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The Moral Duties of Climate Clubs in a Context of Polycentric Climate Governance

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1. Introduction

Today, the question of climate governance is one of great interest. The classical multilateral climate governance structure, framed by the 1992 United Nations Framework Convention on Climate Change (UNFCCC) and the 1997 Kyoto Protocol, has been criticized by many. This ‘traditional’ structure focused on a top-down approach, where precise emissions reductions were determined and the contribution of non-state actors to the climate effort was not explicitly called upon (Chan et al. 2015, in Gajevic Sayegh, 2020: 490). Eckersley (2012: 24) argues that the negotiation process within the UNFCCC had become “fatally tedious because it requires the impossible: decision-making by consensus [...] on every line of a complex and long treaty.”

In the intent of creating a more effective structure to cope with climate change, a shift away from the traditional top-down approach was developed in the 2015 Paris Agreement. The latter embodied the transition towards a bottom-up approach in climate governance, by relying on voluntary pledges (called *Nationally Determined Contributions*) rather than legally binding targets and timetables. This constituted an important improvement in terms of climate governance, because it “charted a new course in the global climate effort” by strengthening the global response to the threat of climate change (UNFCCC, n.d.). Part I of this paper will further develop on evolution of the climate governance structure.

However, even though the climate governance structure has undergone significant improvements with and since the Paris Agreement, certain criticisms remain. Indeed, the regime still seems to be unable to “keep its promise of protection” and “ensure a healthy environment for present and future generations” (Mayrand, 2018: 2). According to Vatna (2011: 2), “[t]he improvement of the institutional framework [for climate action] is indeed a real cause for concern, given the fragmentation of governance [...]” Furthermore, de Lassus St-Geniès (2015: 10) underlines that the sharing of the “burden of action among all states,” as defined by the Paris Agreement, is a central problem in the climate governance structure, since it is not certain that it “is necessarily more equitable than in the past, or even that it leads to a better efficiency of the regime.”

Hence, the ineffectiveness of the current multilateral climate governance structure has triggered a series of alternative proposals which aim to accelerate effective climate action, such as ‘climate clubs.’ These clubs can be loosely defined as “a smaller group of actors [aiming] to take action outside the UN climate regime, with clearly defined targets and conditions for members, possibly involving sanctions against non-members” (Falkner et al., 2021: 1). They aim to complement the international multilateral system by pushing international climate policy beyond the UNFCCC and the Paris Agreement (Mourier, 2020: 3). The proliferation of climate clubs stands as a promising solution to address the shortcomings of the current regime. As Torney (2019: 167) advocates, “[b]ecause of the global commons nature of climate change, unilateral leadership [...] by one or a small number of actors will be insufficient to combat climate change effectively.”

This realization is not new: many have drawn attention to the new polycentric nature of climate governance, which seeks to include minilateral, subnational and non-state (hereafter: MSN) agents in climate change mitigation and leadership for climate action (Gajevic Sayegh, 2020: 483). Even the Paris Agreement held implications for polycentric governance from the get-go, as it institutionalized ‘hybrid multilateralism,’ a concept which denotes an intensified interplay between multilateral and transnational climate action (Bäckstrand et al., 2017: 566). This blurring between state and non-state actors incarnated by the Paris Agreement gave birth to a climate governance structure that is much more fragmented and ‘polycentric.’

The concept of ‘polycentricity’ was first popularized by Michael Polanyi in the 1940s and 1950s, who analyzed ‘polycentric tasks’ which referred to problems of balancing large numbers of connected, interdependent elements in a graphical network (Dorsch and Flachslund, 2017: 48). In the 1960s, Vincent Ostrom adopted the terminology of polycentricity to the context of metropolitan governance. He described it as a system “of many autonomous units formally independent of one another, choosing to act in ways that take account of others, through processes of cooperation, competition, conflict, and conflict resolution” (Ostrom, 2014: 46). Polycentric governance, by attributing a high degree of autonomy to societal actors, claims that widespread self-coordination leads to a multitude of decision-making ‘centers’ (Wurzel, Liefferink & Torney, 2019, 3). Elinor Ostrom subsequently employed the concept of polycentricity to analyze collective-action problems,

defined as “a situation in which all individuals would be better off cooperating but fail to do so because of conflicting interests between individuals that discourage joint action” (Brown, McLean, & McMillan, 2018). In her late work, she specifically applied the terminology to the issue of climate change. With the increasing diversity of actors in climate governance, we can conclude that the global community has entered a new phase of more polycentric climate governance (Okereke, 2018: 321).

However, as promising as polycentric climate governance may be, it also poses several questions, including that of the responsibility of the actors on the ethical level. Indeed, this new architecture for climate governance brings about novel implications for climate justice and impacts considerations of equity and fairness within international climate governance. Until today, experts have mostly focused on the practical issues related to climate change, such as determining its causes, consequences and effects on political and social life. However, in the past two decades, ethics and justice considerations related to climate change are gaining in interest. Various works (see Shue, 1999; Gardiner, 2006; Caney, 2014) have particularly studied this relationship, and have contributed to the massive output of academic work on climate justice¹ in the last decade. This raises many questions, among which ones that relate to the duties and responsibilities falling upon the various entities involved in climate governance.

With the growing proliferation and diversity of actors and ‘centers’ of influence in climate governance, alternative ways of thinking about global justice and climate change holds great potential. As this paper will develop in the next section, minilateralism, where “cooperation is encouraged and advanced through small group interactions that generally involve the most powerful actors in the international system” (Hampson and Heinbecker, 2011: 299), is a proposal which seems to hold much potential for the next generation of global climate governance. Given the new context of polycentric climate governance, minilateral proposals such as climate clubs have the potential to play an important role in the developing global climate governance structure. Composed of diverse actors such as nation states, cities, think tanks and corporations, these clubs are able to, are able to “influence policy outcomes by

¹ Climate justice is a term used for framing global warming as an ethical and political issue, rather than one that is purely environmental or physical in nature, by relating the effects of climate change to concepts of justice, equality, human rights; collective rights, and the historical responsibilities for climate (UNEP, n.d.).

providing information, holding nation states accountable for their behaviors, as well as changing how issues are debated through discourse and contestation” (Ruggie, 2004 in Nasiritousi, 2015: 21). In order to gain a better understanding of the duties of various unilateral actors such as climate clubs in the fight against climate change, the link between ethics and polycentric governance is a subject that would greatly benefit from being further developed. In this regard, this paper will aim to study the connection between polycentric governance and climate justice, in particular as it relates to climate clubs. It will aim to develop a normative framework which differentiates the various climate-related responsibilities of collective agents within polycentric governance settings, while taking into consideration the problem of non-compliance. This essay argues that the distribution of moral duties in a context of polycentric governance allows for an increasingly ‘morally informed’ climate governance, which in turn contributes to inducing agents to act according to the collective goal. An in-depth distribution of climate duties adapted to polycentric governance frameworks can potentially contribute to addressing the problem of non-compliance (Gajević Sayegh, 2020: 484).

In order to evaluate the moral duties² of climate clubs in a context of polycentric climate governance, this paper will study the following: first, within the new polycentric climate governance framework, do agents have a duty to put climate clubs in place as a tool against non-compliance? Second, climate clubs have a moral duty to intervene against climate change and if so, what precise moral duties are incumbent upon them? To accomplish this task, the first part of this analysis will be essentially descriptive, and will contextualize the new polycentric nature of climate governance, define and describe climate clubs and analyze their role within this new framework. The normative analysis will be made later on. The second part will evaluate the moral implications related to climate change and climate governance, especially in a polycentric context. The third and final section will connect the theoretical concepts presented in the first and second parts by linking climate clubs with principles of moral responsibility for climate action and will aim to provide an answer to the two aforementioned questions.

² I understand having a moral duty as meaning that one is morally required to act in a certain way.

2. Part I: The Climate Governance Regime

2.1 Dawn and Evolution

Although nation states have long been collaborating in order to protect natural resources (one may recall the North Pacific Sealskin Convention of 1911, or the establishment of the International Union for the Conservation of Nature in 1948), these early initiatives were relatively rare and isolated (Morin & Orsini, 2015: 21). However, from the 1960s onwards, several events, such as the increase in nuclear tests, the distribution of the first photos of the Earth seen from space and denunciation of the effect of pesticides on ecosystems attracted attention from the media and raised public awareness of environmental issues (Morin & Orsini, 2015: 21). As concern for issues such as the depletion of natural resources, industrial and military pollution and overpopulation became predominant, a paradigm shift was initiated and brought with it the dawn of the international climate governance structure we know today.

The latter truly took off at the 1972 United Nations Conference on the Human Environment in Stockholm. After this event, the number of multilateral agreements on environmental protection quickly multiplied (see Morin & Orsini, 2015: 24). 20 years later, at the United Nations conference on environment and development in Rio, international environmental cooperation took another important turn, for this conference not only established the UNFCCC, but also defined several cardinal principles and laid the normative basis for a second series of international environmental agreements (Meyer et al., 1997, in Morin & Orsini, 2015: 22).

The UNFCCC-based climate governance structure was mainly focused on a top-down approach, which was further ascertained by the 1997 Kyoto Protocol. Within the latter, precise emissions reductions were determined and the contribution of non-state actors to the climate effort was not explicitly called upon (Chan et al., 2015, in Gajevic Sayegh, 2020: 490). Hence, at this moment, the early climate governance structure was still based on the strategies of powerful individuals and nation states. However, the 2001 refusal of former US President George W. Bush to ratify the Kyoto Protocol induced a rise of various bilateral or unilateral climate partnerships and clubs, such as the Methane to Markets Partnership, the Asia-Pacific Partnership on Clean Development and Climate and the Major Economies Forum. These initiatives effectively challenged the UNFCCC as the epicenter of climate

governance and have induced the development of a more bottom-up response to multilateral climate action (Bäckstrand et al., 2017: 563-564). Indeed, although the UNFCCC was still considered as the main structure coordinating the international response to climate change, the growing interest in climate governance shifted the focus to the role of other actors such as the EU, businesses, NGOs, unions and even individuals (Wurzel, Liefferink & Torney, 2019, 2).

According to Cole (2015, in Bäckstrand et al., 2017: 563), one important event to be underlined in this evolution towards a bottom-up approach in climate governance is the Copenhagen summit, which gave birth to a climate governance structure that scholars have depicted as “complex, dispersed, fragmented and polycentric.” Indeed, the resulting Copenhagen Accord contained several key elements such as the long-term goal of limiting the maximum global average temperature increase to no more than 2 degrees Celsius above pre-industrial levels, a review of the possibilities to aspire for a 1.5°C target, the pledge and review system for NDCs, etc. (Bäckstrand et al., 2017: 563). However, the paradigm shift was truly epitomized in the 2015 Paris Agreement. Indeed, as this section has illustrated, the international climate governance structure has been a hybrid of top-down and bottom-up elements. The Paris Agreement, which relied on voluntary pledges (called Nationally Determined Contributions) rather than legally binding targets and timetables, “both exemplifies and formalizes this shift, effectively extending it out to the post-2020 period” (van Asselt & Zelli, 2018: 31). Hence, climate governance has undergone fundamental changes which indicate that it can no longer be governed multilaterally in a top-down manner by nation states only. This transition signals the emergence of an increasingly polycentric climate governance structure, which the following section will aim to present in better detail.

2.2 The ‘New’ Polycentric Nature of Climate Governance

As it has been previously observed, since the Copenhagen and Paris developments, climate governance has involved “a multiplicity of actors exercising agency and authority in a non-hierarchical mode, (co-) creating norms across different scales (Okereke, Bulkeley and Schroeder, 2009, in Okereke, 2018: 320).” According to some authors, this transition towards a more polycentric climate governance structure was inevitable. For van Asselt & Zelli (2018: 29) “the physical and socio-economic interconnections between climate change and a

range of other issue areas” inevitably induced institutional overlaps between the climate governance structure and other international institutions. For Morin & Orsini (2015: 22) four factors have contributed to the emerging context of global environmental interdependence, namely the fact that i) ecosystems frequently straddle political boundaries, ii) certain natural environments are shared not only between several nation states, but sometimes also by the entire international community (such as outer space and the international seabed) iii) a number of sources of pollution, although emitted locally, generate global effects and iv) environmental problems appear to be linked to other themes of international relations, such as security, development aid, finance and even trade. One author who has been particularly optimistic about this emerging multifaceted structure is Elinor Ostrom, who put forward the idea that the existence of a broad range of climate actions from a diverse set of actors at multiple levels could be a more effective approach to governing climate change; “Given that multiple benefits at diverse scales are generated from efforts taken to reduce GHG emission,” she states, “polycentricity is a useful analytical approach for understanding and improving efforts to reduce the threat of climate change” (Ostrom, 2010b, 552). In order to better understand this governance structure, it could be interesting to underline that polycentric governance concepts are centered around the idea that widespread self-coordination leads to a multitude of decision-making ‘centers,’ particularly at subnational level, and attribute a high degree of autonomy to societal actors (Wurzel, Liefferink & Torney, 2019, 3). They are characterized by multiple governing authorities at differing scales, which benefit from a considerable level of independence permitting the creation of norms and rules (Ostrom, 2010b: 552).

This structure challenges the fashion in which climate governance has traditionally been studied. According to polycentric governance approaches, successful climate governance strongly depends on the existence of strong, relatively autonomous decentralized decision-making centers, which allow for self-coordination (Wurzel, Liefferink & Torney, 2019, 15). For example, within polycentric climate governance, actors such as cities, provinces and NGOs are beginning gain in influence when it comes to climate policy, by their shaping and mobilizing norms and beliefs (Morrison et al., 2019 : 2).

Binding agreements among major emitters, although they represent major steps in the fight against climate change, can take a long time to develop. Hence, ‘global solutions’ negotiated at a global level should be backed up by a variety of efforts at national, regional, and local levels (Ostrom, 2010b: 550). Indeed, it must be noted that Ostrom did not claim that polycentric governance could substitute for international diplomacy, but rather suggested that it had the potential to be highly complementary to traditional multilateralism (Ostrom, 2010, in Jordan et al., 2018:5). One important distinction to be made between multilateralism and polycentricity is that the latter implies the participation of non-state actors, such as corporations, influential individuals, NGOs, think tanks, the scientific community, etc.

Polycentric regimes present various advantages. According to Dorsch and Flachsland (2017, in Wurzel, Liefferink & Torney, 2019, 3), “one of the advantages of polycentric governance is that experimentation at local and decentralized levels may lead to learning-by-doing and subsequent horizontal diffusion or upscaling to higher climate governance levels.” In other words, actors in a polycentric system may use local knowledge from others who are also engaged in trial-and-error learning processes, which allows for mutual monitoring, learning, and adaptation of better strategies over time (Ostrom, 2010b: 552). In this sense, polycentric governance is much more tolerant of overlap, redundancy and duplication in governance, which is considered as an opportunity for learning (Jordan et al., 2018: 6). Indeed, within polycentric governance systems, experimentation and learning from diverse policies adopted by multiple scales are important features, which explain why a more polycentric approach to climate governance holds great potential (Ostrom, 2012, in Torney, 2019: 168). Some authors suggest that an increased presence of non-state actors can enhance transparency and accountability by reviewing ambition, implementation and compliance (van Asselt, 2016 in Okereke, 2018: 331). Another advantage of polycentric governance systems is that although actors possess different levels of formal autonomy, they remain interconnected with other actors within the system (Torney, 2019: 169).

Polycentricity is a term which is frequently employed to describe the wide variety of centers of influence involved in climate governance at different levels. However, as Dorsch & Flachsland (2017: 47) argue, “it often remains unclear which specific effects of policies and governance attempts can be captured by deliberately employing the concept of polycentricity

in a different sense—that is, as a specific approach to perceiving, designing, and implementing climate governance.” In this regard, this analysis attempts to situate the role of climate clubs within this emerging governance system, in order to determine how their implication might increase the effectiveness of climate mitigation action. However, before specifically turning towards climate clubs as actors in polycentric governance systems, it can be pertinent to further discuss the different manners in which different actors interact with each other in polycentric climate governance structures.

2.2.1 Relationships Between Actors in Polycentric Governance

As Wurzel, Liefferink and Torney (2019:1) underline, “the environmental governance literature has seen a proliferation of analytical terms to describe actors who try to engender change for the improvement of the environment/climate [...].” However, the ways in which the various actors interact within polycentric climate governance structures calls for further investigation. Indeed, as this paper has previously discussed, polycentric governance concepts rely on the participation of a wide variety of actors (such as cities, businesses, NGOs, citizens, etc.) which enjoy a high degree of autonomy allowing self-coordination. This phenomenon has been deemed as crucial for the successful functioning of global climate governance (Ostrom et al. 2012: 27). Because they involve many centers of decision-making that are formally independent of each other, polycentric configurations provide the conditions for various leadership dynamics. These exchanges create reinforcement mechanisms on multiple levels of governance which can catalyze an increase of the environmental standards (Schreurs and Tiberghien, 2007, in Wurzel, Liefferink and Torney, 2019:4).

Extensive research has previously demonstrated that there are various types of leadership. In their 2019 article, Wurzel, Liefferink and Torney evaluate different types of leaders implicated in polycentric climate governance. Among these we find structural leadership, entrepreneurial leadership, cognitive leadership and exemplary leadership. Structural leadership is based on an actor’s military and economic power. However, in the field of climate governance, an actor’s relative contribution to a particular environmental problem and/or its ability to offer solutions can also entrust it with greater structural power (Wurzel, Liefferink and Torney, 2019:9). Entrepreneurial leadership focuses on an actor’s ability to wield diplomatic and/or negotiating skills in order to engender compromises and agreements

(Young, 1991 in Wurzel, Liefferink and Torney, 2019:9). Cognitive leadership aims to define or redefine concepts in order to impact the discourse on climate governance and change international actors' cognitive biases. This type of leadership can also relate to cause–effect relations and policy solutions obtained through scientific and experiential knowledge regarding innovative climate measures. Exemplary leadership is based on the intentional setting of examples for others, for example by pushing forward domestic policies as models. Not only are there various types of leadership, but actors can combine different leadership types: for instance, a leader can, simultaneously exert entrepreneurial leadership (through coalition-building around a particular issue), cognitive leadership (by supporting these efforts with scientific evidence), and exemplary leadership (by acting as a model for others) (Wurzel, Liefferink and Torney, 2019:11). Because polycentric governance approaches are based on the idea that successful climate governance strongly depends on the existence of strong, relatively autonomous decentralized and/or local decision-making centers and allow for experimentation and learning-by-doing (see p. 9), they mostly foster entrepreneurial, cognitive and exemplary leadership (Wurzel, Liefferink and Torney, 2019:15). First, since polycentricity focuses on site-specific conditions to assess “the specific capabilities of individual actors and their potential to cooperate” (Dorsch and Flachsland, 2017 in Wurzel, Liefferink and Torney, 2019:9), it opens the door to a wide range of state and non-state actors potentially demonstrating entrepreneurial leadership. According to Young (1991, in Wurzel, Liefferink and Torney, 2019:9) an entrepreneurial leader is usually “an agenda setter and a popularizer who uses negotiating skill to devise attractive formulas and to broker interests.”

According to Victor (2017, in Unger & Thielges, 2021), climate clubs' possibly strongest role “lies in advancing political dialogue and raising awareness for climate change among its members and beyond.” For example, the G20, which is not a climate club *per se* but rather an economic club with a climate governance work stream, is one of the most well-known clubs, and its action plans on sustainable development, climate, and clean energy issues have received international attention and have helped it become an international agenda setter (Röhrkasten et al. 2016, in Unger & Thielges, 2021).

Second, the multiplicity and diversity of actors involved in polycentric governance widens the range of agents which are able to provide cognitive leadership, through their expertise

and experience. Indeed, we may recall that Ostrom (2009: 32) has argued for the adoption of “a polycentric approach to the problem of climate change in order to gain the benefits at multiple scales as well as to encourage experimentation and learning from diverse policies adopted at multiple scales,” which encourages the multiplication of cognitive leaders. Additionally, the fact that these actors form networks within polycentric settings can enhance their cognitive leadership potential (Wurzel, Liefferink and Torney, 2019:10). One advantage of polycentric governance is that cognitive leadership capabilities are easier to acquire for ‘smaller’ actors who lack structural power. For example, Andersen and Liefferink (1997, in Wurzel, Liefferink and Torney, 2019:11) have underlined how some small EU member states (such as Denmark and the Netherlands) have had the capacity to provide considerable cognitive leadership for EU environmental policy. Hence, it is no surprise that polycentricity literature has underlined the importance of cities and regions as sources of experimentation and of innovation (Ostrom, 2009: 15).

Third, exemplary leadership is central to polycentric governance concepts, which are interested in innovations coming from actors at lower governance levels, (such as cities, businesses, NGOs) for they have the potential to impact higher governance levels (such as national governments) over time (Ostrom et al. 2012: 54). Indeed, experimentation and learning-by-doing practices, which are at the core of polycentric governance concepts, can be scaled up in a bottom-up fashion to other actors or higher levels of climate governance) (Wurzel, Liefferink and Torney, 2019:15).

Structural leadership, which is based on an actor’s military and economic power, is not particularly fostered in polycentric settings. First, because this type of leadership is relatively easier to acquire for ‘structurally’ powerful actors, which are not the only important actors in polycentric structures and second, because structural leadership is not a necessary attribute for climate governance actors in order to show leadership. In sum, polycentric governance concepts do not focus on the extent of actors’ power, but rather the different types of power at play, and how their distribution can affect governance processes and environmental outcomes (Wurzel, Liefferink and Torney, 2019:15-16).

Most importantly, leaders can and often do combine various leadership types. For instance, actors can simultaneously show entrepreneurial leadership through coalition building around

a particular issue, cognitive leadership by supporting these efforts with scientific evidence, and exemplary leadership by acting as a model for others (Wurzel, Liefferink and Torney, 2019:11). This multiple leadership display is particularly present in polycentric climate governance, specifically when we observe the role and impact of climate clubs. This paper will come back to this in part III.

2.3 Polycentric Governance and Climate Change: More Than a Question of Actors

In *A Polycentric Approach to Global Climate Governance*, Dorsch and Flachslan (2017: 45) distinguish four important features for climate mitigation governance³ and their related mechanisms: an emphasis on self-organization, a recognition of site-specific conditions, the facilitation of experimentation and learning, and the building of trust.

As this paper has discussed earlier, polycentric approaches to climate governance distinguish themselves from classical top-down governance systems by striving to “create ownership by individually implementing measures and enhancing cooperation on climate-relevant issues in all subsidiary jurisdictions” (Dorsch and Flachslan, 2017: 52). Indeed, self-organization, in the sense of granting local actors the ability to set up their own rules, is essential for climate governance, because it empowers the most immediate and most capable units of power (Dorsch and Flachslan, 2017: 51). Additionally, since climate mitigation governance implies very heterogeneous site-specific conditions, polycentric approaches allow for the understanding and recognition of the specific capacities of individual actors and their potential to cooperate (Dorsch and Flachslan, 2017: 53). Furthermore, because polycentric approaches promote experimentation and learning as a means to facilitate governance improvements over time, they can “foster innovation and flexible adaptation in climate mitigation governance overall, as well as the production and diffusion of knowledge and norms” (Dorsch and Flachslan, 2017: 55). Indeed, taking into account the importance of knowledge and norms production, evolution, and diffusion is essential for effective climate governance, because this new knowledge can have an effect on individual and societal preference structures (Dorsch and Flachslan, 2017: 56). Finally, one other important

³ Climate mitigation is defined as “a human intervention to reduce the sources or enhance the sinks of greenhouse gases.” It differs from climate adaptation, i.e., “the process of adjustment to actual or expected climate and its effects” (Noble et al., 2014: 14). Although climate clubs can cooperate on adaptation, climate engineering, or climate compensation, this analysis will focus on mitigation.

characteristic of polycentric governance approaches is the emphasis on trust. Indeed, Ostromian literature perceives trust as a relevant resource for enhancing cooperation, particularly for collective-action problems like climate change mitigation. Recently, Cole (2015, 15) has demonstrated how enhanced direct communication of individuals positively affects trust levels, which in turn impacts levels of cooperation. Inversely, his study also shows how positive experiences of cooperation bolster mutual reputation and trust, which creates even higher cooperation levels.

These four features along with the leadership dynamics discussed above, to which part III will circle back, introduce several ethical ramifications. Indeed, as Jordan et al. (2018:6) underline in their volume *Governing Climate Change Polycentrically*, polycentric governance “has potentially far-reaching implications for our appreciation of important matters such as authority and power, accountability, legitimacy and innovativeness” (Jordan et al., 2018: 6). Now that this paper has given an overview of the new polycentric nature of climate governance, the following section will aim to situate the role of climate clubs within this new setting.

2.3.1 Climate Clubs: The Next Climate Governance Leaders?

The study of leadership dynamics within polycentric governance structures has greatly contributed to the perception that nation states are no longer the only actors capable of acting as climate leaders. Today, we are noticing the involvement of individuals, cities, NGOs, businesses and many other actors on the international level which seek to contribute to the fight against climate change. Not only are we noticing a wider variety of actors, but the interactions between the latter are evolving as well. Indeed, many authors now seek to promote the practice of ‘minilateralism’ in global climate governance, where “cooperation is encouraged and advanced through small group interactions that generally involve the most powerful actors in the international system” (Hampson and Heinbecker, 2011: 299).

According to a growing number of scholars and practitioners, considering the current crisis of multilateralism, a new form of climate minilateralism is needed to ensure effective international climate cooperation: climate clubs. The latter can be loosely defined as “a smaller group of actors [aiming] to take action outside the UN climate regime, with clearly defined targets and conditions for members, possibly involving sanctions against non-

members” (Falkner et al., 2021: 1). Hovi et al. (2016: 2) define a climate club as “any international actor group that (1) starts with fewer members than the UNFCCC has and (2) aims to cooperate on one or more climate change-related activities, notably mitigation⁴.” These clubs, as was mentioned in the introduction, can be composed of a wide variety of actors, such as nation states, cities, NGOs, think tanks and corporations. According to Falkner (2015: 1), minilateral forums “promise more effective negotiations” as well as “better incentives to encourage mitigation efforts and discourage free-riding, and new ways to align power asymmetries with the interests of the global climate regime.” In this regard, through their innovative governance practices, they hold the potential to boost the effectiveness of the current international climate governance structure.

Nordhaus (2015) underlines that the major conditions for a successful club are that : (i) there is a public-good-type resource⁵ that can be shared (such as the global environment), (ii) the cooperative arrangement, including the dues, is beneficial for each of the members, (iii) non-members can be excluded or penalized at relatively low cost to members and (iv) the membership is stable in the sense that no one wants to leave. One key aspect of the club mechanism is that non-participants are penalized. For example, we can take the example of a climate club characterized by an agreement between its members to undertake harmonized emissions reductions. In this situation, the club might agree that each member will implement policies that produce a minimum domestic carbon price of \$25 per ton of CO₂. Noncomplying members who would fail to produce this minimum domestic carbon price could face a penalty such as uniform percentage tariffs on the imports of non-participants into the club region. This mechanism thus creates a strategic situation, where countries acting in their self-interest will choose to enter the club and undertake high levels of emissions reductions because of the structure of the incentives (Nordhaus, 2015). By contrast, the Paris Agreement has no active enforcement mechanism, and focuses rather on the respective national capabilities and circumstances of Parties. The Paris Agreement Implementation and Compliance Committee (PAICC), put in place to facilitate the implementation of and promote compliance with the provisions of the Paris Agreement, explicitly states that it

⁵ Public goods are commodities for which the cost of extending the benefits to an additional person is zero and where it is impossible or expensive to exclude individuals from enjoying the benefits (Nordhaus, 2015).

“neither functions as an enforcement nor dispute settlement mechanism, nor imposes penalties or sanctions, and respects national sovereignty” (UNFCCC, 2020). In this regard, even if a club becomes large enough, it fundamentally differs from current UN-led climate mitigation proposals.

Although the term has bounced around in climate literature in recent years, the concept of ‘climate clubs’ in itself is in urgent need of conceptual clarification, because significant knowledge gaps exist about the different varieties of climate clubs (Falkner et al., 2021: 2). With this in mind, the following section will aim to define climate clubs and present their typology, before moving on to their role within polycentric climate governance structures.

2.3.2 Typology of Climate Clubs

Climate clubs can vary in member type, size, purpose, principles, legal strength, and relationship to the UN climate regime, but they also share certain characteristics: they comprise members that meet certain criteria, and they are expected to produce specific benefits that are reserved to their members (called club goods) (Falkner et al., 2021: 2). Clubs usually start out as small, minilateral forums, depending on more or less demanding entry rules, but can become larger multilateral bodies. They represent permanent creations which can incorporate both state and non-state actors, either formally or informally constituted, built around a common purpose and with rules governing membership (Falkner et al., 2021: 3). In order to bring some clarity to the concept, Falkner et al. (2021: 2) distinguished three categories of climate clubs: (a) *normative clubs*, which are composed of members aiming to make a normative commitment to certain climate policy objectives; (b) *bargaining clubs*, whose objective is to enable more effective negotiation of climate mitigation targets, measures and rules between important powers; and (c) *transformational clubs*, with legally binding membership rules, concrete club benefits and effective sanctioning mechanisms that seek to change the incentive structure of a select group of members. First, *normative clubs* gather members that share a normative commitment, or sense of obligation towards the club, to achieving certain objectives. The important membership criterion in this type of club is adherence to the shared climate policy ambition. Because of its open-ended membership, any country (or even non-state actor) that supports the club’s target commitment can join. These types of clubs represent ‘coalitions of the willing,’ where rather than having legally binding

rules for club membership, the main purpose is to rally actors behind a specific climate policy objective. The influence and strength of normative clubs derive from the combination of their level of moral ambition and size of their membership (Falkner et al., 2021: 3). Because of their low entry barriers and the fact that they are held by normative beliefs rather than legally binding rules and sanctions, normative clubs have proved particularly popular. Examples include Powering Past Coal Alliance⁶ and Friends of Fossil Fuel Subsidy Reform⁷. These clubs can develop innovative policy solutions, boost climate mitigation initiatives and act as a signaling device for governments.

Second, *bargaining clubs* aim to facilitate the negotiation of common objectives, targets and policies, among influential players in a given issue area. Here, international status, power and relevant capabilities are more important than climate policy ambition. Instead of gathering motivated actors behind important normative commitments, bargaining clubs aim to encourage compromises among its members, even those with lower levels of normative ambition. To be effective, this type of club is most often restrained to fewer members, which reduces the number of members' interests and circumstances that need to be considered during negotiations (Falkner et al., 2021: 3). The objective here is that reducing the number of parties engaged in negotiations will help break deadlocks and achieve more ambitious agreements. Examples include the Major Economies Forum on Energy and Climate (MEF)⁸, which has served in the past as a discussion club for its 17 members. In a recent (January 2021) executive order, President Biden announced the reconvening of the MEF, suggesting it could advance a potential agreement to phase out coal (The White House, 2021). In this sense, the MEF could serve as a minilateral bargaining club for a coal ban.

⁶ The *Powering Past Coal Alliance* (PPCA) is a coalition of over 100 national and sub-national governments, businesses and organizations working to advance the transition from unabated coal power generation to clean energy. It encourages its members to endorse the PPCA Declaration, which includes a commitment to phase out coal by 2030 in the OECD and EU, and by no later than 2050 in the rest of the world. For more information, go to: <https://www.poweringpastcoal.org/about/who-we-are>.

⁷ The *Friends of Fossil Fuel Subsidy Reform* is an informal group of non-G20 countries working to build political consensus on the importance of fossil fuel subsidy reform. The FFFsR works internationally within forums such as the G20, APEC, OECD, World Bank, UNFCCC and the UN Sustainable Development Agenda to convince governments of the benefits of reform, and to help them with ways to do it. For more information, go to: <http://fffsr.org/about/>.

⁸ The Major Economies Forum on Energy and Climate, launched in 2009, is aimed at facilitating candid dialogue among major emitting countries to garner the political leadership needed to advance efforts against climate change (IISD SDG Knowledge Hub, n.d.).

Third and finally, *transformational clubs* comprise members who share a common objective, but equally aim to transform their members' incentive structure in order to "overcome the free-riding problem and enhance compliance with ambitious climate targets" (Falkner et al., 2021: 3). According to Falkner et al. (2021: 3), these clubs are the most demanding type of climate clubs, because in order to attain their aforementioned objectives, they must i) create club benefits that are available only to members (such as preferential trading, access to technology and finance, etc.), and ii) sanction members that are non-compliant (through withdrawal of club benefits, expulsion, etc.) or non-members that are unwilling to join (through carbon duties or uniform percentage tariffs on imports, etc.) (Nordhaus, 2015). Although this type of club will initially attract agents sharing a certain level of normative commitment, they also involve the negotiation of objectives, rules and policies, just like bargaining clubs. These clubs may attract more members by creating tangible membership-based benefits (Falkner et al., 2021: 3).

Other typologies of clubs include Buchanan clubs, where the actions taken are 'inherently attractive' and where emission reductions are a 'co-benefit.' In such types of clubs, dominant actors can take the lead when they expect sufficient economic, strategic or reputational benefits. However, for Buchanan clubs, 'club goods' consist in excludable goods (for which it is possible to exclude individuals from enjoying the benefits) (Hovi et al., 2016: 2). Public goods (such as the global environment, see p. 14) are more difficult to encompass in Buchanan clubs. A similar analysis can be made for Wiseman clubs, which are centered around the idea of sharing the costs of a public utility among the users. Once again, these types of clubs focus on private (and thus excludable) goods (Hovi et al., 2016: 2).

A growing body of literature now typologizes clubs similarly to what Falkner et al. (2021) developed. Prakash and Potoski (2007), for example, discuss 'voluntary clubs' where excludable benefits for encouraging membership are offered. Mourier (2020:4), suggests 'improved' climate clubs which meet three key conditions: first, they ensure meaningful benefits available to club members that are significant enough to offset the costs of climate change mitigation. Second, they are made up of a range of enthusiastic players who control a considerable share of global revenue. Finally, they are linked to the Paris Agreement in order to ensure their legitimacy in relation to the UN-led climate process as well as their

complementarity with the current multilateral climate regime. However, both these types of clubs strongly recall the *transformational clubs* mentioned in Falkner et al. (2021). In this regard, Prakash and Potoski's distinction is highly pertinent, even though they embrace a more restrained typology. Because this paper is grounded in a context of polycentric governance and focuses on ethical considerations such as moral responsibility, Falkner et al.'s club typology will be of particular interest, as will be later discussed in part III. Having now gained a better understanding of the role of climate clubs within polycentric climate governance structures, the following section will discuss the specific responsibilities, including moral ones, which fall on these new entities. However, in order to fully understand their nature, it is first necessary to make an overview of the type of moral issues that attach to polycentric climate governance.

3. Part II: Moral Implications of a Polycentric Context of Climate Governance

“Climate change poses serious existential threats to many people’s lives and to the very existence of some communities. Its effects will be extremely harmful, possibly catastrophic, for millions of people” (Caney, 2014: 127). In the past, many scientists, policy makers and citizens have focused on the concrete issues and impacts related to climate change, such as determining its causes, consequences and effects on political and social life. However, ethics and justice considerations related to the phenomenon have been increasingly coming to the forefront over the past 20 years. For example, “incorporating environmental ethics into law, governance and policy” was already a topic at the tenth meeting of the Conference of the Parties to the Convention on Biological Diversity (COP10). Questions such as: “Is it morally wrong to pollute the global environment?,” “What kinds of duties and responsibilities fall upon actors?” and “How can we distribute them?” have proved themselves to be of rising interest, and are also at the core of this analysis. Climate change binds people around the world in a morally distinct way that requires extensive global collaboration both between nation states and between generations (Koukouvelis, 2017: 756). These changes call into question the traditional world order and give rise to a new conception of our duty of justice (Maltais, 2008: 597). Given this, it becomes crucial to evaluate how responsibilities should be distributed in order to most effectively prevent the onset of dangerous climate change and to mitigate its negative effects in the fairest and most inclusive way possible. In this regard, the following section will aim to discuss the philosophical framework behind questions of climate responsibility and climate justice.

3.1 Climate Change and Justice Considerations

Climate change raises many questions of justice. First, human-induced climate change raises important issues of distributive justice. Indeed, questions about the ‘fair’ or ‘just’ allocation of benefits and burdens of global climate change are inextricably linked to questions of justice (Moore, 2008: 502). There are various perspectives from which we can discuss climate justice. For example, although we do not systematically need to use human rights indicators to discuss climate justice, climate change can be interpreted as a human rights

issue. Caney (2005: 768) demonstrates this by underlining the multiple malign effects climate change is predicted to have, according to the IPCC Assessment Reports:

“The predicted temperature increases are likely to result in drought and crop failure. They will also lead directly to more deaths through heatstroke. Furthermore, with increased temperatures there is a predicted increase in the spread of malaria, cholera and dengue fever. In addition to this, the increased temperatures are predicted to melt ice formations and thereby contribute to a rise in sea levels, which will threaten coastal settlements and countries such as Bangladesh which are flat and close to sea level. As well as simply destroying buildings, homes, and infrastructure, a known effect of climate change will be to force some inhabitants of small island states and coastal settlements to relocate. Finally, [...] global climate change [...] will lead to high levels of unpredictable weather patterns. This jeopardizes a vital interest instability and being able to make medium and long-term plans.”

Given this, Caney (2005: 768) argues that “there is a strong case for the claim that persons have the human right not to suffer from the disadvantages generated by global climate change.” The United Nations Human Rights Office of the High Commissioner (OHCHR) holds a similar claim, by stating that “[c]limate change threatens the effective enjoyment of a range of human rights [...]” and, for this reason, “[s]tates have a human rights obligation to prevent the foreseeable adverse effects of climate change and ensure that those affected by it [...] have access to effective remedies and means of adaptation to enjoy lives of human dignity” (OHCHR, n.d.). Second, global climate change not only raises issues of justice among those currently being impacted by and causing climate, but it also triggers considerations of intergenerational justice as well. Gardiner (2006: 404) argues that the ‘temporal perspective’ relating to climate change constitute a serious issue, since “the bad effects of current emissions are likely to fall, or fall disproportionately, on future generations, whereas the benefits of emissions accrue largely to the present.” Indeed, it has now been clearly demonstrated that much of the current global warming is a result of activity in the first phase of industrialization (Moore, 2008: 502). In its sixth assessment report, the IPCC affirms with *high confidence* that “there is a near-linear relationship between cumulative anthropogenic CO₂ emissions and the global warming they cause” (2021a: 36) and that “[c]hanges in the climate system, resulting from past, present and future human activities, which will continue long into the future (centuries to millennia)” (2021b: TS-6). Hence,

climate change induces disastrous effects on current generations, partly due by precedent generations, which will also greatly impact subsequent ones.

Finally, climate change is a global problem, because it oversteps political boundaries and thus has implications for theories of distributive justice in an increasingly globalized world. The distribution of the burdens related to climate change cannot merely be confined to existing nation states (Moore, 2008: 502).

Approaching the fight against climate change and its mitigation in terms of distributive justice is made even more complex by three asymmetries, as identified by Okereke (2018 : 322). The first asymmetry refers to the world actor's respective contribution to the climate issue. For example, if we study the annual CO₂ emissions per region, it is possible to notice that Asia (home to 60% of the world's population) is by far the largest global emitter, as it accounts for about 53% of global emissions. Within this group, China represents both Asia's (and the world's) largest emitter: it emits nearly 10 billion tonnes each year, more than one quarter of global emissions. North America (home to 5% of the world's population) follows closely behind, as it emits around 18% of global emissions. The largest emitter in this group is the United States, which emit a little over 5 billion tonnes every year. The third largest polluting country is Europe (home to 10% of the world's population), with 17% of global emissions. Africa and South America (home to about 23% of the world's population combined), on the other hand, are both fairly small emitters, as they account for only 3-4% of global emissions each (Ritchie & Roser, 2020).

The first asymmetry is profoundly related to the second, which is the asymmetry in impacts. Indeed, the latter focuses on the fact that the negative impacts of climate change will not be stomached proportionately by the countries which emit them. The Global Climate Risk Index report (2021:5) underlines that “[i]mpacts from extreme-weather events hit the poorest countries hardest as these are particularly vulnerable to the damaging effects of a hazard, have a lower coping capacity and may need more time to rebuild and recover.” Some of the poorest peoples and countries, such as Bangladesh and several Pacific Islands, will be catastrophically affected by climate change, although they are responsible for relatively minute amounts of carbon emissions.

Finally, the third asymmetry refers to the ability of countries to participate in various international decision-making forums. Indeed, since they often face limited resources and lack the technical abilities to follow tedious negotiations, developing countries find it more difficult to attend and to participate in international climate meetings (Okereke, 2018: 323).

Hence, it is not difficult to see how climate change raises various and significant issues of justice. The humanitarian, temporal and territorial considerations related to the climatic phenomenon have created difficulties in defining the concepts of ‘obligation’ and ‘responsibility’ with regards to climate action, which has contributed to slowing the attribution of concrete climate duties. Additionally, because it is not accompanied by the traditional characteristics of moral problems, climate change sometimes fails to be perceived as an urgent issue. As we have seen, not only are the harmful effects of climate change not easily identifiable, but the victims and perpetrators are not closely related in time and space. As Gardiner (2006: 397) affirms, climate change creates the ‘perfect moral storm,’ because it involves the convergence of a set of global, theoretical and intergenerational problems. In this regard, climate change raises issues of individual and collective responsibility.

The focus of this analysis will be twofold. On the one hand, this essay will develop on the responsibility of national governments, which are the collective agents relevant to polycentric governance. It is often argued that nation states, as collective entities, have moral obligations to combat global issues such as climate change. In this sense, the moral duties which correspond to these obligations are collective duties. This paper will not focus on defending this view, but will merely assume the existence of such collective moral duties. On the other hand, this paper will also explore the distribution of duties beyond UN-led multilateralism, in order to offer an alternative to the latter. Although there exists a vast array of MSN agents who can play a role in the context of polycentric governance (such as NGOs, firms, etc.), this analysis will focus specifically on climate clubs. The next section will aim to first review the present conception of climate responsibility, and second, to suggest alternative ways to think about responsibility and duty which could help break us out of the current deadlocks.

3.2 Climate Change and Moral Responsibility

3.2.1 The Problems of the Traditional Approach to Responsibility

Many authors have contributed to the debate surrounding the relationship between justice, responsibility and distribution of duties. Traditionally, the ‘key’ principle governing this vision of climate change justice has been the ‘polluter pays’ principle. Shue (1999), for instance, has advocated for the idea that those who have caused pollution should clear it up, and has argued vigorously that members of industrialized countries have caused global climate change should bear the burdens of climate change. As Caney (2005:752) states, the ‘polluter pays’ principle has considerable intuitive appeal: “In everyday situations we frequently think that if someone has produced a harm (they have spilled rubbish on the streets, say) then they should rectify that situation. They as the causers are responsible for the ill effects.” However, the argument for the ‘polluter pays’ encounters some difficulties when facing global collective obligations such as fighting against climate change. It binds us in deadlock, because it demands a fairly sturdy relationship between the moral blameworthiness of a person’s action and remedial duties. One important distinction to be made here is the one between *causal* and *moral* responsibility. Causal responsibility refers to the causal role played by an agent in the creation of a situation. Moral responsibility, on the opposite, involves an appraisal of the agent’s conduct. In other words, this type of responsibility appears in situations where the agent having caused the situation is liable to moral blame (Miller, 2001: 456). This recalls Peter Singer’s well-known example of a child drowning in a puddle: if one were to encounter a child face down in a puddle, the fact that one did not push it in obviously does not entail that one does not have a moral duty to aid the child. In the context of considering the moral responsibilities related to climate change, it is possible to note that the ‘polluter pays’ principle is incomplete. Indeed, as Caney (2005:766) underlines, although this principle has the ability to assign what he calls ‘primary responsibilities’ (the polluter bears the primary responsibility to bear the burden), it overlooks the fact that primary duty bearers often fail to comply with their duties. This is what is called the problem of non-compliance. In the context of climate change, not only do we face the classic problem of non-compliance, as we are unable to make non-compliers comply, but we also face a real, new problem, because we often ignore who the non-compliers are. Hence, in such situations, we are somewhat faced with ‘duties without bearers.’ And according to

Caney (and to general scientific consensus), leaving the duties unperformed is out of the question: “In light of the havoc it wreaks on people’s lives we cannot accept a situation in which there are such widespread and enormously harmful effects on the vulnerable of the world.” In this context, various authors have aimed to find an answer to the question: “What does it take to be subject to moral obligations?” which dodges the problem that the agents causally responsible for the harm are nowhere to be found or too difficult to identify. Here, the issue is that the agents performing the remedial duties, the agents who have the responsibility *to* act are not the agents who are responsible *for* the harm, as they didn’t cause it. In order to overcome this problem, Wringer (2010: 217) suggests that “[t]he collective obligations of unstructured collections of individuals, including global collective obligations, meet the addressability requirement insofar as they require something of the individuals who make up the collective.” Various authors have previously handled this idea: Peter French (1984, in Wringer, 2010: 218), for example, has argued that a collective can only be the subject of obligations if it has what he calls a ‘formal decision structure.’ Inversely, Larry May (1992, in Wringer, 2010: 218) holds that groups with considerably less structure can also legitimately be considered the subject of obligations.

Once conception of responsibility which often seems ‘logical’ to most is the ‘individualist’ view of responsibility. The latter is based on three elements: i) individualism, which considers individuals as the primary bearers of responsibility; ii) a distinction between positive and negative duties (respectively, *causing* harm or *failing to prevent* harm) and iii) importance attributed to special obligations such as family, friends and colleagues (Scheffler, 2003: chapter 2). This conception seems ‘logical’ because “it fits our conception of ourselves as agents, primarily in giving priority to action over omission, to near over remote outcomes, and individual over group behavior” (Green 2002, in Moore, 2008: 503). However, this view is hardly compatible with issues relating to human-induced global climate change, because the harm generated by carbon emissions is not directly, or uniquely, the result of individual action. Hence, the individualist view of responsibility is inadequate in dealing with all collective cases, and therefore lacks the ability to appropriately apply to climate justice considerations. In this regard, a more collective view of responsibility, such as Caney’s conception of climate justice seems to be better equipped to cope with the issue of human-induced global climate change.

3.2.2 Caney's Solution

In "Two Kinds of Climate Justice: Avoiding Harm and Sharing Burdens" (2018), Caney underlines that there are two ways of thinking about climate justice: 'burden-sharing justice' and 'harm avoidance justice.' The former focuses on determining how the burden of combating climate change should be shared fairly among the duty bearers, while the latter focuses on the imperative of preventing climate change in order to determine agents' duties. Here, the responsibilities of agents are to ensure that that the catastrophe is averted, or at least minimized within reason.

Caney is indebted to the distinction drawn by Iris Marion Young between causal responsibility (backward-looking) and forward-looking responsibility. Young distinguishes between the 'liability mode' of responsibility, and what she calls the 'social connection model' of responsibility; The former is primarily backward-looking, because "the purpose of assigning responsibility in terms of blame, fault, or liability, then, is to seek retribution or compensation for this past action." The latter emphasizes forward-looking issues, by aiming "to deter others from similar action in the future, or to identify weak points in an institutional system that allows or encourages such blameworthy actions, in order to reform institutions" (Young and Nussbaum, 2011: 121). Much of the ethical discussion of climate change has concentrated on 'burden-sharing' (and 'backward-looking') modes of responsibility, which are crucial in understanding the changes that need to be made in order to adequately respond to the climate challenge. However, a more effective theory of global climate justice should be sensitive to alternative kinds of responsibility, such as those underlined in Caney's writings.

In his 2014 article, "Two Kinds of Climate Justice: Avoiding Harm and Sharing Burdens," Caney distinguishes between two kinds of responsibilities: 'first-order' and 'second-order' responsibilities. He defines first-order responsibilities as responsibilities that certain agents have to perform (or omit) certain actions. Examples of first-order responsibilities relating to climate change include ones which aim to enable mitigation, adaptation and compensation for harm done (such as reducing emissions, for example). Second-order responsibilities, which complement the previous, consist in responsibilities that some have to ensure that agents comply with their first-order responsibilities (Caney, 2014: 134). They aim precisely

at “creating conditions that will likely increase compliance” and that will “make it easier for agents to act upon their first-order duties of climate change mitigation” by being easily within reach (Gajevic Sayegh, 2020:488). O’Neill (2005: 428) also developed on this distinction in a similar, but more general fashion, by asserting that “securing and enforcing liberty rights require an allocation of certain obligations,” namely “first-order obligations to respect liberty rights” as well as “second-order obligations to ensure that everyone respects liberty rights must be allocated.” Having distinguished between both types of duties, Caney argues that, in situations of non-compliance, “others should cover some, if not all, of the first-order responsibilities of those who do not comply.” Indeed, given the importance of preventing dangerous climate change, second-order responsibilities become essential in order to enable greater compliance (Caney, 2014: 135).

The advantages of separating moral responsibilities in first- and second-order duties are multiple. First, agents may be increasingly led to action as they get acquainted with their duties, by better understanding first- and second-order duties distribution and how they change in situations of non-compliance. Second, as more agents fulfill their duties, others can be more inclined to fulfill their own, as this becomes easier in contexts of increased compliance. Third, because second-order duties are easily within reach and aim to create the conditions that increase compliance, they make it easier for agents to act upon their first-order duties (Gajevic Sayegh, 2020:488).

Caney’s suggestion accomplishes exactly what Wringer suggested: second order duties fill in the void created by non-complying first-order-duty bearers, by transferring agency from the actor who *should* do something to the actor who *can* do something. In this regard, we can extend the argument to advocate that second-order duty bearers, in cases of non-compliance, have as much moral responsibility as first-order duty bearers, if not more so (indeed, we will see later how second-order duty bearers can possess certain abilities and advantages that first-order duty bearers to not have, which are crucial in polycentric governance concepts).

3.3 The Principles Behind Responsibility

Responsibility can be attributed to agents on various grounds or for various reasons. Several other principles have been used to attribute responsibilities to agents, such as the principle such as the principle of *benefit* (see Caney, 2014), the *precautionary* principle (see the 1998

Wingspread Declaration) and the *causal responsibility* principle (see Miller, 2001). However, I will focus here on the principles of *capacity*, *community*, and *historical responsibility*, as they can serve as bases for attributing responsibility to collective agents and they are particularly pertinent in advocating for the attribution of second-order duties to nation states as well as to climate clubs as potential bearers of moral duties in the fight against climate change, as will be explained in part III.

The principle of capacity has been discussed in several ways. For Miller (2001: 461), it consists in a hybrid principle, composed of two distinct factors: considerations of effectiveness of different agents in remedying the situation, and considerations of the cost that they must bear in performing the remedial duties. Caney refers to it as the ‘ability to pay’ principle, which argues that climate mitigation duties should be ascribed to the most advantaged, who have the ability to perform their duties. The principle of community focuses on the ties of community between the victims and responsible agents, understood in terms of “an inter-generational community of people who aspire to or engage in forms of collective (political) self-determination.” In his work, Miller extends the agency perspective beyond individuals to communities of agents, which do not necessarily refer to a political state, understood as an organized political entity. Similarly, Caney stresses that there exists an alternative way of thinking about global justice and climate change that does not restrict the fulfillment of duties to nation states. The historical responsibility principle, in the context of climate change policy, refers to the concept of determining the obligations of a country based on its level of cumulative greenhouse gas (GHG) emissions since the beginning of the industrial era (Godart, 2017: 113).

These three principles will help illustrate how they overcome the difficulties encountered by the traditional approach to responsibility, because they not only support the argument that nation states bear first-order duties in the fight against climate change, but they also support the identification of MSN actors as morally responsible agents in the fight against climate change, as will be shown in part III. The next section will thus aim to determine who can fill in the obligations put forward in Caney and Wringer’s works, by arguing that climate clubs are a key type of MSN entities suited to fit this role, especially in the current context of polycentric climate governance.

4. Part III: The Moral Duties of Climate Clubs in a Context of Polycentric Climate Governance

The previous sections have contextualized the polycentric nature of climate governance, the role of climate clubs within the latter and the ethical framework related to climate change considerations. The third and final section will now aim to link the notions presented in parts I and II, by connecting climate clubs with principles of moral responsibility for climate action. To do so, this section will advocate that, within the current context of polycentric governance, a) nations have a second-order duty to set up climate clubs as a tool to increase compliance towards climate action, b) MSN agents have moral responsibilities in the fight against climate change and c) even more specifically, climate clubs are a key type of MSN entities suited to fit this role. To do so, this section will mobilize three principles, namely ‘capacity,’ ‘historical responsibility’ and ‘community.’ The principles of capacity and historical responsibility will apply to a), and the principles of capacity and community will apply to b) and c).

4.1 Moral Duties of Nations

Two principles can be mobilized to support the argument that nation states bear first-order duties in the fight against climate change: the principles of capacity and historical responsibility. Indeed, as we have seen earlier, the greater the ‘capacity’ an agent possesses, in the sense of its “ability to perform functions, solve problems and set and achieve objectives” (Fukuda-Parr & al., in Willems & Baumert, 2003: 5), the greater their duty to act. National governments possess great institutional capacity with regards to climate change. Although the latter is country-specific, and greatly depends on its history, institutional setting and social fabric (Willems & Baumert, 2003: 10), countries are recognized as durable, influential sources of authority, which possess important levels of structural power (see p. 11). Hence, because national governments are in a position to reduce GHG emissions, they possess a first-order duty to act upon climate change. Another principle which supports this claim is the one of historical responsibility. Various reasons support the distribution of climate-related duties according to this principle. First, considering that global warming is “mainly due to increased GHG concentration” (IPCC, 2021a: 11), which is itself a function of emissions that accumulated over time, historical accountability is supported by core

scientific evidence. In this regard, neglecting historical accountability in the distribution of climate-related duties blatantly ignores the fundamental laws of physics that give rise to the environmental problem of global warming. Second, accounting for historical emissions “ensures equality of opportunity to use the global resource atmosphere”: ignoring historical responsibility would mean to favor past generations from developed countries and to discriminate against present generations in developing countries, who crucially need to ensure their development (Neumayer, 2000: 7-9). One other principle which could be mobilized is the duty not to harm. This concept is part of the moral foundation of the historical responsibility principle, and is justified because past and current emissions are causing harm, and past emissions imply that developing nations are now deprived of the possibility to develop in a way that they can afford. However, this essay will not engage with the duty not to harm, as it will focus solely on burden sharing in the context of establishing climate clubs.

Hence, this essay advocates that the principles of ‘capacity’ and ‘historical responsibility’ support the argument for attributing first-order climate mitigation duties to national governments. However, in certain situations, it is possible to observe that these collective agents fail to fulfill these duties. Such circumstances are considered as ‘situations of non-compliance.’ In the context of climate change specifically, many nation states do not meet their emission reduction targets. Thus, they fail to achieve their first-order duty relating to climate change, namely the duty to enable mitigation through the reduction of their emissions. This has a great impact on the attribution of climate-related duties. Indeed, studies indicate that diminishing the non-compliance effect is crucial to the climate effort: the latest IPCC report (2021b: SPM-36) states that “[f]rom a physical science perspective, limiting human-induced global warming to a specific level requires limiting cumulative CO₂ emissions, reaching at least net zero CO₂ emissions, along with strong reductions in other greenhouse gas emissions.” What happens, then, if governments fail to fulfill their first-order duty to cut their emissions?

Some elements previously discussed in this paper may bring some insight. As has been shown earlier, climate change consists in a collective-action problem, in which agents would be better off cooperating but fail to do so due to the conflicting interests that discourage joint action (see p. 4). According to conventional collective action theory, these types of problems

will only be solved if an external authority is put into place to guide, monitor and sanction behavior. However, in contexts of polycentric governance, tackling collective action problems can be achieved differently. By focusing on the increased communication and opportunities for experimentation, policy improvement and the importance of mutual trust, rather than on the importance of a central authority, polycentric governance theories encourage mapping of climate duties as part of the response to the global collective action problem and to situations of non-compliance (Gajevic Sayegh, 2020: 487). In this regard, this paper aims to contribute to the argument that, in a context of polycentric governance, situations of non-compliance also call for the attribution of second-order duties, namely, those which create conditions likely increasing general compliance towards climate action. In other words, national governments, in order to facilitate the achievement of their first-order duties, must implement climate clubs as a tool against non-compliance.

However, as we have seen earlier in part I, polycentric climate governance frameworks underline the fact that nation states are no longer the *only* morally relevant agents in the fight against climate change. In this context, it is important to develop a normative framework which also identifies other agents, more particularly MSN agents, who are in a position to reduce emissions and who have a duty to do so.

4.2 Moral Duties of MSN Agents

Two overarching principles support the identification of MSN actors as morally responsible agents in the fight against climate change. First, the principle of capacity, which states that if agents are capable of fighting against climate change, they should do so according to their capacity, can once again be mobilized. Due to their experience and ambition, MSN agents can positively contribute to the fight against climate change by diminishing non-compliance. In this regard, if these agents *can* help nation states to prevent dangerous climate change, it can be argued that they *should*. Caney (2014: 135) argues that in situations of non-compliance, “others should cover some, if not all, of the first-order responsibilities of those who do not comply.” Indeed, given the importance of preventing dangerous climate change, second-order responsibilities become essential in order to enable greater compliance and thereby avoid harm. MSN actors possess specific capabilities which are particularly relevant from a moral standpoint and enable them to fulfill second-order duties. For example, many

provinces, states and cities possess the legislative authority to contribute to reducing carbon emissions and can thus directly enforce and incentivize effective climate action (McGinnis, 2016 in Gajevic Sayegh, 2020: 493). In this regard, within a context of polycentric governance, if national governments fail to fulfill their climate duties, and MSN entities have the capacity to compensate for national level non-compliance, then the latter have a duty to do so (Gajevic Sayegh, 2020: 499). Second, the principle of community also supports the idea of attributing moral duties to MSN agents. As underlined in part II, this principle focuses on the ties of community between the victims and responsible agents in a fairly loose sense which captures special ties of various kinds. In the case of climate change, it can be argued that victims and responsible agents are tied within a community, as they share common identities and histories. This is particularly true when we look at MSN agents, which can act on a smaller, local level. According to Miller (2001: 462) these ties justify the argument that communities hold “special responsibilities to one another, responsibilities that are greater than those they have towards humanity at large.”

For authors such as Miller and Caney, these ‘communities’ do not exclusively refer to organized political entities such as nation states. Cohen (2008: 34) formulates the principle of community as “the requirement [...] that people care about, and, where necessary and possible, care for, one another, and, too, care that they care about one another.” Cohen’s argument can also be pertinent in analyses of polycentric systems, because it puts focus on the concepts of social and political cooperation within diverse social settings. Part I has underlined the importance of trust in polycentric climate mitigation governance (Dorsch and Flachsland, 2017: 45), which is particularly intertwined with the principle of community. As Ostrom (2000:149) underlines in her studies on collective action within polycentric governance systems: “If a group of users can determine its own membership [...], the group has made an important first step towards the development of greater trust and reciprocity. Group boundaries are frequently marked by well-understood criteria, like everyone who lives in a particular community or has joined a specific local cooperative.” Hence, local agents bound by ties of community play an essential role within the functioning of polycentric governance, especially in the context of climate governance. Falkner et al. (2021: 4) also underline that, in the context of climate governance, “operating in a minilateral forum can help enhance political dialogue and ultimately build trust between key players.”

The principles of capacity and community are particularly crucial in advocating for MSN agents as potential bearers of moral duties in the fight against climate change. Having laid down the basis for the attribution of moral duties to non-state agents, the next section will aim to expose the reasons why climate clubs are specifically well suited to fulfilling these duties by providing specific examples.

4.3 Why Climate Clubs

What makes climate clubs special among MSN actors? In order to advocate that the international community should attribute second-order duties to climate clubs *specifically* in the fight against climate change, this section will revisit important features of polycentric governance which have been underlined in the previous sections. As aforementioned, there exist four important features for climate mitigation governance: self-organization, site-specific conditions, experimentation and learning, and the building of trust (Dorsch and Flachslund, 2017: 45). As it is, climate clubs are particularly well equipped to becoming important actors in climate mitigation within polycentric governance settings, because encourage the blossoming of these crucial features. Keeping in mind that second-order duties are complementary duties which help agents to comply with their first-order responsibilities, the following section will focus on the four aforementioned features and illustrate how they contribute to the argument of attributing second-order duties to climate clubs. To do so, each feature shall be exemplified by specific second-order duties that are currently fulfilled by climate clubs.

First, as we have seen earlier, polycentric governance approaches underline the potential of individual action and cooperation realized through a variety of actors within their specific contexts (Dorsch and Flachslund, 2017: 50). Self-organization and coordination, opposed to traditional top-down rule-making by the central state, suggests granting local actors the freedom to set up their own rules. Dorsch and Flachslund (2017: 51) perceive this as a more ‘functional’ arrangement deriving from the principle of subsidiarity, which claims that some social problems are best dealt with at the level most closely related to the problem. Climate clubs have the capacity to incentivize effective climate action, particularly because of their ability to self-organize into comprehensive networks and follow a continual coordinative adaptation. This also connects with the principle of capacity which, as we have seen in the

previous section, justifies the attribution of second-order duties to climate clubs. By organizing themselves in such a way, clubs can commit to specific climate and energy targets, introduce review schemes, and organize policy transfers. The fulfillment of these second-order duties contributes effectively to the fight against climate change by helping agents comply with their first-order responsibilities. Specific examples include the CSLF (Carbon Sequestration Leadership Forum), a ministerial-level international climate club focused on the development of improved cost-effective technologies for carbon sequestration. Its current 26 member governments (25 countries plus the European Commission) represent over 3.5 billion people on six continents and comprise 80% of the world's total anthropogenic CO₂ emissions (see <https://www.csforum.org/csrf/>). The CSLF is, like many other climate clubs, composed of various organs such as a *Policy Group*, a *Technical Group*, a *Secretariat* and an *Academic Task Force*. In this regard, the CSLF is more than capable of self-organizing and coordinating its efforts in order to bring forward concrete actions in the fight against climate change.

Second, another important feature for climate mitigation governance within polycentric frameworks is the importance of building upon site-specific conditions. According to Dorsch and Flachsland (2017: 53), “the very heterogeneous site-specific conditions that are relevant in climate mitigation governance” call for “understanding and recognizing the specific capabilities of individual actors and their potential to cooperate” in progressing towards the common goal. By the diversity of their stakeholders and of their expertise, climate clubs build upon their members' site-specific experiences in their missions. Although in some cases, due to constitutional constraints, enacting a climate policy might be limited for MSN actors, ambitious actors both capable and willing to introduce mitigation policies could bypass such a barrier. As we have seen earlier, if one actor fails or refuses to fulfill its climate-related duties, others can step in within their jurisdiction, sector, or issue area because of their respective site-specific expertise and “pick up the slack” (Dorsch and Flachsland, 2017: 54). This relates to second-order duties, as the latter foster greater compliance, and climate clubs' capacity of building upon site-specific conditions enables them to fulfill such second-order duties.

According to Jakob et al. (2014, in Dorsch and Flachslund, 2017: 55), addressing climate-related issues in a site-specific approach can “foster societal support for ambitious climate mitigation.” Specific examples of climate clubs which have built upon their site-specific capabilities include The Renewable Energy and Energy Efficiency Partnership (REEEP), comprised of 359 members (including businesses, NGOs, industry associations, financial institutions and other civil society entities, as well as 45 national governments) which strives to develop innovative, efficient financing mechanisms to advance market readiness for clean energy services in low- and middle-income countries. Because these mechanisms create conditions likely increasing general compliance towards climate action, they fulfill second-order duties of mitigation. This climate club has demonstrated its ability to make use of its site-specific expertise by launching, along with Government of the Republic of Zambia, the Zambian Off-Grid Energy Task Force, which gathers government, private sector and international donor stakeholders in the Zambian off-grid sector to exchange information on current activities and to collaborate in tackling barriers to market readiness (see <https://www.reeep.org/> and the [Zambian Off-Grid Energy Task Force Brochure](#)). Hence, by adapting their policies in order to achieve multiple policy goals simultaneously, climate clubs such as the REEEP have fostered ambition and achieved greater climate mitigation, which contributes to helping countries achieve their first-order mitigation duties.

Third, experimentation and learning also constitute important features for polycentric climate mitigation governance. Indeed, as this paper has previously observed, in an increasingly interconnected and diversified global climate mitigation governance structure, decentralized experimentation and mutual learning are crucial means which can facilitate governance improvements over time and create more effective policy changes. Not only does information exchange reduce the costs of mitigation, but it also enhances cooperation, fosters innovation and allows the diffusion of knowledge and norms (Dorsch and Flachslund, 2017: 56), which also consist in second-order duties. Examples of climate clubs which strive to wield these skills within their action plan include the PPCA (Powering Past Coal Alliance) and the REN21 (Renewable Energy Policy Network for the 21st Century). The PPCA is comprised of 165 countries, cities, regions and businesses committed to phasing out coal power at home and supporting others in their energy transition. The club’s website underlines that “PPCA members strive to accelerate the transition by working together and learning from each other,

as many share a historical reliance on coal and have gathered extensive expertise on how to shift financial flows and ensure a just transition or transform grids and utilities” (see <https://www.poweringpastcoal.org/>). The REN21 also composed of a variety of members such as industry associations, governments, inter-governmental organizations, NGOs, and academic and scientific institutions, considers itself as a ‘coalition of the willing’ with the objective to support and accelerate the development of renewable energy by collecting, consolidating and synthesizing renewable energy data to provide clear and reliable information on what is happening in real time. By creating and sharing reports and case studies on renewable energy-related developments worldwide (such as the Renewables Global Status Report and the Global Futures Report) and by organizing various debates (such as the International Renewable Energy Conference) in order to bring together government, the private sector, civil society, research and academia, REN21’s objectives are deeply aligned with the features of experimentation and learning, which are central virtues of a polycentric approach to climate governance, and which contribute to fulfilling second-order duties (see <https://www.ren21.net/>).

Fourth and finally, the building of trust is another important aspect of a polycentric approach to climate governance, and a recurring element in the Ostromean literature. Indeed, trust is seen as “a very relevant resource for enhancing cooperation (especially for collective-action problems like climate mitigation), which can be built better across personal relationships (especially at lower levels and smaller scales)” (Dorsch and Flachsland, 2017: 57). Ostrom (1990) stresses the importance of face-to-face communication as a ‘trust catalyst.’ Climate clubs are well aware of this important quality. For example, the G20, which is not a climate club *per se* but rather an economic club with a climate governance work stream, is one of the most well-known clubs (see <https://www.dfat.gov.au/trade/organisations/g20>). It enjoys a high degree of legitimacy by simultaneously including some of the most responsible actors for climate change (China and the USA) as well as the largest CO₂ emitters and major fossil fuel-producing and consuming countries (Saudi Arabia and Russia). Most importantly, it nurtures trust building by organizing regular ministerial meetings which establish important regular communication channels (Unger 2021: 41). The CCAC (Climate & Clean Air Coalition) constitutes another example of a club which maintains positive member relationships. Its members meet at least twice per year, and cooperate closely in various

initiatives, which also contributes to the building of trust between members (see <https://www.ccacoalition.org/en>). In this regard, the building of trust is yet another crucial feature which is brilliantly exploited by climate clubs, and which contributes to the fulfillment of second-order duties.

To reiterate what has been shown earlier, by mobilizing the principles of capacity and community, it is possible to observe that MSN actors indeed have a moral duty to intervene against climate change. More specifically, the previous paragraphs have exemplified in which ways climate clubs, as a specific type of international actor, possess the necessary tools to fulfill various second-order duties. The following section will aim to specify the precise second-order duties moral duties that are incumbent upon climate clubs, and explain how the fulfillment of such duties can contribute to climate governance in practice.

4.4 Second-Order Moral Duties

In order to better understand the specific moral duties which are incumbent upon climate clubs, it might be useful to recall Caney's definition of first- and second-order duties. First-order duties can be defined as responsibilities that aim to enable mitigation, adaptation and compensation for harm done (such as reducing emissions) that certain agents have to perform. Second-order duties are complementary duties which help agents to comply with their first-order responsibilities (Caney, 2014: 134). At the beginning of this section, this paper has shown, by mobilizing the principles of capacity and historical responsibility, that nation states are bearers of both first and second-order duties. Climate clubs, however, are best-suited to fulfill second-order duties, especially as we recall the intricate leadership dynamics within polycentric governance structures which have been described at the beginning of this paper.

As we have seen, there exist various types of leadership within polycentric governance concepts, and each hold certain moral implications. Some authors (such as Shue, 2011) discuss leadership on the first-order level. According to this perspective, first-order moral duties are intertwined with an actor's capacity to demonstrate structural leadership through its military and economic power. In the field of climate governance, this type of leadership is anchored in an actor's relative contribution to a particular environmental problem, such as reducing GHG emissions (a first-order duty). This explains why countries, which possess a

high level of institutional capacity and which are recognized as durable, influential sources of authority, can more aptly exercise structural power and fulfill first-order mitigation duties than MSN agents.

However, other authors (such as Caney, 2014) define leadership duties as second order duties. Indeed, other international actors, such as climate clubs, can be better equipped to provide entrepreneurial leadership, cognitive leadership and exemplary leadership. In this regard, rather than concretely contributing to climate mitigation through reducing nation states' GHG emissions, climate clubs are much better suited to wielding diplomatic and/or negotiating skills in order to engender compromises and agreements (entrepreneurial leadership), developing and sharing scientific and experiential knowledge regarding innovative climate measures (cognitive leadership) and intentionally setting of examples for other actors (exemplary leadership). For example, the PPCA has demonstrated entrepreneurial leadership by recruiting members and influencing policy outcomes: starting from a handful of members in 2017, it now comprises 165 countries, cities, regions and businesses. With 14 countries joining in the lead up to and during COP26 (November 2021), the Alliance now has the support of a quarter of all countries in the world. Also, during the COP26, the Alliance exerted its entrepreneurial leadership by making Ukraine join its ranks and bring forward its coal deadline from 2050 to 2035. Chile has also announced that it will work together with the Alliance to bring forward its coal deadline from 2040 to 2030 (PPCA, n.d.). An example of cognitive leadership can be found in REEEP's development of hard data and digital tools. Indeed, this climate club has long been a front-runner in the Linked Open Data space, and for three years ran the coordination hub of the Climate Knowledge Brokers Group, a network of over 400 professionals dedicated to making climate knowledge more accessible, relevant and useful to decision makers worldwide (REEP, n.d.). Finally, the Climate Ambition Alliance (CAA)'s "Race To Zero" is an example of exemplary leadership. By bringing together countries, businesses, investors, cities and regions who are working towards achieving net-zero CO₂ emissions by 2050, the CAA is intentionally setting of examples for other actors by building momentum around the shift to a decarbonized economy (CAA, n.d.). These three forms of leadership can be closely linked to second-order duties which, as we recall, aim to create the conditions that will likely increase compliance. The fact that polycentric governance approaches foster entrepreneurial, cognitive and exemplary

leadership (see p. 11), continues to underline the importance of attributing second-order duties to climate clubs in order to cultivate constructive actor interactions within the current fragmented climate governance framework.

Caney (2014: 136) specifies various second-order responsibilities that agents such as climate clubs can perform in order to avert dangerous climate change, two of which being particularly interesting in the context of this paper: *incentivization* and *norm creation*. The first aims to incentivize compliance by offering benefits to non-compliers. Rather than imposing burdens on non-compliers through enforcement, incentivization attracts compliance by setting certain criteria and by recompensing agents who comply with them. Agents who employ this type of second-order responsibility can also withhold membership (and its associated benefits) from those that do not comply with their engagements. The second aims to influence the behavior of others by creating norms discouraging undesirable practices or, on the opposite, by encouraging a commitment to positive adaptation measures. This type of second-order responsibility has been coined as ‘norm entrepreneurs’ in the past (Sunstein, 1996: 909). This paper has previously demonstrated how various climate clubs embrace these second-order duties.

Examples of incentivization include the CSLF’s criteria for membership, namely “national governmental entities that are significant producers or users of fossil fuels that have a commitment to invest in CCS research, development, and demonstration (RD&D) activities,” (CSLF, n.d.) as well as the PPCA’s objective of bringing forward its members’ coal deadline and accelerating this transition by “working together and learning from each other” (PPCA, n.d.) Norm creation from climate clubs can be illustrated through the REEEP’s capacity-building activities and facilitating engagement with private sector businesses, financiers and regulatory authorities in the energy efficiency space, or even through REN21’s biennial International Renewable Energy Conference, which bringing together government, the private sector, civil society, research and academia and builds on “the knowledge of successes and failures, seeing what opportunities innovation and cooperation can bring and how developments in one country can feed into the development of renewables regionally. Although many other examples could be provided, it is clear that climate clubs use the benefits associated with their membership to incentivize climate action and create and share

norms by encouraging a commitment to positive adaptation measures. Having now understood why climate clubs are a type of MSN agent who can and should fulfill second-order moral duties, the last section will critically assess the position of climate clubs within the polycentric climate governance architecture in a succinct manner.

4.5 The Position of Climate Clubs Within a Polycentric Climate Governance Architecture

The efficiency and potential of climate clubs have often been criticized. Indeed, Falkner et al. (2021: 4) uphold that “clubs risk elevating cheap talk and symbolic gestures over substantial action.” Mourier (2020: 4) argues that unilateral regimes, as they are conceived today, are ineffective. Because they merely generate non-legally binding documents such as joint declarations, activities to promote climate projects or ‘safe spaces’ for diplomatic initiatives, climate clubs’ actions are “limited and not very transformative.” Andersen (2014) states that select ‘exclusive alternatives’ to the UNFCCC, such as climate clubs, “largely served as ‘discussion clubs’ that have achieved very little in terms of actual emissions reductions.”

However, the current climate governance architecture is changing. Tagliapietra and Wolff (2021:4), argue that “conditions are ideal for a new climate club” in which members “commit to stronger domestic climate measures and agree on the coordinated introduction of carbon border adjustment measures,” due to the current technological and political conditions. Indeed, today, we notice popular support in all societies for substantial climate action, we observe impressive technology cost reductions, and we see the emitters of half of global greenhouse gas emissions – the United States, the European Union and China – sharing for the first time a common climate ambition.

It should also be noted that climate clubs have also been defended in many ways. Falkner et al. (2021: 4), maintains that climate clubs are politically useful for many reasons. First, they “drive up normative ambition, create momentum behind specific targets and galvanize action within and outside the multilateral framework.” As an example of this, Falkner et al. underline the Helsinki Principles⁹ adopted by the Coalition of Finance Ministers for Climate

⁹ A set of six principles that promote national climate action, especially through fiscal policy and the use of public finance. See <https://www.financeministersforclimate.org/about-us> for more information.

Action Building: since its launch, finance ministers from over sixty countries have signed on to these Principles. Second, climate clubs can “help enhance political dialogue and ultimately build trust between key players.” The fact that the G8 and the G20, operating as a minilateral bodies, inject political dynamism into multilateral negotiations is a good example of this. Indeed, the G8’s consideration and endorsement of the goal to halve global greenhouse gas emissions by 2050, as well as the recognition of the 2°C target in 2009 had a large impact on both the ME27 and the UNFCCC (Weischer et al., 2012: 180). Other advantages of climate clubs include: breaking political deadlock among powerful countries (Falkner et al., 2021: 6); allowing a more flexible regime which provides significant and exclusive benefits to its members (Mourier, 2020: 4); and increasing overall innovative capacity on subsets of climate in the international arena (Weischer et al., 2012: 178). One additional aspect to underline is climate clubs’ capacity interact synergistically with other actors, such as the UNFCCC. Indeed, although climate clubs are most often appraised only in terms of their own achievements, it is important to keep in mind that polycentric governance structures are anchored around the idea of widespread self-coordination between a multitude of decision-making ‘centers.’ Hence, allowing climate clubs to play an increasingly important role within the current polycentric climate governance framework is not antithetical to maintaining the UNFCCC as a center of influence. As Hovi et al. (2016: 7) stress:

By capturing the attention of governments, news media and stakeholders for at least a couple of weeks, major UNFCCC conferences, such as COP 21, can generate additional incentives for governments and delegations to perform well in the eyes of domestic constituencies and other important stakeholders. In such a setting, frontrunners will have an advantage over laggards, and club members might use that advantage to link up with like-minded non-members and form a broader coalition of ‘pushers.’ Such a move will hardly suffice to radically change the negotiation game, but ***the possibility of synergistic interaction indicates that some climate clubs can make a difference also beyond the impact of the mitigation measures undertaken by its own members.*** [Emphasis added]

Similarly, as this paper previously underlined, Ostrom did not claim that polycentric governance could substitute for international diplomacy, but rather suggested that it had the potential to be highly complementary to traditional multilateralism (Ostrom, 2010, in Jordan et al., 2018:5). In conclusion, even if they cannot always overcome age-old interest or value conflicts, through the fulfillment of various second-order duties that the international

community should bestow upon them or that they themselves should choose to achieve, climate clubs can contribute in many ways to the urgent combat against climate change.

5. Conclusion

This paper studied the following question: within the new polycentric climate governance framework, do climate clubs have a moral duty to intervene against climate change and if so, what precise moral duties are incumbent upon them?

To provide insight on this issue, the first part of this analysis has underlined that climate governance has undergone a fundamental transition from a top-down towards a bottom-up approach, which has had important implications for today's new architecture for climate governance. Indeed, from a UNFCCC-based, top-down climate governance structure, it has today been recognized that climate change can no longer be governed multilaterally in a top-down manner by nation states only. The growing proliferation and diversity of actors have introduced a new, increasingly polycentric governance framework, characterized by a multitude of decision-making, self-coordinating 'centers.' Because polycentric regimes present various advantages, such as learning-by-doing and upscaling of norms and rules to higher climate governance levels, they may be seen as a promising solution to address the shortcomings of the current regime. The various leadership types involved in polycentric climate governance structures, such as structural leadership, entrepreneurial leadership, cognitive leadership, was subsequently studied. It was concluded that polycentric governance approaches, mostly foster entrepreneurial, cognitive and exemplary leadership. At this point of the analysis, the study of these actor interactions and leadership dynamics called for a greater focus on one actor who distinguishes itself from others: climate clubs, defined as "a smaller group of actors [aiming] to take action outside the UN climate regime, with clearly defined targets and conditions for members, possibly involving sanctions against non-members" (Falkner et al., 2021: 1). In order to better situate climate clubs within the current international climate architecture and to understand how their action might increase the global effectiveness of climate mitigation action, this paper presented different club typologies and analyzed their role within polycentric climate governance structures. Particular attention was given to four important features for climate mitigation governance and their related mechanisms underlined by Dorsch and Flachsland (2017), namely self-

organization, a recognition of site-specific conditions, the facilitation of experimentation and learning, and the building of trust, which were further developed in part III.

The second part of this paper examined the implications for climate justice and responsibility that the new polycentric architecture of climate governance has generated. Indeed, alternative ways of thinking about global justice and climate change holds great potential and have been increasingly coming to the forefront over the past 20 years. In this regard, this paper interpreted climate change as having various implications for human rights and intergenerational justice. Having better understood in which ways considerations of justice and climate change are profoundly intertwined, the analysis moved on to evaluate the relationship between justice and responsibility. It argued that the ‘polluter pays’ approach of responsibility was inadequate in dealing with collective problems, such as the issue of human-induced global climate change. In this regard, three principles supporting the attribution of responsibility apply to collective agents were mobilized, namely, the principles of capacity, community, and historical responsibility. This paper also put forward a different normative cartography for climate action, which distinguishes between ‘first-order’ and ‘second-order’ responsibilities, thus enabling a better understanding of how duties can be distributed in polycentric contexts.

The last part of this analysis connected the theoretical concepts presented in parts I and II, by linking climate clubs with principles of moral responsibility for climate action. In this section, it was advocated that, within the current context of polycentric governance, both nations and climate clubs bear moral responsibilities in the fight against climate change. The principles of capacity and historical responsibility were used to support the argument that nation states bear first-order duties of mitigation and, moreover, that in situations of non-compliance, it could be argued that they also bear a second-order duty to implement climate clubs as a tool against non-compliance, in order to facilitate the achievement of their first-order duties. Afterwards, by recalling that within polycentric climate governance frameworks, national governments are no longer the only morally relevant agents in the fight against climate change, this paper mobilized the principles of capacity and community in order to argue that MSN actors can be bearers of moral duties in the fight against climate change. In a next section, concrete examples which demonstrated that climate clubs were capable of

demonstrating self-organization, expertise in site-specific conditions, reliance on experimentation and learning as well as the building trust were provided. It was also shown that climate clubs could illustrate entrepreneurial, cognitive and exemplary leadership. These elements supported the argument that climate clubs were particularly well equipped to fulfill second-order duties of mitigation within polycentric governance settings. Having supported this claim, the paper specified the types of second-order duties that are incumbent upon climate clubs, such as *incentivization* and *norm creation*. The third section concluded with a brief assessment of the efficiency and potential of climate clubs within the current polycentric climate governance architecture.

As this paper has shown, the fight against climate change is a problem at the global level: all of humanity faces the likelihood of extremely adverse effects, which can only be reduced if the international community commits to reducing their GHG emissions (Ostrom 2010, in Gajevic Sayegh, 2020: 487). Within this context, this analysis has aimed to evaluate the structure of the current international climate governance framework, in order to contribute to the body of literature which aims to develop new and innovative approaches to better tackle climate change. In this regard, the implications of greater polycentricity for climate justice, in particular as it relates to climate clubs, were discussed, and it was concluded that both national governments and climate clubs bear second-order duties in the fight against climate change. In a nutshell, this paper showed that (a) national governments have a second-order duty to implement climate clubs as a tool against non-compliance, that (b) MSN agents also have a duty to act, and that (c) climate clubs were a relevant type of MSN agents.

A growing number of empirical studies underline the urgent need accelerate global climate action. This paper has contributed to the discussion by highlighting the potential contribution of climate clubs in helping national governments to meet their emissions reductions, which could strengthen cooperation and effectiveness in climate policies. Attributing specific second-order duties of mitigation to the various actors implicates in climate governance could make it easier for nation states to fulfill their first-order duties and contribute to overcoming non-compliance in collective-action problems like climate change mitigation. Indeed, as this analysis has sought to clarify, polycentric governance settings allow increased opportunities for communication and collaboration. Fully embracing these possibilities will be particularly

crucial in the post-COVID-19 period, which has reiterated the fact that both risks and vulnerability are systemic and interconnected.

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