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Planetary justice: a systematic analysis of an emerging discourse

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ABSTRACT

Justice concerns have been central to contemporary social and ecological debates for decades but have only recently made inroads into the Earth system centric discourses on the Anthropocene and planetary boundaries. Our focus here is the emerging discourse on planetary justice which has aimed to be a corrective to this lacuna. Our goals in this paper are to delineate the general parameters and novel contributions of planetary justice while also recognizing the emergent variability within this discourse. In order to accomplish these goals we analyze the discourse through three interrelated analytical themes: First, how approaches to planetary justice envision *scope* across different human practices and categories of humanity and nature. Second, how they envision *scale* across space and time. Third, how they envision the *ecosocial purpose* of planetary justice.

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KEYWORDS Anthropocene; earth system governance; planetary justice; scope; scale; ecosocial purpose

1. Introduction

Justice concerns have been central to contemporary social and ecological debates for decades (e.g. Freyfogle 1993, Low and Gleeson 1998). But only recently have such concerns made inroads into the Earth system centric discourses on the Anthropocene and ‘planetary boundaries’ (Rockström *et al.* 2021, 2024, Ensor and Hoddy 2021). Our main aim here is to identify core characteristics of the emerging discourse on planetary justice. We argue that the expanded scope, scale, and ecosocial purpose of justice that planetary justice entails makes it a useful addition to contemporary debates – but we also identify tensions.

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Given the essentially contested nature of any conception of justice, we do not try to provide a single authoritative definition of planetary justice (on essentially contested concepts see Collier *et al.* 2006, Connelly 2007). Rather, our aim is to broadly delineate this novel discourse so that what makes it distinctive and provides it added value becomes clearer while, concurrently, allowing us to differentiate among its various operationalizations. In this endeavour, we draw on the efforts by an emerging community of scholars that share similar aspirations (e.g. Dryzek and Pickering 2019, Biermann and Kalfagianni 2020, Hickey and Robeyns 2020) and the broader humanities and social science literature increasingly addressing value contestations in the context of profound transformations of the Earth system (Lane 2016, Chakrabarty 2021). We have consulted literature that (a) emphasizes social and ecological justice concerns which we consider broadly applicable to a global governance context, (b) could help us distinguish a planetary discourse on justice from other justice discourses, and (c) allow us to differentiate among different approaches to planetary justice.

To achieve our aim, we employ three main analytical themes that appear prominently in debates about justice and planetary politics in general (see Burke *et al.* 2016, Biermann and Kalfagianni 2020, Stevis and Felli 2020). These are the themes of scope, scale (as used by Chandler 1994), and ecosocial purpose. The first theme interrogates the *scope* of justice, or else who or what is considered as a subject of moral concern, including the relations between the various subjects. Liberal views of justice focus on individuals (Rawls 1971), while communitarians take state-bound societies as their main unit, which Rawls himself later did with his conception of ‘the law of peoples’ (Rawls 1999). The rise of Earth systemic problems that involve all of human civilization now challenges the social foundations of liberal and communitarian theories of justice as does the ‘multispecies justice’ argument that humans should not be considered the sole subjects or agents in Earth system governance (Celermajer *et al.* 2020, Tschakert *et al.* 2020, Luisetti 2023), and the historical relations approach of those espousing the Capitalocene (Malm and Warlenius 2019, Moore 2019). In an important way, then, the planetary justice discourse harks back to the ecojustice discourse of the early 1970s that fused society and nature within a religiously inspired view of the ‘creation’ (Hessel 2007).

The second theme addresses the implications of planetary justice in terms of spatial and temporal *scales*. Although planetary justice implies a scale that is well beyond the international and the global, it is not clear if a planetary scale replaces the multiscalearity also present in the approaches mentioned (Crumley 2006, Estes *et al.* 2018). Yet, while the concept of the Anthropocene, for instance, leads to thinking about scales in a more analytical systems approach (Rockström *et al.* 2009, Galaz 2019), the Capitalocene

approach centers global divisions of labour and power relations in the generation of and relations between scales (Stevis and Assetto 2000, Malm and Warlenius 2019, Moore 2019, Hornborg *et al.* 2019).

The third theme is that of *ecosocial purpose*, i.e. the social/political and ecological priorities of a particular policy or world view under planetary conditions (e.g.; Hopwood *et al.* 2005, Stevis and Felli 2020). One debate here is whether planetary justice comes in one or many varieties, aligned with different political ideologies, and the implications either option has for changing power relations. A second discussion is about the social forces that could move us towards planetary justice.

The intersections of scope, scale, and purpose vary and require our attention. For example, one can support a planetary scale but limit its scope to humans or expand it to include humanity and nature. Or one can adopt a planetary scale whose scope includes both humanity and nature but may or may not challenge power relations. In the next sections, we explore each of these themes with that warning in mind.

2. Key themes around planetary justice: scope, scale, and purpose

2.1. Scope: humanity: differentiated or undifferentiated?

The idea that we have entered a new geological epoch is compelling, whether we call it the Anthropocene, Capitalocene (e.g. Malm 2015, Moore 2015, Davies 2016) or Homogenocene (Mann 2011). In general, these planetary approaches converge around the idea that certain anthropogenic geophysical processes have transformed the ontology of our planet. However, not everyone has been equally responsible, and not everyone is going to face the same consequences.

A central issue of injustice, exemplified by the Anthropocene-Capitalocene debate, is the scope of responsibility and obligation behind unfolding planetary dynamics. Some analysts, going back to the post WWII era (see Stevis 2010 for a historical overview) adopt an undifferentiated ontological stance whereby all humanity is responsible for breaching geophysical or social boundaries (Rockström *et al.* 2009, Steffen *et al.* 2015). Others argue that categories of people are differentially responsible and obligated but may disagree which people and how (Tsing 2015, Malm and Warlenius 2019, Moore 2019). In broad terms, some analysts adopt an individual attributes approach whereby people and countries with different attributes have differential impacts (Wiedmann *et al.* 2020). Others, like ecologists, planetary boundaries, and Anthropocene analysts, adopt a systems approach that seeks to understand the complex ways in which parts and wholes intersect and fit (Rockström *et al.* 2009, Estes *et al.* 2018,

Meadows 2008). While the whole may, in some views, be more than the sum of its parts, this is the result of the interactions of the parts. Still, others adopt a historical structural or systemic approach that argues that the behavior and interactions of parts cannot be understood independent of the relations within which these parts emerge (see Ollman 1976, 2015, Crumley 2006, Jackson and Nexon 1998, Stevis and Assetto 2000, Wright 2016 and throughout his long career). A key debate here is whether there is a way to make boundaries more socially egalitarian (e.g. Raworth 2017), or whether planetary boundaries are another way to impose austerity from above in their Earth system justice approach aims to identify ‘just boundaries’ within the planetary boundaries framework. In contrast, Biermann and Kim (2020) are sceptical of any science-driven efforts (including from the social sciences) aiming to set (just) boundaries for the planet.

Another key issue is the scope of the planetary processes that we should track as subjects of justice. The planetary boundaries/doughnut economics approach (Donought Economics Action Lab 2024) identifies a number of indicators that measure the consequences of human activity in various natural realms. The argument here is that they are more amenable to scientific measurement and monitoring and that in any event they are important enough to track if we are to survive. However, one can argue that we also need to measure and monitor those social practices that endanger these realms. Nuclear and other strategic weapons are not problematic only when they are used. They also involve persistent and global political contestations over their production and location. Tracking the intensifying nuclear arms race, for instance, before it affects one or more of the boundaries (see Sagan 1983/84, Hornborg 2019), seems prudent and necessary. Social inequality and injustice diminish the majority of the world’s population even before limits are reached (Chancel 2021). Should every indicator measuring ecological boundaries be accompanied by one that measures and tracks the social dynamics that threaten these boundaries (Brand *et al.* 2021)? What are the research and policy implications of measuring the aggregate consequences without measuring the socially variable causes? If we start with the idea that every social practice is also environmental and every environmental practice is also social, as political ecologists have long argued (Bunker 1984, Cronon 1995, Low and Gleeson 1998, Robbins 2019, Martinez-Alier 2023, Marks 2024) we need a more diverse and inclusive set of socio-ecological indicators that track the socially uneven causes of our predicament.

2.2. *Scope: humanity and/in nature?*

The human–nature relationship is an integral part of environmental political thought. A key element of this is the understanding that humans are not the

only beings with the capacity to act, to have motivation, will, intentionality, choice, freedom, and creativity, in other words agency (Emirbayer and Mische 1998). Nonhuman agency can be applied from particular animal species (Ahuja 2012) and plant varieties to ecological wholes such as lotic ecosystems (springs, rivers) that include interactions among various organisms and abiotic (non-living) physical and chemical interactions. Below we review some distinct approaches regarding human-nature relations that raise different justice concerns of relevance to planetary justice, even though they are not all explicitly planetary in their focus.

First, sentientist theories of justice argue that all sentient beings and not only humans fall under the scope of justice. In this context, some scholars argue for an understanding of justice between humans and sentient beings that rests on sympathetic imagining (Nussbaum 2006), stewardship, care (Hay 2018), and solidarity. While these appear more ethical than justice principles, Garner (2013) argues in favour of using justice language advocating a rights-based approach in which animals have a right to not suffer at the hands of humans. Nussbaum (2023) based on her capabilities approach argues that all animals should have a shot at flourishing in their own way. In this regard, humans have a collective duty to address animal harm through a global legislative framework that acknowledges and protects animal rights. Others take the rights language a step further and argue in favor of the development of political rights for animals. These could differ according to animal relationship to humans. For example, wild animals should be granted sovereignty over their territory while domesticated animals should be granted citizenship rights (Donaldson and Kymlicka 2011).

Second, we find theories that extend their understanding of justice to non-sentient beings (biocentric) and to entire ecosystems (ecocentric). Baxter (2005), for instance, adopts a distributive justice lens for both sentient and non-sentient beings arguing that they are all part of the same community and as such are proper recipients of the distribution of environmental goods and bads. He proposes a constitutional protection for the nonhuman world and looks to the prospect of establishing an 'International Court of Ecological Justice'. Wienhues (2020) also develops a distributive theory of how to share ecospace with biodiversity and conservation demands at its heart. From an ecocentric perspective, Schlosberg (2007) adopts a multi-dimensional justice lens that goes beyond distribution to include procedural and recognitional aspects of justice, an approach that is further developed by Kortetmäki (2017). Schlosberg (2007) and later also Dryzek and Pickering (2019) argue in favor of ecological reflexivity in which humans listen to ecosystems in a cross-species communication effort.

Third, a more recent theoretical development is thinking around 'multi-species justice', an approach in which both human and nonhuman agency is

seen in relational and co-constitutive terms (Gumbert 2020, Burke 2023, Fishel 2023). For these scholars, multispecies justice is a way to avoid the dichotomies and hierarchies perpetrated by the human-nonhuman distinction (Haraway 2015, Celermajer *et al.* 2020, Tschakert 2022, Thaler 2022). This widens the scope of who is included in this conception of justice (Tschakert *et al.* 2020). Acknowledging that the term ‘species’ itself may be problematic due to its Linnaean tendency to collapse individuals into classes (e.g. see Van Dooren *et al.* 2016), these scholars argue that the term multispecies points beyond the human as a ‘type’ individuals need to belong to in order to be recognised as subjects of justice (Celermajer *et al.* 2020). Yet, even in this case important questions remain. One set of questions concerns our limits to fully understand and know what is good for other species (Soper 2018), and the appropriateness of a discourse of justice for capturing humans’ ethical relationships to other species (Hay 2018). A second set of questions concerns issues of representation and communication. Given the primacy of human language in making claims about justice, other species are automatically excluded unless represented by a human voice (Stevis 2000). In this case, the challenge according to scholars is to avoid a twin-peril: either not apprehending other species as subjects of justice and thus excluding them or apprehending them, but only to bring them under political or epistemological domination (Celermajer *et al.* 2020). A third set of questions concerns the applicability of institutions developed for intra-human justice for addressing multispecies justice (Celermajer *et al.* 2020).

Lastly, there are those who remind us that both human and nonhuman, as interrelated subjects of justice, are narrated within a particular historical, political and power context (Stevis 2000). In this regard, scholars warn of the predominance of Western and colonial understandings of human relationship with other species that undermine the magnitude of violence both nonhuman species and indigenous peoples have been experiencing (Mitchell 2020).

2.3. Spatial scales: within or before social divisions of labour?

The planetary assumes that there are enough and consequential processes that require us to also think at a planetary scale. A single planetary scale is probably impossible and perhaps undesirable. In general terms, proponents of planetary politics and justice – like those of cosmopolitan justice (Held and Patomäki 2006) – are likely to propose different paths (Cabrera 2018). In any case, a planetary scale is likely to coexist with local, national, international, and global scales for the foreseeable historical time. Thus, this raises the question of how planetary justice envisions multiscalearity.

As social geographers, historians and others have pointed out, not necessarily using planetary framing, human actions reconfigure space

and invest in what seem like similar or permanent institutional arrangements with particular meanings and dynamics (Bridge *et al.* 2013, Cronon 1991, Holifield *et al.* 2009, Honborg and Crumley 2006). Seen in terms of a few centuries, geographic boundaries – and their content – have changed dramatically, ranging from empires to national states. From one angle, the last several decades have been characterized by a world made of countries with similar legal standing. But once we look at the legal and political contents of these units (and their boundaries) it becomes apparent that we are not dealing with the same entities. The boundaries of particular countries, such as legal institutions, vary in terms of who and what can enter and leave, who has rights and where (Sassen 2005, Mezzadra and Neilson 2012). In short, assuming that a single planetary scale is politically unfeasible and, most likely, undesirable, the politics of multiscale in planetary justice and politics, more broadly, is central. How can we differentiate between different approaches to planetary multiscale? Here we can employ again the difference between relational and interactionist ontologies (see Jackson and Nexon 1998, Ollman 2015, Wright 2016, Caglar and Schiller 2021).

The advocates of historical relational approaches argue that global divisions of labour are the product of our common history over the last several centuries and, in some cases, millennia (Dicken 2015, Hornborg and Crumley 2006, Marks 2024, Moore 2015). In their view, the different scales in world politics are historically and mutually constituted rather than the product of ontologically independent actors – whether localities, countries, corporations or civil society. The interactions between actors are very much influenced by their mutually constituted positionality.

From an interactionist perspective, scales are the product of ontologically independent actors, largely unequal, that interact across and within boundaries. From a systems perspective, as is the case with the socioecological systems approach underlying planetary boundaries, parts are the components of wholes (for an illuminating debate see Montoya *et al.* 2018a, 2018b, Rockström *et al.* 2018, also, Martiskainen *et al.* 2021). While the long-term aspiration of some planetary justice views may be the creation of a single planetary scale, in theoretical and practical terms all planetary justice analysts have to take a position with respect to present and future multiscale.

Here, the work of scholars on the partialities and geographies of environmental justice is particularly useful. Pellow (2018), for instance, introduces a multi-scale justice approach that suggests that environmental injustice, and struggles against it, can simultaneously function at many spatial and temporal scales including the future. Likewise, Sikor and Newell (2014) emphasize the interrelationship between ‘local’ and ‘global’, such as local issues and struggles are affected by larger-scale processes and

international institutions but simultaneously influence the latter, thus becoming trans-local.

2.4. *Temporal scales: futures and/in pasts*

The importance of time has always been essential for those working in the field of ‘green politics’ and the wider sustainability sciences (Adam 1998, Galaz 2019). In this context, the notion of intergenerational justice explicitly refers to taking into account not only the present but also the future and generations yet unborn in any account of justice (see for example, Dobson 2000, 2007, Lawrence 2020). However, there is a debate about the principles of intergenerational justice and whether these can and should resemble those of intragenerational justice (see Barry 1999). Caney (2018) argues in this regard that, while Rawls rejects that similar obligations apply across generations as between contemporaries because of a lack of reciprocity in the former case, there are at least three approaches one can rely upon to develop intergenerational justice principles. The first one relies on sufficiency and has been an integral element of the concept of sustainable development itself, with the Brundtland Report (1987, p. 43) defining sustainable development as: ‘development that meets the *needs* of the present generations without compromising the ability of future generations to meet their own *needs*’ (emphasis added). The second one relies on relational concerns because earlier generations can impose harm in an asymmetric and arbitrary way on vulnerable others in the future (Nixon 2011, Taiwo 2022). And the third one relies on notions of luck egalitarianism in that it is bad – unjust and unfair – for some to be worse off than others through no fault of their own (Temkin 1993, p. 13).

The future is not the only parameter of time one needs to consider for planetary justice. The past matters too. In this context, research on humanity’s socioecological history is revealing. Hornborg *et al.* (2019), for instance, reminds us how the turn to fossil energy in the 19th century and the success of the Industrial Revolution were an integral part of British colonialism and the related asymmetric exchange relations and environmental displacements it entailed globally. Likewise, the industrial intensification of cotton production was linked to the slave trade and American cotton plantations (Inikori 2002, Beckert 2014). Other explorers of human history point out how the intersection of human and natural forces solidified inequality, especially between industrialised and non-industrialised countries creating the modern world (Marks 2024). Going further back, the entire debate about the Anthropocene and its origins – whether it is in the Pleistocene extinctions of megafauna some 50,000 years ago, on the domestication of animals around 10,000 BC, the depopulation of the Americas after 1492, the

invention of the steam engine in 1784 or the first nuclear detonation in 1945 (Hornborg 2019, see also Angus 2016, Bonneuil and Fressoz 2015, Davies 2016, Hamilton 2017, Lewis and Maslin 2015, Graeber and Wengrow 2021) – forces us to think how human activities have transformed the planet and with what implications for life on Earth.

Beyond these notions of time that are bounded to some extent to human history and experience, scholars speak of geological timescales to take into account nature's biorhythm rather than that of humans, as a necessary acknowledgment that humans do not exist independently of the Earth's life support systems (Christian 2005, Zalasiewicz *et al.* 2019). Deep time is considered crucial for the development of a planetary ethic, as this precedes human political (e.g. the nation-state) and socio-economic (e.g. capitalism) constructs that shape the way we understand relationships both among humans and between humans and nonhumans (Ahuja 2012, Hanusch 2023). Likewise, scholars advocate a non-progressive linear account of time that opens up different possibilities for understanding human – environment relationships across continuities and discontinuities, foldings, ruptures, memories, and disappearances (DeSilvey 2012, Houston 2013).

2.5. Ecosocial purpose: political ideologies and power relations

This section asks whether there are particular ideologies and power relations that are more or less aligned with planetary justice. A first key debate here is whether planetary justice implies the subsumption of justice ideologies under a universal understanding of justice among humans and humans' relations to other living beings and the planet as a whole. Some scholars contend that today's dominant institutionalist and liberal approaches have not addressed global environmental problems in a just manner (Dauvergne and Clapp 2023). Others argue that previously under-appreciated movements centered around a critique of capitalism and market-based solutions, that advocate community agency, local empowerment for global action and justice-centered governance of ecosystems could offer ways forward (Bresnihan and Miller 2023). In general, new ideologies employing a planetary ethos can emerge only by replacing or modifying existing ideologies, a contested process that will require a long period of time, if successful (Latour and Schultz 2022, Tweedale 2023). Even so, it is unlikely that planetary justice will have a single expression, thus ending the debate about what justice means in a planetary era. While major ethical theories may be replaced by others, the contentious nature of justice means that there will always be a need to conceptually clarify the different tenets and contestations around justice, including planetary (Biermann and Kalfagianni 2020).

For example, currently, people all over the world engage in multiple ideational and material power struggles for a better life within this

planet. Justice is closely interwoven with power as most injustices arise from unequal power relations within the dominant social, political, and economic structures. At the global level, justice movements have focused primarily on material equity, especially the international redistribution of funds from the Global North to the Global South and the domestic redistribution of funds from the most affluent rich to the disadvantaged poor (Fanning and Hickel 2023). Ideationally, this has been accompanied by a rights discourse that could empower the disadvantaged, since their condition would not improve unless they were also legally given voice and choice at the same time that the voice and choice of the more powerful was commensurably reduced. Both current debates about environmental justice and climate justice have strong roots in this global justice discourse in addition to their debt to local power struggles (Shue 2014, Coolsaet 2021). This is mainly a socially centered discourse which sees environmental degradation and global warming as disproportionately harming the socially and economically disadvantaged within the Global North and broadly Global South countries as a whole.

And yet, while planetary justice may not imply the end of history, it is informed by major existential ecological challenges, in addition to those emanating from strategic weapons. This means confronting theoretically and practically not just the dominant economic paradigm of neoliberalism (Slobodian 2018) and the ‘reactionary populism’ behind Donald Trump and Brexit (Fraser 2017) but also the fundamental shortcomings of ‘gridlocked’ international institutions (Hale *et al.* 2013). Presently, the situation is that ‘just at the time when the spectre of climate change stages the need for a large-scale POLITICS of the planet itself, global publics continue to find themselves confronted with the sheer impotence of actually existing national-international politics’ (Beck 2016, p. 37, emphasis in original). The inadequacy of international organizations and institutions needs to be addressed. If planetary justice requires a post-international planetary order, then are we to totally reject existing institutions or are there ‘best practices’ that should be grafted onto the new order?

To begin answering this question, we first need to ‘identify the distinctive character of the rules governing (the current system), and the justificatory principles which underpin them’ (Beetham 2013, p. 36). And then we can begin to talk about ‘planetary justificatory principles,’ which will arguably reform and replace prior ones (Pedersen *et al.* 2022). Which old justificatory principles can be reformed and which should be abandoned? One debate is whether the present order is founded on *national/international* instead of *planetary* justificatory principles. In this context, some argue that planetary justificatory principles indicate a future break from the current order (e.g. Pedersen 2021) while the more commonly shared assumption is that ‘a new

planetary politics’ can change the qualitative functioning of today’s state-system rather than transcend it (Patrick 2021).

That we are presently discussing planetary justice might be a sign that a wider turn away from national normativity is ongoing. The climate movement is strangely silent on what seeing our planet as an Earth system means for the nation-centric politics of the present (e.g. Thunberg *et al.* 2022). Some scholars question whether nation-states and nationalism are compatible with e.g. ‘interspecies cosmopolitanism’ (Mendieta 2019, Burke 2023). Some argue that a decisive turn to ‘national-internationalism’ (Beck 2016) over nationalism alone should facilitate solutions to the problems that have spurred on a desire for planetary justice to begin with (e.g. Lieven 2020). But are the national justificatory principles at the base of national-internationalism – that ultimately serve to maintain the hold nationalism has over the collective imagination – in the final analysis compatible with a fuller turn to planetary justificatory principles?

In this context, a second key debate emerges. Will planetary justificatory principles eliminate power relations of domination and control among political communities, people, and living beings mentioned earlier? Or could they grant power and authority to ‘enlightened’ elites with access to the latest Earth system science, tasked with saving life as we know it? We further reflect on these questions more in the next section. However, one thing is clear. The struggles that used to be on the margins are now essential to the survival of all (Latour and Schultz 2022). And thus, power relations need to fundamentally change if just planetary politics are to take root. Whether these will be institutionalized in the form of e.g. an international federation, a planet state, or be the ethos of a planetary non-state society, new ways of living and being in a just planetary community needs to be imagined.

Achille Mbembe’s thought is exemplary here: ‘the question today is how we are to imagine other ways of inhabiting the Earth, sharing it, repairing it, and taking care of it’ (2022: 124). We agree with him that a foundational aspect of imagining a just community will necessarily be a repudiation of racism in all its forms – since this ‘ultimate neurosis of separation’ remains anathema to the new ‘we that would include human beings as well as objects, viruses, plants, animals, oceans, machines – all the forces and energies with which we must now learn to live in *bio-symbiosis*’ (Mbembe 2022, p. 125), i.e. in just planetary relations.

2.6. Ecosocial purpose: political action and institutions for planetary justice

For planetary justice to be realized, there must be political forces and corresponding visions – which bring on a new depth in terms of their purpose and the priorities they will likely be pursuing. Latour and Schultz

(2022) argue that a new ‘ecological class’ must emerge if the ecological movement is to gain any ideological consistency and autonomy. Whether such a class exists, we have yet to see it unite under a strategically coherent political umbrella that can compete against both nationalist and neoliberal agendas. Bruno Latour points out that ‘having failed to figure out how to join forces effectively, socialism and ecology, each of which sought to alter the course of history, have only managed to slow it down’ (Latour 2018, pp. 56–57). Within the systems of parliamentary democracy, it remains a possibility that an eco-socialist left might win power on a program aiming to spearhead ‘a counter-hegemonic project for eco-societal transformation that could, at least in principle, save the planet’ (Fraser 2021). The challenge here is that such an unabashedly ‘anti-capitalist’ program means taking on the formidable green capitalist wave (Fraser 2021, pp. 126–127). For others, however, a less ambitious project that merely designates ‘the fossil fuel companies, right-wing plutocrats, and oil-funded governments’ as ‘the enemy’ (Mann 2021, p. 3) may be sufficient. Such a move, for example, would place green industrial policies in the ‘friend’ camp, thus allowing for reforms, often marginal and contradictory, but not fundamental transformation.

Related to the above, Latour also makes the argument that what are today truly ‘progressive forces’ – instead of the neoliberal centre-left – are those that ‘turn their attention to [] the Earth’ (2017, p. 86). There might be room for a planetary cosmopolitanism that is universalist, green, humane and socially liberal, allowing for the reform of capitalism along eco-friendly lines rather than for its complete dismantling. It could perhaps be possible to re-center a counter-movement around care for the Earth, while not prioritizing justice in inter-human relations to the extent that socialism has traditionally done. A left that is willing to regulate rather than eliminate capitalism would retain the possibility of alliances with greener capital that could separate the worst fossil fuel defenders from the herd.

In another scenario, ecosocialists and planetary cosmopolitans could emerge properly on the political scene over the coming years and together sideline the neoliberals and the nationalists for good. Here, eco-socialists, planetary cosmopolitans and post-neoliberal greens might take up distinct positions in a new ideological constellation where planetary justice is defined differently through their respective ideological lenses. The eco-socialists might then define planetary justice in terms of redistribution towards sustainable equity while planetary cosmopolitans could define it in terms of universal rights for individuals and equally universal obligations towards humanity’s shared habitat in the biosphere. The greens could define it in terms of making peace with the Earth (–system) so life can regenerate.

We finally turn our attention to the role of science as a potentially new social force emerging in the current political reality of planetary concerns. Increasingly, social scientists are at the forefront of movements asking for

international treaties to keep fossil fuels in the ground (Van Asselt and Newell 2022) or an international non-use agreement on solar geoengineering (Biermann *et al.* 2022). Beyond such calls for non-action, Earth system scientists (e.g. Rockström *et al.* 2024), are calling for global agreements based on science that will determine the planetary boundaries for climate, land, water, and so on, to constrain local action by globally defined sustainability criteria. In this context, scientific bodies such as the Earth Commission or the Intergovernmental Panel on Climate Change (IPCC) could, as already alluded to above, become a powerful political agent by interpreting the ‘will of the planet’ (Latour and Schultz 2022) within global governance arrangements.

The idea that a wise epistemic community independent from nationalist sentiments and economic interests can rationally govern the planet has been criticised for its flawed assumption that science can be uncontaminated by politics and disagreement, and that the public will remain ignorant and self-interested (see Eckersley 2017). Yet, instead of separating science and politics, scholars propose that debates about the Anthropocene and planetary justice need to proliferate in the public domain rather than remain confined to academic debates (Eckersley 2017). Knowledge about Earth system processes and the value judgements entailed in how to co-exist with each other and with other living beings, needs to become both popularised and pluralistic if the public is to trust science and be able to make informed decisions within democratic processes (see also Mert 2020).

3. Conclusion

This paper aimed to delineate the general parameters and novel contributions of planetary justice while also recognizing the emergent variability within this discourse through the themes of scope, scale, and ecosocial purpose.

We note that planetary justice expands the scope of justice to the nonhuman, including sentient and non-sentient beings, as well as Earth's ecosystems and the entire Earth system. However, there are different demands of justice raised depending on the perspective one takes on the human-nature (or more-than-human) relationship. Regarding scale, we note that spatial dynamics are being rethought from a planetary worldview that is different from the national/international or even global perspectives that dominate political thinking around justice for the ‘globe’. When it comes to the temporal dimension of scale, we observe the development of an expanded consciousness of time capturing geological time and also cultivating a sense of slow time that can enable planetary sensitivities. Regarding ecosocial purpose, we underline that for a form of planetary normativity to develop we must identify the social forces that can enable or prevent its unfolding,

which may vary across scale and scope. For example, translocal networks of activism, ecosocialism, and planetary cosmopolitanism may all support planetary justice albeit in different forms.

We hope that themes of scope, scale, and purpose and their interplay will allow social scientists to better understand the emerging discourse on planetary justice and the sincere disagreements regarding how human, nonhuman, and political relations can be reconfigured and reimaged. How we understand the past and what we aspire for the future will depend a lot on how we, humans, view our relationship with the planet and with each other. We anticipate that this article and the special issue it is part of, can lead to a common language, if not yet to a common approach to planetary justice that will be developed not from a position of privilege but from a position of humbleness, sympathy, and care.

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