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Critical Environmental Law in the Anthropocene

Andreas Philippopoulos-Mihalopoulos

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Abstract

It is important to embrace the responsibility that comes with the new geological epoch of the Anthropocene, which, in terms of environmental law, requires nothing less than a radical revisiting of its basic tenets. In an attempt to incorporate the Anthropocene to my ongoing project on Critical Environmental Law, I examine it from three angles: grammar, theoretical perspective and methodology. Grammar refers to the need for a new, anthropocenic vocabulary that will deal with the challenges of the Anthropocene. To this effect, I suggest some terms, such as continuum/rupture, human/nonhuman/inhuman, as well as geologic immersion and planetary withdrawal. Theoretical perspective refers to the way current thinking changes or at least is affected by the Anthropocene – indeed, how current environmental legal thinking is *turning* in order to accommodate the needs of the new epoch. Finally, methodology refers to the way the Anthropocene changes the way we seek knowledge and the epistemological presuppositions of the limits of such knowledge. I offer four theses in the form of suggestions on how Critical Environmental Law needs to adapt methodologically in order to integrate the Anthropocenic grammar and perspective.

1. Introduction

The amount of text produced on the Anthropocene¹ across the disciplines is rapidly generating a digital (and occasionally paper) imprint worthy of the geological imprint of its subject matter. One might even be tempted to talk of an ‘Anthropocene-turn’: as with the spatial turn,² of which the Anthropocene is a close bedfellow, a new grammar is inaugurated, a different theoretical perspective is tried out, and an updated methodology ensues. The Anthropocene has managed to provide for all these new steps, influencing an unexpectedly large and broad variety of disciplines. Environmental law has not been left out of this wave,³ since, more than any other branch of law, it is directly involved in some of the fossilising and anthropogenic processes in the core of the Anthropocene. But so far, most attempts to deal with the Anthropocene from an environmental point of view have been partial,⁴ or even worse, espousing of the ubiquitous neoliberal ‘green’ economic agenda, entrusting the future

¹ P J Crutzen and E Stoermer, ‘The Anthropocene’ (2000) 41 *IGBP Newsletter* 17.

² B Warf and S Arias (eds.), *The Spatial Turn: Interdisciplinary Perspectives* (New York, Routledge, 2009).

³ See for example, C Gonzalez, ‘Bridging the North-South Divide: International Environmental Law in the Anthropocene’ (2015) 32 *Pace Environmental Law (PELR) Review*, 407; D Houston, ‘Crisis Is Where We Live: Environmental Justice for the Anthropocene’ (2013) *Globalizations*, 10, 3, 439; see also N Robinson, ‘Fundamental Principles of Law for the Anthropocene?’ (2014) *Environmental Policy and Law*, 44, 1-2, 13, whose work on principles for the Anthropocene is based on strong ethical considerations.

⁴ Exceptions of course abound. See indicatively, A Gear, ‘Deconstructing *Anthropos*: A Critical Legal Reflection on “Anthropocentric” Law and Anthropocene “Humanity”’ (2015) *Law and Critique*, 26, 3, 225; S Adelman, ‘Climate justice, loss and damage and compensation for small island developing states’ (2016) *Journal of Human Rights and the Environment*, 7, 1, 32

of the planet to more technology, stronger ('but cleaner') industry, aggressive geoengineering, and other market-oriented mechanisms which sadly confirm Swyngedouw's characterisation of the Anthropocene as the 'opiate of the masses'.⁵

What is needed instead, is a return to the basics of the discipline of environmental law, and a reconsideration of some of its major tenets. Grammar, perspective and methodology of the Anthropocene, therefore, are the three focal points of this text. Briefly, grammar refers to the need for a new, anthropocenic vocabulary that will deal with the challenges of the Anthropocene and its introduction in social sciences and humanities in a way suitable to the disciplines but also faithful to the origin of the term. The theoretical perspective, on the other hand, refers to the way current thinking changes or at least is affected by the Anthropocene – indeed, how current thinking is turning in order to accommodate the needs of the new epoch. Finally, methodology refers to the way the Anthropocene changes the way we seek knowledge and the epistemological presuppositions of the limits of such knowledge. I will examine the first two in the context of environmental law, and will suggest an anthropocenic methodology in the form of what I have initiated elsewhere by the name *Critical Environmental Law*,⁶ namely a way of looking into the law that takes into consideration the various developments in other disciplines and on the planet as a whole.

Rather unsurprisingly, the law has been lagging behind in terms of riding the Anthropocene wagon. This is partly because the law is always characterised by a slower, more ponderous temporality, typically operating later than politics and certainly much later than most humanities and social sciences. The reasons for this are multiple, but perhaps the most obvious ones are the fact that law often operates as the final arbiter on events in which several other institutions have already been involved, such as politics, media, science and so on. Things *end up* in law, and for that reason, law carries the weight of confirming societal expectations. These expectations refer to the assumption that the circumstances will carry on being the way they have been so far, and that they can be relied upon not to change arbitrarily.⁷ This rather conservative aspect of the law is coupled to a more proactive and future-tending aspect, and the second main reason for which law is characterised by a slower temporality: the law is expected to bind the future. Every act and decision (if one wishes to look at the law narrowly), every legal spatialisation and expansion (geopolitical law), every legal gesture and movement (embodied law), and indeed every piece of legal research, bears the responsibility of capturing the future. This is simply because every piece of the legal system, to a smaller or greater extent, at the same time *constructs* the law and *binds* social expectations on how the law will be in the future.

Environmental law is no exception to this, although its slow temporality might be more of a disappointment because of the different expectations we have of it.⁸ In view of the

⁵ E Swyngedouw, 'The non-political politics of climate change' (2011) *Acme* 12, 1, 1.

⁶ A Philippopoulos-Mihalopoulos, 'Towards a Critical Environmental Law', in A Philippopoulos-Mihalopoulos (ed), *Law and Ecology: New Environmental Foundations* (London, Routledge, 2011).

⁷ N Luhmann, *Law as a Social System*, trans. K Ziegert (Oxford, Oxford University Press, 2004).

⁸ See for example Elizabeth Fisher's ruminations on the particularities of environmental law as 'hot law' responding to 'hot' problems that lack an adequate knowledge base and involve

urgency of environmental issues and the relatively uncrystallised nature of the particular branch of law, the expectations would be that environmental law would act faster and without the laboriousness that characterises the rest of the legal areas. These expectations are bound to be disappointed, since environmental law remains part of the legal machine that needs to reduce real facts into legal facts, while at the same time inserting itself into existing administrative legal mechanisms. Current environmental law, therefore, is as fast or as slow as the rest of the legal system, with occasional bouts of acceleration if the particular case, story or concept has been taken up by the media, politics, the economy or other spheres of social life.

It would now seem, however, that the law has found its match. Geology is notoriously slow and so far has operated outside the speed demands of other disciplines. Its method relies on the construction of a continuity that spans vast durations before and indeed following human presence.⁹ Humans are often considered a brief interval in an otherwise multiscalar process that is concerned with what withstands time and therefore remains in time and space. But even geology is changing: with the emergence of the Anthropocene, lithostratigraphy is being complemented by biostratigraphy (namely, not just non-anthropogenic rocks but also urban environments created by humans). The focus is more zoomed in and as a consequence, the epistemic velocity speeds up. This, in combination to the fervour with which the Anthropocene as a new geological epoch has been embraced by various disciplines, has propelled the discipline of geology to an accelerated mode - so much that, as Bruno Latour puts it, “we find geologists flabbergasted by the quick pace of human history; a pace that forces them to try lodging a ‘golden spike’ in a span of two hundred or even of sixty years (depending on whether you prefer a short or very short temporal boundary demarcating the emergence of Anthropocene).”¹⁰ The term has provided us with a sizeable amount of interdisciplinary work by geology scholars that aim to converse with other disciplines in ways never occurring before. Although the discipline itself has stalled for a characteristically long time on its decision whether there is enough scientific evidence to accept the term,¹¹ the Anthropocene has managed to mobilise an extraordinary inter- and even supra-disciplinary surge of interest – a great indication of which is also this very volume. We are all united in the search for our position with regards to the Anthropocene – or at least this is what it would seem. And why not? It is rare to witness and be offered the opportunity to cogitate on the change of a geological epoch, and the law must not abstain from it.

a plurality of parameters and agents. E Fisher, ‘Environmental Law as ‘Hot’ Law’ (2013) *Journal of Environmental Law* 25, 3, 347

⁹ See for example “Landscape modification will only persist as long as human land management persists; there will be a lag time, *probably of a few centuries*... After this, sedimentary processes will revert to approximately natural.” J Zalasiewicz *et al.*, ‘Stratigraphy of the Anthropocene’ (2011) *Philosophical Transactions of the Royal Society A*, 369, 1036, 1047, added emphasis.

¹⁰ B Latour, *Facing Gaia: Six lectures on the political theology of nature* (the Gifford Lectures on Natural Religion Edinburgh, 18th-28th of February 2013) 77, www.macaulay.cuny.edu/eportfolios/LATOUR-GIFFORD-SIX-LECTURES

¹¹ See however the report of the Anthropocene Working Group of the 29th of August, 2016, to the International Geological Congress, subsequently to be considered by the International Commission on Stratigraphy for their final decision, on how the Anthropocene is stratigraphically verifiable, making the Anthropocene an official geological epoch.

In what follows, I embrace this responsibility of thinking of the new geological epoch which has been entirely instigated by us humans. I will suggest some new terms to deal with the Anthropocene from an environmental legal point of view, such as continuum/rupture, human/nonhuman/inhuman, as well as geologic immersion and planetary withdrawal. These are merely the tools in order to start constructing a theoretical perspective faithful to the Anthropocene and its demands, which takes place in section three of this text. To conclude, I offer four theses in the form of suggestions on how Critical Environmental Law needs to adapt in order to integrate the Anthropocenic grammar and perspective.

2. Anthropocenic Grammar

In the opening pages of his book *Ecological Thought*, Timothy Morton writes: “one of the things that modern society has damaged, along with ecosystems and species and the global climate, is thinking.”¹² The kind of thinking Morton refers to, has been long forgotten in the name of problem-solving and solution-oriented practices. This does not mean that problem-solving precludes thinking. On the contrary, it demands a thinking that is specific, unidirectional and targeted. By definition it needs to bracket issues that are not immediately relevant and assume a temporality that targets the present and the immediate future. This mode of thinking is applied in most environmental legal production processes.¹³ The Anthropocene, however, opens up a different temporality and depth of thinking. It requires a focus that zooms out rather than in, observing humanity and its shenanigans from a distance. It requires a counter-intuitive pause and an opening up to include previously thought irrelevant issues, planetary futures and inhuman bodies, as I show below. It demands a supra-disciplinarity, some work on which must take place within the confines of every individual discipline (every discipline has the responsibility to start thinking of other disciplines) and also in unison as a collective emergence.

The challenge for environmental law is considerable. It must expand beyond the increasing epistemic closure that always demands a return to the law and its habitual mechanisms, and consider other disciplines in both its theoretical and applied manifestation. Indeed, the latter is the lesser of the two problems: in any environmental legal statute or court decision there is an inherent interdisciplinarity that needs to bring together epistemic advances from science, ecology, politics and economy, to name a few. But this interdisciplinarity is instrumentalised and as such, does not reach beyond the law and its needs. The various disciplines become translated into law for the demands of the particular problem, with its pre-determined, mostly short-term temporality. This remains the case despite some of the more visionary legal concepts, such as the principle of intergenerational equity that urges towards a slightly ampler but ultimately still limited temporality, especially when compared to the Anthropocenic temporality. So, the main challenges for environmental law are: *adopt an interdisciplinary approach that escapes the narrow instrumentalism of decision-making, and extend this on a supra-disciplinary horizon of long-term futurity.*

¹² T Morton, *Ecological Thought* (Harvard University Press, 2010) 4.

¹³ F Capra and U Mattei, *The Ecology of Law: Toward a Legal System in Tune with Nature and Community* (Berrett-Koehler, 2015).

Similarly to what has been called the grammars of climate change,¹⁴ that refer to the questions of who speaks and how one speaks for pressing environmental issues, the need for a grammar of the Anthropocene is pressing and invites the re-emergence of a supra-disciplinary thinking of the kind in which Renaissance excelled. While a Renaissance breadth of knowledge would now be impossible due to the depth of specialised knowledge, an epistemic propensity towards supra-disciplinarity is the main grammatical invitation of the Anthropocene. In a way, this challenge is superior to the one augured by sustainable development – another mobilising concept that transcended disciplines. Indeed, very few concepts have managed to mobilise the various disciplines so fiercely and with such an effect on current thinking as the Anthropocene hypothesis. Let me, therefore, point to some of the new grammatical structures that are proposed with the Anthropocene.

First, the Anthropocene changes the way we understand the connection between humanity and the rest of the planet. It demands a fine, somewhat paradoxical, balance. On the one hand, an understanding that, not only do humans depend on the planet (which is in the basis of many anthropocentric theories where nature is protected as resource); not even that nature is central to humanity (in the way ecocentrism and Earth jurisprudence has it¹⁵); but that there is such a continuity between them and the rest of the planet that any distinction is often arbitrary and on the basis of partial interests. On the other hand, the Anthropocene invites a return of *anthropos* as a new political and legal body that embraces the scientific developments of posthumanism, and yet asserts that humans are *not* the same as other material and immaterial bodies that populate the planet.¹⁶ The oft-rehearsed deep-ecology notions of oneness in terms of human and non-human bodies points to a need for an ecological flatness that does not offer any criteria of distinction, and therefore cannot differentiate between the various bodies. It is important, therefore, to retain difference and even perhaps human priority. As Kathryn Yussof puts it, “this priority is isomorphic and is not something that should be flattened out in relation to other life/minerals (as some argumentation in the posthumanities inadvertently does).”¹⁷ The other end of the spectrum is, however, a human exceptionalism, the kind of which we often witness and practice, whether consciously or unconsciously. This is especially the case in law, which in its majority is characterised by anthropocentric values. Paradoxically, this needs to be managed as an anthropocenic asset in terms of retaining human responsibility. Yussof again: “[i]t is a case of negotiating human exceptionalism rather than trying to do away with it all together, because that elision negates the power and responsibility that comes with what is inherited as a consequence of our humanism (the ontological debt).”¹⁸

¹⁴ C Barnett, P Cloke, N Clarke and A Malpass, *Globalizing Responsibility: The Political Rationalities of Ethical Consumption* (London, Blackwell, 2011).

¹⁵ What I suggest is different to ecocentrism in that, emphatically, here there is no centre yet there is difference. See my work on this in ‘Actors or spectators? Vulnerability and critical environmental law’, in A Gear and E Grant (eds), *Thought, Law, Rights and Action in the Age of Environmental Crisis* (Cheltenham, Edward Elgar, 2015).

¹⁶ A Gear, ‘Deconstructing *Anthropos*: A Critical Legal Reflection on “Anthropocentric” Law and Anthropocene “Humanity”’ (2015) 26/3 *Law and Critique* 225-249.

¹⁷ K Yussof, ‘Geologic subjects: nonhuman origins, geomorphic aesthetics and the art of becoming inhuman’ (2015) *Cultural Geographies*, 22, 3, 383, 399.

¹⁸ Yussof, *Geologic Subjects*, 399-400.

In other words, the Anthropocene is inviting us to consider the connection between what I have called *the indistinguishability between bodies* on the one hand, and the de facto emergence of *different bodies* on the other. The indistinguishability between bodies refers to the way bodies are always assembled in collectivities with other bodies, to the point that the limits of a (human but also any other) body become actually and epistemically fuzzy. Bodies, in other words, constitute a *continuum*. I have elsewhere defined the continuum as the surface that cuts across animate and inanimate objects, bodies, discourses and so on.¹⁹ This continuum is not equivalent to a flat ontology, nor to the vastness of the plane of immanence (“the ‘holding together’ of heterogeneous elements.”²⁰). It draws on Moira Gatens’s description as “a plane of experimentation, a mapping of extensive relations and intensive capacities that are mobile and dynamic”,²¹ in that it emphasises experimental and therefore unpredictable mobility of both material (extensive) and immaterial (intensive) bodies. It also draws on Jane Bennett’s “ontological field without any unequivocal demarcations between human, animal, vegetable or mineral. All forces and flows (materialities) are or can become lively, affective, and signaling ... portions congeal into bodies, but not in a way that makes any one type the privileged site of agency.”²² Indeed, the continuum I am suggesting here is acentral and multi-agentic, constituted of affective excess and of bodies melting into each other’s contours. But it is not flat, like much of current ontologies, new materialisms and some ecological thinking seem to suggest. It is instead a *manifold*, full of fissures and planes, heavily politicised by historical and geographical processes. It is also a *tilted*, power-structured surface, on which bodies move, rest and position themselves, affecting the tilt while being affected by it. Stronger bodies affect the continuum in radical ways, making it tilt according to their positions: the global North is stronger than the South; a corporation is often stronger than a single individual; a collective is sometimes stronger than a developer; a tsunami is nearly always stronger than the holiday-makers, and global warming is stronger than all of us.

The concept of indistinguishability refers to the commonality of all bodies as ‘inhabitants’ of the continuum. But so far, the anthropocentric continuum reserved a special place for the human, indeed for Man. Think of the idea of ‘man’ as propagated in Enlightenment: a white male of ideal corporeal proportions, gifted with reason, common sense, knowledge, potential, ready to conquer the world.²³ But we know now, after the extensive discussion on the posthuman, that the human has never been what we thought. The human is always mediated (by its body, by the space around it and by the space that the human body generates, by other bodies, whether human, natural, artificial, and so on). This is intimately connected to the fact that a body cannot be a neatly defined entity. The body does not have an outline. If they were a painting,

¹⁹ A Philippopoulos-Mihalopoulos, *Spatial Justice: Lawscape Body Atmosphere* (London, Routledge, 2015).

²⁰ G Deleuze and F Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. B Massumi (London, Athlone Press, 1988) 323; G Deleuze and F Guattari, *What is Philosophy?*, trans. H Tomlinson and G Burchell (New York, Columbia University Press, 1994) 141.

²¹ M Gatens, ‘Through a Spinozist Lens: Ethology, Difference, Power’, in P Patton (ed.), *Deleuze: A Critical Reader* (Oxford, Blackwell, 1996) 165.

²² J Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham, Duke University Press, 2010) 117.

²³ See A Grear, ‘Challenging corporate ‘humanity’: legal disembodiment, embodiment and human rights’ (2007) *Human Rights Law Review* 7, 3, 511.

bodies would be Venetian dashes of colour without drawn linear boundaries, staging through their expansive leaking a radical withdrawal from the Florentine canon of humanist containment. Deleuze writes: “the edge of the forest is a limit. Does this mean that the forest is defined by its outline?...We can’t even specify the precise moment at which there is no more forest.”²⁴ All bodies are leaking. By ‘all bodies’ I mean human and nonhuman. While in traditional environmental thinking, whenever included, nonhuman bodies have been either resource, context or the negative of the dialectics of humanity, here I follow the schools of thought largely identified as new materialisms, non-representational theory, speculative realism and object-oriented ontologies,²⁵ themselves generally drawing from a Spinozan/Deleuzian understanding of the body. Thus, for Deleuze, “a body can be anything: it can be an animal, a body of sounds, a mind or idea; it can be a linguistic corpus, a social body, a collectivity.”²⁶ All bodies are *assemblages*, namely aggregations of human and nonhuman bodies that are contingent upon the conditions of their emergence and which do not presuppose the centrality, and certainly not the exclusive presence, of the human. What is more, assemblages are both actual, namely space and matter, and virtual, namely potential, but still real. Actual and virtual are not found in a dialectical opposition; nor does the actual determine the virtual.²⁷ Rather, there is no ontological distinction between the two, and if anything, the actual is determined through its folding with the virtual. In this sense, current weakness or at least lack of strength is always affected by the virtual potential of its evolution into a much stronger body. Post-colonial environmental legal studies amply show both how the various positions of the bodies (North/South, urban poor versus urban elite, and so on) are artificially maintained in positions of subjugation due to capitalist interests; and how these positions can and do change, usually according to a neoliberal economic machine that encourages growth at the expense of environmental protection.²⁸

So, if all bodies are assemblages and if no body has a definitive contour, how do bodies differentiate themselves from each other? How do singularities emerge from the continuum? These singularities emerge through *ruptures*. Ruptures interrupt the continuum, cutting the links between bodies and allowing differences/individualities/subjectivities and eventually singularities to emerge. In thinking of the continuum, I have been inevitably influenced by Foucaultian biopolitics because its sovereignty is diffused and embodied in each participating body. It differs from the biopolitical, however, because it is characterised by the persistent erection of boundaries in the form of ruptures without predetermined ethical value. Ruptures can be both positive differences that encourage identity, as well as exclusions or hierarchies that discourage specific kinds of identity; they can be conflicts (necessary or engineered) as well as Deleuzian folds, namely co-emerging assemblages, and

²⁴ G Deleuze, *Cours Vincennes: Sur Spinoza*, 17.02.1981 in L Lambert, *The Funambulist Pamphlets 01: Spinoza* (New York, Punctum Books, 2013) 74.

²⁵ See for example D Coole and S Frost, *New Materialisms: Ontology, Agency and Politics* (Durham, Duke University Press, 2010); Bennett, *Vibrant Matter*; Thrift, 2007.

²⁶ G Deleuze, *Spinoza: Practical Philosophy*, trans. R Hurley (San Francisco, City Light Books, 1988) 127.

²⁷ G Deleuze, *Cinema 1: The Movement-Image* (London, Athlone Press, 1986).

²⁸ See C Gonzalez, ‘Bridging the North-South Divide: International Environmental Law in the Anthropocene’ (2015) 32 *Pace Environmental Law (PELR) Review*, 407; S Humphreys and Y Otomo, ‘Theorising International Environmental Law’ in F Hoffmann and A Orford (eds) *The Oxford Handbook of International Legal Theory* (Oxford, Oxford UP, 2014).

therefore ontological differentiations and 'gatherings'; they can also be epistemological necessities: we *need* to differentiate, according to the foundational fantasy of distinction between self and environment, as Teresa Brennan writes.²⁹ Whatever they are, ruptures remain part of the continuum. Rather than annulling it, ruptures nourish the continuum, which can be thought of as a (continuous) series of ruptures. I have employed the term continuum in different contexts, but it is consistently characterised by this one quality: it is always ruptured, indeed self-ruptured, through foldings and distinctions on its surface. Sometimes illusionary necessities and other times ontological facts, ruptures are the locus of singularity in the continuum. Ruptures constitute the continuum, to the point that one is left only with a continuity of ruptures.

Through ruptures, bodies differentiate themselves from other bodies. According to Spinoza, bodies differentiate themselves on the basis of their differentiated velocities or pauses – it is all about how a body moves or rests. A human body will be faster than a chair will be faster than the plant will be faster than the fossil, and all of them will be slower than a typhoon. Rupture enables a difference in movement that results in a repeated difference. Yet, precisely because the continuum is a series of ruptures, ruptures do not rupture the continuum as such: they are all inscribed within. So, the continuum is crossed by lines that produce meaning, while continuously being ruptured by them. Lisa Blackman in her seminal work on the body,³⁰ has called this the problem of 'the one and the many', namely the ontological difficulty of being coherent yet multiple, in other words, self yet othering. Karen Barad has introduced the term "agential separability" to signal the need for boundaries between bodies.³¹ These boundaries are not placed as fixed constructions between subject and object, human and non-human, or indeed animate and inanimate. Rather, they emerge in order to produce meaning relative to the continuum on which the boundary appears. I understand this as a rupture that brings agency forth without flattening it to an all-connected ontology. It is significant that these boundaries are not conceptualised as either prior or immutable: they are drawn every time as part of the emergence of differentiated bodies – namely, the emergence of agency. The main challenge is how to avoid categorising either continuum or rupture as inferior, namely how to escape the trap of mapping them "onto differentiations made between the civilized and the primitive, the superior and the inferior, the simple and the complex, and the impulsive and the environmental."³² Indeed, how *not* to make rupture and continuum a dialectic of opposites, namely a question of positive presence and negative absence, but a folding co-emergence.

This is also the challenge for the Anthropocene: to put it more concretely, how to manage the fact that humans are everywhere, affecting the geology and future history of the Earth even after our extinction, while at the same time being embedded in a continuum of indistinguishability. As the editors of *New Materialisms* Diana Coole and Samantha Frost write, we have moved away from an epoch where

agents are exclusively humans who possess the cognitive abilities, intentionality, and freedom to make autonomous decisions and the corollary presumption that humans have the right or ability to master nature. Instead, the

²⁹ T Brennan, *The Transmission of Affect* (Ithaca and London, Cornell University Press, 2004).

³⁰ L Blackman, *Immaterial Bodies* (London, Sage, 2012).

³¹ K Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham, Duke University Press, 2006) 175.

³² Blackman, *Immaterial Bodies*, 59.

human species is being relocated within a natural environment whose material forces themselves manifest certain agentic capacities and in which the domain of unintended or unanticipated effects is considerably broadened.³³

For environmental law, this means that there can no longer be a boundary between a body and its environment. The main find of the Anthropocene is that our presence on the Earth necessarily *includes* our “environment”, whether “natural” or otherwise. We are always in an assemblage with the planet. A body is an assemblage of various conditions and materialities. Eben Kirksey’s multispecies families³⁴ is an example of such an assemblage containing human and animal bodies, discursive bodies of economics, politics and law, conservation agencies, wildlife experts, government agents and hobbyists, specific spatialities, affects from gentleness to aggression, and so on. The total sum of these connections constitutes a body that is internally ruptured in an infinity of modalities.³⁵

The Anthropocene, therefore, invites us to think of a grammar of continuum and ruptures, of ruptured continuum and continuous ruptures. These are heuristic tools, indeed a vocabulary or at least a mode of thinking that allows disciplines such as environmental law to extend on the ways it is intimately connected to everything else by engaging with the indistinguishability of bodies, and also accept the need for differentiation and draw it in a velocity and mode that serves its purpose. This enables the law to question the unchallenged perpetuation of such existing accepted assemblages as environment and economy, or sustainability and growth, and start experimenting with different assemblages that include the non-human in its ruptured polyvalence.

3. Anthropocenic Theoretical Perspective

Claire Colebrook writes: “the anthropocene thought experiment also alters the modality of geological reading, not just to refer to the past as it is for us, but also to our present as it will be without us. We imagine a viewing or reading in the absence of viewers or readers, and we do this through images in the present that extinguish the dominance of the present.”³⁶ The perspective is changing radically. The Anthropocene demands an epistemological distance from the object of study, both spatially and temporally. In order to observe the effects of the human onto the Earth, we must *withdraw* from it: spatially to get an understanding of the way the crust of the Earth is altering due to our presence; temporally and into the future of a human extinction, “in the absence of viewers or readers”, where the planet returns to its slowness after that brief human interval.

³³ Coole and Frost, *New Materialisms*, 10.

³⁴ E Kirksey, ‘Multispecies Families, Capitalism, and the Law’ in I Braverman (ed.), *Lively Legalities* (London, Routledge, 2016); see also J Lorrimer, ‘Multinatural geographies for the Anthropocene’ (2012) *Progress in Human Geography*, 36, 5, 59.

³⁵ T Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis, University of Minnesota Press, 2013).

³⁶ C Colebrook, *Death of the PostHuman: Essays on Extinction, Vol. 1* (Ann Arbor, Open Humanities Press, 2014) 30.

These notions perhaps seem too large for environmental law. They open up existential gushes that have little to do with the day-to-day operations of, say, the laws on pollution. As Upendra Baxi writes, “the question of urgency of global social policy is often considered vast enough to permit the luxury of ethical deliberation.”³⁷ But if the Anthropocene is to be heeded, this has to change. An environmental law open to the ruptured continuum must adopt a different, more ethically situated perspective to the one traditionally understood. The anthropocenic perspective I am suggesting here is the fold between, on the one hand, a withdrawal of the law from the object in hand, in order for a planetary jurisprudence to emerge; and, on the other, an immersion to the geological strata of law with an aim of understanding a mineralised jurisprudence.

I employ withdrawal here as a tool of resistance against an atmosphere of absolute inclusion in what Timothy Morton has named *hyperobjects*: objects characterised by viscosity, nonlocality, temporally undulating and constantly phasing. Morton’s prime example of a hyperobject is global warming. As a hyperobject, global warming is characterised by an absence of distance between the implicated bodies: raindrops on our face is global warming, just as the act of flushing away our toilet waste thinking that it ends somewhere *away*. Its viscous nature means that there is no distance between here and away. Everything is within, assembling into the continuous space of the hyperobject yet at the same time withdrawing from it: global warming is not *here* either. “The octopus of the hyperobject emits a cloud of ink as it withdraws from access. Yet this cloud of ink is a cloud of effects and affects.”³⁸ The affects and effects left behind are not causal, at least not in the sense of being merely the sign of the cause. Rather, they all constitute the hyperobject; but they are often cut into palatable pieces of locality and present: they all become little ruptures placed at a distance in order to be apprehended. “It’s never the case that those raindrops only fall on my head! They are always a manifestation of global warming!”³⁹ These ruptures are also part of the object, “are simply the invisible presence of the hyperobject itself, which looms around us constantly.”⁴⁰ In their phasing, objects appear only partially, as indexical signs of their spatiotemporal distribution, and never in their entirety. Indeed, what is there to appear in global warming, if not the entire Earth, fractal and multiscalar, apprehended by different systems, such as politics, media, science, economics, ecology, and so on, all putting between themselves and the hyperobject a desperately constructed distance of observation? How can it present itself, and to whom, if everyone is implicated in this hyperobjective implicate order of global warming? We are all in it, complicitly constituting its continuum.

The total inclusiveness of the hyperobject (which is not of course just climate change but also the Earth’s environmental degradation as a whole) is an aspect of the continuum from which environmental law needs to withdraw and resemiotise. The operations of the hyperobject need to be conceived as a *whole* in an integrated, planetary manner, however strong the gravitation attraction of the hyperobject might be. The Anthropocene offers just this possibility of withdrawal. Clare Colebrook writes: “the positing of the anthropocene era relies on looking at our own world and imagining it as it will be when it has become the past... We can see, now, from changes in the

³⁷ U Baxi, ‘Towards a climate change justice theory?’ (2016) 7 *Journal of Human Rights and the Environment*, 7, 10.

³⁸ Morton, *Hyperobjects*, 39.

³⁹ Morton, *Hyperobjects*, 48.

⁴⁰ Morton, *Hyperobjects*, 7.

earth's composition that there will be a discernible strata that—in a manner akin to our dating of the earth's already layered geological epochs—will be readable.”⁴¹ The withdrawal is both spatial and temporal, planet-embracing and future-tending.

Environmental law needs to see the whole hyperobject (or at least attempt a construction) as a planetary problem, and elevate the planet on an agentic level. Only subsequently can environmental law define its own role accordingly. As Rory Rowan writes, “whereas ‘the global’ suggests a relatively flat, anthropocentric conception of the Earth focused on the construction of social relations on the surface, ‘the planetary’, by contrast, points to a more complex, volumic, stratified understanding of an Earth constituted through dynamic geo-social entanglements. Accordingly, the Anthropocene creates opportunities to cast the planet itself as a key player in the drama of human politics rather than simply its stage.”⁴² The role of environmental law in this is pivotal, as long as it starts thinking in terms of the *planet* rather than in the old geopolitical terms of globality (this does not only apply to international environmental law but also very much to regional and national manifestations). Such a shift would come about with a withdrawal from given legal mechanisms such as the standard balance of interests and legalistic issues of interest, harm and proof. Environmental law must perform a withdrawal from the very inclusivity of this hyperobject: if it carries on operating within it, environmental law falls victim to the devastating rhetoric of piecemeal action and generally accepted impossibility of actually doing anything radical enough that will halt environmental decline. In a way, environmental law needs to stop being so thoroughly *law* and begin becoming more *environmental*: to withdraw from itself and its own habitual legal mechanisms and to move to a different plane from where the issue of environmental degradation will appear as a whole, in its all-ingesting hyperobject presence. From there on, preventive action must be given priority over economic interests and lack of scientific proof, in accordance to a more idealised (but critically realistic, in view of the conditions) understanding of the precautionary principle; issues of intergenerational equity on a planetary scale that includes the future of human extinction must tangibly affect every legal decision and in course change the core of environmental law, from a generally rather conservative, piecemeal and overtly technical legal branch to the visionary, open and given to futurity way of legal thinking and acting that it could be.

On the other side of withdrawal lies immersion. It begins with the fact, suggested by Timothy Morton,⁴³ that we are witnessing the end of the biologically-determined human subject and the inauguration of a distributed humanity operating as a *geological* agent. Humanity and its activities can no longer be understood as mere thought advances, or even corporeally embedded presences, but significantly as mineralised temporalities. Kathryn Yussuf puts it clearly: “[t]he Anthropocene can be seen as a remineralization that is prompting reflection of the future fossilization of humanity...This is largely a result of being able to ‘take up’ a bloated payload of geologic force, courtesy of fossil fuels. In this sense the Anthropocene represents a moment of acknowledgement of a geologic social body politic, but in which our

⁴¹ Colebrook, *Death of the PostHuman*, 26.

⁴² R Rowan, ‘Notes on politics after the Anthropocene’ (2014) in E Johnson et al. (eds) Special Issue ‘After the Anthropocene: Politics and geographic inquiry for a new epoch’ *Progress in Human Geography*, 38, 3, 439, 448

⁴³ T Morton, *The Ecological Thought* (Harvard University Press 2010).

discourses for the critique of power (i.e. biopolitics) are configured to a version of 'life' that does not take account of this geology."⁴⁴ The Anthropocene presents us with a depth (of subjectivity, politics, law) that has so far been excluded, and in which we need to immerse ourselves: the geological depth and its effect on existing discussions on biopolitical control. What will happen to the law if it considers the mineralisation of the body? The law will be required to immerse itself deeper in the geology of the Anthropocene and, once again, reconsider its basic notions. Think, for example, of the understanding of private property as a fundamental human right. In the light of anthropogenic mineralisation, property becomes a planetary loan that has relied on the overexploitation (a "bloated payload") of fossil fuels. Property becomes less secure, less exclusionary, much more permeable. It needs to accommodate the logic of geologic circularity, namely the eventual fossilisation of humanity, and indeed the vanity of it all. It moves increasingly towards a much more expanded understanding of commons.

Immersion entails an acknowledgement of chthuloid (namely, of the deep Earth) verticality and a serious engagement with the ethical consequences of such an acknowledgement. This is what Donna Haraway has called the *Chthulucene*, namely an epoch which gives priority to the constant assemblaging of human with other nonhuman materialities.⁴⁵ Haraway prefers this to the Anthropocene because it describes more accurately the constant implication of the human with other Earthly entities rather than artificially detaching the human from the assemblage. As Kathryn Yussof puts it, "considering the human within geologic time poses the problem of thinking an inhuman milieu, both before, after and internal to 'us.'"⁴⁶ The *inhuman*, namely the geological, becomes part of the human and expands it from within. What is more, the Anthropocene demands a *geophilosophical* situatedness of thought in relation to the Earth. Reza Negarestani writes: "geophilosophy is a philosophy that grasps thought in relation to earth and territory...it is a philosophy that, perhaps unconsciously, grasps thought in relation to two traumas, one precipitated by the accretion of the earth and the other ensued by the determination of the territory. Whilst the former trauma lies in the consolidation of the earth as a planetary ark for terrestrial life against the cosmic backdrop, the latter is brought about by a combined geographic and demographic determination of a territory against the exteriority of the terrestrial plane and fluxes of populations of all kinds."⁴⁷ These two traumas, distinctly anthropocentric and a direct effect of the Anthropocene, are also specifically legal. They both require an intervention that guarantees limits, while at the same time allocating responsibility. This is an anthropocentric legality that chops up the surface of the Earth in territorial modes that include other populations as resources (rather than allowing for multiple territories in terms of animal populations); and then delegates

⁴⁴ K Yussof, 'Anthropogenesis: Origins and Endings in the Anthropocene' (2016) *Theory, Culture & Society*, 33, 2, 5.

⁴⁵ 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>; see also A Gear's contribution in this volume, and A Gear, 'Anthropocene "Time"?'—A reflection on temporalities in the 'New Age of the Human' I AM HAVING TROUBLE FINDING THIS PUBLISHED (I HAD A DRAFT). YOU MIGHT KNOW BETTER? IT'S NOT A BIG DEAL IF IT IS NOT INCLUDED BUT IT WOULD BE NICE.

⁴⁶ Yussof, *Geologic Subjects*, 388.

⁴⁷ R Negarestani, "Triebkrieg", unpublished manuscript, 5, cited in B Woodard, *On an Ungrounded Earth: Towards a New Geophilosophy* (Punctum Books, 2013) 14.

the whole Earth to the status of resource ('ark') for the human future. A geophilosophical position attempts to mend these traumas through the only way possible. Colebrook writes: "the anthropocene thought experiment also alters the modality of geological reading, not just to refer to the past as it is for us, but also to our present as it will be without us. We imagine a viewing or reading in the absence of viewers or readers, and we do this through images in the present that extinguish the dominance of the present."⁴⁸

Rethinking the basics would also include the very term 'Anthropocene' which will need to be ruptured too: not all can be equal in terms of their responsibility towards the overexploitation of resources. As Chakrabarty writes, ⁴⁹ the Anthropocene risks becoming another totalising imposition (a hyperobject?) flattening historical and geographical injustices and presenting a total, unified humanity in terms of the share of systematic destruction of nature. In other words, "how humanity is deployed as a method of erasure that obfuscates climate racism, social injustice in fossil fuels, and differentiated histories of responsibilities through homogenization in a 'we' of the Anthropocene."⁵⁰ The tilt in the continuum disrupts the happy flatness of some of the Anthropocenic rhetoric. We are not one humanity facing its responsibility before the Anthropocene. Rather, we are a continuum of ruptured shares, some more, some less (no one however with no share in the responsibility).

The continuum changes: rather than flat, it is now revealed to be manifold, full of fissures and deep ruptures. Environmental law in the Anthropocene is to cultivate "a depth relation that is something like a charge in its fathoming of deep, underground spaces."⁵¹ Inhuman (geology) and non-human (biology) constitute the assemblage of what the human is in the epoch of the Anthropocene. In other words, the responsibility in the Anthropocene epoch is one of both withdrawal and immersion: withdraw from the present in order to read it as nonhuman future; withdraw from centrality while retaining omnipresence; withdraw from the given legal mechanisms in order to withdraw from the hyperobject. But also, immerse ourselves in the geophilosophical understanding of the human; immerse the law in a mineralisation that extends into a deep future; and immerse into the differentiated responsibility that humanity has in the face of anthropocenic environmental degradation.

4. Anthropocenic Methodology: Critical Environmental Law

There is no question that the Anthropocene affects the way environmental legal research and thinking in general should take place. But the Anthropocene is not an isolated move. If it were, it would not have captured the collective imagination the way it has. It is one more stage in the recent evolution towards a more embedded, material thinking about the human and the world at large. What has started with Catherine

⁴⁸ Colebrook *Death of the PostHuman*, 30.

⁴⁹ D Chakrabarty, 'The Climate of history: Four theses' (2009) 35 *Critical Inquiry*, 197.

⁵⁰ Yussof, *Anthropogenesis*, 6-7.

⁵¹ Yussof, *Geologic Subjects*, 401.

Merchant's *Death of Nature*⁵² and carried on with Deep Ecology and post-ecologism,⁵³ has now found an outlet in arguably more supra-disciplinary ventures such as the spatial turn, the corporeal turn, the affective turn, and such philosophical currents of thought as posthumanism, new ontologies, new materialism and speculative realism. The Anthropocene is an addition to this long yet compact thinking evolution, and brings the need for an expansive thinking and acting, a differential understanding of space and time in terms of depth, a need for strategic withdrawal for hyper-inclusion, and a reconfiguration of human exceptionalism.

In what follows, I would like to offer four theses on Critical Environmental Law in order to show how they are affected by the Anthropocene. This is not a programmatic description of how things should be solved, but suggestions for a methodology of environmental law in the epoch of the Anthropocene, which demands a conceptualisation of environmental law that moves beyond the usual distinctions between anthropocentrism and ecocentrism; unproblematised distinctions between environment and human; and standard methodologies of legal access to knowledge.

4.1. *An Ontologised Environmental Law*

"With the arrival of the Anthropocene, this division [between human/nonhuman or nature/culture] is de-ontologized; as such, the separation appears instead as an epistemological product mistakenly presumed as a given fact of being."⁵⁴ The Anthropocene brings to the fore an ontology of continuous connection between bodies. In so doing, it instructs us to question the well-trodden paths of epistemology, and begin placing them in a wider context. Why is it that human rationality needed this rupture between human/nonhuman? Why this need to naturalise what should have remained transparent epistemological distinctions, arguably necessary to understand the world, but ultimately misleading and obscuring of the ontology of the continuum? Continuing in this vein, one would be forced to question that major distinction between epistemology and ontology:⁵⁵ can we afford to carry on allowing Eurocentric, Capitalocenic,⁵⁶ neoliberal, market-originating epistemological tools to determine what we take as ontological truths? Can such a distinction seriously be maintained in view of the fact that the Anthropocene also augurs the de-individualisation of the human in favour of a human collectivisation as a geological agent that affects the Earth,⁵⁷ and further a human fossilisation as a return to the Earth as the *a priori* agent? This ontological take would affect environmental law in two main ways: first, it would collapse the distinction of a mechanistic, slow, procedure-led environmental law on the one hand, and an urgent tool of rapid dealing of environmental degradation on the other, that would deal with the issues as a priority and on a planetary level where

⁵² C Merchant, *The Death of Nature: Women, Ecology and the Scientific Revolution* (Wildwood House 1980).

⁵³ I Blühdorn, *Post-ecologist Politics* (London, Routledge, 2000).

⁵⁴ E Turpin, 'Who Does the Earth Think It Is, Now?', in E Turpin (ed), *Architecture in the Anthropocene: Encounters Among Design, Deep Time, Science and Philosophy* (Open Humanities Press, 2013) 8.

⁵⁵ See R Brasier, 'Concepts and Objects' in L Bryant, N Srnicek and G Harman (eds) *The Speculative Turn: Continental Materialism and Realism* (re.press, 2011).

⁵⁶ Haraway, *Anthropocene, Capitalocene*, 2014.

⁵⁷ T Morton, *Ecological Thought*.

resources are not about economic capabilities of access but about geological finitudes. The method of accessing knowledge (epistemology) is responsible for the construction of such knowledge – thus, if environmental law follows a method of slow legal deliberation, it also generates a reality filled with unresolvable problems. Second, the ontological practice of the Anthropocene demands the collapse of traditional disciplinary boundaries, further fossilised by research councils, discipline-specific assessment exercises, and sclerotic university structures that operate along obsolete disciplinary distinctions.

4.2. A Material Environmental Law

Critical environmental law can no longer hide behind the usual legal logocentric panoply that insulates environmental law from materiality. We now know that, as Austin Sarat writes, “the law is all over”:⁵⁸ this is a call to claim law’s spatial, corporeal, emotional, sensory presence that has been subsumed to the critique of discourse. More than other legal disciplines, environmental law is exposed to its own materiality: dealings with scientific thresholds, ecological catastrophes, urban poverty, sick bodies and polluted atmospheres. Above all, the Anthropocene shows that environmental law is already itself a body,⁵⁹ namely an assemblage of various materialities, spaces and disciplines. As a body, environmental law is both singular and part of the continuum: it affects and is affected by other bodies. Environmental law must be thought critically, as a multi-layered, planetary, fragmented discipline, characterised by horizontalities that follow the transboundary nature of pollution and verticalities that reach deep into the planet’s space and time. There is no more room for such antiquated debates as anthropocentrism versus ecocentrism.⁶⁰ The Anthropocene has exposed the grand paradox of the absence of centre. To be a singularity amidst a plane of other singularities entails a radical *acentricity*, which is much more than a call for the inclusion of uncertainty in environmental law. Rather, it is an invitation to a praxis-oriented, spatially specific, material approach that considers every problem in its singularity.

4.3. A Mineralised Environmental Law

Environmental legal agency in the era of Critical Environmental Law cannot be limited to humans. The earlier posthuman understanding of the human as an assemblage is enough to cloud the agentic certainty. The Anthropocenic mineralisation of thought introduces an agentic tripartite: human (as assemblage, without contours), nonhuman (assemblages where the biological – animals and plants – but not the human prevails), inhuman (assemblages where the mineral prevails). Any carving of agency from the

⁵⁸ A Sarat, ‘ “...The Law is All Over”: Power, Resistance and the Legal Consciousness of the Welfare Poor’ (1990) *Yale Journal of Law and Humanities*, 2, 2, 343.

⁵⁹ This is why, as D Houston (2013) ‘Crisis Is Where We Live: Environmental Justice for the Anthropocene’, *Globalizations*, 10, 3, 439, points out, we must not forget the existing environmental narratives of environmental activism but built on their successes and carry on with local action.

⁶⁰ see my take on this in ‘Epistemologies of Doubt’, in A Grear and L Kotzé (eds), *Research Handbook On Human Rights And The Environment* (Cheltenham, Edward Elgar, 2015).

continuum requires a rupture, often artificial and arbitrary.⁶¹ Critical environmental law, however, must move towards a closer reading of the Anthropocenic geological circularity (life has always originated in and will always return to minerals) and consider issues such as the recognition of legal agency of bodies such as mineral formations (such as fossil fuels) and even the planet as a whole.⁶²

4.4. A Situated Environmental Law

Human exceptionalism must be managed in order to create the conditions for assuming responsibility, regardless of proof of causal link. There is no doubt that humans are only one participant in the environmental decline, but also, as the Anthropocene has taught us, they are always a participant, always situated within the ecological conditions of our planet. Strict liability for historical anthropocenic environmental degradation is consonant with assemblage-thinking, where all bodies are complicit with the degradation. However, the responsibility is not flat. Depending on where each body is situated in the assemblage, the responsibility changes. This is not about *proof* but about historical presence. It is clear that responsibility now becomes situational: it is the juridical responsibility of situating one's body within an assemblage. Responsibility needs to be thought of as extended, namely both material and unrestricted by the immediate or the local. Doreen Massey puts this as "the Russian Dolls issue of care and responsibility: we always begin with the proximate, home, and then move outwards. But care diminishes as we move out."⁶³ We might think we try to be "responsible" about our presence in a locality, even a locality that "thinks globally," as the motto goes. But the problem is much vaster. Timothy Morton writes: "the problem goes beyond how to dispose of human-sized things, like the stuff that gets flushed down a toilet. What should we do about substances on whose inside we find ourselves?"⁶⁴ Critical environmental law is expected to situate itself at a distance from the hyperobject of environmental degradation and yet immerse itself in the geologic verticality of responsibility. This is the way to encourage that humans assume their responsibility in relation to their position in the planetary assemblage.

5. Conclusion

These theses are mere indications of how environmental law can remodel itself critically by taking into consideration some of the important challenges of the Anthropocene. This is neither an easy, nor a unilateral task. Environmental law itself is part of an assemblage of material and immaterial bodies and to a large extent is bound by the general continuum around it. It can, however, organise itself politically and start withdrawing from the traditionally understood legal methodology. What is more, it bears a particular responsibility to do so – more than any other branch of law,

⁶¹ For agentic emergence in the law, see A Philippopoulos-Mihalopoulos, 'Lively Agency: Life and Law in the Anthropocene', in I Braverman, *Lively Legalities* (London, Routledge, 2016).

⁶² especially the latter is connected to what A Neimanis, C Åsberg and J Hedréncall, 'Four Problems, Four Directions For Environmental Humanities: Toward Critical Posthumanities For the Anthropocene', (2015) *Ethics & Environment* 20, 1, 67, call the problem of compartmentalization of environmental questions.

⁶³ D Massey, 'Geographies of Responsibility' (2004) *Geografiska Annaler, Series B, Human Geography, Special Issue: The Political Challenge of Relational Space* 86, 1, 5, 9.

⁶⁴ Morton, *Hyperobjects*, 140.

environmental law needs to reflect critically on what is expected of it and how to achieve it. And when bodies move, the assemblage often moves along and the continuum's tilt might change a little.

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