When we decided upon the broad theme for this issue we toyed with different terms. Inevitably, given its current cachet in the environmental humanities, 'Anthropocene' came up. Although a relatively recent addition to the scholarly lexicon, the term has begun to accumulate baggage, not least as Sarah Kember (2017) points out in how it 'identifyies agency as anthropos or Man' (p.348). 'Is it not a marker of masculine disembodied knowledge practices or intellectual, Cartesian habits of mind' Kember asks, 'oriented here to defining and demarcating the progress of geological eras and the naming of the current one as that of Man and His tools?' (p.350). As Mayu lida argues in her Open Space piece 'Fukushima', the 'Anthropcene, like 'Cenes' more generally, is prone to such abstraction. Angela Last (2015), among others, has pointed to the Anglo-European centeredness of Anthropocene discourses, science and aesthetics. Another concern of ours was to explore the feminist/environment relationship beyond its association with a particular tradition of 'ecofeminism' in the second-wave, Anglo-North-American tradition American ecofeminism, as Maneesha Dekha (2012) believes, tends to prioritise gender over other categories of analysis. In this issue we were interested in showcasing innovative intersectional approaches, incorporating queer and critical race critiques and concerns for environmental justice alongside the more familiar language of women and care.

In the end we chose 'Environment', an imperfect term but one that we use here as a sign for the dynamic relationships between entities, within and around us and across different scales, temporalities and strata (see also Zylinska, 2014, p.20).

A central theme running through all these contributions is a concern to make connections, while remaining situated — geographically, historically, politically. In their article on the different discursive and political uses of 'Pachamama' ('the indigenous term for the vitality that animates the earth') in contemporary Bolivia, Miriam Tola warns us to be wary of renditions of a 'normatively gendered Mother Earth.' Bolivia's first indigenous president, Evo Morales, frequently

evokes 'Pachamama' even as he pursues an extracitivst economic agenda reliant on foreign investment. The wider context, of course, is a global capitalist vampirism that has historically fed itself, in the words of Eduardo Galeano (1997), on the 'open veins of Latin America'. Yet this example from recent history cautions against the assumption that anti-capitalism, indigenous rights and human rights necessarily go hand-in-hand with environmental justice. 'There are different epistemic and political conceptualizations in the struggle for global futures' Walter Mignola (2010, p.10) writes of the attention to Pachamama in the constitutions of Bolivia and Ecuador that took from the work and thought of indigenous activists and intellectuals. For Mignolo, decoloniality is at the heart of such struggles, 'the question is not so much where do we "file" nature as what are the issues that emerge from the analytic of the coloniality of nature (that is, its control and management) and in decolonial thinking and doing on environmental issues.'

It comes as no surprise in this context that there is much interest in history in this issue: with the relationship between genocide and environmental catastrophe (Last; Neimanis and Hamilton); in the 'chrononormativity' of mainstream environmentalism (Clark and Yusoff); and the persistent impact of post-Enlightenment liberalism on contemporary humanist and even post-humanist thought. Angela Last opens her Open Space piece 'To Risk the Earth - The Nonhuman and Nonhistory' with an image she can't shake from her mind: 'At a conference on the Anthropocene a few years ago, a fellow white artist described her affective interactions with a volcano in the Caribbean.' As Last goes on to explain, this artist was so beholden with the history of the volcano, so determined to historicise the other-than-human, that she was able to forget — precisely because of her own lack of attachment to the place and history of the volcano (Mount Pelée on the island of Martinique) — the histories of the people who had lived and died in its shadow. Yet the very fact that the volcano, like the island, has a name, stamps it with a particularly human history. In the case of the artist, a triumphant turn to the other-than-human became a white amnesia. As Last insists: 'The artist's paper is [...] not the only example of this strategy to "decentre the human" [...]. Her work stands in for countless papers, artworks and public engagements that long to "reconnect people with the Earth" while ignoring sites of colonial

trauma.' Last challenges such 'methodological whiteness' (Bhambra 2017) with stories from Martinican theorists Edouard Glissant and Suzanne Césaire, for whom this historical slight of hand, the extraction of 'the environment' from its entanglement with human power relations, is literally unthinkable, unwritable. Not to say profoundly ahistorical.

It matters which connections in the past are made, and how. Certain historical narratives may work to decontextualise events, tear them away from their situated meanings. The nuclear disaster at Fukushima, following the Japanese earthquake of 2011, ignited memories of previous nuclear attacks and 'accidents': 'Fukushima became part of international vocabulary like Hiroshima, Nagasaki and Chernobyl, alienated from the city and the prefecture it originally refers to' (lida). In a different context, Sonya Klinsky stresses the importance of (re)claiming a feminist appreciation for the local, of place-based activism and research. Her Open Space intervention on how feminist theory and methods can help to strengthen work on climate change policy-making is another reminder of the falsity of the theory/practice binary. It is in part the interdisciplinary nature of feminist research that makes it so relevant to climate change research and action. As Klinksy notes: 'While feminist theory alone is insufficient for tackling the complexity of climate change, it evokes a tradition of interest in articulating fundamental mechanisms of inequality.' Her appeal to climate-change policy to make better use of the lessons of feminist theory and practice emphasises both the importance of making connections and the centrality of the local to climate justice.

While a number of the works here are specifically concerned with the fallout from climate change, others are interested in how human beings can form more ethical relationships with the other-than-human and in-human. Inspired especially by the work of Donna Haraway, the authors of 'A Feminist Menagerie' introduce us to a range of critters, from four environments, 'the home, the skies, the seas, and the microscopic'. Tellingly, in their exploration of oceanic life, Giraud, Hollin, Potts and Forsyth write of brittlestars and cup corals as 'alien species'. There is an established tradition of imaginary links between the deep seas and outer space. The spaceships of science

fiction bear a close resemblance to submarines. And it may in part be the otherworldliness of the oceanic underworld, plunging towards Middle Earth, that accounts for the popularity of the *BBC*'s recent mega production 'Blue Planet II'. Haraway, of course, has long been interested in the relationship between sci fi and 'real' fi. In *Staying with the Trouble* (2016) she evokes H.P. Lovecraft's 'Chthlhu' proposing 'Chthulucene' as an alternative to 'anthropocene'. Whether we accept this rejection of the 'anthropocene' as always already too anthropocentric, we do well to remember that science fiction, like fairy and folk tales, have often wandered where scholars now tread.

Haraway features frequently in this themed issue, testimony to the force of her imagination and ideas, and the sheer range of her scholarly scope, which crosses disciplines in ways few other academics dare. In 'Kinship across species', Shruti Desai and Harriet Smith inspired by Haraway's latest volume, *Staying with the Trouble* (2016) advocate 'practice-based ethical interventions' for intrerspecies interactions. Their two case studies of 'learning to care for nonhuman others' incorporate forms of play into care, through explorations of a digital forest conservation game and human-to-other-than-human body contact at a city farm. By exploring the care of trees as well as farm animals, defining both as 'sentient kin', Desai and Smith remind us that 'sentience' itself is being redefined in contemporary scientific and philosophical debates about the 'other-than-human', as scholars increasingly take an interest in plant sentience (Smith 2016). For these contributors any reworking of an ethics of care needs to be attentive to the same kinds of essentialist traps that bedevil some forms of ecofeminism. As the subject of care is expanded beyond the human to incorporate many forms of other-than-human kin — plant, animal, elemental — questions remain open about *who* performs care, how it is performed, and for whom.

Caring for other-than-human others raises questions about the relationship between care as affect, action and ethics (see Puig, 2012). For '(c)aring about does not immediately prompt caring for' (Desai and Smith). Learning to care 'emotionally' for trees and forests through virtual games

does not necessarily lead to direct intervention in sustainable forest management. Care also carries with it the risk of turning the other into an object, a victim, and the carer into the rescuer. An urge to 'save' trees may frame other-than-human vegetation as 'passive participants' in their own destruction or salvation, rather than active forces of environmental change. At the same time there are cross-currents and matrices of care, wherein care for one species can entail the violation of another. 'Time and again I have witnessed how care for some individuals and species translates into suffering and death for others' van Dooren observes, 'the 'violent care' of conservation: predators and competitors are culled, expendable animals provide food or enrichment for the endangered, the list goes on.' (2014, p.292).

It is possible that a critical practice-based ethics of care, on the other hand Desai and Smith believe, may draw human participants towards a more active engagement with other-than-human bodies, including their entanglements within unfolding geo-social contingencies. Desai and Smith find some hope for care in local spaces. Learning the art of 'multispecies co-breathing' children at a city farm in London experience 'the animal through its breath'. Consequently 'animal subjecthood and experiences in relation to its actions—feeding, resting, playing—became (more) apparent than when associating the animal with a certain likeness, name, or other visually and externalised identifying characteristics as is commonplace in, for instance, the London Zoo.'

The importance of recognising other-than-human forces runs through much of this issue, implicitly and explicitly. The authors of 'A Feminist Mengagerie' evoke Elizabeth Johnson's (2015) lab lobster, 'an especially lively actor who disrupts an experiment'. The turn to agency is also apparent in recent animal history. Similarly to Johnson, Jason Hribal (2007) finds evidence of animal agency in signs of animal *rebellion* against human attempts to control, manipulate and oppress them. Where Erica Fudge (2002) once dismissed the history of animals as basically impossible because of the insurmountable problems posed by evidence and nonhuman temporalities, she and other animal historians are increasingly interested in analysing animal agency in the past, prompting us to reconsider some of the main pillars of conventional historical

research, including sources and periodisation. Yet, even in this materialist, post-linguistic-turn era we still need to ask: how do we *represent* other-than-human forces and freedom?

If the work presented in this issue offers different possibilities for thinking, dreaming and caring for the animal other as agent, other interventions turn to the elements. The unpredictable, sometimes terrifyingly destructive, but also generative force of fire challenges anthropocentric 'chrononormativity' (Clark and Yusoff), just as the vast movements of the oceans operate at a pace out of rhythm with human time (Giraud, Hollin, Potts and Forsyth). If there is one thing that holds these pieces together, though, it is a sense that 'we' humans may be the ones out of sync. The forces of fire, like the elusiveness of radiation in Fukushima (lida) moreover remind us that 'material' is not synonmous with 'tangible'. That fire and radiation cannot be held or easily captured does not mean that they do not touch us. Both have capacity to latch onto and get into human and other-than-human bodies, changing them beyond recognition. As Mayu lida writes, 'Sticking to the bodily surface or the skin – where radiation easily penetrates and, in the most extreme cases, only leaves a shadow of its contour by the exposure to atomic light – points towards the fading out of the ultimate boundary between us and them'.

Bodies — of water and of people — and the ways they stream together and apart are beautifully charted in Neimanis and Hamilton's Open Space intervention on 'weathering'. The piece delves further into the waters of Christina Sharpe's (2016) rendering of weather as a pervasive antiblackness in the wake of slavery. Neimanis and Hamilton are mindful that 'weathering here is neither metaphor nor analogy (antiblackness is not only *like* bad weather and surviving it is not only *like* surviving bad weather); in a climate-changing world, climatological phenomena are themselves imbricated in these embodied lifeworlds.' Reminding us again of the central importance of language in these materialist times, '(w)eathering', they write, '[...] is a particular way of understanding how bodies, places and the weather are all interimplicated in our climate-changing world. Weathering describes socially, culturally, politically and materially differentiated bodies in relation to the materiality of place, across a thickness of historical, geological and

climatological time. As that part of speech known as a gerund (an –ing word that functions as a noun), weathering also names a practice or a tactic: to weather means to pay attention to how bodies and places respond to weather-worlds that they are also making; to weather responsively means to consider how we might weather differently—better—and act in ways that can move towards such change [...].'

We should no more paint water as passive and apolitical than we should forget the powerfully political effects and meanings of fire. In 'Queer Fire' Clark and Yusuff draw attention to the revolutionary history of the blazing element — its association not only with wanton destruction but with 'urban uprisings'. In the London context, the brutality of fire was on our minds during the second half of 2017 when the devastating Grenfell inferno took so many impoverished, black, brown and migrant lives, burning a community to the ground on 14 June. For Nadine El-Enany (2017), the environment in which Grenfell residents were located cannot be excised from the British colonial ordering of space. 'The hyper-segregation and differential quality of life of North Kensington residents mirrors practices of the colonial era when British authorities instituted spatial ordering on the basis of ideas and practices of racial hierarchy and white European supremacy.' Grenfell is a stark signifier of Sharpe's (2016) 'weathering'. A reminder of the vulnerability of certain bodies to an uncontrolled blaze, of the politics of catastrophe misnamed as 'accident'. And across the European Continent and the globe, it was a summer and autumn of forest fires, from Portugal and California. Fire seemed unforgiving; wanton; unsalvageable.

But in *Queer Fire*, Clark and Yusoff take another tact too, evoking fire's sexiness, its unabashed eroticism. In their article is another kind of desire — to frame the shift away from our fossil-fuel driven economy and lifestyles in terms other than some puritanical, moralistic forsaking of the pleasures of the flesh. The authors propose a Bataillian 'sacrifice' — 'A sacrificial offering is a rupture in the cycle of exchange, a gesture without expectation of a return – and as such, an opening to an unknowable future'. They continue, 'On a crowded, overheating planet, in a world in which desires have been stoked to hyper-consumptive intensities, there is a temptation to turn to

new strictures, tighter cyclings, tempered passions.' It is worth remembering, indeed it is vital to remember, that there is nothing inevitable about 'fossil-fuelled desires' (Neimanis and Hamilton). Thinking the future in ways that neither assume nor celebrate hetero-reproductive normativity *nor* place the burden of sustainability on women and people in the global south to 'control' fertility, remains one of the trickiest tasks for contemporary theorists of sexuality and their entwinement with 'environment' in all its senses.

A significant underlying incitement from Clark and Yusoff concerns the tensions in feminist scholarship and activism between treating nature/environment as matters of social justice (and within certain philosophical traditions of human exceptionalism where justice is predicated on human subjectivity, identity and agency) and as in-human and non-human forces and potentialities (see Grosz, 2011). Recourse to a relational, synchronous ontology is not enough here. As Kathryn Yusoff's (2015, p.403) riveting exploration of 'geologic inhumanities' and 'queer inhuman genealogies' through Palaeolithic cave art suggests, thinking of geology and other inhuman elements as already a part of our bodies and subjectivity, indeed as sometimes anterior to subjectivity and identity, can offer more generative approaches to the environment and nature. 'In the context of the Anthropocene,' Yusoff writes, 'it might be a way to think about our geologic corporealities in a way that does not continue to place 'our' relations with matter outside the subject as something to be chosen, theorized or politicized (i.e. as a nonconstitutive element of survival).' (p.388). This transbodily vulnerability and co-implicatedness is crucial to how this issue invites conversations and contemplation of the environment.

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