



Geography and ethics I: Placing injustice in the Anthropocene

Jeremy J Schmidt 

Department of Geography, Durham University, Durham, UK

Progress in Human Geography
2022, Vol. 46(4) 1086–1094
© The Author(s) 2022



Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/03091325221097104

journals.sagepub.com/home/phg



Abstract

This report on geography and ethics focuses on the conditions of ethics. It identifies the ethical stakes of how accounts of unequal anthropogenic impacts on the Earth are specified with respect to both injustice and to what are deemed viable futures. It centres arguments of Indigenous and Black scholars regarding kinship and intersectionality, and respective ethical practices of struggle, resurgence and rebellion against the mutual oppression of peoples of colour and the environment. I identify challenges these forms of grounded practices pose to more-than-human geographies and urge an approach to understanding ethical conditions as concrete concerns.

Keywords

Kinship, intersectionality, ethics, relationality, Anthropocene

The first exercise students complete in my course on how humans are altering the planet is to read ‘The Ones Who Walk Away from Omelas’ by Ursula Le Guin. The story is about a utopia premised on abhorrent abuse of a child. Everybody in Omelas is required to witness the child’s brutal suffering. Afterwards, some make the utilitarian exchange of their happiness for their inhumanity. Others leave Omelas in moral disgust. The story sets up ethical engagement with the Anthropocene, including how Earth system sciences imply a moral imaginary set between continued environmental subjugation versus humble retreat (Lövbrand et al., 2010). It is not easy going for students since many scholars argue existing normative resources cannot handle conditions unprecedented in Earth or human history. For instance, Chakrabarty (2009: 221, original emphasis) claims climate change presents a universal challenge to the human condition before stating that ‘we can never understand this universal’. Similar claims that human and geological time are incommensurable form

a near axiom of Anthropocene scholarship. Geographers often centre the idea too, even amidst critiques of a singular humanity (*anthropos*) and charges against other culprits for planetary crises: capitalisms, patriarchies, Eurocentrisms, racisms and combustion (e.g. Lewis and Maslin 2015; Moore 2015; Schmidt et al., 2016; Grusin 2017; Pulido 2018; Yusoff 2019; Gibson-Graham 2020; Phillips 2020; Pyne 2021). Many likewise rechristen the proposed geologic era into some other ‘cene’: Capitalocene, Manthropocene, et cetera. Others name the structures oppressing peoples of colour and environments less diplomatically. Caputi (2020: 77) argues the rape of Black women by slave owners, and the formative role of plantations for economies now raping the Earth mean: ‘the Anthropocene is a motherfucker’.¹

Corresponding author:

Jeremy J Schmidt, Department of Geography, Durham University, Lower Mountjoy, South Road, Durham DH1 3LE, UK.
Email: jeremy.schmidt@durham.ac.uk

Midway through the term the students and I read N.K. Jesmin's response to Le Guin: 'The Ones Who Stay and Fight'. The title signals an ethical alternative to staying or walking away. Jesmin's powerful rejoinder targets the implicit privilege of being positioned to scope moral possibilities from afar, as though ethical conditions do not pervade everyday moral ecologies. This sets up a focus on ways to be and act otherwise in the Anthropocene for the rest of the course. I initially liked the progression. As I have written this first of three reports on geography and ethics, however, I have come to see the order is not quite right. It is vital to know what critiques target – what I personally hope remains an 'essentially contested canon' of the Anthropocene – but this can be done without centring positions privileged enough to walk away literally, metaphorically or academically.

In this context, this first report concentrates on the conditions of ethics, assertions of planetary changes to them and critiques of Indigenous and Black geographers that mobilise kinship, relationality and intersectional ethics to explain those conditions otherwise. These concerns are not always explicitly connected, and I have not clapped them together without reason. I have an argument to build that follows the late Clive Barnett's (2017) insight that injustice unspecified is often justice denied. Barnett (2018) emphasised that the spatial dimensions of injustice demand not the impartiality sought by theories of justice but the inclusive ambition of concrete ethical practices. Similarly, I argue that more ethical perspicuity is needed than complaints that human impacts on the Earth are not the result of humanity writ large. Although true, it's also critical to specify injustices in ways that recognise the limits of theories of justice and the limits of ethics (Sandel 1982; Williams 1985). This moral work is underway in many areas of Geography that identify the importance of kinship and relationality for meeting intersectional obligations.

My set of reports comes after previous assessments in this journal of Geography's 'moral turn' in the late 1990s (e.g. Sack 1997). That turn developed a threefold approach towards moral geographies by distinguishing: (1) practices affecting moral harms or goods, (2) normative accounts of how practices relate

to what ought to be done and (3) metaethical arguments regarding accounts of the good (Smith 2001). These distinctions remain useful even though many geographers have pivoted away from a primary orientation to Western philosophy's traditions of deontology, utilitarianism and virtue ethics (Barnett 2010; Olson 2018). Amooore's (2020) analysis of the ethics of algorithms, for instance, deftly describes how algorithms do not merely have practical ethical effects, such as reinforcing discrimination when trained on biased data sets. That is the case, but there are also normative considerations in the very idea of using the attributes of others to make decisions affecting particular individuals. In this context, Amooore augurs for an ethics of doubt backstopped by a metaethical position aligned with Judith Butler's argument that an ethical account of one's self requires an account of one's conditions. Since the latter will always be partial so too will the former, and this provides warrant for what Amooore terms an ethics of doubt. Amooore's powerful arguments raise questions too. What would a 'full' account of one's conditions entail? If a full account were available what would become of an ethics of doubt?

These types of questions do not sit on shelves, as this report shows how by focusing on where and how metaethical commitments locate the conditions of ethics. The Anthropocene is an excellent aperture for focusing these concerns because it is not only about geological signatures of people on the planet but also about changes to planetary functions that enable life (Waters et al., 2016). This raises questions regarding the changing boundary to what counts as metaethical. It also makes metaethics much less abstract by demanding a way of thinking through the complexity of unequal conditions. To these ends, the first section engages Indigenous geographers who challenge the notion that the Anthropocene is a 'new' condition while also countering metaphorical notions of what it means to be related – kin – with other species and processes. The second, on intersectionality, takes its cue from the late bell hooks (1996: 22), who argued in her essay 'Touching the Earth' that: 'In modern society, there is also a tendency to see no correlation between the struggle for collective Black self-recovery and ecological movements that seek to

restore balance to the planet by changing our relationship to nature and to natural resources’.

I Anthropocene ethics: From conditions to kin

Castree (2014: 474) argued the anthropogenic forces altering how the Earth system functions open anew debates over ‘the right way to live on Earth’. This (big) ethical question is complicated by what constitutes ‘the right way to live’ and practices for knowing the planet. Bulkeley (2019) argues that engaging such practices requires treating climate change as a condition, not a discrete problem that can be parsed from other aspects of social life. Treating climate-as-condition raises important metaethical concerns since debates about past injustices, present responses and possible futures often come packaged together. For instance, Purifoy (2021: 832) argues that racial assumptions built into contemporary notions of climate dystopias constrain Black futures not only because they ignore histories of adapting to violence and environmental dispossession but also owing to how they suppress ‘legacies of Black people creating more durable relationships to everything that gives them life’. These are live ethical concerns because what constitutes a viable future under climate change is not scientifically settled in advance. As Poprocki (2022) shows in Bangladesh, ‘viable futures’ under conditions of climate change are co-produced through the political economy of scientific assessments.

The Anthropocene is not only about climate, and geographers have been ethically engaging multiple issues. Numerous scholars take up ethics as matters of care for the more-than-human relations that condition moral consideration with respect to other species such as lobsters, dingos and street dogs (Carter and Palmer 2017; Johnson 2015; Srinivasan 2019). These diverse offerings share in rethinking the ‘subject’ of ethics in relational rather than anthropocentric or individualist terms. Ruddick (2017: 121), for instance, argues that the Anthropocene demands one ‘think our ethical engagements in planetary terms’ and without the methodological individualism that isolates individuals as solitary ethical agents. Ruddick takes up Spinoza (among others), which as Sharp (2017) notes in response is

potentially fruitful owing to how Spinoza’s philosophy can refocus attention on the composition of human and nonhuman alliances, but less helpful in practice since he remained committed to seeing the most powerful alliances as those with humans.

Rethinking the conditions of ethics is a task Krzywoszynska (2019: 663) undertakes by describing the ethics of more-than-human worlds as requiring ‘care networks’, an extension designed to trouble the notion of discrete encounters with soil in the Anthropocene. The shift from dominant philosophical traditions in this case is clear when Krzywoszynska (2019: 662) describes soil conservation as an ‘emerging arena’ for recognising the importance of non-human life, and moves in conversation with the speculative ethics of Puig De Bellacasa (2017). This departs from the staid reference point of environmental ethicists in Aldo Leopold’s (1966) land ethic and his arguments that soil conservation required an ecological extension of ethics beyond soil to the entire biotic community. There are good reasons to move beyond Leopold and his idea of wilderness emptied of Indigenous presence. But not everybody sees the more-than-human turn as uniformly beneficent. Pitt (2018) argues that, in fact, more-than-human care may even produce harms.

Hunt (2022: 135) argues the more-than-human turn ‘is old news for Indigenous peoples’. Indeed, in debates about climate change Hunt (2022) argues a more salient question is why Indigenous peoples and their views are not centred. Indigenous scholars and collectives have long identified the specificity and spatiality of literal relations to land, ancestors and other species as central to obligations (e.g. Watts 2013; Simpson 2017). Daigle (2018) argues Indigenous resurgence has been an explicitly spatial project of reactivating kinship relations to and with water’s relations; Nightingale and Richmond (2022) describe ‘environmental repossession’ by Indigenous peoples as the joint reclamation of territory and renewal of values and responsibilities; Tynan (2021) argues that Indigenous ethics of relationality derive from active kinship with land – where the specificity of those relations and obligations accrues to respective Indigenous peoples. In settler colonial contexts, these obligations are discharged in contexts

where extractivist ethics by the state enclose and undermine Indigenous sovereignty (Curley and Lister 2020; Estes 2019; Yazzie 2018).

Kanngieser and Todd (2020) argue that accounts of environmental violence against Indigenous peoples, lands and relations in places like the Marshall Islands or the Tar Sands of Alberta are often rendered as so many ‘case studies’ of the Anthropocene (cf. Masco 2010; Schmidt 2020). They propose an alternative – kin studies – to recognise ‘Land and place as sets of relationships between human and nonhuman beings, co-constituting one another’ (Kanngieser and Todd, 2020: 386). The co-constitutive, co-becoming of relations to lands is also central to Indigenous relationships to Country, and to research ethics in and with Country, owing to obligations towards ancestors and future relations (Bawaka Country et al., 2016a, 2016b; Shaa and Marshall, 2021). These relational concerns affect how the Anthropocene is known. Liboiron (2021a) argues decolonising geoscience requires more than just inclusion or diversity, because these are not antonyms of colonial practices that assume access to Indigenous lands for scientific study. As Raja et al. (2022) also show colonialism cannot remain an unmarked condition for study of the deep past – or Anthropocene departures from it – because the political economy of colonialism has itself produced biased sampling on core concerns, such as species distribution and biodiversity. Further, kinship relations continue to co-evolve, and Indigenous scholars identify how novel arrangements, such those to plastics, also entail obligations (Liboiron 2021b).

The specificity of Indigenous relationality amid genocidal structures of colonialism amplifies demands for ethical scrutiny of ‘changed conditions’ claimed for the Anthropocene (cf. Davis and Todd 2017). This includes critiques of how colonised peoples have already developed ethical practices for living through, and resurging amid, apocalypse (Curley and Lister 2020; Simmons 2019). These critiques press against claims of ‘incommensurability’ in the Anthropocene by showing it to be more an outcome of chronic conditions than the onset of acute crises. In response, Jackson (2021) argues for geographies of ‘epistemic

disobedience’ that dissent from the Anthropocene as a product of, and tacit apology for, conditions wrought by colonialism. Yusoff (2019) argues geologic time is itself deeply racialised owing to the social practices of geosciences. Schmidt (2019) argues that not only are geologic and human time often made commensurate in the Anthropocene but also that new moral geographies often incorporate critiques of anthropocentrism and society/nature dualisms yet maintain the status quo. These concerns run adjacent to those Owen Flanagan (2019: 7) raises in *The Geography of Morals*, where he emphasises the unique moral ecologies of all ethical relations and describes efforts to take up ahistorical, culturally neutral viewpoints ‘ecologically unrealistic’ and ‘transcendentally pretentious’. What matters crucially, then, is to treat Indigenous kinship as literal, ethical relationality under colonised climate-as-condition.

II Intersectional ethics, Anthropocene conditions

The earlier quote from hooks (1996: 22) highlighted the ‘correlation between the struggle for collective Black self-recovery and ecological movements’. Ethically, it is valuable to think about correlation as a mutual relationship: the ways in which one thing affects or depends on another. This is especially so when thinking about the conditions of ethics because what constitutes a mutual relation is not given in advance; relations are not metaphors for, or merely descriptions of, other types of connections such as those of logic or causation. Relations are lived. The quote from hooks (1996: 22) further states that correlated struggles ‘...seek to restore balance to the planet by changing our relationship to nature and to natural resources’. As with Indigenous geographies, there is much more to the ‘ethic of black struggle’ that centres ‘Black experiences and ways of being in the world’ than is covered here (Bledsoe, 2021: 1017). This section focuses on intersectional ethics that target plural spaces of lived, co-related struggle over climate change and Anthropocene conditions.

Davis et al. (2019) make a clarion call to geographers who displace the Anthropocene in exchange

for an explanation of human-Earth oppression modelled on plantation slavery – the Plantationocene. Their call: the Plantationocene is first and foremost racial, not colour blind in the way Donna Haraway and Anna Tsing introduce it in reference to plants or microbes (see [Davis et al., 2019](#)). Thinking with Sylvia Wynter's notion of the plot as a space of 'relational modes of being, multiple forms of kinship, and non-binary ways of engaging the world' they argue for ethics 'articulated through grounded racial-political struggle' ([Davis et al., 2019: 8](#)). As [McKittrick \(2011, 2021\)](#) argues, racialised conditions demand reorienting ethics toward Black lives and livingness and not to the racialised categories of oppressors. Understanding climate change as a site for, and expression of, this type of ethical disposition occupies a growing literature within and beyond geography (e.g. [Sharpe 2016; Mbembe 2017; Karera 2019](#)). For instance, [Pulido \(2018: 117\)](#) interrogates the racialised 'meta-processes' – conditioning processes – of the Anthropocene: industrialisation, urbanisation and capitalism. Confronting racialised conditions points to an ethical refusal – rebellion, in [McKittrick's \(2021\)](#) work – of explanations that generalise, abstract or extract from correlational struggles. Instead, kin relations are storied through what [Purifoy \(2021\)](#) termed the parable (a moral story) of concrete Black experiences and ethics of climate change.

Racial critiques of Eurocentric ethical categories have long anchored what [Slate \(2012\)](#) termed the 'colored cosmopolitanism' that arose through solidarity movements linking, for instance, Indian post-independence struggles against caste and the U.S. civil rights movement. Climate change struggles also intersect across multiple vectors of inequality that constitute the struggle for climate justice ([Barca 2020; Sultana 2022; Sze 2020](#)). Increasingly, geographers mobilise intersectionality in the tradition of hooks, [Crenshaw \(1991\)](#), and [Collins \(2015: 2\)](#) to identify how 'race, class, gender, sexuality, ethnicity, nation, ability and age operate not as unitary, mutually exclusive entities, but as reciprocally constructing phenomena that in turn shape complex social inequalities'. Importantly, intersectional analysis provides a way of specifying particular moral

ecologies of injustice precisely by reorienting attention to the complexity of concrete ethical conditions. Or, as [Perry \(2016\)](#) puts it: intersectionality addresses the sites of differential geographies of power (cf. [Wolford 2021](#)). As such, intersectionality has been used to highlight the unethical spatial burdens of climate change on Black spaces in particular, as well as the complexities of climate change across registers of race, gender, class and coloniality (e.g. [Kaijser and Kronsell 2014; Vergés 2017; Hawthorne 2019; Garcia and Tschakert 2022](#)).

Intersectional analysis foregrounds correlated struggles both against oppression and for life as a site of metaethical concern. In other words, intersectional ethics modify *meta* in a way that rejects philosophical abstraction in favour of relational commitments. These commitments arise from particular moral ecologies, and their spatial dimensions are relevant to a range of concerns that geographers (and others) connect to convergent inequalities. For instance, [Ghertner \(2021: 1498\)](#) argues that a just response to air pollution in India requires confronting the enclosure of clean air to well-off spaces, and the resurrection of colonial tropes about capacities of the 'Indian lung', through an Anthropocene ethic that does not reinforce 'segregationist templates or the hierarchies implicitly within a single model of the human (or the posthuman)'. [Gay-Antaki \(2021a\)](#) focuses on how intersectional inequalities gender scientific knowledge production within the processes of the Intergovernmental Panel on Climate Change (IPCC) and by defaulting to English in multilingual settings. [Gay-Antaki \(2021b\)](#) further attends to how intersectional inequalities stifle critical climate stories, often silencing those that are the moral 'targets' of climate interventions, such as poor women. Further, as [Perry \(2021\)](#) argues, the coloniality of climate change 'solutions' demands a normative shift. For instance, [Perry \(2021\)](#) argues extensions of climate finance to policy 'targets' extend the plantation model anew and argues for reparations in recognition of the particular harms of climate change and historical conditions of Black slavery. Intersectional ethics that address colonial, structural inequalities have significant potential to engage with philosophers

like Táiwò (2022), who argues that reparations must address historical harms but that they – like climate change – are also future facing because they are about building a more just social order.

hooks (1996: 22) concluded her essay in a future-oriented register: ‘Collective black self-recovery takes place when we begin to renew our relationship to the earth, when we remember the way of our ancestors’. Recent work on Black kinship also makes a parallel critique to that of Indigenous scholars regarding the ‘old news’ of a more-than-human turn. Leong (2016) argues, for instance, that the emphasis of new materialisms on affect does not provide adequate ethical grounds for, or treatment of, Black lives. Rather, to look ‘forward’ requires confronting structures and histories of racism, an ethical disposition Tolia-Kelly (2016) describes as a reckoning with the specificity and plurality of Black loss. Treating loss as multiple and plural is also not adequately captured by theories of justice abstracted from moral ecologies (Dotson and Whyte 2013). As McKittrick (2021: 186) writes: ‘To be black is to live through scientific racism and, at the same time, reinvent the terms and stakes of knowledge. The reinvention becomes an invention-appreciation of our relational lives...which is especially urgent given that we continue to collectively struggle against racial violence, premature death, and ecocide’.

III Boundary conditions

As I finalised this first report, the IPCC (2022: 35) published its sixth assessment on impacts, adaptation and vulnerability and highlighted demands for climate justice amid the ‘rapidly closing window of opportunity to secure a liveable and sustainable future for all’. It identified principles of recognition, procedural justice and distributive justice to point towards a rights-based approach to climate justice. These laudable principles, however, need to be placed in actual ethical relations to articulate injustice. Amplifying intersectional ethics of kinship and relationality can have concrete effects on how the conditions of a liveable future are understood. Or in other words, for where metaethics are located. For

instance, Shue’s (2014: 4) anchoring text on climate justice describes how ‘compound injustices occur when an initial injustice paves the way for a second’. An intersectional ethics of kinship and relationality, however, shows injustices do not compound abstractly. As important as Shue’s insight is – I am not discounting it – an intersectional ethics of kinship and relationality shows how injustices also ramify. They branch out. They grow in complexity as lived relations, including sited lives and plural losses among people, species and relations co-evolve and co-create shared lives under unequal conditions.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Jeremy J Schmidt  <https://orcid.org/0000-0002-9155-1777>

Note

1. Caputi (2020) cites genealogies of Black folk theory in which the term ‘motherfucker’ references how children of enslaved Africans used to refer to the White slave master who raped their mothers so as to not call the slave master ‘father’.

References

- Amoore L (2020) *Cloud Ethics: Algorithms and the Attributes of Ourselves and Others*. Durham: Duke University Press.
- Barca S (2020) *Forces of Reproduction: Notes for a Counter-hegemonic Anthropocene*. Cambridge: Cambridge University Press.
- Barnett C (2010) Geography and ethics: justice unbound. *Progress in Human Geography* 35(2): 246–255.
- Barnett C (2017) *The Priority of Injustice: Locating Democracy in Critical Theory*. Athens: University of Georgia Press.

- Barnett C (2018) Geography and the priority of injustice. *Annals of the American Association of Geographers* 108(2): 317–326.
- Bawaka Country, Wright S, Suchet-Pearson S, et al. (2016a) Co-becoming Bawaka: towards a relational understanding of place/space. *Progress in Human Geography* 40(4): 455–475.
- Bawaka Country, Wright S, Suchet-Pearson S, et al. (2016b) The politics of ontology and ontological politics. *Dialogues in Human Geography* 6(1): 23–27.
- Bledsoe A (2021) Methodological reflections on geographies of blackness. *Progress in Human Geography* 45(5): 1003–1021.
- Bulkeley H (2019) Navigating climate's human geographies: exploring the whereabouts of climate politics. *Dialogues in Human Geography* 9(1): 3–17.
- Caputi J (2020) *Call Your "Mutha": A Deliberately Dirty-Minded Manifesto for the Earth Mother in the Anthropocene*. Oxford: Oxford University Press.
- Carter J and Palmer J (2017) Dilemmas of transgression: ethical responses in a more-than-human world. *Cultural Geographies* 24(2): 213–229.
- Castree N (2014) The Anthropocene and geography III: future directions. *Geography Compass* 8(7): 464–476.
- Chakrabarty D (2009) The climate of history: four theses. *Critical Inquiry* 35(2): 197–222.
- Collins PH (2015) Intersectionality's definitional dilemmas. *Annual Review of Sociology*: 411–420.
- Crenshaw K (1991) Mapping the margins: intersectionality, identity politics, and violence against women of color. *Stanford Law Review* 43(6): 1241–1299.
- Curley A and Lister M (2020) Already existing dystopias: tribal sovereignty, extraction, and decolonizing the Anthropocene, Moisiu S, et al. (eds), *Handbook on Changing Geographies of the State*. Cheltenham: Edward Elgar, pp. 251–262.
- Daigle M (2018) Resurging through Kishiichiwan: the spatial politics of Indigenous water relations. *Decolonization* 7(1): 159–172.
- Davis H and Todd Z (2017) On the importance of a date, or decolonizing the Anthropocene. *ACME* 16(4): 761–780.
- Davis J, Moulton A, Sant LV, et al. (2019) Anthropocene, Capitalocene, ...Plantationocene?: A manifesto for ecological justice in an age of global crises. *Geography Compass* 13(5): e12438.
- Dotson K and Whyte K (2013) Environmental justice, unknowability and unqualified affectability. *Ethics and the Environment* 18(2): 55–79.
- Estes N (2019) *Our History Is the Future: Standing Rock versus the Dakota Access Pipeline, and the Long Tradition of Indigenous Resistance*. London: Verso.
- Flanagan O (2019) *The Geography of Morals: Varieties of Moral Possibility*. Oxford: Oxford University Press.
- Garcia A and Tschakert P (2022) Intersectional Subjectivities and Climate Change Adaptation: An Attentive Analytical Approach for Examining Power, Emancipatory Processes, and Transformation. *Transactions of the Institute of British Geographers*. Online ahead of print. DOI: [10.1111/tran.12529](https://doi.org/10.1111/tran.12529)
- Gay-Antaki M (2021a) Stories from the IPCC: an essay on climate science in fourteen questions. *Global Environmental Change* 71: 102384.
- Gay-Antaki M (2021b) Grounding climate governance through women's stories in Oaxaca, Mexico. *Gender, Place, & Culture* 28(9): 1234–1257.
- Ghertner DA (2021) Postcolonial atmospheres: air's coloniality and the climate of enclosure. *Annals of the American Association of Geographers* 111(5): 1483–1502.
- Gibson-Graham JK (2020) Reading for difference in the archives of tropical geography: imagining an(other) economic geography for beyond the Anthropocene. *Antipode* 52(1): 12–35.
- Grusin R. (ed), *Anthropocene Feminism* (2017). Minneapolis: University of Minnesota Press.
- Hawthorne C (2019) Black matters are spatial matters: Black geographies for the twenty-first century. *Geography Compass* 13(11): e12468.
- hooks b (1996) *Touching the Earth*. Great Barrington, MA: Orion Autumn, 21–22.
- Hunt S (2022) Unsettling conversations on climate action. *The Professional Geographer* 74(1): 135–136.
- IPCC (2022) *Climate Change 2022: Impacts, Adaptation and Vulnerability: Summary for Policy Makers*. Geneva, Switzerland: IPCC. IPCC Sixth Assessment Report: <https://www.ipcc.ch/report/ar6/wg2/>
- Jackson M (2021) On decolonizing the Anthropocene: disobedience via plural constitutions. *Annals of the*

- American Association of Geographers* 111(3): 698–708.
- Johnson ER (2015) Of lobsters, laboratories, and war: animal studies and the temporality of more-than-human encounters. *EPD: Society and Space* 33(2): 296–313.
- Kaijser A and Kronsell A (2014) Climate change through the lens of intersectionality. *Environmental Politics* 23(3): 417–433.
- Kanngieser A and Todd Z (2020) From environmental case study to environmental kin study. *History & Theory* 59(3): 385–393.
- Karera A (2019) Blackness and the pitfalls of Anthropocene ethics. *Critical Philosophy of Race* 7(1): 32–56.
- Krzywoszynska A (2019) Caring for soil life in the Anthropocene: the role of attentiveness in more-than-human ethics. *Transactions of the Institute of British Geographers* 44(4): 661–675.
- Leong D (2016) The mattering of Black lives: Octavia Butler's hyperempathy and the promise of the new materialisms. *Catalyst* 2(2): 1–35.
- Leopold A (1966) *A Sand County Almanac*. New York: Oxford University Press.
- Lewis SL and Maslin MA (2015) Defining the Anthropocene. *Nature* 519: 171–180.
- Liboiron M (2021a) Decolonizing geoscience requires more than equity and inclusion. *Nature Geoscience* 14: 876–877.
- Liboiron M (2021b) *Pollution Is Colonialism*. Durham: Duke University Press.
- Lövbrand E, Stripple J and Wiman B (2010) Earth system governmentality: reflections on science in the Anthropocene. *Global Environmental Change* 19: 7–13.
- Masco J (2010) Bad weather: on planetary crisis. *Social Studies of Science* 40(1): 7–40.
- Mbembe A (2017) *Critique of Black Reason*. Durham: Duke University Press.
- McKittrick K (2011) On plantations, prisons, and black sense of place. *Social & Cultural Geography* 12(8): 947–963.
- McKittrick K (2021) *Dear Science and Other Stories*. Durham: Duke University Press.
- Moore JW (2015) *Capitalism in the Web of Life: Ecology and the Accumulation of Capital*. London: Verso.
- Nightingale E and Richmond CAM (2022) Building structures of environmental repossession to reclaim land, self-determination and Indigenous wellness. *Health & Place* 73: 102725.
- Olson E (2018) Geography and ethics III: whither the next moral turn? *Progress in Human Geography* 42(6): 937–948.
- Perry K-KY (2016) Geographies of power: Black women mobilizing intersectionality in Brazil. *Meridians* 14(1): 94–120.
- Perry KK (2021) The new bond-age, climate crisis and the case for climate reparations: unpicking old/new colonialities of finance for development within the SDGs. *Geoforum* 126: 361–371.
- Phillips ME (2020) Reconnecting with nature: an eco-feminist view of environmental management. *Geographical Research* 58(2): 154–166.
- Pitt H (2018) Questioning care cultivated through connecting with more-than-human communities. *Social & Cultural Geography* 19(2): 253–274.
- Poprocki K (2022) On viability: climate change and the science of possible futures. *Global Environmental Change* 73: 102487.
- Puig de la Bellacasa M (2017) *Matters of Care: Speculative Ethics in More than Human Worlds*. Minneapolis: University of Minnesota Press.
- Pulido L (2018) Racism and the Anthropocene. In: Mitman G, Armiero M and Emmett R (eds), *Future Remains: A Cabinet of Curiosities for the Anthropocene*. Chicago: University of Chicago Press, pp. 116–128.
- Purifoy D (2021) The parable of Black places. *Transactions of the British Institute of Geographers* 46(4): 829–833.
- Pyne SJ (2021) *The Pyrocene: How We Created an Age of Fire, and what Happens Next*. Oakland: University of California Press.
- Raja N, Dunne EM, Matiwan A, et al (2022) Colonial and global economics distort our understanding of deep-time biodiversity. *Nature Ecology & Evolution* 6: 145–154.
- Ruddick SM (2017) Rethinking the subject, reimagining worlds. *Dialogues in Human Geography* 7(2): 119–139.
- Sack RD (1997) *Homo Geographicus: A Framework for Action, Awareness, and Moral Concern*. Baltimore: Johns Hopkins University Press.
- Sandel MJ (1982) *Liberalism and the Limits of Justice*. Cambridge: Cambridge University Press.

- Schmidt JJ (2019) The moral geography of the Earth system. *Transactions of the British Institute of Geographers* 44(4): 721–734.
- Schmidt JJ (2020) Settler geology: Earth's deep history and the governance of *in situ* oil spills in Alberta. *Political Geography* 78: 102132.
- Schmidt JJ, Brown PG and Orr CJ (2016) Ethics in the Anthropocene: a research agenda. *The Anthropocene Review* 3(3): 188–200.
- Sharp H (2017) Spinoza and the possibilities for radical climate ethics. *Dialogues in Human Geography* 7(2): 156–160.
- Sharpe C (2016) *The wake: On Blackness and Being*. Durham: Duke University Press.
- Shue H (2014) *Climate Justice: Vulnerability and Protection*. Oxford: Oxford University Press.
- Simmons K (2019) Reorientations; or, an Indigenous feminist reflection on the Anthropocene. *Journal of Cinema and Media Studies* 58(2): 174–179.
- Simpson LB (2017) *As We Have Always Done: Indigenous Freedom through Radical Resistance*. Minneapolis: University of Minnesota Press.
- Slate N (2012) *Colored Cosmopolitanism: The Shared Struggle for Freedom in the United States and India*. Cambridge: Harvard University Press.
- Smith DM (2001) Geography and ethics: progress, or more of the same? *Progress in Human Geography* 25(2): 261–268.
- Srinivasan K (2019) Remaking more-than-human society: thought experiments on street dogs as “nature”. *Transactions of the Institute of British Geographers* 44(2): 376–391.
- Sultana F (2022) Critical climate justice. *The Geographic Journal* 188(1): 118–124.
- Sze J (2020) *Environmental Justice in a Moment of Danger*. Oakland: University of California Press.
- Táíwò OO (2022) *Reconsidering Reparations*. Oxford: Oxford University Press.
- Tolia-Kelly DP (2016) Anthropocenic culturecide: an epitaph. *Social & Cultural Geography* 17(6): 786–792.
- Tynan L (2021) What is relationality? Indigenous knowledges, practices and responsibilities with kin. *Cultural Geographies* 28(4): 597–610.
- Waters CN, Zalasiewicz J, Summerhayes C, et al. (2016) The Anthropocene is functionally and stratigraphically distinct from the Holocene. *Science* 351(6269): 137.
- Watts V (2013) Indigenous place-thought and agency amongst humans and non-humans (First Woman and Sky Woman go on a European world tour!). *Decolonization* 2(1): 20–34.
- Williams B (1985) *Ethics and the Limits of Philosophy*. Cambridge: Harvard University Press.
- Wolford W (2021) The Plantationocene: a Lusotropical contribution to the theory. *Annals of the American Association of Geographers* 111(6): 1622–1639.
- Vergès F (2017) Racial capitalocene. In: Johnson GT and Lubin A (eds), *Futures of Black Radicalism*. London: Verso.
- Yandaarra with Gumbaynggirr CountryShaa SA, Marshall UB, et al. (2021) Ethics and Consent in More-Than-Human Research: Some Considerations From/with/as Gumbaynggirr Country, Australia. *Transactions of the British Institute of Geographers*. Online ahead of print. DOI: [10.1111/tran.12520](https://doi.org/10.1111/tran.12520)
- Yazzie M (2018) Decolonizing development in Diné Bikeyah: resource extraction, anti-capitalism, and relational futures. *Environment and Society* 9: 25–39.
- Yusoff K (2019) *A Billion Black Anthropocenes or None*. Minneapolis: University of Minnesota Press.