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Title Page

Title: Pluralising Planetary Justice beyond the North-South divide: Recentring procedural, epistemic, and recognition-based justice in earth-systems governance

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Pluralising Planetary Justice beyond the North-South divide: Recentring procedural, epistemic, and recognition-based justice in earth-systems governance

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Abstract:

The concept of planetary justice has received increasing attention within the field of earth systems governance. Although a significant epistemic shift in the field, planetary justice discussions have primarily focused on western and (re)distributive notions of justice. By doing so, planetary justice is depriving current debates of crucial dimensions of what justice has meant for different communities, organizations, and institutions. Many of these trajectories spanning the realms of social activism, research, and institutional change have historically called for more than (re)distributional approaches to justice. Here we argue that recentring procedural, epistemic, and recognition-based notions of justice is critical in addressing the challenges of planetary justice in both research and practice of earth systems governance. We propose that Pluralising Planetary Justice (PPJ) requires a series of epistemic shifts in the way we research and practice the governance of environmental inequalities. These shifts demand close attention to the links and gaps between justice movements and scholarship beyond the industrialised North. They also require scaling debates within climate justice and developmental ethics regarding peoples' abilities to achieve well-being and the challenges of public deliberation across spatio-temporal scales and in both democratic and non-democratic political systems. Finally, these shifts need to recognise long-lasting processes of epistemic colonialism and build specific mechanisms to integrate intersectional, multispecies, intergenerational, and non-western notions of justice in legal and institutional frameworks. We argue procedural, epistemic, and recognition-based justice are essential guiding principles and empirical standpoints to developing long-term, pluriversal, and multiscale human-earth governance systems that effectively build upon long-standing plural notions of justice. Without appealing to procedural, recognition, and epistemic concerns, planetary justice cannot meaningfully engage with the necessary agents and trajectories or outline the normative ends to which it aims to advance in earth systems governance.

Keywords: Planetary boundaries, Environmental justice, Global environmental governance, Global South, Anthropocene, Science-policy interface.

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1. Introduction: The rise of justice discourse in earth systems governance

The concept of planetary justice has received increasing attention within the field of earth system governance (Biermann et al., 2020, Biermann, 2021, Dryzek and Pickering, 2019). Focusing on recent initiatives such as the 17 Sustainable Development Goals (SDGs) and the Intergovernmental Panel on Climate Change (IPCC), scholars have pointed out that “after years of neoliberal dominance,” the “justice turn” has emerged as an “unprecedented” endeavour in the arena of intergovernmental organizations and agreements (Biermann et al., 2020: 1). International financial and market liberalization, and the expansion of regressive economic policies during the 1970s and 1980s have indeed expanded socioeconomic disparities through the 1990s and 2000s, including among OECD countries (Leimgruber and Schmelzer, 2017a, Stiglitz, 2016). Global inequality issues have also been critical in discussions about nations’ self-determination to manage natural resources and the links between human rights and the environment since the emergence of intergovernmental organizations in the mid-20th Century (Conca 2015:51-52). This has particularly been the case in moments where discussions about decolonization or conflicts over the place of developing countries in the international economic order have arisen in negotiations and agreements (Borowy, 2013, Conca, 2015, Ivanova, 2021). Thus, the “justice turn” in earth systems governance research should be understood as both: a reaction to the internationalization of neoliberal economic policies and the rise of socio-economic inequalities since the 1970s and 1980s and as the continuation of long-running efforts to address inequalities in the international environmental governance arena—as processes linked to lasting issues of (under)development and colonialism.

By emphasising inequalities as a central lens in environmental research and practice, the concept of planetary justice serves as an epistemic shift in earth system governance. This shift aims to rethink ill-prepared tools dominated by market-based and state-centred approaches framed in the Cold War context and expanded afterward by fields such as neoclassical economics, international relations, and political sciences, among others (Bernstein, 2001, Dauvergne and Clapp, 2016). Bridging concerns developed since the 1980s by earth-systems sciences about the challenges to integrating biogeochemical processes of planetary scale into existing governance institutions and local/social practices (Biermann, 2002, Biermann, 2007, Biermann and Pattberg, 2012, Biermann, 2014, Dauvergne and Clapp, 2016, Palsson et al., 2013), earth system governance has emerged since the 2000s as a specific set of agendas to bridge—and go beyond—traditional environmental policy analysis as it developed in the 1970s with questions about human-induced change in biogeochemical earth systems, planetary boundaries, and their complex governance challenges (Biermann, 2002, Biermann, 2007, Biermann and Pattberg, 2012, Biermann, 2014).

The planetary justice concept thus serves to expand questions about (underrepresented) agents and (unequal) power, scales, and agencies in the governance of human-earth interactions in the Anthropocene era (Burch et al., 2019). Moving away from a “global” scope—focused on international relations, state actors, and institutions—to the “planetary,” as a sphere that involves complex assemblages of social, political, technological, and biogeochemical systems, is, however, a difficult task. Planetary justice offers thus an epistemic path for the future of earth systems governance to advance explorations in how inequalities are embedded in complex interactions of biogeochemical cycles, governance, and socio-political pressures to allocate resources and outline distinct development trajectories at multiple spatio-temporal scales (Burch et al., 2019:5).

Along the process building environmental governance systems across national and transnational scales, scholars, social activists, and both public and private organisations have developed various notions of justice (Allen et al., 2017, Roberts and Parks, 2007, Sharachchandra Lele, 2018). Within the scholarship arena,

research on environmental politics and earth system governance has raised, for instance, important issues about the inequity of power that concern matters of procedural and epistemic justice. That is, fairness in the processes that resolve disputes, equal representation in decision-making to allocate and manage resources, just recognition of multiple knowledge systems, and opportunities to produce and voice them. This is particularly the case in recent environmental governance research regarding underrepresented agents, non-state and non-human actors, responsibilities, legitimacy, accountability, and rights (Betsill et al., 2020, Biermann and Kim, 2020, Burch et al., 2019, Coscieme et al., 2020, Haas, 2017, Karlsson-Vinkhuyzen and McGee, 2013).

Although governance studies have opened up broader questions about power disparities of various kinds, a (re)distributional approach has dominated the discussion of planetary justice. (e.g., Biermann, 2014:145-173, Biermann, 2007:334). That is, the focus has mainly been on the unfair distribution of environmental rights, duties, risks, hazards, and harms. To be more precise, although recent endeavours into planetary justice are acutely aware of procedural and recognition-based aspects of justice, they have primarily responded to, or drawn on, western distributive philosophies of justice. For instance, Biermann and Kalfagianni (2020) argue a planetary justice framework must maintain a clear focus on the planetary scale of assessment and, as such, “disregards (parts of) the burgeoning scholarship of the narrower environmental field”. However, the planetary framework that Biermann and Kalfagianni (2020) propose consists primarily of western philosophical traditions. The omission of non-western perspectives is justified, they argue, because their planetary framework is intended to assess “existing political documents, scientific debates or integrated assessment models in global change research and debate,” which are less likely to contain references to non-western traditions. Similarly, although a number of the western approaches on which Biermann’s and Kalfagianni’s (2020) framework is based contain procedural and recognition-based elements, they are drawn on primarily in a distributive capacity—focusing on the outcome the perspective promotes as opposed to the processes which might improve them.

Other omissions of non-distributive approaches have been more conscientiously discussed. In perhaps the most comprehensive philosophical exploration of planetary justice, Hickey and Robeyns (2020:2), also omit procedural justice but with the caveat that: “other dimensions of justice, most importantly procedural justice, and issues that are relevant to taking questions of justice into practice... without doubt, as other authors have made clear, these issues are important (e.g. Schlossberg, 2007 [cited here as 2009], 2013), and hence the fact that they are not the focus of this paper should in no way be taken as an implicit statement on their importance or relevance.”

Whilst some contributions to the planetary justice scholarship do focus on typically excluded parties, the distributive paradigm still appears as the de facto starting point for analysis. For example, Kashwan et al. (2020) present a means of prioritising the poor in earth systems governance in which two of their three tenets of pro-poor planetary justice predominantly rest on distributive concerns: “[1] that the poor and marginalized majority shall not be made worse off; [2] That the lot of the poor must improve.” Although a third tenet “the poor [must] be recognized as legitimate participants (whether directly or via representation) in decisions about planetary stewardship” focuses on recognition and participation, Kashwan et al (2020) offer little discussion regarding how the global poor might actually be recognised or involved in procedural aspects of planetary justice.

The emphasis on (re)distributional and western approaches to justice, and the lack of empirical attention to non-western and non-distributional traditions raises several questions about the extent and potential impact of planetary justice research in the growing earth system governance field. Although the recent rise of planetary justice represents an epistemic shift within the earth system and environmental governance community, a narrow and western scope to justice might hinder essential debates for advancing the field,

particularly with regards to the role and agendas of underrepresented agents and non-western ways of knowing and doing. In addition, this might also reproduce ill-prepared frameworks and assumptions about how various agents and communities have enacted and experienced distinct notions of (in)justice and the multiple approaches needed to address the challenges of bringing justice to the arena of planetary governance.

Outside the realm of international environmental politics and governance studies, social movements fighting for environmental justice and access to natural resources, and a growing equity-oriented scholarship in the social sciences and humanities have actively outlined more than distributional notions of justice. Across these fields, procedural, epistemic, and recognition-based approaches have been essential in constructing what we call a pluralised approach to justice (also see chapter 7 of Schlosberg, 2009). Examining the rise of planetary justice as part of—and a departure from—these various trajectories opens up a series of questions about the challenges, and opportunities, of integrating justice in the research and practice of earth systems governance.

Scholarship regarding the normative aspects of earth systems research, which have in recent years culminated into a discourse of “planetary justice”, have so far omitted various justice trajectories developed within and beyond other academic, social, and institutional circles. In the following sections, we illustrate the procedural, epistemic, and recognition-based aspects of these preceding trajectories, with particular attention to the research and practice of environmental justice, climate justice, developmental ethics, and global governance beyond the North-South divide. More precisely, we highlight that each of these trajectories sought to emphasise or recentre procedural, epistemic, and recognition-based aspects of justice. In doing so, we compile a series of challenges which the nascent planetary justice literature should seek to address as it enters the global governance field.

2. Bridging social and research agendas beyond the industrialised North

Within the US context, environmental justice movements initially stemmed in the 1980s from localised grievances regarding the disproportionate exposure of racial minorities to environmental pollution (Mohai et al., 2009, Walker, 2012). These movements seemingly prompted western-academic debates on philosophical and theoretical aspects of environmental justice, which often focused primarily on distributive ideals of justice (Dobson, 1998, Low and Gleeson, 1998, Miller, 1999).

However, the movements surrounding these grievances also regularly voiced procedural and representational concerns (Bullard and Johnson, 2000, Cole and Foster, 2001). In areas of the Global South where environmental injustices have been historically linked to land ownership and access to natural resources, issues of participation and recognition have been particularly acute (Guha and Martínez Alier, 1998). Yet, a distributive focus in research and policy omitted many of the concerns of social movements from which environmental justice scholarship seemingly stemmed (Schlosberg, 2004). A similar pattern has also recently emerged in debates regarding energy and justice (Jenkins et al., 2016, Wood and Roelich, 2020).

The process of broadening environmental justice struggles and their scholarly study since the 1980s prompted a reformulation of environmental justice theory. In doing so, environmental justice came to include the regularly voiced procedural and recognition-based grievances, which were almost always intertwined with the social movements’ distributive concerns—those which initially underpinned environmental justice as a research domain (Schlosberg, 2004). The reconnection of these concerns in academic debates has produced trivalent understandings of environmental justice, in which environmental justice could be seen as consisting of recognition-based, procedural, and distributive dimensions (Schlosberg, 2009). Others have recently pointed out the centrality of an epistemic approach to environmental inequalities (Porto et al., 2017, San

Martín, 2021, Temper and Del Bene, 2016, Vermeylen, 2019). Here we propose an approach to planetary justice that integrates and recentres procedural, recognition, and epistemic-based dimensions of justice.

Along the process of expanding the study of justice, increasing attention to environmental movements in the Global South has revealed fundamental features of their origins and agendas that distinguish them from a purely distributional approach. Scholarship on these areas has pointed out that environmental justice movements initiated in the United States in the 1980s might be better characterised as a struggle for a better quality of life (as a reaction to the uneven distribution of environmental goods and bads disproportionately impacting low-income communities and minorities) (Guha and Martínez Alier, 1998:33). Unlike these struggles, “against the effluents of affluence”, environmental conflicts in less industrialised areas have historically originated in socio-political disputes over access to and control over natural resources necessary for the livelihoods and the physical and cultural survival of these communities (Chomsky and Striffler, 2014, Guha, 1989, Guha and Martínez Alier, 1998:33, Martínez-Alier, 2002, Schlosberg and Carruthers, 2010).

Before the rise of environmental movements in the 1970s and 1980s, and associated with long-lasting colonialism and land dispossession processes, communities in these regions developed specific strategies to contest environmental injustices. These communities often framed recognition and procedural dimensions as central requirements to gain sovereignty, access, and control over critical natural resources and decision-making processes. In the (post)colonial era, enduring unequal economic relations with industrialised nations or with foreign capitals removed territorial rights and traditional mechanisms to participate in the management and governance of natural resources. Recognition of historical territorial rights and traditional (communal) ways of managing natural resources, and the granting of access to both resources and processes for decision-making, have been fundamental aspects of the environmental agendas in these communities, sometimes since colonial times (Chomsky and Striffler, 2014, Guha and Martínez Alier, 1998). Though following different interests in nature and scope, discussions about recognition and procedural-based demands to gain sovereignty over natural resources also entered debates within the United Nations in the 1950s and 1960s in terms of nations’ self-determination to manage natural resources, as former colonies and developing countries negotiated their status in a shifting international economic order (see, for instance, chapters 3-4 in Conca, 2015).

Although these different trajectories might easily fit distinctions between rich and poor nations, the specific struggle by native peoples to enforce territorial rights in order to retain access to and sovereignty over the management of natural resources are similar across states, including wealthy countries like Canada, New Zealand, and the United States (Guha and Martínez Alier, 1998:35) and in less wealthy nations such as Chile and other Latin American countries (Carruthers, 2008, Schlosberg and Carruthers, 2010). These cases suggest that recentring procedural and recognition issues in planetary justice debates requires close attention to the multiple and contesting environmental agendas that have emerged across social movements within and beyond the nation-state, outside western ways of knowing, as well as across the traditional divisions between developed/developing nations.

Recentring the distinct agendas of social movements across the North and South opens up new paths to examine how plural approaches to justice have emerged in the arena of activism. It also raises several questions about how non-distributional approaches to justice have been marginalised in specific academic and policy circles. More importantly, bridging the realm of social movements and scholarship to recentre procedure and recognition in planetary justice brings a series of challenges for the research and practice of global governance. For instance, if communities have actively sought to (re)gain and keep control over the management of land and resources (sometimes quite effectively), how will these historical struggles and agendas be translated into the practice of planetary justice governance? How will these non-distributional

approaches be negotiated within needed (re)distributional debates in the international arena? We argue, actively engaging with more than distributional approaches to justice developed in realms of social activism beyond the industrialised North will be critical as planetary justice debates enter and expand the global governance arena.

3. Scaling Climate Justice and Developmental Ethics

At the intersection of research and practice, similar processes within both climate justice and developmental ethics discourses have also led to the reinterpretation and recentring of non-distributional concerns. Climate justice has recently brought particular emphasis over questions of temporality and intra and intergenerational justice, geographic scale, notions of responsibility, and representation over a broad spectrum of scales (Bulkeley et al., 2013, Gardiner, 2011, Gardiner, 2016, Okereke and Coventry, 2016, Shue, 2014). Especially important for the procedural realm, climate justice has raised pertinent and ongoing questions regarding the role, shape, and size of the institutions we use to govern global affairs and the vessels through which participation is practiced.

Questions regarding the ends and aims of development have also led to the expansion of notions of capability (these notions also can be seen to stem from responses to contemporary debates in distributive scholarship and the question of “equality of what” (see Anderson, 1999, Arneson, 1989, Dworkin, 1981, Rawls, 2013 [1971], Sen, 1987)). These ends or capability sets, specifying the valued things a person can be or do, provided normative guidance which looked beyond contemporary distributive concerns, assessing how a distribution of goods or burdens impacts differing people’s ability to attain well-being (Nussbaum, 2001, Sen, 2001). A focus on people’s ability (capability) to achieve well-being considers (re)distributive grievances, but places them in a more extensive set of socio-cultural, economic, political, and epistemic factors that ultimately condition the capacity of people and communities to achieve their well-being. Strongly associated with developmental ethics, the notion of capability has therefore been an important approach to connect normative issues arising at intersecting development and environmental and climate justice trajectories (Schlosberg, 2009, Schlosberg and Carruthers, 2010, Holland, 2014, Holland, 2017).

A key occurrence in all of these trajectories is an eventual demand for and incorporation of procedural and participation of vulnerable nations, communities, and people in global decision making. Capability literature placed emphasis on the role of public deliberation and an individual’s political control over their environment in defining the ends to which development should aim (Nussbaum, 2001, Sen, 2001). Such arguments sought to combat the so-called “lee thesis” which states that political freedoms could curtail the fulfilment of economic needs through stifling development (Sen, 2001). At the intersection of the democracy, development, and justice debates, it is important to consider that ideals of at least some democratic participation are often taken for granted in mainstream environmental governance discourses (Brain and Pál, 2019, Brown, 2009, Betsill et al., 2020, Cornell et al., 2013, Dryzek and Stevenson, 2011). Yet, these conflicts and debates are almost unavoidable when discussing ideas of planetary justice, given that a large portion of the global populations live under regimes which view political freedoms and participation as hampering economic growth and development (Sen, 2001).

Notions of capability have also been particularly relevant to emerging global governance systems. The capabilities approach has long been linked to global development initiatives and initially motivating the Human Development Index (Anand and Sen, 1994). The approach’s normative base is also seen to have influenced the UN’s Millennium Development Goals (Fukuda-Parr, 2011, Unterhalter, 2012) and is now closely associated with the UN Sustainable Development Goals (SDGs). Although critical in developing these global target-setting agendas, notions of capability have also been used in a variety of scholarship to

normatively assess and critique these goals (Ndubuka and Rey-Marmonier, 2019, Hillerbrand, 2018, Biggeri, 2021). Hillerbrand (2018), for instance, outlines how the SDGs default on differentiation of environment, human well-being, and technology, leading the SDGs to succumb to a “mild technological determinism”. Critiques suggest that the capability approach can provide a normative framework to recentre and connect well-being and the environment within the SDGs.

Over the past decade, ‘governance through goals’ has become an expanding governance tool at the intersection of competing development and environmental issues. However, concrete processes to achieve these targets have generally become less specified and more uncertain (Burch et al., 2019). In attending competing SDGs, national and subnational actors face extreme asymmetries in participation and political power to address diverging incentives and the gap between ambitious targets and the policies and practices needed to achieve these goals (Young et al. 2017). The SDGs became a prominent structure in global environmental governance. Yet, it remains to be seen how implementation efforts will lead to further debates on the limits and potentials of target-setting as a governance tool and its implications for procedural and epistemic justice, including notions of capabilities, intergenerational, multispecies, intersectional, and planetary justice.

Environmental and climate justice scholarship began with attempts to articulate distributive outcomes to the respective issues at the centre of these discourses. It seems apparent that the emerging scholarship on planetary justice is pursuing similar answers. More recent work on climate and environmental justice (and more recently also on energy justice) has shifted to focus on procedural and recognition-based issues (Nightingale, 2017, Schlosberg, 2009, Schlosberg, 2013, Simcock et al., 2021, Wood and Roelich, 2019). Given this, we should ask whether planetary justice scholarship should also begin with procedural and recognition-based concerns as these are the primary means of investigating questions of just what a planetary justice agenda or framework should entail or respond to in the practice of environmental governance.

It seems the primary developmental barrier for a discourse as broad as planetary justice will be the scale of the conceptual space it must construct in order to hear and understand the grievances of the diversity of groups that earth systems governance is attempting to serve. In this respect it seems unusual to begin exploring planetary justice through pursuing substantive guidance—even if recognition-based and procedural concerns arrive in future work. Scaling debates within climate justice and developmental ethics which recentre procedural and recognition-based approaches, will be fundamental in advancing the planetary justice agenda as it builds upon, and engages with, ongoing environmental justice dialogues at both national and transnational scales.

Given the prominence of recognition and procedural concerns in other justice trajectories, a pre-emptive focus on recognition and procedural issues at the centre of planetary justice may be instrumental in the success of shaping earth systems governance agendas. Just as environmental, climate, and developmental trajectories sort to re-emphasise and reinterpret different aspects of justice, so too will planetary justice have to, in order to meet the multiple spatio-temporal scales that earth systems governance seeks to incorporate.

4. Decolonising Epistemic and Governance Systems

The question about how to integrate issues of participation and recognition within multiple scales of earth systems governance, requires close attention to the place of democratic legitimacy and epistemic (in)justice within existing governance architectures. As planetary justice enters the environmental politics arena, it is essential to remember that our current environmental governance systems are rooted in political, cultural, scientific, and economic orders created in (post)colonial settings and institutionalised within the conflicting agendas of Cold War, decolonisation, and developmental politics (Borowy, 2013, Conca, 2015, Escobar, 2012,

Ivanova, 2021, Leimgruber and Schmelzer, 2017b). As procedure and recognition are key foundations of legitimate forms of governance, we argue advances in the practice and scholarship of planetary justice will need specific strategies to decolonize existing epistemic and governance systems.

The history of international climate assessments and negotiations provides a paradigmatic case of unequal participation and recognition. In the 1980s and 1990s, developing countries struggled to gain influence in international networks and negotiations, and only a few researchers from these countries participated in foundational assessments. This lack of representation, which can be read from both a procedural and epistemic (in)justice perspective, was a structural feature of the first climate assessments of the 1980s (e.g., the 1985 Villach Conference), and remained throughout the first IPCC reports and other international frameworks in the 1990s, such as the 1995 UNEP Global Biodiversity Assessment (Biermann, 2000, Biermann, 2006, Karlsson, 2002, Karlsson et al., 2007, Yamineva, 2017). Lack of participation and representation have often increased conflicts to calculate emissions and discuss the uneven responsibilities between developing and developed countries, which has occasionally been framed by southern nations as new instances of “environmental colonialism” (Agarwal and Narain, 1991).

Often forgotten in the scholarship and practice of global environmental governance is that the uneven participation and representation of former colonies and developing nations in international negotiations and scientific assessments has been a product of long-term processes of material and epistemic colonialism. Uneven research capacities and structural divisions on which institutions and scientific communities produce legitimate and policy-relevant knowledge in the global governance arena are rooted in historically unequal (neo)colonial encounters between (former) imperial centres and (post)colonial nations (on epistemic injustice and decolonial knowledge see Pitts, 2017). Since the emergence of intergovernmental governance organisations in the mid 20th century, former colonies, developing countries, and non-sovereign territories have struggled to gain political and economic sovereignty and equal negotiating capacities in the global environmental order (regarding nonsovereign territories, see Ferdinand, 2018).

Thus, planetary justice research requires close attention to how power disparities have shaped global knowledge networks and research capacities, and to how these power imbalances have permeated the arena of environmental politics and governance. However, it also requires a detailed analysis of how individuals and communities have contested these epistemic imbalances and, in the process, produced alternative notions of justice to those framed in the academic and policy arenas of the North.

Epistemic injustices in research capacities and environmental negotiations are also coupled with an uneven global governance arena. Along with the rise of earth system sciences during the 1970s-1980s, national institutions, environmental conventions, and multilateral organizations have faced an increasingly polycentric and fragmented governance field (Biermann and Kim, 2020). Lack of attention to limited research capacities and the absence of effective science-policy interface frameworks in the Global South have also been structural features in emerging governance schemes, for instance in the case of critical earth’s systems such as the governance of the nitrogen planetary boundary (San Martín, 2020).

Fragmentation and polycentricity have also encountered a profound lack of empirical attention to justice and power disparities in global environmental governance research. Scholars have pointed out the absence of issues concerning inequalities, colonialism, and political economy (Burch et al., 2019, Dauvergne and Clapp, 2016). With the uneven socio-physical and intellectual realities of the Anthropocene, it has become indispensable to incorporate questions about non-human (e.g., chemical forms, technologies, animals, and ecosystems) and underrepresented agents (e.g., indigenous peoples and knowledge, and future generations (intergenerational justice) into a broader understanding of agency and power relations in global environmental issues, especially

in the Global South (Betsill et al., 2020). While a response to profound gaps in environmental governance scholarship, these research agendas can provide important avenues to rethink and recentre plural notions of (planetary) justice in the increasingly complex and polycentric global governance field.

Climate governance struggles have offered important insights into how multiple notions of justice emerge at the intersection of polycentric social movements and governance arrangements (Tormos-Aponte and García-López, 2018). Building on decolonial, indigenous, multispecies, and intersectional perspectives, scholars and activists have pointed out that current notions of justice are insufficient to address the climate crisis and outline effective road maps for navigating its complex praxes, responsibilities, and politics (Sultana, 2021, Tschakert, 2020, Tschakert et al. 2020, Winter, 2020). Recentring epistemic and procedural disparities in current climate governance debates and practise, they have pointed out that contemporary ideas of justice are “insufficient to overcome the persistent silencing of voices belonging to multiple others” (Tschakert et al. 2020:1). In doing so, they have emphasised how prevailing notions of justice tend to prioritize western and human-centred ontologies and temporalities, hindering broader efforts to provide voice and recognition to marginalised actors across race, class, gender, age, species, ecosystems, and generations (Tschakert, 2020, Tschakert et al. 2020, Winter 2019, Winter 2020).

Indigenous, intergenerational, and multispecies notions of justice have indeed been a central part of emerging legal frameworks beyond the arena of climate governance, such as in the case of “rights of nature”. The rise of “rights of nature” as legal philosophy, social movement, and codified legal provisions has provided novel ways of integrating more plural and beyond-distribution notions of justice into national and subnational institutional frameworks. Rights of nature, either in terms of “Nature’s Rights” (where all Nature, within the legal jurisdiction, is recognized as having rights), as provisions giving legal personhood for specific ecosystems (which gives ecosystems “a voice” via its human guardians in decision-making processes), or as preconditions for protecting human environmental rights (Kauffman 2021, Kauffman and Martin 2021), have expanded for more than a decade in nations such as Ecuador, Bolivia, Australia, the United States, India, among others. Its emergence provides critical insights to pluralize the analysis of justice in earth systems governance.

Bridging indigenous cosmologies and western(ised) legal tools, rights of nature endeavours are part of larger historical efforts from NGOs, academic institutions, and grassroots movements, to address issues at the intersection of human, environmental, indigenous, and economic rights (Kauffman 2021). The rise of the rights of nature provides new avenues to broaden our understanding of justice beyond western, human-centred, and distributional perspectives. First, rights of nature build on long-term struggles over environmental sovereignty and self-determination that have historically emerged in (neo/post)colonial encounters. In doing so, the more plural notions of justice embedded in these endeavours need to be understood as part of long-lasting processes creating new social and institutional processes for the participation of historically marginalised voices—as initiatives entangled with decolonial praxis at the intersection of human-environmental rights in post(colonial) and decolonising contexts. Second, rights of nature, as procedural and epistemic projects, expand recognition and voice to non-human entities and species and provide new ways of aligning natural, human, and economic systems with the historical struggle of marginalised communities to create alternative ways to manage and govern human-earth interactions at local, national, and regional scales.

Questions remain about the future of rights of nature initiatives—in particular, regarding their various forms and agendas, their integration in intergovernmental, transboundary, and global governance, and how historically marginalised voices can stay (or not) at the centre of competing environmental politics and legal frameworks (for Ecuador see Riofrancos 2020). However, in aiming to recentre decolonial, intersectional, intergenerational, and multispecies perspectives, they provide critical avenues to examine pluralising notions of (planetary) justice as epistemic and procedural issues. Similarly, by bridging the realm of social activism and academic debates on

posthumanism, new materialism, postcolonialism, critical feminist race theory, animal studies, and environmental justice ethics and theory, they provide privileged avenues to examine the scope and limits of justice at the intersection of research and practice beyond the North-South divide.

Issues of multispecies, intergenerational, and non-western notions of justice, colonialism, and political economy have also been broadly discussed by scholars in fields such as anthropology, science and technology studies, history, environmental humanities, sociology, political philosophy, postcolonial studies, and environmental ethics (Celermajer et al., 2021, de la Cadena and Blaser, 2018, Emmett and Nye, 2017, Ferdinand, 2019, Gow, 2008, Guha, 2000, Holland and Linch, 2016, Ilea, 2008, Jorgensen et al., 2013, Liboiron, 2021, Pellow, 2018). Expanding discussions on underrepresented agents, (uneven) power, and agencies will require increasing attention and new interdisciplinary frameworks that consider intellectual trajectories and methods from disciplines less often represented in traditional environmental governance research. More precisely, expanding empirical approaches to planetary justice that focus on non-state actors and processes at the intersection of biogeochemical processes and multiple human perceptions/behaviours will demand the integration of methods and theoretical frameworks from disciplines beyond the traditional realms of international relations, economics, and political sciences. In doing so, the global governance research community will need close attention to its intrinsic epistemic inequalities and the mechanisms that might foster the legitimisation of broader kinds of expertise, methods, and approaches.

Thus, decolonising the global governance realm and recentring planetary justice requires building interdisciplinary research frameworks and institutional avenues that foster a more complex understanding of multiple agents, agencies, and disparities. Across the epistemic-governance interface, essential difficulties still remain about the danger of delegating too much power to experts and other intellectual elites at the expense of democratization processes (Burch et al., 2019, Carrozza, 2015, Pickering and Persson, 2020). Especially so, when experts tend to overlook the more complex and multiple notions of fairness and justice embedded in the arena of social conflicts and institutions (Gross, 2014). Or in contexts where the actors that produce and diffuse relevant knowledge are more diverse than “epistemic communities” (Haas, 1992, Jasanoff, 1996, Mukherjee and Howlett, 2015) composed of scientists only (Never, 2014). In the knowledge-justice-governance nexus, there is still a profound lack of understanding on how different kinds of knowledge, norms, notions of justice, social demands, and governance architectures interact at a domestic level, especially in the Global South.

Decolonising existing research and governance systems will require expanding our understanding of the knowledge-governance interface to expand the participation of underrepresented epistemic agents and plural notions of fairness and justice. In particular, planetary justice will have to address the breadth of deliberative spaces in which a vast diversity of knowledge and interests will be exchanged. We argue that a foundation for recentring recognition and procedure within planetary justice initially requires attention to which knowledge holders and knowledge systems are able (or not) to become legitimate agents in the research and practice of earth system governance. It also requires close consideration of the means and procedures that enable different knowers to be part of recognised epistemic systems, legal frameworks, and institutions. Consequently, adopting an epistemic approach within these arenas can enrich subsequent deliberations and importantly, ground democratic legitimacy in the outcomes from these processes (Catala, 2015, Dieleman, 2015).

5. Conclusion: Pluralising planetary justice

An emphasis on distributional justice seems especially fitting as the “justice turn” is conceived as a response to the rise of wealth inequalities produced by the internationalisation of neoliberal economic policies since the 1970s. Given the increasing public and academic concern about global socio-economic inequalities, it is easy to forget that not only environmental inequalities manifest in more than distributional terms but also that a notion

of justice focused on (re)distribution is a comparatively recent phenomenon. Although (re)distributional approaches are essential to just sustainability transitions, the overemphasis on distribution overlooks other critical dimensions. We argue that procedural, epistemic, and recognition-based justice are indispensable guiding principles—and empirical standpoints—in developing long-term, pluriversal, and multiscale human-earth governance systems that effectively build upon long-standing notions of justice across academic, policy, ecological, socio-cultural, and epistemic boundaries.

Planetary justice demands a series of epistemic shifts in the way we research and practice the governance of environmental inequalities. These shifts require close attention to the historical links and gaps between justice movements and scholarship beyond the industrialised north. This involves integrating a broader set of tools, methods, and theoretical frameworks from disciplines that complement those developed by political sciences, international relations, economics, and governance studies. In particular, decolonising research and governance requires close attention to processes of epistemic colonialism and building specific mechanisms to integrate multispecies, intersectional, intergenerational, and non-western notions of justice in legal and institutional frameworks. Recentering procedure and recognition in planetary justice thus also demands rethinking the processes and mechanisms that legitimize less represented research agendas and notions of justice in the global environmental field.

So far by primarily focusing on distributive justice, planetary justice is depriving current debates of crucial dimensions of what justice has meant for different communities, organizations, and institutions. In other words, without appealing to procedural, recognition, and epistemic concerns, planetary justice is not capable of meaningfully engaging with these agents and trajectories or outlining the normative ends to which it aims to advance earth systems governance.

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