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ARTICLE

Steps Towards a Legal Ontological Turn: Proposals for Law's Place beyond the Human

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Abstract
Environmental law remains grounded in a 'one-world world' paradigm. This ontological structure asserts that, regardless of variation in world-construing, all beings occupy one 'real' world of discrete entities. The resulting legal system is viewed as an independent set of norms and procedures regulating the 'human' use of the 'environment' by specifying allowable harm rather than adjudicating on mutually enhancing relations. This legal form fails to fulfil its purpose of prevention and remediation, and constitutes a significant barrier to overcoming world(s)-destroying conditions. As such, we take up the injunction for a 'legal ontological turn' so as to lay bare these assumptions, and to be able to move beyond their constraints into a renewed exploration at the intersection of vastly differing legalities. In dialogue with systems-grounded ecological jurisprudence(s), Indigenous legal thinking, and anthropological insight, we seek to ground future discussions towards building a truly earth-sustaining form of environmental law for all beings.

Keywords: Ontology, Environmental law, Ecological jurisprudence, Legal pluralism, Law beyond the human

1. INTRODUCTION

Current environmental legal systems are failing to prevent and remediate ecological degradation despite this being their ostensible purpose.[1] Environmental law is struggling to understand and adequately capture the complex relations between global

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1 A. Wiersema, 'The Precautionary Principle in Environmental Governance', in D. Fisher (ed.), *Research Handbook on Fundamental Concepts of Environmental Law* (Edward Elgar, 2016), pp. 449–74.

transformations of social and natural systems.[2] Environmental law thus fails to consider ecological interdependencies and is often fragmented in its thinking, split into disciplinary silos, resulting in responses that are reductionist and myopic.[3] Despite the advances made in both the earth system sciences and the humanities in reconceptualizing the human–nature relationship, environmental law continues to reinforce the constructed dichotomy between the sphere of the *anthropos* and that of the natural world – the former operating above or outside the functions of the latter, in contradiction to the reality in which the human social sphere is a part of, inherently connected to, and embedded in the earth's ecological systems and natural dynamics.[4] Nature, in environmental law, is abstracted and sheared from social context (both human and more-than), becoming passive or non-agentic and therefore *res nullius*: a resource empty of meaning and purpose and therefore available for human annexation.[5]

This framing of environmental law continues a legal illusion of control over the 'natural', governing the 'environment' in a predominantly command-and-control approach, which attempts to predict and assess environmental harm in a balancing act between economic growth, national interests, and social equity.[6] This methodology, by which we mean a system of rules in which decision makers are enmeshed, is implemented in a coordinated manner by social actors, who advance principles such as sustainable development and 'polluter pays'.[7] These are approaches well-suited to protecting private property and national statehood, but ill-suited to governing an omnipresent and all-pervasive meshwork of relations, both ecological and social, which has been conceptualized as the 'environment'.[8] This methodology is deeply informed by both the tradition of legal positivism and positivist interpretations of environmental realities, as well as predominant neoliberal ethics.

Underlying these interpretations, and deeply infusing much of western legal thought, is the ontological assumption of a single objective, and an objectifiable reality, or what sociologist John Law calls a 'one-world world' (OWW).[9] This ontological position frames the world as operating by absolute and universal laws, which can only be known by reference to evidence gained by strictly conceived empirical means, banishing

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2 F. Biermann et al., 'Transforming Governance and Institutions for Global Sustainability: Key Insights from the Earth System Governance Project' (2012) 4(1) *Current Opinion in Environmental Sustainability*, pp. 51–60, at 51.

3 G. Garver, 'The Rule of Ecological Law: The Legal Complement to Degrowth Economics' (2013) 5(1) *Sustainability*, pp. 316–37, at 316.

4 A. Grear, '"Anthropocene, Capitalocene, Chthulucene": Re-encountering Environmental Law and its "Subject" with Haraway and New Materialism', in L. Kotzé (ed.), *Environmental Law and Governance for the Anthropocene* (Hart, 2017), pp. 77–95.

5 For a general critique see A. Grear, 'Deconstructing Anthropos: A Critical Legal Reflection on "Anthropocentric" Law and Anthropocene Humanity' (2015) 26(3) *Law Critique*, pp. 225–49, at 225.

6 A. Philippopoulos-Mihalopoulos (ed.), *Law and Ecology: New Environmental Foundations* (Routledge Glasshouse, 2012).

7 G. Hydén, 'Operationalizing Governance for Sustainable Development' (2001) 17(2) *Journal of Development Studies*, pp. 13–31, at 13.

8 L. Pellizzoni, 'Responsibility and Environmental Governance' (2004) 13(3) *Environmental Politics*, pp. 541–65, at 541.

9 J. Law, 'What's Wrong with a One-World World?' (2015) 12(1) *Distinktion: Journal of Social Theory*, pp. 126–39.

any metaphysical questioning. Environmental law evidences this position by assuming that the world is revealed purely by the physical sciences and can be managed, predicted, and controlled through the application of risk management frameworks, common to environmental assessment processes.

These kinds of critique are not new to environmental law scholars;[10] however, diversity with regard to knowledge, ontologies, epistemologies, and research methodologies is an under-developed and under-theorized area of research within environmental law.[11] It is necessary to develop an understanding of how ecological systems are not only culturally co-produced, politically maintained or altered, but potentially ontologically multiple.[12] Otherwise, we risk saddling emerging conceptualizations of ecological jurisprudence,[13] which seek to situate the legal system within socio-ecological systems, with a shared ontological and epistemological foundation that is similar to the environmental law systems the very failings of which they seek to overcome.[14]

This article builds upon the work of scholars in the environmental law field who have already articulated many of the issues with current environmental law frameworks. These authors have demonstrated that such legal approaches, their underlying legalities, and the ontological assumptions upon which they rest and of which they are expressions are inadequate to ensure effectively the resilience of the very ecosystems upon which we rely.[15] Their work has created space in which we can think beyond an environmental law grounded within an OWW and explore the possibility for at least partial connection with[16] and understanding of Indigenous legal orders. These growing areas of scholarship, with the general (though not coincident) mutual goal of life-sustaining practice, are hobbled in their discourse and influence because of serious issues of an ontological order. However, this is not to say that this mutual conversation, and influence, between Indigenous legal orders and environmental law is not already under way. We begin by examining the ways in which underlying ontological assumptions structure and constrain environmental law before considering the ways in which new insights from systems thinking and ecology have come to challenge its very foundations. We then consider the potentially underestimated ontological

[10] See, e.g., Philippopoulos-Mihalopoulos, n. 6 above; A. Grear & L. Kotzé (eds), *Research Handbook on Human Rights and the Environment* (Edward Elgar, 2015).

[11] R. Bartel, 'Place-Thinking: The Hidden Geography of Environmental Law', in A. Philippopoulos-Mihalopoulos & V. Brooks (eds), *Research Methods in Environmental Law* (Edward Elgar, 2017), pp. 159–83.

[12] A. Mol, *The Body Multiple: Ontology in Medical Practice* (Duke University Press, 2002).

[13] L. Kotzé & R. Kim, 'Earth System Law: The Juridical Dimensions of Earth System Governance' (2019) 1 *Earth System Governance*, article 100003, pp. 1–12; C. Cullinan, *Wild Law: A Manifesto for Earth Justice* (Chelsea Green, 2011); Garver, n. 3 above.

[14] See, e.g., E. Boulot & A. Akhtar-Khavari, 'Law, Restoration and Ontologies for a More Ecologically Complex World!' (2020) 39(3) *University of Queensland Law Journal*, pp. 449–73.

[15] See, e.g., L. Kotzé, 'Earth System Law for the Anthropocene: Rethinking Environmental Law Alongside the Earth System Metaphor' (2020) 11(1–2) *Transnational Legal Theory*, pp. 75–104; S. Vermeylen 'Materiality and the Ontological Turn in the Anthropocene: Establishing a Dialogue between Law, Anthropology and Eco-philosophy', in Kotzé, n. 4 above, pp. 137–62; Grear, n. 4 above; G. Garver, 'A Systems-based Tool for Transitioning to Law for a Mutually Enhancing Human-Earth Relationship' (2018) 157 *Ecological Economics*, pp. 165–74.

[16] M. Strathern, *Partial Connections*, updated edn (Rowman & Littlefield, 2002).

ramifications for environmental law generally in the growth of rights of nature legislation, particularly in the case of the 2008 Ecuadorian Constitution and the Whanganui River settlement in New Zealand/Aotearoa. We argue that these interventions represent much more than environmental legal 'progress' – namely, the radical leaking of Indigenous legal and, crucially, *ontological* orders into the legislation of the nation-state. However, this dynamic is not without a multiplicity of issues. Anishinaabe legal scholar Aaron Mills has cautioned, for example, that liberal and what he calls 'rooted' legal orders may be fundamentally incommensurable, and that their forced complementarity may in the end constitute 'constitutional capture', meaning that attempts at legal pluralism may result in only further solidifying the dominant liberal legal order.[17] In this vein we go on to consider the stumbling blocks that are likely to be encountered in any legal ontological 'turning'. Finally, we outline future steps towards a legal ontological turn and signpost a future research agenda. In this article we seek to clear some of the theoretical ground at the crossroads of these issues, with the hope of opening environmental law to different sources of life-sustaining legalities in ways that are attentive not only to the various modes of dwelling, but also the relationality at the heart of differing forms of worlding. In so doing, we seek to show the ways in which legalities might alternatively emerge. We engage with these questions through the lens of liberal environmental law generally, both state-led and law beyond the state, although we eventually acknowledge that our argument requires an examination of the ontological foundations of law more broadly.

2. ENVIRONMENTAL LAW AND THE ONE-WORLD WORLD

To explore these questions properly at the intersection of vastly different legalities, firstly we examine the ways in which underlying ontological assumptions structure and constrain environmental law as it currently stands. The OWW is an exclusionary conception of reality the lineage of which is wrought from the Euro-American historical experience, particularly its modern period. Anthropologist Arturo Escobar argues that:

> [the OWW project has been a] [t]wofold ontological divide: a particular way of separating humans from nature; and the distinction and boundary policing between those who function within the OWW and from those who insist on other ways of worlding. These (and many other derivative) dualisms underlie an entire structure of institutions and practices through which the OWW is enacted.[18]

One of these institutions and fields of practice is the legal order. This 'mono-ontological occupation'[19] precludes the possibility and the very reality of differing *worldings*, as the OWW translates other worldings into differing cultural *views* of the singular and common world of western naturalism. This ontological position, as described by Philippe

[17] A. Mills, 'Miinigowiziwin: All that Has Been Given for Living Well Together: One Vision of Anishinaabe Constitutionalism' (Ph.D. thesis, University of Victoria (BC, Canada), 2019), available at: http://hdl.handle.net/1828/10985.

[18] A. Escobar, '*Transiciones*: A Space for Research and Design for Transitions to the Pluriverse' (2015) 13(1) *Design Philosophy Papers*, pp. 13–23, at 14.

[19] Ibid.

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Descola,[20] construes the world as composed of human and only human interiors, or selves, which hold kinship with the rest of the world only in terms of their materiality, their common matter. This framing has not stayed in the west. Its exportation around the world through the processes of colonization, development, and globalization has only accelerated, fundamentally structuring the very horizon of possibilities for those with legal rights and standing.

Law reflects dominant ontological assumptions, and the particular cultural expressions and enactments of those assumptions, including ethics and values. This is because the law is fundamentally a discipline of adjudication and definition. John Borrows has described the extensive scope of what is considered to fall within the legal purview, stating that our 'legal systems are called upon to decide where and when life begins, how we should live during our years on earth, and what might happen after death. Moral, social, economic, emotional, scientific, religious, spiritual, and philosophical questions are framed as justiciable issues'.[21] Indeed, in distinguishing between what can and cannot be considered a person, as well as establishing clear distinctions between different categories of person ('natural' or human, juridical or 'constructed'), the law is, without modesty, ordering the very ontological undergirding of our social and ecological systems. In environmental law we see that legal systems continue the mono-ontological occupation by assuming a divide between nature (the earth system and its constitutive beings on which we depend and with whom we relate) and humans (our internal political sphere).

In environmental law's attempts to fulfil its mandate to provide environmental protection, the 'environment' is abstracted and reified from the social context, becoming passive or non-agentic, thus fulfilling expectations of what Descola calls the naturalist ontology expressed by modern materialism.[22] Environmental law takes the human (perhaps more accurately a disembodied representation of the human more similar to the corporate form) as its subject and nature as its object,[23] embedding deeply held liberal assumptions within legal constitutionalism, foundationally separating the more-than-human from the human realm.[24] The development of environmental law has also resulted in a form of teleological thinking which entails a problem/solution dichotomy,[25] with environmental law seeking to mitigate, and sometimes facilitate, environmental impacts within the current liberal system rationalized to the market.[26]

In this ontological reduction of the natural world into its constitutive and merely material parts for the purpose of epistemic legibility to empirically minded eyes, and

[20] P. Descola, *Beyond Nature and Culture* (University of Chicago Press, 2014).

[21] J. Borrows, 'Origin Stories and the Law: Treaty Metaphysics in Canada and New Zealand', in M. Hickford & C. Jones (eds), *Indigenous Peoples and the State* (Routledge, 2019), pp. 30–56, at 33.

[22] Descola, n. 20 above.

[23] Grear, n. 4 above.

[24] A. Mills, 'The Lifeworlds of Law: On Revitalizing Indigenous Legal Orders Today' (2016) 61(4) *McGill Law Journal / Revue de droit de McGill*, pp. 847–84.

[25] P. Burdon & J. Martel, 'Environmentalism and an Anarchist Research Method', in Philippopoulos-Mihalopoulos & Brooks, n. 11 above, pp. 316–37.

[26] S. Alexander, 'Wild Law from Below: Examining the Anarchist Challenge to Earth Jurisprudence', in M. Maloney & P. Burdon (eds), *Wild Law: In Practice* (Routledge, 2014), pp. 31–44.

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open to manipulation by modernist hands, legal systems worldwide perpetuate a particular ontology provincial to the modern west. The separation of mind from matter, culture from nature, and the human from the non-human[27] – which forms the basis of empirically minded legal systems the world over – frames environmental 'problems' as merely physical in origin and expression. Indeed, the legibility of its citizens and its non-citizen 'resource base' has been a central, and increasing, preoccupation of the state for its purposes of control, manipulation, and management. Perhaps, as James Scott has argued, this has been true since the state's historical inception.[28] Further, it is important to underline that managing natural resources has, of course, often already been about governing people, carried out along hierarchical and structurally unequal lines.[29] The use of new systems of scientific and technical knowledge and the modes and technologies of seeing, developed so as to extend governmentality into the natural world, have been heavily studied.[30] By their processes the living world, its multiplicities of kinds of being and relations, its flows and exchanges – indeed, the entire meshwork[31] that makes up what is framed as the 'Earth System' – is abbreviated and narrowed so as to make it legible to systems of power. This is not to say that the modelling of the natural sciences and the inherent and necessary representation of the world are not useful, or necessary. Rather, it is to say that it is one particular way of seeing, which sees only one particular aspect of the possible world.

It is this very same legibility that allows environmental law to expect the world to be manageable and predictable through the application of risk management and calculation, resulting in the conversion of inherent environmental uncertainties into numericized probabilities. Risk management became the bedrock for environmental regulation across most industrial states in the early 1970s,[32] binding the human-nature relationship to the language of risk and security.[33] The risk assessment process, most evident in environmental impact assessment, is one that relies heavily upon positivist conceptualizations of science and associated bureaucratic-rationalistic policy (which itself is not always positivist in nature).[34] This results in a form of 'regulatory ecological science [that] does not so much describe the environment as both actively constitute it as an object of knowledge and, through various modes of positive intervention, manage and police it'.[35] Risk, however, is perceived differently by diverse groups of people, including *within* the scientific community, shaped by history, politics, and culture.

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27 K. Anker, 'Law as … Forest: Eco-logic, Stories and Spirits in Indigenous Jurisprudence' (2017) 21 *Law Text Culture*, pp. 191–213, at 192–3; Escobar, n. 18 above.

28 J. Scott, *Against the Grain: A Deep History of the Earliest States* (Yale University Press, 2017).

29 I.R.G. Waldron, *There's Something in the Water* (Fernwood, 2018).

30 See A. Agrawal, *Environmentality: Technologies of Government and the Making of Subjects* (Duke University Press, 2005).

31 T. Ingold, *Being Alive: Essays on Movement, Knowledge and Description* (Routledge, 2011).

32 S. Jasanoff, 'The Songlines of Risk' (1999) 8(2) *Environmental Values*, pp. 135–52.

33 P. Rutherford, 'Ecological Modernization and Environmental Risk', in E. Darier (ed.), *Discourses of the Environment* (Wiley-Blackwell, 1999), pp. 95–118.

34 J. Goodie, 'The Ecological Narrative of Risk and the Emergence of Toxic Tort Litigation', in Philippopoulos-Mihalopoulos, n. 6 above, pp. 65–82.

35 P. Rutherford, 'The Entry of Life into History', in Darier, n. 33 above, pp. 37–62, at 56.

Risk is the 'embodiment of deeply held cultural values and beliefs … concerning … issues such as agency, causation, and uncertainty' with state-led risk assessment frameworks 'implicitly empower[ing] … some people as experts and exclud[ing] others as inarticulate, irrelevant or incompetent'.[36] This defines those who ascribe to differing worldings as irrelevant to the processes of environmental law, just as Escobar described as the second of the twofold ontological divides. In this, the occupation of the land in terms of physical extension, territory and extraction, relies on and perpetuates an ontological occupation.[37] The imposition of certain methods of framing, encountering, and describing the natural world therefore constitutes a form of ontological enforcement of a certain world structure and of possible responses, both legal and otherwise.

3. NEW ECOLOGY AND THE CHALLENGE FROM 'WITHIN'

The ontological and epistemological underpinnings of environmental law have, however, begun to be challenged from within, not only from the social sciences and humanities but from quarters of the environmental sciences as well. The 'new ecology' emerging from systems science accepts that natural systems operate far from equilibrium and assumes the possibility of uncertainty, instability, and variability in natural systems.[38] Epidemiologist Tony McMichael argues that this systems approach of ecological science contrasts with traditional science in that:

> [it] embraces the complex interplay between animate and inanimate components; it studies dynamic, non-equilibrial and non-linear processes … To an ecologist the world is neither deterministic nor randomly unpredictable; rather, it is a world of contingent probabilities within mutually adapted, self-ordering systems.[39]

This thinking embraces methodologies and frameworks that view the world as consisting of nested complex systems,[40] the characteristics of which cannot be captured through a single perspective.[41] Rather, complex systems comprise a set of components 'interconnected in such a way that [they] produce their own pattern of behaviour over time'.[42] The collective behaviour resulting from component interactions is therefore more than the sum of the behaviour expected of individual parts.[43] Complex systems demonstrate unpredictable non-linear behaviour and self-organize to support

[36] Jasanoff, n. 32 above, p. 137.

[37] A. Escobar, 'Thinking-Feeling with the Earth: Territorial Struggles and the Ontological Dimension of the Epistemologies of the South' (2016) 11(1) *Revista de Antropología Iberoamericana*, pp. 11–32, at 14.

[38] L. Godden & J. Peel, *Environmental Law: Scientific, Policy and Regulatory Dimensions* (Oxford University Press, 2010); see also W. Steffen et al., *Global Change and the Earth System: A Planet under Pressure* (Springer, 2004).

[39] A. McMichael, *Human Frontiers, Environments and Disease: Past Patterns, Uncertain Futures* (Cambridge University Press, 2001), pp. 21–2.

[40] Steffen et al., n. 38 above.

[41] S. Funtowicz, J. Martinez-Alier & G. Munda, *Information Tools for Environmental Policy under Conditions of Complexity*, Environmental Issues No. 9 (European Communities, 1999); G. Munda, 'Social Multi-Criteria Evaluation (SMCE): Methodological Foundations and Operational Consequences' (2004) 158(3) *European Journal of Operational Research*, pp. 662–77, at 663.

[42] D.H. Meadows, *Thinking in Systems: A Primer* (Chelsea Green, 2008), p. 2.

[43] M.E.J. Newman, 'Complex Systems: A Survey' (2011) 79(8) *American Journal of Physics*, pp. 800–10.

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system identity and function.[44] In contrast to the epistemic belief in objectivity within the scientific method, a systems approach does not assume that the act of observation is a neutral pre-analytical step. Rather, the decision of what and how to observe a system become crucial analytical requirements determining the representation of the system.[45]

The complexity and uncertainty inherent in socio-ecological systems challenge the very nature of a liberal environmental statehood where the state's interest in the regulation of the environment within its jurisdiction is predicated on command-and-control approaches designed to ensure maximum yield from natural resources.[46] Fundamental uncertainty also brings into question the conceptualization of one single reality, problematizing the assumption of rational decision making in environmental law as it hinders 'evidence-based' or 'informed' decision making where certainty as a possibility is assumed.[47] Under conditions of uncertainty, the probabilities relating to alternative risk assessments can only be quantified, seemingly challenging 'the reliability of the decision-making process'.[48] The rationalist assumption that the environment can be controlled and that certainty can be achieved via prediction and control fundamentally rings false with environmental law that requires the 'constant re-evaluation of already established problem solving methodologies',[49] and the ongoing generation and application of new knowledge.[50]

Various approaches have been proposed to address these fundamental critiques, which go to the very heart of an environmental statehood predicated on the dual exploitation of both society and the rest of nature.[51] For example, Judith Koons argues that the complexity evident in earth systems requires governance approaches that are polyarchic, adaptive, place and context-specific.[52] Further, scholars such as

[44] R. Kim & K. Bosselmann, 'International Environmental Law in the Anthropocene: Towards a Purposive System of Multilateral Environmental Agreements' (2013) 2(2) *Transnational Environmental Law*, pp. 285–309.

[45] Z. Kovacic, 'Investigating Science for Governance through the Lenses of Complexity' (2017) 91 *Futures*, pp. 80–3, at 81.

[46] C.S. Holling & G.K. Meffe, 'Command and Control and the Pathology of Natural Resource Management' (1996) 10(2) *Conservation Biology*, pp. 328–37, at 329–30.

[47] Å. Knaggård, 'What Do Policy-Makers Do with Scientific Uncertainty? The Incremental Character of Swedish Climate Change Policy-Making' (2014) 35(1) *Policy Studies*, pp. 22–39.

[48] M. Tallacchini, 'Before and Beyond the Precautionary Principle: Epistemology of Uncertainty in Science and Law' (2005) 207(2) *Toxicology and Applied Pharmacology*, pp. 645–51, at 648.

[49] Philippopoulos-Mihalopoulos, n. 6 above, p. 21.

[50] D. Tarlock, 'Is There a There There in Environmental Law?' (2004) 19(2) *Journal of Land Use & Environmental Law*, pp. 213–54, at 220.

[51] Ioris argues that consistently with its pre-analytical assumptions, the more the modern neoliberal state engages with environmental concerns, 'the more it promotes or endorses the exploitation of socionature and widens the gap between society and its ecological condition': A.A.R. Ioris, *The Political Ecology of the State: The Basis and the Evolution of Environmental Statehood* (Routledge, 2014), p. ix.

[52] J. Koons, 'Key Principles to Transform Law for the Health of the Planet', in P. Burdon (ed.), *Exploring Wild Law: The Philosophy of Earth Jurisprudence* (Wakefield Press, 2011), pp. 45–58, at 53.

J.B. Ruhl,[53] Bradley Karkkainen,[54] Geoff Garver,[55] and Louis Kotzé[56] suggest that environmental legal systems and governance processes should mirror the complex ecosystems they seek to govern. Others argue that legal systems should be harmonized with the inviolable 'laws of nature'. For example, Johan Röckstrom and co-authors famously advocate planetary limits that constrain a safe operating space for humanity.[57] These (natural) laws, scholars argue, are fundamental norms in the sense that if they are not heeded, the very conditions for the possibility of human law will cease to exist.[58]

However, the law is never simply a collection of inviolable rules and processes. Laws reflect narratives, stories and worldviews; they are fundamentally the expression of a lifeworld as Anishinaabe legal scholar Mills has observed.[59] It is therefore not enough to update environmental law's anthropocentric narrative of reason and liberalism by supplementing it with 'scientific description'.[60] As anthropologist Mario Blaser writes, even in our best attempts at overcoming the hegemony of empirical description, it is 'evident that the Natural Sciences are still conceived as the predominant spokespersons for non-humans'.[61] In attempting to surmount this impasse, critical legal scholar Saskia Vermeylen argues that environmental law should 'seek inspiration from other disciplinary theoretical debates about the relationship between culture and nature … in anthropology and (environmental) continental philosophy'.[62] In bringing specifically the variety of approaches that might be summarized under the title the 'ontological turn', she shows how the theorization of these issues by anthropology, in particular, offers a variety of deeper ways forward for developing theories of law that grapple not only with environmental considerations, but with the encounter between cosmologies. We agree with her assessment of the need for inspiration from and cross-fertilization with fields more familiar with ontological analysis and questioning. In this article we attempt to fulfil this entreatment by examining such questions from the perspective of the discipline of environmental law in the hope that 'a complete re-examination of current environmental law might … [operate] not only as a preface to environmental law, but as a preface to the understanding of all law'.[63] We begin

[53] J.B. Ruhl, 'Panarchy and the Law' (2012) 17(3) *Ecology and Society* online article 31, available at: http://dx.doi.org/10.5751/ES-05109-170331.

[54] B. Karkkainen, 'Marine Ecosystem Management and a "Post-Sovereign" Transboundary Governance' (2004) 6(1) *San Diego International Law Journal*, pp. 113–42.

[55] Garver, n. 15 above.

[56] Kotzé, n. 15 above.

[57] J. Rockström et al., 'A Safe Operating Space for Humanity' (2009) 461(7263) *Nature*, pp. 472–5.

[58] See, e.g., C. Cullinen, *Wild Law: A Manifesto for Earth Justice* (Chelsea Green, 2011), p. 113.

[59] Mills. n. 24 above.

[60] Anker. n. 27 above, p. 198.

[61] M. Blaser, 'On the Properly Political (Disposition for the) Anthropocene' (2019) 19(1) *Anthropological Theory*, pp. 74–94, at 87.

[62] Vermeylen, n. 15 above, p. 141. For discussion of a similar argument – namely, the potential for a relational turn but in sustainability science – see S. West et al., 'A Relational Turn for Sustainability Science? Relational Thinking, Leverage Points and Transformations' (2020) 16(1) *Ecosystems and People*, pp. 304–25.

[63] R. Brooks, 'A New Agenda for Environmental Law' (1991) 6(2) *Journal of Environmental Law and Litigation*, pp. 1–17, at 1.

by asking whether the recent discourse surrounding rights of nature may provide the relevant metaphysical intervention required for a re-examination of environmental law before outlining the work that remains to be undertaken, potential stumbling blocks, and the nascent steps that are already seemingly under way.

4. RIGHTS OF NATURE: A METAPHYSICAL OPENING?

Environmental law has taken great strides in certain jurisdictions – at least in terms of theoretical development – in attempting better to protect the more-than-human world. The past two decades have been marked by the growth and interest in the rights of nature discourse, led largely by Indigenous peoples.[64] This includes the rights for Pachamama or Mother Earth, which were famously included in the 2008 Ecuadorian Constitution, and in the granting of legal personhood to the Whanganui River at the conclusion of the long-standing conflict between the Māori people and the Crown in New Zealand.[65] These developments might be criticized as being constrained to particular cases, lacking enforcement, or as merely metaphorical placation and the extension of a western rights approach.[66] However, such developments have resulted in an interesting metaphysical intervention in legal systems. What interests us as a harbinger of novel environmental legal thinking is not the extension of rights in itself, but rather what has been smuggled in with them in some shape or form.

In the case of the Whanganui River, the Whanganui River Deed of Settlement (given effect in the Te Awa Tupua (Whanganui River Claims Settlement) Act 2017 (2017/7)) recognizes 'Te Awa Tupua [as] an indivisible and living whole, comprising the Whanganui River from the mountains to the sea, incorporating all its physical and *metaphysical elements*' (section 12, emphasis added) with the Act going on to describe the river's legal personhood (section 14(1)).[67] The inclusion of the Andean Indigenous earth and time goddess of Pachamama in the Ecuadorian Constitution similarly invokes this kind of metaphysical element. What both rights of nature inclusions have done, we argue, is to allow the leaking of Indigenous legal and ontological orders into the legislation of the nation-state. We argue that in the renegotiation of colonial relations, state legal systems in these places have begun something potentially (and potentially only theoretically) more profound than what has been expressed in the rights of nature discourse. The realities and beings that are described by these cases exceed the theoretical discourse which has sought to describe and extend them.

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[64] E. O'Donnell et al., 'Stop Burying the Lede: The Essential Role of Indigenous Law(s) in Creating Rights of Nature' (2020) 9(3) *Transnational Environmental Law*, pp. 403–27.

[65] A. Geddis & J. Ruru, 'Places as Persons: Creating a New Framework for Māori-Crown Relations', in J.N.E. Varuhas & S.Wilson Stark (eds), *The Frontiers of Public Law* (Hart, 2020), pp. 255–74.

[66] P. Burdon & C. Williams, 'Rights of Nature: A Constructive Analysis', in D. Fisher (ed.), *Research Handbook on Fundamental Concepts of Environmental Law* (Edward Elgar, 2016), pp. 196–220; P.D. Burdon, 'Obligations in the Anthropocene' (2020) 31(3) *Law and Critique*, pp. 309–28.

[67] For further discussion of the topic of rights for rivers and ontology see C. Clark et al., 'Can You Hear the Rivers Sing? Legal Personhood, Ontology, and the Nitty-Gritty of Governance' (2020) 45(4) *Ecology Law Quarterly*, pp. 787–844; E. O'Donnell, *Legal Rights for Rivers: Competition, Collaboration, and Water Governance* (Routledge, 2018).

The inscription into the legal orders of said modern states of the metaphysical aspects of non-human natural subjects beyond those conventionally recognized by both nation-states and modernity is a far more radical inclusion than has previously been recognized. What has resulted from this encounter between the (potentially incommensurable) legal systems in rights of nature cases has been something beyond traditional notions of legal pluralism, with the under-examined potential of ontological destabilization, and potential turning for modern legal orders. Because the very *ontological* categories and concepts (not merely legal categories) are shifting in a way that is different in *kind* from previous extensions of rights, these moves have started to enter into the realm of what Blaser, drawing on Bruno Latour[68] and Isabelle Stengers,[69] have called 'cosmopolitics'.[70] This pushes the theoretical discussion beyond political ecology and law, or rights of nature discourse, into relationships with political ontology. These cases and their potential implications are exactly the kind of *steps* towards a legal ontological turning that have been proposed, and which will be addressed more fully in the remainder of this article.

Concomitantly, there has been an increased focus on the protection of the lifeways and knowledge practices of Indigenous peoples from the encroachment and co-option of their intellectual property rights regarding traditional knowledge.[71] This is crucial to forms of self-determination for Indigenous peoples; however, whether this renewed focus might engender engagement with practices and relations beyond those that are understood by the settler state, and what bearing this might have on law, is unclear.[72] Indeed, it is crucial to remember, as has already been pointed out by Mills above, that traditional ecological knowledge is always already rooted within a legal order. Unfortunately, the inclusion of traditional ecological knowledge in state dialogue often functions more as a political tool to quieten and co-opt opposition and to silo and bracket out Indigenous knowledge, rather than representing good-faith attempts at cultural learning and reconciliation between Indigenous peoples and newcomers, and humans and the earth.[73] James Tully argues that, ironically, the exclusion of an honest engagement with the specific ways of becoming with the earth – which are glossed by the state as 'traditional ecological knowledge' – from treaty relations fundamentally undermines the possibilities for the dual reconciliation he sets out as necessary.[74]

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68 B. Latour, 'Whose Cosmos, Which Cosmopolitics? Comments on the Peace Terms of Ulrich Beck' (2004) 10(3) *Common Knowledge*, pp. 450–62.

69 I. Stengers, 'The Cosmopolitical Proposal', in B. Latour & P. Weibel (eds), *Making Things Public: Atmospheres of Democracy* (The MIT Press, 2005), pp. 994–1003.

70 M. Blaser, 'Is Another Cosmopolitics Possible?' (2016) 31(4) *Cultural Anthropology*, pp. 545–70.

71 L. Little Bear, 'Traditional Knowledge and Humanities: A Perspective by a Blackfoot' (2012) 39(4) *Journal of Chinese Philosophy*, pp. 518–27.

72 See G. Teubner & P. Korth, 'Two Kinds of Legal Pluralism: Collision of Transnational Regimes in the Double Fragmentation of World Society', in M. Young (ed.), *Regime Interaction in International Law: Facing Fragmentation* (Cambridge University Press, 2010), pp. 23–54.

73 J. Tully, 'Reconciliation Here on Earth', in M. Asch, J. Borrows & J. Tully (eds), *Resurgence and Reconciliation: Indigenous-Settler Relations and Earth Teachings* (University of Toronto Press, 2018), pp. 83–130.

74 Ibid.

Of course, the legal relationship between the settler population and those colonized is as old as colonization itself.[75] Before the development of the legislation discussed above, there were attempts to slowly return to the nation-to-nation relationship that is reflected in treaties, at least ideally and aspirationally. In so doing, contemporary state governments have been forced to account for alterity in the manner in which they might engage with the natural world. In particular, colonial states have come to require consultation with, if not obtain the consent of Indigenous peoples in the environmental governance of their territories, often by reference to what is framed as traditional ecological knowledge.[76] However, such consultation has frequently been perfunctory, and more often than not the ecological knowledge of Indigenous peoples is accepted only when framed as an archive that is consistent with scientific knowledge. This, unsurprisingly, has attracted significant criticism from Indigenous scholars.[77] Rather than focusing on participation in the relationality that is at the centre of living well, as described in many Indigenous expressions of traditional ecological knowledge,[78] the legal adjudication in these areas, unsurprisingly, centres on the power of states over Indigenous peoples, and their lands.

There are many reasons – including colonial power, capital, resource and land conflict, and the dynamics of racism and hegemony – that explain why the lifeways of those who know the land best have never truly penetrated, or productively reshaped, larger settler-society, state, or global narratives. However, one crucial factor, on which we focus in this article, is the *metaphysical elements* at stake (to use the language of the Whanganui River case). More often than not, as Potawatomi scholar Kyle Whyte observes, traditional ecological knowledge is seen as a 'competing authority with science, creating divisions between Indigenous expert authorities and scientific expert authorities'.[79] The fact that western scientists increasingly recognize the truth of Indigenous ecological knowledge[80] has only entrenched the perception of it as a form of western science done outside the lab, unsanctioned by the Academy, rather than freeing it from this kind of reification into a form of technical ecological knowledge.[81] There have been encouraging developments of what Andrea Reid and co-authors call 'an ethic of knowledge coexistence and complementarity in knowledge generation' between Indigenous and mainstream knowledge.[82] This has been called the 'two-eyed

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[75] See J. Borrows & M. Coyle (eds), *The Right Relationship: Reimagining the Implementation of Historical Treaties* (University of Toronto Press, 2017).

[76] P. Nadasdy, 'The Politics of TEK: Power and the "Integration" of Knowledge' (1999) 36(1–2) *Arctic Anthropology*, pp. 1–18.

[77] For a thorough treatment see K. Whyte, 'On the Role of Traditional Ecological Knowledge as a Collaborative Concept: A Philosophical Study' (2013) 2(7) *Ecological Processes*, pp. 1–12.

[78] D. McGregor, 'Traditional Ecological Knowledge and Sustainable Development: Towards Coexistence', in M. Blaser, H. Feit & G. McRae (eds), *In the Way of Development: Indigenous Peoples, Life Projects and Globalization* (Zed Books, 2004), pp. 72–91.

[79] Whyte, n. 77 above, p. 2.

[80] E. Weatherhead, S. Gearheard & R. Barry, 'Changes in Weather Persistence: Insight from Inuit Knowledge' (2010) 20(3) *Global Environmental Change*, pp. 523–8.

[81] P. Nadasdy, 'The Anti-Politics of TEK: The Institutionalization of Comanagement Discourse and Practice' (2005) 47(2) *Anthropologica*, pp. 215–32.

[82] A.J. Reid et al., '"Two-Eyed Seeing": An Indigenous Framework to Transform Fisheries Research and Management' (2020) 21(5) *Fish and Fisheries*, pp. 1–19, at 1.

seeing' framework, as developed by Mi'kmaw Elder Dr Albert Marshall. However, so-called traditional ecological knowledge cannot be wrest from the cosmological mesh of which it is part, or from the ontological underpinnings of which it is an expression. As Mills argues, this is equally true of law.[83] There continue to be peoples who operate outside the OWW who are legally carrying on governing their worlds otherwise. However, the state remains, as anthropologist Elizabeth Povinelli has described it, the 'cultural organization of Western disbelief'.[84]

5. STUMBLING BLOCKS FOR THE (SOUL) BLIND

Although the metaphysical gestures encoded in rights of nature legislation certainly represent victories, and have been recognized as such, we argue that they constitute an incomplete attempt at enabling an ontological turning and may be an ill-fated experiment in finding the edges of the naturalist cage.[85] This is particularly evident in rights of nature discourse which seems to argue for the construction of juridical persons bereft of what anthropologist Eduardo Kohn calls a 'self',[86] fundamentally misapprehending the kinds of person with whom Indigenous peoples interact.[87] In recent decades we have witnessed attempts to shift away from a speciesist and reductionist model of extending legal consideration beyond the human. As far back as 30 years ago, Jennifer Nedelsky observed that the white European male property owner has been the paradigm case of 'the human',[88] and it is this yardstick that has been used to serve as the standard for animal rights.[89] This ethnocentric notion of personhood has been argued to be insufficient for achieving earth-sustaining ecological protection, as are anthropocentric notions of ecosystem 'services'[90] or a 'human right to a healthy environment'.[91] Not only have rights of nature attempts been insufficient in terms of their environmental purpose, but arguably also with regard to ontological openness to the forms of rooted and Indigenous law, praxis, and thinking, to which these recent innovations are indebted. As Anker states, these attempts too often involve only the 'temporary suspension of disbelief regarding the self-hood of non-humans'.[92] This is not the first time that western academic theory, and particularly western legal theory,

[83] Mills, n. 17 above.

[84] E. Povinelli, 'Do Rocks Listen? The Cultural Politics of Apprehending Australian Aboriginal Labor' (1995) 97(3) *American Anthropologist*, pp. 505–18, at 505, 506.

[85] Descola, n. 20 above, pp. 192–200.

[86] E. Kohn, *How Forests Think: Toward an Anthropology Beyond the Human* (University of California, 2013).

[87] N. Bird-David, '"Animism" Revisited: Personhood, Environment, and Relational Epistemology' (1999) 40(S1) *Current Anthropology*, pp. 67–91.

[88] J. Nedelsky, 'Law, Boundaries, and the Bounded Self' (1990) 30 *Representations*, pp. 162–89.

[89] M. Bekoff, *Minding Animals: Awareness, Emotions, and Heart* (Oxford University Press, 2002).

[90] V. de Lucia, 'Competing Narratives and Complex Genealogies: The Ecosystem Approach in International Environmental Law' (2015) 27(1) *Journal of Environmental Law*, pp. 91–117.

[91] A. Grear, 'Human Rights and the Environment: A Tale of Ambivalence and Hope', in D. Fisher (ed.), *Research Handbook on Fundamental Concepts of Environmental Law* (Edward Elgar, 2016), pp. 146–67.

[92] Anker, n. 27 above, p. 207.

has owed such a great debt of influence.[93] However, there remain significant challenges, and genuine pitfalls, to the project of its ongoing ontological receptivity.

Although our legal regimes in theory have allowed subjugated human beings to become *post*colonial with some semblance of legal empowerment, decolonization scholars Eve Tuck and K. Wayne Yang have observed that 'land, water, air, animals, and plants are never able to become postcolonial; they remain objects to be exploited by the empowered postcolonial subject'.[94] These 'objects' remain enframed by the colonial ontological occupation and do not regain the relationality and subjecthood of which they were robbed. Humans may be allowed to enter into the polis, but their ontology must be checked at the door.[95] In this way, as Escobar asks, '[d]espite their efforts, do the recent tendencies continue to uphold in some fashion an intramodern (largely Euro-American) understanding of the world (as decolonial theorists might argue)? Do they continue to function within a much-renewed, but still primarily Western/modern, episteme?'[96] Indeed, the western mould of a singular unit of personhood, with its boundedness within an 'individual' body, does not hold up cross-culturally, or cross-ontologically. An example is found in the ethnographic work of Marilyn Strathern who has shown that in Melanesian societies personhood is forged by the praxis of relations, rather than taxonomically preceding them.[97] Strathern has emphasized that these forms of relation cannot be recognized by modern legal conceptions of the self.[98] The notion of a fixed and sustainable personhood is also cast in doubt by the ethnographic record, attested to by the anxieties of many hunting peoples who must 'become-animal', with the ever-present fear of never returning.[99] In legal terms, perhaps we should heed that anxiety, understanding that the solidification of the concept of personhood may not be a task that can, or should, be finally enclosed or judicially settled, because as Iván Vargas-Roncancio aptly summarizes, 'life constantly exceeds the purview of the law, as well as its person-making machine'.[100] This potentially paralyzing fact – which exposes an equivocation at the basis of the rights of nature discussion – presents an opportunity to question the fundamental concepts utilized by Euro-American legal regimes.

Further, rights of nature might constitute a form of hemming in, of ontological control, rather than openness – what Mills calls 'constitutional capture'.[101] In this way rights of nature may be the most recent form in the long history of 'predatory legality',

[93] D. Graeber, *Possibilities: Essays on Hierarchy, Rebellion, and Desire* (AK Press, 2007).

[94] E. Tuck & K.W. Yang, 'Decolonization is not a Metaphor' (2012) 1(1) *Decolonization: Indigeneity, Education and Society*, pp. 1–40, at 19.

[95] See Blaser, n. 61 above.

[96] A. Escobar, *Designs for the Pluriverse* (Duke University Press, 2018), p. 97.

[97] M. Strathern, *The Gender of the Gift: Problems with Women and Problems with Society in Melanesia* (University of California Press, 1988), p. 13.

[98] M. Strathern, *Kinship, Law and the Unexpected: Relatives Are Always a Surprise* (Cambridge University Press, 2005), p. 13.

[99] See R. Willerslev, *Soul Hunters: Hunting, Animism, and Personhood among the Siberian Yukaghirs* (University of California Press, 2007).

[100] I. Vargas-Roncancio, 'Forest on Trial: Towards a Relational Theory of Legal Agency for Transitions into the Ecozoic', in C.J. Orr, K. Kish & B. Jennings (eds), *Liberty and the Ecological Crisis: Freedom on a Finite Planet* (Routledge, 2020), pp. 239–55, at 249.

[101] Mills, n. 17 above.

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which 'has subordinated customary law' through the imposition of western law on local systems at the time of colonial conquest.[102] Knowledge of the colonized is cannibalized by the more dominant knowledge system, and therefore frame, of the colonizer: '[w]here legality difference obtains, translation across constitutional orders reconstitutes law within the logic and structure of the constitutional order it's translated into'.[103] When the incommensurable gap between different forms of law, and the life-worlds that underlie them, is collapsed, one is yielded to the power of the other.[104] This may be a hard pill to swallow. However, Vermeylen disagrees and holds out a potentially hopeful possibility. She writes that 'there cannot be an accurate translation or legal transplant of foreign law. Translation cannot therefore erase difference; on the contrary, it intensifies it'.[105] Although here she agrees with Mills and Borrows, she offers a phraseology that might provide resistance to constitutional capture and allow for the retaining of integrity in what Mills calls 'rooted' legal orders.[106]

It is understandable that the legal discipline has been slow to take seriously this problem of translation and ontological plurality. The discipline of anthropology – which traditionally has been tasked with, and delimited to, the study of stunning human variety – itself has taken many decades to challenge and begin to overcome its own positivist reinterpretations, wilful mistranslations, and colonial condescension to embrace questions of political ontology. It has attempted to make up for its 'indiscretions', striving to follow Stuart McLean's disciplinary entreaty to 'be willing to engage its informants as fully fledged intellectual interlocutors and potential co-producers and to enter into dialogue with, rather than seeking to explain away, the ontological and metaphysical claims that they put forward'.[107] It is the taking 'seriously' of these metaphysical claims that lies at the heart of the legal ontological turn we seek to encourage. To avoid the capturing, misinterpretation, and subjugation of the legal orders and lifeways of Indigenous peoples who do not suffer from the kind of 'soul blindness' that philosopher Stanley Cavell[108] has described, and which Kohn has extended beyond the circle of humanity,[109] we must push the thrust that resulted in the rights of nature further, to potentially its logical conclusion.

6. STEPS TOWARDS A LEGAL ONTOLOGICAL TURN

The social category of the law has certainly been one of the chief architectural elements of the continuation, extension, and defence of the OWW. This universal conception of reality produces and is undergirded by a universal conception of law to match. Here we

[102] S. Vermeylen, 'Comparative Environmental Law and Orientalism' (2015) 24(3) *Review of European, Comparative and International Environmental Law*, pp. 304–17, at 310.

[103] Mills, n. 17 above, p. 271.

[104] Borrows, n. 21 above.

[105] Vermeylen, n. 102 above, pp. 309–10.

[106] Mills, n. 17 above.

[107] S. McLean, 'Stories and Cosmogonies: Imagining Creativity Beyond "Nature" and "Culture"' (2009) 24(2) *Cultural Anthropology*, pp. 213–45.

[108] S. Cavell, *Philosophy and Animal Life* (Columbia University Press, 2008).

[109] Kohn, n. 86 above.

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can see how, as Borrows writes, the 'law's dubious metaphysics … channels (erroneous) assumptions about the nature of life itself'.[110] It channels it by its continuing *performance* of the world, setting that world in motion by sentences (both linguistic and juridical) that are performed by speech and associated acts. Without such reflexivity, a society's legal order not only operates upon its metaphysical assumptions and in its work, but also continues to solidify them. Law is something that is *practised*,[111] and that is continually reordering the world and itself through its interpretations and solidifications, reinscribing the OWW in its everyday praxis. However, is this very distinction between law and metaphysics not also provincial to the OWW? Is not the stable material reality to which law adheres, and on which it adjudicates, not itself the very focus of our criticism? As Mills notes, the 'lawscapes'[112] of many peoples, Indigenous peoples chief among them, do not accommodate these, to them, artificial distinctions, this separation between law, lifeway, and cosmology.[113]

Martin Holbraad and Morten Axel Pederson, who were the initiators of the 'ontological turn' within anthropology, have termed this approach, with a somewhat critical tone, 'alternative ontology'.[114] This perspective is premised on reconsidering the larger and far more fraught question of the relationship between, in this case, law and lifeway. The very fact that any other way of life and law is framed as an 'alternative' only further reifies and performs the dominant position of the OWW.[115] This need for a 'conceptual innovation in the service of an ontological regime-change'[116] is pressed upon us particularly by the ontological openings we have been exploring within environmental law. This kind of reflexivity would enable ecological jurisprudence to participate fully in 'a politics of worlding, that is, a politics concerned with the processes through which a world is being brought into existence'.[117] One of the central assumptions and stumbling blocks of western-descended legal orders when considering environmental issues is the question of correspondence and communication with the more-than-human world. We examine in the following section the possible implications of questioning this logocentrism for environmental law more broadly.

7. MUST THE NATURAL SPEAK? ON MORE-THAN-HUMAN LEGIBILITY

Western-descended legal systems comprise language, enacted and performed through the legal system, with the assumed muteness of the natural world, rendering it incapable

[110] Borrows, n. 21 above, p. 32.

[111] See R. Charnock, 'Overruling as a Speech Act: Performativity and Normative Discourse' (2009) 41(3) *Journal of Pragmatics*, pp. 401–26.

[112] N. Graham, *Lawscape: Property, Environment, Law* (Routledge, 2011).

[113] Mills, n. 24 above.

[114] M. Holbraad & M.A. Pederson, *The Ontological Turn: An Anthropological Exposition* (Cambridge University Press 2017), p. 46.

[115] J.K. Gibson-Graham, 'Diverse Economies: Performative Practices for Other Worlds' (2008) 32(5) *Progress in Human Geography*, pp. 613–32.

[116] Holbraad & Pederson, n. 114 above, p. 48.

[117] Blaser, n. 70 above, p. 552.

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of participation. Our legal order and methodology is perhaps one of our culture's most profound expressions of our fundamental logocentrism, our deeply held ontological position that considers words and language as being a fundamental expression of external reality. Environmental, ecological and wild law are pressed to use a form of ventriloquism to represent the more-than-human and their purported desires, complaints, damages, cases, and so on.[118]

Though a jury box full of mammals, amphibians, birds, and reptiles might seem fanciful to some,[119] there are already ways in which nature appears in court. For example, as John Law notes, we think of nature engaging in a form of 'speaking' through scientific papers.[120] Many have echoed Latour's suggestion to create more speech prosthetics for, among other things, non-human animals, consisting of 'millions of subtle mechanisms capable of adding new voices to the chorus'.[121] Further, science has taught us how to listen to plants, which might well be listening back to us.[122] However, these developments are not enough. As Vargas-Roncancio astutely summarizes, although the 'law is almost exclusively conceived as a lettered practice', it is important to reach beyond letters, asking '[c]an the plant speak law? Does the forest always need the mediation of the botanist, for example, in a court of law?'[123] Indeed, it is likely that our much impoverished sense of both the sensibility and languages of non-humans, and particularly plants, means that we can barely conceive of a law carried out otherwise.[124] To broaden what might be thought of as the natural world communicating, and to further her ontological push, Vermeylen uses a variety of tools from the kit of posthumanism to examine how the more-than-human world is brimming with signification.[125] For example, she draws on Michel Serres' *The Natural Contract* in which he argues that the expressions of the variety of natural laws of which the earth is composed, and to which it must operate, is sufficient for contractually interacting with it.[126] This is a similar point relied upon in earth jurisprudence theory, in which these fundamental laws or principles that govern how the universe functions are referred to as the 'Great Law' or 'Great Jurisprudence', the ultimate frame to which we must adjust in order to regulate our societies.[127] This form of bio-legal mimicry is also espoused, as we discussed above, by Ruhl[128] and

[118] Vermeylen, n. 15 above.

[119] D. Orr, 'The Trial' (2006) 20(6) *Conservation Biology*, pp. 1570–73.

[120] Law, n. 9 above.

[121] B. Latour, *Politics of Nature: How to Bring the Sciences into Democracy* (Harvard University Press, 2004), p. 69.

[122] M. Gagliano et al., 'Experience Teaches Plants to Learn Faster and Forget Slower in Environments Where It Matters' (2014) 175(1) *Oecologia*, pp. 63–72.

[123] Vargas-Roncancio, n. 100 above, p. 251.

[124] N. Myers, 'How to Grow Liveable Worlds: Ten (Not-So-Easy) Steps for Life in the Planthroposcene', *ABC Religion & Ethics*, 7 Jan. 2021, available at: https://www.abc.net.au/religion/natasha-myers-how-to-grow-liveable-worlds:-ten-not-so-easy-step/11906548.

[125] Vermeylen, n. 15 above, p. 141.

[126] M. Serres, *The Natural Contract* (University of Michigan Press, 1995).

[127] T. Berry, *The Great Work: Our Way into the Future* (Bell Tower, 1999); P. Burdon, 'A Theory of Earth Jurisprudence' (2012) 37 *Australian Journal of Legal Philosophy*, pp. 28–60; Cullinen, n. 58 above.

[128] Ruhl, n. 53 above.

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Karkkainen,[129] but does not completely depart from traditional western science and its undergirding epistemology. As legal scholar Kirsten Anker has underlined, this kind of updated form of natural law, taken in its dual meanings, 'does not destabilise the dualisms between culture and nature, and mind and matter, that constitute disenchantment, if these entities are not considered to be genuine actors'.[130]

Taking cues from this critique, Vermeylen further develops her argument, drawing on the work of Jesper Hoffmeyer[131] and Eduardo Kohn[132] among others, who have shown that the natural world is not only a web of signification, but that semiosis is actually constitutive of it (and therefore us), both individually and evolutionarily. That is to say that the web of relations that makes up the more-than-human world is made up of threads of semiosis. Although symbolic communication may be purely the province of human beings (though this view, too, is not cross-culturally held, as Kohn is clear to specify), forms of communication based upon iconicity and indexicality are present throughout the animal world, and perhaps beyond it. The very symbolic thought, the 'arbitrary' language that makes up our logocentric legal orders is in actuality an emergent property of this larger, and older, semiotic field. This means that the human speech acts that have enabled non-human nature into being rights-bearing, into participation in our legal order, emerge, in the technical sense, from our always-already enmeshment in the more-than-human world. Now that we know that forests think, to draw on Kohn's title, and how they think (at least to some small degree), the question that remains is *what* they think. If we are to treat Pachamama, the metaphysical elements of the Whanganui River, or non-human agency in general seriously, rather than as mere metaphor or a useful legal fiction to gain a form of standing, the following questions emerge front and centre. How do we receive signals from these metaphysical agents? How might we consult the beings that populate the more-than-human world? This question goes to the heart of a split that ran through continental philosophy and semiotics in the 20th century regarding the distinction between signs that are expressive and those that are indicative.[133] This refers to the distinction between signs that are *meant* to communicate something, which have intention infused into them, and those that merely indicate something to an observer without dint of purpose. This distinction is significant because the type of environmental law that is laid out by those who rely on a scientific description of nature results in a kind of indicative legal order only, bracketing out the expressive nature attested to by many Indigenous, and particularly animist, peoples. It may certainly be that their forms of relations and the phenomenological experiences on which they rest are not scalable either in population and geographic

[129] Karkkainen, n. 54 above.

[130] Anker, n. 27 above, p. 194.

[131] J. Hoffmeyer, *Biosemiotics: An Examination into the Signs of Life and the Life of Signs* (University of Scranton Press, 2008).

[132] Kohn, n. 86 above.

[133] See J. Derrida, *Speech and Phenomena: And Other Essays on Husserl's Theory of Signs* (Northwestern University Press, 1973).

size,[134] or in a short time frame.[135] This presents, we certainly concede, significant challenges to the enactment of our proposal.

It is the more radical point of departure (to the northern, or western lawyer), which sees nature as providing expressive legal signification, from which we draw inspiration, and it is for this reason that our aim is to go further than the horizon of our own cosmology. There are people throughout the world who have no doubt about the expressive capacities of non-humans. As Paul Nadasdy writes, the Kluane First Nation, and northern Indigenous societies more generally, maintain that non-humans 'do not require the help of human "enablers" to communicate their needs or facilitate their participation in politics. These sentient and spiritually powerful beings are perfectly capable of protecting their own interests and communicating their needs and desires directly to humans'.[136] Questions therefore arise regarding how such cosmologies, which express the relational ways of peoples who interact with a not only living but also agential world, might interrelate in a generative manner with the western legal order. What might be the implications of living in a world which not only speaks but *listens*, as do Indigenous Australians[137] or the Indigenous peoples of the Saint Elias Mountains?[138] If what is cast in the modern cosmology as objects or topography, such as rocks and glaciers in the respective cases above, is forever attentive to our human speech with its own legal consequences being meted out when laws and forms of reciprocity are neglected or disrespected, how might our entire legal edifice change? Tully draws on systems science and the new ecology to push further, writing that we must learn dually from non-human nations, and from those who already know how to live among them.[139] Cultures that already live in this way have developed their own legal regimes, modes of relationality, and technologies of communication, befitting this world.

8. WHAT COUNTS AS LAW, AND ON WHAT (AND WHOSE) GROUNDS?

How might encounters with these legal notions and methodologies, usually constrained within the disciplinary silo of legal anthropology or Indigenous studies, productively reshape western approaches to the legal? In a way this article seeks to breathe life into the legal anthropological record and analysis, to bring it more fully into discussion with the work done in critical ecological jurisprudence. We aim to transgress the bounds of orthodox comparative law, which sees law as a 'positivistic

[134] N. Bird-David, 'Size Matters! The Scalability of Modern Hunter-Gatherer Animism' (2018) 464 *Quaternary International*, pp. 305–14.

[135] K. Whyte, 'Too Late for Indigenous Climate Justice: Ecological and Relational Tipping Points' (2019) 11(1) *WIREs: Climate Change* online articles, pp. 1–7, available at: https://onlinelibrary.wiley.com/doi/abs/10.1002/wcc.603.

[136] P. Nadasdy, 'First Nations, Citizenship and Animals, or Why Northern Indigenous People Might Not Want to Live in Zoopolis' (2016) 49(1) *Canadian Journal of Political Science*, pp.1–20, at 7.

[137] Povinelli, n. 84 above.

[138] J. Cruikshank, *Do Glaciers Listen: Local Knowledge, Colonial Encounters, and Social Imagination* (UBC Press, 2005).

[139] Tully, n. 73 above.

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"science"'.[140] The fundamentally differing ontological possibilities for law for which we are arguing here have structural consequences for 'what counts' as law. Mills highlights this structural difference by stating that when we 'witness ceremony, story-telling, or drumming, it may be that the work of law and governance is being enacted'.[141]

Increasingly, within the Canadian colonial context, for example, the work of dedicated Indigenous legal scholars such as Val Napoleon and John Borrows have been working to articulate, recover, and revitalize Indigenous legal orders and methods.[142] This reconstruction and resurgence is necessary as a result of ongoing colonization and a commitment to decolonization, both to 'gather the threads' of what has been lost, and to use this methodology and legal tapestry to govern the lives of Indigenous peoples who seek to continue their own ways of living and legislating. In addition, Indigenous legal orders have been articulated in ways that are more accessible to settler populations and scholarship, thereby creating opportunities for translation and cosmopolitics in ways seemingly unavailable before. As Mills states, while decolonization does not automatically revitalize Indigenous traditions, it is not a prerequisite for such revitalization.[143] The resurgence of Indigenous legal orders can happen *in spite* of the colonial state, he argues. However, land 'dispossession' of Indigenous peoples is forced disconnection and deracination, with Mills writing that what has been taken from Indigenous peoples is 'the freedom to live our kinship with earth'.[144] It is this kinship that is the source of legality, and thus land dispossession is *also* not only social but legal dispossession in a much broader and inclusive sense. For many of the peoples from which the ontological turn draws, law comes not from the human political order, or its institutions, but from a place ontologically deeper still, resident and expressed through the land, its inhabitants, and their relations.[145] In a sense, then, kinship rather than personhood is an appropriate place to begin to reformulate legal praxis[146] in line with a more radical ecological law with which we have been engaging in this article.

There are, of course, dangers in this process of revitalization, one of which is the possibility of 'remaining at the level of broad generalities that can flatten the complexity of these traditions into oversimplified or pan-Indigenous stereotypes that are impossible to imagine applying to concrete issues'.[147] The rights of nature discourse in broader terms is at risk of this in that it often implies a unified ontology – a generalizable form of new legal thinking, which does not take into account the potential radical alterity at the heart of the different particularities, histories, beings, ontologies and so forth of each

[140] Vermeylen, n. 102 above, p. 305.

[141] Mills, n. 17 above, p. 271.

[142] H. Friedland & V. Napoleon, 'Gathering the Threads: Developing a Methodology for Researching and Rebuilding Indigenous Legal Traditions' (2015) 1(1) *Lakehead Law Journal*, pp. 16–44; Borrows, n. 21 above.

[143] Mills, n. 17 above.

[144] Ibid.

[145] See Vargas-Roncancio, n. 100 above.

[146] K. Whyte, 'Indigenous Environmental Justice: Anti-Colonial Action through Kinship', in B. Coolsaet (ed.), *Environmental Justice: Key Issues* (Routledge, 2020), pp. 266–78.

[147] Friedland & Napoleon, n. 142 above, p. 27.

case to which it is applied. The legal orders of 'rooted' peoples are not different in degree but in *kind* from the liberal western style that governs the world's states.[148] Certainly, legal pluralism has made great strides in reconciling various legal orders in the etymological terms of restoring friendly relations between differing legal approaches and systems. However, the inherently fraught relations between 'rooted' and liberal legal orders may be beyond the purview of a workable legal pluralism. We are certainly not arguing for the early cultural relativist mistake of construing cultures as bounded and separable objects; however, the amicable settling of disagreements between incongruous modes may be precluded in cases where the underlying ontologies, epistemologies, and cosmologies are potentially fundamentally incompatible, posing a foundational problem for legal pluralism. So how do we address such questions as scholars? Having covered the various avenues, possibilities, incipient realities of, and potential for renewed attention to ontological thinking in environmental law, we turn now to suggestions for a continuing research agenda.

9. BEYOND LEGAL PLURALISM: SIGNPOSTS FOR A RESEARCH AGENDA

Although legal pluralism is an established concept, how might the law be able to deal with this more fundamental form of pluralism, this 'challenge that goes well beyond an ordinary acceptance of the coexistence of different legal regimes'?[149] The notion of a plurality of worlds poses distinct challenges to legal thinking. If we do indeed live in different worlds, how can we deal with the incommensurabilities and contradictions between them? How can we communicate and potentially arbitrate across not just cultures but worlds? Can worlds be cross-accessible to people and the law? Is there space in this kind of theoretical structure for falsification, for certain worlds to be inadmissible, not only because they are bent on domination but because they are wrong (both morally and factually), as suggested by the Zapatistas who first articulated these questions?[150] In a 'world of many worlds'[151] how might we even be able to claim what is just? These questions quite reasonably might engender some hand-wringing. After all, law's practice in many ways is the process of adjudication and interpretation: its function is to come to a solution, a *correct* interpretation, at least provisionally.

We might see that this radically plural framing necessitates an inherent banishment of a kind of provincialism that is not only cultural but metaphysical (unless, that is, the utilized term of 'worlds' is not ontologically intended). Perhaps the concept of the pluriverse, as it has come to be known, might be seen as committing ourselves to a sort of tautological position of internal world-reckoning, a solipsism that is at odds with the

[148] Mills, n. 17 above, p. 69.

[149] Vermeylen, n. 102 above, p. 310.

[150] Subcomandante Insurgente Marcos, Indigenous Clandestine Revolutionary Committee General Command of the Zapatista Army of National Liberation Mexico, 'Fourth Declaration of the Lacandon Jungle', 1 Jan. 1996.

[151] M. Cadena & M. Blaser (eds), *A World of Many Worlds* (Duke University Press, 2018).

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solidarity and pluralism necessitated by the global ecological crisis. It could be interpreted as committing ourselves to a future in which we are utterly paralyzed by this kind of confusing and intractable multiplicity. Surely there is some manner in which we can navigate this theoretical nexus without falling subject to the allure of hard relativism, which is a danger both for metaphysics and legal theory? However, the answer is not to be found in this article.[152] Anthropologist Eduardo Viveiros de Castro has emphasized that modern thought has resulted in a 'massive conversion of ontological into epistemological questions (questions of representation)'.[153] In the wake of this fact, if we are truly to achieve mutually life-enhancing legalities while appreciating and revering the alterity and independence of Indigenous legal orders, then we must remain conscious of this dynamic. This requires us to resist the propensity of current legal thinking to rephrase questions concerning the multiplicity of worlds as those interrogating differing cultural views, representations, and constructions of a singular world, which further ratify these conversions of modern thought.

While conscious of the difficulties of cross-ontological comparison and engagement, it is our hope that in our best moments of comparative work[154] we might be able to glean something that contributes towards a model for the transformation of our own ecological governance systems; towards the kind of 'rooted' law of which Mills writes.[155] The question of the origin and horizon, of the original 'deracination' of our legalities will not be arbitrated here, although our departure from the land-as-law certainly goes back further than Enlightenment-descended legal positivism. However, what this does mean is that the lineages and genealogies of western legal orders are complex, and ancient seeds of rooted legal orders resident within them might still bear fruit. This kind of legal archaeology would be, and already is, a productive area of research.[156]

As the reader no doubt will have discerned, our view is that the most productive comparative partner for western environmental legal thinking has been Indigenous peoples.[157] The 'ecological logic' aspirationally referred to in the work of 'new ecologists' already has its antecedents not only in Indigenous understandings of ecology but, crucially, also within their systems of law. As Mills has pointed out, however, the 'rooted constitutionalism' of Indigenous peoples in North America is based upon a lifeway that is ontologically distinct from that of western liberal states for reasons outlined above, precluding workable legal pluralism between them. For example, despite how

[152] A potential means forward might be found in the work of Mario Blaser; see M. Blaser, 'Doing and Undoing Caribou/Atiku: Diffractive and Divergent Multiplicities and their Cosmopolitical Orientations' (2018) 1(1) *Tapuya: Latin American Science, Technology and Society*, pp. 47–64.

[153] E.V. de Castro, 'Exchanging Perspectives: The Transformation of Objects into Subjects in Amerindian Ontologies' (2004) 10(3) *Common Knowledge*, pp. 463–84, at 483.

[154] Vermeylen, n. 102 above.

[155] Mills, n. 24 above.

[156] D. Grinlinton & P. Taylor (eds), *Property Rights and Sustainability; Evolution of Property Rights to Meet Ecological Challenges* (Martinus Nijhoff, 2011).

[157] For an examination of the risks of ongoing colonialism and reliance on tokenistic and archetypal characterizations of indigenous ecological relationships in the development of ecological law see K. Anker, 'Ecological Jurisprudence and Indigenous Relational Ontologies beyond the "Ecological Indian"?', in K. Anker et al. (eds), *From Environmental to Ecological Law* (Routledge, 2020), pp. 104–18.

far the Ecuadorian Constitution has come – and it certainly has been a major step forward – it still reproduces the language, and therefore the enforced reality, of an OWW in its section providing for the rights of nature (see Chapter 7, Articles 71 and 72). It may be possible, and aspirational, to consider it a site of generative friction, of competing cosmologies. However, as cases concerning extractivism in Ecuador have demonstrated, the relationship of power remains weighted in the direction of liberal idealism and marketization, appearing to demonstrate Mill's fears of constitutional capture described above.[158]

It is for this reason that it is crucial to underline that, methodologically, any attempt to undertake research in the legal ontological space should of necessity be carried out along decolonizing lines.[159] Our purpose here is not to argue for the pilfering of Indigenous legal orders or cosmologies, which would be yet one more form of extraction and colonialism. As Métis anthropologist Zoe Todd argues in her oft-cited paper concerning the ontological turn, the entire theoretical move largely draws upon, and rarely acknowledges, 'Indigenous articulations and intellectual labor', which often amounts to 'just another word for colonialism'.[160] Indeed, it is important to recognize here that it is neither the responsibility nor, some would argue, the concern of Indigenous peoples whether or not settler and western populations can achieve some level of sustainability or legal order that truly accounts for the living.[161] Rather, confronting questions of law and ontology requires us as researchers to fundamentally question the legitimacy of colonial and state power and authority as the source of law.[162] Law conducive to a 'future that has a future'[163] cannot be achieved by 'statecraft' alone[164] and a strong commitment to bottom-up transformation is necessary, with this bottom being the very ground itself. As Eva Lövbrand and co-authors state, the 'fundamental challenges to societal organization posed by the Anthropocene are, paradoxically, to be countered by many of the same institutions that have allowed the recent human conquest of the natural world'.[165] Top-down approaches to law will not result in the transformational change that is required but will rather continue to bolster existing political and corporate power committed to economic growth.[166]

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158 J. Llangari, 'Ecuador Begins Large-scale Mining at Mirador Copper Project', *Reuters*, 19 July 2019, available at: https://www.reuters.com/article/us-ecuador-mining/ecuador-begins-large-scale-mining-at-mirador-copper-project-idUSKCN1UD36F.

159 L. Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 2nd edn (Zed Books, 2019).

160 Z. Todd, 'An Indigenous Feminist's Take on the Ontological Turn: "Ontology" Is Just Another Word for Colonialism' (2016) 29(1) *Journal of Historical Sociology*, pp. 4–22, at 9.

161 See K. Whyte, C. Caldwell & M. Schaefer, 'Indigenous Lessons about Sustainability Are Not Just for "All Humanity"', in J. Sze (ed.), *Sustainability: Approaches to Environmental Justice and Social Power* (New York University Press, 2019), pp. 149–79.

162 Borrows, n. 21 above.

163 Escobar, n. 96 above, p. 9.

164 K. Morrow, 'Ecofeminist Approaches to the Construction of Knowledge and Coalition Building: Offering a Way Forward for International Environmental Law and Policy', in Philippopoulos-Mihalopoulos & Brooks, n. 11 above, pp. 289–315.

165 E. Lövbrand et al., 'Who Speaks for the Future of Earth? How Critical Social Science Can Extend the Conversation on the Anthropocene' (2015) 32 *Global Environmental Change*, pp. 211–18, at 214.

166 Alexander, n. 26 above.

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While certainly necessary for the creation of enabling conditions, top-down reform will fail to capture the very context-specific and local conditions necessary for the successful governance of complex socio-ecological systems.

Additionally, research in this space requires a commitment to place-based understandings that recognize the ways in which living in the world is context-specific. Vermeylen writes, for instance, that however much consideration of the ways in which Amazonian people live with the more-than-human world is productive and illuminating, such ways 'are context specific and therefore will not travel easily to a Western context'.[167] Nor, we add, will they necessarily travel to other ecological communities. The key here is the need to assert the subjectivity and significance of place and of ecology to counter narratives prevalent in law which continue to make 'natural resources' visible only as commensurable monetary objects, being otherwise invisible and without inherent agency.[168] This is another way of saying that for law to be life-sustaining, attention to *worldings* matters.

Finally, research that operates at the interface of complex systems, law and governance, social values, and onto-epistemics, further requires acknowledgement from us, as researchers, that our views are *perspectival*, and that full understanding will never be achieved. Uncertainty always remains inherent in complex systems. As Blaser points out, it is perhaps rather a question of understanding and accepting the limits of knowing itself (personal communication). He asks what might be 'good enough' in terms of knowledge in relation to the other to still function as a workable understanding so as to be able to conduct and continue a human and more-than human relationship. Interdisciplinary and especially transdisciplinary approaches will certainly assist in capturing a greater representation of such lifeworlds. However, methodologies are always constitutive of certain realities and their application will inevitably result in a loss of certain features of some lifeworlds. Aligning our own practices and experiences gives us an ontological window into the world, and while our lives carry on alongside one another, in *correspondence* with one another, these lives do not *see* the world differently, but live and enact different fractions of it.[169] Key to such research is a shared language that can communicate law and governance frameworks that are ecologically informed, support disciplinary and ontological fluidity,[170] all the while displacing the centrality of the dualist constitutive ontology of the OWW. Claims of researcher objectivity must, however, be rejected, as 'researchers' and participants' relative positions and standpoints [are] critical (rather than optional) elements of the research process'.[171]

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[167] Vermeylen, n. 15 above, p. 156.

[168] M. Davies, 'The Consciousness of Trees' (2015) 27(2) *Law & Literature*, pp. 217–35; Graham, n. 112 above.

[169] T. Ingold, 'One World Anthropology' (2018) 8(1/2) *HAU: Journal of Ethnographic Theory*, pp. 158–71.

[170] A. Philippopoulos-Mihalopoulos, *Absent Environments: Theorising Environmental Law and the City* (Routledge, 2007).

[171] E. Hordge-Freeman, '"Bringing Your Whole Self to Research": The Power of the Researcher's Body, Emotions, and Identities in Ethnography' (2018) 17(1) *International Journal of Qualitative Methods*, pp. 1–9, at 3.

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10. CONCLUSION: LEGALITIES AND THE LANDS FROM WHICH THEY COME

Environmental law has failed to curb the ever-worsening conditions of the relations between much (though not all) of humanity, and the remainder, and remaining, community of life. Whatever we might want to call this era, the systems that have been produced to counteract it have been found to be more than wanting because of the insufficiencies of their underlying system of thought. The present and worsening condition of socio-ecological systems demonstrates that human exceptionalism and liberal environmental management, which have resulted in our moment of crisis and continue to foster death, are in direct conflict with the 'ecological logic' that is necessary for sustaining not only human but all life. It is law that 'needs to be integrated into the logic of life, and not the other way around'.[172] This ongoing complex of crises compels us to examine the underlying ontological assumptions of environmental law and governance, and consider responses that recognize socio-ecological system diversity and flourishing. If we are to overcome the nature-culture dichotomy prevalent in law and governance, our understanding of ecology must necessarily be legal, just as our laws become ecological.[173] Failure to do this necessary work will not move law, as Escobar eloquently summarizes, 'beyond strategies that offer Anthropocene conditions as solutions'.[174]

This article has attempted to present interdisciplinary questions, provocations and insights to help to establish a path towards an ontologically plural legalism, and the kind of governance that this might imply. It has shown that the required transformative structural change within global and national governance systems requires more than merely increasing diversity and multiple perspectives, but further requires upending structures of power. Entirely new ways of conceiving of the world and our place within it are therefore urgently needed. Further research in this area, we suggest, should be alert to such questions of diversity, equity and power, and cognizant of either continuing the performance of the OWW or fundamentally challenging its reductionist ontology. We certainly hope Borrows is right when he states that '[l]aw is not impervious to metaphysical turns'.[175]

We have attempted to nurture the dialogue already ongoing worldwide in the aspiration of a multiplicity of earth-sustaining legal regimes that proceed from a radically different premise than our present regimes. This 'earthway praxis', as Mills describes it, is already being lived in many places and in many ways throughout the world, and has been enacted since time immemorial.[176] As Mills goes on to write, '[u]nequivocally indigenous peoples have been rooted constitutionalism's exemplars, but it's a kind of constitutionalism (and more generally, of legality) available to all'.[177] The

[172] Vargas-Roncancio n. 100 above, p. 246.
[173] Philippopoulos-Mihalopoulos, n. 6 above, p. 2.
[174] Escobar, n. 18 above, p. 15.
[175] Borrows, n. 21 above, p. 37.
[176] Mills, n. 17 above, p. 270.
[177] Ibid., p. 111.

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'legal ontological turn' is one proposal, and one approach, within a host of ongoing efforts to take up Mill's invitation to deracinated peoples. Indigenous scholar Kim TallBear has responded to this scholarly turn, stating that although it is fascinating, it 'may not be a sufficiently encouraging response in this moment of settler-colonial existential crisis. For those paying attention, Indigenous worldviews compel and edify'.[178] It is for this reason, among others, that we have tried throughout this article to write in conversation with the myriad coexistent approaches, decolonial and Indigenous, as well as ecological, and attempt to create connections and breathing room for more of this kind of thinking within the environmental law space.

While acknowledging that the ontological turn within anthropology has been far from bereft of criticism[179] for a variety of reasons – including that it is a method of inquiry that is produced by and provincial to the western philosophical tradition[180] – our goal here is to extend a modest invitation to bring its essential instruction to legal thinking, and to provoke legal thinkers to debate these ontological grounds in their own registers. We hope that this might foster openings in which environmental law might continue to be exposed to other ways of legally carrying on, beyond the exclusionary categories of nature and culture. Our aspiration is that this will allow the legal gaze to register that the land and the relations of all its beings constitute its very meshwork,[181] itself pregnant with legality. The habits of the land, its emergent properties and relationalities themselves are legal orders, legible in manners beyond the gaze of earth system sciences. We hope that this article functions as an invitation back to the legal counsel of the more-than-human, an invocation to end our legal order's more-than-juridical estrangement. More than being of service to the non-human world, more than building mutually enhancing relations or even conspiring with the beings beyond the human, the promise of this 'law beyond the human' is that it might lead us back to a relationship of nation to more-than-human-nation, learning law again from the land itself.

[178] K. TallBear, 'Science v. The Sacred, a Dead-end Settler Ontology: And Then What?', 28 Oct. 2020, available at: https://www.youtube.com/watch?v=DvpB_krTsik.

[179] See D. Graeber, 'Radical Alterity is Just Another Way of Saying "Reality"' (2015) 5(2) *HAU: Journal of Ethnographic Theory*, pp. 1–41; Todd, n. 160 above; H.E. Vigh & D.B. Sausdal, 'From Essence back to Existence: Anthropology beyond the Ontological Turn' (2014) 14(1) *Anthropological Theory*, pp. 49–73.

[180] W. Mignolo, *The Darker Side of Western Modernity: Global Futures, Decolonial Options* (Duke University Press, 2011).

[181] Davies, n. 168 above; Ingold, n. 31 above.

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