

‘Anthropocene, Capitalocene, Chthulucene’: Re-encountering Environmental Law and its ‘Subject’ with Haraway and New Materialism

This chapter brings together critical scholarship concerning environmental law and its subject with Haraway’s reflections on the ‘Anthropocene’, as well as insights from New Materialism, in order to trouble some counter-productive and eco-destructive assumptions haunting the ‘Anthropos’ of the ‘Anthropocene’. The author uses these reflections to suggest potential lines of thought for the re-imagination of environmental law’s ‘subjects’ and for moving beyond the trajectories and tropes underlying environmental law in its manifestation as an intensifying form of neoliberal governmentality.

Introduction

This chapter flirts with Donna Haraway’s framing of ‘Anthropocene, Capitalocene, Chthulucene’¹ in order to reflect upon environmental law and its assumed ‘subject’. The chapter uses the threefold ‘cene’ iteration of its title to develop a progressively deepening critique of the assumptions underlying environmental law and its subject, read—in significant part here—as the *Anthropos* of the Anthropocene trope. The chapter then moves on to reflect on new materialist provocations concerning the possibility of a new materialist environmental legal imaginary.

1. Haraway’s Framing: Three Stories

For Haraway, the Anthropocene, Capitalocene, Chthulucene are three framings of the contemporary epoch: ‘three stories that are too big, and also not big enough’.² The ‘Anthropocene’, as Haraway notes, is the current proposal put forward for naming the current epoch,³ though, as Haraway rightly argues, the epoch might better be named the ‘Capitalocene’. The Chthulucene, Haraway’s third (and countervailing) figuration, is inspired by altogether different energies and ways of seeing and being—and could, she argues, produce ‘something—just maybe—*more liveable*’.⁴

Haraway inaugurates her analysis by pointing to the intellectual revolution underway in the natural sciences—a revolution characterized by the convergence of two powerful understandings. The first understanding is that ‘individualism, methodological individualism and human exceptionalism’ are now ‘literally unthinkable’ for the most pioneering work conducted across the disciplines. The second is the insistence in the biological sciences that the ‘tissues of being anything at all’ are ineluctably caught up in a *multi-species becoming*—the long overdue recognition ‘that those who *are* have been in relationality all the way down’.⁵ How is it then, Haraway asks, that despite these two seismic shifts in intellectual and cultural understanding, the ‘Anthropocene’ is the name ‘seriously proposed’ as the name for the present epoch? Why is the naming of the age thus dominated by ‘the figure of the “Anthropos”’—the very figure whose individualism, methodological individualism and exceptionalism are now rendered so unthinkable?

2. Anthropocene: The Hierarchies of Anthropos

¹ See ‘Anthropocene, Capitalocene, Chthulucene: Staying with the Trouble’, a lecture given by Donna Haraway at University of California, Santa Cruz on 5th September 2014, available at <https://vimeo.com/97663518> (last accessed 18th September 2015).

² Haraway, n 1 above, at 00:18.

³ PJ Crutzen, ‘Geology of Mankind’ (2002) 23 *Nature* 415.

⁴ Haraway, n 1 above, at 01:05.

⁵ *Ibid*, 02:20.

Haraway sets out in response to her own question both to ‘justify’ and to ‘trouble’ the human centrality figured by the terminology of the Anthropocene.⁶

It is important to trouble this human centrality—and to trouble it, in part, for its failure to reflect the exclusions of the *Anthropos* itself. Crutzen’s famous 2002 popularization of Stoermer’s original Anthropocene terminology⁷ presents ‘mankind’ as a Promethean species agent whose impacts operate at global scales and lock the planetary future onto a trajectory for which ‘[t]he impact of current human activities is projected to last over very long periods’.⁸ Crutzen reasons that

[c]onsidering these and many other major and still growing impacts of human activities on earth and atmosphere, and at all, including global scales, it is thus more than appropriate to emphasise the central role of mankind in geology and ecology by using the term ‘Anthropocene’ for the current geological epoch.⁹

Crutzen’s account now represents the mainstream account of the Anthropocene’s emergence, and it is an account, arguably, that exposes the distinctively Eurocentric origins of the new geological era characterized by ‘large-scale human modification of the Earth System, primarily in the form of climate change, the most salient and perilous transgression of Holocene parameters’.¹⁰ Perhaps the naming of the ‘Anthropocene’ can be read as an admission, one marked by a problematic Eurocentric hubris, for *Anthropos* is an *intrinsically* Eurocentric, individualist and exceptionalist figuration.¹¹ Indeed, I have argued elsewhere that the terminology of the ‘Anthropocene’, circling as it does around the *Anthropos*, reflects the historically persistent centrality of a particular kind of ‘human’ rather than a species conception.¹²

The ‘Anthropocene’—for all its universalistic talk of ‘humankind’ and of the collective action of humanity the *species agent*—signals a planetary crisis triggered by logics of action reflecting the prioritization of a far smaller category of humankind than ‘humanity’ as a whole. It thus remains critically important to ask what exactly the ‘Anthropos’ of the ‘Anthropocene’ includes and excludes. What privileges and violations are masked or performed by such terminology? The mainstream deployment of Anthropocene terminology attaches to a mainstream account of Anthropocene origins, which while contested, remains dominant—and relentlessly Eurocentric: This account ‘represents an effort to expand (rather homogenized) European historical experiences, frameworks and chronologies onto the rest of the world ... and hides a disturbing extension of colonial discourse into a postcolonial world’.¹³

There is an important sense, then, in which the terminology of the ‘Anthropocene’ simply *extends* the logics of Eurocentric human exceptionalism and methodological individualism—the self-same logics that gave rise to the Anthropocene crisis itself. Crutzen traces the Anthropocene’s emergence to markers in data ‘retrieved from glacial ice cores’ betraying a notable intensification of greenhouse gases (especially

⁶ Ibid, 03.23.

⁷ Crutzen, n 3 above, 415. As Haraway notes, the term was originally coined by Eugene Stoermer to drive at anthropogenic causes of water acidification and shifts in the nature of life on earth: Haraway, n 1 above at 08.27.

⁸ Crutzen, n 3 above, *ibid*.

⁹ PJ Crutzen, ‘The Anthropocene’ in E Ehlers and T Krafft, *Earth System Science in the Anthropocene* (Berlin and Heidelberg: Springer, 2006) 13-18 at 16.

¹⁰ A Malm and A Horborg, ‘The Geology of Mankind? A Critique of the Anthropocene Narrative’ (2014) 1/1 *The Anthropocene Review* 62–69 at 63.

¹¹ A Gear, ‘Deconstructing Anthropos: A Critical Legal Reflection on “Anthropocentric” Law and Anthropocene “Humanity”’ (2015) 26/3 *Law and Critique* 225-249.

¹² *Ibid*.

¹³ KD Morrison, ‘Provincializing the Anthropocene’ (2015) 673 *Seminar* 75, 75-6.

CO₂, CH₄, and N₂O) dated from the eighteenth century. ‘Such a starting date’, he observes, ‘coincides with James Watt’s invention of the steam engine in 1782’.¹⁴ Accordingly, Crutzen installs the ultimate icon of European rational and technical mastery—the steam engine—at the heart of the ‘standard Anthropocene narrative’.¹⁵ Indeed, as Malm and Hornborg note, the steam engine is ‘often referred to [within mainstream Anthropocene discourse] as the *one artifact* that unlocked the potentials of fossil fuel energy and thereby catapulted the human species to full spectrum dominance’.¹⁶ Yet while steam-driven industrialization is at the heart of the dominant account, and despite the narrow class of European man at the heart of such industrial expansion, for Crutzen (and others) the Anthropocene *also* constructs a forward-facing sense of *species-responsibility* to act in the face of its looming global climate crisis.¹⁷ This claim could be seen as a call for the genesis of an eco-responsible Anthropocene environmental subject—and certainly a call for responsibility is important. Yet, there is good reason to be wary of the implicit universalism folded into such a call (and its related potential Anthropocene ethic) and imported, by implication, into the dominant Eurocentric account of Anthropocene inauguration.

It is important to pause, at this point, to draw explicit attention to the narrowness of the *Anthropos*. Indeed, Haraway argues that the best figuration for *Anthropos* is ‘fossil-making man burning fossils’.¹⁸ ‘Fossil-making man burning fossils’ is scarcely representative of all humanity—even *now*. Let us therefore examine the implicit universality of Anthropocene ‘humanity’—whether implied by the *species* language of ‘mankind’ as originator of the epoch or reflected in ‘humanity’s’ responsibility in the face of the looming climate crisis (the Anthropocene’s most deadly marker).

Critical theorists of all kinds tend to be suspicious, in all disciplinary traditions, of universalizing assumptions. Yet even critical theorists can be attracted to the allure of an Anthropocene universal as an important idea responding to the need for an Anthropocene ethic. Chakrabarty, one of the few critical theorists directly to engage the Anthropocene and its implications, suggests that the ‘crisis of climate change appeals to our sense of human universals while challenging at the same time our capacity for historical understanding’.¹⁹

Historical understanding is challenged, Chakrabarty argues, because climate scientists have ‘unwittingly destroying the artificial but time-honored distinction between natural and human histories’ and ‘the human being has become something much larger than the simple biological agent that he or she always has been. Humans now wield a geological force’²⁰ as a collectivity. In response to this collective force of human species-impact, Chakrabarty poses two questions to the idea of the Anthropocene human universal. First, he asks whether it is fair to include the ‘poor of the world’, whose carbon footprint is small, in the notion of responsibility for genesis of the Anthropocene.²¹ And secondly, he asks whether the climate crisis presents a role for a universal human species agent. Chakrabarty’s first question directs a powerful critical anxiety towards Crutzen’s easy-sounding assertion of future-facing Anthropocene species responsibility: Can a generalized notion of Anthropocene species responsibility (facing backwards, and thus by implication, forwards also) be so easily accepted? Or should there be a more carefully

¹⁴ Crutzen, n 9 above, at 16.

¹⁵ Malm and Hornborg, n 10 above, at 63.

¹⁶ Ibid. Emphasis added.

¹⁷ Crutzen, n 3 above.

¹⁸ Haraway, n 1 above, at 10.02.

¹⁹ D Chakrabarty, ‘The Climate of history: Four theses’ (2009) 35 *Critical Inquiry* 35: 197–222 at 201.

²⁰ Ibid, at 206.

²¹ Ibid, at 217.

calibrated attentiveness to unevenness?²² Chakrabarty's first question sets up the answer to his second question. Chakrabarty is well aware of historical patterns of oppression, of global unevenness, but for him, climate change—*unlike* the crisis of capitalism—necessitates embracing a negative universality because climate precarity co-situates us all in so far as there is no escape for the privileged. The climate crisis, Chakrabarty asserts, presents a role for a universal human species agent, because, he reasons, '[u]nlike in the crises of capitalism, there are *no lifeboats here for the rich and the privileged* (witness the drought in Australia or recent fires in the wealthy neighborhoods of California)'.²³

Accordingly, while Chakrabarty clearly affirms the familiar critical hermeneutic of suspicion directed at the production of a universal 'humanity', suggesting—rightly—that it remains 'an effective critical tool in dealing with national and global formations of domination',²⁴ he nevertheless argues that in the face of the climate crisis, the utility of this approach breaks down. This is because 'inchoate figures of us all and other imaginings of humanity invariably haunt our sense of the current crisis'—and, because the longstanding wall between natural and human history is breached by the emergence of the Anthropocene, 'we appear to have become one at the level of the species'.²⁵ This, then, is a new universal born of the 'emergent, new universal history of humans that flashes up in the moment of danger that is climate change'.²⁶ It is, Chakrabarty insists,

a question of a human collectivity, an us, pointing to a figure of the universal that escapes our capacity to experience the world. It is more like a universal that arises from a shared sense of a catastrophe. It calls for a global approach to politics without the myth of a global identity, for, unlike a Hegelian universal, it cannot subsume particularities. We may provisionally call it a 'negative universal history'.²⁷

This is not universalism as usual. Particularities are not subsumed. Yet, despite Chakrabarty's important critical rejection of the 'the myth of a global identity', an important question persists: 'Is it not risky to accept the construction of a negative formation of humanity as a category that stretches to all human beings, *all other differences notwithstanding*'?²⁸ And is it not equally risky, we might add, to construct a future-facing Anthropocene ethic addressing a human *species* responsibility *all other differences notwithstanding*?

Focusing directly on Chakrabarty's pivotal assertion that there are 'no lifeboats here for the rich and privileged', Malm and Hornborg point out that this assertion

blatantly overlooks the realities of differentiated vulnerability on all scales of human society: witness Katrina in black and white neighborhoods of New Orleans, or Sandy in Haiti and Manhattan, or sea level rise in Bangladesh and the Netherlands, or practically any other impact, direct or indirect, of climate change. For the foreseeable future – indeed, as long as there are human societies on Earth – there *will* be lifeboats for the rich and privileged. If climate change represents a form of apocalypse, it is not universal, but uneven and combined: *the species is as much an abstraction at the end of the line as at the source*.²⁹

²² On the centrality of unevenness to the global order see R Radhakrishnan, *Theory in an Uneven World* (Oxford: Blackwell, 2003).

²³ Chakrabarty, n 19 above, at 221. Emphasis added.

²⁴ *Ibid*, 221.

²⁵ *Ibid*.

²⁶ *Ibid*.

²⁷ *Ibid*, 222.

²⁸ R Braidotti, *The Posthuman* (Cambridge: Polity, 2013), at 88. Emphasis original.

²⁹ Here the authors cite A Malm, 'Sea wall politics: Uneven and combined protection of the Nile Delta coastline in the face of sea level rise' (2013) 39 *Critical Sociology* 803–832; A Malm and S Esmailian, 'Ways in

The hermeneutics of suspicion, it turns out, cannot be so easily laid aside. And, relatedly, we can add that *Anthropos* cannot be assumed to represent ‘us all’ in our ‘moment of danger’. There may indeed be a growing sense of catastrophe concerning the future of humanity as a species on earth, but that sense of catastrophe is not monolithic or evenly felt. Impending (and actual) climate catastrophe for some is most emphatically not what it is for others. Even the sense of catastrophe may not yet (if ever) be meaningfully *shared*. If anything, the Anthropocene present is marked by a rapidly expanding set of divisions: the rift between the richest and the rest; the multiplication of zones of exclusion and marginalization; deepening entanglements of oppression between marginalized humans, non-human animals and ecosystems at the hands of the neoliberal order; corporate land grabs forcing communities in the Global South off their lands in order to securitize the Global North; profoundly uneven distributions of vulnerability and resilience; and the intensifying eco-governmentality (and ‘neoliberalization of nature’) enacted by international environmental law and governance structures.

It seems implausible that the Anthropocene signals the emergence of a new universal—even a negative one—at least not *yet*—and despite the urgent need—as Haraway puts it—‘to be less parochial’.³⁰ Parochiality—particularly when it comes to questions of distributive and environmental justice—seems if anything to intensify in response to climate-driven mass migrations, which are met by border-protective impulses and a generalized fear of ‘the other’. The recently erected fences and barbed wire in Europe eloquently endorse Malm and Hornborg’s critique of Chakrabarty’s assertion that there are no lifeboats here for the rich and privileged. The parochial grabbing of lifeboats, and the desperate consignment of refugees and migrants to distinctly leaky boats, if anything, seems virulent of late. Thus, while climate pressures certainly point to a broadening awareness of catastrophe—and perhaps, given the evidence of emergent post-capitalist modes of social organisation, might signal a more inclusive and empathic sense of ‘the human’ in the making—the patterns of *Anthropos* and the patterns of privilege persist and ‘the species [remains] as much an abstraction at the end of the line as at the source’.³¹

These patterns, I suggest, point directly towards the ‘Capitalocene’, which is, Haraway suggests, a more accurate term for the present epoch than the ‘Anthropocene’.

2. *Capitalocene: Entanglements of Law, Coloniality and Environmentalty*

If the Anthropocene is to have its full significance for environmental law, it must surely implicate the need to reflect upon the global juridical order. After all, as Haraway points out, the Anthropocene is intrinsically connected to the scale of the ‘global’, including in the policy imagination of bodies such as the Intergovernmental Panel on Climate Change. Yet the global—as Haraway also points out (and as longstanding critiques of universalism converge to insist)—is *also highly specific* in terms of its historical and material origins and development.³² This specificity yet again raises the question of the identity of the *Anthropos*. If we were to use any single term to capture the trajectories leading to the current crisis and to the threatened mass extinction of species in the age of *Anthropos*, Haraway suggests, then that term should be ‘Capitalocene’.³³

and out of vulnerability to climate change: Abandoning the Mubarak Project in the northern Nile Delta Egypt’ (2012) 45 *Antipode* 474–492. Emphasis added.

³⁰ Haraway, n 1 above, at 6.36.

³¹ Malm and Hornborg, n 10 above.

³² Haraway, n 1 above, at 14.02.

³³ *Ibid.*, 16.35.

The ‘Capitalocene’ is a term that resonates deeply with critical legal accounts of the current international juridical order and its origins in European colonial predation.³⁴ Such critical accounts converge powerfully with Haraway’s description of the Capitalocene as a set of processes characterized by ‘primitive accumulations and extractions, organisations of labour and productions of technology of particular kinds for the extraction and maldistribution of profit’.³⁵

Malm and Hornborg’s critical account of the ‘Anthropocene’ *also* strongly connects with critical accounts of the origins of the contemporary international legal order. Malm and Hornborg rightly argue that industrialization—the origins of the Anthropocene on the dominant account—was fundamentally capitalist in ambition and motivation—and inseparable from European (especially British) colonialism. The authors point out that the origins of the Anthropocene lie in an expansion of British appropriative power exercised through the deployment of steam-power as a weapon by ‘an infinitesimal fraction of the population of *Homo sapiens* in the early 19th century’:

A scrutiny of the transition to fossil fuels in 19th-century Britain . . . reveals the extent to which the historical origins of anthropogenic climate change were predicated on highly inequitable global processes from the start. The rationale for investing in steam technology at this time was geared to the opportunities provided by the constellation of a largely depopulated New World, Afro-American slavery, the exploitation of British labour in factories and mines, and the global demand for inexpensive cotton cloth. Steam-engines were not adopted by some natural-born deputies of the human species: by the nature of the social order of things, they could only be installed by the owners of the means of production. A tiny minority even in Britain, this class of people comprised an infinitesimal fraction of the population of *Homo sapiens* in the early 19th century. Indeed, a clique of white British men literally pointed steam-power as a weapon — on sea and land, boats and rails — against the best part of humankind, from the Niger delta to the Yangzi delta, the Levant to Latin America. Capitalists in a small corner of the Western world invested in steam, laying the foundation stone for the fossil economy.³⁶

While Haraway dates the origin of the Capitalocene in trade relations existing before the industrial revolution, capitalism’s long dependency upon a fossil fuel economy³⁷ and the convergent nature of capitalist impulses in the genesis of the fossil fuel-dependent international legal order explain precisely why the global juridical structures now in place ‘lock in’ the dependency of the global economic system on fossil fuels³⁸—and why the international legal order is dominated by *Anthropos* as ‘fossil-making man burning fossils’.

Anghie, in *Imperialism, Sovereignty and the Making of International Law*,³⁹ notes the combination of colonial suppression of ‘Third World’ peoples and the ambitions of

³⁴ A Anghie, *Imperialism, Sovereignty and the Making of International Law* (Cambridge: CUP, 2005).

³⁵ Haraway, n 1 above, at 16.51.

³⁶ Malm and Hornborg, n 10 above, at 63-64.

³⁷ M Koch, *Capitalism and Climate Change: Theoretical Discussion, Historical Development and Policy Responses* (Palgrave Macmillan, Basingstoke 2012). See also, P Newell and M Paterson, *Climate Capitalism: Global Warming and the Transformation of the Global Economy* (Cambridge University Press, Cambridge 2010).

³⁸ J Dangerman and HJ Schellnhuber, ‘Energy Systems Transformation’ (2013) *PNAS* E549-E558 (available at www.pnas.org/cgi/doi/10.1073/pnas.1219791110) (Date of last access: 18 Feb 2016).

³⁹ Anghie, n 34 above.

Northern states for ‘natural resources’ to feed their increasingly industrialized social order as being key determinants of nineteenth century Northern colonial and imperial expansionism.⁴⁰ He argues that the ‘importance of raw materials to the global economy was always well understood by the more powerful States’,⁴¹ and that ‘imperial expansion was powerfully motivated by the desire of colonial states to exploit the resources of non-European territories’.⁴² In this highly uneven process, ‘Western trading and mining companies’ acquired ‘extraordinarily favourable’ terms in the then nascent system of colonial state relations, achieving such terms by a combination of direct force and legal sleight of hand in the form of ‘agreements, which possessing a legal form, were hardly comprehensible to the natives who were ostensibly signatories to them’.⁴³ The very foundational purpose of international law was deeply capitalistic and predatory. As Simons puts it,

[t]he underlying purpose of international law that was developed in the context of the colonial and post-colonial eras was precisely the promotion and protection of economic interests of the North. Thus, as newly independent states emerged from colonial rule as sovereign entities and attempted to assert their sovereignty and establish control over their natural resources, Northern states responded using legal doctrines such as state succession, acquired rights, contracts and consent to protect the interests of their corporate nationals in these states and to resist the attempts by these new sovereign actors to establish a new international economic order which included their own sovereignty over their natural resources’.⁴⁴

These dynamics are centrally important to understanding the climate crisis itself as a *crisis of human hierarchy*.⁴⁵ Woven into this crisis of hierarchy—and inseparable from the rationalistic orders of valuation placed upon the human species—are the ecocidal implications of European rationalism and capitalism⁴⁶ and the colonial practices and laws enacting those impulses.⁴⁷ International law, capitalism and colonialism are all interwoven with Eurocentric (and now Global North) impulses and logics of action fully discernible the Anthropocene crisis. There is, therefore, great force in Haraway’s contention that the Anthropocene is better understood as the Capitalocene. The Anthropocene-Capitalocene is an epoch—after all—of eco-violation reflecting well-practiced, patterned and predictable global and globalizing distributions of intra-species and inter-species injustice.⁴⁸ So foundational to the Anthropocene-Capitalocene are such injustices that the

⁴⁰ Ibid, at 211.

⁴¹ Ibid at 212.

⁴² Ibid at 211.

⁴³ Ibid.

⁴⁴ P Simons, ‘International Law’s invisible hand and the future of corporate accountability for violations of human rights’ (2013) 3/1 *Journal of Human Rights and the Environment* 5-43 at 21.

⁴⁵ A Grear, ‘“Towards Climate Justice”? A critical reflection on legal subjectivity and climate injustice: Warning signals, patterned hierarchies, directions for future law and policy’ (2014) Special Edition *Journal of Human Rights and the Environment* 103-133.

⁴⁶ C Merchant, *The Death of Nature: Women, Ecology and the Scientific Revolution* (New York: Harper Collins 1980); A Geisinger, ‘Sustainable Development and the Domination of Nature: Spreading the Seed of the Western Ideology of Nature’ (1999) 27 *Boston College Environmental Affairs Law Review* 43, 52-8.

⁴⁷ C Gonzalez, ‘Bridging the North-South Divide: International Environmental Law in the Anthropocene’ (2015) 32 *Pace Environmental Law Review* 407-434.

⁴⁸ See, for example, A Collard and J Contrucci, *The Rape of the Wild: Man’s Violence against Animals and the Earth* (Bloomington: Indiana University Press, 1988); DA Nibert, *Animal Rights, Human Rights: Entanglements of Oppression and Liberation* (Oxford: Rowman and Littlefield, 2002); DA Nibert, *Animal Oppression and Human Violence: Domesecration, Capitalism, and Global Conflict* (New York: Columbia University Press, 2013).

current ecological crisis cannot really be understood without them.⁴⁹

The ‘subject’ at the centre of the Anthropocene trope thus ineluctably reflects hierarchies foundational to European rationalism.⁵⁰ *Anthropos* is in a very real sense, the quintessential European (and then ‘Western’) subject—and, accordingly, also law’s archetypical subject. This legal subject provides the ‘centre’ (the very site of mastery, panoptic in its knowledge⁵¹) set against ‘nature’ or ‘environment’ as the backdrop or context for the rational subject’s agency.⁵² Unsurprisingly, the subject-object relationalities of *Anthropos* are fully expressed in environmental law.

The rationality of *Anthropos* is the rationality that defines the subject-object relations undergirding methodological individualism and human exceptionalism. Such rationality, it must be recalled, only truly belongs to the masculinist Eurocentric trope—all other human beings remain complexly immersed—to varying and shifting degrees—in the relative irrationality of embodiment, the primitive, the feminised, the animal, the natural—in that which needs civilizing and/or ordering.⁵³ This rationality was fully operative in coloniality and in the ‘civilizing mission’ of early European expansionism. A range of critical accounts of the colonial foundations of the international legal order thus thoroughly support Haraway’s contention that the current epoch is best captured by the terminology of the Capitalocene. And while Haraway argues that the Capitalocene pre-dates the height of European colonial expansionism (in earlier trade relations), there can be no doubt that the Capitalocene reaches its apotheosis in the imperialistic drives and ambitions of capitalism as an imperialistic ideology.⁵⁴ The figuration of the Capitalocene thus drives directly at the history and the present of the radical unevenness characterizing the contemporary neoliberal juridical order and its antecedent periods of primitive accumulation.⁵⁵ It may even be an error to conflate trade with capitalism in the way that Haraway’s time frame suggests.

Turning now to an explicit consideration of environmental law, it could be argued that environmental law can be read as a *reaction to* the eco-destructiveness of the Anthropocene-Capitalocene, and to the ecological fallout of the imperatives driving it. However, even if that argument drives at a degree of reality, it is abundantly clear that environmental law is *also* entirely continuous with the assumptions at work in the Anthropocene-Capitalocene.

Reflecting first upon the environmental legal subject, it seems that environmental law’s central rational subject is none other than *Anthropos*. Indeed, the environmental legal subject, if anything, presents a site at which law’s relatively disembodied subject-

⁴⁹ This is a central concern for Malm and Horborg, n10 above. See also the work of Bookchin, for whose social ecology account *intra*-species practices of domination were causally decisive for practices of ecological destruction: M Bookchin, *The Ecology of Freedom: The Emergence and Dissolution of Hierarchy* (Oakland: AK Press, 2005).

⁵⁰ Grear, n 11 above.

⁵¹ HY Yung, ‘Merleau-Ponty’s Transversal Geophilosophy and Sinic Aesthetics of Nature’ in SL Cataldi and WS Hamrick, *Merleau-Ponty and Environmental Philosophy: Dwelling on the Landscapes of Thought* (New York: State University of New York Press 2007) 235–57 at 239.

⁵² As Weber puts it, since Descartes ‘the sciences, whether natural, social or economic, try to grasp the world as if it were a dead, mechanical process that could be understood through statistical or cybernetic analyses ... [as a] dead *res extensa*’: A Weber, *Enlivenment: Towards a Fundamental Shift in the Concepts of Culture and Politics* (Berlin: Heinrich Boll Foundation, 2012) at 14.

⁵³ See, for a fascinating example, M Dekha, ‘Intersectionality and Post-humanist Visions of Equality’ (2008) 23 *Wisconsin Journal of Law, Gender and Society* 249–267.

⁵⁴ EM Woods, *Empire of Capital* (Verso, London 2005).

⁵⁵ See, eg, WH Ricketts Curtler, *The Enclosure and Redistribution of our Land* (Clarendon, Oxford 1920); L Westra, ‘Environmental Rights and Human Rights: The Final Enclosure Movement’ in R Brownsword (ed), *Global Governance and the Quest for Justice: Volume IV: Human Rights* (Hart Publishing, Oxford 2004) 107–19.

object relations emerge with particular clarity: This subject stands emphatically at the assumed onto-epistemic ‘centre’ beyond which its ‘others’—*especially* ‘nature’ as ‘the environment’—range along a spectrum of objectifications. Environmental law’s quintessential subject, indeed, is the pivot around which ‘the environment’ revolves.⁵⁶ This rationalist, masterful subject is the very subject assumed by the rationalistic, hierarchical scales of value decisive to the expansion of European capitalist ambition across the globe.⁵⁷ And even in these more eco-conscious times—even in the light of an Anthropocene awakening to the dark side of capitalism’s ‘progress’—marginalized, colonized ‘others’ are rendered susceptible to acts and forms of domination legitimated by Global North assumptions of rationalistic superiority and mastery enacted from ‘the centre’.⁵⁸ If anything, the centre-periphery trajectories implicit in the Anthropocene-Capitalocene are more intense: The forms of eco-governmentality operationalized in contemporary environmental law—legitimated by the concern of ‘the centre’ with the ‘global’ management of the planet in the name of various forms of ‘security’ (Global North security)—are widely accused of being intensifying spasms of neocolonial domination.⁵⁹ For example, Luke, drawing on Foucault’s brilliant analysis of the production of biopolitical subjects and on the implications of Foucault’s analysis for the fate of ‘the environment’, argues that contemporary environmentalism (which includes environmental law and governance) enacts forms of eco-knowledge and geopower reflecting a distinctively neoliberal ‘environmentality’.⁶⁰

The subject-object relations of the Anthropocene-Capitalocene are fully visible in Luke’s analysis. First, there is the cut between humanity and ‘nature’ thoroughly implicit in Luke’s reflection upon how ‘nature’ became ‘environment’ as the result of ‘eco-diction’—the discursive iteration through which ‘nature’ was made to ‘speak’ as ‘environment’.⁶¹ This process, placed by Luke between the 1960s and the 1990s, produced a terminology that remains underdetermined, because even expert discourse on the environment, Luke argues, presents no clear definition of what ‘the environment’ actually is—other than something so all-embracing as to lack definitional precision.⁶² Luke turns, in a search for clarity, to a genealogical analysis of the word ‘environment’, tracing it back to its historical linguistic roots.

In its original sense, which is borrowed by English from Old French, an environment is an action resulting from, or the state of being produced by a verb: ‘to environ’. And environ-ing as a verb is, in fact, a type of strategic action. To environ is to encircle, encompass, envelop, or enclose... to environ a site or a subject is to beset, beleaguer, or besiege that place or person. An environment, as either the means of such activity or the product of these actions, now might be

⁵⁶ A Philippopoulos-Mihalopoulos, ‘Towards a Critical Environmental Law’, in A Philippopoulos-Mihalopoulos (ed.), *Law and Ecology: New Environmental Foundations* (Abingdon: Routledge (2011) 18-38, at 22: the word derives from ‘en’ (in) and ‘virer’ (‘to turn’)—‘This implies an inside that stands erect and an outside that surrounds us, the dervish-like outside that whirls like frilly skirt around a stable pivot ... not only stable, fixed and unyielding but significantly “central”’.

⁵⁷ G Huggan and H Tiffin, ‘Green Postcolonialism’ (2007) 9(1) *Interventions: International Journal of Postcolonial Studies* 1–11.

⁵⁸ See, *ibid*, and Gonzalez, n 47 above.

⁵⁹ Geisinger, n 46 above.

⁶⁰ TW Luke, ‘On Environmentality: Geo-Power and Eco-Knowledge in the Discourses of Contemporary Environmentalism’ (1995) 31 *Cultural Critique* 57-81.

⁶¹ *Ibid*, at 59.

⁶² *Ibid*.

read in a more suggestive manner. It is the encirclement, circumscription, or beleaguerment of places and persons in a strategic disciplinary policing of space.⁶³

This analysis, Luke continues, aptly exposes the nature of environmentalized places as ‘sites of supervision’—‘environments can be disassembled, recombined and subjected to the disciplinary designs of expert management... redirected to fulfil the ends of other ...scripts’: ‘Environing’, Luke argues, ‘engenders “environmentality”, which embeds instrumental rationalities in the policing of ecological spaces’.⁶⁴ In short, Luke’s analysis reflects the governmentality of Anthropocene-Capitalocene subject-object relations, with their long provenance in the Cartesian foundations of the modern worldview: In a sense, what Luke describes is precisely a logic of rational agency carving ‘nature’ up (always set against the subject’s panoptic mastery) into ‘environment’—the dicing and slicing of the living order into eco-enclosures.

And unsurprisingly, such environmentality reflects predictable Capitalocene trajectories, ordering the entrenched concatenation of colonialisms, appropriations and maldistributions of profit and—increasingly—the commodification and financialization of ‘nature’ itself. ‘The environment’ is an increasingly policed space for impulses of financial accumulation, expressing logics of (capitalistic, Global North-favouring) development discourse as a rationalisation for neoliberal governmentality.⁶⁵ As Luke puts it, as ‘new mediations of development and growth were constructed after 1945, the geo-power/eco-knowledge nexus of environmentalization came to comfortably supplement the high technology, capital intensive development strategies that have since been implemented’.⁶⁶

The scripts driving such acts of environing are profoundly neoliberal—and profoundly continuous with early colonizing impulses lying at the dark heart of the Anthropocene-Capitalocene. The resource managerialism at the heart of contemporary responses to environmental challenges is operationalized by dense networks of corporate-managerial-administrative regulatory regimes facilitating a spectacular range of ‘land grabs’ and dispossessions in the name of ‘environmental protection’. Whether in the Convention on Biological Diversity (the CBD), or in practices around food and biofuels production, there is an extensive, planetary land grab underway, driven by the ‘rational planning of the planet for Northern security’.⁶⁷ This management falls out into the extensive and intensive ‘environing’ of the Global South—fully visible in predatory patterns of dispossession and domination that reflect the long histories of enclosure, land grab and dispossession long associated with capitalism and its voracious, colonizing dynamics.

Accordingly, the subject assumed by environmental law—the meta-agency expressed through environmental legal rationality—is, in the final analysis, *Anthropos* as ‘fossil-making’ man re-birthing himself: *Anthropos* re-presented as eco-trope rationalizing forms of geopower and eco-knowledge in the name of ‘ecological sustainability’, the ‘global commons’, ‘food security’ and other forms of future-facing ‘justifications’ deployed in service of the Capitalocene. Indeed, the burning of fossils is now *facilitated* by market mechanisms enabling carbon leakage and unjust distributions of responsibility.⁶⁸

⁶³ Ibid, at 64.

⁶⁴ Ibid, at 65.

⁶⁵ P McMichael, ‘The land grab and corporate food regime restructuring’ (2012) 39:3-4 *The Journal of Peasant Studies* 681-701; C Corson and KI MacDonald, ‘Enclosing the global commons: the convention on biological diversity and green grabbing’ (2012) 39/2 *The Journal of Peasant Studies* 263–283.

⁶⁶ Luke, n 60 above, at 67.

⁶⁷ McMichael, n 65 above at 685, citing W Sachs (ed.) *Global Ecology* (London: Zed Press, 1993) at 20.

⁶⁸ See, for example, R Aichele and G Felbermayr, ‘Kyoto and Carbon Leakage: An Empirical Analysis of the Carbon Content of Bilateral Trade’ (2015) 97 *The Review of Economics and Statistics* 104-155.

Meanwhile, the eco-market mandates the commodification of biodiversity and generates new speculative forms of deadly commodities trading on species extinction, food crisis, water shortage and the like.

The subject of environmental law in the Capitalocene increasingly enacts iteratively deepening forms neoliberal eco-governmentality—and—as Luke argues, ‘to the degree that modern subjectivity is a two-sided power/knowledge relation, scientific-professional declarations... essentially describe a new mode of environmentalized subjectivity’.⁶⁹

What hope and what forms of environmental law and perhaps even insurgent eco-subjectivity might the trope of the Chthulucene offer?

3. *Chthulucene—materiality’s semiosis and the future of environmental legal subjectivity*

At the heart of the questions just posed lies a central challenge: can environmental law exceed the centripetal impulse of neoliberal governmentality? Can environmental law respond to alternative modes of knowing and coordination? Can environmental law respect multiple forms of sharing the world?

Such sharing would need to recognize the companion status of all species and systems entangled in the dance of life itself—to reflect, in short, the grounding, complex energies of the Chthulucene.

Let us reflect first upon Haraway’s framing of the Chthulucene. Haraway emphasizes two main thoughts: first, she points to the way in which biology is shattering the myth of human exceptionalism and individualism, arguing that ‘[w]e are all lichens now. We have never been individuals. From anatomical, physiological, evolutionary, developmental, philosophic, economic, I don’t care what perspective, we are all lichens now’.⁷⁰ Haraway emphasizes, also, the tentacularity associated with the Chthulucene. Chthulu is the lead character in a famous short story, *The Call of Cthulu*, published in 1926, a creation of HP Lovecraft.⁷¹ The story sparked the development of the Chthulu Mythos, a shared invented universe. The name Chthulu is likely drawn from the word ‘chthonic’, meaning ‘subterranean’, with its invocations of the underworld. Chthulu is part-octopus, part-man, part-dragon, and his head is tentacled—an image reflected by Haraway’s deployment of similar images of facial tentacularity on slides drawn from science fiction. Tentacularity, I suggest, has distinctive epistemological implications that will be explored below. For now, however, we will turn our attention back to the significance of the claim that ‘we are all lichens now’.

Haraway’s claim refers to a phrase from Scott Gilbert, who (with Sapp and Tauber) proposes the necessity for a symbiotic view of life, insisting that ‘we have never been individuals’.⁷² Gilbert et al begin by noting the way in which individualism, which emerged ‘with the appearance of the independent citizen’ (a quintessentially Eurocentric construction reflecting the ontology of *Anthropos*) shaped biological assumptions concerning the existence of individual animals, plants and the like, before such individualist assumptions gave way to systems as complements to individuals in the second half of the nineteenth century with the emergence of ecology.⁷³ With the emergence of ecology, the rigidly binary Cartesian separation between (disembodied,

⁶⁹ Luke, n 60 above, at 75.

⁷⁰ Haraway, n 1 above, at 22.33.

⁷¹ HP Lovecraft, ‘The Call of Cthulu’ in ST Joshi (ed.) *The Dunwich Horror and Others* (Sauk City, WI: Arkham House 1984) [1928]: Of Chthulu, Lovecraft writes, ‘It represented a monster of vaguely anthropoid outline, but with an octopus-like head whose face was a mass of feelers, a scaly, rubbery-looking body, prodigious claws on hind and fore feet, and long, narrow wings behind’.

⁷² S Gilbert, J Sapp and AI Tauber, ‘A Symbiotic View of Life: We Have Never Been Individuals’ (2012) 87/4 *The Quarterly Review of Biology* 326-341.

⁷³ *Ibid*, at 326.

rational) humanity and *the rest* begins to fray, although it is clear from the phrasing used by Gilbert et al that the individual continued, even with the emergence of new system-facing conceptions, to be regarded as an ontologically significant referent. Gilbert et al note, however, that new technologies problematize the status of individuality (and, necessarily therefore, individualism). Hence, new technologies already in existence

dramatically transform our conceptions ... [and] have not only revealed a microbial world of complex and intermingled relationships—not only among microbes, but also between microscopic and macroscopic life. These discoveries have profoundly challenged the generally accepted view of “individuals”. Symbiosis is becoming a core principle of contemporary biology, and it is replacing an essentialist conception of “individuality” with a conception congruent with the larger systems approach now pushing the life sciences in diverse directions. These findings lead us into directions that transcend the self/non-self, subject-object dichotomies that have characterized Western thought.⁷⁴

Turning then to Haraway’s insistence that we are all lichens, it is clear that she is pointing to a biological reality capable, if we embrace it, of fundamentally transforming the boundaries of the thinkable. Lichens have been defined as ‘symbiotic associations between two (or sometimes more) entirely different types of microorganism’.⁷⁵ Importantly, though, unlike the many other examples of symbiosis common in the living order, ‘lichens are unique because they look and behave quite differently from their component organisms. So lichens are regarded as organisms in their own right...’.⁷⁶ Gilbert, Sapp and Tauber argue that all ‘animals are symbiotic complexes of many species living together’.⁷⁷ This includes humans. ‘We’ are lichen now, and increasingly recognizing ourselves as such, because new technologies enable a fuller appreciation of the symbiotic generativity of life. In a symbiotic view, the ‘all’ of the ‘we’ is profoundly interspecies—(or intra-species if we count ‘earthlings’ in an all embracing way)—a lively entanglement of beings and systems that are never individual in the traditional Western sense. Haraway’s Chthulucene is a world relational ‘all the way down’—and framing the Chthulucene as an epoch is an invitation to celebrate the porous hybridities, the tangles and knots and dynamic materialities of the world at multiple scales.

The interwoven becomings and symbiotic complexes at the heart of this invitation are particularly well reflected by New Materialism as a broad contemporary school of thought. Just as the biological sciences incontrovertibly reveal the radical continuities between complex lively relationalities at all scales, from the microscopic to the macroscopic, so New Materialist accounts point to the assemblages between multiple factors that operate at multiple scales. New Materialists also point towards the lively meaning-making capacities of materiality itself—to materiality’s semiosis.

Embracing and responding to the ethical implications of materiality seems fundamentally urgent if environmental law is to become responsive to the implications and promise of the Chthulucene. Indeed, as Coole and Frost argue in the opening sentences of their book, *New Materialisms: Ontology, Agency and Politics*,⁷⁸ ‘foregrounding material factors and reconfiguring our very understanding of matter are prerequisites for

⁷⁴ Ibid, at 326 (original citations omitted).

⁷⁵ J Deacon, ‘The Microbial World: Lichens’ (Institute of Cell and Molecular Biology, The University of Edinburgh) available at <http://archive.bio.ed.ac.uk/jdeacon/microbes/lichen.htm> (date of last access 15th Feb 2016).

⁷⁶ Ibid.

⁷⁷ Gilbert et al, n 72 above, at 326-7.

⁷⁸ D Coole and S Frost (eds.), *New Materialisms: Ontology, Agency and Politics* (Durham: Duke University Press, 2010).

any plausible account of co-existence and its conditions in the 21st century'.⁷⁹

Indeed, foregrounding material factors and reconfiguring our very understanding of matter will *necessarily* transform law's fundamental construct of 'the environment' because what is at stake is precisely 'nothing less than a challenge to some of the most basic assumptions that have underpinned the modern world, including its normative sense of the human and its beliefs about human agency, but also regarding its material practices such as the ways we labor on, exploit and interact with nature'.⁸⁰ Environmental law's existing ontology is profoundly at stake in New Materialist insights that go to very heart of the question of what matter *is* and, relatedly, to the question of what the *ethical implications of matter are*. If matter has escaped its imposed (imagined) inertia—if matter begins to evade categorizations, to over-spill linear conceptions of causality, to generate meanings—then matter necessarily challenges the previous *taken for granted* of environmental law. Cartesian subject-object relations are thus thoroughly challenged by an understanding of matter as 'materialization [...] a complex, pluralistic, relatively open process' in which 'humans [are] thoroughly immersed within materiality's productive contingencies'.⁸¹ And since, matter has its own lively agencies, 'the conventional sense that agents are exclusively humans who possess cognitive abilities, intentionality and freedom to make autonomous decisions and the corollary presumption that humans have the right or ability to master nature' is entirely disrupted.⁸² Taken seriously, such disruption strikes at the very heart of the anthropocentric assumptions underlying the eco-governmentality expressed in the environmental legal priorities of the Capitalocene.

Such lively complexity, taken seriously, has further implications. Key among these are its implications for the environmental legal subject. The individualistic, exceptionalist human agent 'acting on' or 'governing' 'the environment' becomes an intellectually unsustainable idea. Matter's lively, self-emergent properties and the sense in which 'we are all lichens now' folds human flesh and the generation of human meaning into a much wider field of materio-semiotic energies. The de-centred subject is presented with a demand for epistemic humility, re-positioned as just one partner in a 'spatial and temporal web of interspecies dependencies'.⁸³ Environmental epistemology thus becomes *ecological*.⁸⁴ And environmental subjects are themselves *ecologies*.⁸⁵—and seen as such, in place of the panoptic subject radically separated from 'the environment' it 'acts upon'.

What then, might such realizations indicate in practical terms?

First, there is a need to foreground materiality and its significance. The way in which New Materialist thought transversally dissolves the material/cultural dualism so long assumed by Cartesianism and its conceptual descendants necessarily broadens and deepens the focus of theoretical vision. As Coole and Frost suggest, New Materialist frames of analysis draw together the effects of macro-structural projects such as the international economy, 'well-honed micro-powers of governmentality' and the sheer materiality of existence as corporeal beings inhabiting 'a world of natural and artificial objects' and having biological needs.⁸⁶ Environmental legal thought, likewise, could

⁷⁹ Ibid, at 2.

⁸⁰ Ibid, at 4.

⁸¹ Ibid, at 7.

⁸² Ibid, at 10.

⁸³ D Haraway, *When Species Meet* (Minnesota: University of Minnesota Press, 2008) at 11.

⁸⁴ L Code, *Ecological Thinking: The Politics of Epistemic Location* (Oxford: OUP, 2006).

⁸⁵ Again, see Haraway, n 83 above, at 3-4.

⁸⁶ Coole and Frost, above n 78, at 27.

embrace the ‘elements’ interacting at various different levels (‘micro, meso and macro’), and respond to the fact that dynamics are multi-directional rather than moving in the traditionally conceived top-down ways assumed by environmental law and governance structures *or* by uni-directional bottom-up responses. Interrelationalities should be seen as rhizomatic rather than arboreal.

For the environmental legal subject, New Materialist thought necessarily means that the focus moves away from ‘individual bodies, subjects, experiences or sensations’ towards ‘assemblages of human and non-human, animate and inanimate, material and abstract, and the affective flows within these assemblages’.⁸⁷ Indeed, it makes sense—as Barad has argued—to eschew the notion of a stable subject-object split entirely.

This shift will be profoundly challenging for an environmental law that continues to assume its broadly Cartesian ontology of the subject. That said, law is not a stranger to shifts of meaning—and environmental law is closer than many forms of law to the materiality of the world and potentially responsive to materiality as an ethical matter. Law is in any case, adaptive. Law both attempts to ‘capture’, ‘fix’ and ‘stabilize’ meanings and referents for coordinative/control purposes—but law also destabilizes meanings, not least through legal argument, interpretive variance and the semiotic shifts operationalized by appeal processes. It is not impossible to believe that environmental law’s particular focus on material relations could, if pursued into Chthulucene realities, hold out hope for environmental law as a conduit of more liveable futures.

And while the destabilization of fixed subject-object relations presents a particularly profound challenge to law’s assumption of the construct of the rational juridical individual, it is just possible to imagine the environmental legal subject as a contingent position relevant to a particular context or purpose. And if environmental law can face up to the fact that such choices represent a contingent ‘fixing’ of an underlying complexity, then perhaps environmental law, within parameters responsive to its own nature, including its institutional dynamics, can become more radically responsive to the materiality it seeks to engage with.

Relatedly, the de-centering of the environmental legal subject has distinctive epistemological implications. If the subject becomes a contingent identification, not a fixed *a priori* designation of an exceptionalist status, then the subject’s knowledge, likewise, is de-centred. The dethroning of the epistemology of mastery (the dissolution of the ‘eye in the sky’) necessarily brings the *politics of epistemic location*⁸⁸ centre-frame for environmental law and legal process. De-centering epistemic power challenges the panoptic ‘knowing centre’ at the heart of intensifying levels of eco-governmentality and the neoliberalisation of nature under the imperatives of the Capitalocene. Environmental law and environmental legal enquiry are invited by such foundational shifts to become overtly reflexive, alert to premature closure and to the overly rigid fixing of boundaries drawn for theoretical, operational or doctrinal purposes.

Environmental law is also invited by such insights to broaden its epistemic ‘receptor sites’, and to embrace a form of epistemic tentacularity. If environmental law and methodologies were to ‘begin in the middle’⁸⁹ rather than ‘at the centre’, and if environmental epistemology were to abandon the panoptic for a tentacular exploration of materiality, then the entire epistemic focus of environmental law could include previously unconsidered constituencies of meaning-making. Tentacularity (and the partial knowing that such an epistemic approach might even *celebrate*) points towards a fully ‘ecological epistemology’.⁹⁰ An ecological epistemology, in the words of Lorraine Code,

⁸⁷ Ibid, at 406.

⁸⁸ Code, above n 84.

⁸⁹ Philippopoulos-Mihalopoulos, n 56 above.

⁹⁰ This is the project of Code, above n 84.

‘emerges from and addresses so many interwoven and sometimes contradictory issues ... that its implications require multifaceted chartings’.⁹¹ Importantly, such an epistemology is characterised, first and foremost, by responsible epistemic practices particularly sensitive to local, situated diversities and ‘proposes a way of engaging—if not all at once—with the implications of patterns, places and the interconnections of lives and events in and across the human and nonhuman world ... in projects of inquiry ... where epistemic and ethical-political concerns are reciprocally informative’.⁹² A tentacular epistemology would, I suggest, necessarily feel its way along particular, situated puzzles and questions, inviting a mode of knowing that was knowingly incomplete and open to perceptual ambiguity in a way that invites epistemic relationality—of all kinds, including interspecies engagements—into epistemic relationalities. And examples of legal epistemic strategies along (and/or analogous to) such lines of approach already exist.

Pieraccini, for example, explores materio-semiotic inter-species encounters between sheep and humans on upland commons in the United Kingdom (UK): There, it is the bodily habits and repetitions, practices, movements, modes of stopping and of dwelling of sheep that are used to guide property relations and to suggest new ways of seeing property as being, in the words of Pieraccini, the ‘contingent product of humans and non-human animals’.⁹³ There is a kind of ecological epistemology at work in such partnerships of knowing. There is a kind of tentacularity in the way that the community feels its way along, guided by animal movements and habits in a dance with the slower movement of landscape—a most lichen-like ‘mutual and dynamic crafting of people and environments’.⁹⁴ Such an ecological epistemology would exceed environmental law’s traditional epistemic mono-culturalism to allow (and *by allowing*) non-human intelligences and agencies their place in the formation of legal and normative relations.

An environmental law responsive to the Chthulucene might just be able to cast aside the eco-destructive assumptions and ideological closures of the Anthropocene-Capitalocene. The newly de-centred environmental subject would no longer stand at the ‘centre’ of a world rendered oppressively fungible and commodified. Then, perhaps, environmental law might, by responding to the energies of the Chthulucene, become an important mode of coordinating ‘something—just maybe—*more liveable*’.⁹⁵

⁹¹ Code, *ibid* at 4.

⁹² *Ibid*.

⁹³ M Pieraccini, ‘Property Pluralism and the Partial Reflexivity of Conservation Law: The Case of Upland Commons in England and Wales’ (2012) 3 *Journal of Human Rights and the Environment* 273–87 at 273.

⁹⁴ *Ibid* at 280.

⁹⁵ Haraway, n 1 above, at 01:05.