section we aim to strengthen our argument that the climate secretariat is not only the organizational backbone to the negotiation process, but increasingly draws attention to its problem-solving strategies and substantive preferences, thereby contributing to agenda setting, policy drafting and reaching consensus among states. Such actions can be directed to the conference presidency, chairpersons or delegates directly.

Crafting the Paris Agreement

When trying to explain what enabled the negotiation of the Paris Agreement at the 21st Conference of the Parties (COP 21) in 2015, studies point to factors like civil society mobilization (Jacobs 2016), great power politics (Milkoreit 2019), leadership (Eckersley 2020) and institutional design (Allan et al. 2021), but also to the careful management and the „diplomatic process and entrepreneurial leadership by host governments“ as well as to their „timing, pacing, sequencing and coordination of sessions, as well as the strategic rhetoric“ (Dimitrov 2016:9). While these actors and factors have been credited for the successful negotiations, it is worthwhile to also take into the account the contribution of the climate secretariat, despite its technocratic mandate. Allan et al. (2021, p. 25) identify certain entrepreneurial actors that were crucial for finalizing the Paris Agreement. Apart from the role of the COP presidency and states with political clout, they point to the entrepreneurial role played by the secretariat:

“The strategies of specific actors in the negotiations (...) proved crucial to securing the final components of the deal: the 1,5°C target and the ratchet-up mechanism. These were key

demands of vulnerable countries, and crucial for agreement. Without their sign-on, a Copenhagen-level fiasco may have occurred. However, others played an important role in steering parties toward common ground. Here, therefore, we highlight the entrepreneurship of several actors for the overall design: the French COP Presidency and the UNFCCC Secretariat, US and Chinese diplomats, and those in the High-Ambition Coalition.” (Allan et al. 2021: 15)

This entrepreneurial role of the climate secretariat is also corroborated by interviews with secretariat staff. One member of the secretariat’s staff describes its role during negotiations by way of comparison: “The UNFCCC is very different from other processes. If you look at the Security Council, it is the Parties who bring the text and [...] negotiate around that. [...] In the Climate Change Convention, [...] the secretariat plays a big role [...] [in] preparing all the drafts” (1A). Relying on their expertise and experience, the climate secretariat acts as an intermediary between parties’ interests on the one hand, and the chairs’ and presidency’s organizational tasks on the other hand, who are in charge of compiling and presenting a draft decision text reflecting these positions (interviews 1A, 3A, 7A). To this end, secretariat staff seek their attention by offering procedural advice as well as substantive information and highlight possible areas of compromise or “landing zones”, i.e. the likeliest compromise on core issues, all of which help parties when drafting decision texts (see also Allan et al. 2021: 16). Secretariat staff were able to form trustful personal relations and to gain the attention of delegates, as one member of staff recalls: “Because of the personal relationships that were built during the process, at this working level you stop seeing people as the guy from France, the guy from Brazil, but we are just the guys that are trying to [...] draft a text. [...] I would sit with the people, not with the countries” (1A, similarly 3A, 7A). Such personal relations also enable the secretariat to foster the trust of parties into the UN’ multilateral process: “Trust breaks down for many reasons. We try to bring people together, if governments walk out of a session because of loss of trust in the process or each other. Usually, the secretariat tries to meet with them, [...] and create a frame where people talk to each other again” (4A).

What is more, in cases of technical or highly politicized issue areas, such as climate change mitigation, the negotiations may be “so complicated that chairs do not have any other option but to go along with the drafts they receive” by the secretariat (1A). Usually, such a secretariat-prepared text would be tabled by the chair, thereby combining the secretariat’s policy-relevant expertise with the chair’s political authority, who can together gain considerable influence on how negotiations develop. However, the following example shows that the climate secretariat is able to play this role on its own. The negotiations leading to the Paris Agreement combined low levels of trust between negotiation parties and a high degree of politicization and

technicality of the agenda items, leading to long and barely readable draft decisions, containing multiple unresolved issues and options (1A, 7A; Dimitrov 2016). In this situation, “the visions were so stark, that you didn’t have a possibility to work on a text tabled by any party” and the “trust was so bad, that not even the chairs were asked to do it” (1A, see also Allan et al. 2021: 16). When referring to a section of the text that was later included into the Paris Agreement, this staff member reports that “The decision was entirely drafted by us” (1A). This account shows that the secretariat was able to directly contribute to the final text of the Paris Agreement, having drawn attention to its relevant expertise and earned trust of parties to assist in this way beforehand.

While this may not be the usual course of how negotiations are organized as it exceeds the designated role that the climate secretariat has in multilateral negotiations, this example does show that circumstances such as high politicization and technicality and low trust between states have been conducive for the climate secretariat as an attention-seeking bureaucracy. It gained the attention of chairpersons, the conference presidency and negotiation parties by reducing the complexity of technical negotiations, synthesizing positions and offering a line of compromise. It was then possible to feed procedural advice, substantive information and even draft text into the process. Such an attention-seeking behavior enabled the climate secretariat not only to contribute to the successful completion of negotiations, but to leave a fingerprint on the outcome of the final text, as in the case of the Paris Agreement.

Supporting the post-Paris architecture

While this type of direct attention-seeking before and after COP 21 could be observed by means of participant observation and expert interviews, it was a behavior that stayed within the confines of the relationship between parties and the secretariat and was not openly displayed beyond this professional environment. However, since 2017, the secretariat has published annual reports, in which it reflects on its changing role vis-à-vis parties and non-party stakeholders, which is marked by a focus on implementation and a stance that acknowledges a more visible role for itself: “While the secretariat in its early years focused on facilitating intergovernmental climate negotiations, today it supports a complex architecture that serves to advance the implementation of the Convention, the Kyoto Protocol and the Paris Agreement” (UNFCCC 2020:8). In the currently (as of January 2022) available reports of 2017 to 2020, it reports on its own activities during the year in relation to important negotiation achievements

as well as its support for implementation and capacity-building¹. It also sheds light on how it supports parties through translation of information into policy-relevant advice, by proposing or supporting issue-linkages and by providing guidance to parties. For example, in its 2019 annual report, the secretariat reports to have “launched efforts to help Parties prepare to implement the enhanced transparency framework” (UNFCCC 2020:15) established under the Paris Agreement, which provides guidance to countries on how to report progress on their climate change mitigation, adaptation and relevant support to or from other countries. The support by the secretariat included technical support on implementation of the enhanced transparency framework, designing institutional arrangements to support it, providing guidance on Nationally Determined Contributions (NDCs) and producing detailed expert training materials on national greenhouse gas inventories (ibid.). This support potentially has a far-reaching impact on how parties implement the enhanced transparency framework, since it helps to turn the relevant provisions in Article 13 of the Paris Agreement into national policy tools. The secretariat openly acknowledges this: “The secretariat plays a crucial role in putting into practice the transparency and accountability arrangements for climate change reporting.” (UNFCCC 2020:8). Similarly, the secretariat reports to support parties on a wide range of processes related to adaptation, stepping in when needed: “in the face of decreasing financial resources, the secretariat facilitated the [Adaptation] Committee’s communication and outreach activities” (UNFCCC 2020:17).

While this emphasis on implementation and capacity-building is one important dimension of the role of the climate secretariat since the Paris Agreement has come into effect, a second important development is issue-linkage between climate change and other policy areas. As explained above, issue-linkage can be an element of direct attention-seeking and normative influence. Jörgens et al. (2016) described the role of the climate secretariat for supporting the link between gender and climate change. A more recent example of issue-linkage is the secretariat activities in the area of climate and security. Since 2007, states have increasingly discussed the link between climate and security at the UN Security Council (Abdenur 2021). Although it has not been an agenda item or prominent angle in the context of UNFCCC negotiations, discussions on it have increased recently during official side events, pointing out the different security implications of climate change, such as risks for social stability (e.g. Climate Diplomacy 2018). At COP 25 in Madrid, the climate secretariat hosted a side event

¹ These can be found at <https://unfccc.int/annualreport>.

entitled “Dialogue on climate-related risks to social stability: law and governance approaches” (UNFCCC 2019; participant observation at COP 25). By hosting this as a secretariat-sponsored event and providing a framing on climate and security ‘from the inside’, the secretariat drove the attention of delegates to the link of climate and social stability and provided support to considering the effects of climate change from this perspective. It invited the chair of the Subsidiary Body for Scientific and Technological Advice (SBSTA) as well as actors who favor the angle of climate-related risks to social stability, such as the United Nations Convention to Combat Desertification (UNCCD) Secretariat, the Office of the High Commissioner on Human Rights (OHCHR) Secretariat and representatives of Ghana and Germany (both founding member of the Group of Friends on Climate and Security in the Security Council) (Federal Foreign Office 2018; participant observation at COP 25). This is an example of the climate secretariat’s open support for the link between climate and security, which is still no agenda item under the UNFCCC and therefore not mandated, but is certainly in line with highlighting the “planetary emergency” that climate change poses (see for example UNFCCC 2020: 6).

Summarizing, we observe that the direct attention-seeking behavior could be observed in the run-up to the Paris Agreement and has since become more pronounced, public and part of a broader communication and engagement strategy, blending into the indirect attention-seeking of all stakeholders. This will be dealt with in depth in section 3.2.1.

3.1.2 CBD

The biodiversity secretariat seeks the attention of parties directly throughout the whole policy cycle: it contributes to agenda setting by alerting parties to new policy issues or possible linkages; it provides input into the negotiation process by seeking attention for its analysis of lines of compromise during policy drafting, and it supports parties in the implementation of decisions by providing capacity-building. The following section will lay out, in which way the interviews substantiate these findings.

In the case of ocean governance, for example, the biodiversity secretariat actively seeks the attention of parties in order to put the issue on the agenda and create a mandate for its own activities through COP decisions. For example, when certain parties showed interest in aspects of ocean governance, such as ocean acidification and marine mining, the secretariat responded to this initial interest by trying “to make it an issue” at a larger scale. Secretariat staff tried to “find a way for an issue to gain attraction at policy level, and [...] find an excuse to help a country [...] so that the issue rises, and finally the COP will reapprove the importance and

maybe even request the secretariat to do more” (10B, 11B). The role of the secretariat in this strategy is to highlight the global implications and benefits of specific topics, such as the role of a healthy ocean for many dimensions of sustainable development, as well as to “see issues in perspective, to connect relevant partners”. If this strategy of translation and agenda setting is successful, the secretariat may have created an own role for the issue in question: “Once they are in, we try to serve them” (10B, similarly 3B). Secretariat staff also reported to help parties and non-state actors in framing ocean-related topics, in order to create a fit with national debates and contexts, thereby also promoting certain frames, such as looking at ocean areas from different continents as a whole. One staff member formulated this approach as “Forget your box and see the environment as a whole” (10B, 11B).

While the climate secretariat cannot attract the attention of specific parties, by for example organizing workshops that target only one or few parties, the biodiversity secretariat can organize national workshops on specific issues if parties express a special concern for these topics, such as for the issue of marine mining. Sensitive to the worries of specific parties, secretariat staff assisted with the provision of an impact assessment and the invitation of experts and stakeholders for this issue, thereby drawing attention to its expertise, network and convening power. According to several interviewees, such activities can pave the way for outputs that help to advance the negotiations, such as the compilation of national long-term visions for all stakeholders (1B, 6B, 7B, 10B). In this sense, the biodiversity secretariat can benefit from a wider mandate than the climate secretariat to attract the attention of specific parties and support them according to their needs. We will describe the biodiversity secretariat’s mandate in more detail below.

In terms of policy drafting and cooperation with chairpersons, the biodiversity secretariat is more similar to the climate secretariat. It is also tasked to provide logistical and procedural support in negotiations (Art. 24 of CBD). Nevertheless, it actively contributes to negotiations by pointing out benefits of mutual cooperation, suggests substantive or procedural solutions to negotiation deadlock, and shows parties what they would miss out on or maybe even lose control over if they do not cooperate (1B, 3B, 6B, 10B). To reach an agreement in negotiations, the secretariat “create[d] a fear of being left out” (10B) until parties decided to cooperate. One member of staff reported to attract especially the attention of those parties that occupy veto positions or otherwise block progress in negotiations: „The most difficult they are, the most helpful I am“, following the credo that „going backwards is no option“ (3B).

Seeking the attention of chairpersons was also key, e.g. by providing a “choreography” of meetings, which included not only background information on the positions of delegations and potential pitfalls concerning specific agenda items, but also suggestions on how to navigate such pitfalls and opposing interests (1B, 9B, 5B). By providing such procedural advice, the biodiversity secretariat actively sought to feed its own policy preferences into the negotiations and build compromise. A member of staff would not “go [into negotiations] with a blank page, but make[s] suggestions how to frame, how to make it work” (3B). In particular, if agreement among negotiators is hard to achieve, the secretariat “give[s] parties options what they could agree on” (3B). “You incorporate (...) as much as you can” (1B) while ensuring that the suggested policy options “reflect a balance of [voiced] views” (1B, 3B, 5B).

While the biodiversity secretariat has no mandate for implementation, it is able to assist and support parties in implementing decisions and working on their National Biodiversity Strategies and Action Plans by providing capacity development: “I think we can say without hesitation that the countries do get a lot of help from the CBD staff” (2B, similarly 3B, 7B, 8B, 10B). Especially parties from least developed countries, small island countries as well as indigenous and local communities are supported frequently with the goal to empower these effectively playing their role in the negotiation and implementation process: „We need to build everyone’s capacity at all levels” (3B). Its role in capacity development and in assisting the implementation of decisions is a further avenue for the biodiversity secretariat to seek attention for its expertise and policy suggestions.

3.2 Indirect attention-seeking via the policy network

3.2.1 UNFCCC

Directly seeking the attention of parties to the UNFCCC is viable for the climate secretariat with regards to concrete negotiation topics and processes. It does so by adopting a strong role in policy drafting, organizing negotiation sessions and building trust, as pointed out above. However, when wishing to attract the attention of parties regarding broader perspectives on combatting and adapting to climate change, such as connecting climate change to economic and societal questions, the climate secretariat attracts the attention of parties in an indirect way, by conveying its messages through the extensive transnational policy network that has evolved around the UNFCCC. The climate secretariat holds a central position in the relevant issue-specific information flows and transnational cooperation networks, enabling it to act as a broker of information between actors outside the formal negotiations, such as NGOs, think tanks,

research institutions, private sector organizations, international organizations and the parties themselves (Saerbeck et al. 2020). Using this central network position, the climate secretariat can provide substantive and procedural information to well-connected stakeholders, resulting in an excellent reach of its messaging (ibid., 1A, 3A, 4A, 6A). By gathering, synthesizing, processing, and disseminating policy-relevant information that went beyond the negotiation of specific decision drafts to a wide range of different stakeholders, the climate secretariat attempted to connect broader policy discourses with specific negotiation items.

Giving a sense of direction in the run-up to the Paris Agreement

Using this network position, the secretariat aimed to change the “narrative” of how climate action could and should be viewed (S6) prior to COP 21. Staff members wanted to demonstrate that the negotiation process “was part of a bigger transformation going on“ (6A). The secretariat aimed to streamline the policy discourse, to make it more coherent and forward-looking, because “people weren't really getting it, ordinary citizens, many governments, particularly the negotiators [...] were all running in different directions” as one senior member of staff remembers, adding, “have you ever seen the Monty Python video of the Olympics for people that have no sense of direction, then you know exactly what I am talking about” (6A). It provided orientation for example by directing attention to successful climate policies already in place before COP 21. Giving such a “sense of direction” was the goal of a communication strategy that aimed to attract the attention of parties indirectly by targeting prominent, well-connected societal and political actors. The positive message of this communication strategy was introduced into the “political landscape of the year”, including G20 and G7 meetings, World Bank and the International Monetary Fund (IMF) meetings, and even meetings of religious groups in order to mainstream this message into different policy fields (6A; G7 Germany 2015; G20 Australia 2014; Lagarde 2014; Mou 2015; World Bank 2015). To this end, the secretariat partnered with important stakeholders and public figures or organizations in order for them to “carry” and “amplify [the] message” of “how well cities are doing on climate change, [...] how big corporations like Unilever are greening their supply chains”, to name two examples (6A).

In line with this strategy, the executive secretary incumbent from 2010 to 2016, Christiana Figueres, sought the attention of parties by starting her climate diplomacy campaign ahead of the negotiations of COP 21. One indirect way to do this was by thanking cities, faith groups, companies, investors, and other non-party stakeholders publicly for going ahead with innovative climate activities, while at the same time asking for more ambitious actions (6A,

UNFCCC 2014a). Another one was to ask prominent individuals to speak out about climate action, including a meeting with the Pope to discuss how climate change could figure prominently in his encyclical “Laudato si” (6A; King 2014). She reached a multitude of actors and also addressed parties “through her social media account, she would thank India for saying they would invest in solar. She would thank [...] Johannesburg, for committing to a certain target on climate change”, thereby drawing attention to “all the benefits that come with climate change [policies], all the positive outcomes that can come by a low-carbon transition” (6A). Questions that were not officially on the negotiation table but that were nonetheless crucial in achieving emission reductions could be included into the policy debate (3A, 2A, 4A, 5A, 6A). For example, ‘Momentum for Change’ was initiated by the climate secretariat in 2013 to connect different economic and societal sectors to climate change action by publishing information on “lighthouse activities” of climate action and low-carbon development and by awarding the UN Global Climate Action Awards annually (UNFCCC 2014 b, see also Hickmann, et al., this volume). A recent strand of literature describes initiatives by the climate secretariat to include non-party stakeholders, such as ‘Momentum for Change’, the ‘Non-State Climate Action Zone (NAZCA), the Lima-Paris Action Agenda (LPPA), the Marrakech Partnership for Global Climate Action (GCA) or Action for Climate Empowerment (ACE) as orchestration (Hale 2016; Thew, Middlemiss, and Paavola 2021; Hickmann et al. this volume).

The goal of such an indirect attention-seeking behavior via the transnational policy network was two-fold: first, ideas and information were distributed through an additional, powerful channel, thereby building transnational support for climate change action and raising pressure on national governments to agree on ambitious climate policies from the outside. Second, through this informal channel that was independent of narrowly phrased agenda items and a legalistic negotiation logic, fresh ideas could be circulated. Looking back at COP 21, one former senior official of the climate secretariat noted in 2016 that “policy announcements and initiatives made outside of the formal negotiations were also spectacular in scale and scope, suggesting that a new sustainable growth model is underway“ and that non-state actors in the Paris Agreement „are increasingly becoming the engine of both mitigation and adaptation action. This is helping to define a ‘new normal’“ (Kinley 2017:4). Through its strategy of engaging and empowering non-party stakeholders and conveying own policy preferences through this network (2A, 3A, 4A, 6A), the climate secretariat has arguably contributed to the necessary “cognitive change” that enabled the Paris Agreement (Dimitrov 2016:1). It ensured that those “persuasive arguments about the economic benefits of climate action“ that „altered

preferences in favor of policy commitments at both national and international levels“ (ibid.) found its way into the policy debate and onto the agenda.

Executive leadership and legitimacy concerns

The extent of indirect attention-seeking and influence-seeking behavior of the climate secretariat varies over time and according to the political context of global climate governance. In 2009, Biermann & Siebenhüner found the autonomy and influence-seeking behavior of the climate secretariat to be extremely limited, if existing at all: “That staff at all levels have internalized the expectations of parties and the resulting lack of leadership further explains the limitation of its influence. In fact, the secretariat has accepted the parties’ definitions of boundaries and ‘has very rarely attempted to exercise open substantive leadership by brokering agreements among parties’“ (Bauer 2009:179). This description stands in stark contrast to the leadership displayed by the executive secretary in particular before COP 21. In 2013 Figueres highlighted in an article: “The only way to regain energy security, stabilize water and food availability, and avoid the worst effects of climate change is to accelerate the economic tipping point towards low-carbon growth, towards the point where low-carbon living is the norm and not the novelty.” (Figueres 2013), thereby sketching her vision of how national climate policies should be spelled out. Thinking back to her first press conference in 2009, she reflects on how it was possible to achieve a global climate change agreement in an interview in 2016: “Impossible is not a fact, it’s an attitude [...] And I decided right then and there that I was going to change my attitude and I was going to help the world change its attitude on climate change.” (Greene 2016). These statements show the departure from an attention-avoiding and neutral stance towards an attention-seeking, outspoken behavior, by which the secretariat deliberately stretched and surpassed the parties’ definition of boundaries. In addition, Figueres’ ability to adapt the goals and organizational processes of the UNFCCC secretariat to the challenges she identified and her aptitude in translating this into an effective strategy for engaging with a wide network of different actors made her leadership flexible, reflexive and visionary. This kind of executive bureaucratic leadership was an important element of the attention-seeking activities of the secretariat especially vis-à-vis external actors in the run-up and follow-up of the Paris Agreement.

Until today, we can observe different examples and varying degrees of attention-seeking behavior of the climate secretariat. While tracing this development in details lies outside the scope of this empirical section, it is plausible that the initial attention-seeking behavior originated in the ‘fiasco-like’ COP 15 in 2009, which was “perceived to be constrained by the

lumbering UNFCCC process that was limiting, rather than enabling climate action in a timely and responsive manner” (Dubash and Rajamani 2010; see also Figueres 2013). This “hurt the legitimacy of the UNFCCC” (Allan et al. 2021:19) and the trust into the climate secretariat was lower than before COP 15 (4A; Sommerer et al. 2022:95, 177). As typical for a bureaucracy, it is likely that the climate secretariat sought the attention of parties and non-party stakeholders also for the sake of self-preservation, by drawing attention to itself as an actor legitimized by visible policy outputs, for example by assuming the role of an orchestrator with regards to non-state climate action (Sommerer et al. 2022:177).

This section has shown that, so far, the culmination of the climate secretariat’s indirect attention-seeking behavior is the described effort leading to the Paris Agreement. Since the adoption of the Paris Agreement the secretariat has continuously sought the attention of citizens and policy-makers (Mederake et al. 2021; Saerbeck et al 2020) and invested into a targeted communication strategy, increasingly online and via social media channels (UNFCCC 2020). Engaging with youth stakeholders represented by prominent persons such as Greta Thunberg fitted especially well into the strategy of the including non-party stakeholders as an integral pillar of the post-2015 climate regime (Thew et al. 2021). Instead of acting invisibly or from behind the scenes, part of the ‘new normal’ of international climate administration is the climate secretariat’s aim to garner trust into its work by indirectly seeking the attention of parties and non-party stakeholders through its policy network.

3.2.2 CBD

Issue linkages: connecting with relevant policies

Since the biodiversity secretariat has the mandate to play a coordinating role, or that of an “overlap manager” in the biodiversity regime (Jinnah 2014:73), seeking the attention of policy-makers via both the intergovernmental and the transnational policy network, that is via other international organizations and non-governmental stakeholders, is a natural option for the biodiversity secretariat. The objectives of the CBD are biodiversity conservation, sustainable use of its components, and equitable sharing of its benefits (UN 1992a, Art. 1). These objectives overlap with a multitude of other multilateral environmental agreements (MEAs) that form the global biodiversity regime (Jinnah 2014:68; Raustiala and Victor 2004:277). With regards to engaging with other international bodies, the biodiversity secretariat has the mandate to actively seek the attention of international entities that overlap with these objectives (Jinnah 2014, 73). The CBD convention text states that the secretariat’s functions shall be, inter alia, “to coordinate

with other relevant international bodies and, in particular to enter into such administrative and contractual arrangements as may be required for the effective discharge of its functions” (Art 24(d). It furthermore asks of parties to “contact, through the Secretariat, the executive bodies of conventions dealing with matters covered by this Convention with a view to establishing appropriate forms of cooperation with them” (UN 1992a Art. 23, 4(h).

Our analysis shows that the CBD secretariat seeks attention in the transnational policy debates on biodiversity to increase the general weight of its arguments, build issue-specific coalitions with other stakeholders and, in the long run, shape parties’ preferences on substantive issues, including by issue-linkage (1B, 3B, 6B, 8B, 13B). This includes liaising with international organizations on overlapping issues and linking the respective biodiversity issue to those of the broader policy concerns of other organizations. Such overlapping issues between the CBD and the UNFCCC are especially relevant, e.g. forests, oceans, blue carbon’ (i.e. carbon stored in marine ecosystems), gender equality or geoengineering (1B, 9B, 10B, 13B, 14B, (van Asselt 2011). Also, in the case of the causal relationship between climate change and biodiversity itself, the biodiversity secretariat deployed “an aggressive marketing campaign”, in order to draw parties’ attention to biodiversity conservation as a climate adaptation strategy (Jinnah, 2014: 94, see also 13B). The UNFCCC has recently put at an emphasis on ‘nature-based solutions’, which reflects the link between the two conventions and recognized “the interlinked global crises of climate change and biodiversity loss” and “the importance of ensuring the integrity of all ecosystems, including forests, the ocean and the cryosphere, and the protection of biodiversity” (UNFCCC 2021) .

Other international organizations, and by extension, policy communities the biodiversity secretariat collaborates with include the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Food and Agriculture Organization (FAO), the United Nations Environment Program (UNEP), the World Conservation Monitoring Centre (UNEP-WCMC) and the World Meteorological Organization (WMO) (7B, 8B, 9B, 10B, 13B, 14B). In order to liaise with the two other Rio Conventions, the United Nations Convention to Combat Desertification (UNCCD) and the UNFCCC, the biodiversity secretariat is very active in the so-called Joint-Liaison Group (13B). This is an institutionalized mechanism through which the executive heads and other members of staff of the three Rio Conventions meet to discuss and draw attention to overlapping issues between them (SCBD 2006). The CBD is furthermore deeply intertwined with the development, agricultural and trade regimes, which are some of the most responsible sectors for biodiversity loss, as well as with the 2030 Agenda for Sustainable

Development (Miller Smallwood et al. 2022:48–49). Reaching out to organizations in these adjacent, but also to non-environmental policy fields provided the biodiversity secretariat with ample opportunity to link biodiversity to different issues and bring these connections to the attention of state actors. Framing biodiversity issues in the light of a connection to a different policy field may also attract the attention of actors outside of the biodiversity community and thereby inform and influence the public discourse. For example, the COVID-19 pandemic dramatically brought the connection between biodiversity and human health into focus, as the incumbent Executive Secretary Elizabeth Maruma Mrema highlighted in her opening statement for COP 15 in 2021:

“Now more than ever, we are witnessing a deep shift of awareness of the interconnected biodiversity, climate and health emergencies that we face. The COVID-19 pandemic is a stark reminder of the connection between human health, the health of species and our ecosystems.” (SCBD 2021a).

An important avenue of reaching biodiversity goals is to mainstream them into other sectors and non-environmental policies, for example by linking biodiversity and business practices (1B; 12B; SCBD 2016). Building on the interest of parties, the biodiversity secretariat launched several business-related events from 2005 on, which have become more numerous and prominent in recent years and “acted as a catalyst for larger discussions on business engagement issues and COP business decisions” (SCBD 2022a), such as the *Business and the 2010 Biodiversity Challenge*, the *Business and Biodiversity Forum*, the *Global Partnership for Business and Biodiversity* and the *Business and Biodiversity Week* in 2021 (12B; Hickmann and Elsässer 2020; SCBD 2022a). Through coordinating and collaborating with companies, business association and civil society actors, the secretariat indirectly sought the attention of parties to bring the linkage between biodiversity and business into the spotlight (12 B). Parties became gradually more interested and asked the secretariat at COP 10 to establish a forum for them to exchange with businesses and other stakeholders, which led the secretariat to launch the *Global Partnership on Business and Biodiversity* (SCBD 2010). In further decisions, the COP asked the secretariat to expand this work, including by liaising with other relevant organizations and by providing relevant capacity-building, tools and guidance (SCBD 2021b) These activities are now listed under the umbrella of the *Business Engagement Programme* run by the secretariat and funded by the European Union, thereby further formalizing this issue-linkage (SCBD 2022b).

Non-state actor engagement: broadening the discourse

The CBD furthermore reaches out to an array of non-state actors, in order to support their participation in the policy process and create support for ambitious negotiation outcomes from the outside (1B, 3B, 6B, 8B, 10B, 11B, 12B, 14B). The CBD has a long history of engagement with stakeholders and stands out in this respect compared to other organizations in global environmental governance (Miller Smallwood et al. 2022). Non-state actors are often more supportive of ambitious biodiversity policies than national delegations and can be key partners for implementation and accountability in the CBD (10B, see also Miller Smallwood et al. 2022:57; Ulloa 2022). Therefore, the biodiversity secretariat builds transnational support for biodiversity topics by opening debates on certain agenda items to include broader concerns represented by civil society. Particular emphasis is placed on the cooperation with indigenous peoples and local communities (IPLCs), which may be viewed as “elders of the convention” (3B), which speaks to their sincere commitment to biodiversity conservation, excellent organization and knowledge of the negotiation process, dedication to cooperation and, in many cases, low turnover rates (as opposed to national delegates, who have higher turnover rates) (3B, 10B). Target 18 of the 2020 Aichi Biodiversity Targets states that by 2020 traditional knowledge, innovations and practices are to be respected and protected, and fully integrated and reflected in the implementation of the CBD (SCBD 2010). This makes IPLCs a key grouping of stakeholders via which the secretariat can advocate for an ambitious outcome of negotiations (1B, 3B, 10B). The CBD secretariat also strives to empower regional actors, religious groups, research institutions and universities to effectively participate in negotiations and other CBD events (3B, 8B, 10B). As described in the previous section, secretarial outreach activities furthermore include the private sector.

Such a strategic use of its embeddedness in broader policy discourses is in line with the findings of other studies which point out IPA’s potential roles as knowledge brokers or orchestrators (Abbott et al. 2015). Our findings add on to this, since we see a particular emphasis on their agenda-setting role in instances of multilateral policy formulation. Our explorative study indicates that the secretariat of the CBD seeks the attention of a wide range of stakeholders outside of the convention on specific issues discussed under the framework of the CBD. It is the hub of a widespread stakeholder network, allowing secretarial staff to act as a knowledge brokers, enabling it to drive negotiations forward from the outside (see also Hickmann and Elsässer 2020; Mederake et al. 2021). In its increasing integration of non-state actors into the CBD process, the secretariat follows a broader trend in global environmental and sustainability

governance of collaborating with transnational actors (Kok and Ludwig 2022; Pattberg, Widerberg, and Kok 2019).

4. Conclusion

In this chapter we developed the contours of a heuristic framework for modeling the role and social interactions of international treaty secretariats with regard to issue-specific negotiations of multilateral treaty conferences. We drew on an explorative empirical study to illustrate the plausibility of our model. Overall, the empirical observations are in line with the theoretical framework outlined in the beginning. They show that international secretariats regularly act according to a logic of attention-seeking. Rather than withholding policy relevant information from their principals or forming covert alliances with selected states, they act openly with the aim of increasing policymakers' awareness of their problem definitions and policy proposals. Seeking the attention of policy makers both directly and internally as well as indirectly and externally prove to be potent strategies of progress in the climate and the biodiversity regimes, confirming that bureaucratic behavior can alter knowledge and belief systems, thereby enabling political change (Barnett and Finnemore 2004). Attention-seeking international bureaucracies contribute to blurring the line between international politics and bureaucracy. Both the climate and the biodiversity secretariats successfully compete with other organizations, indeed with a whole industry of knowledge providers, in the provision of policy-relevant information to national bureaucracies and their political leadership. Among these organizations are other international organizations that are mandated to work on related issue areas as well as an array of actors from civil society and the private sector. And unlike other actors in global environmental governance, they can use their bureaucratic authority for this end. Both secretariats act as agenda-setters, policy entrepreneurs and policy brokers thereby furthering and shaping the negotiations in the respective conventions and including actors outside of the conventions into the policy debate. The climate secretariat exploits its narrow mandate by seeking attention for its policy solutions in negotiations and by rallying support for climate action in the transnational network, for which its central network position is key. The biodiversity secretariat has a slightly more lenient mandate and can also form alliances with individual or groups of parties and stakeholders. With a strong role in capacity development, it is also able to leave a mark on the policy implementation phase, albeit indirectly.

Our findings are also in line with empirical studies on the autonomy and influence of bureaucracies at the domestic level of the United States (Carpenter 2001; Workman 2015). We

therefore argue that conceptualizing public administrations as attention-seeking actors can provide a fruitful complement to theories of delegation and oversight when studying the autonomy and influence of domestic bureaucracies.

Analyzing the role of bureaucracies at earlier stages of the policy process, especially at the stages of problem definition, agenda-setting, and policy formulation, requires different parameters than at the implementation stage. Whereas during implementation processes, bureaucracies may gain influence by withholding expert knowledge from their principals, this mechanism is less important at the stages of problem definition and policy formulation. It is not policy-relevant information that is scarce at this stage of the policy process, but policymakers' capacity to pay attention to the great amount of information that is fed into the policy process by a multitude of actors. Consequently, scholars studying bureaucratic influence in domestic agenda-setting and policy formulation could gain new insights by conceiving of bureaucracies as attention-seeking organizations, that is, as partially autonomous actors competing with other public and private organizations to supply policy-relevant information to decision-makers. By focusing on a type of bureaucracy whose main tasks are related to the stages of agenda-setting and policy formulation, we described and empirically illustrated two potential pathways through which public administrations may attempt to feed their policy-related knowledge and preferences into the policy process, despite their limited mandates and the comparatively strong control exerted by multiple principals of IPAs.

Notes

¹ These can be negotiations within the Conference of the Parties (COP) or the Subsidiary Bodies of the relevant conventions.

² For a seminal treatment of this argument, see Schattschneider (1960).

³ The underlying logic of this strategy is similar to what Keck and Sikkink (1999: 93) in their work on transnational advocacy networks describe as the "boomerang pattern of influence", that is, a strategy where "NGOs may directly seek international allies to try to bring pressure on their states from outside".

⁴ The analysis of expert interviews focuses on thematic units, meaning text extracts with similar topics, which are scattered over the interviews. The comparability of the interviews is ensured by the commonly shared context of the experts, as well as by the interview guidelines (Meuser and Nagel 2009:35).

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3.4. Complexity in global environmental governance

3.4.1. Conceptual contextualization of the article “REDD+ finance: policy making in the context of fragmented institutions”

The fact that IPAs can draw on their network position, or nodality, for their authority results from a diversified global governance architecture, where networks between organizations and actor types are increasingly important for effective governance (Jordan et al. 2015; Zelli and van Asselt 2013), as pointed out in section 2.1.3. However, the international system is increasingly marked by polycentric and complex global governance systems and by fragmented institutions (Biermann, Pattberg, et al. 2009; e.g. Biermann, van Driel, et al. 2020; Cole 2015; Dorsch and Flachsland 2017; Ostrom 2010; Young 2017). In such a setting, it is likely that states rely on IPAs to a certain degree, since their “unique position in governance networks [...] allows them to operate in this political space” (Jinnah 2014:48). IPAs can play important roles in fragmented governance settings as agenda setters, policy entrepreneurs and brokers of expertise (de Wit et al. 2020:60). The article presented in this section provides an in-depth analysis of one case of institutional fragmentation in global environmental governance. Pursuant to this analysis, section 3.5 will then analyse, how IPAs navigate such a space and foster global coordination in the context of institutional complexity.

As the first author of this article, my main contributions were choosing institutional fragmentation as a conceptual lens to understand REDD+⁵ finance, gathering qualitative data for analysing REDD+ finance at a global level as well as for the case study on Indonesia and interpreting the results considering the secondary literature on institutional fragmentation in global environmental governance. My co-author Astrid Carrapatoso contributed advice on the state of the art from the perspective of the research project, in which the qualitative data was gathered, namely “Die Einbindung von REDD+ in das neue Klimaabkommen der UNFCCC und Annäherungspotentiale der CBD”⁶.

The article analyses the institutional architecture for providing adequate financial resources for REDD+ as a framework under the Paris Agreement. It shows that the absence of adequate modes of coordination at the global level influences the effectiveness and efficiency of this important policy tool, thereby demonstrating the effects of complex, non-hierarchical governance structures, or “regime complexes” (Abbott 2012; Keohane and Victor 2011) in

⁵ REDD+ stands for Reducing Emissions from Deforestation and Forest Degradation; while simultaneously aiming at conserving and enhancing forest carbon stocks and sustainably managing forests (+) and is a framework under the UNFCCC and enshrined in the Paris Agreement in Article 5 (UNFCCC 2015).

⁶ Funding for this project was provided by the German Federal Agency for Nature Conservation under grant FZK 3513840200.

global environmental governance. In the absence of an institution with the authority to set central standards and rules and procedures for REDD+ finance, they are developed in a dense network of co-governing institutions, of which each sets its own rules. The article demonstrates that REDD + finance is played out in a context of cooperative institutional fragmentation, understood as coordination through cooperation in loosely coupled networks (Biermann, Pattberg, et al. 2009; Zürn and Faude 2013). Finance institutions partly overlap and collide, creating a demand for institutions that can adequately coordinate fragmentation in a way that reflects the different governance tasks inherent to the intricacies of REDD + finance, the different capabilities of states and ultimately the “deeply pluralist structure of world society” (Well and Carrapatoso 2017:700; Zürn and Faude 2013:127).

These findings provide an empirical contribution to the literature that describe overlapping and only vaguely connected institutions that form non-hierarchical networks for handling international issues (Zelli and van Asselt 2013) and the impact of institutional variety in the absence of hierarchical coordination (Fischer-Lescano, Teubner, and Everson 2004) on the strategic behaviour of state actors and on the governance of specific issue areas (Zürn and Faude 2013). The lack of global coordination is a central concern, as institutional fragmentation influences the cooperation and coordination of organizations, states and non-state actors in issue-specific areas and impacts on the effective implementation of rules (ibid.), as the presented article demonstrates both for REDD+ policymaking at the transnational level as well as for national implementation. These findings have implications and may inform the study of other policies (Biermann, van Driel, et al. 2020:163), including educational innovations. For example, institutional fragmentation is a barrier to implementing ESD, as Gale et al. show for the case of higher education (Gale et al. 2015).

While the presented article points out how institutional fragmentation viewed from differentiation theory can lead to functional differentiation of governance tasks and lead to a division of labour between actors (Well and Carrapatoso 2017:699), the article also clearly demonstrates the downside of a fragmented REDD+ policy as an important element of climate governance in the UNFCCC. This is in line with studies that highlight the importance of the UNFCCC a centralizing regime, in order to create fair and effective outcomes (Dorsch and Flachslund 2017; Dyer 2014; Hare et al. 2010; Winkler and Beaumont 2010). Furthermore, the case of REDD+ is an illustrative example of the overlap between the UNFCCC and CBD, as REDD+ aims at countering land use change as a threat to climate and to biodiversity (van Asselt 2011). Hence, the case study on institutional fragmentation of REDD+ finance demonstrates how state actors fail to coordinate directly due to a lack of authoritative institutions for standard

setting. A situation in which governments are unable to manage institutional fragmentation generates a demand and an opportunity for IPAs as impartial actors to provide guidance on how to navigate a fragmented governance setting, by drawing on their unique networks, capacities and expertise (de Wit et al. 2020:61). Furthermore, the overlap between institutions creates a governance niche for overlap management, which provides an opportunity for the autonomous action of IPAs (Abbott et al. 2016; Elsässer et al. 2022; Jinnah 2014). Institutional fragmentation can therefore be understood as a structural condition that potentially enables the influence of IPAs on policy initiation and implementation.

3.4.2. REDD+ finance: policy making in the context of fragmented institutions

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3.5. The role of treaty secretariats in the coordination of a complex global climate governance

3.5.1. Conceptual contextualization of the article “Brokering climate action: The UNFCCC secretariat between parties and nonparty stakeholders”

As demonstrated in the previous section, global climate governance is institutionally complex and allows actors to pursue their interests within and beyond the multilateral negotiations under the UNFCCC (Falkner 2016; Jänicke 2017), which the climate secretariats does by employing its nodality, as established in sections 2.1.3, 3.2 and 3.4. This article draws on a large survey among UNFCCC stakeholders as well as on qualitative data, which together form the centrepiece of the ENVIPA research project in terms of collected data. By combining SNA and qualitative expert interview and document analysis, this article explores how the UNFCCC secretariat uses its network centrality to interact with state and non-state actors in global climate governance. Through this innovative methodological approach, the article is in line with scholars that call for the of study of governance fragmentation by SNA techniques and to treat networks seriously from a methodological standpoint when studying administrations (Biermann, van Driel, et al. 2020:165; Lecy et al. 2014).

By systematically mapping the interactions of the UNFCCC not only with parties, but also with non-party stakeholders, this article is an important empirical contribution to the burgeoning literature on the role of non-state actors in global environmental governance (e.g. Bäckstrand and Kuyper 2017; Hale 2016; Hale et al. 2021; Hickmann and Elsässer 2020; Nasiritousi and Linnér 2016). Non-state actors have risen in importance and their influence is now a core feature of the current climate and biodiversity governance systems, even more so since the adoption of the Paris Agreement (UNFCCC 2015, 2022) and the Kunming-Montreal Global biodiversity framework (CBD 2022). Non-party stakeholders play a central role for implementing the two conventions by contributing to education and capacity building at multiple levels (Chan, Brandi, and Bauer 2016; Dryzek 2017). This contemporary form of policymaking is understood as transnational governance, defined as a system of interaction among supranational, national, regional and local levels of government within and beyond the state. By exploring the role of an IPA in transnational climate governance, this article builds on studies that recognize transnational governance as an institutional innovation that provide the basis for understanding IPA influence, given their positional advantage in governance networks (de Wit et al. 2020:61). It contributes to studies that understand IPAs as actors that facilitate institutional learning in the context of fragmented climate governance by connecting different types of stakeholders and steering them towards compatible governance targets (cf. Elsässer et al. 2022:384).

My contribution as the second author of this article were the following. In cooperation with the first author, I contributed to this study by designing and implementing the large-scale survey to collect the data necessary for the SNA in 2015 and 2016 ; preparing and describing the obtained survey data; implementing SNA techniques; designing and implementing the qualitative data collection, namely the expert interviews and document analysis; analysis of qualitative data by qualitative content analysis (Mayring and Frenzel 2014); as well as the interpretation and discussion of the data derived from the combination of the quantitative and qualitative approaches. All co-authors further contributed to specifics aspects of data analysis, interpretation of results and their contextualisation in the secondary literature.

The results of the SNA show the high centrality and embeddedness of the climate secretariat in issue-specific communication flows, giving it a high potential to act as a knowledge broker and exert political influence in the climate regime (Saerbeck et al. 2020:117). The survey shows that stakeholders requested both procedural as well as substantive information on policy options from the secretariat, enabling the secretariat not only to provide information and options on substantive negotiation issues, but also to connect parties and non-party stakeholders. Furthermore, by connecting to other well-connected actors, the information provided by the secretariat travels widely (ibid.), enabling the secretariat to attract attention to its policy proposals among a wide audience. The results of the qualitative analysis allow insights into the behaviour of the secretariat based on this favourable network position, which the article describes as a “communication hub between party and nonparty stakeholders” (Saerbeck et al. 2020:120). The secretariat strategically connects to both party and non-party stakeholders, thereby deliberately extending policy debates outside of formal negotiation spaces. It plays a facilitating and even mediating role by actively bringing non-party stakeholders and parties together, aiming to give non-party stakeholders “the opportunity to be heard” and to create “an open dialogue” (ibid.) Hence, the article demonstrates that as an entrepreneurial IPA, the climate secretariat succeeds in brokering climate action.

3.5.2. Brokering climate action: The UNFCCC secretariat between parties and nonparty stakeholders

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Brokering Climate Action: The UNFCCC Secretariat Between Parties and Nonparty Stakeholders

*Barbara Saerbeck, Mareike Well, Helge Jörgens,
Alexandra Goritz, and Nina Kolleck**

Abstract

Our article aims to better understand the role of the secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) in the increasingly complex global climate governance structure. We employ an innovative approach to addressing this issue by systematically examining the climate secretariat's relations with the main groups of actors involved in this policy domain, in particular with nonparty actors. In a first step, we use social network analysis (SNA) to examine the secretariat's relations with nonparty and state stakeholders and to identify its position in the UNFCCC policy network. An understanding of where the climate secretariat stands in the global climate governance network and which actors it interacts with most allows us to draw preliminary conclusions about the ways in which it connects with other stakeholders to influence global climate policy outputs. In a second step, we conduct thirty-three semistructured interviews to corroborate the results of the SNA. Our findings lend support to the argument that the climate secretariat may gradually be moving from a rather neutral and instrumental stance to playing a proactive and influential role in international climate governance. It aims to increase its political influence by establishing strategic links to actors other than the formal negotiation parties.

Today's global climate governance system is characterized by institutional complexity, bottom-up and top-down elements, and a multiplicity of actors and levels. It is a structure that allows for interest-driven and voluntary actions within and outside of the formal auspices of the United Nations Framework Convention on Climate Change (UNFCCC) (Falkner 2016; Fuhr and Hickmann 2016; Jänicke 2017; Jänicke and Quitzow 2017; Saerbeck et al. 2017; Widerberg et al. 2016). In other words, a "mosaic of stakeholders, including governments, civil society, science, business, and public non-party stakeholders" (Pattberg and

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Stripple 2008, 368) have taken ownership of the implementation of “a universal, ambitious climate agreement that is differentiated, fair, lasting, dynamic, balanced, [and] legally-binding”¹ in an attempt to stay below 2°C.

In this article, we explore the role of the UNFCCC secretariat within this unique global governance structure. One of the climate secretariat’s duties is to promote and coordinate the so-called Nationally Determined Contributions (NDCs), domestic mitigation measures pursued by the parties (Article 4, paragraph 2, 12, Paris Agreement), via the continuous exchange of information. Based on the notion that the climate secretariat “strives to keep all stakeholders informed on the negotiating process ... through a variety of communication products” (United Nations Framework Convention on Climate Change [UNFCCC] 2019), while also facilitating the NDCs, we argue that the climate secretariat makes use of the multiactor and multilevel structure of the global climate regime to gauge national positions and mobilize climate action by nonparty stakeholders to achieve the goal of the Convention. This helps the member states reach compromises by extending the policy debate to different actors inside and outside of government who would otherwise probably not connect.

The literature on international bureaucracies and treaty secretariats has mostly examined the important and influential roles secretariats can and do play in international negotiations (see, e.g., Bauer et al. 2012; Bauer and Ege 2016, 2017; Busch 2009; Jinnah 2014; Johnson 2013). We still lack knowledge about the role and position of secretariats in their respective networks and how they interact with and likely even influence different kinds of stakeholders. Moreover, the literature on the global climate governance regime has focused mainly on the interaction between negotiation parties and nonparty actors. An important strand of this literature has studied the authority of nonparty stakeholders and their influence on decision makers and negotiation outcomes (Böhmelt 2013; Böhmelt and Betzold 2013; Lund 2013; Moussu 2015; Rietig 2014; Nasiritousi et al. 2014, 2016; Nasiritousi and Linnér 2016; Schroeder and Lovell 2012; Tallberg et al. 2013). Despite shedding light on the important role of international treaty conventions, such as the UNFCCC, and the activities of nonparty stakeholders that might contribute to societal transformation in global climate governance, these studies have neglected the link between convention secretariats and party and nonparty stakeholders.

The climate secretariat needs to master the unique architecture of multi-level global climate governance despite its narrow formal mandate that emphasizes its logistical and informational role while explicitly exempting it from taking a more active part in multilateral negotiations (Hickmann et al. 2019; Jörgens et al. 2016; Kolleck et al. 2017b). Consequently, when communicating and cooperating with different kinds of stakeholders to guarantee the successful

1. *Earth Negotiation Bulletin* 12 (653) (2015), <https://enb.iisd.org/vol12/enb12653e.html>, last accessed March 26, 2020.

realization of the measures agreed upon in the Paris Agreement, the secretariat always strives to act in a balanced and impartial way (Well et al. 2020). By scrutinizing the position of the climate secretariat within the UNFCCC regime and how it engages with negotiation parties and nonparty stakeholders, this article seeks to contribute to the literature on secretarial interaction patterns as a first step toward a better understanding of the role played by the climate secretariat in the global climate governance regime.

We apply a mixed methods design to gain deeper insight into the ways in which the climate secretariat engages with others. In a first step, we employ tools of social network analysis (SNA) to study how the climate secretariat interacts and cooperates with the entire range of actors operating in the climate policy realm. Based on an original data set derived from a large-*N* survey among organizations in the field of global climate governance, our SNA maps networks of policy-specific communication and cooperation among diverse actor groups and assesses the position that administrative organizations occupy within these networks. The choice of this first approach is based on the fact that existing studies usually focus on just one actor type, which allows them to draw only limited conclusions about the relationships between various actor types within the same negotiations (notable exceptions include Böhmelt and Betzold 2013; Lund 2013). In a second step, we conduct document analysis and thirty-three structured interviews with party and nonparty stakeholders as well as with members of the climate secretariat between 2015 and 2018—during and between the Conferences of the Parties (COP) 21 to 23—to narrow down our assumption and answer our research question. Interviewees were asked about the nature of the relationship and extent of interaction. The combination of a survey-based SNA with interviews and document analysis enables us to reconstruct the policy-specific information flows and identify the actors who hold positions that allow them to connect different groups of actors.

The article is structured as follows. We first discuss the changing perception of the role of international public administrations (IPAs) – that is, the administrative bodies of international organizations (IOs) – in international treaty negotiations in general and then formulate our hypothesis. Taking into account the unique characteristics of the global climate governance structure, we then describe the interaction between the three types of actors—the climate secretariat, negotiation parties, and nonparty stakeholders. The analysis of our findings allows us, *inter alia*, to test our assumptions and discuss our findings on the ways in which the climate secretariat interacts with other stakeholders.

The Changing Conceptualization of International Treaty Secretariats

International treaty secretariats are established by states as formal bodies to provide the parties to an intergovernmental convention with a common knowledge base irrespective of national capacities (Depledge 2005). They shall support

governments and nonparty stakeholders in subsequent rounds of issue-specific negotiations within multilateral treaty regimes through the provision of technical, legal, and procedural expertise—as well as normative and diplomatic knowledge (Bauer 2006; Jörgens et al. 2016; Kolleck et al. 2017a). Scholars in the field of International Relations and IPA have long treated IOs and their bureaucracies as instruments of nation-states rather than as actors in their own right (Ness and Brechin 1988). Consequently, until recently, research on IOs has been primarily concerned with exploring whether IPAs represent a challenge to state power and the political control of bureaucracies.

More recently, this focus has shifted to an empirical examination of the degree to which international secretariats, and IPAs more generally, exert autonomous influence on politics and policies. The expectation that IPAs may constitute partially autonomous and potentially influential actors of global governance is based on a series of assumptions. First, IPAs are often perceived as the institutional memory of their respective policy regime (Bauer 2006), that is, to have superior “informal knowledge about the history and evolution of institutional processes” (Jinnah 2010, 62). Moreover, they are said to often have an informational advantage on technical and legal issues over their political masters (Barnett and Finnemore 2004; Derlien et al. 2011). IPAs are no longer understood as just epiphenomena of national governments but rather are regarded either as self-interested actors using information asymmetries to their advantage vis-à-vis their principals, namely, the nation-states, or as agents of the global common good, whose actions go at least partially beyond national interests. Against this backdrop, scholars have studied the agency and influential role of IPAs in multilateral negotiations by inquiring whether, how, and to which degree they exert influence on international policy making (see, e.g., Bauer et al. 2012; Bauer and Ege 2017; Busch 2009; Jinnah 2014).

Secretariats of multilateral environmental conventions may try to mobilize support to advance their own proposals and to build momentum for agreement (Abbott and Snidal 2010; Jörgens et al. 2016; Kolleck et al. 2017b). Some IPAs, for example, the desertification and the biodiversity secretariat, have framed discourses and problem perceptions in line with their governance preferences—despite narrow and issue-specific mandates, close supervision by their principals, and relatively limited scientific and administrative capacities (see, e.g., Bauer 2006; Conliffe 2011; Depledge 2007; Jinnah 2011; Jörgens et al. 2016; Kolleck et al. 2017a; Siebenhüner 2009). They have raised their convention’s profile, set items on the agenda, introduced amendments to draft proposals, and promoted the institutionalization of their conventions (Bauer 2009; Michaelowa and Michaelowa 2017; Pallavi 2011). Moreover, many of the initiatives and compromises proposed by the chairs or presidencies of multilateral frameworks are traceable back to the secretariat (Depledge 2005).

Eckhard and Ege (2016, 961) conclude that IPAs act as “autonomous actors with some degree of influence on global public policy.” Today, it is not only the state signatories of a convention who contribute to processes of multilateral

decision-making.² Rather, administrative and political actors interact horizontally, vertically, and diagonally with one another, leading to blurred lines and competencies between national and supranational as well as direct and indirect administrative activities. In this regard, Kingsbury et al. (2005, 5) argue that “much of global governance can be understood and analyzed as administrative action: rule making, administrative adjudication between competing interests, and other forms of regulatory and administrative decisions and management.” A global administrative space is said to evolve (Wessel and Wouters 2007, 281) in which states are no longer the single determinant but rather one of many. Wessel and Wouters (2007, 281) therefore call “for the recognition of a global administrative space in which international and transnational administrative bodies interact in complex ways.”

The Climate Secretariat as Knowledge Broker?

Building on studies that take the behavior of international bureaucracies—rather than the principal-agent relationship between states and IOs—as a starting point, this article assumes that not all bureaucratic behavior in global politics is government-imposed and that international secretariats can play a constitutive role in shaping party and nonparty stakeholder preferences. Moreover, we believe that the climate secretariat’s potential for influence relates to the global climate governance structure and its transnational networking and mobilization capacities.

As stated in the introduction, the global climate governance regime is characterized by a multisectoral and multiactor network structure. It is a system in which skilled action can enable actors such as international secretariats to mobilize support for their policy preferences (Jänicke 2015; Ostrom 2010). They do so by interacting with party and nonparty stakeholders at different levels of government. Jinnah (2014), for example, shows that treaty secretariats position themselves at the center of transnational communication flows that surround official multilateral negotiations to provide policy-relevant information to negotiators from the outside. Abbott and colleagues (Abbott et al. 2015; Abbott and Snidal 2010) further conceive of IOs and their secretariats as “orchestrators” who follow a complementary strategy of “reaching out to private actors and institutions, collaborating with them, and supporting and shaping their activities” to achieve their regulatory goals and purposes (Abbott and Snidal 2010, 315). Finally, Carpenter (2001), in his study on the autonomy and influence of regulatory agencies in the United States, points out that administrative agencies

2. In this regard, a representative of a think tank quoted by Reschke (2016) refers to Ostrom and Ostrom’s (1965) notion of polycentricity, which emphasizes the multifaceted nature of human-ecosystem interaction. Namely, it explains the variety of relationships between governmental units, public agencies, and private businesses coexisting and functioning in a public economy that can be coordinated through patterns of interorganizational arrangements.

may try to influence public policy making by publicly promoting their preferred policy options in issue-specific discourses outside the political system.

Against this backdrop, several authors conceptualize secretariats as knowledge or policy brokers (see Bauer and Weinlich 2011; Biermann and Siebenhüner 2009; Eckhard and Ege 2016; Jinnah 2014; Jörgens et al. 2016; Kolleck et al. 2017a). Understood by Sabatier and Jenkins-Smith (1993) as actors who mediate and seek compromise between competing advocacy coalitions, actors possessing a brokerage position “bring parties together” and create an “enabling environment” (Lepoutre et al. 2007, 10) among actors who lack “access to or trust in one another” (Marsden 1982, 202). They can potentially negotiate the stream of information and “bring together ideas that emerge within the network” (Kolleck 2014, 55), to “facilitate exchange, identifying potential options for multi-actor agreement, and helping to craft patterns of communication as well as multilevel and multi-actor governance arrangements” (Bressers and O’Toole 2005, 141). The concept of knowledge brokerage hence emphasizes that information dissemination plays a key role in exerting influence in political processes.

Since Max Weber, studies in the field of public administration have found that bureaucracies derive authority from their superior expertise (see, e.g., Barnett and Finnemore 2004; Derlien and Böhme 2011). Giving meaning to information, bureaucracies are able to shape social reality, prompt action, and exert cognitive influence. International public administrations in general and convention secretariats in particular are no exceptions to this (Bauer and Weinlich 2011; Jinnah 2010). Scholars of international bureaucracies have shown that international treaty secretariats can be powerful actors that wield (independent) influence in global policy making. For example, Barnett and Finnemore (2004) explain with reference to Weber that bureaucratic power includes control over information (meaning bureaucrats have information that others do not have) but also the ability to transform information into knowledge, that is, to structure perceptions. International bureaucracies exert influence, *inter alia*, through the use of their central position in actor networks, their privileged access to information, their professional authority, and technical expertise (Bauer and Ege 2016; Jörgens et al. 2016; Kolleck et al. 2017b; Widerberg and van Laerhoven 2014; Jinnah 2014).

We assume that the climate secretariat makes use of the unique multiactor and multilevel structure of global climate governance, thereby expanding its original spectrum of activity. It can do so by connecting with a variety of stakeholders operating at different levels and linking otherwise disconnected pools of ideas, acting as an intermediary in the UNFCCC regime. To confirm this expectation, we would have to observe a number of features of a policy broker in the climate secretariat. In particular, we would have to demonstrate that it engages in activities that are typical of knowledge (or policy) brokers, such as gathering, synthesizing, processing, and disseminating policy-relevant information to a wide range of different stakeholders in an attempt to alter knowledge and belief

systems (Jinnah 2014). In addition, we would have to show that it occupies a central position within the international climate policy network, enabling it to influence the flow and content of policy-relevant knowledge and information. In the next section, we will study the role of the secretariat by analyzing its interactions with state and nonparty actors. Using SNA, we will first identify the position of the secretariat within the UNFCCC stakeholder network and then examine its interactions with state and nonparty actors in more detail.

Methodological Approach and Data Sources

We conduct a systematic empirical analysis of the policy-related information and cooperation network that has emerged between negotiation parties, nonparty stakeholders, and the climate secretariat to determine the climate secretariat's position within the network as well as the ways in which it interacts with different stakeholders operating at various levels of government.

Research on the interaction between international treaty secretariats and other—state and nonstate—actors within the context of multilateral agreements has advanced considerably over past years (see, e.g., Bauer 2006, 2009; Busch 2009; Conliffe 2011; Depledge 2005, 2007; Jinnah 2011, 2014; Jörgens et al. 2016; Kolleck et al. 2017b; Siebenhüner 2009). A number of scholars studied why and under which conditions states and/or IOs would be interested in information provided by nonparty actors (Böhmelt 2013; Jinnah, 2014; Rietig 2014; Tallberg et al. 2013, 2015). Some scholars analyzed the links between different treaty secretariats, including the climate secretariat (Betsill et al. 2015), and the role that international secretariats play in the management of regime overlap (Jinnah 2010, 2011). However, although information provided by international treaty secretariats is believed to be valued by party and nonparty stakeholders, the ways in which international treaty secretariats and the stakeholders of their conventions exchange issue-specific and policy-relevant information is still largely unknown, as is the position they hold within global policy domains, such as the climate governance regime. Our article addresses this research gap through an empirical analysis of how the climate secretariat attempts to influence the multilateral climate negotiations under the UNFCCC by means of engaging with other, notably nonparty, actors.

We start by applying SNA measures to identify the position of the secretariat within the UNFCCC stakeholder network. SNA adds a relational component to the analysis of actors and their influence on policy outcomes. Instead of focusing only on actors (nodes) and their attributes, SNA shifts the focus toward the relations (ties) between actors and to the overall structure of policy networks. Applied to our case, SNA enables us to concentrate on the UNFCCC network as a whole and the relationships that have emerged between different actors and actor groups within this network. Thus we shift the unit of analysis from individual secretariats to the linkages or relations between a broad range of relevant actors, including, but not limited to, the secretariat of interest.

Data were collected between September 2015 and March 2016, approaching a wide variety of state and nonstate actors operating at different levels of the global environmental policy domain via a large-*N* survey of organizations in the field of global climate governance. Respondents were identified through lists of COP participants in previous years. Within every organization, we identified one person to answer our survey. We then asked this person to name their contacts concerning cooperation and information exchange. We then extended the number of respondents based on the snowball principle and data provided in open questions.

The survey was received by 2,474 persons, of whom 769 answered at least partially, representing a 31 percent response rate. The survey contained two network questions. One asked “Which organizations did you cooperate closely with regarding topics discussed under the UNFCCC during the last 12 months?” and the other “Which organizations did you receive trustworthy information from during the last 12 months?” These two questions form the basis for our SNA and were combined into one undirected network consisting of 1,021 nodes and 1,834 ties. UNFCCC stakeholders were asked, among other things, to indicate the actor groups they represent. They also answered questions concerning the type of information provided by the UNFCCC secretariat. This allows us to detect if the UNFCCC secretariat limits itself to providing procedural information or if it also offers, for example, information on policy options and the technical or scientific aspects of climate policies.³

To build a more detailed picture of the quality of interaction between the secretariat and UNFCCC stakeholders, we also conducted thirty-three interviews and substantiated interview responses through a document analysis. Interviews 1–7 were conducted with staff of the climate secretariat (e.g., staff concerned with communication and outreach; strategy; mitigation; data and analysis; finance; technology and capacity building; legal affairs; and administrative services, such as the organization of side events), interviews 8–25 with party stakeholders (e.g., representatives of different public authorities and agencies at the local, regional, and national levels), and interviews 26–33 with nonparty stakeholders (e.g., members of IOs, research organizations, nongovernmental organizations [NGOs], and business representatives).

Interviewees were queried, among other things, whether and, if so, with whom they mainly cooperate and exchange policy-relevant information. Stakeholders of the UNFCCC were also asked to indicate the role and importance of the secretariat within the UNFCCC realm as well as the relationship they entertain with secretariat staff. Members of the climate secretariat, on the other hand, were requested to describe the ways they interact with UNFCCC stakeholders to provide issue-specific information and eventually build trusting relationships. This allows us to better understand and retrace the methods employed by the

3. As research on the provision of information by the UNFCCC secretariat is still developing, we included the category “other information” to gain additional information.

climate secretariat to foster the facilitation of negotiations and the implementation of the Paris Agreement.

The Climate Secretariat Within the UNFCCC Stakeholder Network

To study the secretariat's potential role within the climate regime, we first analyze its position in the UNFCCC stakeholder network. We apply two centrality measures to determine the secretariat's position: betweenness and eigenvector centrality. Betweenness centrality is often described as a measure to assess an actor's broker potential within a specific network. It is calculated by counting how often an actor lies on the shortest path between two other actors. Actors with high betweenness centrality scores are in a powerful position to control flows through the network, for example, information flows. Moreover, their absence from the network has a strong potential to lead to disruption. The second measure, eigenvector centrality, accounts for the quality of an actor's connections. It measures how many ties an actor has to other actors, which in turn have many ties. In other words, it shows us how well an actor is connected to other well-connected actors. Table 1 ranks the twenty-five most central actors in the UNFCCC stakeholder network according to their betweenness and eigenvector centrality, respectively.

The UNFCCC in general and the UNFCCC secretariat more specifically both occupy an extremely central position within the UNFCCC stakeholder network. For both centrality measures, the UNFCCC ranks fourth and the UNFCCC secretariat sixth (Table 1). These findings show that the climate secretariat is well embedded within the UNFCCC stakeholder network. As mentioned earlier, a high betweenness centrality score indicates that the secretariat has the potential to act as a broker within the increasingly complex UNFCCC regime. This means that it is a potentially powerful actor within the network and can disrupt the network easily by, for example, limiting information flows. Moreover, the eigenvector centrality score reveals that the climate secretariat is well connected to other potentially influential actors and successfully engages with other multiplier stakeholders. Other actors with high scores for both measures are IOs, such as the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP); globally active NGOs, such as the Climate Action Network (CAN) and the World Wildlife Fund (WWF); and governmental organizations like Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

As survey responses differentiated between UNFCCC and the climate secretariat, we treated the two as separate actors. Some respondents, however, might not have clearly distinguished between the UNFCCC as a treaty regime and the climate secretariat as an international bureaucracy. To account for the possibility that respondents who indicated the UNFCCC might actually have meant the secretariat, we merged the UNFCCC and the climate secretariat into one actor, recalculated its centrality measures, and adapted the egocentric network

Table 1

Top Twenty-Five UNFCCC Stakeholders with the Highest Centrality Scores

	<i>Betweenness Centrality</i>			<i>Eigenvector Centrality</i>		
	<i>Organization</i>	<i>Type</i>	<i>Value</i>	<i>Organization</i>	<i>Type</i>	<i>Value</i>
1.	UNDP	IO	100525.884	UNDP	IO	1
2.	UNEP	IO	90334.1668	UNEP	IO	0.92607348
3.	GIZ	Government	61936.3445	GIZ	Government	0.79012691
4.	UNFCCC	IO	50766.1967	UNFCCC	IO	0.70554767
5.	CAN	NGO	40328.1431	WWF	NGO	0.53081342
6.	UNFCCC Secretariat	IO	34137.6474	UNFCCC Secretariat	IO	0.51165778
7.	WWF	NGO	31688.5403	WRI	Research	0.50014145
8.	IPCC	IO	24353.1372	FAO	IO	0.48784391
9.	FAO	IO	24193.5707	CAN	NGO	0.44324944
10.	WRI	Research	23627.5991	IETA	Business	0.41941308
11.	UNESCO	IO	20746.042	IPCC	IO	0.41567093
12.	BMUB	Government	19964.5282	Wuppertal Institute	Research	0.40953824
13.	CGIAR	Research	19855.811	EU	IO	0.36134739
14.	Climate Analytics	Research	17182.2932	BMUB	Government	0.35428374
15.	GOF	Government	15872.9552	GHMC	Government	0.32707374
16.	IETA	Business	15630.3831	UBA	Government	0.32375486

17.	CIFOR	Research	14583.1155	NAMA Facility	IO	0.30059063
18.	EU Commission	IO	13708.5745	GOT	Government	0.30022025
19.	HCENR	Government	13630.7554	BMLFUW	Government	0.29881895
20.	EU	IO	13130.8729	SEMARNAT	Government	0.27709143
21.	IEA	IO	12747.3383	IEA	IO	0.27156099
22.	UIC	Business	12247.3376	GEF	IO	0.25561021
23.	UBA	Government	11895.6864	OECD	IO	0.24350941
24.	World Bank	IO	11494.9094	EU Commission	IO	0.24254535
25.	Wuppertal Institute	Research	11275.9957	IISD	NGO	0.24166453

BMLFUW = government of Austria, Federal Ministry of Agriculture, Forestry, Environment and Water Management. BMUB = government of Germany, Ministry for the Environment, Nature Conservation, Building and Nuclear Safety. CGIAR = Consultative Group on International Agricultural Research. CIFOR = Center for International Forestry Research. EU = European Union. IEA = International Energy Agency. IETA = International Emissions Trading Association. IISD = International Institute for Sustainable Development. FAO = Food and Agriculture Organization. GHMC = government of India, government of Hyderabad, city of Hyderabad, Greater Hyderabad Municipal Corporation. GOF = government of France, Ministry of Ecology, Energy, Sustainable Development, and Spatial Planning. GOT = government of Thailand, Ministry of Natural Resources and Environment. HCENR = government of Sudan, Higher Council for Environment and Natural Resources. IPCC = Intergovernmental Panel on Climate Change. SEMARNAT = government of Mexico, Ministry of Environment Mexico, Secretariat of Environment and Natural Resources. UBA = government of Germany, German Environment Agency. UIC = International Union of Railways. WRI = World Resources Institute.

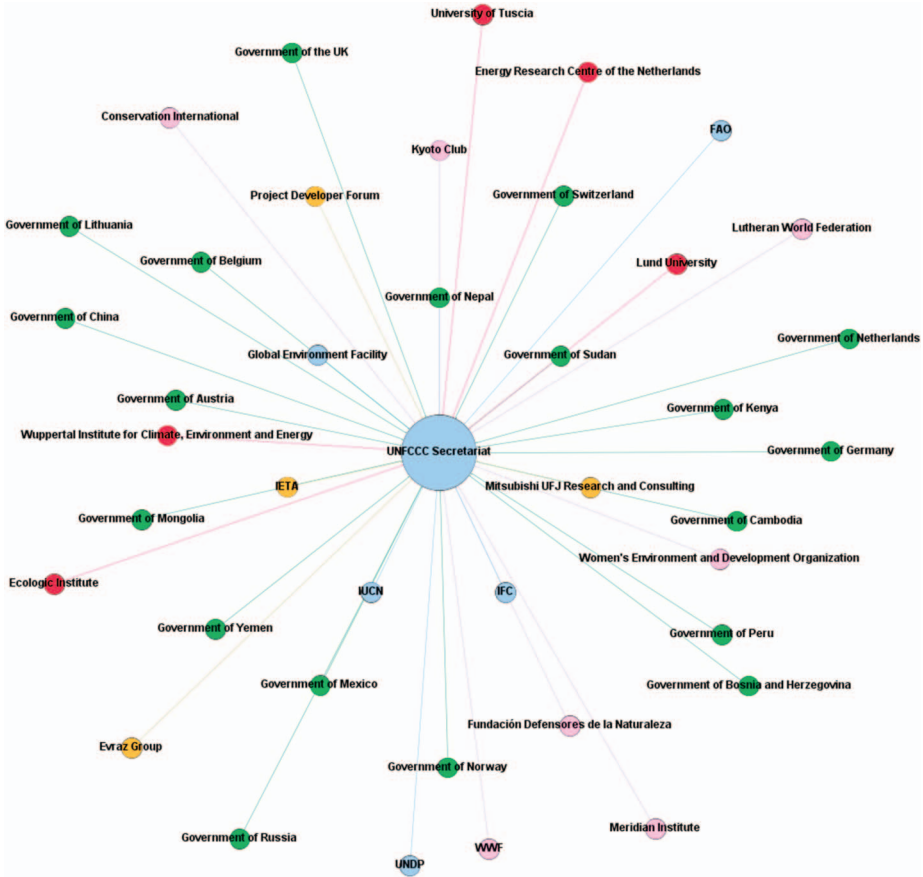


Figure 1
The UNFCCC Secretariat's Egocentric Network

The network was created with Gephi, using the Fruchterman–Reingold layout. The node color represents the actor type: blue = IOs, green = government, red = research, pink = NGOs, yellow = business.

of the secretariat accordingly (see Supplemental Appendices 1 and 2; https://www.mitpressjournals.org/doi/suppl/10.1162/glep_a_00556). In the adapted stakeholder network, the climate secretariat obtains the highest scores for both betweenness and eigenvector centrality. Nevertheless, to avoid the risk of overinterpreting our data, we base our analysis on a stakeholder network that considers the UNFCCC and the climate secretariat as separate actors.

In addition to examining the centrality scores of the UNFCCC secretariat, we are also interested in the secretariat's specific interactions with groups of UNFCCC stakeholders. Figure 1 shows the egocentric network of the UNFCCC secretariat, which only includes those actors who responded that they cooperated or exchanged information with the secretariat (see Supplemental Appendix 2 for

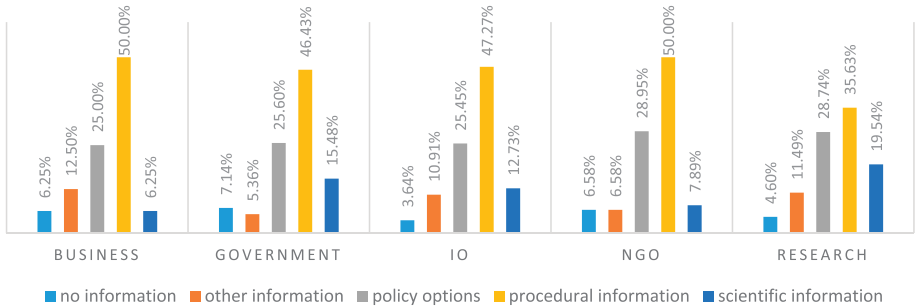


Figure 2
Types of Information Provided by the Climate Secretariat to Different Actor Types

an egocentric network of UNFCCC and the climate secretariat combined). We can see that party and nonparty stakeholders are almost equally represented. The UNFCCC secretariat is an important partner for both groups of actors.

Although the secretariat’s position in the global climate governance network indicates a significant potential for influence, its actual influence depends crucially on the type of information that it passes on to other actors. Figure 2 shows that the secretariat primarily provides procedural information to surveyed governments, IOs, and nonparty stakeholders. However, the secretariat also shares information on policy options related to the climate negotiations. Among all actor types, policy-relevant information was the second most common answer, ranging from 25 percent for IOs and businesses to almost 29 percent for NGOs. Furthermore, a considerable share of research (20%), government (15%), and IOs (13%) reported having received technical or scientific information from the secretariat. This indicates that the climate secretariat not only holds a central position within the UNFCCC regime but also engages in the dissemination of policy-relevant information to state and nonparty stakeholders within the network. The fact that different groups of actors perceive the secretariat as a go-to organization for policy-relevant information is an important precondition for it to exert influence on policy outcomes and an indicator of its potential as a global climate policy broker.

Summing up, the findings of our SNA indicate that the climate secretariat has significant potential to influence the UNFCCC regime. First, it is able to broker information of different kinds within the UNFCCC stakeholder network between party and nonparty stakeholders, which may allow it to facilitate international climate negotiations. Second, it connects with other well-connected stakeholders, meaning that it provides information to actors that, in turn, provide information to many other actors. Third, the information it provides to other actors is not limited to procedural information but also includes substantial information on policy options and the technical or scientific aspects of climate policies.

The Climate Secretariat's Interaction

By providing policy-relevant information to both the negotiation parties and nonparty stakeholders, the climate secretariat strengthens its link to the formal climate negotiations and, to a certain degree, confers institutional legitimacy to their problem definitions and policy proposals. The official mandate of the secretariat and the demands of parties do not seem to hinder it from maintaining close links to nonparty stakeholders. Rather, our survey data and subsequent interviews suggest that it focuses more strongly on the needs of nonparty stakeholders than its mandate stipulates and tries to build support among nonparty stakeholders in the hope of putting pressure on parties and thereby advancing negotiations in the desired direction. The next sections present the results of our qualitative analysis and explore in more detail how the climate secretariat interacts with party and nonparty stakeholders.

The Climate Secretariat and Nonparty Stakeholders

On closer analysis of the relationship between the climate secretariat and nonparty stakeholders, we find that different kinds of interactions take place. As nonparty stakeholders are generally less interested in information about the negotiating process itself and rather seek to understand the interaction between the parties and the underlying political questions (interview 6), the secretariat tends to give information on the proceedings and obstacles to the negotiations as well as “the possibilities for a successful outcome” (interview 6). Moreover, the secretariat provides targeted information to nonparty stakeholders so they may better understand “what climate change means on the ground in different areas” (interview 6).

Understanding the different needs of stakeholders (interview 6), the climate secretariat reaches out to nonparty stakeholders to educate people about climate change by giving a “sense of positivity and optimism that it can be done and that we are not starting at ground zero” (interview 5). For example, at COP 22, the address made by the executive secretary of the climate secretariat to the opening plenary highlighted the need to fully include nonparty stakeholders, as “they are central to the global action agenda for transformative change” (Third World Network 2016, no. 3, 1). Defined as “anybody who is not a governmental actor and wants to contribute to the process” (interview 6) by a member of the secretariat, nonparty stakeholder involvement is said to push for the greater good in international climate politics (interview 1) and makes people aware of the direct consequences of climate change.

As changing the narrative on climate change is a costly endeavor, members of the secretariat team up with a variety of other actors (interview 5) to underscore the multiple (economic) benefits resulting from acting. Members of the secretariat, for example, worked with software developers to program a climate game, promoted by “a couple of ... celebrities” (interview 5) to reach out to the

public so they may in turn take action. Moreover, the climate secretariat “spent a lot of time forming partnerships with key stakeholders, like the former mayor of New York, Michael Bloomberg, and celebrities who had climate interests, such as Mark Ruffalo” (interview 5). The executive secretary also talked to religious groups and their leaders, such as the pope, as well as to research organizations and other entities, asking them to speak out on climate change. The climate secretariat connects with high-level stakeholders—so-called influencers in media and in research—to articulate the secretariat’s message (interview 5).

The climate secretariat also actively extends its network of focal points to, for example, youth organizations (interview 4). It invites civil society to make requests for technical assistance “from any level, be it local government, NGOs, universities, the private sector or national ministries” (interview 28). On the issue of women and gender, for example, the secretariat facilitates implementation and capacity building via a network of approximately “260 organizations, private sector entities and other types of institutions around the world” (interview 28), such as the GEF Gender Partnership, UNEP, the Women Delegates Fund, and the Global Gender Climate Alliance (interview 28). Other cooperation partners include UNESCO and the German Development Institute.

The climate secretariat also supports and encourages the engagement of nonparty stakeholders operating at different levels beyond the UNFCCC regime. This happened, for example, in the context of identifying synergies between the Paris Agreement and the Sustainable Development Goals. When the president of the seventy-first session of the UN General Assembly called for a “focus on new strategic partnerships and mobilizing resources from public, private, blended and alternative sources,”⁴ the UNFCCC executive secretary quickly “echoed the UN Secretary-General’s vision for addressing challenges in an integrated manner.”⁵ She stated that momentum is building not only among national governments but also in the “unprecedented alliances” of companies, investors, cities, regions, institutions, and individuals (see interview 5).⁶ Additionally, at the UNFCCC Bonn sessions in May 2017, she said, “All sectors of society in all nations need to be on-board and fully involved to support governments as they take forward their climate action plans into the future” (UNFCCC 2017).

To sum up, members of the secretariat actively promote interaction with nonparty stakeholders (interview 2): “Stakeholders are out in the real world. They’ve got boots on the ground, they are dealing with vulnerable communities, they are trying really hard to talk across ministries, across sectors” (interview 1; also interview 4). Members of the secretariat interact with nonparty stakeholders

4. *Earth Negotiation Bulletin* 32 (29) (2017), <http://enb.iisd.org/vol32/enb3229e.html>, last accessed March 26, 2020.

5. *Earth Negotiation Bulletin* 32 (27) (2017), <http://enb.iisd.org/vol32/enb3227e.html>, last accessed March 26, 2020.

6. *Earth Negotiation Bulletin* 32 (27) (2017), <http://enb.iisd.org/vol32/enb3227e.html>, last accessed March 26, 2020.

while acting as mediators and facilitators on certain issues (interviews 24 and 26) or as the “hub of a network” (interview 6), thereby pushing for cooperation via the extension of topics. As one member of the climate secretariat states, “My job ... is to bring together stakeholders, like NGOs, science, different levels of decision makers, experts of every potential kind, and involve them into discussion that the parties have” (interview 1). Nonparty stakeholders themselves greatly appreciate the efforts of the climate secretariat. At an exclusive meeting between nonparty stakeholders and members of the climate secretariat at COP 23, many nonparty stakeholders thanked the climate secretariat for all of its work and for giving them “the opportunity to be heard, not only in the corridors, but also in an open dialogue” (interview 32).

The Climate Secretariat as Communication Hub Between Party and Nonparty Stakeholders

The climate secretariat seems to be very aware of the importance of communication and staying within its mandate (interviews 1 and 6), as state delegates occasionally express their reservations about the climate secretariat taking an active role during COP negotiations. While members of the secretariat might not openly voice their opinions in the negotiating space (interview 1), providing nonsensitive information in a “strictly neutral” (interview 6) fashion, party stakeholders confirm that the interactions of the members of the climate secretariat with the parties go beyond merely facilitating negotiations (interviews 7 and 19). Rather, the secretariat acts as a mediator—as a communication hub—between parties (interview 24) and nonparty stakeholders.

Interaction between party and nonparty stakeholders often takes place via participation in convention institutions like the Adaptation Committee and in other initiatives, such as the Lima Paris Action Agenda and the Technical Expert Meetings (interview 6). This kind of cooperation is particularly evident during COP sessions, in the form of jointly conducted side events organized by members of the climate secretariat.

Side events are held in parallel to negotiation sessions and provide an opportunity to discuss policy issues beyond the realm of the negotiation. They bridge the “interactions between the formal and informal spaces of climate governance” (Schroeder and Lovell 2012, 23) as states are formally required to collaborate with an observer organization to apply via the climate secretariat for a side event and/or an exhibit slot. At side events, all speakers have the opportunity to prominently present their views on a certain topic and to advocate for a preferred policy option in tandem. While the formal view of the party hosting the side event does not necessarily need to converge with that of the nonparty stakeholders, these events are often used to demonstrate a common stance on a specific issue.

Nonparty stakeholders are very keen to register and participate as observers in UNFCCC negotiations and to organize side events to actively take

part in the discussions (interview 2) to ensure they get their “fingerprints on the process” (interview 1). Party stakeholders, on the other hand, welcome the non-party stakeholders’ participation in side events, as they generate important stimuli (interview 16) as well as legitimize their actions. Side events enable capacity building, the introduction of potential items for negotiation, networking across levels and policy areas, and dissemination of information (Hjerpe and Linnér 2010; UNFCCC 2015; see also interviews 17 and 30). Side events can thus be understood as high-quality conversations that are able to foster innovation, trust, and awareness of the need for possible compromises (Hjerpe and Linnér 2010), all of which can positively affect both the negotiation of issues and the implementation of past decisions.

Conclusions

In this article, we aimed to better understand the role of the UNFCCC secretariat in the increasingly complex global climate governance structure. We developed an innovative methodological approach to addressing this issue and systematically examined the climate secretariat’s relations with the main groups of actors involved in this policy domain, in particular with nonparty actors. More specifically, we used SNA to examine the secretariat’s relations with nonparty and party stakeholders and to identify its position in the UNFCCC policy network. An understanding of where the climate secretariat stands in the global climate governance network and which actors it interacts with most allowed us to draw preliminary conclusions about the ways in which it connects with other stakeholders to influence global climate policy outputs. In addition, we extended our findings gathered with SNA by conducting thirty-three semistructured interviews to corroborate the results of the SNA.

Our quantitative and qualitative analyses show that interaction between party and nonparty stakeholders and the climate secretariat occurs in many ways. Hence, in this article, we demonstrate that the climate secretariat not only provides expertise that allows party and nonparty stakeholders to understand the complexity of the issue at hand but also successfully connects with other well-connected stakeholders (e.g., influencers) to promote the implementation of the Paris Agreement and combat climate change outside of the UNFCCC regime. In doing so, it prioritizes its actions and (selectively) connects with a variety of stakeholders. We also conclude that the climate secretariat acts as an intermediary between party and nonparty stakeholders. It deliberately extends issue-specific policy debates beyond the inner circle of official negotiation parties (i.e., the national delegations) to build transnational support for the policy issues at stake, thereby raising pressure from both within and outside to continue and successfully conclude the negotiations. The climate secretariat shows key characteristics of a knowledge broker in that it deliberately engages in gathering, synthesizing, processing, and disseminating policy-relevant information to a wide range of different stakeholders in an attempt to alter knowledge

and belief systems. In addition, the central position it occupies within the international climate policy network enables the secretariat to influence the flow and content of policy-relevant knowledge and information among the actors in this network.

The results of our study lend support to the argument that the climate secretariat may gradually be moving from a rather neutral and instrumental stance to playing a proactive and influential role in international climate governance. It aims to increase its political influence by establishing strategic links to actors other than the formal negotiation parties, thereby exceeding its role as a mere provider of process-related information. While its behavior is rooted in its formal mandate, we find that the climate secretariat is increasingly involved in the generation and diffusion of climate-related policy ideas and innovations. It coordinates and moderates the interaction with numerous stakeholders operating at various levels to foster cooperation and agreement. For example, the former executive secretary of the UNFCCC, Christiana Figueres, was publicly perceived as the driving force behind the UNFCCC COP 21 negotiations in conjunction with the French presidency. The laudation of the Ewald von Kleist Award, which they received at the 2016 Munich Security Conference, states, “While many played a part in achieving agreement in Paris, it was our two award winners tonight who, primarily, made the Paris accord possible” (United Nations Secretary-General 2016).

Mastering the unique multilevel global climate governance architecture despite a narrow formal mandate that emphasizes its logistical role and explicitly exempts it from taking on a more active part in multilateral negotiations, it cooperates with different kinds of stakeholders to guarantee the successful realization of the measures agreed upon in the Paris Agreement. The climate secretariat makes a deliberate choice to use its limited resources for investing heavily in networking with different kinds of stakeholders. Our study lends support to the assumption that, being intermediaries between party and nonparty stakeholders, international treaty secretariats may be gradually moving from playing a rather neutral and instrumental role in international climate governance (Busch 2009) to being proactive and influential (see, e.g., FCCC/SBI/2016/INF.13). While the UNFCCC explicitly stipulated that the secretariat should cooperate with different stakeholders operating at various levels to guarantee the implementation of the measures agreed upon, it might be precisely this secretariat task that blurs the borders between fulfilling its mandate and participating in shaping the political will.

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4. Conclusion

When states fail to coordinate and agree on action that is adequate to countering the climate and biodiversity crises, which can originate in diverging interests but also pertain to governance complexity and institutional fragmentation, IPAs find a governance system that is structurally conducive for drawing attention to their problem definitions, policy preferences and capacities and to bridge structural and substantive divides between states (e.g. Elsässer et al. 2022; Hale, Held, and Young 2013; Miller Smallwood et al. 2022). An important context factor for this course of action is the increasing urgency and even emergency character of the intertwined climate and biodiversity crises which threaten to destabilize the living conditions of humanity (Pörtner et al. 2021). IPAs legitimate activities associated with policy entrepreneurs with their impact on regime effectiveness, or their performance, thereby enhancing the acceptance of their actions (Tallberg and Zürn 2019). One way of using this leeway is to advocate for integrating educational policies into environmental policy and governance.

This thesis analysed the role that IPAs play in global environmental governance, with a specific view to educational innovations therein (McKenzie 2021). It focused on bureaucratic behaviour as a point of departure and demonstrated, in which way IPAs can achieve autonomous, influential roles in the absence of explicit state delegation (Bayerlein, Knill, and Steinebach 2020; Jinnah 2014; Knill et al. 2018). The findings were structured according to an IPA's autonomy, entrepreneurialism and expertise as preconditions for its potential influence in global governance networks. The concept of an IPAs' nodality as resulting from its expert authority and trust into its impartiality received particular attention (Bauer et al. 2017). The five articles and the connecting discussion sections showed that IPAs play diverse roles in the climate and biodiversity regimes through which they can influence policies to a certain extent, especially in the policy initiation phase.

First, the thesis demonstrated that despite a prohibitively strict mandate as a technocratic facilitator, the UNFCCC Secretariat adopts an entrepreneurial administrative style at the policy initiation stage and a cautiously entrepreneurial style during the policy formulation phase, clearly displaying the intent to influence the process and outcomes of the negotiation process prior to the adoption of the Paris Agreement (section 3.1). It has acquired a distinctive actor quality in the climate regime, motivated by a strong commitment to enhancing the effectiveness of the climate regime, advancing meaningful cooperation and driving the UNFCCC process toward ambitious climate policies, both at the level of global rule setting and at the level of national implementation (Well et al. 2020).

Second, the climate secretariat's role as a policy broker is described for the case of climate change education. Section 3.2 traces the success of the climate secretariat in increasing the relevance of education in the UNFCCC negotiations at an early stage, especially by promoting the concept of "Action for Climate Empowerment". It furthermore shows how the climate secretariat develops an expert authority in education as an issue outside the original scope of the climate regime and beyond the secretariat's mandate, thereby displaying a highly entrepreneurial policy style by strategically linking climate and education (Kolleck et al. 2017). The section furthermore shows how the educational innovation CCE as part of ESD is put onto the agenda of and negotiated in global environmental governance, thereby highlighting how the study of educational governance and of public administrations can fertilize each other.

Third, after having established the roles of a policy broker and entrepreneur for the UNFCCC secretariat, implying a high potential for political influence, the thesis specifies that, in order to influence the outcomes of multilateral negotiations, IPAs need to actively and strategically seek to attract the attention of states to their own problem definitions and policy suggestions (section 3.3). The section emphasizes the role of an IPAs' expert authority and autonomous contribution to the problem-solving capacity of the regime in which it operates (Barnett and Finnemore 2004; Busch and Liese 2017) and hence its output or performance-based legitimacy (Tallberg and Zürn 2019). The plausibility of attention-seeking bureaucracies as an adequate heuristic to study IPAs was demonstrated with the explorative case study on the UNFCCC and CBD secretariats, which showed that attention-seeking is indeed an essential tool for IPAs to bring their policy definition and preferences to the fore in multilateral negotiations (Well et al. n.d.).

Fourth, institutional fragmentation is a structural condition that potentially enables the influence of IPAs on policy initiation and implementation (section 3.4). IPAs can play important roles in fragmented governance settings as agenda setters, policy entrepreneurs and brokers of expertise (de Wit et al. 2020:60). The case study on institutional fragmentation of REDD+ finance demonstrates how state actors fail to coordinate directly due to a lack of authoritative institutions for standard setting (Well and Carrapatoso 2017). Institutional fragmentation and overlaps generate "a governance niche", i.e. an opportunity for IPAs as impartial actors to provide guidance on how to navigate a fragmented governance setting, by drawing on their unique networks, capacities and expertise (Abbott et al. 2016; Elsässer et al. 2022; Jinnah 2014).

Fifth, an IPAs' nodality is crucial for its potential to influence global policies (section 3.5). The climate secretariat's high centrality and embeddedness in issue-specific communication flows provides it with a high potential to act as a knowledge broker and exert political influence in

the climate regime (Jørgens et al. 2017; Kolleck et al. 2017; Saerbeck et al. 2020) . Based on this favourable network position as a communication hub, the climate secretariat strategically connects different stakeholder types to each other, thereby deliberately extending policy debates beyond formal negotiation spaces. It plays a facilitating and even mediating role by actively bringing non-party stakeholders and parties together and thereby succeeds in brokering climate action (Saerbeck et al. 2020).

In sum, international treaty secretariats take on the roles of policy brokers, entrepreneurs, mediators and attention-seekers. They do this by employing an entrepreneurial administrative style, by drawing on their expert authority and on their positional advantage in networks, which enables them to display normative leadership (for example through issue-linkage) and seeking the attention of states internally and directly in multilateral negotiations as well as externally and indirectly via transnational policy networks. The thesis furthermore highlighted that contemporary policymaking in the international system is increasingly characterized by transnational governance, in which supranational, national, sub-national, state and non-state actors have an impact own globally agreed policies (Abbott 2014; Widerberg and Pattberg 2017). In this setting, despite their limited formal, rather technocratic mandates, IPAs can bridge the divide between public administration and international politics and regularly enter the “purple zone”, that describes how IPA staff operate at the intersection of the “red” of politics and the “blue” of administration (Alford et al. 2017).

The conceptual and empirical results from this thesis contribute, on the one hand, to the knowledge on IPAs from the viewpoint of Administrative and Organizational Studies and International Relations, as summarized above. On the other hand, these findings constitute an empirical and conceptual contribution to Educational Science. Empirically, the thesis generated insights into the role of IPAs for the global advancement of climate change education (CCE) as a part of Education for Sustainable Development (ESD), by highlighting internal factors that determine the behaviour of the UNFCCC secretariat as an actor that is highly relevant to the educational innovation of CCE and its communication (McKenzie 2021; Thew et al. 2021). More specifically, the potential for the climate secretariat’s influence on CCE becomes visible through the strategic connection to other influential actors, by enabling knowledge and communication flows and by exploiting a unique position in global networks to garner support for CCE among many actors. The climate secretariat employed normative leadership, facilitation and outreach to promote the concept of “Action for Climate Empowerment” as an approach to CCE that is adapted to the regime goals of the UNFCCC as well as to raise ambition for its subsequent implementation (Kolleck et al. 2017:119–21). It furthermore strategically

shapes its organizational environment on CCE, which is typical for autonomous IPAs (Bauer et al. 2017:188).

Conceptually, the thesis developed analytical tools to study the global negotiation and implementation of policy innovations, which are well suited to also analyse the spread of educational innovations (Altrichter 2010; Kolleck 2014), including within global climate governance (McKenzie 2021). The combination of specific conceptual tools for studying IPA influence, such as administrative styles and attention-seeking, with research on advancing sustainability in education policy and practice proved to be well suited to study the role of intrinsic motivations and relational factors for the global diffusion of climate change and sustainability aspects in educational policy (Goritz et al. 2019; Jacob et al. 2021; Kolleck and Bormann 2014; Pitton and McKenzie 2022). The thesis therefore empirically and conceptually contributes to the literature focusing on how educational innovations with regards to climate change and sustainability considerations are set onto the agenda in multilateral negotiations and on understanding the role of IOs and IPAs in educational governance (Jakobi 2009; Meyer and Rowan 2006; Shahjahan 2012). The way in which the climate secretariat helped CCE gain traction as an educational innovation within the climate regime is an empirical example of how IPAs adapt to a global governance setting in which policies that were formerly regarded as distinct from each other are increasingly treated as interrelated, socio-ecological phenomena. The thesis therefore finally highlights the nexus between education and climate change as interrelated global sectors, by proposing to understand the dynamics between global policies on climate change and education from an Anthropocene perspective (Biermann 2021), rather than from the two separate perspectives of environmental and educational governance.

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Overview of publications and author contributions

Well, Mareike, Barbara Saerbeck, Helge Jörgens, and Nina Kolleck. 2020. "Between Mandate and Motivation: Bureaucratic Behavior in Global Climate Governance." *Global Governance* 26(1):99-120, Vol.26.

As the first author of this article, my main contribution was the choice of the conceptual lens of administrative styles to study the impact of the UNFCCC secretariat as well as the discussion of the secondary literature, the choice of the UNFCCC secretariat as a case study for studying IPA influence and the analysis and interpretation of data in light of the chosen conceptual approach. Interview and participant observation data was collected jointly with my co-author Barbara Saerbeck at UNFCCC COPs and the UNFCCC secretariat. Barbara Saerbeck, Helge Jörgens and Nina Kolleck provided input and advice to the theoretical and methods sections, drawing on the research approach of our joint project "ENVIPA" and inspired by exchange with colleagues in the research group "International Administrations".

Kolleck, Mareike Well, Severin Sperzel, and Helge Jörgens. 2017. "The Power of Social Networks: How the UNFCCC Secretariat Creates Momentum for Climate Education." *Global Environmental Politics* 17(4):106–26. doi: 10.1162/GLEP_a_00428

As the second author of this article, my main contribution was the gathering and analysis of qualitative data on CCE in the UNFCCC. Nina Kolleck, Severin Sperzel and Helge Jörgens gathered and analysed the quantitative data. Drawing conclusions by combining the two data types was a collaborative effort by all co-authors. I furthermore contributed the section on CCE in the UNFCCC and contributed to the state of the art and methods sections as well as to the final discussion of results. The contextualization of the analysis into the secondary literature was mainly contributed by Nina Kolleck, complemented by contributions by Helge Jörgens and myself.

Well, Mareike, Helge Jörgens, Barbara Saerbeck, and Nina Kolleck. n.d. "Environmental Treaty Secretariats as Attention-Seeking Bureaucracies: The Climate and Biodiversity Secretariats' Role in International Public Policy Making ." in *International Public Administrations in Environmental Governance. The Role of Autonomy, Agency and the Quest for Attention*, edited by H. Jörgens, N. Kolleck, and M. Well. Cambridge: forthcoming in Cambridge University Press.

As the first author of this chapter, my main contribution was to revisit and refine the analytical heuristic, which the four co-authors had proposed in a previous publication, of which Helge Jörgens was the first author (Jörgens et al. 2017). This implied further specifying and adapting the heuristic framework for the analysis of policy making in international treaty systems and

fleshing out bureaucratic authority and entrepreneurial leadership as the distinctively bureaucratic elements of attention-seeking behaviour (Well et al. n.d.:8–9). In addition, I refine the two pathways of attention-seeking by identifying sub-categories of internal and external attention-seeking (ibid.:10-13). For the internal dimensions, for example, I highlight the role of translation and issue-linkage as forms of normative influence. For the external dimensions, I specify institutional complexity and polycentricity as a conducive environment for IPAs to act as knowledge brokers and exert reflexive leadership, drawing on their embeddedness in transnational policy networks. I furthermore contribute the comparative case-study on the UNFCCC and CBD secretariats, drawing on qualitative content analysis of semi-structured expert interviews, relevant documents and participant observation. Qualitative expert interviews were gathered jointly with Barbara Saerbeck, which I complemented with further participant observations and document analysis. Helge Jörgens, Nina Kolleck and Barbara Saerbeck contributed to the theoretical section.

Well, M., and A. Carrapatoso. 2017. “REDD+ Finance: Policy Making in the Context of Fragmented Institutions.” *Climate Policy* 17(6). doi: 10.1080/14693062.2016.1202096.

As the first author of this article, my main contributions were choosing institutional fragmentation as a conceptual lens to understand REDD+ finance, gathering and analysing qualitative data for analysing REDD+ finance at a global level as well as for the case study on Indonesia and interpreting the results considering the secondary literature on institutional fragmentation in global environmental governance. My co-author Astrid Carrapatoso contributed advice on the state of the art from the perspective of the research project, in which the qualitative data was gathered, namely “Die Einbindung von REDD+ in das neue Klimaabkommen der UNFCCC und Annäherungspotentiale der CBD”.

Saerbeck, Barbara, Mareike Well, Helge Jörgens, Alexandra Goritz, and Nina Kolleck. 2020. “Brokering Climate Action: The UNFCCC Secretariat between Parties and Nonparty Stakeholders.” *Global Environmental Politics*. doi: 10.1162/glep_a_00556.

My contribution as the second author of this article were the following. In cooperation with the first author, I contributed to this study by designing and implementing the large-scale survey to collect the data necessary for the SNA in 2015 and 2016 ; preparing and describing the obtained survey data; implementing SNA techniques; designing and implementing the qualitative data collection, namely the expert interviews and document analysis; analysis of qualitative data by qualitative content analysis (Mayring and Frenzel 2014); as well as the interpretation and discussion of the data derived from the combination of the quantitative and qualitative

approaches. Barbara Saerbeck led the data analysis for this chapter and mainly contributed the theoretical section. Alexandra Goritz contributed to the data analysis and visualization. All co-authors further contributed to specific aspects of data analysis, interpretation of results and their contextualisation in the secondary literature.

Selbstständigkeitserklärung

Hiermit erkläre ich, dass ich die vorliegende Dissertation selbstständig verfasst und ohne unerlaubte Hilfe angefertigt habe.

Alle Hilfsmittel, die verwendet wurden, habe ich angegeben. Die Dissertation ist in keinem früheren Promotionsverfahren angenommen oder abgelehnt worden.

Berlin, 17.01.2023

Mareike Well