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Power and politics across species boundaries: towards Multispecies Justice in Riverine Hydrosocial Territories

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ABSTRACT
Rivers have attracted increasing attention as politically contested entities. Existing literature on hydrosocial territories sheds light on how power relations and cultural-political hierarchies permeate rivers and their processes of territorialization, management, and governance. Yet, so far, the *multispecies* dimension of and in these processes remains under-addressed. This article helps fill in this gap by weaving together two central concepts: hydrosocial territories and multispecies justice. In this theoretical exploration we engage with rivers as living entities *and* territories co-created, co-inhabited, and actively reshaped by a diversity of human and other-than-human beings. We argue that acknowledging the latter's agency, as well as the multiple ways in which power and politics constantly cross species boundaries in riverine territories, calls for a dialogue with the notion of multispecies justice (MSJ). We pose that MSJ can support, strengthen, and challenge movements, practices, and modes of relationship around the defence, conservation, and restoration of rivers.

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1. Introduction

Alongside lakes and wetlands, rivers cover less than 1% of the Earth's surface but host approximately 10% of all species, illustrating the fact that they are amongst the most biodiverse ecosystems on the planet (Tickner *et al.* 2020). Carrying freshwater across vast distances and diverse landscapes, they are essential not only for the livelihoods of human populations around the world but also for the lives and habitats of countless other species and beings. Nevertheless, many of the world's rivers are threatened by industrial

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activities and extractivist infrastructures, ranging from dams and mega-dams to mining, pollution, diversion, and depletion. This manipulation and degradation of rivers is responsible for a decrease of more than 80% of global populations of freshwater species since the 1970s (ibid.). It also reveals the technocratic, anthropocentric, and mostly neoliberal character of the prevailing norms within water management and governance regimes (Vos and Boelens 2018, Whaley 2022).

Hydrocracies (hydraulic bureaucracies), functionalized by market-driven regimes, tend to engage in river management and governance from the top down and with utilitarian engineering perspectives (Molle *et al*., 2009; Menga and Swyngedouw 2018; Owens *et al*., 2022). They operate within a framework of western, industrialized modernity that seeks to conquer and govern socionatures through (amongst others) infrastructures (Hommes *et al*. 2022). The powerful 'expert' ontologies and epistemologies that determine these interventions are usually embedded in capitalist, extractivist imaginaries that disregard alternative river knowledges and relations, as well as non-human beings and their needs (Boelens *et al*. 2023).

Ongoing processes of industrializing and degrading rivers are being met with various forms of societal response and resistance. New networks and movements for river defence, conservation, and restoration on local, national, and international levels have been emerging throughout the last couple of decades (Hoogesteger *et al*., 2023). These place-based, culturally specific, and yet also trans-locally allied initiatives have been conceptualized as 'new water justice movements' (NWJMS) (Boelens *et al*. 2023). NWJMS challenge existing power relations, river management strategies, institutions, and policies at different scales.

Based on this recognition, in this article we depart from a political ecology perspective that is especially attentive to how power and politics affect human *and* other-than-human lives and actors. Specifically, we engage with rivers as multispecies contact zones that are permeated by profoundly asymmetrical power relations and structured by histories, knowledge systems, and political economies that position other-than-human beings as subordinate to humans (Collard 2015). We answer the following question: how can theories and practices of multispecies justice (MSJ) challenge and enrich the struggles of new water justice movements (NWJMS) in contested riverine hydrosocial territories?

The article is based on literature review, activist engagement in national and international river defence networks, river walks and riverside meetings,[1] and political-conceptual debates with academic and grassroots collectives, in five continents, from January 2021 to December 2023. It prompts an important, new conversation between the notions of hydrosocial territories and MSJ. The following sections focus on each of these concepts, weaving them together to tell *not-only-human stories* of (in)

justice in river worlds and river lives (Van Dooren *et al.* 2016). We demonstrate that a broader, more inclusive and plural, less anthropocentric perspective on issues of (in)justice in rivers – namely through engagement with the notion of MSJ – can challenge, strengthen, and support the practices and modes of relationship that contribute to the defence, conservation, and restoration of socio-ecologically sustainable, biodiverse rivers. The final section thus reflects on what MSJ can bring into NWJMS working with rivers.

2. Riverine hydrosocial territories: agency, power, and politics beyond the human

2.1. Rivers as contested hydrosocial territories

In this section we introduce the concept of *hydrosocial territories* because it allows us to look at rivers as sites of ongoing contestation, transformation, and political (re)imagination. This concept invites us to understand rivers as spaces (and/or as living entities) that are socially, culturally, and politically constituted through interactions among multiple actors (e.g. Hommes *et al.* 2022, Drapier *et al.* 2023).

Boelens *et al.* (2016, p. 2) offer a conceptual framework for analysing hydrosocial territories as contested imaginaries and socio-environmental materializations of spatially bound multi-scalar networks that are interactively defined and mobilized through epistemological belief systems, naturalizing discourses, and political hierarchies. Hydrosocial territories are thus the outcomes of interactions between diverse actors, in which the latter's imaginaries, knowledge systems, and social practices create the boundaries, contents, and connections between nature and society (ibid.). Discourses around hydrosocial territoriality thereby combine power and knowledge (Foucault 1980) to create a specific political order as if it were natural, establishing fixed links and apparently logical relations between a specific group of actors, objects, and concepts that define both the nature of problems and the solutions to overcome them (Boelens *et al.* 2016).

To illustrate: rivers around the world are fragmented by dams and weirs that were built for the (human) purposes of navigation, water supply, flood control, or hydropower development (Benitez *et al.* 2022). In the Netherlands, for instance, specific actor communities (e.g. hydraulic engineers, Water Boards) are defined as the experts who can identify pressing issues (e.g. flood risks) and priorities (e.g. more navigable rivers for more efficient trade routes). According to these experts' views, such problems and priorities have been answered by building said infrastructure.

Over time, canalizing and damming rivers such as the Maas or the Rhine became the natural order of things that defines nature-society

relations in a certain way, overlooking alternative modes of engagement with rivers. Moreover, these hydraulic engineering norms and practices that arose in countries like the Netherlands have been extremely mobile, being transferred to other geographical, political, and cultural contexts (e.g. Latin America) and becoming a 'new' natural order of things there too.

What may be viewed as normal or inevitable according to underlying norms of economic development, human security, or technocracy (Zwarteveen and Boelens 2014) may also constitute an imposition of power and political hierarchy upon other actors – including the more-than-human world. The fragmentation of rivers by dams leads to the alteration of upstream and downstream habitats, breaks river connectivity, alters a river's natural flow, interrupts the migration routes of different species, etc (Benitez *et al.* 2022). In most cases, then, removal of barriers might well be 'the preferred solution through the eyes of a fish' (Brevé *et al.* 2014, p. 207). But conservation and restoration in large lowland rivers tendentially happens within the framework of the socio-economic services that these rivers support (e.g. navigation, flood protection, agriculture, freshwater supply) (Stoffers *et al.* 2021). Consequently, other-than-human beings' interests and needs usually come second – or are simply disregarded – in mainstream river management.

Yet, these dominant narratives have been more recently counterposed by groups of social actors (e.g. environmental organizations) who seek to advance other norms and forms of cultural politics, namely through rewilding, 'nature development', etc. A case in point involves the Dutch river Maas, where the Grensmaas project (hailed as the largest river restoration project in Europe) seeks to 'undo 500 years of world-renowned Dutch water engineering' by expanding and rewilding the river's floodplains (The Guardian 2022). Environmental organizations are advancing a picture of the river as less controlled by infrastructure and (re)populated by a growing diversity of animal and plant species (De Jong *et al.* 2024).

Hydrosocial territoriality can therefore be understood as 'a battle of divergent (dominant and non-dominant) discourses and narratives' that has 'consolidating a particular order of things as its central stake' (Boelens *et al.* 2016, p. 7). Either imagined, planned, or already materialized, hydrosocial territories have contested meanings, values, and functions, as they determine processes of inclusion and exclusion, development and marginalization, and distribution of benefits and burdens that affect a variety of living beings (ibid.). Whereas most literature has so far focused on processes of territorialization, political struggles, and water (in)justices within human societies and between human actors, it can be directly applied to multispecies communities.

2.2. Non-human agency in riverine hydrosocial territories

The agency of other-than-human beings in the co-creation and transformation of river systems has been receiving increasing attention in river sciences and research. For example, Druschke *et al.* (2017) critically explore the agency of fish in dam removal decisions. Through an analysis of Rhode-Island's Wood-Pawcatuck watershed in the USA, they call for an acknowledgment of the distributed agency underpinning dam removal decisions that makes these much more than strictly technocratic processes (ibid.).

Druschke *et al.* look at the ways in which migratory species such as river herring and resident species such as brook, rainbow, and brown trout have been influencing human decisions concerning several dams along the watershed; and they insist that both managers and theorists should pay attention to how fish actors might defy scientific predictions and technocratic expectations (ibid.). By arguing that 'fish are central actors in dam-removal practice, tying river systems and multiple species back together through connectivity and creating newly constructed realities of river health and human-fish relations', these authors provide a clear example of how other-than-human beings are contributing to the transformation of hydrosocial territories (ibid.: 726). They suggest decentring human agency in fish passage projects to look at human-nonhuman relations from a different perspective, namely one that invites restoration managers to co-create dam removal projects in collaboration with fish themselves (ibid.).

In line with this view, Goedeke and Rikoon (2008) argue that animals, plants, soil, water, and others must be included in restoration narratives and projects, given that how these projects turn out requires the compliance of human *and* other-than-human beings to scientific predictions, and they are all involved in social conflicts. Goedeke and Rikoon's argument is based on their analysis of how other-than-human beings, especially otters, contribute to establishing, challenging, or stabilizing networks in a river restoration project in Missouri, USA.

People, fish, and river otters have historically co-inhabited the streams and woods of Missouri with differing levels of success (ibid.). River otters were almost driven to extinction by the mid-1930s due to habitat reduction and hunting. Otter trapping was banned in the state in 1937, and in the early 1980s the Department of Conservation launched a project to restore otter populations. What ensued was a successive shift in discourses, actions, and policies by different groups of people (e.g. DoC, scientists and academics, animal rights organizations) in relation to otters. State and non-state approaches to otter reintroduction transformed because otters responded differently to what was expected of them on multiple occasions. They exerted their own agency in the ways they reproduced, inhabited, and spread across the state (ibid.).

Based on this example (amongst others), we recognize, together with Goedeke and Rikoon (2008), that other-than-human actors have immense potential to challenge and transform networks, recruiting human and non-human beings alike. Their analysis illustrates how non-human and human agency, at once and interrelated, is constantly deployed in the (re)shaping of riverine hydrosocial territories. This also implies that hydrosocial territories are *plural*, overlapping and interweaving in the same geographical spaces. We explore this below.

2.3. Agency, pluralism, and diversity in riverine hydrosocial territories

Territories and their constitutive elements (e.g. boundaries, relations, objectives, technologies, resources) are disputed and contested both from within and from the outside, as different subjects aim to shape territory according to their own interests (Hoogesteger *et al*. 2016). Territory and how it transforms is determined by human and other-than-human actors, interests, and power relations. Hoogesteger *et al.* (ibid.) use the term 'territorial pluralism' to highlight that diverse territories overlap, interact, and conflict in the same geographical space. This leads to the existence of 'territories-in-territory' that have partially similar constitutive elements and relations, although these are ordered in different, often opposing ways. Importantly, 'once a territory (or a particular "territory-in-territory") is constituted, it becomes an organizing element of human/nonhuman interactions, influencing both nature and society' (ibid.: 93).

We argue that different human and other-than-human actors have particular territorial projects, deliberately aiming to (re)shape a riverine territory in specific ways. A case in point is presented by Woelfle-Erskine and Cole (2015, p. 298), who describe a trip up the Columbia River, USA, where they saw how 'beaver works inevitably transgress private property lines, interrupt human irrigation and landscape schemes, and shift fence-able pastures and orchards toward dynamic patchworks of thicket, meadow, stream, bog, and woods'. In their view, the beavers they encountered physically decolonized the controlled territories of the Columbia River, tying the river system and species back together in different ways to those of human engineers and technocrats – ways through which the beavers' and other species' needs are actually better met (ibid.).

We would add that such beavers' behaviour is a form of territorial politics against their displacement. Beavers create the conditions for many species' flourishing through their daily activities (ibid.). Tree-felling and dam-building raise the level of streams and create ponds and flood dynamics that foster the habitats of multiple species. This reminds us that multiple territorialization processes co-exist in the same space. While human hands, infrastructures, and technologies aimed to create a specific order for the

Columbia River, beaver paws, teeth, and tails transformed and recreated another Columbia River, facilitating 'the emergence of whole worlds of creatures and [enabling] new kinds of relations among them' (ibid.: 308). The beavers' actions changed not only the organization of riverine space but also human understandings of beavers and actions towards them over the past century. Discourses portrayed them first as furbearers, later as habitat maintenance tools, and more recently as ecosystem engineers (ibid.).

As such, beavers (like other species) constantly disrupt anthropogenic hydrosocial territories – as well as the human imaginaries of how these territories should be ordered and sustained – through multispecies relations and materialities. That is, they co-constitute alternative multispecies hydrosocial territories. These examples, involving fish, otters, and beavers, help us to conceptualize non-human beings as active co-creators of riverine hydrosocial territories, inviting an expansion of understandings of subjecthood and agency beyond the human.

Indeed, dominant narratives of rivers have long ignored, silenced, or rendered invisible other-than-human beings as agents in socio-political and environmental processes. Yet, outside them, other ontological understandings exist that acknowledge rivers and their multispecies communities differently. In the following section, we engage with *plural river ontologies* and their relevance for discussions of subjecthood and agency beyond the human.

3. Engaging with plural river ontologies: subjecthood beyond the human

> When different groups talk about a river, are they talking about the same 'thing'? (Götz and Middleton 2020, p. 2)

Outside dominant (technocratic, anthropocentric) river ontologies, rivers are also known as persons and subjects. Krenak (2019, p. 21) describes the Rio Doce in Brazil using the following words: 'The Rio Doce, which we, the Krenak, call Watu, our grandfather, is a person, not a resource, like the economists say'. For the Māori of New Zealand, rivers are not just entities that exist for human beings to inscribe meaning onto and to transform, control, degrade, and restore; instead, they are understood as more-than-human actors with agency, power, and a life force, as well as being relatives and ancestors to particular human groups (Parsons *et al.* 2021). Such ontological understandings of rivers find resonance among non-western and indigenous cultures across the globe (Kauffman and Martin 2018).

Poelina and colleagues (RiverOflife *et al.* 2021) translate the Martuwarra Fitzroy River's voice into human words according to Aboriginal Australian imaginaries that extend the concepts of subjecthood, agency, voice, culture,

and others to rivers. According to these imaginaries, *rivers too are actors that constitute, shape, and reshape hydrosocial territories* inhabited by a multiplicity of human and non-human beings. Similarly, Laborde and Jackson (2022) examine how Aboriginal Australians ontologically situate the Martuwarra as a living being involved in myriad, reciprocal relations with different beings and materialities, including humans, animals, plants, and spirits. 'Water is conceived as an integral part of social and political life and its meanings emerge from relationships that extend across the boundaries of human and non-human' (ibid.: 8).

These plural, lively, and relational ontological understandings of rivers have historically led to specific modes of relationship with them – especially, modes of relationship that preserve, protect, or seek to restore the integrity of rivers and their multispecies communities. This shows that ontologies, narratives, and imaginaries are always necessarily *political*: they materialize in very concrete practices and are deeply embedded in (most often asymmetrical) power. That is why, in the following section, we engage with a discussion of ontological politics and how they operate within and across riverine hydrosocial territories.

4. Ontological politics and the (re)making of (multispecies) rivers

Götz and Middleton (2020, p. 2) note that 'hydrosocial thinking has been especially strong in critically scrutinizing the potential implications of "modern" Water that reduces it to its mere, material, physical dimensions, namely H2O, and rendering Water separate from society'. Far from being neutral, 'claiming water as H2O is a profound assertion of political power' (ibid.). Laborde and Jackson (2022, p. 1) argue that 'regulators and practitioners acting within modernist water institutions take for granted their own analytical categories to make sense of their water management challenges, and do not take seriously the ontological diversity of waters'. This has important practical consequences.

Of relevance here is what Tănăsescu (2022) calls the descriptive-prescriptive nexus: how we describe the world fundamentally informs how we act upon it. In line with that point, choosing to acknowledge particular river ontologies (that might include or listen to some subjects while excluding or silencing others) is necessarily and inherently a matter of justice. If particular (e.g. western/modernist, technocratic, anthropocentric, capitalist) river ontologies have been leading to rivers' degradation, then we are called to look for other (e.g. non-western/vernacular, plural, relational, multispecies) ontologies that perceive rivers as an assemblage of beings who each play unique roles that are essential for the integrity and socio-ecological sustainability of rivers; and who are entangled in networks of life, death, vulnerability, and resilience/

resistance. Essentially, we are called to 'a world of kin, grounded in a profound sense of the connectivities and relationships that hold us together, vulnerable and responsible to one another' (Van Dooren and Chrulew 2022, p. 2). Plural river ontologies can co-exist in tension and in contradiction with each other but are not mutually exclusive; in some cases, they even merge into new hybrids that mix elements from different, seemingly incompatible river ontologies (Escobar 2018).

Many alternative river ontologies have become visible in some of the NWJMS that engage in river defence across the globe (Boelens *et al.* 2023). Several of them have advocated for the recognition of specific rights and legal personhood status for rivers (Kauffman and Martin 2021). Emblematic cases include the Vilcabamba River in Ecuador (Berros 2017); the Atrato in Colombia (Macpherson *et al.* 2020); the Whanganui in New Zealand (Magallanes 2020); the Ganges and Yamuna in India (Kinkaid 2019); the Martuwarra Fitzroy and the Muteshekau-shipu Magpie in Australia and Canada, respectively (Page and Pelizzon 2022).

Broadly aligned under the Rights of Nature (RoN) umbrella, the actors involved in these river cases constitute a diverse group of people and organizations. While some of these cases set remarkable precedents for what their proponents argue to be less anthropocentric paradigms (e.g. Whanganui) or reflect the importance of connecting RoN with the upholding of indigenous territorial and cultural rights (e.g. Martuwarra), others have revealed the inherent tensions and challenges associated with RoN (e.g. Ganges and Yamuna) or the difficulties in implementing RoN on a national scale within the parameters of a global capitalist economy (e.g. Ecuador).

Although pervaded by challenges, contestation, and their own power dynamics and processes of subjectification (Immovilli *et al.* 2022), these movements also hold important potential for debating and restructuring human-nonhuman relations in riverine hydrosocial territories. Our brief look into the plurality of river ontologies and ontological politics in the previous sections shows that rivers are *always* multispecies hydrosocial territories; and that power and politics constantly cross species boundaries, requiring us to reflect on issues of (water) justice from a broader, less anthropocentric lens. To that end, in the next section we engage with the concept of multispecies justice (MSJ) and bring it into dialogue with rivers as hydrosocial territories.

5. A multispecies justice perspective on rivers

5.1. Introducing MSJ

MSJ departs from the basic acknowledgment that all living beings are born into and make their lives within multispecies communities (Van Dooren

et al. 2016). This means that human societies are always embedded within larger communities of life that entangle an innumerable diversity of beings (e.g. humans, animals, plants, ecosystems) in shared networks of living, dying, and the (re)making of worlds.

The entanglement of human and other-than-human lives in these shared worlds is, as we have already seen, profoundly influenced by power relations, asymmetries, and political hierarchies. MSJ invites us to consider a broader variety of beings (both individuals such as human animals, nonhuman animals, plants; and communities of subjects such as ecosystems) as subjects of justice (Celermajer *et al.* 2021). In other words, MSJ 'expands the relationships of justice to include human responsibilities to all earth beings' (Winter and Schlosberg 2023, pp. 2–3).

The term *multispecies justice* has been adopted by a growing number of scholars who in many ways explore issues of (in)justice in multispecies worlds (e.g. Tschakert *et al.* 2020, Celermajer *et al.* 2021, Kirksey and Chao 2022). A genealogy of the concept, tracing the contributions it has been gathering from disciplines and fields as diverse as STS, animal rights theories, ecofeminism, environmental justice, posthumanism, indigenous and decolonial thought, cultural anthropology, political ecology, among others, can be found elsewhere (e.g. Celermajer *et al.* 2021, Kirksey and Chao 2022). Still, it is essential to state that the foundational ideas of MSJ are not all new; several of them reflect principles and understandings that have been prevalent (in multiple ways) among many, non-western, indigenous cultures and knowledge systems around the world (Winter and Schlosberg 2023). As an emerging research agenda, MSJ is inherently transdisciplinary, breaking the apparently hard boundaries between the social and the natural sciences and distinctions between subject and object (both in science and research and in the multispecies worlds we co-inhabit) . Given its commitment to deconstructing some of the central tenets of western modernity (e.g. anthropocentrism, human exceptionalism), MSJ is not only a research program but also – fundamentally – a normative project (Celermajer *et al.* 2021).

Its normative core stems from a deliberate rejection of the fiction of individualism in favour of the acknowledgment of the actual ecological array of relationships that sustain life (ibid.). By doing so, it points to a broader socio-ecological reality of which humans are only one part (albeit a particularly impactful one): 'Here, human and nonhuman animals, species, microbiomes, ecosystems, oceans, and rivers – and the relations among and across them – are all subjects of justice. Consequently, multispecies injustice comprises all the human interruptions of the functioning of this broad array of relations' (ibid.: 127). This definition is important because it points to the relationality of the concept: justice in multispecies worlds (including rivers) pertains not only to the subjects who co-inhabit the latter, but also to the

relations binding them together. As such, particular modes of relation that endanger rivers might be seen as unjust and in need of transformation; whereas others that foster their integrity and sustainability may be seen as promoting MSJ.

As Winter and Schlosberg (2023, p. 2) argue, justice theories have predominantly focused on something other than material relationships, 'when in reality any conception and practice of justice is necessarily enmeshed in them'. Regarding rivers, these material relationships can include pollution or hydro-extractivism as examples of injustice; or forms of activism for river defence and river conservation or restoration projects as examples of justice. They suggest that 'any approach to justice that is to guide human behaviour on a relational, ecological planet needs to incorporate recognition of that relationality, and have the reflexivity to address the ways that human behaviours affect it' (ibid.).

Through an intersectional approach to justice, MSJ recognises that multiple identities and categories of difference and inequalities are simultaneous (e.g. race, class, gender, ability, species, being) and that they intersect each other in structures and processes of oppression and injustice (Tschakert *et al.* 2020). Given the immense diversity of beings that co-inhabit multispecies worlds such as rivers, as well as their many forms of subjecthood, agency, and modes of expression and voice, MSJ challenges us to nurture arts of attentiveness (Van Dooren *et al.* 2016) and practices of active listening (Rose 2013). These are profoundly political because they directly relate to processes of inclusion/exclusion and of (mis)recognition of diverse subjects.

Regarding riverine hydrosocial territories, applying a MSJ lens to river management and governance might imply asking questions such as: when damming a river or when designing a river restoration project, whose perspectives, needs, and interests are decision-makers considering? Who are, in fact, the decision-makers, and who are they representing? How can we invite other-than-human beings at the decision-making table? If we want to include other-than-human perspectives, who can speak on behalf of non-human beings? What gives particular human actors the legitimacy or expertise to do so? And how are these processes inherently inclusive *and* exclusive? Who 'decentres' who? (Houart 2023).

Naturally, widening the circle of those whose voices we seek to listen to when discussing practices of (in)justice in rivers renders the discussion profoundly more complex. MSJ 'emerges within fields of power where who is in the world, and whose world counts, is at stake. Any project that aims to achieve justice in multispecies worlds should thus ask: justice for whom or what?' (Kirksey and Chao 2022, p. 6). Indeed, two important points must be raised here. Firstly, it must be emphasized (again) that although MSJ is a recent and developing concept, most of its ontological, epistemological, and ethical-political premises have been part of the cosmologies, knowledge

systems, ethics, and modes of relation with the more-than-human world of multiple indigenous cultures and vernacular societies for thousands of years (Celermajer *et al.* 2021). MSJ does not, therefore, represent a set of ideas developed just (or mainly) by western academia. Epistemologically, then, it must recognize and be in constant dialogue with other knowledge systems and forms of knowledge production that have been historically silenced (Thaler 2021). Its emancipatory project is thus directly relevant to *human* subjects, not only to non-human beings.

Secondly, although it may be argued that a main goal of MSJ is to 'decentre the human', such a move must not amount to perpetuating forms of excluding or rendering invisible particular groups of human actors that are already deeply impacted by asymmetrical power relations and the global capitalist economy (Fitz-Henry 2021). Tensions and potential contradictions are necessarily part of MSJ, for example in its connection with the RoN movement and how it has been differently adopted by grassroots movements (bottom-up) or imposed by external or more powerful agents (top-down). Fitz-Henry's (2021, p. 13) question is pertinent: 'How can we ensure that "attending to the communication of non-humans" such as crows, snails, or trees, does not neglect (and therefore risk alienating) huge segments of the human population whose "communication" has long been silenced, distorted, appropriated, or otherwise attacked?'.

The concerns falling under the umbrella of MSJ (e.g. river degradation; interruption of migratory routes; species extinction; endangerment of the livelihoods of riverine communities) should matter to a broader range of individuals, for multiple reasons. MSJ must, then, engage with people 'who will not share some of the more radical commitments that have been at the heart of the multispecies turn – but who would benefit in their own ways from the protection of multispecies systems and relations' (Celermajer *et al.* 2021, p. 134). Nonetheless, to ensure legitimacy and transformative potential, MSJ must explicitly engage with the ongoing political struggles and more 'radical' political claims of marginalized human communities and groups across movements as diverse as Black Lives Matter or those striving for indigenous sovereignty (Fitz-Henry 2021). Not doing so would amount to perpetuating forms of injustice between human actors *and* make it 'impossible to build the sorts of grassroots movements that will be required to fundamentally transform the liberal [and illiberal, technocratic, authoritarian] state[s] in the coming years' (ibid.: 18).

Consequently, we advocate for MSJ frameworks that are not about decentring *any* human per se, but about decentring and deconstructing specific, dominant human ontologies, systems, and modes of relationship regarding the more-than-human world (e.g. especially those that rely on the belief in human exceptionalism and legitimize exploitation and destruction of rivers and their multispecies communities). In dialogue with Rose and Plumwood,

the task at hand is 'to resituate the human in ecological terms, and . . . to resituate the non-human in ethical terms' (Rose, 2015 *apud* Van Dooren and Chrulew 2022, p. 12). Next, we suggest that broadening the scope of justice to include a growing diversity of other-than-human subjects and a much larger number of human subjects are not mutually exclusive; rather, they should be aligned through an intersectional approach to justice (Tschakert *et al.* 2020) that acknowledges that these countless subjects are all exploited and oppressed by global capitalism.

Finally, we would add, from our political ecology perspective, that any MSJ framework must always be self-reflexive, critical of the ways in which seeking to include (e.g. listen to and speak on behalf of) non-human beings might also perpetuate processes of subjectification and practicing *power over* these beings. This point is crucial, because bringing other-than-human subjects into political decision-making processes is – to some extent – inevitably a matter of human intermediation and interpretation. Decision-making might not always be in human hands (e.g. as in when otters or beavers defy scientific predictions and technocratic expectations to (re) populate and (re)shape riverine territories according to their own interests), but river management and governance is still heavily/mostly determined by human actors. Acknowledging and opening space for other-than-human beings to actively participate in decision-making processes is therefore a central part of the challenge, *while remaining aware* of how those processes entail their own power relations and political hierarchies across species boundaries is key.

5.2. Do forms or practices of MSJ in rivers already exist?

Beyond utopian interpretations and demands for a MSJ future (Thaler 2021), our core interest is in more specific forms or situated practices of MSJ *that already exist*, woven into particular modes of relationship between human communities and other-than-human beings, or as forms of environmental activism for river defence.

In the Magdalena River, Colombia, for instance, local artisanal fisher(wo) men claim that fish have a voice that they can hear, and that they are able to predict the weather according to what animals tell them (Boelens *et al.* 2021). Importantly, the close relations binding the artisanal fishing communities and the fish together also manifest in the development of ethical principles that determine particular practices as illegal (to the contrary of what national authorities legislate). Fishing in the areas where fish are sleeping, for example, is forbidden among the artisanal fisher(wo)men. These situated practices and the principles underlying them might be understood as a form of MSJ, since they not only demonstrate care and respect for the fish, but also seek to safeguard the socio-ecological sustainability of the river (e.g. by posing limits

on fishing that not only ensure sustained livelihoods for the fishing communities but also the future of other species).

Yet, fish populations in the Magdalena are dwindling, threatening the futures of both human and non-human beings, because of overfishing, loss of river connectivity caused by the existence of hydroelectric dams, deforestation, etc. (ibid.). The artisanal fisher(wo)men of the Magdalena are not regarded as political actors by the Colombian state, meaning that their ontological understandings of the river (and the modes of relationship with the river and its multispecies communities that they encourage) are not acknowledged in the management of this hydrosocial territory. Achieving MSJ in this case might thus also imply including the voices of the artisanal fishing communities into political decision-making processes about the river's management and governance (as grassroots organizations are trying to do). These not only better represent the needs and interests of the (vulnerable) humans, but also, indirectly, those of the non-human beings with whom they share this territory.

Practices of MSJ in rivers may be seen as an attempt *to produce new or to defend already existing modes of relationship* between human and other-than -human beings. In line with this, in the next section we explore how new water justice movements (NWJMS) that seek to defend, conserve, and/or restore rivers can be challenged and enriched by a MSJ perspective.

5.3. Bringing MSJ into new water justice movements (NWJMS)

We suggest that bringing a MSJ perspective into NWJMS involves two important dimensions: creating diverse networks of actors and bridge-building across fields and disciplines. On the one hand, a diverse network of actors could include: riverine local communities and indigenous peoples; scientists and academics; legal activists and scholars; environmental activists and NGOs; concerned citizens; bureaucrats and politicians; among others. It is key to connect groups of actors with potentially different ontological understandings of rivers (e.g. indigenous communities and natural scientists; social and natural scientists; peasant communities and environmental activists), who might nevertheless find common ground in their concern for rivers and might provide complementary contributions for working on their behalf – while shedding light on differences between actors' needs and interests; and trying to better respond to them by transforming power relations and political hierarchies.

Such coalitions can engage as active political subjects in the defence of rivers and their multispecies communities. They have the potential to jump scales and develop political agency through grassroots scalar politics (Hoogesteger and Verzijl 2015) and the development of rooted water collectives (Vos *et al.* 2020). The deliberate inclusion of multiple species and their

respective needs, knowledge, experience, and interests in a wider circle of justice can add new dimensions to the struggles and demands of these movements and collectives.

Furthermore, it is also vital to build bridges across fields and disciplines, which enact and develop different epistemologies and methodologies, such as arts and sciences, or activism and academia. To critically look at and engage with rivers through a MSJ perspective is ultimately a challenge for activists, researchers, scientists, policymakers, artists, citizens, and others who care about the fate of rivers and their multispecies communities in the present context of socio-environmental injustices, river degradation, biodiversity loss, and climate change *to co-create pathways into different futures*. Examples of this (to name just a couple) already exist, for instance the diverse Riverhood and River Commons action-research endeavours that bridge rivers' human/non-human communities trans-locally,[2] or in the work of Wölfle Hazard (2022), which connects river sciences with the work of indigenous nations, local citizens, artist collectives, and others.

A central question, which constitutes one of the fundamental challenges for all proposals dealing with the inclusion and representation of the more-than-human world, is how to know the perspectives, needs, and interests of other-than-human beings *when we are human*. Multiple discussions around issues of voice and communication beyond the human have been taken up by scholars for decades (e.g. Plumwood 2002, Eckersley 2004, Latour 2004, Schlosberg 2009, Rose 2013, Van Dooren *et al.* 2016; Meijer, 2019; etc.). We draw inspiration from all of them but would like to mention here Eckersley's (2004, p. 211) proposal for the development of ecological democracy, which suggests that: 'All those potentially affected by a risk should have some meaningful opportunity to participate or otherwise be represented in the making of the policies or decisions that generate the risk'. This includes future generations and other-than-human beings. For their representation, Eckersley suggests the appointment of representatives taking on a trusteeship role, which should include people with 'firsthand knowledge or experience of non-human nature' (ibid.: 141).

It is not our intention in this paper to argue for any specific form of inclusion of non-human beings, since that discussion would merit significantly more space and attention, but rather to point out the existence of several proposals for it that offer pathways for overcoming anthropocentric and exclusionary practices in political decision-making. We do, however, argue that it is key to involve the politically excluded, the economically marginalized, the culturally and epistemically discriminated in terms of river's voices. As Ottinger (2023, p. 1) argues, movements for environmental justice have long criticized the value and importance predominantly placed upon scientific expertise, 'often to the exclusion of the knowledge and values of people most affected by' different forms of environmental harm. Ottinger

offers an account of epistemic justice that she terms *careful knowing*, meaning 'practices of empirical investigation and meaning-making responsive to the needs of marginalized knowers' (ibid.: 2). Opening space for other-than-human beings therefore also calls for the deployment of creative methods and performances that invite human actors, for example, to temporarily adopt the perspective of another being in order to empathize and seek to better understand what this being might want of their river. Examples abound, including Macy's Council of All Beings, or the indigenous-led Land and Peoples Relationship Model[3] (see also Wölfle Hazard 2022).

The fact that other-than-human beings do not communicate through the same spoken language as humans does not mean that they do not have a voice or modes of expression (e.g. signals, gestures, behaviours) that humans cannot listen to or comprehend. Understanding what other-than-human beings are communicating is always a matter of interpretation, but the same happens with humans (Latour 2004). Likewise, 'in opening one's self to others as communicative beings, one places one's self in a position of being able to experience communication' (Rose 2013, p. 97). Indeed, '(. . .) as other creatures live their lives, so they communicate aspects of themselves' (ibid.: 98). To this respect, 'contesting for better worlds requires learning to take others seriously in their otherness (. . .) It also requires learning new modes of taking account of and with enigmatic others who cannot be – or perhaps do not want to be – represented or even knowable or sensible within any available mode of understanding (. . .)' (Van Dooren *et al.* 2016, p. 16).

In the end, this implies that the normal/normalizing terms of engagement, conversation, and territory-configuration must be shifted. Rather than 'integrating' and selectively cherry-picking local, indigenous, or vernacular riverine multispecies ontologies into established science and preconceived river restoration (which reinforces dominant science and mono-ontological water orders), there is a need for identifying intercultural, reciprocal, and decolonial co-constructions of river socionatures. These start with pluri-ontological and multispecies reality; with vernacular, convivial epistemologies; with *care-full* hydrosocial territorialization – and then look for complementarities and solidarities (Yates 2022). Such reciprocal coalitions cross and interlace riverine contexts and movements, challenge river extractivisms, re-politicize the environmental debate, river policies and 'single-species' design approaches, and open up new modalities for acknowledging, strategizing, and constituting riverine territories.

6. Conclusions: opening space for other-than-human beings in river defence efforts

Haraway (2008, p. 105) writes that 'a liveable world is remade with disregarded human persons and other displaced beings, or not at all'. In

this article we started an important conversation between two concepts – hydrosocial territories and multispecies justice – and their research and normative programs. Engaging with the existing literature on hydrosocial territoriality through a MSJ perspective encourages us to acknowledge non-human beings (e.g. rivers, otters, fish, beavers, algae, etc.) as active co-creators and transformers of riverine hydrosocial territories, just as much as humans.

As co-inhabitants of rivers and co-participants in their territorialization processes, non-human beings are also constantly impacted by power relations, political processes and hierarchies that are often led by (specific groups of) humans within dominant political economies. Issues of (in)justice in river worlds and river lives are therefore always, necessarily, issues of multispecies justice. Bringing a MSJ perspective into NWJMS working for the defence, conservation, and/or restoration of rivers encourages these movements to include a wider variety of subjects into their projects, both as fellow sufferers and subjects affected by processes of dispossession, loss, destruction, and death/extinction; *and also*, as partners and collaborators in processes of resistance, transformation, and response to these various forms of socio-environmental injustice.

We have argued that taking on a MSJ lens when discussing issues of river conservation and restoration means *to ally* with other-than-human beings in the defence and re-enlivening of multispecies riverine hydrosocial territories. In some cases, this can occur by inviting them into hydrosocial territorial designs (e.g. through the protection of existing species; through dam removal projects that include the agency of fish; through the reintroduction of species like beavers or otters, and collaboration with them to restore river biodiversity and health). In other cases, it can imply appointing human representatives to intermediate and speak on behalf of the more-than-human world when deciding on specific projects – especially human representatives who have also historically been marginalized and silenced by settler-colonial and capitalist states.

This introductory conversation paves the way for further topics and angles of research. One of them might be looking into what practices of MSJ already exist on the ground, in grassroots movements, in specific modes of relationship between human and other-than-human beings in riverine hydrosocial territories, to encourage cross-pollination and potentially strengthen multispecies justice efforts in other spaces and geographical, political, and cultural contexts. Another one might entail reflecting on how MSJ might contribute to the decolonization of modes of relationship between particular groups of humans by adopting an intersectional approach that builds bridges with social justice movements. Finally, another one might focus on exploring what kind of new practices for MSJ in NWJMS might arise through citizens assemblies, citizen science, creative methodologies,

intercultural and intersectional dialogues, and socio-environmental activism on local and trans-local scales, through weaving webs of human and more-than-human co-creation.

Notes

1. River walks, counter-mapping and riverside meetings (www.movingrivers.org) were also a form of conducting multispecies ethnography (Kirksey and Helmreich 2010), which is particularly pertinent to reflections on multispecies justice.
2. www.movingrivers.org
3. https://www.respectcareshare.ca/

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