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Whose Anthropocene is this? Women's nature writing in a time of planetary emergency

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Abstract

The Anthropocene concept claims that humans have changed the planet so profoundly that we are now in a new epoch of geological time, defined by human activity. But whose Anthropocene is this? Whose story does it tell? What futures does it prescribe or preclude? The shifts in the human–nature relationship that the Anthropocene names have been reflected in a well-documented surge in nature writing, particularly, in more recent years, from diverse, female voices who have long been absent from the genre. This thesis grounds itself in the historical and geological moment of the Anthropocene, and it takes this shift in nature writing as its point of departure. With these two animating threads, it asks: What were the problems with nature writing dominated by white, middle-class men? What are the Anthropocene stories these women writers are telling instead? What kinds of shifts in feminist scholarship do their narratives speak to? This thesis will explore these questions by engaging with the work of seven contemporary women writers: Lauret Savoy, Margaret Renkl, Kathleen Jamie, Nina Mingya Powles, Ingrid Horrocks, Elizabeth Rush, and Rebecca Giggs. This thesis is divided into four parts, each challenging a different aspect of the Anthropocene narrative, including: when the Anthropocene began; where it is found; how it is experienced; and how we can tell stories about it.

Lay summary

The Anthropocene concept claims that humans have changed the planet so profoundly that we are no longer in the Holocene, a geological epoch of relative stability that began after the last ice age, approximately 11,700 years ago. Instead, it proposes that we have entered a new epoch: the Anthropocene. The name ‘Anthropocene’ – from *Anthropos*, meaning ‘man’, and *-cene*, meaning ‘new’ – indicates that this new epoch is defined by human activity. But which humans does this Anthropocene belong to? Exactly whose story does it tell? And what futures does it prescribe or preclude? The changes in the human–nature relationship that the Anthropocene names have been reflected in a well-documented surge in non-fiction nature writing, particularly, in more recent years, from diverse, female voices who have long been absent from the genre.

This thesis grounds itself in the historical and geological moment of the Anthropocene, and it takes this shift in nature writing as its point of departure. With these two animating threads, it asks: What were the problems with nature writing dominated by white, middle-class men? What are the Anthropocene stories these women writers are telling instead? And finally, how does their work reflect the emerging scholarship of Anthropocene feminism? This thesis will explore these questions by engaging with the work of seven contemporary women writers: Lauret Savoy, Margaret Renkl, Kathleen Jamie, Nina Mingya Powles, Ingrid Horrocks, Elizabeth Rush, and Rebecca Giggs. This thesis is divided into four parts, each of which challenges a different aspect of the Anthropocene narrative, including: when the Anthropocene began; where it is found; how it is experienced; and how we can tell stories about it.

Introduction

The Anthropocene concept claims that humans have changed the earth so profoundly that we are now in a new epoch of geological time, defined by human activity. But whose Anthropocene is this? Whose story does it tell? What futures does it prescribe or preclude?

The Anthropocene, coined by Paul J. Crutzen and Eugene F. Stoermer in 2000, is a geological concept that has exceeded the bounds of geology, gaining traction among the social sciences, humanities, arts, and in the public sphere. This thesis engages with the Anthropocene as a 'portmanteau term' (Purdy, 4) for various anthropogenic environmental changes, including – but not limited to – the climate crisis, toxic pollution, and biodiversity loss. But it also engages with the *concept* of the Anthropocene, to explore the way that this geologic idea is storied and by whom. In doing so, this study is aligned with feminist thinkers who have problematised the many 'new' ideas that the Anthropocene arrives with, and illuminated the contradictions and complexities enfolded in the idea of an epoch defined by 'Man'.

The shifts in the human–nature relationship that the Anthropocene points to have been reflected in a well-documented surge in nature writing in the last twenty years, particularly in the British Isles, where it has been named the 'New Nature Writing' (NNW) (Cowley). Although offering an innovative departure from previous nature writing traditions, the NNW has been heavily criticised for the inheritance of white male bias that it still carries. Since around 2019, this bias has begun to abate with a diverse range of female writers breaking into the genre.

This thesis grounds itself in the historical and geological moment of the Anthropocene, and it takes this shift in nature writing as its point of departure. With these two animating threads, it asks: What were the problems with nature writing dominated by white, middle-class men? What kind of Anthropocene stories are these women writers telling instead? And how are they telling them? Also, what kinds of shifts in feminist scholarship do their narratives speak to? What new lenses are they prompting us to read the Anthropocene with?

This study will engage with seven contemporary non-fiction nature writing texts authored by women, in order to explore these questions and to engage with the emerging idea of an 'Anthropocene feminism'. Composed of an interdisciplinary range of thinkers from posthuman, feminist, Indigenous, science and technology studies, queer studies, de- and anti-colonial, new materialist, disability studies, and blue and environmental humanities backgrounds, Anthropocene feminism is a rich field of scholarship that will provide a theoretical framework for this investigation. This study is divided into four parts, all of which engage with and challenge a different aspect of the Anthropocene narrative: *when* the Anthropocene began; *where* it is found; how it is *experienced*; and how we can *story* it.

This introduction aims to provide a guide into the thesis by outlining its key parts, including the diversification of nature writing, the Anthropocene concept, and feminist scholarship in the Anthropocene.

The diversification of nature writing

The scope of this thesis is not limited to British writers, but the recent shifts in nature writing in the UK provide a productive case study for the changes occurring in writing on nature and place in the Anthropocene, and a fertile starting point for this investigation. This is because nature writing in the UK has flourished in recent decades, undergoing significant changes at the same time as the changes to our planet have unfolded. The NNW is embedded in a long tradition of British nature writing that stretches back to eighteenth- and nineteenth-century writers and poets such as Gilbert White and John Clare, and more recently, in the environmental movements of the 1970s and 1980s, of which Richard Mabey and Roger Deakin were prominent figures. However, since the mid-2000s, a new and distinct form of the genre has emerged. The NNW marks its departure from traditional forms of nature writing with a turn to the local and quotidian – to urban, suburban, and edgeland ecosystems, in which hidden meaning is found in everyday encounters with the natural world (Moran).[1] There is a shift in scale, with sustained attention to

[1] Where possible, this study will avoid using the term 'nature'. This term is loaded and problematic as it 'has set up "Nature" as a reified thing in the distance' (Morton 2010, 3), an object separate to humans that can be looked at from afar, visited for recreation, or utilised as a resource. Such a

the small and ‘microcosmic’ (Mabey qtd. in Smith, 7), and the objective, naturalist narrator is replaced by a personal ‘I’, whose voice is a strong influence in the narrative. The natural world is no longer a backdrop, object of nostalgia, or scientific resource; instead, it is relevant and meaningful in the lives of normal people. Many local, cultural and contemporary ‘cultures of nature’ (Macfarlane, 2015b) come alive in these texts. The writing style of the NNW is often highly lyrical, yet the otherness of the natural world is upheld at all costs, with a refusal to romanticise and a strong rejection of the pastoral tradition.

Writers of the NNW attempt to bridge the gap between science and art – what Jos Smith calls ‘aesthetics and facts’ (23) – creating a fusion of scientific knowledge and subjective experience that refuses the dualism between them. These writers roam widely through genre and discipline, including travel writing, memoir, geography, folklore, biography, biology, psychogeography, natural history, anthropology, cultural history, topography, ethnography, ecology, and geology. These texts are so thematically and stylistically diverse that many of its practitioners strongly reject the label ‘nature writing’, claiming it pigeonholes them and only serves publishers and booksellers (Jamie qtd. in K. Scott 2005; Lilley; Macfarlane 2003; Moran). After winning the 2023 Weston International Award for career achievement in non-fiction, NNW figurehead Robert Macfarlane spoke of the potential of this type of writing: ‘What it is, is possibility – it opens up a space in which the stubborn recalcitrance of fact can keep company with the shimmer of poetry, and the questing, testing work of cultural history or ethnography can braid with the bright specificities of human encounters with more-than-human lives.’ Such an interdisciplinary, innovative approach means that these texts are able to inspire as well as inform, evoke wonder and care instead of overwhelm and apathy, and engage ordinary readers in the natural world in a time of crisis. Indeed, the climate crisis, biodiversity decline, pollution, and human disconnect are strong motivators for writers of this genre, catalysing a need to reconnect with the natural world. The question of how to live

distanced perspective is ‘characteristic of, symptomatic of, the continuous exploitation that has led to such anthropogenic disruption’ (Smith, 13) that we see in the Anthropocene. Instead, this study uses the increasingly popular terms ‘natural world’ and ‘living world’, which are more effective at conveying human entanglement within and inseparability from planetary life. However, for the sake of clarity, it will continue to use the term ‘nature writing’ as an imperfect but widely used name for the genre of creative non-fiction writing on nature and place that this thesis focuses on.

well in the more-than-human world in urgent, changing times is a fundamental tension at the heart of these texts (Smith).

Although highly impactful in literary, academic, cultural, and commercial senses, the NNW's major weakness has always been its lack of diversity.[2] It might have departed from the authority of the expert male naturalist observer, but the majority of its writers were still, for a long time, white, middle-class men. Examples include Neil Ansell (2018), Patrick Barkham (2015), Mark Cocker (2008), Rob Cowen (2015), Tim Dee (2010), Charles Foster (2016), Macfarlane (2008, 2015a, 2019), Adam Nicholson (2017), and two-time Wainwright Prize winner John Lewis-Stempl (2015, 2017). It also includes NNW progenitor Richard Mabey (1997, 2008, 2010), who is considered pivotal to the development of the genre (Smith, 4).[3]

These male-authored texts are highly valuable and important contributions to the genre. However, it is important to note that, facilitated by class and wealth, many of these male writers had an apparent freedom to venture into the natural world for long periods of time that was not, and still is not, available to others, including women, who are often constrained by domestic responsibilities and commitments (Norbury). In 2008, Kathleen Jamie, one of the very few female figures of the early NNW, published a now infamous review in the London Review of Books of Macfarlane's *The Wild Places*, in which she criticised Macfarlane as 'A white, middle-class Englishman! A Lone Enraptured Male! From Cambridge! Here to boldly go, "discovering", then quelling our harsh and lovely and sometimes difficult land with his civilised lyrical words'. In this review, Jamie portrayed Macfarlane and his 'lovely honeyed prose' as an example of a white, middle-class man promoting a particular ideal of nature that risks erasing marginalised, complicated, and domestic histories

[2] This white bias in nature writing is not an isolated phenomenon; it is part of a broader trend (both in the UK and US) that unequally represents human experiences in and engagement with the natural world. It is reflected in many aspects of the environmental movement, including in agencies, charities, and other non-profits and foundations. This has come to be known as the 'green ceiling' (Taylor). It is also mirrored in the white bias of visitors to and residents of national parks and rural landscapes in the UK and US (Ayamba; CPRE; Finney).

[3] Smith actually makes a case for dating the emergence of the NNW genre to 1973, the year in which both Mabey's *The Unofficial Countryside* and Raymond Williams' *The Country and the City* were published: 'two books that would fundamentally change the way people thought and wrote about landscape in Britain' (4).

of landscape in favour of a wilderness aesthetic (Smith, 87) – a land that is 'empty, secret, luscious' (Jamie 2008).[4]

Jamie's review was somewhat reductive in its reading of Macfarlane's position on the wild, but her critique of the lack of diversity in the genre was timely. Just over a decade later, Barkham (2019) published an interview with Jamie in *The Guardian* that updated her position on this issue, in which she continued to argue that 'nature writing has been colonised – by middle-class white men', occluding younger, working class, BIPOC[5] writers who 'are just too put upon, downtrodden, frightened, worried' to write. Jamie was immediately criticised by writer and academic Jessica J. Lee on Twitter for being one of many white writers 'reproducing a woke status quo' by 'bemoaning the lack of non-white writers without actually platforming those out there working hard to break through' (2019b). Lee had a point. Whiteness and masculinity

[4] Whilst Macfarlane can be said to embody the privileged white male figure, to dismiss his work in this way is reductive. His later work has been responsive to Jamie's criticism, with 'a far more purposeful fusion of living histories with active nature' (Gange, 114). And his oeuvre to date is not one of a lone, enraptured male, but is instead formed of collaborative works (Macfarlane et al. 2013; Macfarlane and Donwood 2019), a co-authored children's book (Macfarlane and Morris 2017), and editorial work on Nan Shepherd's prose and poetry (Shepherd 2011). Macfarlane has been pivotal in raising awareness of Shepherd's writing, working with others to bring the work of an unknown, undervalued, female writer of the 1940s to a modern-day, mainstream audience. He has matched this with other impactful, collaborative projects, such as political campaigning, song writing, and supporting young nature writers who do not fit the typical mould, such as Dara McAnulty and Yuvan Aves. Macfarlane's later work, *Underland* (2019), actually features many of the qualities that are discussed in this thesis as being distinctive to women's writing on nature and place. For example, unlike *The Wild Places*' solitary journeys, *Underland* reverberates with other voices, and not just scientists and experts, but friends, fishermen, poets and miners. It is the 'most communal' (2019, 18) of all Macfarlane's texts, with a clear politics of citation, interweaving a diverse range of texts, from the Finnish epic *Kalevala* to the work of Robin Wall Kimmerer. Macfarlane is also committed to the theme of entanglement in this text, portraying our intimate, often uncomfortable material enmeshment in a planet in emergency. And he never strays towards escapism; deep time is no longer an inhuman, romanticised externality, but is an urgent space that he brings close to the reader. The key motif that resounds through and beyond *Underland* isn't mountain, glacier or rock, but the open hand, symbolising generosity, hospitality, and care. Macfarlane's importance in the development of the NNW cannot be overstated, and his later work is in clear dialogue with that of the writers in this thesis. However, this thesis will not incorporate Macfarlane as a primary source. There are certain ways in which he still hangs on to old traditions of the heroic nature and travel writing genres. For example, *Underland* is still concerned with journeys to the edge – to a remote cave reached only by a dangerous mountaineering route, a nuclear storage facility on a secluded Finnish island, and to the calving face of a glacier. Furthermore, whilst acknowledging his importance and influence, the key research question remains an exploration of how women writers are responding to the Anthropocene, and to include Macfarlane would distract from this and dilute its impact.

[5] This thesis will use the term *BIPOC*, meaning Black, Indigenous, or People of Colour. It acknowledges both that this term is US-specific, and also that using an acronym can flatten nuance and recognition of distinct identities. However, for the purposes of this study, this term is an imperfect but useful shorthand to speak about writers and thinkers who do not fit into the hegemonic white norm, without actually setting up that dichotomy or defining anyone by negation, e.g., 'non-white'. In addition, this term is effective as it emphasises that forms of violence against Black and Indigenous peoples are related, which is foundational to the arguments in this study.

still dominate the genre – to this day, eight out of nine winners of the Wainwright Prize for nature writing have been white men, and for the more recent Wainwright Prize for conservation writing, *all* winners have been white men – but things are changing, and other writers are finally receiving the publishing attention and platforming they deserve. Putting the bias of the Wainwright Prize aside, the gender balance has been much improved, with Amy Liptrot and Helen Macdonald achieving huge commercial success with their texts *The Outrun* (2015) and *H is for Hawk* (2016), and a multitude of new female names from a variety of backgrounds appearing on the shelves, including Amy Jane Beer (2022), Elizabeth-Jane Burnett (2019), Nancy Campbell (2018, 2022), Nicola Chester (2021), Mya-Rose Craig (2022), Doreen Cunningham (2022), Josie George (2019), Anna Fleming (2022), Cal Flyn (2021), Alys Fowler (2017), Tiffany Francis Baker (2019), Melissa Harrison (2017), Helen Jukes (2018), Jessica J. Lee (2017, 2019a), Helen Mort (2022), Kerri ní Dochartaigh (2021), Jini Reddy (2020), Anita Sethi (2021), Tanya Shadrick (2022), Sarah Thomas (2022), Amanda Thomson (2022), and Isabella Tree (2018).

Indeed, this thesis dates 2019 – the year of Jamie's renewed complaint – as a turning point for diversity in the publishing of contemporary nature writing.[6] It is the year that Luke Turner provided a much-needed LGBTQ+ perspective with his memoir *Out of the Woods*; Josie George's *Still Life* challenged the ableism of nature writing with a memoir of connection with the natural world as 'a single mum with a nine-year old son and a mobility scooter'; and Elizabeth-Jane Burnett explored what belonging in a changing English landscape means for a person of colour in her 'geological memoir' *The Grassling*. Also in 2019, Lee herself published *Two Trees Make a Forest*, a memoir exploring her Taiwanese heritage that won the Hilary Weston Writers' Trust Prize for non-fiction. The Forestry Commission's 2019 centenary writer in residence programme provided a platform for more diversity in conservation, appointing Zakiya McKenzie, writer and PhD candidate in Caribbean literary heritage, to tell different stories about the UK's forests. The 2019 Kendal Mountain Literature Festival – arguably the most significant festival of nature writing in the UK – introduced 'Open Mountain', a panel discussion showcasing work from

[6] This thesis dates 2019 as the epicentre of this shift, but of course there are examples of writers who were ahead of this curve, such as Lauret Savoy and Kathleen Jamie – two writers whose work this thesis will explore.

writers underrepresented in the outdoors that now has a permanent place on the line-up. And in the same year, Canongate launched their Nan Shepherd Prize, aiming 'to provide an inclusive platform for new and emerging nature writers from underrepresented backgrounds' (Canongate 2019). So far, winners include Nina Mingya Powles, a poet and writer from Aotearoa New Zealand with Chinese-Malaysian heritage; and Marchelle Farrell, a Black Caribbean immigrant to the UK exploring her journey of 'seeking belonging in an English country garden' (Canongate 2021).

Meanwhile, from 2018–2022, Lee's *The Willowherb Review* provided a digital platform for writers of colour on the natural world, showcasing writers such as Powles, Thomson, Michael Malay, Jay G. Ying, Craig, Burnett, Jini Reddy and Rowan Hisayo Buchanan, all of whom have now published books or poetry collections, or secured book deals. Since 2019, many more publications from a diverse set of writers have followed, including neurodivergent Irish teenager Dara McAnulty, whose *Diary of a Young Naturalist* won the 2020 Wainwright Prize for nature writing; Claire Ratinon's *Unearthed*, which combines her story of making a life in the English countryside with reflections on food cultivation and her family's Mauritian heritage; and Natasha Carthew's *Undercurrent* (2023), a memoir of growing up in a working-class family in Cornwall, where wealthy visitors and second homes juxtapose with local people suffering political neglect.

In parallel, 2019 also stands out as a year in which the Anthropocene suddenly appeared to become more intense, or at least more visible. Extreme weather events included a polar vortex in the US Midwest, two cyclones in Mozambique, and Hurricane Dorian in the Bahamas. Wildfires burned across the Arctic, the Amazon rainforest, California, and Australia. Now known as the 'Black Summer', the 15,000 wildfires that raged from July 2019 to March 2020 in Australia led to 33 direct human deaths (and hundreds more indirect) and more than 24 million hectares of land burned (Cook et al). Further, an estimated 400 megatons of CO_2 were released into the atmosphere (Nguyen et al.), and a highly conservative estimate of 1 billion animals were killed (Dickman and McDonald), with several billion more harmed and displaced. For these reasons and more, 2019 has been called the 'year zero of the climate apocalypse' (Goldrick) and 'the year of suddenly' (Delaney). Its staggering

events saw a public awakening to the reality of the climate crisis, which had arguably begun in 2018 with the rise of Extinction Rebellion and Greta Thunberg's *Skolstreijk för klimatet*, whose youth-led movement truly catalysed the climate crisis zeitgeist. This shift is perhaps best evidenced in the 2019 Oxford English Dictionary word of the year: 'climate emergency'.

It is difficult to imagine that the increased visibility of the Anthropocene and the emergence of so many new, diverse voices in nature writing was purely coincidental. Arguably, it evidences not only a recognition of the many emergencies our planet faces but also a desire for a deeper understanding of the situation, and a need for alternative ways of connecting with the natural world. The diversification of nature writing in 2019 wasn't an isolated phenomenon either, it was a permanent shift that continues to this day. It has been swiftly reflected in the publication of a number of anthologies, which aimed to both catalogue and catalyse the broadening of a genre. These include Kathryn Aalto's *Writing Wild: Women Poets, Ramblers, and Mavericks Who Shape How We See the Natural World* (2020); *Gifts of Gravity and Light: A Nature Almanac for the 21st Century* (2021), which, according to its blurb, showcases 'not only the diversity of the writers featured, but the endlessly changing natural world itself'; and Katherine Norbury's *Women on Nature* (2021), which chronicles over one hundred female voices from Britain and Ireland. Jamie also edited *Antlers of Water: Writing on the Nature and Environment of Scotland* (2020), addressing the English bias of the NNW. These collections follow in the footsteps of other genre challenging collections such as Alison H. Deming and Lauret Savoy's *The Colors of Nature* (2011), which disrupted the whiteness of American nature writing.

In the US, contemporary nature writing has thrived for much longer than the UK's more recent resurgence (Macfarlane qtd. in Stenning, 2012). It emerged out of eighteenth- and nineteenth-century white male naturalists and philosophers, such as Ralph Waldo Emerson, Henry David Thoreau, Aldo Leopold, and John Muir, and is therefore partly shaped by imperial urges toward taxonomy, transcendence, and a white wilderness aesthetic bound up with *Terra nullius* and the erasure of other voices on the land. However, in the last seventy years, many of its most famous writers have been women, including Rachel Carson, Gretel Ehrlich, Annie Dillard, Terry Tempest Williams, and Rebecca Solnit.

In addition, BIPOC writers in the US (who, of course, face different contexts and challenges to Black or other writers of colour in the UK), have been vocal about their marginalisation from a white nature writing genre for much longer. *The Colours of Nature* was originally published in 2002 and was significant enough to be expanded and reissued as a new edition in 2011. This anthology speaks to a flourishing culture of BIPOC American nature writing already taking place in the margins. Since its reissue this has only increased, with a number of non-fiction publications from US BIPOC writers, including J. Drew Lanham's *The Home Place* (2016), on his experiences as a Black birder and naturalist; geologist and writer Lauret Savoy's *Trace* (2015), exploring race, colonial legacy and memory in American landscapes; Potawatomi citizen and scientist Robin Wall Kimmerer's *Braiding Sweetgrass* (2013); Toni Jensen's memoir *Carry* (2020*)*, about what it means to be an Indigenous woman on stolen American land; Aimee Nezhukumatathil's *World of Wonders* (2020), which draws on her Filipina and Malayali Indian heritage to provide a novel perspective on nature writing; and Camille Dungy's *Soil: The story of a Black mother's garden* (2023), recounting Dungy's efforts to diversify her garden in order to reflect her heritage.

As in the UK, this wealth of new voices has been mirrored by new anthologies. In 2022, a new collection of non-fiction writing on climate change, *The World As We Knew It*, was published. Although the collection isn't marketed as providing a platform for diverse voices (perhaps as an attempt to make this unexceptional), out of 19 writers featured, only 2 of them are white men, and the collection showcases a diverse set of writers with different race, sex and gender identities, including Emily Raboteau, Pitchaya Sudbanthad, Melissa Febos and Meera Subramanian. Furthermore, in 2023, Erin Sharkey edited and produced *A Darker Wilderness: Black Nature Writing from Soil to Star*s, which aims to 'push the limits' of the definition of nature writing, with essays exploring themes of power, liberation, sovereignty, racism, and Black memory. As Teena Gabrielson writes, within new anthologies like these, 'nature becomes a place of alienation, desire, labor, refuge, survival, and thriving rather than primarily a means to reaffirm white, middle-class domestic virtue or a heroic, able-bodied white nationalism' (56).

There are important differences that distinguish the US nature writing tradition from its UK counterpart – not least its 'pragmatic, effective streak' (Macfarlane 2009) that in many cases, including in the work of Muir, Carson, and Edward Abbey, has led to activism and real political change. Further, the American nature writing tradition is shaped by a history that, while connected to British history, is unique. However, whilst the aim of this thesis isn't to homogenise these writers or gloss over their differences, there are many similarities between contemporary nature writing in the US and the UK, including the use of the first-person, reflective I; the interest in material worlds; the fusing of art and science; the tendency to traverse borders, both thematic and stylistic; and the prioritisation of deep attention and care. To a lesser but still significant extent, this is also mirrored in writers from other anglophone, settler colonial states, such as Australia and Aotearoa New Zealand, evidenced in texts including Sophie Cunningham's *City of Trees* (2019), Delia Falconer's *Signs and Wonders* (2021), Rebecca Giggs' *Fathoms* (2020), and Ingrid Horrocks' *Where We Swim* (2021).

In this scale-disrupting, globalised Anthropocene moment, in which toxins created in one region pollute bodies elsewhere, and fossil fuels burnt on one side of the globe return in the form of flooding on the other, there is no local or small-scale setting that is not always already implicated in wider global issues. This thesis takes note of these global dynamics and adopts a more fluid approach, widening its scope to incorporate texts from the UK, the US, Australia, and Aotearoa New Zealand.[7] Indeed, many of the diverse, women writers outlined in this introduction have combined the intimate scale of 'tangible localism' (Smith 11) or 'progressive parochialism' (Macfarlane qtd. in Smith, 11) that is characteristic of contemporary nature writing with global settings, themes and concerns – and they have done so without losing any of the groundedness that the former provides. For example, Powles' *Small Bodies of Water* (2021) traverses London, Aotearoa New Zealand, Malaysia and Shanghai, whilst also rooting itself in the intimate and interconnected details of each place: 'the delicate veins' (47) of a Kōwhai flower petal, or the 'mint-

[7] This thesis acknowledges the bias towards anglophone writers and thinkers in this choice and the limitations that come with this. In doing so it does not seek to erase the concurrent environmental humanities scholarship and nature writing taking place in other parts of the world, such as Asia, Latin America, continental Europe, and Oceania (O'Gorman et al).

green blooms of lichen on rock' (7). Other writers have also moved away from the focus on a single home place or site of study to explore multiple places interlinked by a central theme. Canadian-Irish writer Joanna Pocock's *Surrender* (2019*)* combines criticism with nature writing to report on the changing landscape of the American West and the different ecological communities springing up within it; and Scottish writer and journalist Cal Flyn's *Islands of Abandonment* (2021) seeks out ruined, 'post-human' landscapes all over the globe.

Furthermore, the emergence of so many diverse, female perspectives in these regions has meant huge shifts in the parameters of the genre and in what counts as appropriate nature writing subjects. New themes, such as care work, motherhood, fertility, and queer family-making emerge strongly in relation to connections and experiences with the natural world (Francis Baker 2021; Chester; D. Cunningham; George 2019; Horrocks 2021; Jamie 2019a; Mort; Renkl 2019; J. Singh 2021; Simard; M. Ward). Official memory is disrupted as writers ask difficult questions about how history is remembered and erased, and about how it has marked bodies and landscapes differently (Savoy; Jensen; Giggs 2020; Powles 2021; Jamie 2019a; Kimmerer 2013; Lee 2019a). Other traditions and ways of relating to the natural world emerge alongside Eurocentric ones (Kimmerer 2013; Jensen; Maclear). And nature writing no longer shies away from difficult topics such as death, loss, violence, and decay (Renkl 2019; Jamie 2005, 2019a; Jensen; Rush 2018; Savoy) – partly because these experiences are implicit in a time of Anthropocenic mass extinction, but perhaps also because many of these writers have never been sheltered from them.

There are two key characteristics of these diverse, women-authored texts that make them productive for this thesis to focus on. The first is their decentring of the white, heterosexual, middle-class male as the voice of nature writing. Taken together, they disrupt this hegemony by providing alternative stories about relationships with the natural world and how it is understood and experienced. These include women's stories, queer stories, Black stories, Indigenous stories, working-class stories, disabled stories, neurodivergent stories, and stories from those who belong to or identify with more than one nation or heritage. As well as decentring the dominant voice, they also challenge white male hegemony through active critique and

subversion, through first-person narratives that aren't afraid of grappling with political, environmental justice, and social justice issues. This decentring is a vital, seismic shift in the contemporary nature writing genre that reflects the scholarship of Anthropocene feminism, as well as a broader political and cultural move away from the white privileged male as the unquestioned centre of human power. As Donna Haraway, paraphrasing Marilyn Strathern, writes: 'It matters what stories tell stories; It matters whose stories tell stories' (2016b; 2019).

The second characteristic that distinguishes these texts is their Anthropocene setting. Although these writers may not refer to the Anthropocene explicitly, it is always there as an implicit backdrop. For example, in *Carry*, Jensen navigates male violence in the fracklands of the Bakken, a 200,000-square mile marine shale formation and one of the largest deposits of oil and natural gas in the US. In her 2019 collection of essays, *Surfacing*, Jamie visits the Yup'ik village of Quinhagak, where the climate crisis is eroding the tundra, leading to the loss of ancestral objects as they emerge from the melting ground and tumble into the sea. Anxiety about the volatility of the earth is a constant in Powles' work*,* erupting into the foreground of her narrative in the form of social media clips of forest fires, unnerving everyday signs of seasonal instability, and the constant threat of tsunamis and earthquakes. In *Trace*, Savoy confronts the often ignored racial dimensions of the Anthropocene and explores the connections between geology, race, and environmental justice in the US. And Horrocks dives headfirst into waters that scientists have condemned as so polluted as to be unswimmable in her memoir *Where We Swim*. These are not texts that sidestep the difficult topics of climate change, toxic pollution, and biodiversity loss, or that gesture to them through a lens of nostalgia and elegy, evoking a lost pastoral idyll. Christian Hummelsund Voie argues that such nature writing of the Anthropocene replaces the traditional 'narrative of retreat' (nature as a source of romanticised escapism) with what they call 'the narrative of confrontation' (2017, 2). These writers show that it isn't possible to speak about the natural world without speaking about emergency. And whilst they don't pretend to have the answers to these issues, they are unflinching in their ability to confront them, and to ground any writing about nature and place within an Anthropocene context.

Taken together, these texts provide alternative accounts of these Anthropocene times and what it means to live within them, from voices that have long been pushed to the margins. They all ask, what does it mean to write about the natural world in a time of environmental crisis? Furthermore, the two shifts that these texts effect – the decentring of the white male, and the grounding in an Anthropocene context – are reflective of the trajectory of feminist scholarship in the Anthropocene, known under various names, including 'Anthropocene feminism' (Grusin et al.) and 'posthuman feminism' (Braidotti, 2022). The practitioners of this Anthropocene feminism include, but are not limited to, Donna Haraway, Rosi Braidotti, Zoe Todd, Stacy Alaimo, Astrida Neimanis, and Max Liboiron.[8] Whilst exploring this scholarship and assessing its usefulness for Anthropocene questions, this thesis will utilise it as a broad theoretical framework for exploring how women writers are responding to this unique Anthropocene moment. The following sections will provide brief introductions to both the Anthropocene concept and the scholarship of Anthropocene feminism.

The Anthropocene

The Anthropocene is an increasingly popular geological concept that indicates a shift in the planet caused by human activities so profound that a new geological epoch is required to name it. The Anthropocene integrates the many aspects of ecological breakdown we currently face, including global warming, rising sea levels, biodiversity decline, the sixth extinction, ozone depletion, toxic pollution, ocean acidification, deforestation, soil erosion, atomic radiation, and coral bleaching. As Jedediah Purdy writes, the Anthropocene is 'not a statement of fact as much as a way of organising facts to highlight a certain importance that they carry' (2). It both indicates a scientific reality of ecological breakdown and offers a cultural narrative that describes the who, how, what, and why of this planetary emergency.

The term 'Anthropocene' was first used informally in the 1980s by biologist Eugene F. Stoermer but was popularised by Nobel Prize-winning chemist Paul J. Crutzen in 2000. At a conference in Mexico, Crutzen became frustrated with other scientists continually referring to the Holocene, eventually erupting with the claim that the

[8] This thesis will use 'Anthropocene feminism' as the most succinct and useful term for the collective of feminist scholarship in question; this does not necessarily mean that it endorses the definition that Richard Grusin et al. provide over any other.

Holocene was over and that we were now in the Anthropocene. Crutzen then joined forces with Stoermer to publish an article (2000) formally declaring their Anthropocene proposal. In 2009, the Subcommission on Quaternary Stratigraphy established the Anthropocene Working Group (AWG), tasked with examining the proposed epoch as a potential new addition to the Geological Time Scale and led by geologist Jan Zalasiewicz. In May 2019, the AWG voted in favour of treating the Anthropocene as a formal chrono-stratigraphic unit, and for its proposed start date (or primary stratigraphic signal) as being around 1950, at the time of the 'Great Acceleration'.

The Anthropocene future of decades and centuries ahead speaks to us through the promise of drowned cities, toxic bodies, mass extinction, and millions of ecological refugees. Inhabitants of the deep time future will also find evidence of our age in the marks we will leave in the strata, in the atmosphere, and in the biological composition of the planet. It is these lithostratigraphical, chemostratigraphical and biostratigraphical signals that the AWG have been seeking as evidence of our swerve into a new epoch – and as indicators of where its starting point or 'golden spike' might be.

Lithostratigraphical signatures of the Anthropocene include the great 'human-made mineral flowering' (Zalasiewicz et al. 2018, 179) of our age, which has created more than 180,000 synthetic mineral compounds. Arguably the most notable of these is plastic, of which at least 390 million tonnes are now manufactured annually (Plastics Europe). Cultural reliance on plastic is evident in clogged rivers, in vast plastic islands floating in our oceans – such as the Great Pacific Garbage Patch, which covers an area of 620,000 square miles (Kottasová) – and in the deaths of millions of birds and marine wildlife. It is also evident in the presence of uncanny new materials such as plastiglomerate: an obscene mixture of plastic and rock formed through the 'agglutination of natural sediments to melted plastic' (Corcoran et al., 4). As well as manufacturing material, certain groups of humans are also now proficient at moving it, transporting enough material – around 30 trillion tonnes – through construction, mining, drilling, damming, and urbanisation to exceed the sediment moved by natural forces (Zalasiewicz et al. 2018, 179). Such large-scale changes will persist as evidence of our presence for millennia in the form of 'ichnofossils' or 'trace fossils':

geological records of lives that do not take the form of a preserved biological body. These can include nests, burrows, or footprints, or for humans, in the remains of mega-cities, mines, boreholes, dams, landfill sites, and millions of miles of road, and in the sedimentation of everyday objects: kitchen appliances, smartphones, tin cans, and artificial turf (Farrier 2020).

The best-known Anthropocenic chemostratigraphical signature is the rise in atmospheric carbon dioxide levels, which have soared from 280 parts per million (ppm) in pre-industrial times to roughly 421 ppm (including a rise of 9 ppm in the time it has taken to write this thesis). This increase in atmospheric CO_2 is increasingly evident in the loss of glaciers and polar ice, rising sea levels, extreme weather events, ocean acidification, coral bleaching, and a stratigraphical layer of carbon-12: a light carbon isotope found in fossil fuels, which is absorbed into fossilisable plants and animals (Zalasiewicz 2016). Many global megacities, such as Mumbai, New York, Shanghai and Rio de Janeiro, are located on the coast – a colonial-era pattern of settlement that Amitav Ghosh claims demonstrates a complacency about 'the regularity of the world […] carried to the point of derangement' (36). Increasing numbers of extreme coastal weather events and rising sea levels will kill and displace millions in these population-dense areas. Indeed, it is estimated that, without any change to our coastal cities, between 72 million and 187 million people will be displaced by 2100 (Farrier 2020, 60).

The Anthropocene is also chemically distinguished by an enormous rise in reactive nitrogen and phosphorus, due to the industrial manufacture and use of fertiliser. Since the creation of the Haber-Bosch process in 1913, the amount of reactive nitrogen in the earth system has increased by 120% (Waters et al., 136). Nitrogen fertiliser is now estimated to feed around 50% of the world's population (Erisman et. al., 637). The cost of this is fertiliser run-off, which pollutes rivers, lakes and oceans, leading to algal blooms that deplete levels of oxygen and create vast 'dead zones' in the water. Other chemical signatures include the radioactive particles absorbed into soil, ice, seafloor sediment and rock due to the detonation of atomic bombs. Before the Test Ban Treaty of 1963, 500 atomic test bombs were detonated, releasing millions of radioactive isotopes into the earth's atmosphere, which will be detectable for thousands of years (Farrier 2020, 188). As of early 2023, an estimated total of

12,500 nuclear warheads were still in possession around the world (Kristensen et al.), with around 440 nuclear reactors producing 10% of the world's electricity (World Nuclear Association). The safe disposal of nuclear waste remains a problem, with some countries turning to extreme solutions, such as underground facilities designed to keep high-level radioactive waste safe for 100,000 years (Farrier 2020; Macfarlane 2019).

However, it is perhaps the biostratigraphical markers of the Anthropocene that are most significant, 'affecting as they do the living fabric of our planet' (Zalasiewicz et al. 2018, 180). We are currently in the midst of an accelerating biodiversity crisis that scientists are calling the onset of the sixth extinction, in which one million species are at risk of extinction (IPBES, 206). This is mostly caused by climate change, pollution, the introduction of non-native species, poaching, overfishing and loss of habitat due to deforestation, grazing, construction, and industrial agriculture. Elizabeth Kolbert has described the spread of non-native species across the globe as humans 'running geologic history backward and at high speed' (208), creating a 'New Pangea' (208). A 2022 report showed that wildlife populations have decreased by 69% globally since 1970 (WWF). The current extinction rate of life on earth is estimated to be between 1,000 and 10,000 times higher than the natural extinction rate, and this staggering loss of biodiversity will continue to shape the course of life on the planet long after we are gone (Kolbert, 269). Species loss is not an immediately visible problem, leaving no obvious signals or evidence. Instead, as David Farrier describes, extinction will perhaps declare itself in the form of a resounding silence, a sense of eeriness connoting an absence of something that should be there (2020, 226).

The Anthropocene concept has become incredibly popular both in academia and popular culture.[9] As well as a scientific reality, it provides a provocation for rethinking our place as human beings on a multispecies, living planet. It has seismic consequences for many of our ideas about ourselves and our place in the world. It

[9] In 2018, there were already 717 articles containing the term (Zottola and de Majo). This is a Western-dominated field, with the UK as the most prolific source of these outputs, followed by the US, Australia and India.

challenges the notion of human separation (even as it upholds it through an exceptionalist narrative) with evidence of profound entanglement across human and more-than-human bodies, technologies, and sciences: artificial intelligence technologies appear to be outstripping us with their liveliness, autonomy and capabilities; historic diseases are rising up from melting permafrost; everyday foods are transformed by genetic modification; toxic waste is reappearing in the form of cancers, miscarriages, diseases and neurological disorders affecting marginalised communities; and recently, the permeability between human and more-than-human became devastatingly clear after the zoonotic transfer of the Covid-19 virus led to the deaths of more than 6.8 million people worldwide.

The Anthropocene also profoundly disrupts the way that we understand ourselves in terms of scale (T. Clark, 2015), as it proposes that humans be viewed collectively – on a species level. It removes us from the container of human history into a deep time context and distorts our ideas about individual impact and cause and effect relationships. Suddenly, personal, everyday acts have become highly charged ethical and political choices – geological even (Colebrook). But even as we are confronted with the fallacy of believing that we are a separate and sovereign species, human exceptionalism is upheld by commentators (predominantly white and male), enraptured by the idea of humans 'overwhelming the great forces of nature' (Steffen et al. 2007) and effecting 'the birth of the new epoch' (Davies, 58). In similarly grandiose terms, they declare that, as 'the most important geomorphic agent on the planet' (Wilkinson and McElroy, 140), the Anthropocene 'sweeps humankind into the turbulent flow of geohistory' (Davies, 11), leaving us to 'face a struggle between ruin and the possibility of some kind of salvation' (Hamilton, x). This exceptionalist, anthropocentric narrative is just one of the many ways in which the Anthropocene concept has been widely criticised, with feminist scholars leading this critique.

The principal issue is naming. Haraway (2014) speaks to the 'extraordinary contradiction' in naming this proposed new epoch after 'the figure of the Anthropos', during a time in which intellectual and cultural revolutions have made it 'literally unthinkable to do good work in any interesting field with the premises of individualism … and human exceptionalism'. Distinguishing the epoch in this way

‘delivers a Promethean self-portrait’ (Crist, 131) that reinforces the outdated myth of human exceptionalism, whilst also providing a new iteration of it: a species separate to the rest of life not only for its genius, but also for its ability to destroy (Colebrook). As Eileen Crist writes: ‘Cold and broken though it be, it’s still a Hallelujah’ (132). Naming the epoch after the regime that led to the planet’s destruction in the first place is a form of blinkered anthropocentrism that is also reflected in the techno-saviourism that abounds in much Anthropocene discourse: the view of ‘technology as a humanitarian panacea and not simply a technique of intervention’ (Abdelnour, 206). This promotes the belief that only human geoengineering will ‘save the planet’ – a common phrase which, itself, is evidence of anthropocentric hubris.

The figure of the Anthropos immortalised in the Anthropocene is the figure of ‘Man’ – the normative model of the human perpetuated by classical humanism, which has long been criticised by feminists, ecofeminists and other marginalised groups (Braidotti 2022; Haraway 1988, 2015, 2016a, 2016b; Merchant; Plumwood). ‘Man’ is shaped by European renaissance ideals, and takes the form of the rational, European, middle-class, heterosexual, able-bodied, white male. He is defined by the conceptual strategy of othering; anything or anyone that does not fit into the category of ‘Man’ (such as the female, the animal, the natural, the Black, the Indigenous, the queer) is negatively defined against him as an other. This humanism is founded upon dualistic structures of power, which have long been highlighted and challenged by ecofeminists such as Val Plumwood, Vandana Shiva, and Carolyn Merchant, who worked to dissect toxic conceptualisations of feminised ‘nature’ vs. cultural, civilised man. This integrated set of dualisms include culture vs. nature, male vs. female, human vs. non-human, civilised vs. savage, white vs. Black, mind vs. body, and self vs. other. In this hierarchical logic, sameness is prized and difference is demonised. In this sense, ‘Man’ is not only a normative model of the human, but also a category of thought.

‘Man’ has been instrumental to the project of Western modernity and imperialism, providing what Braidotti calls ‘a hegemonic civilizational model’ (2022, 19). Race theorists and Black feminists have exposed how this figure both creates and naturalises a racialised ontology that has enabled violent practices of oppression and colonialism against non-white others (Fanon; hooks 2014a, 2014b; da Silva;

Wynter). The dichotomy between human and non-human was first weaponised by colonisers in order to create a hierarchy between white, European 'Man' and Indigenous peoples and enslaved Black people (Lugones). Once dehumanised, these others could be considered 'resources' and therefore available for exploitation. This logic enabled colonisers to capitalise on both the landscapes of the 'New World' and the people within them: a dynamic which persists in the reality of present-day global capitalism (Tsing) and the pollution, exploitation, fossil fuel culture, injustice, and mass extinction it brings with it. It is with this history and inheritance in mind that Jason W. Moore has proposed the Capitalocene (2016a, 2016b, 2017) as a more accurate name for this epoch.

Therefore, as the figurehead of dominant European culture, 'Man' is also the figurehead of the violent processes of colonialism, slavery, industrialisation, land degradation, extraction, capitalism, and fossil fuel culture that have led us to the point of planetary emergency. The trouble with the name 'Anthropocene' is not only that it celebrates this, but also that it universalises the blame for this emergency as belonging to the entire human species, presenting itself as a 'species act as opposed to an historical, situated set of conjunctures' (Haraway qtd. in Mitman, 2019). Such uncritical thinking lumps together all nations, communities, cultures, and peoples under the banner of 'Anthropos' or 'humankind' and apportions equal responsibility to all for the planet's degradation. This violent homogenisation overlooks the asymmetrical contributions to CO_2 emissions, consumption, waste production and pollution across the so-called Global North and South, and between settler and Indigenous communities. For example, in 2019, around 35% of the global population lived in countries emitting more than nine tonnes of CO_2 per capita; whilst 41% lived in countries emitting less than three tonnes per capita (IPCC, 10). Further, the Anthropocene's universalising tendency also erases the violence – both historical and ongoing – committed against marginalised groups in the name of 'Man'.

Ultimately, the narrative of what Giovanni de Chiro calls the 'white M(Anthropocene)' (489) 'conceals the gendered, racialised and exploitative global capitalist system that is driving ecological and climatological destruction' (de Chiro, 489). It obscures the fact that those least accountable for ecological breakdown are also those who will

bear the brunt of its consequences.[10] As feminist Métis scholar Zoe Todd writes: 'The complex and paradoxical experiences of diverse people as humans-in-the-world, including the ongoing damage of colonial and imperial agendas, can be lost when the narrative is collapsed to a universalizing species paradigm' (2015, 244). Such species-thinking transforms the Anthropocene into what Elizabeth Reddy calls 'a charismatic mega-category' (2014), ballooning in popularity but subsuming all difference and nuance within it. Furthermore, this narrative of 'humankind' also suggests an essential and universal 'human nature' as the driving force behind the environment's destruction. In this way, the Anthropocene points to a form of determinism that naturalises anthropogenic damage. Implying that environmental catastrophe is an inevitable telos to human life in this way both occludes the possibility of alternative futures and erases Indigenous cultures and the very different ways in which they have lived as part of the natural world for millennia.

The scholarship around the Anthropocene concept has also been criticised for mirroring the white, male bias of its name. Writing at the time of the AWG's inception in 2014, Kate Raworth dubbed it 'the Manthropocene', gesturing to an initial gender balance of 29 men to 1 woman, with only 4 of those members based outside of the OECD. Furthermore, the knowledge systems that define the scholarship of the AWG – and Anthropocene discourse more broadly – mean that the same worldview that led us into the Anthropocene has become the primary way by which we attempt to understand it. Dominated by Western science, this discourse is characterised by empirical facts. Scientific data and facts are important,[11] providing vital knowledge

[10] This asymmetrical dynamic of injustice and obscuration was encapsulated perfectly in the coverage of the OceanGate tourist submarine implosion in June 2023, which killed the five men onboard. News of this incident broke just days after the loss of up to 750 lives on a migrant fishing vessel off the coast of Greece – many of them women and children. The migrant shipwreck received scant media attention in comparison to the submarine disaster, which dominated headlines for days. Growing numbers of people are forced to seek refuge abroad due to ecological breakdown making their homes inhabitable, but increasingly, in the media and politics, their lives do not appear to be perceived as being of the same value as other human lives. When this is considered alongside the masculine hubris inherent in billionaires trying to conquer deep sea and space environments, as well as the fact that OceanGate's submarine tourist offer has emerged as a potential front for financing and furthering the technology for deep-sea drilling – a 'first step toward using submersibles for more industrial ventures, such as inspecting and maintaining underwater oil rigs' (Neuman) – these two concurrent events provide a disturbingly clear example of a masculine, technoscientific dominated Anthropocene in which the universal 'we' glosses over multiple layers of historic and ongoing injustice.

[11] This thesis does not seek to underestimate the value of scientific knowledge in addressing and tackling the issues the Anthropocene names, or to reinforce the dualism between science and culture. Instead, it acknowledges the perspective of feminists and Indigenous scholars who perceive Western science as 'a practice that assumes mastery over Nature, reproduces the doctrine of discovery, revels

and understanding around stratigraphical signals, predictions, and the possibilities of mitigation and sustainability, however, as Crist points out, this factual tone also extends to seemingly self-evident statements about our species, including 'descriptions of humanity as "rivalling the great forces of Nature", "elemental", and "a geological and morphological force"' (132). Such statements are tinged with a glorification of human power that denies the agency of Earth forces and presents human dominion as a fact, further eliding the potential of changing the way we inhabit the earth. Haraway argues that this discourse 'saps our capacity for imagining and caring for other worlds, both those that exist precariously now […] and those we need to bring into being in alliance with other critters, for still possible recuperating pasts, presents, and futures' (2016b, 50). Furthermore, science in its traditional forms has historically been conceived as 'an isolated activity *not* bound up with systems of political action and social dynamics' (Colebrook, 2). In this way, a discourse with a scientific register presents itself as at a remove: pure, innocent, disconnected and disentangled from the 'abstract matter' of life. As Colebrook writes, paraphrasing Latour, this denies the fundamental fact that we are entangled in the world, that we are 'earthbound' (2) – living within, and dependent upon the world of matter rather than observing it from an imagined outside.

The supremacy of Western science in Anthropocene discourse also leaves no space for other forms of knowledge. It ignores the fact that scientific terms may not be 'translatable to all parts of the world, even if the phenomena in question are experienced differently' (Haraway, in Mitman), thus further excluding local and Indigenous Knowledge at a time in which – having led us into this situation – Western epistemologies should be widening their remit to incorporate as many alternative kinds of knowing-in-the-world as possible. The 2023 IPCC report reflects this by emphasising that scientific knowledge alongside 'cultural values, Indigenous

in exploration and appropriation of Indigenous Land, and is invested in a rigorous self-portraiture in which valid scientific knowledge is created only by proper European subjects' (Liboiron 2021a, 20). This thesis seeks to explore this perspective and specifically problematise the dominance of technoscientific knowledge in Anthropocene discourse, and the way that it hierarchises and occludes other forms of knowledge, whilst authorising practices that can be unaccountable and destructive. It is also highly inaccessible. The point is not that science and technology are not important sources of knowledge and action; but that they are not the only source, and in the Anthropocene, we need other ways forward that are both more diverse and more accessible.

Knowledge, [and] local knowledge' (67) can create meaningful participation and inclusive approaches to climate adaptation.

However, the Anthropocene concept does have value in the challenge it brings to modern human society, in the shock it delivers as 'a cultural zeitgeist, as an ideological provocation' (Malhi, 93), and in its potential to deliver an 'ideological and political call for environmental action' (Braje, 504). But we must remember to 'calibrate the "shock" of the Anthropocene against the knowledge of Others' (Probyn-Rapsey, 3), for whom the shock isn't so much of shock – but who have 'lived with the bad news, experienced the bad news and are now sitting back watching, with maybe a wry smile, at why, in this supposed "Age of Men", the men seem so disoriented and lost' (Probyn-Rapsey, 3). The extent to which we engage with this shock and the opportunity for reimagining it offers will depend on who it is that does the talking – on which voices and how many of them we hear. As Kathryn Yusoff writes, we 'cannot be immune to who is writing and mobilizing this history and the implications of its telling for who is granted agency in shaping the present and future' (2018, 23). Again, 'It matters what stories tell stories; It matters whose stories tell stories' (Haraway 2016b, 2019).

Anthropocene feminism

Several scholars have argued that feminist thought actually preceded the idea of the Anthropocene by several decades (Braidotti 2022; Grusin et al.) In 1985, Haraway published *A Manifesto for Cyborgs*, outlining a novel understanding of the human as inextricably connected with non-humans, science, culture, nature, and technology, thus preceding the relational, entanglement thinking that the Anthropocene catalyses. In this text, Haraway writes of the late twentieth-century world of rapid technoscientific development and socio-cultural revolution as a time of 'transgressed boundaries, potent fusions, and dangerous possibilities' (2016a, 14), in which our understanding of the human as 'an ultimate self untied from all dependency' (2016a, 8) became troubled by our increasing entanglement in a messy, interconnected world. This 'breakdown of clean distinctions between organism and machine and similar distinctions structuring the Western self' (Haraway 2016a, 53) ripped open the structures of power that separated human and non-human, science and culture, organic and machine. And it offered 'great riches' (Haraway 2016a, 53) for feminist

thinking and the project of dismantling humanism: ‘We can learn from our fusions with animals and machines how not to be Man, the embodiment of Western logos’ (Haraway 2016a, 52).

The events of the Anthropocene confront us with ‘a reality that feminist, postcolonial and race thinkers had already voiced: that the “human” is nether universal nor neutral but shot through with power relations organising access to privileges and entitlements’ (Braidotti 2022, 4). Feminism, in its drive for equality across gender, but also race, class, sexual orientation, and other axes of power, has the expertise needed for this Anthropocene moment. It is a time that requires ‘the age-old feminist question […] of “who gets to count as human and at the expense of whom?”’ (Åsberg and Braidotti, 14). As Colebrook writes, ‘Feminism is always the question of *who*: who speaks, for whom, and whose subjectivity is presupposed in the grammar of the question?’ (9). Colebrook proposes that an Anthropocene feminism would be most useful in its ability to problematise what for many has become an accepted concept – that the Anthropocene is an epoch, an uncontested line in the rock strata – by instead asking ‘for whom this stratum becomes definitive of *the human*’ (10). Who does the Anthropocene concept name as human, and who does it exclude or silence? Whose story does it tell?

In the Anthropocene, perhaps more than ever before, ‘our feminist thinking matters; it is a transformative device we may use to think other stories or matters with’ (Åsberg and Braidotti, 14). But what does feminism look like in the Anthropocene? How can feminism help us think about and challenge the Anthropocene concept? These are questions that a number of humanities, feminist, de- and anti-colonial, science and technology studies, queer studies, disability and crip theory studies, environmental humanities, new materialist, and posthuman scholars are writing about, with publications including *Anthropocene Feminism* (2017) from Richard Grusin et al.; *Feminist Ecologies* (2017) from Stevens et al; Cecilia Åsberg and Rosi Braidotti’s *A Feminist Companion to the Posthumanities* (2018); Braidotti’s 2020 text *Posthuman Feminsm;* Samantha Walton’s 2020 essay ‘Feminism’s Critique of the Anthropocene’; and the 2021 special issue on ‘Gender and the Anthropocene’ from the journal *Feminist Encounters* (Gouws et al.). What all these scholars agree on is that the Anthropocene cannot be properly addressed without feminism’s input. And

this thinking must be intersectional, grounded always in the contexts of race, sex, gender, ability, class, indigeneity, and de- or anti-colonialism (Sandilands).

This swell of feminist thought responds to the Anthropocene by injecting a new energy and urgency into the historic commitment of feminist and other marginalised groups to decentre 'Man', and to create alternative visions of the human with those who were historically excluded from it. It is buoyed by growing interdisciplinary understandings of the relationality, interconnection, and porousness of life, which have emerged from advances in the life sciences, such as Lynn Margulis' endosymbiosis, and work from cultural scholars such as Latour's actor-network theory and Haraway's becoming-with (2008) – 'new' understandings that are actually ancient truths to Indigenous peoples around the world (Todd, 2016). It is catalysed by the need to challenge the white, male Anthropocene, and offer alternatives to the 'too often unquestioned masculinist and technonormative approach' (Grusin, x). The following sections will outline the main characteristics of Anthropocene feminism, which this thesis will utilise to inform and deepen its readings of the contemporary women-authored texts it explores.

1. Intersectionality and collaboration

As the Anthropocene exposes the power structures that marginalise different oppressed groups in intersecting ways, a feminism fit for this time must find a way to work inclusively and collaboratively across difference. This is not a new idea. Mainstream feminism's white, middle-class bias was long ago challenged by Black and Indigenous feminists (Crenshaw; Lorde; hooks 2014a, 2014b; Moreton-Robinson), who confronted their white counterparts with the knowledge that the 'we' they utilised was exclusive, that it created 'a homogeneity of experience covered by the word sisterhood that does not in fact exist' (Lorde, 116). This meant that their feminist thinking failed to speak for women from other race, class and sex backgrounds. The intersectional approach (Crenshaw) that Black feminists and race theorists pioneered in the 1990s changed feminism and enabled it to better account for the multiple ways that people can be oppressed. Feminism now is about dismantling the edifice of white Man to achieve equality for all – and this means working in collaboration with thinkers from across the intersectional prism of marginalised identities, but without collapsing their

differences. As Audre Lorde put it: ‘there is no such thing as a single-issue struggle because we do not lead single-issue lives’ (138).

Environmental justice struggles must also incorporate intersectional feminism, and vice versa. Walton argues that ‘what Anthropocene feminism might achieve is an emboldened reorientation of ecological concerns within gender justice struggles’ (2020, 113) acknowledging that ‘there can be no gender justice without social and environmental justice’ (2020, 114). The 2023 IPCC report stresses that ‘prioritising equity, climate justice, social justice, inclusion and just transition processes can enable adaptation and ambitious mitigation actions and climate resilient development’ (33). But ecocriticism and Western environmental and conservation movements have historically been defined by neo-colonial white bias, operating separately from feminism and its manifold social justice struggles (Walton 2020, 114). Walton cites Laurence Coupe’s introduction to the *Green Studies Reader* as an example of this, in which he declared ‘green literary activism as “the most radical of all critical activities”’ (2020, 113–114), including those focused on class, race, and gender. In this perspective we trace the legacy of Western ideas about the natural world – particularly spaces of ‘wilderness’ (Cronon) – that perceives the human as necessarily outside of it.[12]

But the challenges of the Anthropocene – in which exposure to toxic waste, extreme weather, changing landscapes, and access to support correlate strongly with class, gender, and race differences – do not allow environmental and social justice struggles to be considered separately. As Catriona Sandilands writes, ‘ecological relations must be understood in the context of colonialism, race, gender, sex, class and ability’ (447), and the emergence of postcolonial, Black studies, subaltern studies, queer studies, First Nations and Indigenous scholars in the field of ecocriticism are reflecting this (Walton 2020, 119). What the

[12] Cronon explains how European, settler colonial ideologies of the sublime, heroic masculinity, and frontier individualism produced ‘wilderness’ as an entirely human construct. Violently removing Indigenous inhabitants from American land allowed settlers to play out their masculine frontier myths of ’virgin’ land, or ‘terra nullius’. In this sense, wilderness is a cultural invention that represents ‘a flight from history’ (Cronon, 16), embodying ‘a dualistic vision in which the human is entirely outside the natural’ (Cronon, 17) that still permeates ideas about ‘the wild’ and the place of humans in the natural world today. As Cronon writes, if the ‘place where we are is the place where nature is not’ (17), then the chances of ever achieving an ethical, sustainable relationship with the natural world are slim.

Anthropocene offers for feminism, Walton tells us, is the opportunity to frame feminism 'both symbiotically and dialectically, with both feminism and environmentalism looking to extend and advance the other, while seeking for points of intersection and solidarity' (2020, 120).

In this sense, there is no single, universal feminism. Instead, as Jennifer Mae Hamilton and Neimanis write, feminism is 'manifold' (511); it is 'responsive to and respectful of diverse politics' (512) and is inclusive of other perspectives and discourses, seeking out 'regions of overlap in a broadly construed feminist territory' (512) that understands that gender justice struggles cannot be considered without other social and environmental justice struggles and vice versa. Echoing Walton, Braidotti writes that this is a 'mode of relational affinity and integration' (Braidotti 2022, 17), that requires feminist thinkers to inhabit the 'distinctive moments of encounter and tension' (Walton 2020, 119) that emerge from this multitude of perspectives and to find ways to collaborate in intersectional ways that do not collapse difference. As Braidotti writes, playing on Adrienne Rich's famous quote, the 'we' of feminism is best articulated as: "we-who-are-not-one-and-the-same-but-are-in-*this*-together" (2022, 8).

2. Disruption

The central project for an Anthropocene feminism is to decentre 'Man' as the universal figure of humanity and human power. But this extends into a broader 'ethos of disruption' (Grusin, xi) that builds on feminism's long history of subversive politics and radical action. Feminists in the Anthropocene must dismantle the white male bias of Anthropocene thought, complicating its single, universalising perspective and commitment to technoscientific knowledge with a multitude of other points of view and forms of knowledge production. It must disrupt the dualisms of nature and culture that lie at the root of Anthropocenic destruction. As Haraway writes, 'It matters to destabilize worlds of thinking with other worlds of thinking' (2014). If the Anthropocene story is only told through this lens, the outcome will not change. We need other voices and other forms of storytelling that can disrupt this dominant narrative and offer alternative futures. This means breaking down entrenched dualisms and hierarchies, problematising imagined divides, and challenging comfortable ideas about the sovereignty of the

bounded human self by exposing its porosity, contingency, and uncomfortable intimacy with the more-than-human world.

This feminism emphasises the need for action. Fiona Probyn Rapsey writes about the danger of reacting to the 'shock' of the Anthropocene with disorientation, apathy, or fatalism. She uses Dipesh Chakrabarty as an example of this, whose controversial article 'The Climate of History: Four theses' details his realisation that he no longer understood, he no longer had the answers: 'all my readings… over the last twenty-five years […] had not really prepared me for making sense of this planetary conjuncture within which humanity finds itself today' (2009, 199). But action must overcome apathy, and part of this is letting go of the hubristic need to have the answers in order to act. Haraway emphasises the need to 'stay with the trouble' of these painful, difficult Anthropocene times: 'Our task is to make kin in lines of inventive connection as a practice of learning to live and die well with each other in a thick present. Our task is to make trouble, to stir up potent response to devastating events' (Haraway, 2016b, 1).

3. Relationality

For feminism in the Anthropocene, relationality, or entanglement, is not just a theme but a foundational ethical mode.[13] The understanding that humans are not separate to but intimately entangled with a range of more-than-human others in dense webs of interdependence is critical to living in the Anthropocene, and something that its phenomena are making harder to ignore. This builds on a wealth of feminist, ecofeminist, feminist science and technology studies, ecocritical, cultural, philosophical, and anthropological concepts already created around ideas of relationality, including Haraway's becoming-with (2008) and

[13] It is important to keep in mind a recent turn away from the vocabulary of entanglement for some scholars, based on tensions implicit in the idea of entanglement as an ethical or ontological mode. Entanglement can be flattening; it can obscure the power dynamics inherent within relations. As Eva Haifa Giraud writes, narratives of entanglement are effective at highlighting human implication in ecological damage and in calling for responsibility, but 'actually meeting these responsibilities, however, is not a straightforward task' (1). Giraud argues against 'imposing simplistic solutions on difficult, multifaceted problems' (2). She warns that entanglement narratives can actually undermine the potential for meaningful political action: 'irreducible complexity, in other words, can prove paralyzing and disperse responsibilities in ways that undermine scope for political action' (2). Entanglement is a vital ethical mode and theme for Anthropocene feminism, but clearly needs to be treated with care.

response-ability (2016b), Isabelle Stenger's cosmopolitics (2021), Karen Barad's intra-action (2007), Timothy Morton's the mesh (2010), Deborah Bird Rose's multispecies knots of ethical time (2012), and Tim Ingold's meshwork (2011). Taken together, these ideas reject the liberal notion of the bounded, sovereign human body acting at a remove from the rest of the living world and 'emphasize the deep enfolding of human life in dynamic and complex systems of biotic and abiotic relations that bring overlapping worlds into existence' (Gabrielson, 60). The Anthropocene imbues this field with new urgency, and new understandings in life sciences and ecology, such as mycorrhizal networks (Sheldrake; Simard), horizontal gene transfer, and humans as holobionts, which provide rich new terrain to further this thinking with.

Relationality is an alternative story that has the potential to refute the violence and exclusions of the Anthropocene. Haraway offers the Chthulucene as an alternative to the Anthropocene story, which she names after the 'Chthonic ones, beings of the earth […] replete with tentacles, feelers, digits' (2016b, 2), they 'writhe and luxuriate in manifold forms and manifold names in all the airs, waters and places of earth. They make and unmake; they are made and unmade' (2016b, 2). The 'living-with and dying-with' they embody 'can be a fierce reply to the dictates of both Anthropos and Capital' (Haraway 2016b, 2). Similarly, Glenn A. Albrecht offers the Symbiocene as another alternative name for the epoch that foregrounds symbiotic interdependence instead of the despotism of Man. The Symbiocene is intended as an alternative pathway for a more optimistic future, defined by interconnection, mutualism, and the reintegration of humans into the flourishing web of life (Albrecht).

Anthropocene feminism is concerned with finding new forms of ethical engagement capable of relating across difference without collapsing it, and capable of foregrounding the obligation to more-than-human others that must be recognised as part of this condition of entanglement. However, feminism must take care to acknowledge the inheritances of this thinking. In her 2016 article, 'An Indigenous Feminist's Take on the Ontological Turn: 'Ontology' is just another word for colonialism', Todd criticised Western academia and the ontological turn for 'spinning itself on the backs of non-European thinkers' (7). She calls out

Western academia's 'breathless "realisations" that animals, the climate, water, "atmospheres", and non-human presences like ancestors and spirits are sentient and possess agency, that "nature" and "culture", "human" and "animal" may not be so separate after all' (Todd 2016, 16). And she argues that this scholarship fails to credit Indigenous thinkers for knowledge that has been held in diverse Indigenous communities for millennia, and in doing so, is 'perpetuating the exploitation of indigenous peoples' (Todd 2016, 16) begun by European colonisers centuries ago. The erasure of this Indigenous Knowledge mirrors the erasure of Indigenous peoples by colonisers in the name of *terra nullius.* Both are forms of erasure which violently exploit and appropriate Indigenous peoples for white, European gain.

Kimmerer has also become an important voice in this field. As a citizen of the Potawatomi nation, Indigenous botanist and Professor of Environmental and Forest Biology, Kimmerer provides a unique perspective that is capable of straddling both Indigenous and Western knowledge forms. Her highly popular non-fiction text *Braiding Sweetgrass* (2013) describes the relationality that is inherent in Potawatomi knowledge through webs of reciprocity, responsibility and gifting. She uses the Indigenous paradigm of the gift to provide an accessible figure and framework for thinking about and living these relational, reciprocal dynamics. However, Todd has criticised Kimmerer's text as being written 'largely for white audiences' and for erasing the decolonial struggles that are inherent in relations between white and Indigenous peoples (2021). Todd writes that white readers are able to 'selectively absorb that this work is all about love+reciprocity' whilst missing that it's also about 'justice, repair, truth, redistribution' (2021).

4. Alternative modes of knowledge production

The Anthropocene is both the product and pinnacle of the Western technoscientific and anthropocentric drive for mastery, and this is reflected in its discourse, which is dominated by scientific fact and objectivity. The Anthropocene's principal discipline, geology, tells the story of the new epoch through stratigraphy, a taxonomic impulse to divide and organise the planet's deep history into a linear narrative. The dominant metaphors in Anthropocene discourse reflect this (Rickards). For example, humans are both 'geological and

geomorphological agents' (Price et al.) and a collective 'force' (Crutzen, 23), which has 'inscribed' (Buchan) its presence in deep time and 'carved' (Thomas Smith) new marks into the geologic record. Humanity's destructive impact now extends vertically, sedimented as a new layer in the strata, through which the 'future geologist' (Santana, 1076) or archaeologist will read this grand narrative of destruction and extinction. As well as betraying a thrill for human mastery, this language erases all difference, complexity and nuance in the story, and reduces it to fact – cold and hard as rock. This discourse remains inaccessible and unrelatable to everyday lives, rendering the Anthropocene as something to be mediated through the authority of science rather than felt and understood on a personal level.

Like the NNW, a feminism for the Anthropocene rejects rigid, hierarchical structures of knowledge, and the hyperseparation of what C.P. Snow once called 'the two cultures', by working in highly interdisciplinary, 'transversal' (Åsberg and Braidotti, 18) ways, often engaging with research 'that already thrives on the margins or outside of scholarly comfort zones' (Åsberg and Braidotti, 16). Examples of disciplines it works across include animal studies, cultural studies, queer theory, science and technology studies, anthropology, the medical humanities, the blue humanities, the digital humanities, gender theory, Indigenous studies, new materialism, ecocriticism, ecofeminism, literary theory, and the environmental humanities.

This feminism also offers a host of alternative modes of knowledge production. Knowledge is generated by the persistent questioning of histories and official stories, probing and pointing out the veiled structures, obscured logics and erased stories that are beneath them. It emerges from curiosity, which Anna Tsing argues has been suppressed by the 'simplifications of progress narratives' (6) and the myth of human exceptionalism, which has taught us to 'ignore the multispecies world around us' (281). Tsing calls for the return and rebuilding of curiosity as 'the first requirement of collaborative survival in precarious times' (2). Indeed, in times of precarity, indeterminacy, and the unknown, curiosity is more useful than the desire for definite fact. It encourages the asking of questions, which in turn 'productively raise as many new questions as they answer' (Grusin,

xi). Curiosity creates space for speculation and imagination, two central forms of knowledge production for feminist, queer and Indigenous thinkers (Grusin, xi), emerging in science fiction, fantasy, futurisms, and alternative histories. Feminist knowledge is never about certainty or fact; it's about humility and open-mindedness. As Haraway writes, it 'makes room for surprises and ironies at the heart of all knowledge production; we are not in charge of the world' (1988, 594).

Furthermore, knowledge changes from something that is objective and immaterial to something found in embodied experience, emerging from a corporeal, affective understanding of what it is to be a body in the world. Positioning the body as a site of knowledge 'disrupts gendered narratives of the body as passive while also drawing attention to the body as a site of gendered social and environmental labor, power, and violence' (Gabrielson, 61). This highlights understandings not only about the importance of the physical world but also about Anthropocene power dynamics and the way in which they differently expose bodies to risk. Blue humanities scholars lead the way in acknowledging that knowledge making is an embodied process, enacted through engagement and immersion in a living world (Daws; DeLoughrey; Fagan; Mentz 2016, 2020a, 2020b). 'Sometimes', writes Steve Mentz, 'even artists and academics need to be overwhelmed' (2020a, 136).

This feminism is experimental and innovative, restlessly seeking new understandings, new perspectives, and new voices in its project of redefining the human. It isn't concerned with conclusion or telos but seeks complexity through the feminist practices of care and attention. To use Haraway's words, it always stays with the trouble of tension and indeterminacy. This alternative approach to knowledge and its production has generated a wealth of new ontologies and concepts, such as Jane Bennett's *vibrant matter* (2009),[14] Alaimo's *trans-*

[14] New materialist Jane Bennett's 'vibrant matter' recognises that all things – rubbish, rocks, dead animals – are *alive* by virtue of their ability to affect through complex material entanglements and interconnections. This concept 'give(s) voice to a vitality intrinsic to materiality, in the process absolving matter from its long history of attachment to automatism or mechanism' (Bennett, 3).

corporeality (2010),[15] Barad's *intra-action* (2007),[16] Neimanis' *bodies of water* (2017),[17] and Braidotti's *zoe* (2006).[18] Feminists in the Anthropocene show us that if the desire for definite knowledge, scientific mastery, transcendence, and human authority got us into this situation, they certainly won't get us out of it – new pathways must be explored.

5. Experimenting with perspective

One of the ways in which the figure of the Anthropos as scientific, authoritative Man has influenced thinking and writing around the environmental crises of the Anthropocene is in the pervasion of a neutral, objective perspective. This abstract gaze has long been criticised by feminists, principally in Haraway's 'Situated Knowledges', published in 1988. Haraway writes against what she calls 'the god trick' of scientific objectivity, which occupies a disembodied, disembedded perspective 'from above, from nowhere' (1988, 584). Possessing the mythic 'power to see and not be seen' (Haraway 1988, 581), this epistemological position transcends all limitations and responsibilities; it is unlocatable, and therefore unaccountable. This claim to total objectivity and neutrality reinforces the hyperseparation of humans and 'nature' that the Anthropos*'* power is built upon; it implies that 'nature' and othered humans are objects for study, able to be examined from an unfettered, external, and innocent viewpoint.

[15] Stacy Alaimo's concept of trans-corporeality is a reimagining of corporeality that highlights the way that the body is open and exposed to the ecosystem and other bodies around it. Instead of being bounded and autonomous, this corporeality is permeable, partaking in material exchanges, interconnections and flows.

[16] Karen Barad, a feminist scholar with a background in quantum physics, coined the term 'intra-action' as an alternative to 'interaction'. Intra-action defines agency as something that emerges between bodies, rather than as a property belonging to individual, separate bodies. Agency arises through dynamism taking place between bodies, in their engagement, exchange, connection, friction and inseparability.

[17] Astrida Neimanis' 2017 book of the same name outlined bodies of water as a posthuman figure for our watery subjectivity. In this concept, human embodiment is watery embodiment; 'we leak and seethe, our borders always vulnerable to rupture and negotiation' (2) with others in a watery world. Neimanis' concept resonates with Alaimo's trans-corporeality and flows into several other hydrological concepts created in the same text, such as the hydrocommons, and a posthuman politics of location, both of which this thesis will explore in Chapter Three.

[18] Rosi Braidotti's 'zoe' proposes an alternative to bios, broadening our understanding of life from just human life to a vision that encompasses animal and more-than-human life too. A zoe-centred perspective names our fundamental interconnection with the more-than-human world and refuses an anthropocentric viewpoint that would seek to elevate human life above the others it is entangled with.

The god trick perspective still dominates much of the writing and imagery associated with the Anthropocene (Alaimo 2016; Liboiron 2021a). It also dominated nature writing for a long time and remains a point of debate. As Smith describes, there are naturalists who believe that 'the form should distance itself from aesthetics and stick to the facts, that there is no place for lyricism in a genre that has strayed from its origins in scientific writing' (22). These voices decry the loss of the 'disinterestedness' (Smith, 23) of the scientific perspective, and warn that 'once facts are despised, fancies replace them; and fancies are poisonous companions to the enjoyment and appreciation of nature' (Perrin qtd. In Smith, 23).

Feminists such as Alaimo refute this, arguing that 'the catastrophes of the Anthropocene should make it clear that what used to be known as nature is never somewhere else' (2016, 144). Through the god trick perspective, the messy entanglements and complexities of human and more-than-human agency are erased, as well as the violence, harm and suffering within them. Everything is externalised and made manageable to an outside observer. These viewpoints 'ask nothing from the human spectator; they make no claim; they neither involve nor implore' (Alaimo 2016, 146). Alaimo challenges this incorporeal perspective and calls for 'a creaturely immersion in the world' (2016, 147). The resurgence of the material world forms a big part of this call. In the Anthropocene, the agency of the physical world can no longer be ignored; the human subject is inseparable from a more-than-human world of vibrant, lively matter. This means recognising our human condition as being one of enmeshment in a material world – our porous bodies engaged in flows and exchanges with other bodies and rhythms of all kinds. It also means understanding the 'human imagination not as external to the object of study, but as *actively producing* it' (Åsberg and Braidotti, 6, emphasis in original).

Feminist new materialist scholars evidence this turn with renewed interest in the agency, affect, and importance of the physical world. This field ranges from vital materialism (Bennett), to waste or discard studies (Liboiron 2021a; Liboiron and Lepawsky), to toxic embodiment (Alaimo 2010, 2016; Cielemęcka and Åsberg). Feminist science and technology scholars continue to 'blur the binary between

the social and the biological and place new emphasis upon the lived experience of the body and its constitution through dynamic sociomaterial processes' (Gabrielson, 61). In parallel, scholars such as Yusoff and Elizabeth Povinelli have argued for the 'geologic turn', which posits the Anthropocene as a provocation to take the geologic and the geopolitical life of humans seriously. This scholarship understands the geologic 'as a praxis of differentiated planetary inhabitation and corporeal affiliation, rather than an externality' (Yusoff 2013, 781), and attends to the ways in which politics and power structures – particularly those organised around race (Yusoff 2018) – are 'shot through with geologic forces and their mineralisations' (Yusoff 2013, 781).

Another vital element of an immersed and embedded perspective is that it precludes the idea of externality, which the hierarchical, hyperseparating structures of the Anthropos have for so long relied on. Indeed, in an unruly, intimately interconnected Anthropocene world, we witness the 'end of externality' (T. Clark 2008, 48) – the end of the idea that there is an 'over there' in which to 'export, exclude, externalise' (Wood qtd. in T. Clark 2008, 48) certain people, things, ideas, and ecologies. In the Anthropocene, 'there is no outside, no space for expansion, no more terra nullius, no more Lebensarum, no slack, no "out" or "away" as when we throw something "out" or "away"' (Wood qtd. in T. Clark 2008, 48). If there is no longer an imagined 'over there' that the god trick gaze can use to distance itself, then perspectives must be immersed and embedded. And the subject must understand themselves as being caught up in the mess and muddle of these Anthropocene times. There is no 'pure' position of innocence or neutrality from which to observe (Haraway, 1988).

The broad tension between scientific, objective modes of perception and embodied, material experiences of the world that are encapsulated in Anthropocene feminism's exploration of perspective echo tensions in the ecofeminist tradition. Ecofeminism is a long and varied branch of feminism, broadly stemming from the idea that the domination of women and the degradation of the natural world are both consequences of patriarchy and capitalism. Early ecofeminism focused on exposing the binary between mind and body, highlighting the rejection and devaluation of the conceptual category of the

body, which included nature, women, emotions, and ‘the primitive’, in favour of reason (Plumwood, 19). Some thinkers saw advantage in positioning women as close to the natural world, as a counterpoint to the domination of the ‘masculine’. For example, Mary Daly (1978) argued that women should be defined by, and proud of, their biological difference to men and their ability to reproduce – to create rather than destroy (Alcoff).

This perspective has been criticised on a number of levels, including its gender essentialising approach that bases justice and rights on biology, and its subscription to the same dualistic thinking that underpins dominant Western, patriarchal hegemony. Val Plumwood identified how feminists have endorsed the association of women and nature, or women’s ascent from nature into reason, without examining the logic of exclusion that still underpins both perspectives (20). Plumwood argued against any uncritical endorsement of this women—nature connection, and highlighted the continuing damage this association causes, including in her concept of ‘backgrounding’ (21), which chapter two will explore in greater detail.

Ecofeminism has further engaged with embodiment by exploring how cultural norms for feminine and masculine bodies, rather than biological characteristics, shape ideas about gender, and therefore people’s identities and relationships to bodies – their own and those of others. This type of gendered embodiment is disempowering, reinforcing power dynamics of objectification and oppression through the pervasive idea of the active, masculine subject and the passive, female object. In more recent years, queer, disability, race and feminist scholars have built on this work by complicating the heteronormative binary between feminine and masculine embodiment and the subject/object binary it supports. These scholars look to questions of power and ethical expectations of what a body should be; rather than successful, independent, and capable, bodies can also be unproductive, dependant, unwell or requiring care (Mason).

Astrida Neimanis, an important contemporary voice in this thesis, furthers this work of undoing the conceptual binaries that bind the imagining of the human body by challenging us to think of embodiment as watery. Neimanis takes

forward and builds on the feminist understanding of a body as socially, culturally, and environmentally situated – as described in Adrienne Rich's politics of location and Haraway's situated knowledges – and integrates this into a broader, new materialist understanding of embodiment as the experience of being specifically situated in a world of asymmetric power dynamics, but also fully dissolved into the broader flows of a watery world and the other fluid bodies that mingle in its eddies and currents.

Other thinkers in the ecofeminist tradition moved away from the material body towards technology and science, as a way to advance the feminist movement. These range from Shulamith Firestone, in the radical feminist tradition, whose 1970 manifesto *The Dialectic of Sex: The case for feminist revolution*, argued that social structures of gender inequality were based on women's biological experiences, such as pregnancy, childbirth and childrearing, which kept them in subjugation. Firestone called for radical ways to transcend this through futuristic technologies, including the abolition of the nuclear family and reproduction that could occur artificially, outside of the womb. More recently, Xenofeminism, as described in the 2015 manifesto by the Laboria Cuboniks collective, puts forward an assemblage of thinking that synthesises cyberfeminism, posthumanism, feminist materialism and other strands of thought. The collective pushes back on what they perceive in feminism as reductive notions of technology and a tendency to deify nature.

It is important to acknowledge ecofeminist perspectives on embodiment and the tensions this topic has caused in feminist thought, which precede the contemporary treatment of embodiment by Anthropocene feminism and the writers in this thesis. It is also vital to acknowledge the favourable approaches to science and technology in ecofeminism (also found in Donna Haraway's work), because they contrast with the viewpoints put forward by the writers explored in this thesis, who are generally more focused on seeking alternatives to the objective, disembodied scientific gaze – alternative perspectives, framings, and modes of experiencing the natural world and of writing about the climate emergency.

6. The politics of knowledge

The need to acknowledge bias and difference in knowledge production is a key priority for this feminist thought, rooted in a long feminist insistence on situated knowledges. Situated knowledge production emerged partly as a refusal of the god trick perspective. Instead of an omniscient perspective that presumes the distance and neutrality to both view the world and speak for it, this feminist methodology is about emphasising knowledge as situated and subjective. It emerged as a reminder that knowledge production is shaped by the speaker's unique embodied, geographical, social, and cultural positioning, and by their location in the power dynamics that run through these structures and connect them to others. These conditions form the speaker's unique politics of location. As Maria Puig de la Bellacasa writes: 'That knowledge is situated means that knowing and thinking are inconceivable without a multitude of relations that also make possible the worlds we think with' (2012, 198). Situating one's knowledge by establishing a politics of location not only acknowledges the relations that our worlds are built by, but also rejects the universalising 'we' that white, mainstream feminism perpetuated, long criticised by Black and Indigenous feminists (Lorde), whose unique experiences were erased by this 'we'. Anticolonial, Métis science researcher Max Liboiron points out that this methodology of situated knowledge and positioning is also reflected in Indigenous methodologies and knowledges, in which specificity of place, community and relations are of vital importance in the production of knowledge and honouring one's obligations (2021a).

In 1986, two years before Haraway's publication, Adrienne Rich published her landmark essay 'Notes Towards a Politics of Location', which foregrounded that 'a place on the map is also a place in history' (30) – histories of colonialism, violence, dispossession, oppression and marginalisation, which situate us differently in the present. It responded to the danger of white middle-class feminism speaking for universal womenkind, and called for 'Recognising our location, having to name the ground we're coming from, the conditions we have taken for granted' (34). Rich argued that feminism must discard the 'faceless, raceless, classless category of "all women"' (34) and instead embrace the knowledge that comes from the margins, from the 'We who are not the same. We

who are many and do not want to be the same' (38). Rich also grounded her politics of location in embodiment. For example, in her body, Rich saw 'the teeth of a middle-class person seen by the dentist twice a year from childhood. White skin, marked and scarred by three pregnancies, an elected sterilization, progressive arthritis, four joint operations, calcium deposits, no rapes, no abortions, long hours at a typewriter' (32). She emphasised that bodies tell stories about the conditions under which particular lives have been lived.

Haraway's argument for situated knowledges resonates with a politics of location and builds on feminist standpoint theory, with the understanding that 'positioning implies responsibility' (587). She argues for 'partiality and not universality' (Haraway 1988, 589), and a 'view from a body, always a complex, contradictory, structuring, and structured body, versus the view from above' (Haraway 1988, 589). Haraway calls for this in the knowledge that 'Only those occupying the positions of the dominators are self-identical, unmarked, disembodied' (1988, 586). Other feminist scholars have developed this work to create a politics of location for these Anthropocene times. Liboiron argues for a more rigorous politics of location that is explicitly contextualised in settler-colonial relations, and that draws upon Indigenous understandings of obligation and specificity. Liboiron's methods are partly motivated by the rejection of scholarly practice which perpetuates white settler identity as the 'unexceptional norm' (2021a, 3). And Neimanis offers a posthuman politics of location (2017), which builds on Rich's work to offer an understanding of the body as both individually situated, and simultaneously engaged in the multispecies flows and relations of the wider physical world.

The politics of difference that plays out at the heart of feminist thought in the Anthropocene is also found in an increased attention to the politics of citation. Manoeuvres of appropriation, erasure and homogenisation have been, and still are, rife in feminism, posthumanism, and the environmental humanities, and more scholars are calling attention to this. Todd's criticism of the ontological turn for its appropriation and erasure of Indigenous thought underlines the way that it also perpetuates the erasure of Indigenous bodies from the 'white public space' (Brodkin et al. qtd. in Todd 2016, 13) of academia. Todd's challenge is echoed by

many, including Sisseton-Wahpeton Oyate scholar Kim Tallbear (2011), who warns of 'the "smug" social studies of science' and multispecies ethnography for only partially incorporating Indigenous standpoints, gesturing to Indigenous thinking but filtering it through ill-fitting Western frames and structures. Tallbear urges the inclusion of 'not new voices—but new-to-having-a-real-voice-in-the-academy' (2011), as a way to decolonise and deepen the insights of this field. Citizen of the Potawatomi nation and scholar Kyle Whyte also challenges the way in which dystopian and postapocalyptic narratives of the Anthropocene erase Indigenous perspectives around the relations between the Anthropocene and colonialism, for whom the end of the world has already happened (2018). Whyte's point is that, for Indigenous peoples, the Anthropocene 'is less about the spectre of a new future and more like the experience of déjà vu' (2016, 88).

In a similar vein, scholars working in the environmental humanities have been accused of appropriating and disavowing feminist thought. Hamilton and Neimanis perceive 'an environmental humanities soil richly textured by feminist matters, *and* a strange lack of feminism as an acknowledged critical presence in the field' (503). Building on Haraway's claim 'we are all compost' (2015, 161), Hamilton and Neimanis propose 'composting' as a material metaphor for paying attention to and acknowledging the way in which research metabolises and digests the work of others. Hamilton and Neimanis posit composting as an inclusive practice that encourages repurposing and reusing others' ideas – the '(sometimes drudgey, almost always undervalued) work of gathering up and sifting through what's already there' (511) rather than always seeking '(shiny! new!)' (511) innovations. They caution that care must be taken to avoid homogenising or presuming translatability, particularly when acknowledging Indigenous thought, which, for example, may precede the thinking of feminism or new materialism but is not the same thing. They gesture to Vanessa Watts' work in examining the difference between Alaimo's concept of dirt in comparison to Anishinaabe and Haudenosaunee understandings of human flesh as made of or extending from the soil. Watts argues that Alaimo's trans-corporeal conceptualisation of dirt's agency is distinct in that it is underscored by human ownership: 'This type of dirt is not First Woman; it is a plaything asking for attention' (Watts, 29). Acknowledging inheritances should not be about

homogenising them; ‘Sometimes voices speak together, and sometimes they need to speak, and be accountable, on their own terms’ (Hamilton and Neimanis, 524).

Sara Ahmed describes citation ‘as a rather successful reproductive technology, a way of reproducing the world around certain bodies’ (2013), gesturing to the way that academics’ tendency to predominantly cite white men has reproduced ‘white men’ as a dominant institution, a mode of conduct, and a ‘well-trodden path’ (2014). Ahmed underscores the importance of a politics of citation that properly acknowledges its debts to both mainstream and marginalised figures whose inheritances have shaped our thinking. She writes that, ‘Citation can be feminist bricks: the material through which, from which, we create our dwellings’ (2017, 17); who and how we cite matters. Liboiron also makes a politics of citation a foundational part of their anti-colonial praxis, creating a methodology that prioritises locating work, recognising inheritances, and building good relations, all clearly contextualised within settler-colonial frameworks of power and erasure (2021a).

New ways of storying the Anthropocene

Building on this scholarship around nature writing, the Anthropocene, and an emerging Anthropocene feminism, this thesis will explore how female voices in nature writing are responding to this historical and geological moment, and how they are disrupting the official Anthropocene narrative with new ways of storying the natural world in a time of planetary emergency.

Whilst many of the seven writers whose work is explored in this thesis do not use the term Anthropocene explicitly, they all centre its issues, confront it as an unavoidable context for contemporary relations with the natural world, and challenge the extractive, capitalist worldview that drives its catastrophes forward. In doing so, they provide productive examples of how female-authored nature writing is responding to Anthropocene issues in ways that are different to the dominant approach. This exploration will be split into four chapters, each centring different female voices and disrupting a particular aspect of the Anthropocene narrative. These sites of disruption include when the Anthropocene originated, where the Anthropocene is

found, how the Anthropocene is experienced, and how Anthropocene stories are told.

Chapter One explores American geologist and writer Lauret Savoy's 2015 text *Trace: Memory, history, race and the American landscape,* in order to question the origin story of the Anthropocene. In 2019, the AWG chose the mid-twentieth century, the 'Great Acceleration', as the golden spike of the proposed Anthropocene epoch. In doing so, they drew attention to many causes and catalysts of biodiversity decline, global heating, and pollution, but they also erased the roles that colonialism and capitalism play in the Anthropocene. Savoy's text is animated by a search for these hidden pasts and a questioning of the way that we tell stories about uncomfortable histories. Her personal search for origins can be read as illuminating the real origins of the Anthropocene, as she excavates the connections between geology, race, colonialism, and capitalism that underlie the emergence of this new epoch. This investigation also provides fertile ground for a critique of the knowledge systems that dominate Western civilisation, through which, of course, the Anthropocene and the AWG's origin story are told. As a geologist, Savoy is skilled at reading history in strata, but implicit in her narrative is also a critique of this logic of stratification, through which knowledge and power are – still to this day – organised. This chapter reads Savoy's search for origins as offering an alternative way to make history, based on relationality, accountability and inheritance, providing vital lessons for Anthropocene thought.

Chapter Two builds on this by disrupting understandings about where the Anthropocene is located. Popular discourse implies that the Anthropocene is experienced in a number of spectacular settings: in the authority of the geologic, in the annals of deep time; in the dystopian promise of ruined mega cities and toxic wastelands; and in the present-day experience of climate emergency, found in flooded coastline, fire-scorched earth, and the crash of calving glaciers. But by exploring the essays of Scottish writer and poet Kathleen Jamie, and writer of the American South Margaret Renkl, this chapter finds the Anthropocene to be located in an entirely different setting: in the traditionally feminised world of the domestic everyday. Jamie and Renkl centre the domestic sphere as a site of meaningful experiences with the natural world: experiences of spectacle and crisis, of dramatic

change and resistance, of urgency and wonder. These encounters are processed using the feminist tools of close attention and care, which entangle family members and more-than-human co-habitants into dense, decentred webs of care. Through this disposition of care, relationality and obligation, the everyday also emerges as a site of resistance to the masculine capitalist forces that threaten the natural world. This chapter explores how Jamie and Renkl counter the forces of inattention and render the everyday world a 'matter of care' (Puig de la Bellacasa qtd. in Haraway 2016b, 36), focusing particularly on their practices of care and attention, ideas around gifting, subversive acts of decentring, and use of the essay form.

Chapter Three further develops this study by providing an alternative story about how the Anthropocene is experienced. It explores the upsurge in diverse female nature writing about swimming, disrupting a centuries-old tradition of white, male swimming writing. *Small Bodies of Water* by Nina Mingya Powles and *Where We Swim* by Ingrid Horrocks form the foundation for this investigation. Drawing upon the theory of Neimanis and Alaimo, this chapter will read Powles and Horrocks' texts through the lenses of feminist new materialism and the blue humanities in order to ask questions about how women's experiences in water – in Anthropocene waters – are different. This forms part of a broader focus in both texts on women's embodied experience in an interconnected world, with a centring of the material and corporeal that pushes back against male nature writers and critics who have historically suppressed or disregarded these aspects of life. Both writers are from Aotearoa New Zealand (although Powles is also Malaysian–Chinese), and as such they confront difficult questions about history and lineage, and the connections between empire, race, marginalisation, and access, including access to safe watery spaces. This chapter will explore how their parallel focus on embodied experience and global, political context tells alternative stories of what it is to experience this Anthropocene moment in a female body – in a body of water.

Chapter Four finishes the work begun by the previous three chapters by disrupting notions about Anthropocene storytelling. It outlines the problems with dominant Anthropocene stories, which include their devotion to factuality and technoscientific knowledge; their inaccessibility; and their presumptions of neutrality. It seeks new forms of Anthropocene storytelling by exploring American writer Elizabeth Rush's

Rising and Australian writer Rebecca Giggs' *Fathoms*. In particular, it centres their use of empathy, of which there is a stark absence in Anthropocene discourse, despite its realities of life, death, injustice and suffering. But empathy can be deceptively thorny territory, especially when it comes to empathy for the other; it requires care. Rush and Giggs show that the Anthropocene necessitates empathy that isn't just reserved for those we feel similar to, but for all others – an empathy that is capable of navigating strained relations of similarity and difference. As such, their writing is motivated by empathy gaps in Anthropocene discourse. For Rush this is an environmental justice issue found in the failure to empathise with victims of sea level rise. And for Giggs, it names the dearth of empathy for the more-than-human, and the factors that delimit the care we are able to extend. Rush and Giggs engage with empathy as an ethical imperative for the condition of entangled, Anthropocene life. Using innovative, intentional approaches, they change the narrative on otherness and offer the reader an alternative kind of Anthropocene story.

Chapter One

An Anthropocene inheritance: Race, the geologic, and origin stories in Lauret Savoy's *Trace*

Introduction

Origins are an important theme in the Anthropocene. As Kathryn Yusoff writes, the proposed new epoch 'contains within it a form of *Anthropogenesis* – a new origin story' (2016, 3) for humankind. The Anthropocene is perhaps most valuable as a provocation – as a challenge that destabilises and 'forces us to reckon with history' (Pulido, 124). This reckoning names the need to account for the emergence of the new epoch, following chains of inheritance and knots of relations through history to identify the events, worldviews and ongoing processes at its root. But Yusoff reminds us that origin stories can be a shady business, 'precisely because of the power of stories to designate scenes of agency and accountability' (2016, 20). They require vigilance: "We inherit it, we must watch over it"' (Derrida qtd. in Yusoff 2013, 782.)

The search for an origin story is currently top of the agenda for the Anthropocene Working Group (AWG). Ratification of the new epoch as a formal unit of time depends on the identification of geologic signals preserved within recently accumulated stratigraphic material that provide evidence of precisely when the proposed epochal shift occurred. The most prominent of these signals will be named the 'Global Boundary Stratotype Section and Point' – the Anthropocene's 'golden spike'. A number of time periods have been debated for the location of this spike, ranging from the first human use of fire, the beginning of human agriculture, the colonisation of the Americas, the Industrial Revolution, and the 'Great Acceleration' of the mid-twentieth century. This is the first time that a golden spike must be found as the epoch is in process, seeking 'not the residues of worlds past, but the difficult brightness of a new world emerging' (Farrier 2020, 16).

In 2019, the AWG voted the Great Acceleration of the mid-twentieth century as the preferred time for the golden spike to be placed. The Great Acceleration marks a 'dramatic change in magnitude and rate of the human imprint' (Steffen et al. 2015, 82) on the planet. Some earth scientists have named it as 'unique in the entire

history of human existence on Earth' (Steffen et al. 2005, 131), a time period in which we have 'without doubt seen the most rapid transformation of the human relationship with the natural world in the history of humankind' (Steffen et al, 2005, 131). A set of twenty-four graphs – now famous – outline these shifts. The first twelve illustrate astronomic spikes in socio-economic trends such as population, GDP, fertiliser consumption, water use, transportation, global tourism, and primary energy use (Steffen et al. 2015, fig. 1); in parallel, the other twelve account for the corresponding upticks in earth system trends, including carbon dioxide, nitrous oxide, and methane levels, and surface temperature, ocean acidification, tropical forest loss, and domesticated land (Steffen et al. 2015, fig. 2). Alongside the trends these graphs convey, another important argument for the nomination of the mid-twentieth century is the start of nuclear bomb tests. Between 1945 and the 1960s, the detonation of nuclear bombs led to a peak in radioactivity that is recorded in ice cores, lake and salt marsh sediment, corals, and tree rings (Lewis and Maslin 2015, 176), therefore providing unique, highly precise, and unequivocally anthropogenic stratigraphic signals. The significance that the AWG places on mid-century nuclear activity is evident in their selection of Lake Crawford in Canada as the location to represent the golden spike, due to its sedimentary record showing, amongst other Anthropocenic substances, clear levels of plutonium isotopes from nuclear bomb tests (Witze).

But an Anthropocenic origin story cannot be based on the work of geology alone. Simon L. Lewis and Mark A. Maslin acknowledge that 'the formal definition of the Anthropocene makes scientists arbiters, to an extent, of the human–environment relationship, itself an act with consequences beyond geology' (Lewis and Maslin 2015, 171). The choice of origins will decisively shape how the Anthropocene epoch is interpreted. The story that is told about the golden spike will determine who or what are understood as the main agents in this shift, which relations proved most decisive, and what possible ways forward there are. The Anthropocene is a political as well as geological phenomenon, and an ill-placed golden spike risks glossing over the 'inequalities, alienation and violence inscribed in modernity's strategic relations of power and production' (Moore qtd. in Swanson, 161).

It is important to examine who is telling this story too: though considerably more diverse than its original iteration (Raworth), the voting members of the AWG are still heavily dominated by white men, with only a handful of women and members from universities or institutions outside of Europe or North America. Reflecting the white male bias of this group, the Great Acceleration only tells a partial story. Not only is it universalising, assigning trends and phenomena to a globalised 'we' that fails to differentiate across axes of wealth, race and gender,[19] but it also isolates a segment of history without considering it in a broader context. In this golden spike, the 'we' of the Anthropocene is both naturalised and absolved of history. As Zoe Todd writes in response to the designation of Crawford Lake as the 'single location (in the Global North no less)' (Todd, 2023) of this golden spike:

> European scientists seem to be quite captivated that this time period starts very recently. For Indigenous and other displaced and dispossessed peoples who were impacted by massive forms of violence that characterize the last 600 years, everything that leads up to what makes this global shift possible starts much earlier (qtd. in Witze).

This spike might highlight nuclear warfare, resource use, and population growth – important sociometabolic and technological trends that, in particular, speak to the US as an imperial, global superpower – but it fails to ask bigger questions about the historic, global relations that this stratification of power emerged from. It fails to ask what and who paved the way for such a phenomenal acceleration in human imprint upon the Earth.

Lewis and Maslin (2015) have underscored the political and social dimensions of the Anthropocene by proposing an alternative golden spike of 1610, which makes sense not only geologically but also socially, politically and historically (Swanson). The 1610 Anthropocene is based on two anthropogenic changes that left their mark in the strata. These include what is referred to as 'The Colombian Exchange' or 'the

[19] Indeed, despite the revision of the Great Acceleration graphs to account for the differences in OECD and non-OECD countries in 2015 (Steffen et al. 2015), this narrative is still told in a universalising way, glossing over issues of neo-colonialism, oppression, poverty, race and other socioeconomic factors that determine the divergence between different populations and their contribution to these trends.

global exchange'[20] of bacteria, and plant and animal species, including diseases such as measles, smallpox and influenza which killed millions of Indigenous inhabitants. This was 'a swift, ongoing, radical reorganization of life on Earth without geological precedent' (Lewis and Maslin 2015, 174), and the presence of New World plant species in Old World sediments (and vice versa) provides a stratigraphic record of this. The second golden spike for this Anthropocene origin story is the Orbis Spike, which names the drop in CO_2 levels as a result of the genocide[21] of 56 million Indigenous people as part of European colonisation. The deaths of so many people meant an abrupt decrease in agricultural practices on the continent and the subsequent regrowth of trees and vegetation. This led to a dip in atmospheric CO_2 that has been connected to the 'Little Ice Age' of 1645–1715 (Koch et al.) and is recorded in Antarctic ice cores.

The nomination of an Anthropocene origin story as connected to European colonisation of the Americas has been backed by a variety of scholars across different disciplines (Davis and Todd; Machado Aráoz; Mirzoeff; Mentz 2017; Moore 2016b, 2017; Yusoff 2018). Lewis and Maslin acknowledge that a 1610 golden spike 'implies that colonialism, global trade and coal brought about the Anthropocene' (2015, 177) and also 'highlights social concerns, particularly the unequal power relationships between different groups of people, economic growth, the impacts of globalized trade, and our current reliance on fossil fuels' (2015, 177).

The 1610 golden spike and its naming of European colonialism as part of the Anthropocene's emergence exposes the many ongoing histories of violence and oppression that the AWG's mid-twentieth-century spike obscures. It also emphasises the need to consider human social relations and practices in the formation of the Anthropocene, rather than just singular marks or spikes in stratigraphical substances (Machado Aráoz; Mentz 2017). In light of the complex, entangled relations of human

[20] Yusoff has rightly pointed out the 'slippage of grammar' in this term that obscures its violent reality of conquest, dispossession and genocide: 'In 'the language of exchange, it might be assumed that something was given rather than just taken' (2018, 30).
[21] Another slippage is found in this event being named by Western scholars as both 'The Great Mortality' (Machado Aráoz) or "The Great Dying' (Koch et al). This glosses over the agency and intent behind these deaths, and the event should be referred to for what it was: Indigenous genocide (Dunbar-Ortiz, 8).

and more-than-human history, and the regimes of power and shifting social dynamics that led to the planetary changes that the Anthropocene names, the stratigraphic method of a single spike as representative of these origins is wholly inadequate. This reductive approach is what Yusoff calls a 'point and erase' (2018, xiii) stratigraphic method: a single spike or point that pierces time and obscures everything around it – relations, inheritances, complex connections, others. In this sense, origin stories can also be acts of erasure. And erasing the past also means erasing parts of the present: legacies of violence, exclusion, and oppression in the present day that remain unaccounted for. The complex flows of inheritance can't be understood through a single spike.

The drive to unearth untold histories and inheritances is the central thrust of Lauret Savoy's 2019 text *Trace: Memory, history, race and the American landscape.* And it is specifically this disavowed colonial history of the Anthropocene that the text seeks to exhume. *Trace* takes its title from a word that has multiple meanings. As a noun, it refers to the marks and impressions left behind by the presence of someone or something now absent, such as a fossil in rock, a gravestone, or a footprint preserved in sand. In verb form, it means the act of making one's own way through the world, which is always, whether acknowledged or not, to follow in the footsteps of past others. But *Trace* is not about a singular dominating trace or spike as being definitive of a history; it is about multiple traces, and the connections between these fragments.

Trace is comprised of a collection of ten loosely related essays, narrated by Savoy. Blending memoir with history, geology, and nature writing, these lyrical, non-fiction accounts are based on her search for origins in the contested terrain of American history. Of Black, Euro-American, and Indigenous descent, Savoy is attentive to the ways in which whitewashed history (the preferred history of Anthropocene discourse) marginalises and erases the pasts of transatlantic slavery, of Indigenous peoples, and of other people of colour who have and continue to inhabit American land. Savoy treats both Black and Indigenous stories with equal weight, acknowledging their intertwined histories and ongoing realities of injustice under white power, as well as the decolonial and intersectional feminist imperative towards collective action. She shows us that the erasure of these uncomfortable racialised histories is a

tool wielded in order to maintain power. And she outlines the way that this obscuration can leave descendants of erased or marginalised pasts feeling alienated. Savoy herself attests to feelings of estrangement from her ancestry and heritage, and to harbouring a 'longing to know of origins' (169). Even as a child, she felt 'the possibility of extinction crept close' (Savoy, 185). She describes her objective in *Trace* as the desire 'to find a tangible thread that would place me, would explain me in time and space' (Savoy, 169).

Trace is Savoy's account of her search for origins. Adapting her geologic practice, she seeks out remnants of untold histories in landscape in order to uncover connections with the past that ground her in the present. As a geologist she explores marks in the strata for stories of the deep time past; and in landscape, history and story, she seeks traces of a more recent past, traces that, even 'now without name […] still mark a very real presence' (Savoy, 29). In the spirit of disruption that is at the heart of Anthropocene feminism, she provides a remapping of the American landscape that unearths uncomfortable histories of conquest, dispossession, exploitation, and violence, and that brings contemporary issues of environmental justice, land ownership and racism to the fore. Savoy calls this process 're-membering' (186), which she describes as a refusal of the systematic erasure and forgetting by whitewashed American history – 'an alternative to extinction' (186).

Trace never explicitly refers to the Anthropocene, or to the geologic questions of epochal shifts or golden spikes. But Savoy's search for personal origins also uncovers the origins of a nation, in that she names the power relations and structures that have shaped the American landscape and its different peoples. And these origins can be directly mapped onto the 1610 nomination of an Anthropocene embedded in European colonialism. She shows us that individual stories can never be extracted and treated in isolation from entangled webs of national, cultural, and planetary inheritance.

As a parallel search for origins to the Anthropocene's 1610 golden spike story, *Trace* can also be read as offering an alternative form of history-making. Implicit in this is a critique of the dominant histories and forms of knowledge that shape our understanding of the world and the Anthropocene, which are based on erasure and

the preservation of one particular version of events. Savoy's search for origins exposes this form of history and the entangled inheritances it has denied: inheritances of race, violence, dispossession, geology and capitalism. In doing so, she shows world-making to be a *geosocial* enterprise, a collaboration between geologic and social forces. Excising these hidden geosocial stories from beneath the smooth surface of whitewashed history, she illuminates European colonialism and its stratified logic of taxonomy and division as the origins of present-day fragmented thinking, degradation of the natural world, and continued oppression of racialised peoples. In other words, though she may not say it explicitly, she shows the disavowal of these inheritances to be the origins of the Anthropocene, and it is in the Anthropocene that her text is grounded.

This chapter will explore Savoy's text as evidence of the political stakes of the Anthropocene origin story. In Savoy's personal search for origins, we can interpret a vital critique of an Anthropocene origin story that disavows race. Through her excavation of hidden colonial histories of dispossession, slavery and genocide, and the regimes of power that these racialised relations construct, we can perceive the real roots of the Anthropocene. We can also infer the inadequacy of a 'point and erase' method of trying to define these origins, an issue which this chapter uses as a springboard to embark on a broader critique of stratified knowledge in the Anthropocene. Savoy's text offers many lessons about knowledge based on linearity, hard division, and neat categorisation. By evoking the ways in which the past shapes and acts upon the present, she gives the lie to the notion of history as contained, as something that asks nothing of us in the present. This chapter will build on this to explore how Savoy's unique geosocial practice of history-making offers an alternative method of tracing origins, based on relationality, inheritance, and accountability.

The stratification of knowledge

Savoy is a writer but also a trained geologist. She is the David B. Truman Professor of Environmental Studies at Mount Holyoke College, a liberal arts women's college in Massachusetts known for its diversity and inclusive ethos. In addition to *Trace*, she has published and collaborated on a number of books, including *Living with the Changing California Coast* (2005), *Bedrock: Writers on the Wonders of Geology*

(2006), and *Colors of Nature: Culture, Identity and the Natural world* (2011). This list of publications reflects her intertwined interests in race, history, geology, and narrative. According to her website, she is interested in exploring 'the stories we tell of the American land's origins – and the stories we tell of ourselves *in* this land, including the place of race'. As such, Savoy broadens the remit of geology. Perhaps well ahead of her time, she preceded the call of the more recent geologic turn to recognise the agency of the geologic and to understand that 'the geologic, both as a material dynamic and as a cultural preoccupation, shapes the "now" in ever more direct and urgent ways' (Ellsworth and Kruse, 7). Bringing both the geological sciences and human history into the same fold and underscoring the ways in which they interact and collaborate, she has anticipated the geosocial awakening that the Anthropocene has provoked in scholarship. As a person of mixed Black, Euro-American and Indigenous heritage, Savoy writes about inheriting the tensions and complexities of the American history of conquest, dispossession, enslavement and violence, and she situates this as entangled with a geologic inheritance. She shows that being is always '*being as geological'* (Yusoff 2013, 780). Using her unique practice as both geologist and writer, she brings to light the geologic 'now' as a time of structural racism.

It is clear from the outset, then, that the epistemes at play in Savoy's praxis are anything but conforming. Indeed, the dominant forms of knowledge inherent in Western geology and history are a terrain of particular interest in *Trace*. Stratification appears to be present in her text, both as a form of imagery and a practice. The prologue opens with Savoy walking on a frozen pond: 'In the dead of winter I like to walk on water, held above liquid depths of this nearby lake by a vast frozen plain' (1). The fragility and brittle nature of the ice she stands on is highlighted, as she is 'attentive to any kr-a-a-ck or yielding' (1), and illusions of solid ground are negated by her constant awareness of 'water undulating between ice and me' (1). Kneeling down, Savoy peers into the ice and reflects on the verticality of the time it holds: 'Air bubbles halt in mid-ascent' (1) and 'White oak leaves descend as if on invisible steps' (1). She writes that 'the recent past lies beneath me in these marcescent leaves [...] I kneel within the next stratum' (Savoy, 1). In this image, time is the time of stratigraphy: linear, vertical, formed of steady accretion and distinct layers. Savoy herself, on top of this 'vast frozen plain' (1) is in the next layer of strata. But then the

narrative perspective zooms out, and the evidence of time – both geologic and human – is suddenly everywhere in the landscape around her: 'The hills surrounding this lake and my home are worn remains of long-vanished mountains. Glacial debris from the last ice age produces a rock-crop in my garden each spring. Stone walls that two centuries ago bordered fields and pastures now thread the dark heart of forests' (2). Both the deep time of earth history and the more recent centuries of human history seem distant and inaccessible when imagined in a stratigraphic column; Savoy 'cannot touch a leaf encased in ice—nor can I feel the calloused hands that stack these walls' (2). Yet these material traces of their existence surround her home. The past exists all around her, not stretching away into an infinite distance.

Stratigraphic, linear understandings of time give the illusion of things being fixed, frozen, pinpointed. As linear time marches on, the past recedes into the distance, becoming remote and inaccessible. But like the ice on the pond's surface, this illusion is arbitrary and therefore fragile; it could shatter or melt away at any second. Savoy tells us that there is no neat divide between the present and the past: 'we make our lives among relics and ruins of former times, former worlds' (2). Certain pasts – deep time pasts but also more recent pasts of slavery, dispossession, and violence – may appear to be contained in history, but, in reality, they 'loom close, as immediate as breath, blood, and scars on a wrist' (Savoy, 29). The past cannot be externalised or contained.

The stratification or periodisation of knowledge that Savoy foregrounds in her prologue is reflected in multiple Western disciplines and ways of knowing the world: in history, with its desire for periods, dates, and unequivocal, official accounts; in science and its taxonomic desire to point and name,[22] to categorise and explain in a 'specialized passive voice [which] can frustrate a reader interested in agency' (Savoy, 65); and in narrative itself, in the framing of story as having 'definitive beginnings, vexed middles, smoothly inescapable ends' (Cohen 2017, 26). Jeffrey Jerome Cohen writes: 'To sentences and to epochs belong punctuation marks,

[22] Many scholars have written about the inherent violence in the Linnean classification system, which aimed to impose order on a world by separating out and categorising not only animals, plants and minerals, but also human beings (Mirzoeff; O'Donnell; Plumwood).

formed by pen or sediment, pixel or fossil. To narrative and to eons belong quiet plots, struggles against extinction or death, sedimented archives of story' (2017, 26). There is catastrophe and there is resolution, the period punctuating the end of one story and the start of the next – nothing bridging the gap between them. Knowledge is contained, clean, and absolute. Boundaries are hegemonic and unquestionable.

Savoy's essay 'What's in a Name' illuminates the roots of this dominant logic as located in European colonialism. When conquistadores and settlers arrived in the Americas, they set about imposing order and a sense of familiarity on its unfamiliar ecologies and peoples by naming and categorising: 'In stapling down small created certainties, an overlain geography of home could then orient and transform a vast unknown into a knowable new chance' (Savoy, 75). The place names of present-day America may be accepted as shared and unambiguous, but to believe this, Savoy writes, 'is to see a reflecting surface and not what lies beneath' (71). What underlies this superficial facade are Indigenous place names, created through intimate knowledge of and meaningful relationships with place over thousands of years. Savoy highlights a 'paradox' (76) in that colonisers utilised this Indigenous Knowledge of the land in order to become oriented in it, and then they obscured it,[23] renaming places for kings and queens thousands of miles away, or rewriting them through misinterpretation and simplification, mangling names into something new and divorcing them of their original context and meaning. This is just another form of dispossession. For example, Savoy writes:

> And there is the convoluted origin of the name Wisconsin […] French voyageurs Jolliet and Marquette heard and recorded Mesconsing (or Mescousing) in 1673 for a river flowing west to the continental interior. But Mesconsing became Ouisonsing or Ouisconsink on later maps, finally Wisconsin in English (77).

In Savoy's work, names and place terms become traces, marks left on the land that tell a story about its past, like stratigraphic signatures. Savoy shows us that many of them have been lost, but can still be found by those who understand that the American map isn't a singular authority, but just one layer in a 'palimpsest' (80) – a

[23] This is relevant to the doctrine of *Terra Nullius*, which colonisers used to claim land as empty, a blank page available for rewriting over (Connor).

figure for time as ‘thick, explosive, and simultaneous’ (Cohen 2017, 40). Palimpsest time is entangled with different meanings and relations, with terms used and reused, with stories that surface in divergent forms, with names written, rewritten, and overwritten again. A palimpsest isn’t a vertical column of time in which only the surface is visible; it is dense and messy, it refuses stratification.

As Savoy shows us, naming was a tool of colonial power and human beings were also renamed and categorised. The dominant logic for European colonisers was founded on Cartesian dualisms (Plumwood), on the understanding of one thing via its negation to and separation from another: man vs woman, culture vs nature, civilised vs savage, mind vs body. As Jason W. Moore explains (2015, 2016b, 2017), this logic meant that upon arrival, the complex, rich cultures and ecologies of the Americas were violently riven into two overall categories: Humanity and Nature. This was a vital way that colonisers organised power and imposed hierarchy upon the new world. The figure of the white, heterosexual, European Man was mobilised as the normative model of the human in order to cast all others – not only plants and animals but also Indigenous peoples and enslaved Africans – into the category of Nature. Moore writes:

> …the story of Humanity and Nature conceals a dirty secret of modern world history. That secret is how capitalism was built on excluding most humans from Humanity—indigenous peoples, enslaved Africans, nearly all women, and even many white-skinned men (Slavs, Jews, the Irish). From the perspective of imperial administrators, merchants, planters, and conquistadores, these humans were not Human at all. They were regarded as part of Nature, along with trees and soils and rivers—and treated accordingly (2016b, 79).

Once something or someone was classified as Nature, with a capital ‘N’, they were then alienated, commodified, and available for extraction and exploitation. As an unwelcome part of the ‘New World’ that conflicted with colonisers’ divine mission for ‘progress’, the Indigenous peoples of the Americas were subject to systematic dispossession, rape and genocide. In just 100 years, 56 million Indigenous inhabitants were murdered by colonisers, or killed due to the disease, societal collapse, and dispossession they caused (Maslin and Lewis 2020). Also relegated to Nature, between 1525 and 1866, 12.5 million Africans were extracted from their natal

lands, transported through the Middle Passage to the Americas, and put to work in bondage on plantations of sugar, tobacco, and cotton.

The logic of Humanity and Nature that colonisers imposed on the Americas created what Savoy calls ‘fragmented ways of seeing, valuing and using nature, as well as human beings’ (42). This catalysed a new ‘geometabolic regime’ (Machado Aráoz, 171) of extraction that took place in mines and plantations, based on the maximum exploitation of land and bodies for the maximum accumulation of profit. This extractivist regime converted diverse people, cultures, habitats, and ecologies into ‘plunder zone(s)’ (Machado Aráoz, 168) through the process of alienation. Anna Tsing describes alienation as ’the ability to stand alone, as if the entanglements of living did not matter. Through alienation, people and things become mobile assets; they can be removed from their life worlds’ (5) and made available for commodification, exchange and profit. They become ‘Nature’ with a capital N. From this process, capitalism emerged as a ‘new world-ecology’ (Moore 2016a, 4). And underlying all of it, racial division was ‘a foundational detonating force’ (Machado Aráoz, 166), mobilised to divide matter and people into the violently reductive categories of Humanity and Nature. It is in this sense that Moore has argued that that we are not in the start of the Anthropocene, but the end of the Capitalocene (2016b).

Race was created and weaponised by this logic as ‘a means to operationalize extraction’ (Yusoff 2018, 33). Nicholas Mirzoeff extends this argument by drawing explicit lines between the discipline of stratigraphy and racial division. Mirzoeff writes that ‘Stratigraphy was shaped by the doubled desire to mark the historic eras of Earth history and to trace a systemic boundary between races as a means of containing and displacing abolition and revolution’ (129). The development of a stratigraphical science that records geological change as being visible in ‘lines of demarcation’ (Lyell qtd. in Mirzoeff, 128) or ‘hypervisible point(s) of distinction’ (Mirzoeff, 129) was historically contemporaneous with the effort to fix boundaries and distinctions between races after abolition. Through this lens, stratification emerges as not only an episteme and practice that organises and enables racial violence and oppression, but also a means of visualising these power differentials – through hard lines, sharp spikes, and piercing points of distinction.

The stratification of race and the power relations it enfolds (otherwise known as a caste system) is not contained within the past but, as Yusoff writes:

> …continues to propagate imaginaries that organize Blackness as a stratum or seismic barrier to the costs of extraction, across the coal face, the alluvial planes, and the sugar cane fields, and on the slave block, into the black communities that buffer the petrochemical industries and hurricanes to the indigenous reservations that soak up the waste of industrialization and the sociosexual effects of extraction cultures (2018, xii).

Savoy echoes Yusoff in her assertion that in the present day, 'the pace and degree of such environmental changes are unprecedented in human history. Yet the embedded systems and norms behind them in the United States, the most energy-consumptive nation, are not' (42). These systems and norms are an inheritance from a history of colonialism and settler colonialism and its logics of stratification and hierarchy, logics whose 'deep roots allowed and continue to amplify fragmented ways of seeing, valuing and using nature, as well as human beings' (Savoy, 42).

This stratification of people and place into hierarchies of power gave rise to the late capitalist world we know today, and marks what Moore calls 'the greatest landscape revolution in human history' (2016b, 91), although this may be better articulated as 'the greatest revolution in *human-nature relations* in history'. Pre-colonial, diverse, meaningful connections between people and place were severed by one dominant way of relating to nature, based on 'fragmented ways of seeing, valuing and using'. This logic of division, fragmentation and inhuman categorisation reduced the diverse ecologies of the North American continent to commodified landscapes, stripped of its Indigenous inhabitants and worked to exhaustion by people brutally enslaved through the same process. As Savoy and Yusoff highlight, this history finds its legacy today in an Anthropocene planet exhausted by capitalist extraction, in marginalised populations living next to superfund sites, and in the decimation of wild habitat into wasteland monocultures: palm oil plantations and oceanic wheat fields, often worked by underpaid and overworked foreign labourers. In its dual exploitation of people and place for the accumulation of profit, the capitalist world-ecology and its stratified colonial logic names a dense, ongoing knot of time that entangles human and more-than-human histories. It changed the course of human–nature relations and set us

on a path directly to this epochal moment of degradation and disaster. Through Savoy's disentangling and *re-membering* of this history, and in light of Anthropocene/Capitalocene criticism, we can read the ongoing violence of stratification as enfolded within it.

In *Trace*, stratification emerges as a violent organising logic not only in the events of colonialism that Savoy recounts, but also, and more significantly, in how and whether they are remembered. The central force in Savoy's text is the desire to unearth histories erased or forgotten by power, piecing them together from the 'fragments' (30) and 'remnants' (18) left behind. Because, although 'official' history may present itself as a complete, unambiguous account of the past, Savoy makes clear that 'narratives of the past aren't simply actual events recounted under the authority of truth' (54). Instead, history is a construct based on the popular version of events: 'Inheritances are chosen as much as they are passed on' (Hartman 2007, 100). Those with power choose which stories to preserve and which to forget. This history's silences and slippages have 'reinforced a status quo that continues to privilege what's always been privileged in popular history' (Savoy, 109). In the US, this means that a very particular version of its colonial and settler colonial past has been preserved, which Savoy finds is more about a pioneer life of 'quill pens' (90), 'heirloom vegetables' (90) and glorified civil war battles than it is about Indigenous dispossession; more about liberty and democracy than the enslaved peoples upon whose backs the nation and its wealth was built. 'How a society remembers can't be separated from how it wants to be remembered or from what it wishes it was,' Savoy writes, 'The past is remembered and told by desire' (108).

This official history is known by scholars as 'the archive', and as Saidiya Hartman writes:

> …every historian of the multitude, the dispossessed, the subaltern, and the enslaved is forced to grapple with the power and authority of the archive and the limits it sets on what can be known, whose perspective matters, and who is endowed with the gravity and authority of historical actor (2019, xiii).

The archive is a tool of control and power (Robinson; Sharpe 2016; Shotwell); it is 'the ἀρχή (arche), the building or room or chest into which inscriptions of a partial story have been placed to buttress hierarchy, authority, and other straightened or

stratified slices of history' (Cohen 2017, 30).[24] Indeed, Savoy shows how control over the archive has historically always been in the hands of those who controlled the land, property and wealth of the nation: 'The power to segregate people under Jim Crow and to segregate memory would work in concert' (112). The archive reflects the stratified logic examined in this section. The past of the archive is, Savoy writes, 'fenced property' (91) – just one more commodity, one more carefully contained segment of stratified history, which means that the 'historian's job was simply to retrieve then reveal the securely passed past, waiting in storage' (111).

Savoy emphasises that stratigraphic logic runs across both geologic and human archives:

> Annals of the past in these mountains lie incomplete and fragmented. Millions of years may be lost in the gaps between black-shale laminae so thin as to be pages of a book at night. Time condensed and time eroded: punctuated discontinuity rather than layered continuity [….] The past I've emerged from is also broken and pitted by gaps left by silences stretched across generations. By losses of language and voice. By human displacements. By immeasurable dimensions of lives compressed and deflated. And by dismembering narratives of who "we" are to each other in this land (185).

Using textual imagery such as 'pages of a book' and 'annals', Savoy gestures to a long tradition of white male geologists evoking stratigraphy as a practice of reading and writing. In this tradition, geologists are imagined as 'reading in the face of rocks the annals of a former world' (Hutton qtd. in Cohen 2017, 30); or knowing 'the general history of the continent by describing events and landscapes that geologists see written in rocks' (McPhee, 37); or understanding ice cores as 'holy scripts, the sacred scrolls of our age' (Griffiths, 359). Savoy underscores that this emphasis on *graphesis* (Cohen 2017, 30) in history-making dominates both earth and human history. In this kind of history, lives, flesh, and the agency of rock and water are, she writes, 'compressed and deflated', 'condensed and eroded' in order to fit into discrete segments and 'bounded narratives' (142). Official memory disappears Black lives

[24] And this is a tool still used today, seen most recently in the escalation of book bans in schools and libraries across the US, censoring themes of race, history, sexual orientation and gender. In the first half of the 2022–23 school year, 874 unique titles were banned; '30% of these were about race, racism or featuring characters of colour' (Meehan and Friedman).

‘into paper records of property rather than human lives remembered in story’ (Savoy, 113).

As an anthropocentric practice, reading and writing alienate and strip the geologic of any agency. And Savoy emphasises how easily things are erased in the official records of both earth and human history: these records masquerade as complete accounts, but they are ‘punctuated discontinuity rather than layered continuity’ (185). In describing this past, the hard, consonant sounds of ‘broken and pitted by gaps’ juxtapose with the sibilance of ‘silences stretched across generations’ to evoke the hidden violence of historical suppression. The official record presents a smooth surface that belies the hard brutality of that which is obscured within it. Savoy evokes how silence itself is a violent act, a form of harm that is ‘embedded […] in a society’ (29) yet remains imperceptible to those unaffected.

The past-in-present

As well as highlighting the violence of stratified logic in dominant Western knowledge systems, Savoy’s text also exposes the fallacy of its belief in containment. She writes that official history presents the past as contained, as ‘the securely passed past, waiting in storage’ (111) and therefore unconnected to the present. Parcelled up as something sealed and concluded, no one is accountable for this form of history; it asks nothing of us. But Savoy stresses throughout her text that the past doesn’t stay in the past. It lingers ‘in eroded, scattered pieces, both becoming and passing into what I am, what I think we are’ (Savoy, 181). The past directly shapes society, culture, landscape, and the conditions for life that we are differently situated in. Like the lines bordering geological epochs and dividing race, the line demarcating past and present is also an anthropocentric construct. It belies the way that the past conditions the present through legacy and inheritance.

One aspect of this, which Savoy demonstrates, is that the dehumanisation of slavery and colonial, racialised logic are not consigned to history. Their ‘consequences still unfold’ (Savoy, 137) in the deeply embedded racism that exists in the US:

> …the legacy of slavery, and the racism it fed and reinforced, remains a malignant symbiosis. It feeds who we Americans think we are, as citizens and

> as communities. It still festers as untended wounds, quite open and disfiguring to some, hidden from view to others (Savoy, 113).

Savoy outlines what Hartman calls 'the afterlife of slavery—skewed life chances, limited access to health and education, premature death, incarceration, and impoverishment' (2007, 6). Legacies of slavery are both direct and indirect, some obvious and others more insidious. For example, as sociologist Colin Samson describes, post-slavery voter suppression tactics such as the enforcement of poll tax, literacy tests, and criminal disenfranchisement persist today in the form of voter ID laws proven to discriminate against Black people, and the continuation of criminal disenfranchisement (88). As of 2020, an estimated 5.17 million people were disenfranchised due to a felony conviction, with Black people disenfranchised at a rate 3.7 times greater than that of non-Black people (Uggen et al.). Furthermore, the criminalised stereotypes of Black people perpetuated during and after the slavery era continue today in the criminalisation of their descendants. The denial of rights for a fair trial for Black Americans that was written into the fifth and sixth amendments finds its legacy in the way that 'at every stage of the criminal justice system, the rules are stacked against black Americans, making it more likely they will come in contact with law enforcement in the first place and essentially guaranteeing that when they do, they will be treated more harshly' (Flynn et al. 110).

Furthermore, the fact that Black people are more likely to be in places 'in which crime is likely to occur, and indeed where crime is a viable option of survival' (Samson, 96) is a legacy of residential segregation. Enforced by discriminatory estate agency and mortgage practices, rent raises, employment discrimination, and restrictive covenants, Black residents were historically concentrated in small areas – termed 'ghettoes' – with high levels of poverty, little opportunity for residential mobility, and much poorer levels of health than white people. This continues today in the way that Black people are much more likely to live in areas of crime and poverty. It is also visible in pervasive environmental racism, which sees Black communities living in much closer proximity to polluting and toxic industries than white people, with significant health consequences. For example, asthma rates in Black children are double those of their white counterparts (Newkirk II), and people of colour are exposed to 66% more air pollution from vehicles than white residents (Holden). As Savoy and her co-editor Alison H. Deming write in the introduction to their anthology

Colors of Nature, each of these forms of suffering is 'only another surge in a centuries-old pattern' (3). Each is an example of what Savoy calls 'the past-in-present' (113).

Scholars have theorised slavery's legacy in different ways. Christina Sharpe calls it 'the wake' (2016). To live in the wake is 'to occupy and to be occupied by the continuous and changing present of slavery's as yet unresolved unfolding' (Sharpe 2016, 13). Like the past-in-present, the wake is the result of a history of violence, trauma and annihilation that, crucially, is 'unresolved', and therefore continues into the present. The dividing line between past and present that Western narratives of progress and stratified history rest on is blurred and distorted in the wake, in which 'the past that is not past reappears, always, to rupture the present' (Sharpe 2016, 9). Sharpe writes that to occupy the wake as a Black individual is to occupy both history and the present at once, with the terror of slavery 'as the ground of our everyday Black existence' (2016, 15). This terror is 'historically and geographically dis/continuous but always present and endlessly reinvigorated brutality in, and on, our bodies while even as that terror is visited on our bodies the realities of that terror are erased' (Sharpe 2016, 15) – it is a terror that is both perpetuated by and erased from the archive.

Sharpe argues that in the Anthropocene, the wake names the real disaster – the apocalypse that, for some, has already happened (Whyte 2016) – at the root of our epochal shift:

> Transatlantic slavery was and is the disaster. The disaster of Black subjection was and is planned; terror is disaster and "terror has a history" [Youngquist 2011, 7] and it is deeply atemporal. The history of capital is inextricable from the history of Atlantic chattel slavery. The disaster and the writing of disaster are never present, are always present (Sharpe 2016, 5).

Heather Davis and Zoe Todd's concept of 'the seismic shock' aligns with the wake and expands on it to include legacies of Indigenous trauma. Davis and Todd explain that the arrival of colonialism in the Americas and the subsequent dispossession, genocide and violence that it employed to claim control of Indigenous land was a seismic shock. And this shock 'kept rolling like a slinky – pressing and compacting in different ways in different places as colonialism spread outwards into the homelands

of self-determining peoples around the globe' (Davis and Todd, 772). This 'seismic shockwave of colonial earth-rending' (Davis and Todd, 774) wasn't the singular temporal event that the archive would have us believe, but an ongoing process that continues to reverberate into the present day. Indigenous people are still culturally oppressed by white, settler colonial state governments, dispossessed of their land by petrochemical, mining and extractive industries,[25] and raped and murdered by its workers.[26] Davis and Todd show that this is the real history of the Anthropocene, which they write is 'really the arrival of the reverberations of that seismic shockwave into the nations who introduced colonial, capitalist processes across the globe in the last half-millennium in the first place' (774). In the Anthropocene, the seismic shockwave has become less insidious and more of 'a reckoning, one laying bare the human and environmental injustice of the orders upon which late-stage capitalism and white supremacy are built' (Davis and Todd, 774).

Sharpe narrates the wake through her own story, including the personal in order to 'mourn and to illustrate the ways our individual lives are always swept up in the wake produced and determined, though not absolutely, by the afterlives of slavery' (2016, 8). In doing so, she tells 'a story capable of engaging and countering the violence of abstraction' (Hartman qtd. in Sharpe 2016, 8). We can see this method reflected in *Trace.* Savoy utilises her own personal and familial history in order to demonstrate how slavery and its racist legacies have shaped her world as a person of mixed Black heritage, exposing a reality left untold by whitewashed history. This is demonstrated in her essay 'Alien Land Ethic', which combines the stories of both Savoy and her father growing up in a racist society, with a reading of Aldo Leopold's 'The Land Ethic'. These parallel readings provide fertile ground for an exploration of white environmentalism and an ethical sensibility that excludes race – that refuses to account for the human cost of the Anthropocene.

[25] Examples include the Alberta tar sands in Canada, the Dakota and Keystone XL pipelines in the US, the destruction of Jukkan Gorge by Rio Tinto in Australia, and the explosion of illegal mining on Indigenous lands in Brazil.

[26] Many Indigenous writers, activists and scholars have made explicit that violence against the land is unavoidably also violence against Indigenous – particularly female – bodies (Jensen; Kimmerer; Knott; Laboucan-Massimo; Ruddell), a settler colonial phenomenon that find its legacy in the sex trafficking and sexual violence that accompany extractive industries on Indigenous land today.

Savoy tells us that her father, Willard Wilson Savoy, was distant and that both her parents were reluctant to speak about their familial past. But she gains a posthumous window into his life when she discovers a semi-autobiographical novel he wrote as a young man, titled *Alien Land* and published in 1949, the same year as 'The Land Ethic'. In this novel, Savoy discovers that she and her father's protagonist, Kern, 'shared too many experiences of hurt, too many questions' (35). The structure of the first half of the essay provides an intertextual mirroring through a series of vignettes that move through time. First she recalls her experiences of racism as a small child: 'I ran not just to feel wind, but in hope it would blow away whatever it was about me that was bad and hate-deserving (Savoy, 33); and this is followed by her experience as a teenager reading Leopold and connecting to his 'intimate images of land and seasons' (Savoy, 32) but feeling alienated by his philosophy that extended ethics to land, but not to certain humans: 'I so feared that his "we" and "us" excluded me and other Americans with ancestral roots in Africa, Asia and Native America' (Savoy, 34-35). The third of Savoy's vignettes recalls being refused a job she was on the verge of being hired for, once the employer met her in person: 'I remember the heavy door opening, my practiced "Hello, I'm Lauret Savoy," and his single word as the door closed. *Sorry*' (34, emphasis in original). These three memories are then shadowed by parallels from her father's semi-autobiographical protagonist, Kern. These stories are so similar to Savoy's own that they could be mapped directly onto one another. A sub-section titled 'A little boy's wondering' recounts Kern's suspicion that '"Jim Crow" in Washington, the Capital of the Nation, did not seem to him to be "liberty and justice for all"' (Savoy, 36). Kern's anxieties recall Savoy's 'confused doubts [that] pushed and pulled' (31) on her childhood psyche. Furthermore, her encounter with racial discrimination as a teenager seeking employment is directly echoed in Kern's experience as an eleven-year-old securing a paper round, which is snatched from him when the employer realises that Kern, who, like Savoy's father, is 'white-passing', is from the Black side of town.

The use of the vignette form in this essay enables Savoy to bring moments of time from the past into the present, allowing specific emotions and impressions to move across time and be felt by the reader. These vignettes are a literary rendering of the 'past-in-present'. In their disobedience to the boundaries of chronological time, they

are a subversion of the stratigraphic perspective through form. Hard borders are permeated by emotion and impression. Lines of demarcation are dissolved by the fluid movement between moments of time, loosely connected by the inheritance of race and oppression.

Indeed, Savoy's highly personal mapping of racism across her and her father's coming of age in the US attests to transatlantic slavery and its racist legacies as a violent inheritance, repeated across and through generations. To inherit this past is to inherit what Sharpe calls 'an ongoing disaster' (2016, 5); it is to be caught up in the wake. Savoy uses the notion of inheritance throughout her text when referring to the ways in which the past repeats in the present. She writes that '"we the people" inherit and share the contradictions of this nation's growth. We carry this history within us, the past becoming present in what we think and do, in who we think we are' (42). As a figure, inheritance may appear to offer a linear model of time, gifting something onward through sequential generations. But any inclination towards linearity or the forward-motion of 'progress' in Savoy's work is negated by the way in which the past churns in the present. To inherit is to be connected to and impacted by a previous time. The inheritance in question in *Trace* – of slavery and colonial pasts – is disavowed. And because of this, it continues to unfold in destructive ways, roiling across generational time and reappearing 'always, to rupture the present' (Sharpe 2016, 9). It is 'a past that is not past' (Sharpe 2016, 9) – a 'past-in-present' (Savoy, 113).

Therefore, the crux of all three concepts – Savoy's past-in-present, Sharpe's wake, and Davis and Todd's seismic shock – is that they describe history *unresolved*. They name a past of violence, trauma, genocide, and dispossession that has not been taken responsibility for, and thus persists, shaping the present and future. Sharpe quotes Michel-Rolph Trouillot, writing that 'The "past" fails to stay in the past' because of the 'dishonesty' of our relation towards it in the present (2023, 29). As discussed, this understanding of 'a past that is sectioned off from the present' (Sharpe 2023, 29) is one more expression of commodified and stratified logic. A past that is divided up and preserved into 'history' is a past that has been given the appearance of conclusion, separated from the current moment by a straight line; it is a past that appears to ask nothing of the present. Accountability – as one expression

of connection and relation – is avoided by this stratified logic of objectivity, division, and abstraction. A recent example of this is found in UK Prime Minister Rishi Sunak's latest refusal to apologise for the UK's role in slavery and colonialism because 'trying to *unpick* our history is not the way forward' (Sunak qtd. in Adu, my emphasis). Sunak's choice of the term 'unpick' betrays his belief in history as something that is fixed – arranged into the correct form and then preserved, separated from the present like a butterfly pinned down in a glass cabinet. Building on this stratified history-making, the next section of this chapter will explore accountability and inheritance as key themes in Savoy's search for origins, forming part of an alternative way of both seeking and understanding the past.

Other ways of telling origin stories

Published in 2015, only a few years before the AWG decided by a majority vote that the Anthropocene began in the mid-twentieth century, *Trace* offers an alternative but intertwined search for origins. Set against the stratified logic that runs throughout geology, science, colonial worldviews, and the historical archive, it also provides an alternative method for seeking and marking those origins, and for storying them

At the level of form, Savoy refuses this stratified logic by creating a non-linear text with a healthy disrespect for boundaries and breaks. Her memories of the past are entangled with historical accounts, reflective passages, and critical readings of other texts. She breaches the canon of white environmentalism by putting Aldo Leopold, considered to be one of the founding fathers of the American environmental movement, into conversation with her father, an unknown Black writer. Furthermore, she moves freely across disciplinary, epistemological, and ontological divides by combining Indigenous Knowledge with earth science, literature with anthropology, and oral histories with archival and written records. Seemingly always ahead of her time as a geologist, Savoy's trans-disciplinarity reflects an exciting shift that some scholars believe is occurring in Anthropocene discourse, in which the epochal provocation is driving the emergence of a 'wider movement toward cross-field collaboration' (Swanson, 162), 'bringing natural scientists, social scientists, and artists—and their approaches—together in new ways' (Swanson, 162; see also Lundershausen, 2018).

Instead of following boundaries of state or outlines of plot, Savoy's journeys pursue different kinds of lines: threads of ancestry, gyres of human history, and geological contours, such as the mid-continental divide, the Arkansas and Potomac rivers, and the Appalachian Mountains. In this sense, stone and water provide much of the structure to her narrative. Her human stories are not abstracted, but sedimented in specific topographies of the US landscape, in memory terrains and sites dense with human history, such as Point Sublime on the Grand Canyon, the San Pedro valley, and Washington D.C. As a narrator, Savoy is both present and absent, moving in and out of vision and providing the reader with nothing tangible to locate her with. Memories of her life growing up and details of her family imbue the narrative with real affective force, but any sense of her life as an adult is thin, surfacing in her attested desire to seek origins but disappearing behind the weight of the history she excavates, in which she and her ancestors are often erased.

On a temporal level, chronology and linearity are replaced by a narrative that billows backwards and forwards in time across centuries, from the present day to the Spanish American war, from the 1950s to the Sand Creek massacre of 1864. Any sense of the present as a baseline for this movement is destabilised by Savoy's insistence about the way in which the past shapes and acts upon the present: 'One journey seeded all that followed', she writes of her childhood, 'The memory of what we found shapes me still' (5). And in between this movement within human history, the reader is also repeatedly thrust back into deep time with abrupt forays into geologic world-making. *Trace* is a narrative that provides no stable ground, leaping between moments of personal reflection, accounts of painful history, and the crash of geologic world-making in ways that are sudden and seismic. It is tectonic in its shifts.

Contrary to Western prescriptions of narrative as proceeding in a linear fashion around the structure of start, middle and end, with clear plot markers of problem, catastrophe and resolution, Savoy's text offers no sense of progression or conclusion. Though loosely related, her essays proceed without reference to each other, and the themes and events she excavates in each function separately to illuminate different aspects of settler colonialism, conquest, slavery and how this history lies fragmented in the present. Rather than steadily filing gaps in her knowledge of the past, she instead accepts that the past lies in 'remnant pieces' (18)

– in fragments rather than wholes. Neither does the text's ending afford any sense of telos. The epilogue ends with the memory of finding *incertae sedis*, an unidentifiable fossil which 'bore no compelling affinity with any other recognized organism alive or extinct' (Savoy, 184) and thus provides a figuration[27] of alienation that resonates directly with Savoy's estranged sense of self. Savoy sets the epilogue at Crowsnest Pass on the mid-continental divide, a 2,000 km long rift that runs throughout North and South America and separates the continent's watersheds. It is also the site of an oceanic extinction event that occurred 'almost 360 million years ago, marking a boundary in geologic time—between the Devonian and Mississippian periods' (Savoy, 183). Her text therefore ends poised on multiple thresholds of geologic time, writing from the Anthropocene with one eye on an uncertain future, and the other looking back towards a boundary from the inhuman past from which we inherit our present. Savoy refuses the reader any sense of the 'smoothly inescapable ends' (Cohen 2017, 26) that Western stratified logic prescribes in narratives by pairing this scene of alienation and upheaval with the idea of fragmentation as a permanent condition, which is contained in her final line: 'Home indeed lies among the ruins and shards that surround us all' (186). In every sense, this text leaves the reader with the feeling that we can never truly rely on the ground beneath our feet, that neither landscape nor narrative are ever stable, and that we can never fully trust the histories we inherit.

Savoy's search for origins also refuses the archive and the violence of its stratified logic in other ways. Cohen writes that:

> Most Anthropocene narratives embrace linearity: periods possessed of hard starts and full stops, plots with rising action, accelerated propulsions, catastrophic denouements. Yet their currents swirl with affective detritus, recondite matter, queer fragments, anomalous proximities (2017, 26).

Such Anthropocenic queer matter could include the emergence of Anthrax spores from the corpses of reindeer contained within the melting Arctic permafrost; the loss of ancient Yup'ik artefacts that tumble from the defrosting ground into the sea

[27] 'Figuration', in Astrida Neimanis' sense of the word, means 'embodied concepts', like metaphors but 'grounded in our material reality' (5). Neimanis writes that figurations are 'keys for imagining and living otherwise' (5), which resonates with Savoy's claim that, 'Geology provides an elemental foundation of place. It is a *key* […] as a way of seeing the earth' (in Beebe, 2016, my emphasis).

(Jamie, 2019a); the formation of new kinds of geologic material, such as plastiglomerate, an obscene agglutination of rock with molten plastic; or the uncanny presence of strontium-90 in every human body on the planet (Deloughrey qtd. in Yusoff 2018, 44). Such anomalous proximities could also include the way that the Carboniferous, the first ever named strata, torques the linear stratigraphic column by reemerging in the Anthropocene via the fossil fuels it bequeaths, enacting 'a kind of return of the repressed' (Warde et al. 2017, 249; see also Yusoff 2013). Beneath the archive the record is warped; linearity queered through the 'volution' (Cohen 2017, 27) of time that denies the arrow.

Thinking with Savoy's intermingling of geologic and social histories, we could interpret these disruptive, 'recondite' remnants as 'unconformities'. In geology, unconformities are marks in the rock that do not fit within the uniformitarian reading of strata, such as the fossilisation of *incertae sedis*. They are 'the bucking of terrestrial force against anthropocentric intelligibility' (Cohen 2017, 30). When they are brought into the fold of history, 'the complete narrative seem[s] less than apparent' (McPhee, 441). In seeking that which eddies and swirls beneath the forceful currents of the whitewashed archive, Savoy also unearths unconformities, such as the unmarked graves of enslaved people that she finds hidden in 'an understorey of leaf litter and vinca' (89) and 'polite silence' (91) at Walnut Grove plantation, which disrupt the site's patriotic history of an 'immigrant Scots-Irish family who built a "self-sufficient farm" on the Carolina frontier' (90). Unconformities in *Trace* also include fragments of names that evidence a past and people overwritten. These include 'Kwinitekw', which Savoy tells us is the Indigenous word for the long tidal river valley that was anglicised to 'Connecticut' (77). Other examples are American place names with African origins: 'Ulah in North Carolina from *ula*, possibly meaning "to purchase" or "buy." Nakina, North Carolina, from *nuakina*, "to hate" or "to be cruel." Acolu, South Carolina, perhaps from *alakana*, meaning "to long for, hope for, desire greatly"' (Savoy, 83–84). Disruptive by nature, these linguistic unconformities not only defy the claim that enslaved Africans 'left little mark upon the map' (George Stewart qtd. in Savoy, 82), but they also speak loudly to a past that the archive seeks to silence: a past of human chattel, cruelty and estrangement. Savoy shows this history of slavery, conquest, settler colonialism and race to be the ultimate Anthropocene unconformity. This is the past that swirls beneath the 'vast,

frozen plain' (1) of the archive, and that disrupts the idea of a mid-twentieth-century golden spike.

The trajectory of Savoy's text is borne along by the force of unearthing these unconformities, these unvoiced lives. It is one aspect of her broader practice of history-making that pays attention to what lies *outside* the archive, that refuses its constraints. Returning to 'Alien Land Ethic', if Leopold's philosophy can be said to represent the archive, with its whitewashed ideas of a human–nature relationship untroubled by social injustice, then Savoy disrupts this by complicating his account of mid-twentieth-century America with her and her father's personal stories of the same time. Her illumination of a personal past-in-present, of the wake as individually experienced, creates a form of time that is *in excess of* the archive. She writes, 'I learned that by the age of eight that hate could be spit wetting the front of my favorite, mom-made dress' (Savoy, 31). The affective force of a young child's first coming-to-consciousness of being an object of racial hatred exists in excess of the archive. As Davis and Todd write, the archive and its reductive emphasis on 'evidence' (marks, inscriptions, data) are incapable of incorporating the realities of trauma, connection, memory, embodiment and meaningful life: 'Evidence does not, generally, entail the fleshy story of Kohkoms (the word for grandmother in Cree) and the fish they fried up over hot stoves in prairie kitchens to feed their large families' (767). Savoy and her father's personal stories attest to the 'wounds and scar tissue' (38) of two generations growing up Black in twentieth-century America, and these individual stories of pain and confusion exceed what the sterile, reductive structure of the archive is able to contain or suppress. But, as Davis and Todd point out, 'these fleshy philosophies and fleshy bodies are precisely the stakes of the Anthropocene' (767).

Savoy's history-making attempts to illuminate others outside of the archive too. She attends to forgotten figures, like the five thousand surviving photographic portraits of African Americans that were discovered from the work of early twentieth-century photographer O.E. Aultman (Savoy, 22). Although 'unidentified, unidentifiable' (23), Savoy emphasises that these people, these 'traces now without name […] still mark a very *real* presence' (29). The archive may not remember them but they cannot be fully erased. Furthermore, Savoy attempts to conjure the presence of her own

ancestors, also unidentified and unknowable, by creating a speculative scene that imagines how they would have felt on arrival in Boley, a Black town in Oklahoma:

> I imagined some of my mother's forebears relocating from Alabama's water-thick air, plantation fields and dark woods. I imagined their response to expanses of grass and sky, to the opening of distance to the eye, to a land on which they hoped to live on their own terms [...] Had they wagoned in on a day like that of my visit, the sky an open vault, the air scented by the previous night's rain and a thick June greening, they must have imagined possibility and then begun to live it (27).

Through sensory, imaginative language and an evocation of landscape, Savoy creates a brief intimacy with her unknown people. Speculating on their responses to weather, horizons, landscapes and scents, Savoy constructs her own relation. In doing so she briefly lifts her ancestors into view. There is no 'evidence' of them, but they were still real people who lived real lives, with real emotions and experiences of place. This is the excess, the '*more'* (Haley)[28] of the past that cannot be contained or suppressed by stratified, archival history.

An Anthropocene inheritance

As well as attending to that which exceeds or lies outside of the archive, Savoy also refuses its hegemony through a focus on the figure of inheritance. Inheritance is a key theme in Anthropocene thinking and writing. For many feminist scholars, this centres on the disavowed inheritances that the Anthropocene names – the fact of the epochal shift being directly attributable to our failure to account for what has come before. For Yusoff, the Anthropocene 'is not some new genesis of man, but an inability to understand what it is that is inherited and how responsibility is configured, down the line, in blood, in atmosphere, and in minerality' (2016, 18). For Donna Haraway, inheritance is always shadowed by the question of accountability: 'the fundamental ethical, political question is: to what are you accountable if you try to

[28] This idea of the excess of the archive is pivotal to Saidiya Hartman's *Wayward Lives Beautiful Experiments,* which refuses the archive's 'institutional fictions and the violent abstractions authorized as fact and truth' (2020) with a chorus of Black, female voices who tell a different kind of story – one of Black radicalism, experimentation and freedom. Reviewing Hartman's text, Sarah Haley writes: 'If the founding violence of the archive is obliteration, the founding truth of the speculative and close narrative forms is that there is more; we might call it life, interiority, vision, imagination, desire […] that exceeds archival documentation and that this more is a legitimate subject of historic and scholarly writing […] intimate history demands a public and scholarly consideration of the historical import of the more/excess that has often been rendered inconsequential or impossible, deemed exorbitant.'

take what you have inherited seriously?' (qtd. in Gane, 145). And she insists upon the 'how' of this accounting: 'the pressing question is how to inherit, how to face, the living—and killing—past. The urgent need is to learn how to do that in order to be able to take the present seriously' (Haraway 2011, 106).

This 'how' of inheritance is really the 'how' of understanding history, and the 'how' of making oneself accountable for the ways in which it positions us differently. The 'how' of inheritance is one of the real questions at the heart of Savoy's text, and the answer she gives us is that it isn't through a logic of stratigraphy and division. As outlined, the 'point-and-erase' logic of the golden spike and its nomination of the mid-twentieth century erases the past of conquest, slavery, settler colonialism, race and geology that the many voices in this chapter show are the real roots of the Anthropocene (or indeed Capitalocene). A golden spike that pierces the mid-twentieth century disavows this inheritance; it fails to account for the legacies that this history bequeaths, and how this history is inherited differently along colour, wealth and gender lines. In doing so, it absolves the Anthropocene of this history. To disavow this Anthropocene past is also to disavow the ways in which it differently affects groups of peoples in the present. It is to disavow the wake, to deny Savoy's sense of alienation and estrangement, of 'rootlessness in one's own home' (185). To disavow Anthropocene history is to disacknowledge that 'antiblackness' is 'the ground' on which we stand (Sharpe 2016, 5). The political stakes of this inheritance are high.

Savoy's approach to Haraway's 'how' of accounting for history is found in her idea of 'locating oneself within inheritances', which she presents as an antidote to Anthropocenic disavowal. Savoy writes:

> For if the health of the land is its capacity for self-renewal, then the health of the human family could, in part, be an intergenerational capacity for locating ourselves within many inheritances: as citizens of the land, of nations even within a nation, and of Earth. Democracy lies within ever widening communities (47).

Savoy's concept of inheritance is founded on an understanding of the deep, ecological interconnectedness of the world. Inheritance is a figure of intergenerational time based on the persistence of relation. It signals the continuance

of something specific that traverses generations, whether that be a genetic trait, a necklace, or a history of oppression. And that inheritance forms a golden thread that connects people and places across diverse temporalities. Inheritance refuses a concept of history as 'the securely passed past, waiting in storage' (111), with each discrete period stratified by 'hard starts and full stops' (Cohen 2017, 26). Haraway reflects this by arguing that accounting for inheritance is a process of trying to 'figure out how to think of the world through connections and encounters that re-do you*, not through taxonomies'* (qtd. in Gane, 145, my emphasis). Indeed, the fundamental problem that Savoy identifies with this taxonomic, stratified concept of history is that it 'neglects our relationships to each other and to what is "known" or "not known" about the past' (111). This sense of history fails to ask 'How and why do we know what we know? Who is doing the re(collecting) then telling?' (Savoy, 111). What relations connect past and present? What divergent inheritances are these stories told with and through?

If the Anthropocene gifts us one thing, it is the insight into the fundamental interconnectedness of the world. It is the understanding of human life not as divorced from 'nature', but as enmeshed in 'naturecultures' (Haraway 2003), messy knots and webs of human and more-than-human living and dying. The Anthropocene origin story of conquest, slavery and violence that Savoy testifies to cannot be told in a clean, contained account that can then be sealed off and consigned to history. It is complex, messy and ongoing. It can also 'never be complete or single-voiced' (111), Savoy writes, 'Each of us participates in it. We contribute to it as players, as witnesses, as narrators, as producers, and consumers, in an ongoing past-to-present' (111). Savoy evokes a concept of history that is interconnected, pluralised, and ongoing. It is a history that is *relational*, told through inheritance.

Through the figure of inheritance, accountability and responsibility emerge as pivotal themes. Savoy writes:

> I don't have answers but I do have desires. That the intricate relations implicating us in each other's lives could be acknowledged by recent immigrant and native, by descendent of colonists and those enslaved by colonists. This isn't being trapped by history or consumed by guilt over the past, nor is it being victim without end. It is instead honouring the lives of

> those so often unacknowledged by taking responsibility for the past-in-present—by opposing injustices today for which accountability of the living is direct. This comes closest in my mind to a true re-pairing toward truth and reconciliation (113–114).

Thinking about responsibilities and relations has a strong foundation in Indigenous thought, which foregrounds responsibilities over rights. Mohawk scholar and activist Patricia Monture-Angus asserts that she has only one right: 'the right to live as a Mohawk woman because that is the way Creator made me. That is the only right I have. After that I have a series of responsibilities as a Mohawk woman, because that is how I was made' (qtd. in Shotwell, 49). Further, many Indigenous peoples understand their right to live in a place as the right to be responsible for it, and for what and who came before. As Wilma Mankiller, activist and former principal chief of the Cherokee nation, pointed out: when Indigenous peoples 'speak of preserving their land for future generations, they are not just talking about future generations of humans. They are talking about future generations of plants, animals, water, and all living things' (2010).

This concept of responsibility differs to Western understandings, which can veer towards blame or what Savoy calls the feeling of being 'trapped by history or consumed by guilt over the past' (113). Feminist philosopher Sue Campbell's concept of forward-looking responsibility (2014) speaks to Savoy's message here. Campbell coined this term in her commentary on the Canadian Truth and Reconciliation Commission (TRC). Campbell writes that, despite misconceptions that the TRC is focused on establishing blame (a backwards-looking responsibility), it is intended to be much more future-facing, giving non-Indigenous people a process for making themselves accountable for situations and events, even if they would reject blame for them. Separating responsibility from blame provides an important distinction between being *liable* for colonial pasts and being *responsible* for them. As Jack Forbes, a scholar of Powhatan-Renape and Lenape descent, stressed, 'living persons are not responsible for what their ancestors did, but they are responsible for the society they live in, which is a product of the past' (qtd. in Dunbar-Ortiz, 235). We are obligated to take what Savoy calls 'responsibility for the past-in-present—by opposing injustices today for which accountability of the living is direct' (113). The result is that 'forward-looking senses of responsibility are politically powerful because

they give people a sense that there is action that can be taken for the future' (S. Campbell 2014, 151). Savoy echoes this, claiming that this forward-looking approach that acknowledges 'the intricate relations' (113) of a settler-state 'comes closest […] to a true re-pairing toward truth and reconciliation' (114).

By encouraging a practice of locating oneself within inheritances, and therefore taking accountability for the relations that they implicate us in, Savoy evokes what Cree researcher and educator Dwayne Donald called *ethical relationality*. This form of relating is based on 'an ecological understanding of human relationality that does not deny difference, but rather seeks to more deeply understand how our different histories and experiences position us in relation to each other' (6). Donald names his process as ethical because it 'does not overlook or invisibilize the particular historical, cultural, and social contexts from which a particular person understands and experiences living in the world' (6). He echoes the feminist insistence on situated knowledges and a politics of location, which Chapter Three will explore in greater depth. Savoy's project underscores Donald's imperative to be aware of 'the historically constituted present state of affairs, with the capacity for illuminating how any humanly livable future begins by acknowledging those historically derived debts and obligations that are part of any identity of the present' (Smith qtd. in Donald, 7). Accordingly, Savoy calls for a relationality towards others that takes into account the 'how', 'why' and 'who' of their shared and ongoing history 'as citizens of the land, of nations even within a nation, and of Earth' (47). It is an ecological mode of relation that strives for a broad and deep understanding of one's 'connections and encounters' (Haraway qtd. in Gane 145), and therefore one's obligations. It counters a taxonomic or stratified approach.

Savoy's evocation of relationality also extends to the geologic. Stratified logic of separation means that geology – like all branches of Western science – presents itself as objective and neutral. It masquerades as 'an isolated activity *not* bound up with systems of political action and social dynamics' (Colebrook, 2), drawn from 'its perceived solidity, apparent neutrality and irreversibility' (Warde et al. 2017, 249) and narrated through what feminists call the 'god trick' perspective. In this way, in Anthropocene discourse, geology maintains both dominance and innocence; it is the ultimate authority on the Anthropocene story while retaining no responsibility for it. It

is also often presumed to be necessarily distinct from the social sciences, humanities, and arts (Finney and Edwards), with some scholars defending the authority of geology to make scientific decisions, not political statements (Warde et al. 2017). But Savoy's interwoven practice as geologist and history-maker traverses these divides by tracing geosocial inheritances. Such geosocial relations expose a different story, shining a light on the ways in which the social and the geo collaborate, and thus excavating the geologic as another agent in the acts of shaping land and making history.

For example, Savoy's essay 'Placing Washington D.C., after the Inauguration' exhumes an obscured history that lies beneath the capital city's narrative of liberty, democracy and independence. She sets the essay up for this paradox by juxtaposing the inauguration of the first Black US president with the 'vestiges of slavery's landscapes and architecture [that] still lie in plain sight in the city' (172), pointing out that 'Some of the most notorious markets and pens stood along the Mall where so many would come for Barack Obama's inauguration' (Savoy, 172). When it comes to the location of the nation's capital, Savoy explains that 'public history often fails to mention the back story, the *why* behind this geography' (163), which is that George Washington, the first US President, wanted the capital located in the South, somewhere near his Virginia plantation, below the river's fall line, and in a state with Southern sensibilities – 'somewhere where slavery would remain unmolested' (164). As a result of this designation, covert deals also included the ceding of land from Virginia and Maryland to the capital's territory, which, as Savoy points out, increased the value of the President's land, perhaps by as much as 'a thousand percent' (165).

Savoy's retelling of Washington D.C.'s origins and the relations of wealth, capital and land that underlie it also expose the largely unknown fact that the city was built on the backs of enslaved and free Black people:

> 'Acknowledged or not, the hands, strength and skills of "Negro hire" fashioned building materials from outcrop and woods, from sand and mud, and then constructed a capital city […] And working alongside them were those recently manumitted as well as freemen of color who had never felt the shackles of bondage' (169).

The brutal trafficking of human lives for enormous capital gain continued once the city was built, as did an increasingly oppressive set of Black codes – including the introduction of a 'peace bond' of up to 'one thousand dollars and [which also] required the assurance of five respected white men' (Savoy, 175) – designed to curb the growing numbers of Black residents in the capital city.

This hidden history illuminates the nation's capital as a *geosocial formation*. Yusoff and Nigel Clark coined this term to refer to the collaboration of the geo and the social in building and shaping worlds – 'as a kind of minimal staging ground for earth science-social science encounters' (2017, 6). Washington D.C.'s dominant origin story of liberty and democracy belies the fact that it was built on slavery. And its embodiment of human power, as capital city of one of the most powerful nations in the world, obscures the geological agency that contributed to its creation – the Potomac river, its fall line, and the fertile Piedmont ground. The narrative of the nation's capital denies its geosocial inheritance, and as such, Savoy calls it 'an invented place' (163).

Savoy's relational histories are full of geosocial inheritances that Anthropocene and American history deny. One particular geosocial formation that defines both Savoy's search for origins and the Anthropocene story is 'White Geology' (Yusoff 2018). Referring to the way in which geology colluded – and continues to collude – in the dispossession, enslavement, exploitation, and oppression of racialised peoples in the name of capital accumulation, White Geology names 'a historical regime of material power' (Yusoff 2018, 4). Savoy's essay 'Madeline Traces' explores this inheritance. This journey begins as one of isolated introspection, with Madeline Island on Lake Superior providing Savoy with 'a quiet space' (48) to unpack a box that her late father taped shut many decades ago. Having never visited before, Savoy writes that 'ignorance of the region's human history, of its landscapes and layers of names, meant little if anything here connected me to Madeline Island' (50). It would simply provide a neutral ground for a more interior journey. However, her unfolding understanding of the area's history soon proves that assumptions of disconnect and neutrality from land and history are always false.

Savoy frames this landscape as one in which ‘many headwaters rise’ (49); ‘they flow, as the terrain suggests, towards the Mississippi River, toward Hudson Bay, toward the great lake named Superior’ (48). This hydrological confluence foreshadows the confluence of human and geological forces that occurred there, as colonisers displaced its Indigenous inhabitants in the name of land and mineral exploitation. Savoy recounts how government officials in the early nineteenth century organised reconnaissance expeditions to the area, with ‘political and “scientific” goals’ (59) in mind. A key member of this expedition was Henry Rowe Schoolcraft, a mineralogist-geologist and so-called ‘Indian expert’. The prospectors soon confirmed the area’s mineral wealth, as well as its potential for arable farming and freshwater fisheries; ‘all involved reached the “scientific” conclusion that the land was suitable for rapid expansion’ (Savoy, 60). With Schoolcraft, government agents manipulated Anishinaabe inhabitants into ‘signing’ treaties eroding their rights to their ancestral lands. Coded as ‘inhuman’ or part of ‘Nature’, these Indigenous inhabitants were available for extraction from their relations to land – just like the mineral wealth the colonisers sought to mine. These treaties signalled the start of a long process of dispossession through lies, manipulation, and forcible removals to permanent reservations far from their homelands. Some of these removals ended in the deaths of hundreds of Anishinaabe people from ‘disease, exposure and hunger’ (Savoy, 62).

Schoolcraft, an important agent in this geosocial history, was (and still is) revered for both his ‘expertise’ on Indigenous peoples of the Americas and his authority on geology and geography. Savoy quotes one such recommendation:

> …a highly versatile man. He was a well-grounded geologist, an authority on American ethnology and archaeology, a much-travelled explorer-geographer, an historian, journalist, editor and poet withal. He was a true friend of the Indians and won their esteem and confidence (52).

This portrait of a widely accomplished renaissance man with a patriarchal benevolence for racialised peoples – a ‘quintessential American hero’ (Savoy, 53) – was taught to Savoy as part of her school curriculum and is still widely celebrated today. Savoy recalls being enthralled by Schoolcraft and celebrating his history as ‘a simple, unquestioned sequence of events’ (53), learned about through ‘facts’ that obscured ‘any complexity or contradiction in the man's life or work’ (53). However, as an adult in the practice of seeking the complex relations that tangle beneath the

archive, she learns of a darker history in which Schoolcraft abused his position as geologist and 'Indian agent' to manipulate Indigenous peoples, colluding in their dispossession, murder, and cultural genocide. Schoolcraft also enabled the theft of ancestral homelands for the accumulation of mineral wealth and what Governor Lewis Cass called 'the progress of civilization and improvement' (qtd. in Savoy 60). Schoolcraft is the embodiment of White Geology in its most violent, insidious form. But official historical accounts still depict him as 'an author, ethnologist, explorer, geologist, glass manufacturer and Indian agent' (Library of Congress), who 'spent his adult life working on behalf of the Ojibwe or Chippewa people' (Encyclopaedia of Detroit), who is remembered for negotiating treaties and leading expeditions to map the upper reaches of the Mississippi River, including 'locating' (read 'discovering') its source at Lake Itasca (Encyclopaedia Britannica). Despite being a key figure in the use of geology and geopower to mobilise dispossession, extraction and lasting cultural and social oppression, Schoolcraft's place in the archive is celebratory and uncomplicated.

The effect of Savoy's recounting this history is not just to illuminate it, but also to speak to the question of implication. As late capitalist subjects of the Anthropocene, we inherit this geosocial history of colonial violence and cultural genocide, but we do so differently. For some, the work of geology as an operation of racialised power continues to shape their lives: 'in its material manifestation in mining, petrochemical sites and corridors, and their toxic legacies—all over a world that resolutely cuts exposure along color lines' (Yusoff 2018, 10). 'The current move to mine ore in the nearby Penokee Range, watershed of the Bad River Band of the Lake Superior Tribe of Chippewa Indians', Savoy tells us, 'threatens not only tribal sovereignty and treaty rights but also the wild rice sloughs along the lakeshore that ancestors harvested for generations' (65). In this contemporary example of an Indigenous people and the endangered ecologies its culture and subsistence depend on, Savoy shows us that the inheritance of White Geology arrives in dense, entangled knots of time and violence, repeating and reappearing across life-giving relations between human and more-than-human – a seismic shock that keeps rolling out, 'pressing and compacting in different ways in different places' (Davis and Todd, 772).

The ongoing persistence and inheritance of White Geology is also visible in the nomination of the Anthropocene as a new epoch, which recognises the fundamental changes in biosphere, atmosphere, hydrosphere, and lithosphere that colonial, racialised history and White Geology has brought about, but which erases race from the story. It also continues in a universalised, innocent geology in which 'we' are all equally to blame, and the geosocial formation of white supremacy and capitalism remains insidious and obscured. As Savoy writes, 'Tumultuous histories lie beneath subtle appearances. They have a far reach (49).

To be implicated is to be related or connected, to be inextricably involved in something usually uncomfortable or incriminating. Implication names certain relations we might wish to gloss over: as 'encroachments' or 'millstones around one's neck' (Chinnery and Bai, 240). Savoy's ethically relational history-making enacts implication at all levels, including at the level of the self. Having unearthed this dark history of a place she previously presumed to be unconnected to, Savoy realises 'that "scientific" research began here because of what the bedrock contained. I saw, too, that choices I had made in studies and work were somehow implicated in this pursuit of mineral wealth' (64). The passive, objective voice of science 'frustrate[s]' (65) agency, but Savoy pushes back on this by drawing out the relations that prove science and geology to be anything but innocent. Having once presumed neutrality to this history, she now 'seeks to more deeply understand' (Donald, 6) how she is positioned in relation to it. As a woman of mixed Black and Indigenous descent, she inherits White Geology in the form of racism, marginalisation, and alienation from history. But as a geologist, she also locates herself within the inheritance of White Geology as practice and regime of power. Her knowledge and work make her accountable to this violent colonial history of categorising, dispossessing, and extracting. 'Tumultuous histories, human and geological, formed this landscape in which I am implicated' (50), Savoy writes, and they are anything but clear cut.

Practicing history-making through an ethical relationality that makes explicit how the past of White Geology implicates her and places her in divergent relations to others, Savoy offers an answer to Haraway's 'how' of inheritance. By 'tracking […] linkages' (Haraway qtd. in Gane, 145) and organising knowledge through connections rather

than taxonomies, she illuminates the act of accountability as one of locating oneself within multiple inheritances. These inheritances are both easy and highly uncomfortable, and they help her to explore her relations and situatedness towards others, both past and present. This form of history-making has key lessons for our time, evoking 'a vision of the Anthropocene as much about messy relationalities, confusion, partiality and small things as it is about carbon measurements, nitrogen cycles, and melting ice caps' (Instone and Taylor, 143). No one can be exempt from this ethical and decolonial imperative, Savoy shows us, including the reader: 'my own experiences too, are gathered up and swept along by currents of a still-unfolding history on this vast continent … Though I was unaware, its own life included mine. I suspect it might include yours, too' (51).

Conclusion

Origin stories are powerful in their capacity to apportion or obscure responsibility, in their potential to erase or ground us in relations, and in their ability to shape and disrupt available futures. Often weaponised in order to create more convenient pasts and appealing futures, Savoy shows us that origin stories are, ultimately, about accounting for inheritances. Such stories are important to the concept of the Anthropocene – at least to the storying of an Anthropocene that is capable of recognising its inherent asymmetry. Fundamentally, an origin story located in 1610 names European colonialism and its weaponisation of race as connected to the development of the Anthropocene epoch. An origin located in 1950 does not.

The AWG nominates a golden spike based on scientific charts, stratigraphic signals, and the dispersal of responsibility to a universalised 'we'. Much is left unsaid by this single spike: of the geopower we have inherited, the history of slavery and dispossession that directly shapes the present, and the way in which power, wealth, and exposure to harm in the Anthropocene are organised along colour lines. Numerous scholars call for a golden spike as located in European colonialism, and the hidden histories Savoy unearths support this claim. But even if the spike pierced an exact signal in the strata from 1610, how could it encompass the complexity of these inheritances? How could it account for such origins?

Savoy's text demonstrates other ways of storying origins. Rather than seeking singular inscriptions or substances in the strata to pinpoint the epochal shift, she shows us that tracing human relations and regimes of power situated in place, in all their messiness and discomfort, is a more comprehensive way to begin accounting for historical roots. The earth logic – *geo-logos*– of Anthropocene discourse represents a dominant stratified logic of division, order and clean breaks, which imposes itself across Western understandings of history, science, narrative, power, and human–nature relations. But the Anthropocene world is one of relationality, hybridity and interconnection, of inheritance and legacy. From this perspective, 'golden spikes, histories of rupture, and genre codifications all create falsehoods. All marks and divisions distort and disrupt' (Mentz 2017, 46). Trying to contain the past in discrete units of time denies the way that threads of inheritance and legacy entangle the present with those unresolved pasts. Such authoritative accounts of the archive masquerade as complete and unambiguous, whilst violently erasing and obscuring certain histories and voices. As Savoy shows us, they are 'punctuated discontinuity rather than layered continuity' (185), riddled with gaps and fissures. Such a hierarchical organisation of time is incapable of accounting for the churning currents of colonial history that repeat and reappear in the present, for the seismic shock that keeps rolling out, for the wake. Stratified logic is inadequate for understanding how the past-in-present affects groups of people in radically asymmetrical ways.

But Savoy shows us that narrative is never objective, and the ground beneath our feet is never stable. She proves geology to be anything but innocent, and the Anthropocene to be anything but a neutral proposal. Her history-making practice in *Trace* offers us an alternative to the stratified logic of geologic authority. Her practice seeks those swirls and eddies that exceed the archive. It follows lines of inheritance, legacy, and connection across time and space, breaching borders and blasting apart discrete boundaries and containers. She seeks coiled threads of implication, even and especially when they're uncomfortable. Her history-making exemplifies a practice of accountability in the Anthropocene.

When formalised, the single golden spike of Anthropocene discourse will inscribe a full stop in history, forming a clean, intractable break between one epoch and the

next. But Savoy's relational history-making practice of locating oneself within inheritances has the potential to, as Mentz says, 'overwrite punctuation's rage for closure' (2017, 45). By tracing the marks, paths and threads of human and earth history in place, she begins to unearth her own origin story out of remnant pieces. And this personal origin story can also be read as the origin story of a nation, a civilisation, and an epoch. Savoy locates herself, and us, within many inheritances: 'as citizens of the land, of nations even within a nation, and of Earth' (47). The Anthropocene origin story she gifts us is a pluralised, relational history with wide-ranging consequences. It implicates us all – differently.

Chapter Two

Resistance in the everyday: Attention and care in the work of Kathleen Jamie and Margaret Renkl

Introduction

In his essay ‘UNEARTHED’ (2019), James Bradley writes about the evasive inattention that Western culture exhibits when it comes to confronting environmental crises. He argues that it is embedded in ‘the way we think – or more importantly, don’t think’ and in language, in ‘the way we hide behind conditionals to avoid truths we do not want to hear’. Exercising this denial relies upon the practitioner not looking too closely – not paying too much attention to the changes occurring around us, not noticing the gaps and silences in our landscapes, and not recognising ‘the conflagration that is already engulfing our world’ (Bradley, 2019).

It is in this sense that Donna Haraway writes the following:

> These times called the Anthropocene are times of multispecies, including human, urgency: of great mass death and extinction; of onrushing disasters, whose unpredictable specificities are foolishly taken as unknowability itself; of refusing to know and to cultivate the capacity of response-ability; of refusing to be present in and to onrushing catastrophe in time; of unprecedented looking away (2016b, 35).

Haraway compares this ‘unprecedented looking away’ to Hannah Arendt’s analysis of Nazi war criminal, Adolf Eichmann, in whom Arendt saw the ‘banality of evil’. Haraway claims that Arendt did not perceive in Eichmann ‘an incomprehensible monster, but something much more terrifying—she saw commonplace thoughtlessness’ (2016b, 36). Eichmann was ‘unable to make present to himself what was absent, what was not himself, what the world in its sheer not-oneselfness is' (2016b, 36). This meant that he ‘could not entangle, could not track the lines of living and dying, could not cultivate response-ability’ (Haraway 2016b, 36). In this way, ‘the world did not matter’ (Haraway 2016b, 36). Quoting Maria Puig de la Bellacasa, Haraway writes that in this mindset of thoughtlessness and irresponsiveness, ‘there was no way the world could become for Eichmann and his heirs—us?—a “matter of care”’ (2016b, 36).

This chapter will explore the essays of Margaret Renkl and Kathleen Jamie. Renkl is a Tennessee-based writer and columnist for the New York Times. A self-proclaimed 'backyard naturalist', Renkl is candid about operating outside the academe and having no formal training in the environmental sciences. However, she has written extensively on the natural world and the more-than-human others that she shares her garden and local area with, intertwining this small-scale vision with broader global issues of climate emergency and topics from national politics and popular culture, perhaps highlighting an awareness of the issues of inaccessibility, bias and elitism in the US and UK nature writing traditions that this thesis has explored, and offering a new perspective.

Jamie is a Scottish writer, editor, poet, and Professor of Creative Writing at the University of Stirling, affording her an awareness of key themes and areas in the development of both the nature writing tradition in Britain, and the scholarship of the environmental humanities and ecocriticism. With a solid place not only in academia but also in the Scottish literary scene, Jamie is a Fellow of both the Royal Society of Literature and the Royal Society of Edinburgh, and in 2021 was appointed Makar (the national poet of Scotland). Jamie has always been one of the few openly political British nature writers and is a supporter of the Scottish independence movement.

Despite their different backgrounds, both writers have in common their focus on the importance of paying attention to the natural world. As such, this chapter will explore the work of Renkl and Jamie in order to argue that, through attention, the world can become a matter of care. In the essay collections of both writers, paying close attention on a lived, everyday basis forms the foundation of their relationships with the natural world, and their writing about it. Echoing Haraway and Bradley, Jamie has long been explicit about her concern for the way in which a lack of attention renders us 'little cogs, little consumers, in someone else's machine […] doing what the forces of destruction and inattention want us to do' (2019b). Indeed, many scholars have noted that cultivating an inattentive, evasive mindset is not only a way of avoiding the need to care about anthropogenic environmental damage but is also the method through which we inflict this damage in the first place. In 1954, Heidegger wrote about the effect of a dominant technological imagination that

transformed all beings into a ‘standing-reserve’ (*Bestand*) – a ‘fundamentally undifferentiated supply of the available’ (Lovitt, xxix). Macarena Gómez-Barris argues that this ‘extractive view’ is similar to the colonial gaze: it ‘sees territories as commodities, rendering land as for the taking […] facilitat[ing] the reorganization of territories, populations and plant and animal life into extractible data and natural resources for material and immaterial accumulation’ (5).

The extractive view that Gómez-Barris describes relies on a tunnel vision approach, ‘dismembering an exceptionally complex and poorly understood set of relations and processes in order to isolate a single element of instrumental value’ (J.C. Scott 1999, 21). Fundamentally, the ‘act of extraction removes all of the relationships that give whatever is being extracted meaning’ (L.B. Simpson, 75). As described in Chapter One, Anna Tsing calls this the ‘dream of alienation’ (6), which ‘inspires landscape modification in which only one stand-alone asset matter; everything else becomes weeds or waste’ (6). As Tsing indicates, these new monocultures are organised by a robust utilitarian vocabulary that forms part of a way of ‘reading’ habitats and ecosystems as economic resources, codified by data pertaining to the maximisation of profit. To this end, a complex ecosystem, such as a woodland, ‘would not even have to be seen; it could be “read” accurately from the tables and maps in the forester’s office’ (J.C. Scott 1999, 15). Through a culture of inattention, the natural world is made legible according to fungibility rather than its intrinsic ecological or affective value.

Such thoughtlessness and ‘unprecedented looking away’ are countered by curiosity and attention. Tsing writes that ‘without meaning to, most of us learn to ignore the multispecies worlds around us. Projects for rebuilding curiosity […] are essential work for living with others’ (282). This agenda is clear in Jamie and Renkl’s work. Renkl writes: ‘Every day the world is teaching me what I need to know to be in the world. In the stir of too much motion: Hold still. Be quiet. Listen’ (2019, 126). And Jamie takes a more explicit, urgent approach, arguing that ‘a “serious noticing” of the natural world might […] save it from slow death’ (2019b). This attentive, curious mindset is defined by Haraway as ‘response-ability’: a ‘collective knowing and doing’ (2016b, 35), fostered through close attention to the natural world, a sense of curiosity, an openness to being affected, and an ability to respond. Response-ability

is about attending to 'both absence and presence, killing and nurturing, living and dying – and remembering who lives and who dies and how' (Haraway 2016b, 28).

Potawatomi citizen and scientist Robin Wall Kimmerer posits paying attention as the primary way in which humans can reciprocate for the gifts of the natural world:

> In a world that gives us maple syrup, spotted salamanders, and sand hill cranes, shouldn't we at least pay attention? Paying attention is an ongoing act of reciprocity, the gift that keeps on giving, in which attention generates wonder, which generates more attention – and more joy. Paying attention to the more-than-human world doesn't lead only to amazement; it leads also to acknowledgment of pain. Open and attentive, we see and feel equally the beauty and the wounds, the old growth and the clear-cut, the mountain and the mine. Paying attention to suffering sharpens our ability to respond. To be responsible (2014).

There are many similarities between Kimmerer's ideas on reciprocity and Haraway's 'response-ability'. Both voice a need to attend to the difficult reality of the world, to 'who lives and who dies', to both 'the mountain and the mine'. This, in turn, hones our ability to respond and be responsible, which are posited as interdependent, generative practices that increase our connections to the natural world the more we undertake them. Attention is the gift that gives on; it is not an activity or isolated practice, but a disposition, one which provides us with a way to be in the world.

Both Jamie and Renkl emphasise the idea of paying attention as a generative, reciprocal disposition through their chosen settings in the lived scale of the everyday. Linked by their female voices, domestic settings, and foregrounded themes of care and responsibility, their texts provide a unique angle from which to approach writing on nature and place, and suggest the domestic everyday as an important site to attend to. Our quotidian landscapes are changing just as catastrophically as the glaciers, deserts, and coastal landscapes portrayed in climate crisis media, but are often overlooked due to the assumptions we have about the everyday as a site of stasis, repetition, and mundanity. Jamie and Renkl's essay collections evidence a close attention and curiosity that illuminates the everyday as a site of both spectacular wonder and crisis, in which affective, meaningful and ongoing relations with the natural world can be established. This chapter will explore how these writers

position attention as a way of engaging in reciprocal and response-able relations with the natural world, achieved through the foregrounding of care webs, an openness to encounter, a gift sensibility, and a mode of decentred seeing. For both texts, the essay form functions as a way to evoke their practice of attention and care, enacted in glimpses and glances, and offers rich opportunity to subvert the male-dominated traditions of nature writing. Further, it will also explore how attention as a gift can be mobilised as a form of resistance to the dominant capitalist regime, practiced through a scalar preference for the small, the art of 'serious noticing' (Jamie 2019b), and Neera M. Singh's concept of affective labour, the immaterial outputs of which are an excess from which capitalism can never extract.

An everyday ecology of dwelling

Attention to the natural world is a major theme in the work of Jamie and Renkl, but what distinguishes them from other writers is the way that this attention is grounded firmly in an ethics of care, rather than practiced through more traditional, objective lenses such as science, taxonomy, extraction, or ego. Care ethics emerges from the work of feminist theorists, such as Joan Tronto and Berenice Fisher, who defined care as:

> …a species activity that includes everything that we do to maintain, continue and repair "our world" so that we can live in it as well as possible. That world includes our bodies, our selves, and our environment, all of which we seek to interweave in a complex, life-sustaining web (qtd. in Tronto, 103).

Puig de la Bellacasa develops this definition in her work, in which care emerges as having three dimensions: 'a concrete work of maintenance, with ethical and affective implications, and as a vital politics in interdependent worlds' (2017, 5). Understood in this way, care is a disposition, an active process, and a form of labour by which we become response-able for and reciprocal to the multispecies world we live in.

In his text 'Seeing like a State' (1999), James C. Scott showed that attention can also be instrumentalising and alienating, devoid of care. Mary Oliver echoed this by writing that 'Attention without feeling, I began to learn, is only a report. An openness—an empathy—was necessary if the attention was to matter' (qtd. in Popova). It is through such care-less attention – another form of thoughtlessness – that the natural world ceases to matter. Attention may function without care, but by

contrast, care can only emerge if attention is present. Indeed, care is dependent upon attention in Tronto and Fisher's four-stage definition of care.[29] Without the first stage, *caring about*, in which one pays attention to and recognises the needs of the other, the subsequent three stages of *taking care of*, *care-giving*, and *care-receiving* cannot happen. Anna Krzywoszynska builds on this, writing that, 'In the ethic of care, attentiveness is not only an ethical commitment, but, crucially, a practice inherent to the labour of maintaining life […] Caring for something or someone means paying attention so as to learn about, act on, and monitor the satisfaction of the needs of the ones being cared for' (664). In this way, '*attentiveness is always already present in care practices'* (Krzywoszynska, 664, emphasis in original). Framing their writing explicitly within Anthropocene worlds of change, degradation and extinction, Jamie and Renkl appear to demonstrate that, if we are to resist the thoughtlessness of our times, care must always already be present in attention. If the Anthropocene world is to matter, then attention requires care.

For Jamie and Renkl, attention to and care for the natural world are inextricable, and they are situated within broader care structures defined by their roles as mothers, daughters, and partners. Jamie glimpses birds 'at coffee time, or before fetching the kids from school' (2005, 39); and Renkl observes the wildlife she sees from her office window between working from home and caring for her family. Unlike other, primarily male, writers on nature and place (Ansell 2018; Foster 2016; Macfarlane 2008, 2015a, 2019) whose experiences in the natural world often appear to be unfettered by domestic obligations, Jamie and Renkl's appreciation of the natural world fits around and even emerges from the mundane, domestic duties of everyday life. Val Plumwood's concept of 'backgrounding' helps to contextualise this dynamic. Plumwood describes backgrounding as a form of denial used to maintain the dualisms between man/woman and human/nature, in which, as Chapter One outlined, nature, women, and all others are defined by negation to the normative white, heterosexual, European male. Plumwood explains:

> To be defined as "nature" in this context is to be defined as passive, as non-agent and non-subject, *as the "environment" or invisible background*

[29] In *Moral Boundaries*, Tronto and Fisher defined care as consisting of 'four analytically separate, but interconnected, phases': caring about, taking care of, care-giving and care-receiving (105-108).

> *conditions* against which the "foreground" achievements of reason or culture (provided typically by the white, western, male expert or entrepreneur) take place (4, my emphasis).

Plumwood explains that backgrounding enables dominant Western culture to deny its connection to and dependence on the natural world, treating it instead as '*terra nullius*, a resource empty of its own purposes or meanings, and hence available to be annexed' (4). In parallel, by backgrounding women, Western culture denies its dependence on traditional female labour, such as reproduction, subsistence, and care, and devalues women in history, culture and society. Key to this is the notion that 'Traditionally, women are "the environment"—they provide the environment and conditions against which male "achievement" takes place, but what they do is not itself accounted as achievement' (Plumwood, 22). In this sense, women are understood to exist both in and as the everyday 'environment' – the quiet sub-strata that supports the spectacular life of men. Rita Felski describes this environment as 'the air one breathes, the taken-for-granted backdrop, the commonsensical basis of all human activities' (80), defined in contrast to the masculine realm of 'war, art, philosophy, scientific endeavour, high office' (80). Temporally, Felski writes that the everyday – and by association, women – is characterised by natural circadian rhythms. In contrast to modernity's notions of progress and historical transformation, 'everyday life is belated; it lags behind the historical possibilities of modernity' (Felski, 82). Female life therefore both forms the foundation of time and exists outside of it, obscured by the heroic masculine figure striding ahead in the foreground.

Jamie and Renkl subvert this tradition by bringing domestic female life into the foreground. Jamie's first book of essays, *Findings*, published in 2005, markets its everyday setting as its distinguishing feature. Its blurb claims that the author has 'an eye and an ease with the nature and landscapes of Scotland as well as an incisive sense of our domestic realities'. Indeed, throughout her career Jamie has been vocal not only about centring the everyday reality of female life and quotidian experiences of the natural world, but also about decentring the stereotypical figure of the foregrounded male, seen so often in nature writing. As discussed in the Introduction, Jamie's infamous review of Robert Macfarlane's 2007 text *The Wild Places*

describes this figure as, ‘A white, middle-class Englishman! A Lone Enraptured Male! From Cambridge! Here to boldly go “discovering”, then quelling our harsh and lovely and sometimes difficult land with his civilised lyrical words’ (2008). Jamie conjures the foregrounded male as one who imposes himself upon the seemingly ‘wild’ Scottish landscape – reflecting a long history of English male colonisation – ‘quelling’ its difficult histories, unresolved class and ethnic tensions, and untidy human and more-than-human entanglements into submission as a background for his narrative – for the way in which he wants to see and be seen. Like the ‘colonial gaze’ (Gómez-Barris), the result is that ‘the author is everywhere, north, south, east and west’ (Jamie 2008) and other people who engage with wild places, ‘many of them women’ (Jamie 2008) and whose voices are vital to our understanding of the natural world, are obscured.

The criticism in this review built on questions Jamie had asked three years earlier in her *Findings* essay, ‘Peregrines, Ospreys, Cranes’, which focuses on the observation of birds. Jamie turns to J.A. Baker, the author of *The Peregrine,* as one example of this masculine stereotype. Baker’s text is famous for his unequivocal devotion to the peregrines of Essex. It chronicles the ten years he spent pursuing these birds with a kind of monomaniacal fervour akin to – in a comparison made by Baker himself – Captain Ahab and the white whale (Saunders, 110). Undercutting Baker’s mythic, reverent tone with her characteristic pragmatism, Jamie asks:

> Who was this man who could spend ten years following peregrines? Had he no job? Perhaps he was landed gentry. What allowed him to crawl the fields and ditches all day, all winter, until he could tell just by a tension in the air that there was a peregrine in the sky? (2005, 43).

In *The Peregrine*, Baker’s human life is absent; it is kept separate from his experiences in the woods and fields, perhaps because he saw the trappings of his everyday life as part of the ‘human taint’ (28) he longed to ‘wash away’ (28) in the ‘outward life’ (28) of the Essex landscape. Even the specific locations of his birding trips are undisclosed. Aside from dates (without years) and meticulously recorded weather conditions, all spatiotemporal hooks are absent, leaving the reader unsure how much of the landscape Baker journeys through is located in the realm of the imagination.

Like Melville's white whale, the peregrine is a charismatic species and, although Baker renders the Essex landscape in spectacular precision, it still often dissolves into the background behind the falcon. Figured through mythic images of the violence, drama and power often associated with Western constructions of masculinity, the peregrine enters the narrative with 'sudden passion and violence' (Baker, 30), casting the landscape around it into shadow. By contrast, in Jamie's essay, a pair of nesting peregrines appear in the hills behind her 'narrow garden and the neighbour's gardens' (2005, 29), where she can catch glimpses of them through the window by her desk. She is primarily interested in their domestic life and reproductive labour, their mating and nesting, therefore decentring Baker's masculine enthusiasm for their hunting abilities. Jamie notes the species' vulnerabilities, such as 'egg-snatchers or unscrupulous falconers' (2005, 31), and unseasonal weather. And she openly cares about their survival: 'So there we are. Nesting peregrines. Another damn thing to worry about.' (Jamie 2005, 30).

Jamie juxtaposes her questioning of Baker and the realities of his birdwatching life with a candid declaration of the constraints of her own material human life and caring duties, and a transparency about the way in which birdwatching must fit around them:

> Between the laundry and the fetching kids from school, that's how birds enter my life. I listen. During a lull in the traffic, oystercatchers. In the school playground, sparrows […] The birds live at the edge of my life. That's okay. I like the sense that the margins of my life are semi-permeable (2005, 39).

Paying attention – which Jamie often figures as 'listening' or 'lissening' (2019b) – to the natural world permeates her everyday life because it's a disposition, not an act. As Faith Lawrence writes, 'It's not an exceptional practice for her […] we can take her listening for granted' (30). Unlike Baker's enthusiasm for a sharp, falcon-like vision, Jamie's encounters with the natural world are grounded in the limitations of a human perspective, and are tempered by the domestic parameters in which they were permitted: 'I was fetching the children's school clothes out of the tumble dryer when I chanced to look out of the window and saw the male osprey himself, taking the same route eastward as he had before' (2005, 44). She does not seek to observe birds as a way of escaping the human world; it is an act that is seamlessly enmeshed into the everyday realities and obligations of human life.

Renkl is just as candid about situating her writing in the everyday, which, in her essays, encompasses a broad, multi-generational timeframe of inherited knowledge, care and attention. Her 2019 collection *Late Migrations* begins with Renkl's maternal family tree, and interleaves her own stories of birth, death, care, and life in the American south with second-hand, inherited stories from family members, with titles such as 'In Which My Grandmother Tells the Story of My Mother's Birth'; 'In Which My Grandmother Tells the Story of her Brother's Death'; and 'My Mother Pulls Weeds'. Renkl's work of female ancestral polyphony emphasises that women have been associated with the everyday and its domestic responsibilities throughout history. Just like her female forebears, she describes how caring defines her life, as she finds herself moving from care for children to care for parents, and then to care for her husband's parents: 'By the time my nest was truly empty, I thought, there would be precious little left of me' (Renkl 2019, 188). Everyday care-giving requires constant attentiveness: 'there's a scan running in the background of every thought and act, a scan that's tuned to possible trouble' (Renkl 2019, 188). And when this care-giving is no longer needed, one can feel bereft of purpose – 'I've been taking care of people my whole life,' Renkl recalls her grandmother exclaiming, 'What will I do with myself now?' (2019, 190).

But another scan running in the background of Renkl's daily consciousness is her attention to the more-than-human others inhabiting her garden. Her stories of attending to the messy business of everyday human life and death are seamlessly enmeshed with those of everyday more-than-human life and death. Bluebirds, chickadees, rat snakes, squirrels, house wrens, Coopers hawks, monarch butterflies, milkweed plants and orb weaver spiders, amongst others, co-habit with Renkl and her family not only physically – sharing the same suburban garden space – but also ethically, within a sphere of care. In Renkl's essays, examples of care and attention to the needs of the other emerge not only from Renkl herself, but also between multiple others: from Renkl's father towards her when she suffers homesickness, reminding her that 'there would always be a place in the world' for her (2019, 118); from Renkl's grandmother to her own mother, 'brokenhearted because she had lost a child' (2019, 78); from Renkl's mother towards her 'brown dachshund' (2019, 175);

and from the cardinals to their chicks, ‘work[ing] from dawn to full night feeding them’ (2019, 53).

In this way, Renkl shows us that care is fundamentally relational, illustrating what Tronto and Fisher call a care ‘web’ (qtd. in Tronto, 103). Such a web describes a dense, ‘complex, life-sustaining’ (Tronto and Fisher, qtd. in Tronto 103) network of connections formed through care and attention, enmeshing human and more-than-human others. A defining characteristic of Renkl’s web is that she does not situate herself at the centre of it, refusing to treat care as a moralistic, romantic practice in which she is the sole, sacrificial female care-giver. As Puig de la Bellacasa writes, ‘care is rarely bilateral, the living web of care is not maintained by individuals giving and receiving back again but by a collective disseminated force’ (2017, 20). Unlike our tendency to think in binaries or ‘capitalism’s either/or organization of reality’ (Moore 2015, 14), care is decentralised in Renkl’s everyday world, suffused into webbed relations of interdependency and interconnection, with needs, responsibilities, and chains of gifting that weave between house and garden – and beyond. Renkl’s web evokes, in Jason W. Moore’s words, ‘nature as us, as inside us, as around us. It is nature as a flow of flows’ (2015, 13). Moore describes how this ‘relationality of nature implies a new method that grasps humanity-in-nature as a world-historical process’ (2015, 15) – our enweaving and enwebbing work is never finished, and we are made and remade in, through and with ‘nature’ every day.

Jamie also echoes these ideas of webbing and care. Across her oeuvre, she repeatedly names ‘the web of our noticing’ as ‘a way of being in the world’ (2005, 109) that requires attention as a form of maintenance and repair (2002). Within their webs, both Renkl and Jamie practice what Puig de la Bellacasa calls ‘thick, impure involvement’ (2017, 6) in a world of multispecies relationality and responsibility. They reject tidy binaries, intermeshing different species in their attention and care. For example, in the same breath, Renkl mourns the death of an injured waxwing and grieves for her mother: ‘I wish I had taken that soft brown miracle of a bird into a dark, warm room to die. I wish I hadn’t noticed the way my mother’s hand was already cooling when she took her last breath’ (2019, 205). And Jamie’s ‘web of noticing’ enmeshes everything – ‘the outermost reaches of the universe, the innermost changes at the bottom of a lung, the words on a page, or a smear of blood

on a slide' (2002). In her daily life, the web connects her to 'spiders, alveoli, starlings' (Jamie 2002), to oystercatchers and traffic, sparrows and schoolgrounds; the edges of her life are not bounded but 'semi-permeable' (Jamie 2005, 39).

For both writers, qualities of impurity and thickness are not only found in their rejection of tidy binaries in favour of webbing, but also in their resistance to attempts to operate neatly outside of either capitalism or the Anthropocene. Renkl and Jamie both show that no matter how much one might care about rising sea levels, pollution, a warming atmosphere, and environmental degradation, as humans – particularly white, Western humans – it is impossible to disentangle oneself from culpability. Renkl is an intensely local writer, but she is candid about the consumption culture of her expanding suburban neighbourhood, full of housing developments and manicured lawns. Similarly, Jamie is a writer of the domestic and local, but she is also a travel writer, with work written from Alaska, Norway, the Scottish Highlands and islands, Tibet, and Pakistan. Her care and attention for the natural world and her concern about its destruction are clear, as is her own role in this degradation as a carbon consuming Western subject of late capitalism – to which there is no externality (Wood qtd. in T. Clark 2008, 48). Their environmentalism may be 'thick' with care, attention, and webbed aesthetic relations, but it is also, unavoidably, thick with damage, consumption, and complicity; it is impure.

Renkl and Jamie's essays differ from other writing on nature, place, and climate in that they do not attempt to obscure this complicity or operate from an external position, no matter how uncomfortable it is. Instead, they utilise images of webbing and relationality to demonstrate that there is no easy binary between humans and more-than-humans, between organic and inorganic. They remind us that there is often no absolute distinction between attending and damaging, caring and consuming, gifting and extracting. They show us that there is no simple way to right the wrongs of our time or to extricate ourselves from them; care in the Anthropocene is more complicated than that. Through this honest rendering of the 'thick, impure involvement' of the interwoven, multispecies care webs they participate in, Jamie and Renkl evoke ethics as 'a hands-on, ongoing process' (Puig de la Bellacasa 2017, 6). They create a lively ecology of everyday dwelling, in which care and attentiveness to human and more-than-human others within one's sphere of

domesticity and responsibility is a way of resisting the 'thoughtlessness' and 'looking away' of Anthropocene times – without stepping outside of it. In this reading, the everyday and its domestic obligations are not treated as a limitation. Neither Jamie's detailed knowledge of the peregrines near her house nor Renkl's understanding of the birds nesting in her garden would be possible without their presence in the house on a lived, daily basis. Domestic life is not a hinderance to an appreciation of the natural world; it is what makes it possible.

Narrating the everyday through essay

This everyday, lived experience of paying attention to the natural world that both Jamie and Renkl foreground is reflected in the essay form in which they write. Renkl's text is composed of 119 essays, ranging in length from four pages to just seven lines. Each essay is a tiny glimpse through a window into the world of someone who attends. Together they form what Danny Heitman (2019) calls a 'pointillist portrait' – an overall masterpiece composed of tiny, coexisting pieces of mark-making. Heitman observes a 'patchwork sensibility' in Renkl's work, and this points to what is most distinctive about her and Jamie's use of the essay form: the fact that each essay can be read as a stand-alone piece, distinguished by varying formats, tenses, settings, disciplines, and subjects, whilst also forming part of a wider whole, cohered through common, emergent themes. Jamie claims that, 'There's a point working on something when things start to cohere. It's a bit like scrambled egg. It starts off as liquid in a pan and then it begins to clump' (qtd. in Barkham 2019). For example, Jamie's latest collection, *Surfacing,* traverses familial memory, travels in Tibet, children leaving home, and two archaeological digs, one in the Yup'ik town of Quinhagak in Alaska, and one on the Orkney islands; but these essays cohere through the thematic connective tissue of the Anthropocene, memory, inheritance and deep time. Similarly, for Renkl, essays recalling family history sit alongside interests in bird nesting and reproduction, butterfly conservation, pet dogs, and the work of caring for elders, and are connected by the themes of life and death, beauty and decay, uncertain futures, and domesticity. For both writers, these overarching themes are subtle; they don't overwhelm the essays or overshadow their individual concerns, but instead encourage the reader to make connections, follow threads, and consider the relationship between the part and the whole. Allowing these connections to be negotiated and made is important to both writers, as they seek to

illustrate the webs of care from which they write. As Jamie points out, one might 'look up from sorting the socks and hear the cry of an oystercatcher. Why should those things be separate?' (qtd. in Werber).

Although Heitman admires Renkl's structure, he also laments the brevity of her essays and the way she resists unpacking some of the disclosures she makes, treating them only 'glancingly'. But the glancing nature of these micro-essays is vital. For both Renkl and Jamie, writing in the short (sometimes very short) essay form evokes the very way through which they pay attention to the world: looking and listening in glimpses and gaps, the senses open to distraction, the mind alert to impressions but not always intent upon applying meaning to them, and always half-conscious of the potential to be reeled back in by the needs of another. This is a form of 'decentred seeing', which resists the temptation to put the spotlight on one element, to probe too deeply into it, or to extract answers. It sits in contrast to the traditional essay form, which functions as a vehicle through which the writer, as an authoritative voice, can explore a particular topic or question in depth, embarking on a meandering journey towards a conclusion. As Keith Fort wrote in 1971, the 'key rule is that there must be a thesis which the essay proves' (631). This writing towards conclusion and proof is reflective of the work of the foregrounded male, whose voice dictates the progress of the narrative and upon whose intellectual authority the conclusion rests. By leaving few stones unturned, there is an extractive nature to this form of essay writing that is absent in Jamie and Renkl's work.

Indeed, Jamie and Renkl appear to actively resist the temptation to conclude their essays, the endings of which often intentionally move away from the reflective or contemplative with a return to the ordinary or domestic: 'And all the way home, tiny crescents bespeckled the road, a path of fractured light that led me back to my own place in the world, right to my very front door' (Renkl 2019, 96). In Jamie's work, this shift can often feel sudden, for example, 'I shook myself, went back up to the car' (2012, 176); or 'I bear it as long as I can, then go back inside to the warm' (2012, 19). Other essays of theirs end simply on moments of acute awareness, emphasising a kind of self-conscious inconclusiveness that reflects both the continuation of their pervasive attention and the dynamic ongoingness of the world. Jamie's essay 'Light' chronicles her momentary experience of looking out of her

window and reflecting upon the changing conditions of light, ending with: ‘The year has turned. Filaments and metallic ribbon of wind-blown light, just for an hour, but enough’ (2012, 92). Similarly, Renkl’s ‘Night Walk’ details an evening walk around her neighbourhood that is grounded in the immediacy of the present tense and Renkl’s perceptions. It ends with a sparsely described list of sights and sounds as the moonlight is extinguished behind a cloud, ‘Maple leaves scudding down the rough asphalt. A train whistle. A siren. A wary greeting from the three-legged dog behind her fence, warning me to come no closer in the dark’ (2019, 71). In this paratactic catalogue of impressions – almost like an imagist poem – no single subject is given prominence or meaning, and the perspective remains decentred.

For Jamie, her pieces sometimes seem to be shaped by the essay form’s characteristic meandering movement of the mind, permeated by self-awareness, questioning, and a self-conscious redrafting process. However, her essays don’t follow the movements of an isolated mind grappling with an abstract topic; instead, they follow the direction of her thoughts in response to the material world she encounters. In ‘Magpie Moth’, Jamie recounts her experience of watching a moth in a lochan, before rescuing it from the water with a teaspoon. Regretting her intervention but feeling that she is now ‘implicated’ (2012, 173), she watches it through a magnifying glass, looking even closer. Suddenly, Jamie reels back: ‘Enough. The bubble of my attention popped. I stood too quickly, swooned a little, because there was the wide moor, the loch and the breezy grasses reaching for miles, all scaling up to meet me. I’d been absorbed in the miniscule’ (2012, 176). There is no conclusion or plot ending. It is the process of Jamie’s attention – of noticing, zooming in, providing care, watching, and then reeling back to the macro again – that forms the narrative event of the essay. If Montaigne saw his essay writing as a reflection of the human mind caught in the act of thinking (Porter), then for Jamie, essay writing is a reflection of the human mind caught in the act of *looking*. And this looking is always directed outwards towards the world. In a 2012 interview (Crown), Jamie said that:

> I can't be didactic, telling people what they ought to think – people can think what they like. I'm just encountering. The best thing I can do is go out and be in the world in a very loose, open sort of way, and see what happens. See what I stumble across.

Jamie and Renkl's emphasis on openness to encounter, rather than structure, progress, and conclusion, demonstrates that attention to the material world isn't a means to an end. It doesn't have to fit within a reward paradigm or market exchange dynamic, in which 'investing' time and 'paying' attention must yield a return, whether that be knowledge, answer or conclusion. Instead, their essays decentre such an extractive approach, positing attention as part of a process of being in the world that is open to encounter, but which does not seek to take anything from it.

This decentring of the essay's more traditional masculine perspective is also reflected in a careful policing of tone. Jamie, intensely self-conscious and wary of the colonial and imperial history of the nature and travel writing genres, is constantly pre-occupied with her legitimacy to speak on nature and place and scours her prose for any traces of an authoritative or condescending tone. She is also sceptical of rapture, reverie, romanticism, and other methods of anthropocentric escapism that might distract her from attending to the reality of the here and now and the otherness of the natural world. Such scepticism doesn't always stop Jamie from exploring these registers, but it ensures that she matches any writing of this nature with details of the everyday setting, which has a grounding effect. As Eleanor Bell writes, 'it is not unusual for moments of potential transcendence in her work to come down to earth with a realist bump' (129). For example, her essay, 'Moon', describes Jamie leaning out of her attic window looking at the full moon through her binoculars, its 'pewtery, equivalising light […] falling on the whole night-bound world' (2012, 121). But this scene is soon interrupted by her daughter and friend, who choose to gaze at the 'silvery screen[s]' (Jamie 2012, 122) of their Nintendos rather than at the night sky. Any inclinations towards transcendence are soon interrupted by the realities of everyday domestic life and the decidedly unromantic depiction of our increasing disconnect. Renkl's essay 'The Snow Moon' is remarkably similar in both theme and tone, as she also writes about our move away from the natural world towards the magnetic pull of technology using the image of the moon: 'The snow moon brought a time of hunger to the forest peoples, but we are fat in our snug houses, tethered to the shine of our screens. The snow moon is our hungry sister. The snow moon is our brighter twin' (2019, 30). In an implicit comparison of the Indigenous peoples of the Americas and our own present-day consumer culture, Renkl adopts a reverent,

almost mythic tone but juxtaposes this with a grounding nod to lifestyles that are ‘fat’, ‘tethered’, and ‘snug’.

Furthermore, Renkl and Jamie both question the authority of the traditional nature writer by decentring a scientific, expert perspective – what feminists call the ‘god trick’ (Haraway 1988, 584) – which has historically been complicit in both colonial agendas and condescending work that alienates the reader from the natural world. Like Jamie, Renkl’s work demonstrates how her connections with the more-than-human world are mediated by a refusal to adopt a dominant or authoritative position. In her essay, ‘Gall’ – whose double meaning reflects not only the wasp’s gall she finds on an oak tree – Renkl recalls being asked by another ‘backyard nature’ writer if she is a trained naturalist:

> I had to confess I’m more of a Googler. I grew up playing in the woods, and all my life I’ve turned to woodland paths when the world is too much for me, but I’m not a scientist. It took a lot of nerve for someone so ignorant of true wilderness to fashion herself as a nature writer, but the flip side of ignorance is astonishment, and I am good at astonishment (2019, 73).

Here, Renkl is making a point about the value of wonder that is often echoed in works of New Nature Writing (NNW), namely that an objective, knowledgeable, or scientific perception of the natural world may yield detailed mechanical understanding, but if it is not coupled with a raw affective and emotional response, such as wonder or awe, then it won’t establish meaningful relations of care with the natural world.

In turn, Jamie’s essays push back on traditions of expert authority by offering the reader specificity in her observations of nature, but through alternative, decidedly unscientific ways of seeing that scramble the divides between humans/nature and wild/domestic. Indeed, her writing is most effective when she uses domestic imagery to describe seemingly ‘wild’ nature: a beached whale is a ‘leatherette sofa’ (2005, 57); a corncrake’s call is ‘like someone grating a nutmeg’ (2005, 88); and whale vertebrae smell like ‘wax crayons’ (2012, 105). This technique is best demonstrated in ‘Pathologies’, in which Jamie looks down a microscope at an excised liver and sees the River Tay, her local landscape: ‘There was an estuary, with a north bank and a south. In the estuary were wing-shaped river islands or sandbanks, as if it was

low tide. It was astonishing, a map of the familiar; it was our local river, as seen by a hawk' (2012, 30). The sense of wonder and the uncanny created by this technique destabilises and awes the reader, offering new connections and novel ways of seeing the natural world. Jamie's mode of paying attention and startlingly open perception maintains the uncanny otherness of the natural world whilst also allowing the reader to cross the imagined gulf created by scientific or expert writing, and to be put directly in contact: 'to make the unknown somehow manageable, comprehensible, to partially domesticate the wild without usurping its innate magic' (Bell, 132). Both writers undercut the extractive, masculine perspective that has historically dominated essays of the nature and travel writing genres in favour of an essay form that perfectly reflects the practice of everyday attention, and which posits this as an ongoing relation of openness, wonder and connection.

The gifts of the everyday

Kimmerer's imperative to pay attention to the world as 'an ongoing act of reciprocity', one which 'sharpens our ability to respond' (2014), imbues the question of attention with a gift sensibility that resonates with the work of both Jamie and Renkl.[30] For writing about care for the natural world within a capitalist era of alienation and thoughtlessness, the idea of the gift – as emerging from Indigenous principles of relationality, reciprocity, obligation, and gratitude (Kimmerer 2013, 2014; Kuokkanen 2004, 2006, 2007; Liboiron 2021a) – can be read as a counter to these forces. Thinking with Kimmerer, Renkl and Jamie's essays can be said to reciprocate through attention to the natural world specifically by bearing witness to the overlooked that exists within the everyday. Contrary to the idea that 'its distinctiveness lies in its lack of distinction and differentiation' (Felski, 80), the everyday world that Renkl and Jamie render is not just one of cleaning, caring, and

[30] It is vital to acknowledge the Indigenous heritage in ideas of gifting. The notion of the gift is a structuring principle in many Indigenous people's worldviews, but, historically, has also been written about by anthropologists, ethnologists, feminists and other Western scholars, such as Marcel Mauss, Genevieve Vaughan, and Lewis Hyde. However, some of this work is appropriative and oversimplifies Indigenous gift paradigms, whilst failing to elevate Indigenous voices or acknowledge the damage that colonialism and Western knowledge traditions have exacted upon Indigenous peoples. It is imperative to recognise the historical and ongoing context of colonial injustice in which these dynamics are grounded in, and to recognise that learning from and amplifying Indigenous scholars' worldviews on the gift is important, but if this is not to be extractive it requires proper citation, and as Sami scholar Rauna Kuokkanen writes, 'engaging with the very principles of the gift – establishing and sustaining continuous relationships for the well-being of all' (2006, 269).

working, but also one in which moments of awe slip through the gaps. In 'Peregrines, Ospreys, Cranes', Jamie writes about spotting a crane whilst on a local cycle ride during her lunch hour: 'Like some medieval peasant granted a vision, I was kneeling in a field, fixated by this uncanny cross in the sky' (2005, 41). Jamie writes that 'The hair crept on the back of my neck' (2005, 41) – the experience with the crane provoking a sense of rapturous wonder that is powerful and physical. It interrupts the texture of the everyday, bestowing on her a spectacular experience that is both unexpected and precious: 'I raced for home excited as a child, holding its image in my head like a bowlful of blue water – mustn't spill a drop' (Jamie 2005, 41). Elsewhere, Jamie's knowledge of the peregrines nesting behind her house is enjoyed as 'the pleasure of a warm secret. I could watch this uncommon and handsome bird from my own window' (2005, 46). These are examples of the many experiences of wonder that Jamie relates as taking place within the quotidian – extraordinary moments encountered within the ordinary.

Renkl also frequently evokes moments of awe in her experiences of the everyday. Her essay 'Redbird, Sundown' captures a vision of her garden at sunset, described through imagery that gestures to the housing development taking place all around it: 'the black branches spread out on a flat plane as if cut from construction paper, as if pasted in delicate tracery on an azure scrim' (2019, 108). But this mundane suburban scene is suddenly eclipsed by the blazing presence of a small bird:

> The cardinal perched near the top of the tree bursts into radiance, into flame, and for that moment nothing matters at all […] Never mind. Mind only this tree in winter and this redbird, this tiny god, all fiery light leading to him and gathered in him, this lord of the sunset, this greeter of the coming dark (2019, 108).

Like Jamie's crane, the cardinal punctures the fabric of the everyday. Although dwarfed by the scale of the human impact around it, this 'tiny god' gifts Renkl a momentary experience of wonder so powerful that it stops time and renders the rest of the world and its spectacular life temporarily into obsolescence.

However, in line with Haraway and Kimmerer's assertion that response-ability and reciprocity require attending to both 'the beauty and the wounds […] the mountain and the mine', Renkl and Jamie write not only about the wonder in the everyday, but

also about the crisis – the other end of the register of the spectacular. If the everyday has often been synonymous with a kind of stasis, with 'habit, sameness, routine […] both the comfort and boredom of the ordinary' (Felski, 89), which remains unchanged throughout history and unaffected by modernity, then Renkl and Jamie subvert this by highlighting the disconcerting, sometimes extreme changes in the everyday realm, which is vulnerable to the same global forces that make themselves known in the sensational events of earthquake, fire and flood.

For Renkl, the struggle of holding together life and death; birth and decay; beauty and violence in a changing world forms the tension at the heart of her book. Throughout her essays she foregrounds her understanding that 'the shadow side of love is always loss, and grief is only love's own twin' (2019, 7). And she makes confronting this a part of her life's work. For example, amidst beauty and wonder, Renkl also foregrounds the extreme drought taking place in the American south: 'The earth is cracked, constricted, a bloodless sore. Leaves that should be a hundred different colours are dusty and faded. In the garden, the soil is powder; brown stems lift from it as though they'd never had roots, as though they were formed by heat and air' (2019, 169). Rather than using a national or global scale, she zooms in on the local, highlighting the pervasiveness of the climate crisis as something that occurs at home as well as in an external 'elsewhere': 'Everyone is talking about the drought; everyone is worried, even in this town' (2019, 169). At a hyperlocal level, she sees the unsettling evidence in her own garden: 'Every morning I drag the hose out and fill the birdbath with water. The desperate robins hardly wait for me to turn away before they crowd the edges of the shallow dish to drink and drink and drink' (2019, 169).

The climate crisis also shadows much of Jamie's work. In *Findings,* published in 2005, Jamie writes about standing in her garden in a 'dry April' (2005, 29) and noting that 'it's unseasonal, but all weather is unseasonal nowadays' (2005, 32). Fourteen years later, in *Surfacing* she is more pointed, frustrated by global inaction when the increasing effects of the climate crisis are evident in everyday life and no longer possible to ignore:

> The world warms. Last winter was the wettest; no snow or ice to speak of, a flash of blue sky was rare as a comet, the nights were starless and lachrymose. The TV news showed floods and sandbags, householders

> weeping as they cleared the sodden mess. There were arguments about land management, flood-plains, deforestation. Commentators intoned, “Is it climate change?” Well, you thought sourly, if it walks like a duck and quacks like a duck, it’s a duck (Jamie 2019a, 4).

Jamie also connects this crisis with the domestic world through a rendering of the unhomely. In an unusual move for her 2005 collection, in which she ‘was right in the thick of the childhood years’ without ‘the time or resources to go far’ (qtd. in Crown, 2012), Jamie travels away from her home to the Hebridean island of Ceann Iar. However, on this uninhabited island she finds herself transported right back to the domestic sphere by the tide of plastic that chokes its beaches:

> They had their own fascination, the shampoo and milk cartons, the toilet cleaner bottles we could turn over with our feet. Though the colours were faded and the labels long gone, we knew their shapes, had seen them ranked in supermarkets and hardware stores. Brushes, masking tape, training shoes, orange polypropylene net (2005, 59).

Strangely out of place, yet uncannily familiar – this plastic rubbish is indicative of the increasing power of the mundane in the Anthropocene, in which we have become haunted by the ‘unruly material afterlife’ (Macfarlane 2019, 320) of our own creations. Jamie’s work can therefore be read as bringing the crises of the Anthropocene home on two levels, by paying close attention to a ‘wild’ that has become uncannily mundane, alongside a home that has become increasingly unhomely.

Jamie and Renkl attend to the everyday as a realm of overlooked awe and wonder but also of crisis and vulnerability: of drought-stricken birds, cracked earth, flooding, and plastic pollution. Indeed, vulnerability is a key theme in the work of both writers, and there is a sense in their essays that the proximity that parenthood and their other caring roles bring them into with the messy business of birth, dying, survival and loss yields a greater awareness of vulnerability – not only of humans, but also of more-than-humans and whole ecosystems. Louisa Gairn traces a shift in Jamie’s poetry after she has children in which she begins to mingle images of the natural world with childbirth, breastfeeding and transformation, playing with constructions of nature and femininity. Gairn writes that ‘Jamie’s experience of motherhood has provoked in her writing a heightened sense of the fragility and transience of the natural world’ (240).

Although this assertion risks associating an understanding of the natural world with heteronormative reproduction, in Jamie's work we can undoubtedly recognise that her experiences of childbirth, care work, and domesticity are coupled with a recognition of vulnerability. *Jizzen*, Jamie's 1999 collection of poetry is shaped by the theme of childbirth, which Juliet Simpson writes is figured 'as a plenitude of the ordinary' (71) and 'is charged with an abrupt luminosity of extraordinary connection that patterns the animal and earthy' (71). In the poem 'February', images of domesticity and childrearing are coupled with images of wildness: 'hoisting the wash/ a rare flight of swans/ hills still courying snow' (Jamie 1999, 14); 'to the day of St Bride, the first/ sweet-wild weeks of your life/ I willingly surrender' (Jamie 1999, 14). In this sense, childbirth, care, and domesticity are intrinsically hitched to an intimate sense of vulnerability and transience: the rarity of the geese, the melting snow, the mother surrendering to the 'sweet-wild' needs of her infant.

Concerns for domesticity and vulnerability also appear in Jamie's prose work in *Findings*. In 'Fever', one of the ways in which her acute anxiety about her seriously ill husband manifests itself is through a magnified alertness to the material world around her. She writes: 'In the hours when he slept, and the children were at school or nursery, a rare, spacious elegant air came over the house. I sat on the step […] and noticed the bright cobwebs under the gutter' (Jamie 2005, 102). When her husband goes into hospital, Jamie becomes increasingly, almost painfully aware of fragility, with repeated images of injury, decay, and death. Every time she takes the children to the hospital, they point out a dead starling lying on the roof: 'Its chest cavity was burst open. Carrion crows or something had eaten away at the flesh of its breast, its ribs, its lungs' (Jamie 2005, 112). Taking her children for a walk, her son crushes a spider with a rock: 'The spider was still alive, but three of its legs were crushed against the stone. With the other five it scrambled and scrambled on empty air' (Jamie 2005, 111).

There is a sense that Jamie's experience of her husband's sudden illness has made her alert to the fragility of others, all subject to the same shared vulnerabilities as what Nigel Clark calls 'fleshy, sensuous creatures' (2010, xiv) on a volatile planet. David Farrier (2015) interprets Jamie's awareness of death and violence using Deborah Bird Rose's gift sensibility. Reading Jamie's essay 'Peregrines, Ospreys,

Cranes' alongside Baker's *The Peregrine* and its emphasis on pesticides and extinction, Farrier locates what Rose called 'the howling of living beings in a time of death' (qtd. in Farrier 2015, 744). This howl expresses loss and grief, but also the understanding that 'Life is in the gift of death' (Farrier 2015, 756). The recognition of this gift cycle – which we are all, human and more-than-human, a part – enables an understanding of 'a more profound, shared vulnerability' (Farrier 2015, 756), and therefore interconnectedness.

Farrier highlights this dynamic in Jamie's *Sightlines* essay 'Pathologies', in which she visits a pathology laboratory after her mother's death to learn about a version of 'nature' that incorporates 'our own intimate, inner natural world, the body's weird shapes and forms' that 'sometimes go awry' (2012, 24). In the lab, Jamie views a biopsy slide through a microscope and perceives 'a pink countryside, a landscape […] an estuary, with a north bank and a south […] it was our local river, *as seen by a hawk*' (qtd. in Farrier 2015, 755, emphasis in Farrier 2015). In Jamie's confrontation of the 'animal body, available for cancer and infection and pain' (Jamie qtd. in Farrier 2015, 756), and her 'conflation of inner and outer worlds' (Farrier 2015, 755), Farrier reads a 'deeply Latourian enfolding of human and nonhuman, organic and in-organic actants' (2015, 754), in which attentiveness to death and violence yields not only an awareness of shared vulnerability, but also 'a greater appreciation of connectivity' (2015, 755).

This gift sensibility and the appreciation of more-than-human interconnectedness that it yields can also be recognised in Renkl's essays. Like Rose, Renkl understands that 'This live thrives on death' (Renkl 2019, 20). She evokes Rose's assertion that 'any given group or population is formed through its death narrative' (Rose 2012, 130) in her essay 'Stroke', which describes her mother's death:

> Earth and air won't cease their quarrel. Tornadoes take up their form in the Midwest, a writhing cone of soil and breath and bite. Hurricanes shoulder and churn off the Gulf coast, each one a gray ferocity, a roaring violence of roiling water. Volcanic ash rises in the Philippines. Air becomes mass; dust becomes rock; the sky is raining fire, and no hissing rain will come to cool it. The ocean floor cracks open in the Pacific, heaving waves of nausea across the surface of the sea. A scar down the middle of the Mississippi River unzips and fills the

> world with livid water. In Nashville, a brain breaks open. In the universe, a star folds in on itself. And God said, *Let there be darkness* (2019, 165).

Renkl's mother's stroke, 'a brain break[ing] open', is just one of multiple, concurrent cosmic events of violence, transformation, and destruction. Language of embodiment – of tornadoes as 'breath and bite', hurricanes that 'shoulder', and tsunamis as 'heaping waves of nausea' – further evoke both the cataclysmic violence of a stroke, and the multiscalar interconnectedness of planetary life. Like these cosmic events, the death of Renkl's mother is paradoxically both world-ending and perfectly normal, part of the material cycles and routine mobilisations of a volatile planet (N. Clark 2010) in which death is the gift of life.

Renkl comes to terms with the loss of her mother through a further evocation of this gift cycle, enacted whilst pouring cream into her coffee:

> When I poured just a drip of cream into my cup, it erupted into volcanic bubbles in a hot spring, unspooling skeins of bridal lace, fireworks over a dark ocean, stars streaking across the night sky above a silent prairie. And that's how I learned the world would go on. An irreplaceable life had winked out in an instant, but outside my window the world was flaring up in celebration. Someone was hearing "It's benign." Someone was saying, "It's a boy." Someone was throwing out her arms and crying "Thank you! Thank you! Oh, thank you!" (2019, 219).

Renkl also creates the 'deeply Latourian enfolding' that Farrier reads in Jamie's work, seamlessly interweaving cosmic and planetary actants with the events of a single human life: the domestic ritual of pouring cream into coffee evoking a volcanic eruption, bridal lace, shooting stars. Images of sudden, fleeting movement – bubbles in a hot spring, fireworks above the ocean, stars streaking over a prairie – emphasise the ephemerality of an individual life against the enormity and ongoingness of the cosmos. This enfolding emphasises that the death narrative pervades and connects all life, human and more-than-human, far away and close to home. At the end of the extract, Renkl returns to the human scale and pairs the death of her mother with the creation of new life, thereby cementing the understanding that life is 'an extension of itself into new generations and new species […] from an ecological point of view, death is a return' (Rose 2012, 127). Death promises, as Renkl writes, that 'the world would go on'.

Arguably, Renkl's writing goes deeper into Rose's gift sensibility than Jamie's or Baker's. In her domestic life, Renkl acknowledges that the objective isn't to look past or move beyond violence, death and vulnerability. Instead, she makes staying with this trouble (Haraway 2016b), or learning 'the splendour of decay' (Renkl 2019, 212) a part of her life's work. In her essay 'Nests', Renkl reflects on the 'bloodbath that is the natural world' (2019, 4), and admits that 'oblivion would be easier' (2019, 20), that it would be preferable 'not to know when the rat snake noses aside the tangle of grasses the cottontail has carefully patted into place […] not to fathom that it is slowly, almost mechanically, swallowing the blind babes she has borne for just this moment' (2019, 20). The essay proceeds as a lament for the everyday deaths she cannot 'unsee' or 'save' (2019, 20). But, echoing Rose, Renkl also reflects on the new life that is the gift of all this death:

> But hold very, very still in the springtime sun, and a tufted titmouse will come to harvest your hair and spin it into a soft, warm place for her young. Keep an eye on the ivy climbing the side of the house, and one day you will see a pair of finches coaxing their babies from a tiny nest balanced among the leaves. Hear the bluebirds calling from the trees, and you might turn in time to see a fledgling peer from the hole in the dark nest box, gape at the bright wide world for the very first time, and then trust itself to the sky (2019, 20–21).

These images of birth and sequential, generational continuance are set up in explicit juxtaposition to the losses that preceded them, in order to emphasise the partnership of life and death, splendour and decay. But in terms of the temporalities contained within these scenes, in Rose's words: 'Sequence is not the only story' (2012, 130). Alongside sequential patterns of life and death, Renkl also evokes multiple examples of 'synchronous encounter' (2012, 129): a tit mouse harvesting her hair for its nest, a bluebird becoming a meal for a Cooper's hawk, ivy providing a place for finches to build a nest. In these encounters, 'flows of material being, energy and information' (Rose 2012, 129) move between individuals of different species as they go about their daily business of surviving. The work of sustaining life requires this multispecies synchronous exchange, in which 'Lives are nourished by others, not only members of one's own group, but by others as well' (Rose 2012, 131). When these synchronous encounters interact with sequential time, this intersection is 'a site of flow, a place of mutuality and gift' (Rose 2012, 137) – what Rose calls 'multispecies

knots of ethical time' (Rose 2012 127). Rose teaches us that these knots allow us to see that 'every creature has a multispecies history' (2012, 136); it is 'both itself in the present, and the history of its forebears and mutualists' (2012, 136). Each creature is a 'knot', interconnected with others across different kinds of embodied temporality.

In Renkl's domestic world, she is closely involved in the death narrative of her family, caring for her forebears as they grow old and pass away, and for her children as they emerge into the world, as well as being witness to the death narratives of other species – to 'who lives and who dies and how' (Haraway 2016b, 28) in her garden. But her practice of close attention means that she is also witness to the synchronous gift encounters that occur among different species, as they interact with their 'mutualists' as part of survival. She is even involved in some of these encounters, through the care she provides for those she shares her domestic space with: putting feeders and water stations out, shedding hair for nests, nurturing the right plants for pollinators. Her essays evoke a domestic world that is a dense and lively knot of multispecies ethical time, and they testify to her awareness of the connectivity and mutuality involved in these knots.

Being alert in the domestic world to the 'great patterns of life, death, sustenance and renewal that intersect across species and generations to form flows of life-giving life' (Rose 2012, 139) enables Jamie and Renkl to foster a greater appreciation of connectivity and shared vulnerability on a precarious, multispecies planet. The more-than-human webs of their domestic lives – their webs of noticing, their relational care webs – are alive, pulsing with life and death, gift and encounter, care and witness, all taking place across the embodied temporalities of sequence and synchrony. Their essays testify to their 'thick, impure involvement' in these webs, and they evoke Rose's notion of writing as an act of witness: 'an effort not only to testify to the lives of others but to do so in ways that bring into our ken the entanglements that hold the lives of all of us within the skein of life' (2012, 139). As both witnesses to and participants in webs of synchronous and sequential multispecies gift relations, both writers are able to foster response-ability, which is 'about both absence and presence, killing and nurturing, living and dying – and remembering who lives and dies and how' (Haraway 2016b, 28). In the everyday, webbed world, they pay attention to both 'the beauty and the wounds, the old growth and the clear-cut, the

mountain and the mine' (Kimmerer 2014), and this attention enables them to respond and reciprocate with acts of care, but also, acts of attention and witness.

Attention as resistance

This reading of attention through ideas of gifting in Jamie and Renkl's essays is further developed through a consideration of their explicit positioning of attention as a counter to capitalist forces. As discussed, the enemy of attention in the Anthropocene is often said to be thoughtlessness and inattention, arising from the inability to think outside of a capitalist, extractive imagination that perceives the natural world as 'external, as tap and sink' (Moore 2017, 601). Mark Fisher's concept of capitalist realism describes capitalism as a 'pervasive atmosphere, conditioning not only the production of culture but also the regulation of work and education, and acting as a kind of invisible barrier constraining thought and action' (16). Fisher writes that capitalism is so completely pervasive that it is 'not a particular type of realism; it is more like realism in itself' (4). Like what Timothy Morton calls a hyperobject (2013), we are unable to comprehend capitalism as a thing in its entirety; it 'seamlessly occupies the horizons of the thinkable' (Fisher, 8). As such, it is impossible to imagine an alternative to it, or indeed anything outside of it.

In the face of this pervasiveness, Jamie and Renkl's work can be read as offering an opportunity for a resistance to capitalism that is made not from an imaginary outside, but from the inside – from the overlooked, everyday realm. Jamie has been explicit about her use of attention as a mode of resistance for nearly twenty years. In 2002, she first wrote about 'repairing and maintaining the web of our noticing, [as] a way of being in the world'. In 2005, in *Findings,* she again described 'the care and maintenance of our web of noticing, the paying heed' (109), which she likened to 'a kind of prayer' in the context of her husband's illness – a way of protecting him from harm. In a *Guardian* interview in 2012, Jamie furthered this by underlining the connection between attention to the natural world and resistance to capitalist powers, writing that she feels she is 'striking a tiny blow' to 'the scandalous business of land and land ownership', by 'getting out into these places, and developing a way of seeing which is not theirs but ours' (qtd. in Crown). In 2019, she developed this idea into what she calls 'a web of attention-resistance':

> But why not privately mark a moment of attention as a moment of resistance? Who's to say it's not? When we do that – step outdoors, smell Autumn in the wind, seriously notice – we're not little cogs, little consumers, in someone else's machine. We are not doing what the forces of destruction and inattention want us to do. It is our way of being, not theirs. It's the simplest act of resistance and renewal (2019b).

For Jamie, stepping outdoors and noticing what is happening is also a stepping away from the clutches of capitalism. The relation she sets up between capitalism and 'serious noticing' is reinforced in her latest collection of essays, *Surfacing*. In 'The Eagle', her close observation of an eagle that she spots whilst driving is disrupted by the intrusion of an abandoned building with 'Keep out' signs written on it:

> What danger could there be in a ramshackle old hut? And who would go there, anyway? In that moment, in that change in the texture of my attention, a lurch like when you drive from smooth tarmac onto cobbles, I lose sight of the eagle altogether. It's vanished, its mate has vanished, and there's nothing to do but drive on (2019a, 104).

Clearly, issues of ownership, alienation and the commodification of place are the enemy of attention for Jamie. And in turn, noticing has the potential to disrupt these processes, restoring complexity and particularity to sites and things that have been abstracted, alienated and homogenised. In this sense, Jamie's work puts into practice Tsing's recommendation that, in the face of capitalist alienation and ruination, 'our first step is to bring back curiosity' (6) and the 'arts of noticing' (132).

The scale of Jamie's 'web of attention-resistance' is important. Jamie often manipulates scale in order to resist cliches, tropes, or romanticism, whilst wrongfooting the reader and destabilising their assumptions about the natural world. For example, in 'Pathologies', an excised liver becomes an estuarine landscape (Jamie 2012, 31), a dividing cell becomes 'two boxing hares' (Jamie 2012, 32) and severed arteries recall 'climber's gear, abandoned on a rockface' (Jamie 2012, 30). The result is that 'the outer world' flies 'open like a door' (Jamie 2012, 37), revealing that which our daily inattention and presumption obscure. In a world of capitalist realism, Jamie prompts us to ask, 'what is it that we're just not seeing?' (2012, 37). As well as a destabilising scalar dynamism, the small as a scale is also significant in

– and beyond – Jamie's work. That Jamie calls her attention-resistance a 'tiny blow' indicates the nature of its emergence from *within* the capitalist sphere. Her actions may be microscopic in comparison to the 'pervasive atmosphere' of capitalism, but the fact that they emerge from the small, domestic, everyday world, where no one would think to look, is significant. Jamie is not the only female nature writer to interrogate the function of scale in resistance, and to champion the power of the small and quotidian against the enormity of the masculine, capitalist realm. In *Birds Art Life Death*, Kyo Maclear writes extensively about 'the perverse audacity of someone aiming tiny' (59). Like Jamie, she sees this as a way to oppose or counter the 'overreaching at the heart of Western culture' (Maclear, 59).

Renkl also evidences this type of attention-resistance and demonstrates another way that it can be woven from inside the capitalist sphere. For her, attention-resistance emerges from her own garden – the domestic garden and its $89 billion a year industry being, as Franklin Ginn writes, 'intimately networked within capitalist modes of production and consumption' (9). Renkl portrays her garden as a small oasis for wildlife in a place dominated by capitalist development: 'an unkempt lot in a neighborhood where most of the lawns are pristine' (2019, 195). Renkl is surrounded by those who pay to destroy wildlife rather than preserve it, with one neighbour proudly exclaiming, '"Last summer there was a big ball of bees up in the crepe myrtle next to my garbage cans […] It took me a whole can of Raid to kill them"' (2019, 216). Renkl's garden is a small site of resistance to this destruction, and she enacts this through practical action – acts of care that result directly from her noticing the other species in her garden, and that respond to the way in which it is becoming increasingly difficult for them to sustain their lives there:

> I put up these nest boxes in the first place because developers keep cutting down trees to make room for bigger houses, and every year there are fewer nesting places for the wild creatures that were here first. I planted this pollinator garden because the weedy flowers that once grew in the unkempt yards and rough margins between the houses of this formerly working-class neighborhood no longer have any place in the manicured yards of what my neighborhood has become (2021a).

Renkl's essays are full of practical action she has taken 'to maintain, continue and repair' not only, what Tronto calls, 'our world', but the world that she understands is

shared with more-than-human others. She puts out birdbaths and multiple feeding stations, sets up several bird-specific nesting boxes in carefully thought-out locations, installs predator baffles (guards), plants pollinator gardens, rears butterflies, and always refrains from any garden maintenance activities that might disturb nesting. Her care labour fits within Puig de la Bellacasa's definition of care as a 'concrete work of maintenance', which emerges from 'ethical and affective implications', and provides 'a vital politics in interdependent worlds' (2017, 5).

Indeed, unlike more traditional nature writing that strives for objectivity, Renkl is often both political and unflinching about foregrounding the ethical, affective and emotional dimensions of her care labour. Her essay 'To the Bluebirds', directly addresses the bluebirds that inhabit her garden – elsewhere referred to as 'my bluebirds—not "mine," of course, but the bluebirds I loved' (Renkl 2019, 2). She acknowledges all the ways in which it may not be an ideal place for them: 'I know: there are too many dogs in the yard; and the giant house going up next door is too much hulking house lumbering too near the little nest box, never mind the beeping, growling trucks' (Renkl 2019, 14). She then asks the birds to note all the work she has done to mitigate this, making her garden a better habitat: 'Look at the predator baffle, much larger than last year's, and the now-bare ground where before the brush sheltered house wrens. Look: see the sturdy birdbath I've moved to your side of the yard, and the special feeder designed to hold live mealworms' (Renkl 2019, 14). Renkl is candid about the way in which this care labour has been borne out of emotional, affective, even sentimental motivations:

> The greatest token of my love for you is that every day now I reach into a mesh bag full of live mealworms and pluck them out, one by one, and drop them into the ceramic cup in the feeder […] they curl their segmented bodies around my finger, and they lift their nubby heads and rebuke me with their non-existent eyes, but I harden my heart to their plight and plink them into that little white cup, and I walk away as they twist and curl around each other in search of purchase. They are my gift to you on these cold days when nary a cricket stirs in the dry grass (2019, 14).

Renkl's care labour can be understood as 'affective labour', which Neera M. Singh describes as a form of gift that opposes alienated, capitalist labour. Singh builds on

the work of Michael Hardt and Antonio Negri to describe affective labour as a blend of emotional, embodied, and cognitive labour – engaging 'at once with rational intelligence and with passions or feeling' (2013, 191). Specifically, Singh develops this idea in the context of her work with the villages of the Odisha forest region in India, in which she argues against environmental policy-making that treats humans as rational economic actors who require financial incentives in order to care for the natural world (N.M. Singh 2013; 2015). Instead, she calls for an understanding of human ecological care as catalysed by reciprocity, affect and empathy. Singh noted that the embodied caring practices the villagers undertook as a community to look after their forest – gathering, observing, removing weeds and creepers, and patrolling to protect from pilferage – created affective ties between them and the forest. This resulted in the forests becoming 'sites of "affective sociality" where affective relations with growing plants, trees, soil and animals emerge' (N.M. Singh 2015, 56). It also led to the emergence of new subjectivities for the villagers as '*jungle surakhayakaris* (forest conservationists)' (N.M. Singh 2015, 56), and new forms of sociality as they came together as a community and even entered into gift-giving relations with neighbouring villages. Affective labour echoes Haraway and Kimmerer in the sense that it emerges from our capacity to be affected by other bodies, both human and more-than-human – to notice and respond to them, forming mutualistic relations of gift-giving.

A clear example of Renkl's affective labour is found in her care for pollinators. She responds to the decline of monarch butterflies by creating a pollinator garden, planting 'coreopsis and coneflower and sage and lavender and bee balm and a host of other wildflowers' (2019, 215) and 'a flat of native milkweed plants' (2019, 216). She even attempts to breed them herself, ordering caterpillars in the post and keeping them in a carefully designed butterfly garden with 'an entire bed of native milkweed plants' (2019, 182), and 'a sturdy wire border covered by mosquito netting, to protect the caterpillars from birds and spiders and wasps and parasitic flies and praying mantises and the hundred other predators waiting outside' (2019, 182). Through this work, Renkl is buoyed by a sense of individual agency in the face of catastrophic global loss that can be unusual in contemporary nature writing, which often takes a more elegiac tone – writing as witness rather than actor. Renkl writes:

> I am old enough now to have buried many of my loved ones, and loss is too often something I can do nothing about. So I lie awake in the dark and plot solutions to the problems of the pollinators—the collapse of the honeybee hives and the destruction of monarch habitats—in the age of Roundup (2019, 215).

Renkl doesn't present this conservation care labour as a grandiose act of heroism or even presume that her efforts to partially repair the damage that global capitalism has done will work. Instead, her care labour is simply a response to her understanding of environmental threat: 'Improving the survival odds of wildflower seeds by letting them winter in my refrigerator, unnatural as that may seem, is my way of responding personally to an unstable climate' (2021a). This personal response, resulting from affective and emotional motivations, brings her into a form of multispecies collaboration with the wildflowers, as she gives them the gift of winter shelter in exchange for the nourishment they will provide pollinators with in the summer and the joy this will bring her.

Like the Odisha villagers, Renkl's care labour has not only affective origins, but also affective outputs, which 'diminish the pain and sadness associated with the degradation' (N.M. Singh 2013, 192) of her local landscape:

> …[when] the news of the world, already bad, suddenly becomes much worse, the weight of belonging here is a heaviness I can't shake. But then I think of the glister of a particular morning in springtime. I think of standing in the sunshine and watering the butterfly garden [….] I think of the caterpillars on the milkweed plants, unperturbed by the overspray, and the resident red-tailed hawk gliding overhead, chased by a mockingbird and three angry crows, and the bluebird standing on the top of the nest box protecting his mate, who is inside laying an egg (Renkl 2019, 67).

The joy and satisfaction that emerges from seeing the flourishing of wildlife in her garden – the results of her affective labour – help to sustain Renkl in the face of the global environmental crises, and in turn, to galvanise her sense of hope and motivation for further action:

> I grieve what is happening to the natural world, and I understand perfectly well that my own efforts to help are far from enough. But when I watch a bluebird introducing his mate to the nest box I've installed for them, it's impossible to

> give up. When the tiny hummingbirds make it back from far across the Gulf of Mexico, it's impossible to give up. And a seedling muscling through the soil, carrying its old, sleeping self into the light, never fails to give me hope. It never, never, never, never fails (2021a).

In Renkl's work, we recognise the veracity of Singh's claims for the conservation potential of caring relationships with the natural world that emerge from an economy of 'gift, reciprocity, and affects' (N.M. Singh 2015, 59).

Renkl also makes clear the ways in which her affective labour exists within the global capitalist system. In her efforts to breed monarch butterflies, Renkl reflects upon the ways in which she is 'invested in trying to save them' (2019, 182). Primarily, her investment is emotional and affective – emerging from an awareness of the monarchs' decline and the care she feels for them. But she doesn't try to hide the financial investment that exists in parallel:

> How literally am I invested? I try not to count up the costs for milkweed, fencing, mosquito nets, the caterpillars themselves. But I find myself doing the math each time a caterpillar goes missing, recalculating what I will end up having paid for each monarch that ultimately survives. I know I am fast approaching the butterfly equivalent of what my country friend calls the forty-dollar homegrown tomato (2019, 183).

In order to care and conserve on a local, affective level, Renkl must first purchase products sourced and manufactured on a global scale, profiting businesses near and far. But this market exchange is just one form of interaction amongst many involved in her care work, and it is an alienated exchange as opposed to the embodied intimate encounters that she has with the monarch caterpillars themselves, as well as with the plants she chooses for their nursery and the surrounding predatory wildlife she seeks to protect them from.

Through these interactions emerge the immaterial outputs of connection, care, solace, joy, understanding, hope and love. These emergent affects create and define Renkl's ties with the natural world and are the overriding motivator for, and product of, her labour. And it is here that we find the real resistance to capitalism. Hardt and Negri write that these biopolitical, immaterial products of affective labour are 'always excessive with respect to the value that capital can extract from it because capital

can never capture all of life' (2004, 146). Like the queer, emotive currents that Savoy seeks swirling outside of the archive's control, the affective dimension of Renkl's care labour exists *in excess* of capitalism – it is in excess of that which capital can extract from. Capitalism can extract profit from her financial investment in tools and resources, but it cannot touch the affective investment which both motivates, results from, and characterises her care labour. Instead of being alienated from ethical or affective dimensions, like capitalist labour, Renkl's care labour 'makes ethics a hands-on, ongoing process of recreation and relation', embedded within 'a vital politics in interdependent worlds' (Puig de la Bellacasa 2017, 5). Her care labour is a gift that makes her response-able, reciprocal for life in these interdependent worlds. Renkl and Jamie show us that through the intertwined processes of care and attention, we can find ways to resist the capitalist system from within, and that it is in the everyday, domestic realm that these overlooked gift processes emerge most strongly.

Conclusion

In this time of 'unprecedented looking away', Jamie and Renkl's essays provide a blueprint for the mobilisation of 'serious noticing' and 'arts of attention' as forms of resistance. Engaging with the question of where the Anthropocene is found, this chapter has read their essays as testament to the overlooked world of the domestic, which is not sheltered from the effects of the Anthropocene, but is instead a site of rich, meaningful encounter with the natural world in a time of planetary emergency.

Renkl and Jamie's foregrounding of the domestic world marks a departure from more masculine nature and Anthropocene writing that would typically overlook or 'background' this setting as one of mundane duties, stasis, and feminised life. The everyday worlds in Renkl and Jamie's writing are vibrant, dense with human–nature relations, and rich in encounters that are both ordinary and wondrous, both quotidian and shadowed by crisis. In comparison to many male nature writers, seemingly unfettered by obligations or ties, Jamie and Renkl make a point of centring their domestic responsibilities as mothers, daughters, wives, and caregivers. Within these roles, attention isn't a special or intentional act in their writing, it is a disposition. And this disposition is grounded in the limitations of a human perspective and a caregiver's daily life. Birds and animals are glimpsed out of windows between

domestic tasks or spotted on a lunch break; relations are formed through and around the obligations of everyday life. Their caring roles, responsibilities and domestic settings do not limit their appreciation of the natural world; they make it possible.

Furthermore, Jamie and Renkl's care for the natural world is inextricable from their care for home and family; they are part of the same ecology. In this sense, their writing evokes living webs of care, formed of dense, decentralised relations. These webs are made and maintained through acts of attention and care – 'thick, impure involvement' in the world – and they comprise multispecies relations of attention, witness, care, and gifting that move on multiple axes of embodied time. Subverting male authority and the extractive imperative for conclusion, Jamie and Renkl's essays are inconclusive, reflecting not the expertise of the author but the experience of a human mind caught in the act of looking, in the process of attending to these webs of care.

Like Savoy, Renkl and Jamie make no claims on innocence or neutrality, and never attempt to situate themselves as external to or unimplicated in the capitalist systems of destruction that threaten human and more-than-human life. Indeed, they show us that resistance to the pervasive atmosphere of capitalism isn't made from an imaginary outside, but from inside – from a space in which no one would think to look. The daily affective labour of watering, sowing, planting, feeding and paying attention comprise small-scale acts of resistance that help to 'maintain, continue and repair' shared worlds. Along with their implicit decentring and subversion of dominant masculine traditions – both in writing and in connecting with the natural world – their essays are full of 'tiny blows' to Anthropocene forces that would cultivate only apathy and alienation.

Renkl and Jamie's essays illuminate multigenerational, multispecies domestic life as textured by care and attention. Through the mobilisation of 'serious noticing', the evocation of a gift sensibility, the ability to stay with the trouble of both life and death, and an ethos of subversion and resistance, they illustrate the domestic world around them as a matter of care. Their essays depict attention in everyday life as the opportunity for responding to – and being response-able for – the messy business of living and dying in shared Anthropocene worlds.

Chapter Three

Staying afloat in the Anthropocene: The swimming writing of Nina Mingya Powles and Ingrid Horrocks

Introduction

> *I take my iPod, a bottle of water, a towel and a pack of Oreos down to the pool next to the car park. All summer, the cool, chlorinated water is a blessing. I float on my back under the corrugated plastic roof, which collapsed last winter under the weight of sudden snow. The lifeguard plays games on his phone while I do my slow strokes, alone. The heat can't touch me: a girl swimming is a body of water.*

Taken from poet and writer Nina Mingya Powles' memoir *Small Bodies of Water* (108), this extract is a far cry from what many of us have come to expect in a swimming memoir. Wind-tossed ocean waves are replaced by a chlorinated swimming pool with a plastic roof; a romantic background of deserted clifftops is substituted for a car park; and rare species of seabird are swapped for the company of a disinterested lifeguard on his smartphone.

Powles' extract is notable because historically, both swimming and writing about swimming have been the exclusive remit of the white male. James Bradley describes how the 'idea of swimming as a symbol of male courage and endeavour' (2021) was cemented in the eighteenth and nineteenth centuries by romantic figures such as Lord Byron. In his seminal work of swimming history, *Haunts of the Black Masseur: The Swimmer as Hero*, Charles Sprawson describes how Byron travelled around Europe with other privileged poets and writers, immersing himself in its waters and undertaking heroic swimming challenges, such as the infamous stretch across the Hellespont in 1810, which he wrote about at length. He also found solace in the water, and regularly 'sought relief from moods of gloom and revulsion in swimming' (Sprawson, 113), including from the deaths of both his mother and his friend Percy Bysshe Shelley. Like many of his contemporaries, Byron was most concerned with his own romantic, masculine accomplishments and the sublime thrill of water – what it could offer him. He was 'not intrigued by what lay below the surface' (Sprawson, 105), in fish, plants, aquatic ecosystems, history, or the specificity of watery places.

In parallel, Bradley notes that in the nineteenth century, swimming also became absorbed into 'the racial politics of its time' as an example of British imperial superiority, with 'the civilized and scientific nature of English swimming contrasted with the vulgar and animalistic practices of other cultures' (2021). Written in 1992, Sprawson's text charts and celebrates this masculine, colonial swimming history, in thrall to the romantic, muscular feats of swimmers past and present. Sprawson admits to his own long-held 'conception of the swimmer as someone rather remote and divorced from everyday life […] introverted and eccentric, individualists involved in a mental world of their own' (5). In her introduction to the 2018 edition of Sprawson's text, Amy Liptrot highlights this side of his work, which features 'more heroes than heroines' (2018, xi) and finds 'a particular resonance in the idea of taking on more and more daring feats until dragged under' (2018, ix). In Sprawson's text 'swimming is elevated' (Liptrot 2018, ii), and he would not have been impressed, she imagines, with the 'municipal pools, chilly changing rooms or school lessons' (Liptrot 2018, ii) that characterise the ordinary person's experience of swimming today.

Roger Deakin's *Waterlog*, published in 1999, marks a turn away from this heroic, masculine form of swimming. Often cited as the founding text of the wild swimming movement, Deakin's text chronicles his 'frogs eye view' of the British Isles, swimming through the nation's lakes, rivers, ponds and seas. *Waterlog* is personal, filled with sensuous language documenting the experience of being in water, but it is also quietly political. Deakin asserts the importance of access to the nation's waterways, and challenges those who seek to privatise it. Hiding from what he believes is a search party, he recollects: 'I quived silently into the reeds and floated there up to my nose like a crocodile until they had gone, taking a good deal of boyish pleasure from their failure to notice me. The moment it becomes a subversive activity, swimming is that much more interesting' (Deakin, 60).

However subversive and novel, Deakin's text remains an account of a white, middle-class male who has the time and means to undertake a watery odyssey across the country, alone. In this sense, it is not representative and reflects a swimming world still marked by disparity. Recent figures from Sport England show that 95% of Black

adults and 80% of Black children in England do not swim at all, while only 1% of swimmers registered with the governing body identify as Black or mixed race (Walker). This underrepresentation is believed to be caused by issues around access, affordability, representation, social stereotypes and aquaphobia (Byrnes 2020). Historical factors play a part too, with racist, outdated myths and the legacy of segregation still shoring up barriers to the water. Such 'associations between Whiteness and the water, and Whiteness and the swimmer' (Bradley 2021) persist culturally and on the poolside, riverbank, and beach.

One recent shift that has occurred is a surge in women-authored swimming texts being published, including, notably, Liptrot's 2016 Wainwright Prize winner *The Outrun*. These range from stories of personal triumph (Heminsley; Nyad); to memoir (Roper); to texts that explore the benefits of wild swimming and its – sometimes specifically female – history (Congdon; Landreth; Runcie; Sherr; Wardley); to 'water cure' narratives that depict writers using swimming as a practice of recovery (Fitzmaurice; Norquoy; Whitworth). This has been an important shift in popular ideas about who gets to write about water, with women-authored swimming texts far outnumbering those published by their male counterparts. However, for the most part, it does remain white and middle-class. Many of these texts have also utilised similar traditions to those outlined by Sprawson. Whether as a sublime, tempestuous stage upon which to pit oneself against the elements, or as a source of recovery and reconciliation from malaise, water is largely a means to an end. Even if experiences in water are highly personal and meaningful – and beautifully narrated – they often demonstrate immersion in water as a way to achieve something.

However, a burgeoning new sub-group of women writers have begun to disrupt these standards, bringing diversity into swimming literature and demonstrating new ways of relating to and being in the waters of the world. Nina Mingya Powles is a writer of mixed Malaysian, Chinese, and Pākehā (white New Zealander) heritage. As well as a creative writer, she is a poet, zinemaker, and founding editor of a small press publishing limited edition pamphlets by Asian poets. Powles' memoir, *Small Bodies of Water*, was published in 2021 by Canongate after winning the inaugural Nan Shepherd Prize in 2019. These contexts are clear in her writing, as issues of representation, power and inclusion are key. Powles' text comprises a series of

essays in which immersive experiences in water percolate through reflections on challenging subjects: colonial history, identity, migration, belonging, racism, and climate breakdown. Ranging widely over continents, languages and cultures, the essays form a kind of non-chronological, loose bildungsroman, as Powles shares her experiences in water from childhood, her teenage years, and her twenties, moving between her Wellington home in Aotearoa New Zealand, Shanghai, Malaysia, and London – all places either lived in or inherited – in writing that shifts on the border between poetry and prose.

Ingrid Horrocks is a Pākehā writer, poet and academic, also from Wellington. Horrocks resigned from academia in 2022 to focus on writing, and currently holds an Honorary Research Associate position at Massey University in Wellington, where she was previously Professor of Creative Writing and English. Having published research on women's travel writing, including 18th-century figures such as Mary Wollstonecraft, Frances Burney and Charlotte Smith, Horrocks' work is informed by an awareness of historical and present-day gender biases in the nature and travel writing genres, as well as an understanding of the nature writing tradition more broadly. Her own memoir, *Where We Swim,* also published in 2021, is formed of loosely grouped essays that immerse the reader in both bodies of water – seas, rivers, lakes, waterfalls – and the everyday experience of domestic family life. Her experiences in water are quotidian, family-oriented, and non-heroic, but they do provide space for thinking through her relationship with place in different contexts – as a mother, as Pākehā in Aotearoa, as a woman, and as a human being on a volatile, changing planet.

Powles and Horrocks shape a narrative tradition that is not escapist but everyday, in which outdoor bodies of water are not valued over indoor chlorinated pools, and swims are 'the shimmering crests on the waves of routine and unremembered days' (Liptrot 2018, xi). Horrocks introduces her text with the acknowledgment that the 'dream of watery solitudes' (2021, 5) that texts such as *Waterlog* inspire are 'too close to the act of an explorer, or an old-school nature writer' (2021, 6), and replaces them with an understanding of swimming as 'right there at the breathing core of things' (2021, 6). She writes 'lyric essays with mundane movements at their centre' (2022) – walks to school, family trips to the beach. Powles and Horrocks' texts are as

political as they are personal, with both writers' poetic explorations of swimming paired with a concern for issues of access and privilege, and an interrogation into the colonial, political and social contexts that inform their places in the world. Along with writers such as Jessica J. Lee, Elizabeth-Jane Burnett, Bonnie Tsui, and Leanne Shapton, Powles and Horrocks write not about solitude, solace, or the sublime, but community, material pleasures, and sharing spaces with human and more-than-human others. They are not elitist or heroic, but intensely self-aware and prone to moments of fear and vulnerability.

Rather than upholding the Eurocentric humanist dualisms of nature and culture, and the delusion of the body as a bounded entity separate to its environment, Powles and Horrocks reflect more contemporary, new materialist understandings. They are alive to relationality and interconnection in shared worlds, in what Astrida Neimanis calls the 'more-than-human hydrocommons' (2) in which we are all connected by and through our worldly waters and 'our bodies enter complex relations of gift, theft, and debt with all other watery life' (3). Powles and Horrocks take pleasure and interest in their own material embodiment and their corporeal interactions with water, often through what Stacy Alaimo calls 'trans-corporeality, in which the human is always intermeshed with the more-than-human world' (2010, 2), 'inextricably part of the flux and flow of the world that others would presume to master' (2010, 17). This material consciousness runs parallel to an acute awareness of how they are located politically in the world, which is attentive to specificity and difference, and questions how this unique positioning enmeshes them in wider watery webs of access, privilege and belonging.

Powles and Horrocks' texts are concurrent with each other in space (both branching out globally but finding a home in Wellington), but also time. Both texts were written before and during the global pandemic, and were published in July and August of 2021 – only one month apart. This confluence of their narratives reflects a surging interest – perhaps need, even – for watery spaces after many months of being grounded in lockdown. It also highlights an abiding concern for a planet in climate breakdown, for what it means to live and swim in the Anthropocene. Indeed, issues of water are highly important in an Anthropocene context. Jamie Linton describes how water in the twentieth century – what they call 'modern water' – was generally

taken for granted, ‘most commonly thought of as a resource that could be considered and managed in abstraction from the wider environmental, social, and cultural context(s) in which it occurred’ (6). Modern water was uncomplicated, ahistorical, homogenous, and easy to control by Western, techno-capitalist societies. At the end of the twentieth century, this modern water was scaled up, culminating in ‘the abstraction and representation of the world’s total hydrological stocks and flows’ (Linton, 22) for globally coordinated hydrological management; ‘modern water’ became ‘global water’ (Linton, 162). However, in the Anthropocene this modern/global water imaginary breaks down, with the world’s waterways surging to the fore in many complicated and urgent ways. Extreme watery weather events, including floods, cyclones, acid rain, tsunamis, and droughts abound, along with ‘everyday assaults on the hydrosphere’ (Chen et al, 4), such as toxic pollution, hydroelectric dams, microplastics, aquifer depletion, and ocean acidification.

These events are all connected to and compounded by the creep of rising sea levels, which is, as Elizabeth DeLoughrey writes, ‘perhaps the most powerful sign of planetary change […] producing a new sense of planetary scale and interconnectedness through the rising of a world ocean’ (34). DeLoughrey argues that this has ‘catalyzed a new oceanic imaginary’ in which ‘the largest space on earth is suddenly not so external and alien to human experience’ (34). The threat of the world’s waters has crept to the fore of our imaginations. But rising sea levels will not affect us all equally. Indeed, this entire Anthropocene nexus of hydrological disasters is scored through by a striking asymmetry in who suffers their effects, as well as unequal geographic and social access to water for sustaining life. It is no longer possible to ignore water’s social and political dimensions; ‘all is not well with the waters of the world – nor with the social relations mediated by their flows’ (Chen et al. 4).

Powles and Horrocks’ decisions to turn to water during a time of global climate breakdown reflect blue humanities scholar Steve Mentz’s claim that immersion in water can be a specifically Anthropocene practice. He argues that swimming can be ‘a way of inhabiting our watery planet in difficult times’ (Mentz 2020a, 127), giving rise to a number of Anthropocene perspectives and ways of thinking that will help us to stay afloat in choppy waters. Mentz writes that ‘When we dare to immerse our

small bodies in our globe's watery skin we feel […] nothing like control or mastery' (2020a, 127) but a reminder of our 'own water-filled flesh' (2020a, 127) and its interconnection and interdependency in a watery world. Furthermore, he proposes that, in a volatile Anthropocene context, 'the swimmer's practice of partial order amidst constant threats' (Mentz 2020a, 129) may teach us about vulnerability and the human place in the world. For Mentz, swimming, as an immersive embodied practice, offers itself 'as an ecological meditation for the Anthropocene' (2020a, 131).

This chapter will explore how Horrocks and Powles are moving swimming literature in a new direction. It will examine how their texts engage with blue humanities and new materialist concepts such as Neimanis' hydrocommons and Alaimo's trans-corporeality, in order to evoke interconnected, dynamic watery worlds that they engage with through a practice of embodied immersion. It will then explore how a keen awareness of the importance of relationality, specificity and difference singles their work out from much writing on nature, place, and water, evoking Neimanis' concept of a posthuman politics of location as a key part of Anthropocene living. Finally, it will explore how both writers reflect and build upon Mentz's claim, presenting swimming as an everyday, embodied practice of immersion that responds to the watery Anthropocene world, and that offers the swimmer more fluid, flexible, and communal ways of living through the complex challenges it presents.

Watery theories

This section will briefly map out the key theories that this chapter will engage with. Following on from geography – literally 'earth writing' (Anderson and Peters, 3) – the environmental humanities has long favoured an interest in land over water. The inaccessible and seemingly inhospitable nature (inhospitable to humans, that is) of water has led to the marginalisation of the world's oceans, seas, rivers, and lakes in scholarship. Perceived to be 'at the edge of human consciousness' (Anderson and Peters, 4) and history, the world's waters have been dismissed as othered, empty zones to be traversed, extracted from, or ignored. However, in the last decade or so this has begun to shift with the emergence of the blue humanities, a surging scholarly interest in the waters of the world, which has been buoyed up by what is known as 'the oceanic turn'. The blue humanities recentres the world's waters and reimagines our planet as a wet one, in which water is historicised, specific, dynamic,

and has cultural and social agency. It surfaces histories of water and human entanglement, refusing understandings of water as neutral or empty. These include histories of the Atlantic middle passage, slave ships and 'the hold' (Sharpe 2016; Tolbert; Brand), as well as contemporary realities of the thousands of migrant lives lost to the water whilst seeking refuge on European shores.

Blue humanities scholars are diverse and interdisciplinary, working in a wide range of innovative modes. Alaimo writes that the blue humanities 'is paradigmatic of environmentally oriented scholarship in the Anthropocene, which must reckon with epistemological problems of scale, onto-epistemologies of rapidly altering and utterly entangled lifeworlds, and the urgency of extinction' (2019, 431). Evidence of this turn is found not only in academic circles but in a boom in mainstream publishing based on or in the world's oceans and waters. For example, David Gange's *The Frayed Atlantic Edge* (2019) tells the story of the British Isles from the outside in – focusing on the coastline and moving away from the idea of the nation's metropolitan cities as the centres of knowledge.

As one of the mastheads for this new discipline, Mentz has proposed that the blue humanities requires a new vocabulary, as the terrestrial metaphors that academic discourse has long favoured are rendered useless when thinking with water. His 'deterritorializing terms' (2020a, xvii) include 'Current' instead of 'Field'; 'Water' instead of 'Ground'; and 'Flow' in place of 'Progress'. As well as a watery reimagination of language, the blue humanities also calls for the ecological ethics and awareness we have for terrestrial places to be extended beyond the shoreline. An example of this is found in Carl Safina's 'sea ethic' (2008) – a counterpart to Aldo Leopold's 'land ethic' that includes all the waters of the world: fresh or salt; running or still; solid, liquid or gas.

The blue humanities is also a rejoinder to the idea of the Anthropocene 'as a primarily lithic phenomenon' (Neimanis, 156). As Chapter One has discussed, Anthropocene discourse tells stories through rock: the 'foundation of thought systems as well as houses, an imperturbable solid upon which we build our truths' (Cohen 2015, 12). These stories are inscribed and then read through stratigraphy, a practice that imagines a vertical history chiselled into rock with straight lines and

carved out categories of time. In this sense, Anthropocene discourse has largely ignored 'what flows beneath this stony and terrestrial tale' (Neimanis, 156). Like Savoy and her alternative forms of history-making, feminist posthumanist and new materialist scholars working in the blue humanities, such as Neimanis and Alaimo, have countered the rigid, stony stories of the Anthropocene. And they have done so with aqueous scholarship that highlights the agency of water and its ability to interact, and 'intra-act' (Barad) with bodies, systems and other matter. In the face of the definite knowledge systems of geology and geography, which still uphold the exceptional category of the white, male human, these scholars propose 'a shift towards a "fluid ontology" […] that conceives of our (water)world as one which is in flux, changeable, processual and in a constant state of becoming' (Anderson and Peters, 4). As Neimanis writes, 'the kind of ontologies it inaugurates – connected, indebted, dispersed, relational – are not only about correcting a phallogocentric understanding of bodies, but also about developing imaginaries that might allow us to relate differently' (2017, 11). Part of this relating differently is celebrating knowledge that emerges from, through and with other human and more-than-human bodies.

As such, the research practices of many feminist posthumanists and blue humanities scholars are not objective or detached, but are instead immersive, creative methodologies that attend to collaborations, contact zones, and interconnections. This is because, as DeLoughrey writes, 'submersion may produce alternative knowledges and ontologies' (37) to that which is gleaned from detached, terrestrial research. Examples of this include Melissa Fagan's 'embodied and experiential' (4) research methodology of 'literal, corporeal immersion in the intertidal zone – primarily as a surfer – as a way of being in and bearing witness to coastal environments and cultures' (4). Or Vanessa Daws, who practices 'psychoswimography' in order to 'explore place through the art of swimming' (2014). Or Mentz – swimmer and bodysurfer as well as scholar – and his assertion that 'we salvage knowledge from the wreckage of experience' (qtd. in Alaimo 2019, 432). Recalling a group swim at a Santa Barbara blue humanities conference in 2014, Mentz writes: 'We were thinking about the ocean, but not only thinking about it. Sometimes even artists and academics need to be overwhelmed' (2020a, 136). Through this oceanic and aquatic scholarship, Fagan, Daws and Mentz answer blue

humanities scholars Anderson and Peters' call that 'we must not simply study the seas and oceans as "other" or "different" spaces; but instead start thinking *from* the water' (4, emphasis in original).

This chapter will engage primarily with the work of Neimanis and Alaimo, whose concepts of a more-than-human hydrocommons, a posthuman politics of location, and trans-corporeality help to map out the watery worlds that Powles and Horrocks evoke. Neimanis' figuration of 'bodies of water' asserts our watery embodiment as a starting place for developing what she calls a 'posthuman feminist phenomenology' (2017). To understand watery embodiment is to understand that a watery world is one in which we are implicitly interconnected: 'as bodies of water we leak and seethe, our borders always vulnerable to rupture and renegotiation […] Our wet matters are in constant process of intake, transformation, and exchange – drinking, peeing, sponging, weeping' (2). Neimanis calls this the 'more-than-human hydrocommons' (2), which permeates through all the other watery bodies in the world: other humans, animals, plants, microbes, but also reservoirs, aquifers, plastic water bottles, and oceans. Thinking watery embodiment 'stirs up considerable trouble for dominant Western and humanist understandings of embodiment, where bodies are figured as discrete and coherent individual subjects, and as fundamentally autonomous' (Neimanis, 2). This, Neimanis tell us, is a 'rather dry, if convenient, myth' (2).

Neimanis' theory of the hydrocommons builds on work by other posthuman feminist scholars like Alaimo. In her 2010 work, *Bodily Natures*, Alaimo sought to reanimate and rematerialise the natural environment, 'which is too often imagined as inert, empty space or as a resource for human use, [but] is, in fact, a world of fleshy beings with their own needs, claims and actions (2). She invites an imagining of corporeality not as bounded and autonomous, but as 'trans-corporeal'. Trans-corporeality names the way that our bodies are open to the environment and other bodies around us, always part of material 'interconnections, interchanges and transits' (Alaimo 2010, 2).

Examples of trans-corporeality often centre around real Anthropocene issues such as toxic pollution. Rebeca Giggs describes how whales, 'well insulated by their thick

layer of blubber […] attract fat-soluble toxicants, absorbing molecular heavy metals and inorganic compounds that comprise pesticides, fertilisers, and other pollutants' (2020, 11) from the ocean. A whale acts as a repository for these toxins, which bio-accumulate in their blubber, placenta and milk before being passed on to their calves. In this way, whale bodies end up being 'more polluted than their environment' (Giggs 2020, 11), bequeathing this toxic inheritance onwards to their young and to those that consume them. As Cielemęcka and Åsberg write, these polluted whale bodies 'bring to the environmental social imaginary the toxic kinship of predators and other species, including humans, threatened by extinction' (101). Building on this, Neimanis writes that 'toxic breast milk, in other words, is also a multispecies issue' (35). 'Hitching a ride on atmospheric currents' (Neimanis, 35), pollution arrives in the Arctic and enters the food chain by concentrating in the bodies of sea mammals, whose fat 'is then consumed by humans in Arctic communities as a traditional dietary staple' (Neimanis 35). The result is that 'the breast milk of Inuit women in the Canadian Arctic contains two to ten times the amount of organochlorine concentrations of samples from white women hundreds of kilometres to the south' – closer to where the pollution is emitted – and 'PCB levels are also alarmingly high' (Neimanis, 35–36). In this way, trans-corporeal flows are not only a multispecies issue, but also 'a matter of privilege, and a matter of racialized reproductive politics' (Neimanis, 32). In the same vein, Nancy Tuana's essay 'Viscous Porosity: Witnessing Katrina' describes Hurricane Katrina as a vast, trans-corporeal event that is both natural and social, percolating the climate crisis, weather, racism, colonialism, poverty, cancer, industrialisation, and hazardous waste into its toxic gyre.

Trans-corporeality is an important concept for Neimanis' work on the hydrocommons. Neimanis reflects Alaimo and Tuana's concern for acknowledging the ways in which trans-corporeal flows do not move evenly between different bodies, but magnify and gather according to vectors of class, race, and gender: 'while flows of toxic matters and currents of gendered, racialized, and colonial biopower are not synonymous, if we trace both we note important patterns of reverberation' (Neimanis, 35). It is in this sense that Neimanis combines her work on the hydrocommons and the decentring – or dissolving – of the white male Anthropos, with a demand for the importance of specificity and difference, of establishing an accurate politics of location (Rich) from which to speak from. This builds on a long

feminist tradition of insisting on what Donna Haraway calls ‘situated knowledges’ (1998): the understanding that knowledge isn’t produced in a void, but from specific geographical, cultural, and social locations unique to the thinker, which unavoidably shape that knowledge, how it emerges into the world, and how it is bound up in power relations. This knowledge is ‘embedded and embodied, local and situated’ (Åsberg and Braidotti, 6); it insists on difference and rejects a universalising ‘we’. It is knowledge that its thinker is accountable for.

These ideas are similar to Indigenous methodologies, in which place is of crucial importance in the production of knowledge and the relations of oneself towards place, community, and others, and therefore one’s obligations, must be accounted for (Liboiron, 2021a). Max Liboiron builds a rigorous politics of location into their method in *Pollution is Colonialism*, drawing not only on feminist theory but also on Indigenous understandings of the importance of obligation and specificity. For example, Liboiron highlights the way that introducing Indigenous scholars with their nation or affiliation whilst introducing settler or white scholars only with their name enacts an ‘unmarking’ (2021, 3) that ‘re-centres settlers and whiteness as an unexceptional norm’ (2021a, 3). Instead, Liboiron introduces all authors they cite in the way that they identify themselves; those who do not identify themselves are introduced as ‘unmarked’. Crucially, Liboiron argues that this method allows the reader to understand ‘where authors are speaking from, what ground they stand on, whom their obligations are to, what forms of sovereignty are being leveraged what structures of privilege the settler state affords, and how we are related’ (2021a, 4).

Drawing on her learnings from Audre Lorde and other Black feminists, Adrienne Rich writes in her 1986 essay ‘Notes Towards a Politics of Location’, that establishing a politics of location must be grounded in embodiment as much as social and cultural conditions – ‘Begin […] with the geography closest in – the body’ (30). Rich explains:

> When I write “the body”, I see nothing in particular. To write “my body” plunges me into lived experience, particularity: I see scars, disfigurements, discolourations, damages, losses, as well as what pleases me. Bones well-nourished from the placenta; the teeth of a middle-class person seen by the dentist twice a year from childhood. White skin, marked and scarred by three pregnancies, an elected sterilization, progressive arthritis, four joint

> operations, calcium deposits, no rapes, no abortions, long hours at a typewriter (32).

Neimanis cites Rich's work as a precursor for a watery posthuman conceptualisation of embodiment. For her, Rich offers a mode of understanding the body as 'multiscalar and multigenerational; porous and palimpsestic. It is a congeries of the personal and the political; of the material and the semiotic. It is biological and cultural' (Neimanis, 29). For Neimanis, this understanding of embodiment is enmeshed in confluence – in the flush and flow of the more-than-human hydrocommons – but also, simultaneously, accounts for the ways in which one's particular body is situated in the world. This is the understanding of embodiment that this chapter will take forward.

By situating itself in this scholarly inheritance of blue humanities, posthuman, new materialist and feminist work, this chapter also seeks to acknowledge their limitations. As the Introduction to this thesis outlined, posthumanism has been criticised for its erasure of Indigenous Knowledge and voices. Posthumanism bases itself on ideas of relationality, mutual constitution, and the interconnection of the human in a more-than-human material cosmos that has agency and specificity. However, as Juanita Sundberg writes, 'rarely mentioned are the many Indigenous epistemes that take the material world very seriously in constituting political ontologies' (37). Zoe Todd's account of listening to Latour's lecture in Edinburgh and his failure to 'credit Indigenous thinkers for their millennia of engagement with sentient environments, with cosmologies that enmesh people into complex relationships between themselves and all relations' (2016, 6) is a powerful indictment of posthumanism's appropriation of Indigenous ontologies. Todd recalls leaving the lecture feeling 'once again […] as though I was just another inconvenient Indigenous body in a room full of people excited to hear a white guy talk around themes shared in Indigenous thought without giving Indigenous people credit or a nod' (2016, 8). Todd uses her experience as an example of an omission of Indigenous thought that is systemic – part of the 'white public space' (2016, 11) of the academy in which both Indigenous bodies and Indigenous Knowledge are erased, subsumed by what Rauna Kuokkanen calls 'epistemic ignorance' (2007, 5), which recentres and reuniversalises Eurocentric voices and ways of understanding the world (Ndlovu-Gatsheni).

But for feminist research, properly acknowledging those that have shaped and influenced a piece of work matters. Locating oneself in textual, epistemological and ontological traditions, inheritances and contexts is a crucial part of a rigorous politics of location. In this sense, Neimanis enriches her feminist posthuman theory with a feminist politics of citation that disrupts the hegemony of white male voices. As Neimanis writes, a feminist politics of citation 'is about recognizing debts, but more importantly about allowing certain bodies to continue flourishing, not unlike the logic of bodies of water themselves' (9). Where too often 'our practices persist without consideration of the politics of linking projects to the same tired reference lists' (Tuck et al), the objective is to pay attention and care to how and who we recognise in our work, which debts are acknowledged, and which bodies we allow to continue flourishing.

But recognition is not a tick box activity and white or settler scholars must take care when engaging with Indigenous thought.[31] As such, in creating a properly inclusive feminist politics of citation, Neimanis is careful not to conflate her work with Indigenous concepts or to assume a complete understanding of them. She writes that her advocacy of the bodies of water figuration is 'sustained by the conversations and commitments it shares with those other imaginaries that disturb the Anthropocene narrative' (171). Verbs like 'share' and 'sustain' hint at a reciprocity of thought, rather than an extractive one. One example she gives is the work of artist Rebecca Belmore, who uses water to convey impactful messages about power dynamics and ongoing colonial relations. Neimanis writes that she does not claim to speak for Belmore's watery imaginary, but that her work offers 'sites of collaborative inquiry that can introduce me to Anishinaabe understandings of water without any pretence of full knowledge or subsumption' (171). Engaging with Indigenous scholarship, art, ontologies and epistemologies in this way is not an exercise in 'grand proclamation[s] about Indigenous cosmologies of water' (Neimanis, 171); it is about recognising reverberation across imaginaries. As Neimanis writes, it is not about homogenisation or appropriation, but about gaining insight into ways of being

[31] Treating recognition and a politics of citation in this way can actually exacerbate omission and appropriation (Liboiron 2021a, 29; Anonymous Indigenous Authors 2019).

in the world and ‘the context they emerge from – a context that also imbricates me’ (171).

Neimanis emphasises her awareness of the importance of treating Indigenous work with care in the article ‘Composting Feminisms and Environmental Humanities’, co-authored with Jennifer Mae Hamilton. Citing Kim TallBear and Vanessa Watts, Neimanis and Hamilton underline ‘the care we need to take in presuming a translatability’ (521). As TallBear writes, ‘there are no easy, literal translations […] only careful conversations with much careful thought to be had’ (qtd. in Neimanis and Hamilton, 521). Appropriation is, as Liboiron points out, another form of consumption and colonial violence, perceiving Indigenous thought as ‘delicious […] for “thinking with” or “drawing upon”’ (2021a, 109). Neimanis and Hamilton instead offer composting as a citational methodology, as ‘a material labor whereby old scraps are transformed—through practices of care and attention—into nutrient-rich new soil’ (501). Citational composting, therefore, involves recognising all the ‘old scraps’ or existing currents of thought that have been transformed into shiny new theories and concepts. It involves taking care in how this recognition is carried out: ‘even while composting suggests that many things merge productively in the muck, we resist any lure of homogeneity. We know that muddy ground contains multiple worlds, and the differences of these worlds also need tending’ (Neimanis and Hamilton, 522).

Embodiment

In line with the blue humanities, and the strands of new materialist, posthumanist and feminist thought that swirl within it, one of the distinguishing characteristics of both Powles and Horrocks’ work is an interest in embodiment. This involves a concern for the ways in which their bodies interact with the material lives of their surroundings, and an interest in the experience of being embodied –in being a body in water.

Powles, in particular, centres the material, embodied world. She describes her experiences and responses to the world not only on an emotional or cerebral level, but very often on a corporeal one too. Listening to music, she writes: ‘a reaction occurs first somewhere in my body, deep at the base of my spine, then in my

stomach, then in my hands and wrists, which start to tremble' (Powles 2021, 74). In her food memoir, *Tiny Moons*, Powles writes about how cooking is vital for her due to its embodied engagement: 'I had forgotten how good it is to make things with my hands, and how much I need it … There is nothing but the sound of our cleavers chopping chives and fresh chillies and the feel of peeling gnarled pieces of ginger between my fingers' (2020a, 64). She lives and writes with her whole body.

However, in *Small Bodies of Water*, Powles' interest in embodiment isn't limited to her own physical experience; her narrative pays close attention to material details and interactions of all kinds. Woven through her treatment of large, global issues, such as colonialism, migration, politics, racism, and climate breakdown, is an equal interest in the physical minutiae of the world these issues dominate. To borrow Alaimo's words, she has the ability to 'stretch material intimacies across immense scales' (2016, 10). For example, the meaning of home, for Powles, is both dispersed across several corners of the globe – Malaysia, Aotearoa New Zealand, Shanghai, London – and also found within small-scale material details:

> …home is not a place but a collection of things that have fallen or been left behind: dried agapanthus pods, the exoskeletons of cicadas […] the discarded shells of quail eggs on Po Po's plate, cherry pips in the grass, the drowned chrysanthemum bud in the bottom of the teapot (2021, 7).

Physical elements of different experiences of belonging radiate out globally, spanning place to place. For Powles, even on the largest of scales, the minute material world needs attending to.

Furthermore, Powles connects vast, disparate spatiotemporalities through material vectors, such as food, books, plants, and bodies of water. For example, food functions as a powerful conduit – a 'shared language' (Powles 2021, 11) – that allows her access to family members and a heritage from which she otherwise might feel alienated. Powles cannot speak Hakka, the language of her mother's family, but 'in the kitchen […] language was less crucial' (2021, 223). She writes, 'Po Po ladling rice into our bowls […] These things I don't need language to understand' (Powles 2021, 7). Even with her mother, food is a more powerful way to express love than language, enacted by 'folding down the edges of curry puffs about to go into the

oven, untwisting the purple wrappers from salted dried plums, unpeeling a piece of fruit' (Powles 2021, 74–75).

Plants also offer a form of access for Powles, a way of bridging geographical and linguistic barriers. In the essay 'Where the Kōwhai Blooms', she creates a personal map of London formed of movements between different locations where she has found Kōwhai trees, the national tree of Aotearoa New Zealand. In turn, these connections then radiate out around the globe: back to Aotearoa New Zealand, where they are 'deeply entwined with memories of my parents' house by the sea and the sunlit garden behind it' (Powles 2021, 39), but also to Australia, where the blazing yellow of the Kōwhai's petals is echoed in the wildfires that are arriving earlier and burning more intensely than ever before. Powles creates a form of global mapmaking contained within a single plant species. And within this is a thread of colonial history, recounting the 'discovery' of Kōwhai by imperial botanist Sir Joseph Banks whilst accompanying James Cook on his first voyage to Aotearoa New Zealand. Powles tells us that Kōwhai seeds were collected on the very first landing, at Turanganui-a-Kiwa or Poverty Bay – a landing that left nine Māori dead. The Kōwhai tree, therefore, is implicated in the conquest of Aotearoa New Zealand, just as botanical science is implicated in colonial and imperial history more broadly. Powles celebrates the Kōwhai tree, but she enmeshes it in both multiscalar stories of violent imperialism and narratives of home and migration. In her work, these branching global threads of home, colonialism, migration, identity, and empire are never divorced from material roots.

Powles also centres the kind of material human life that would traditionally be overlooked for nature writing, making space for details such as swimming costumes, Kit Kats, sunscreen, Instagram sunsets, and Uniqlo thermal tops. Her deft poetic ability to interweave these elements into her broader narrative undermines those who would consider them irrelevant or frivolous, such as Stuart Kelly of *The Scotsman*, who ended his review with the somewhat patronising opinion that more 'proper, hard thinking' and 'less about Creative Writing Classes and the colour of bikinis would be very welcome in a future book'. What Kelly fails to understand is that, like Jamie and Renkl, centring the everyday over the spectacular or exotic is a key part of Powles' agenda. In line with the spirit of the Nan Shepherd Prize that

funded her text, Powles aims to disrupt traditional notions of who gets to write about nature and the outdoors: ‘When it comes to nature writing, we tend to imagine people traipsing through fields, not so much teenage girls going to the beach at the weekend […] But that’s changing – and for the better!’ (qtd. in Goh). She recognises that by opening up who gets to write about ‘nature’ and what counts as a proper subject for nature writing, she helps to make the natural world more accessible to those who do not normally see themselves reflected back in it.

Furthermore, part of Powles’ disruption of nature writing conventions is a refusal to shy away from the aspects of corporeal – specifically women’s – life that the historically male-dominated tradition has been too prudish to acknowledge. She writes that, ‘Mentions of periods and period pain are largely absent from the literature of swimming, and nature writing more generally, despite the fact that for many of us, bleeding and swimming are deeply entwined’ (2021, 61). In response to this omission, Powles devotes a whole essay to these subjects, finding a way to figure and communicate her menstrual pain through the language of waves:

> I am filled with a hot, thick liquid that weighs me down at all times except when swimming. I float on my back and feel a rippling sensation beneath the skin at the base of my spine. I let the blue water hold me. The water cools and cradles me. The water seeps all the way in. When waves break they break in four distinct ways: by spilling, plunging, surging or collapsing. For three to four days each month, it feels like my body is composed only of these different types of breaking waves (2021, 58).

Powles evokes an understanding of watery embodiment that is strikingly female, perhaps best encapsulated in the title of her first essay: ‘A girl swimming is a body of water’. Water both fills and cradles her; it both ripples within her and allows her to float on top of it; it is both inside and outside. ‘The sea rises and falls according to the pull of the sun and the moon’ (2021, 55), but gravity pulls at the land too, as well as our fleshy bodies, Powles tell us (2021, 56). ‘I am not sure’, she writes, ‘where the shape of me ends and the dark water begins. The only sure thing is my body’ (Powles 2021, 9). In her writing, the boundaries between human body and watery world begin to dissolve.

Powles' experiences in water reflect a stark, corporeal intimacy, based on careful attention to sensory experience. Writing about Hampstead Heath Ladies Pond, she describes the different temperatures of the water throughout the year and what they mean on an embodied level. At sixteen degrees, she writes, 'As my feet touch the pond I feel the sharp pain of the two-degree drop since my last swim' (2021, 162). At ten degrees:

> The surface glistens. The water is dark and silken, yet somehow also made of a thousand tiny shards of glass that squeeze and cut against my arms and hands. I measure my breathing. The pain gives way faster than expected, transforming into something smooth, shining, weightless. I almost turn back but swim out for one length instead, just to stay in this velvet in-between state a moment longer, before the cold starts to bite into the centre of my chest, which is when I'll start shaking from the inside out (2021, 167–168).

As Jessica J. Lee writes in her swimming memoir, *Turning*, 'A swimmer can sense the turning of the lake […] it isn't something you can see, it's something you can feel' (2017, 3). Swimming 'forces the physical realities of our terraqueous globe onto your skin' (Mentz 2016) – it puts the body in contact with the hyperobject that is the world's waters, but also that of a warming world. Such a 'sensitive body-water relationship' (Gould et al., 47) can enliven the body to tiny changes, to the shifting temperature of water that is caused by something other than the normal turn of the seasons. Immersion is an opportunity to feel 'oceanic disorder with our bodies' (Mentz 2016), and in this sense, the impression Powles gives of her experience in water is not of being enclosed or encased inside a body that is separate from its environment. Instead, it is of a body that is part of an Anthropocenic watery world, that is alive to its changes – open, attentive, interactive.

Powles' writing speaks to Neimanis' theory of watery embodiment: 'Blood, bile, intracellular fluid, a small ocean swallowed, a wild wetland in our gut; rivulets making their way from our insides to out, from watery womb to watery world: we are bodies of water' (1). Neimanis challenges the reader to move beyond Western humanist understandings of bounded, individual corporeality, and to rethink embodiment not only as watery, but as permeable, open to and part of the other watery bodies and environments that compose 'the more-than-human hydrocommons' (2). Horrocks also evokes Neimanis' ideas about watery embodiment in her swimming memoir,

Where We Swim. She opens her text with an image of her drifting on a tidal estuary in which water permeates both fleshy body and time: 'I closed my eyes, letting the tide carry me, feeling the press of the water's echoey breath, As the minutes stretched, the water seemed to enter my body, my limbs becoming liquid' (Horrocks 2021, 1). This sense of the body's permeability, as open to the flow of the world's waters, is also conveyed in Horrocks' ritualistic way of immersing herself in water: 'Three, two, one – and I was in, diving and staying under long enough for the cool to pass right through and become part of my body. The water of my body contained within the water of the sea' (2021, 13).

Like Powles, Horrocks ties the experience of watery embodiment closely with the experience of being a female body. For her, swimming is a family practice more than an individual one, and her interest in the experience of being in water sits beside the experience of motherhood and daughterhood. Swimming with her family is 'right there at the breathing core of things' (2021, 6). As such, the first essay in the text illustrates a multi-generational portrait of an extended family that swims. We learn that Horrocks' mother grew up swimming in the Hutt River with her five siblings and that Horrocks herself was brought up swimming in the river on their farm. When Horrocks' daughters are born, she ventures out for '5pm swims' (2021, 6), which, in the midst of caring for newborn babies, 'helped to keep the whole enterprise afloat' (2021, 6). She then brings her children up to swim: 'everywhere my family and I went, we swam' (2021, 6). Later in life, when swimming with her nephew, Horrocks feels a 'small tug' within her (2021, 114) and is reminded about the decision she must make about the remaining embryos in her IVF course. Immersed in the water, she finds that she is also immersed in middle-age – 'I felt almost painfully in the midst of life then, fully daughter and mother all at once' (2021, 14). Themes of familial love and care – both for children and parents – flow through experiences in water: breastfeeding, anxiety, blood clots, cancer, fertility, mortality.

However, what is most interesting about Horrocks' treatment of watery embodiment is her trans-corporeal (Alaimo 2010) approach. In her introductory essay 'Gone Swimming', she relates her decision to swim in polluted bodies of water whilst on a swimming trip from Wellington to Auckland. At the time, water pollution had become an issue of public concern: 'Which of our rivers and lakes were swimmable? How

many of our beaches? Which weren't? Where would the water make us and our children (and parents) sick?' (Horrocks 2021, 3). At Mōkau, a small town on the upper Taranaki Bight, Horrocks decides not to trust the data on the government water quality website, which depicts the river she plans to swim in as 'threaded […] across the maps in blood red' (2021, 3), moving out 'from the map's mountain centres like cancer cells, darkening as the waters dropped from the hills and began their journeys through human and farm animal country to the sea' (2021, 3). Instead, she pursues an embodied understanding of the new state of the country's waters:

> My determination to swim anyway was partly a denial of these water-quality figures being the final word—a refusal to let that be how it would be, even here, in this country, the water already too polluted to bother. It was a refusal to accept and simply stay at home on dry land (Horrocks 2021, 3).

Blue humanities scholars observe that human knowledge of watery zones largely requires the mediation of science and technology (Alaimo 2019; Anderson and Peters 2014), our fleshy bodies alienated by depth, distance, instability, and inhospitality. Indeed, scientific data affords access to understandings of water that are vitally important for tracking Anthropocenic changes to the world's waterways across large temporospatial scales, and also for comprehending how such changes will affect different species and populations. It also provides access to deep sea creatures and seabed ecosystems of which, otherwise, very little is known (Alaimo 2019, 430). But for Horrocks, the flip side of an experience of water mediated through science is that it provides a reductive account – of water 'already too polluted to bother' (2021, 3). Furthermore, a graded scale of 'swimmability' implies that certain levels of toxic pollution – particularly those that don't pose a threat to *human* life – are completely acceptable. This is an example of what Liboiron has called a 'permission-to-pollute system' (2021a, 39), which is premised on the scientific theory of *assimilative capacity*: the idea that different environments can absorb specific amounts of contamination before any damage occurs (2021a, 40). Liboiron highlights the colonial power dynamics of this scientific theory, as 'assimilative capacity is based on land relations that strip away the complexities of Land—including relations to fish, spirits, humans, water, and other entities— in favour of elements relevant to settler and colonial goals for using the water as a sink, a site of storage for waste' (2021a, 40). In this way, the swimmability index reduces

bodies of water to resources either for humans to swim in, or for humans to dispose of waste in – nothing else.

This is indicative of the ways in which scientific data provides only an abstracted, objective perspective of pollution. As scholars have highlighted, scientific perspectives often understand 'chemicals from a god-like, above-it-all, and looking-from-the-objective-outside scientific position' (Liboiron 2021a, 83) – derived from Haraway's god trick perspective (1988, 584). This elevated, anonymous, and disembodied perspective 'has become all too commonplace in the predominant visual depictions of the Anthropocene' (Alaimo 2016, 7), in which the human observes the increasingly volatile state of the planet from a safe and innocent distance. Such removed perspectives are poor at evoking care, empathy, or feelings of responsibility. In an earlier draft of this essay published in *Landfall* in 2017, Horrocks wrote that she 'kept coming back to the fact that the mechanistic adjective "swimmable" just didn't evoke the immersive pleasures of swimming. And without that, what will make any of us care?' To look objectively is to know something of the water, but to swim is to access a different way of relating to and understanding water, and to care about watery spaces as complex aquatic ecosystems.

Instead, Horrocks follows blue humanities scholars and artists, such as Fagan, Daws, Alaimo and Mentz, by conducting knowledge-making through physical immersion. For Horrocks, perceiving pollution data but swimming anyway is not a total rejection of science but a way of complicating it. It is 'an attempt to understand those figures better, to translate backwards from abstractions such as counting rivers by length or swimmability' (2021, 3). Horrocks writes that she conducts 'an attempt to put my whole body into it' (2021, 3), rather than just her mind. In this sense, she echoes Alaimo, who argues that 'swimming—the immersion of the human in water—releases us from transcendent perspectives, unmoors us as terrestrial creatures, allows us to hover in other ways of being that are, perhaps, less separate from the substances of the world' (qtd. in Mentz 2020a, 134). For Horrocks, swimming is about understanding the material interchanges taking place in the country's waterways through a 'form of animal engagement and involvement' (2021, 3) – in which she uses her own body to trace material agencies that move through mountain, river, soil, farm animals, and the bodies of those others that inhabit the

riverine ecosystem. Through a research method that takes place at the intersection of body and Anthropocene environment, she identifies 'trans-corporeal mappings of networks of risk, harm, culpability, and responsibility' (Alaimo 2010, 3).

This 'necessary immersion' (Horrocks 2021, 3) centres the fleshy body, and relocates the creation of knowledge as an embodied rather than disembodied, 'god trick' practice. Being submerged in water is a way to challenge the usual orientations, expectations, and perspectives of the terrestrial body, and in this way, immersion is a way of asking difficult questions about living in the Anthropocene, such as:

> What were those numbers really telling us? Or, more properly maybe, what were the waters saying? Perhaps I wanted to feel what it means to swim so that I could imagine what was at stake in a place becoming unswimmable – for other creatures, too, who also need water to live (Horrocks 2021, 3).

For Horrocks, swimming becomes a way of expanding the Anthropocene consciousness to a more-than-human scale, and of recognising agency in other species and other waters. One result of her decision to swim in Mōkau and other polluted waterways is a urinary tract infection, but another is her new knowledge of the toxicity of the waters, knowledge that reflects but also deepens the swimmability data. The science might be correct, but, crucially, it is no longer the final word on the issue; the water has also been given some kind of voice: 'it did help me understand. The numbers were serious. The water was too' (Horrocks 2021, 4).

By immersing herself in toxic water with a trans-corporeal subjectivity, Horrocks performs what Alaimo calls 'exposure as an ethical and political act' (2016, 5). This act means to 'reckon with—rather than disavow—such horrific events and to grapple with the particular entanglements of vulnerability and complicity that radiate from disasters and their terribly disjunctive connection to everyday life in the industrialized world' (2016, 5). Framed in this way, swimming becomes a form of resistance to the abstracting, alienating scientific gaze that would otherwise have 'the final word' (Horrocks 2021, 3). By exposing her body to the water, Horrocks performs 'material rather than abstract alliances' (Alaimo 2016, 4), and the Mōkau waterway is briefly recuperated as a 'site of shared vulnerability and activism' (Cielemęcka and Åsberg, 103). Quoting Rosi Braidotti, Alaimo reminds us that it is in such 'ordinary micro-

practices of everyday life' that an ethical subjectivity for the Anthropocene is rooted (Alaimo 2016, 2). Just as Powles' swimming practice centres mundane material life and marginalised understandings of embodiment as a foundational part of thinking about broader global issues, Horrocks treats swimming as both an unremarkable, everyday activity and a vital way of attending to an Anthropocene world. For these writers, swimming can be understood as a 'distinctively Anthropocene form of embodied practice' (Mentz 2020b): a way of stepping outside of dominant humanist modes of knowing, making trans-corporeal contact with more-than-human places, fulfilling obligations to the changing, material world, and reframing watery immersion as a different way of being in the world.

A posthuman politics of location

The interest in material embodiment that both Powles and Horrocks demonstrate does not preclude a concern for the political, social, and cultural conditions that also inform their experiences. Indeed, what distinguishes them from many other nature writers is their acute self-awareness – an awareness of their presence not only as humans in a more-than-human world, but as humans encoded by history and unique socio-economic positioning.

For Powles and Horrocks, concerns for historical context, social conditions, and political location are not separate from their experiences in water or of watery embodiment. Water functions as a powerful vector of connection, flowing both literally and metaphorically through histories, heritages, and constructions of identity. And embodied immersion in water offers a practice for meditating upon one's specific positioning in this interconnected world. In this sense, Powles and Horrocks reflect Neimanis' 'understanding of embodiment as both a politics of location, where one's specific situatedness is acknowledged, and as simultaneously partaking in a hydrocommons of wet relations' (3-4). This is to say that their interest lies in the body as both located in precise socio-political conditions and dissolved into interconnected watery networks – 'both different and in common' (Neimanis, 4). Neimanis calls this a 'posthuman politics of location' (4):

> An adequate understanding of embodiment, then, is not given by simply asking what 'a body' is. Instead, we need to be more curious about our politics

> of location: Where is my body? When is it? Why is it – that is, thanks to what, and whom? What are the membranes that separate it or differentiate it from others? Where and how do these membranes break down? Where and what does that body cease to be? And then: In what ways does it repeat? (29)

At the very beginning of their texts, Powles and Horrocks both echo this call to reframe our understanding of what a body is. For Powles, *Small Bodies of Water* pivots on the question, 'Where is the place your body is anchored? Which body of water is yours?' (2021, 3). In turn, Horrocks concludes her introduction with the understanding that, 'The question didn't seem to be so much why we swim, as where and how we swim, and with whom?' (2021, 7). Their questions point towards Neimanis' posthuman understanding of embodiment, which is capable of taking a wide spatiotemporal view, braiding together the many historical and global currents that have flowed into one's body – 'anchoring' it in a specific political location – as well as understanding that these flows carry on through one's body and into other bodies – fleshy, watery, geologic – in other locations, dissolving us all into a vast, interconnected hydrocommons.

This concern for posthuman embodiment is highly important for an Anthropocene context in which vulnerability, access, risk and support are asymmetrically distributed along lines of race, gender, class and geography. In the Anthropocene, water can no longer be ignored or taken for granted (Linton), and its newly recognised volatility affects different communities at disproportionate rates. For example, coastal Indigenous communities feel the effects of ocean acidification more than populations whose lifestyle, diet and economy don't depend on seafood. Worsening heatwaves (and therefore droughts) in low- and middle-income South Asian countries have been directly linked to rising domestic violence (Zhu et al). Devastating cyclones in the Global South attract scant media attention, but climate events in predominantly white, wealthy countries – such as the 2020 forest fires in Australia – can make headlines for weeks. And as the number of climate refugees forced to leave drowned or drought-stricken homes increases, many rich countries respond only by tightening their borders, forcing them to make dangerous boat crossings. The consequences of a watery Anthropocene world destabilise us all, but we are not equally unstable, and the 'ways in which specific bodies are seriously implicated, while others bear the

heaviest burden in relation to our planet's troubled waters, requires ongoing and increased attention' (Neimanis, 63).

It is in this sense that Neimanis is not speaking metaphorically when she writes:

> The waters that we comprise are never neutral; their flows are directed by intensities of power and empowerment. Currents of water are also currents of toxicity, queerness, coloniality, sexual difference, global capitalism, imagination, desire, and multispecies community. Water's transits are neither necessarily benevolent, nor are they necessarily dangerous. They are rather material maps of our multivalent forms of marginality and belonging. The idea of the Anthropocene, in its most useful sense, places some demands upon humans to account for past actions and recalibrate present ones (14–15).

The world's waters are not a *tabula rasa*, but instead are implicated with, encoded by, and entangled in the kind of Anthropocenic, colonial, global history that Savoy outlines in Chapter One, and its swirling currents of 'toxicity, queerness, sexual difference, global capitalism'. Accounting for this requires understanding our own politics of location. As Chen et al. write: 'So too the locations and positions from which we regard these troubled waters are radically important – whether we are upstream or downstream, distant or immersed' (pp. 4-5).

Throughout her essays, Horrocks conveys an intense awareness of these 'material maps of our multivalent forms of marginality and belonging' and of the privileged position she occupies within them. She rises to the challenge of accounting for the historical currents and flows that have recalibrated her present. And for her, aqueous immersion becomes a material practice for meditating upon this – for reflecting on her location in a variety of watery, relational contexts. Much of this reflection is in reference to her position as a white settler-descendent in Aotearoa New Zealand. For example, on the day of the 2017 Te Awa Tupua, Whanganui River Settlement that acknowledged the Whanganui River as having legal personhood,[32] Horrocks

[32] In March 2017, the New Zealand parliament passed the Te Awa Tupua Act, which declared the Whanganui River as having legal personhood. This status is 'based on the ontological understanding of the river as an indivisible and living whole and as the spiritual ancestor of the Whanganui Iwi' (Kramm, 307). Although not the first example of a government bestowing rights on an ecosystem, this paved the way for acts of environmental personhood all over the globe, including the River Ganges in India, Mount Taranaki also in Aotearoa New Zealand, and Lake Erie in Ohio. In February 2019, Bangladesh declared all its rivers – of which there are hundreds – as having personhood status.

stands in the shallows of the river, unsure about her place as Pākehā in the water and whether to enter it or not. Alert to her whiteness, she admits to being profoundly uncertain about 'swimming in an entity – in a person, even. In someone else's ancestor' (Horrocks 2021, 5). Throughout her text, she can be found looking to Māori understandings as a form of guidance and insight in more-than-human encounters, such as with the whale that visits Wellington harbour: 'The need to decide on the gender of the whale, the tohorā, feels strange. Perhaps the whale could be a "they" to us, as it would be in te reo Māori?' (Horrocks 2021, 32). But she always remains alert to the risks of appropriation in learning from these understandings, exploring the question of how to 'inhabit this place as Pākehā, to acknowledge Māori as Indigenous, without placing myself at an unswimmable remove' (Horrocks 2021, 35)

Horrocks' attention to watery networks of privilege, marginality and belonging also alight on her position as a white, wealthy tourist in contexts of travel. The essays 'Medellín' and 'Amazon' provide accounts of visiting and travelling with her brother in his adopted South American home that are pervaded by a constant sense of disquiet at being a white foreign tourist. These reflections triangulate largely around experiences in water. In Medellín, she tries to suppress the frustration her family feel at not having access to a swimming pool. She recognises that, in this South American city, pools are behind locked gates, inaccessible to all but wealthy residents and foreign tourists, and her brother wanted them to experience a 'proper neighbourhood' instead of one of these complexes. Despite her frustration, Horrocks understands that in this context, swimming pools are a form of escapism available only for the elite, 'sectioned off from the pressing specifics of place' (2021, 59). These reflections resonate in the essay 'Phoenix', in which she writes, only partly tongue-in-cheek, about how easy it is to choose not to care about the socio-political relations of the water one is immersed in. Enjoying her hotel pool's respite from the Arizona desert heat, she writes, 'It seemed impossible to care about much from in here, not climate change or Uber or inequality or refugees' (Horrocks 2021, 91). She evokes Linton's modern water imaginary of neutrality and passivity: 'I thought only fleetingly about where the water came from before we were all in the balmy, clear, frictionless liquid' (Horrocks 2021, 91).

In the Amazon rainforest, pools take on even darker meanings as Horrocks and her family are presented with an area of the river to swim in that has been sectioned off, and inside which are two baby manatees. She and her daughter discern that 'this pool was an enclosure as much as a protected space – a pool for keeping in as much as keeping out' (Horrocks 2021, 72), holding captive endangered animals 'to be exhibited to tourists like us' (Horrocks 2021, 72). In each of these contexts, the swimming pool is conveyed as something that makes Horrocks complicit in multiple systems of containment. In Phoenix and Medellín, the pool is part of the engine of tourism that keeps them 'carefully contained and fed experiences' (Horrocks 2021, 72), shielded from too much exposure to the reality of the place and the people who live there. In the Amazon, the pool is representative of a system of more-than-human containment – of human cruelty and animal suffering. This imagery of containment and division – like the stratified logic of the Anthropocene – is set up in contrast to the language of connectedness that flows through the rest of Horrocks' essays. It is symbolic of the way in which, as this thesis has explored, capitalist systems such as global tourism operate through alienation: 'imbu[ing] both people and things with alienation, that is, the ability to stand alone, as if the entanglements of living did not matter' (Tsing, 5). But, as Horrocks notes, 'There had to be costs to buying in to all this containment' (2021, 72).

Elsewhere in her 'Amazon' essay, Horrocks describes being taken to visit a Ticuna village with her family, where they see an example of the way that climate breakdown is affecting Indigenous communities that live in and with watery ecosystems: 'the river had been rising less in the past few years, so that sometimes it didn't reach the crop areas dependant on yearly flooding' (2021, 77). In this setting, she and her family seemed 'large and white and out of place' (Horrocks 2021, 76), and she struggles to navigate whether they are perceived as intruders, voyeurs, or a welcome source of financial support. With the itinerary completely out of their control, they are transported downriver on a small, precarious boat without life jackets. Horrocks reacts with a loud 'drenching of maternal fierceness' (2021, 79), which she later reflects on with embarrassment:

> I recoiled from my small, neo-colonial drama of panic for my children – at my naivety in believing life jackets would be provided to keep my children safe. I struggled with the immediacy of my feeling that, of all people, they must be

> protected. Like everyone else, I'd seen the footage of boats sinking in the Mediterranean carrying thousands of refugees, children among them (2021, 83).

In the Anthropocene, Horrocks underlines, issues around water do not affect us all equally, but we are all implicit in them. She reflects on her instinct to protect her children from dangerous waters with a consideration of 'where and how we swim, and with whom. Also, where we fail to swim, water threatening to flood our lungs or the lungs or others, as well as where we rise or float' (Horrocks 2021, 7). In this way, she recognises that her daughters' lives are intertwined with millions of other children in the hydrocommons, many of whom receive no protection from the rising tide of Anthropocene water. Individual embodiment is decentred and reframed towards an Anthropocene sense of shared vulnerability and obligation.

Reflecting on a politics of location is also central to Powles' essays, refracted through a concern for meanings of home, heritage and identity. Powles' father is Pākehā, from Aotearoa New Zealand. On her mother's side, her grandfather is Malaysian, and her grandmother is Hakka, a subgroup of the Han Chinese who progressively migrated south, fleeing famine, chaos, and upheaval. Powles grew up in Aotearoa New Zealand, but has also lived in Shanghai, New York, and London – her current home. For her, seeking understandings of history and heritage involves tracing geopolitical currents of power: global patterns of colonialism, migration, and upheaval. 'I think of my own natural history', she writes, 'both sides of my heritage rooted in island colonies' (Powles 2021, 244). With a heritage characterised by movement and migration, 'Home was a slippery word' (Powles 2021, 2).

Powles situates herself in a colonial politics of location by inserting her own story within wider histories of the places and people her heritage connects her to: histories of botany, conquest, migration, natural history, language, and violence. But she refuses to resort to easy conclusions or reductive accounts. She handles complicated historical figures with care and restraint, conveying narratives that are both 'fascinating and uncomfortable' (Powles 2021, 240), and fitting them together in unexpected ways that highlight themes of interconnection and entanglement. The story of her grandfather, Chin Phui Kong, a Malaysian Ichthyologist working on a British Royal Society expedition to Mount Kinabalu in the 1960s, is interwoven with

the story of imperial botanist Lilian S. Gibbs, who carried out research on the mountain fifty years earlier. The gender stereotypes of patriarchal colonial encounters are subverted here, as the local is male and the imperial visitor female. Further, Gibbs isn't treated as a stereotypical British colonial figure used in blunt contrast to her grandfather; instead, her complexity is attended to. Powles conveys the ways in which Gibbs represents the oppression of the British empire, writing: 'she repeatedly praises the locals' "industrious" nature and "commercial spirit", while at the same time observing the destruction wrought by colonial expansion on their livelihoods' (2021, 241). But she also highlights that Gibbs overcomes oppression herself, as 'the first botanist and first European woman to summit Mount Kinabalu' (Powles 2021, 236) in 1910, publishing an account of her observations four years later. What begins as a factual account of Gibbs' life and scholarly work dissolves into an imagined retelling of how she experienced the mountain: 'An icy waterfall cut through the rock at shoulder-level. She crouched low to touch the tiny plants growing in the cracks. She found a clump of small white flowers, *Drapetes ericoides*, and they reminded her suddenly of New Zealand' (2021, 239). The effect of this imagined encounter is that Gibbs is humanised, rendered relatable through the connections between plants, memory and global travel that echo Powles' own concerns.

Flowing through these two braided narrative threads is Powles' own experience of tracing Gibbs and her Grandfather's footsteps. Powles had planned to make the journey to Kota Kinabalu and climb the mountain herself, 'to write about the waterfalls and other small bodies of water that Gong Gong studied, and to bring with me Lilian S. Gibbs' botanical notes' (2021, 229). However, grounded by the pandemic, she is forced to abandon this idea and travel to Kota Kinabalu through archives instead. Like Savoy, Powles is alert to the way in which history comes to reside in place, feeling keenly 'the weight of a city built on the spoils of slavery and colonial violence' (2021, 233). She visits the Linnean Society in London. Located within Burlington House, it is an imposing place, guarded by 'Gold-framed portraits of distinguished white men' (Powles 2021, 231) who embody the history and politics the institution represents. But it is also beautiful, with 'soft sunlight' (Powles 2021, 232), and walls painted 'a soothing shade of mossy green' (Powles 2021, 231) – 'a quiet archive dedicated to science' (Powles 2021, 236). In the archive, she can come into direct contact with her grandfather's work, unhindered by barriers of language or

time. That Powles connects with her Malaysian grandfather's work in this imperial archive on the other side of the world is testament to the unexpected spatiotemporal connections she weaves, and the way in which she withholds conclusions or judgment about how they intertwine.

Powles finds a way to understand and express her search for a politics of location within the context of this complex, colonial history in the Māori term, 'tauiwi'. Quoting K. Emma Ng, she seeks to understand how to 'belong here, become "from here", without re-enacting the violence that is historically embedded in the gesture of trying to belong' (Powles 2021, 246–7). Powles finds a form of guidance in 'tauiwi', which means non-Māori, non-Indigenous, but not 'left drifting, rootless, untethered to an ancestral homeland' (2021, 247). Instead, being tauiwi 'means tracing the threads back to the roots of my history, my colonial history, and holding all the pieces in my hands. It means always looking for the sea' (Powles 2021, 247). For Powles, we know that oceanic waters function as a 'proxy' for feelings of belonging; for her, 'Being near the sea felt like it was a way of returning home' (qtd. in Neilson). In parallel, seas and oceans are the biggest, richest connective bodies of water on the planet, holding human, animal, fish, bird, bacteria and machine bodies aswirl together between continents. Powles' understanding of being tauiwi, therefore, is comparable to Neimanis' concept of a posthuman politics of location. It isn't just about tracing the ways in which one is uniquely positioned by global history and heritage, but also about looking outwards towards one's implicit interconnectedness in a watery world – standing in place but 'always looking for the sea'.

For Powles and Horrocks, locating oneself within a posthuman politics of location also means locating oneself within literary traditions, and formulating a robust politics of citation. Both are attentive to the feminist imperative to acknowledge the other writers and thinkers that have shaped their work, and how they fit within literary legacies and inherited forms of textuality. Powles' essays are full of writers, artists, musicians, and thinkers of all sorts. These figures sometimes function as the pivot around which an essay moves, for example, Japanese-American musician Mitski in 'Crushed Little Stars', or Eileen Chang and Robyn Hyde in 'Falling City'. Elsewhere, they operate as other voices for Powles to think with, contributing perspectives, experiences and ideas. For example, Robin Wall Kimmerer helps Powles to think

through ideas of home; Japanese-American writer Kyo Maclear's term 'anticipatory grief' offers an insightful framework for her anxiety; and Katherine Mansfield appears as a pillar of Aotearoa New Zealand's female literary tradition. Powles practices what Maria Puig de la Bellacasa – building on Haraway's work – calls *thinking-with* (2012): a form of thinking and writing that is committed to caring for the '*collective* of knowledge makers' (Puig de la Bellacasa 2012, 202) it emerges with and through. Thinking-with honours relations (Liboiron, 2021a) and 'troubles the predictable academic isolation of consecrated authors by gathering and explicitly valorizing the collective webs one thinks with, rather than using the thinking of others as a mere "background" against which to foreground one's own' (Puig de la Bellacasa 2012, 202).

What is most striking about Powles' intertextuality is its politics. Her citations are nearly always female with an emphasis on BIPOC voices. Very few men are cited, and the only white men referenced are imperial figures whose words are included as historical evidence. In this sense, Powles constructs a feminist politics of citation (Ahmed 2013, 2017; Mott and Cockayne 2017; Liboiron 2021a) that decentres what Sara Ahmed calls the 'institution' (2014) of white male voices. Ahmed writes that 'Citations can be feminist bricks: they are the material through which, from which, we create our dwellings' (2017, 16). Following this logic, Powles' use of citation creates a dwelling that is the antithesis of the 'white public space' of the academy (Todd 2015, 243). It is a dwelling built on inclusion, diversity, and a richer array of perspectives, and that creates space for those still vastly underrepresented in the nature writing genre. As Neimanis writes, a feminist politics of citation 'is about 'recognizing debts, but more importantly about *allowing certain bodies to continue flourishing*, not unlike the logic of bodies of water themselves' (9, my emphasis). In the hydrocommons, water flows from body to body, gifting life and keeping this gift moving onwards. Just as a gift is only a gift if it keeps moving (Hyde, 4), when a body of water stops moving, it stagnates. Citation gifts onwards in the same way: it is a 'reproductive technology' (Ahmed 2013) that carries out its obligations to relations. When a piece of work is cited, its gift is recirculated, shared with others, flowing into different tributaries of thought. If it is not cited, that body of work does not move and thus putrefies, becoming obsolete. Powles uses this technology with the same watery gift logic that Neimanis points to, with what Todd calls a 'reciprocity of

thinking' (2016, 19), paying keen attention to who is around, alongside and behind her, on whose 'shoulders' she stands (Liboiron 2021, viii).

Horrocks' text is also notable for its range of female voices. The only man she cites is Deakin, and *Waterlog*'s solo journey approach, whilst admired, is quickly disregarded as 'too deliberate, too intentional, and too solitary […] too close to the act of an explorer, or an old-school nature writer' (Horrocks 2021, 6). Instead, the women Horrocks cites include figures from an Aotearoa New Zealand literary tradition, such as Pip Adams, Lynn Jenner, and Katherine Mansfield, but also eighteenth-century British female poets whose writing about water, swimming and landscape have shaped her own: Sussex poet Charlotte Smith, novelist Frances Burney, and pioneering feminist Mary Wollstonecraft.

Horrocks has been reading and writing about these women for her whole academic career, and their influence on her work is made explicit in her essay 'Sussex', in which she returns to the coastline where Smith and Burney wrote, walked and swam, and where she did the same as a younger woman. These women writers produced what Horrocks has called '"wandering texts" – narratives and verse without clear paths forward' (2021, 145). Her own text wanders in a similar way, comprising multiple essays that are largely unrelated and non-chronological, and which roam widely through space and time. In the shared landscape of the Sussex coastline, time collapses – 'different centuries were braided through one another' (Horrocks 2021, 143). Horrocks writes that, 'I felt I was also looking through eyes other than my own' (2021, 142), and that 'Swimming here felt a bit like dunking myself with Burney and those bathing women' (2021, 142). She admits: 'I was always more interested in messing up the past with the present than in treating literature more formally, as I'd been required to do in my thesis. I wanted to explore *how we all swam in related waters'* (Horrocks 2021, 144, my emphasis). Here as elsewhere, water provides both a figure and a form for spatiotemporal relationality: 'If "where we swim" is metaphorical, then Charlotte Smith, Frances Burney, and also Mary Wollstonecraft […] were some of the company I swam with' (Horrocks 2021, 146).

Horrocks does not seek to acknowledge how her work draws upon an existing literary canon, with temporal borders and boundaries of style and form that signal it

as complete, finished, firmly stored in the past. If this type of genre categorisation is representative of the same masculine, stratigraphic logic that chisels distinct time periods out of stone, then, like Savoy, Horrocks adopts a more fluid, feminist, posthuman approach that emphasises connection, relationality, and confluence. She doesn't write of a genre; she writes of a 'wave' (Horrocks 2022) of writing. Her essays do not have subjects, they have 'current[s]' (Horrocks 2022). Indeed, the 'Sussex' essay dissolves Horrocks and her literary forebears' work into a current that flows through space and time – a current that can be 'felt' (2021, 142) and experienced in landscape as well as apprehended on a page. In this way, like Powles, the women writers that Horrocks cites are brought to life, creating a form of citation, which – like swimming – is actually a practice of reciprocity, connection, and conviviality.

Watery form

For both writers, water is a material and metaphorical medium for thinking through interconnection and relationality. As a 'rich, connective force' (Powles, in Goh), water lends itself to both reflection on, and experience of, a sense of planetary interconnection – a hydrocommons. As Bradley writes, 'water's mutability becomes a way of imagining and inhabiting different ways of being' (2021). In line with Anderson and Peters' claim that a posthuman, blue humanities approach to scholarship can be extended to a more fluid way of thinking, both Horrocks and Powles evidence a watery interconnectedness at the level of form.

Both texts are liquid in construction. Fluid, mercurial, and often slippery, they are formed of multiple currents of thought that flow together. Water is not just a theme or subject matter; it shapes the writing itself. In her online article 'Dissolving genre' (2022), Horrocks comments on the convergence of her and Powles' swimming narratives, which are parallel in time and space, but also in narrative construction, moving seamlessly between places, times, themes, languages, subjects:

> It does not seem strange that we were writing our watery books concurrently. We were both in search of forms adequate to multiple coeval experiences. Our books are not so much braided as cartographic—oceanographic, drawing diverse bodies of water together, overflowing distinct embodied experiences and places into one another.

At one level, Horrocks suggests that there is something about the specific time they were both writing in that required this watery approach. Written partly during the Covid-19 pandemic, both texts were constructed from positions of groundedness and stasis – with movement restricted, multiple barriers in place, and swimming largely prohibited. The freedom and dynamism that experiences of water evoke were only accessible in the imagination. Meanwhile, even as we were physically segregated, evidence of our fundamental interconnectedness surged to the fore, dominated by issues of transmission, contact, and entanglement, as well as the relations that bind and sustain us: family, community, society, multispecies life. Running parallel to this were the raging currents of climate breakdown, ecological loss, and social and racial injustice, creating a situation of rapid convergence that refused simplistic, objective perspectives and instead demanded the holding of 'multiple coeval experiences'.

This sense of confluence is indicative of the way that both Powles and Horrocks structure their narratives, embracing multiplicity and disparity, and making connections fluidly across time, space, and theme. Horrocks looks beyond linear metaphors normally used to describe this type of narrative structure, such as 'braided', to something more expansive: cartography; at which point she moves beyond the terrestrial altogether, declaring their texts to be 'oceanographic, drawing diverse bodies of water together, overflowing distinct embodied experiences and places into one another'. There are no neat dividers or boundaries in Powles or Horrocks' work. Adopting fragmentary, non-linear structures, their narratives are permeated with repeated images, tropes, metaphors, themes and ideas, which course across disjointed subjects and spatiotemporalities.

Both narratives are characterised by confluence, but it is Powles that takes this to a more sophisticated level. Dissolving the lines between poetry and prose, Powles' work is largely formed of a fragmentary series of short paragraphs, or perhaps stanzas. The first essay in the collection, 'A Girl Swimming is a Body of Water' is an excellent example of this approach. The essay arcs across Powles' memories of immersion in the different places she has called home: the pool near her grandparents' house in Malaysia, which she played in as a child, 'half-Orca, half-girl' (2021, 3); her international school pool in Shanghai, in which small pink crabs 'shone through the chlorine like bright, fleshy gems' (2021, 4); the coast of Aotearoa New

Zealand, characterised by cold water, ‘pebbles, and driftwood and shells’ (2021, 6); and the Hampstead Heath Ladies’ Pond in London, a ‘sacred place in many women’s lives […] fringed with reeds and willows and blue dragonflies skim[ming] about the surface’ (2021, 8). Sporadic discussions of language, non-Western understandings of water, and reflection on the meanings of home and belonging permeate these memories and interrupt any sense of chronology or linearity.

Narrated in the present tense as vignettes, these memories are lifted out of time to become immediate and intimate – bright, strong images of material experience, impression and sensation that are fleeting, yet vivid:

> Looking up through my goggles I see rainforest clouds, a watery rainbow. I can see the undersides of frangipani petals floating on the surface, their gold-edged shadows moving towards me. I straighten my legs and point my toes and launch myself towards the sun (Powles 2021, 2).

This quote captures the way that Powles’ writing is characterised by restraint and linguistic economy. Specific spatiotemporal markers, adverbs, and other unnecessary words are eroded away, each sentence worn down to its hardest, brightest core. The sparse nature of these sentences only serves to make their sensory impact stronger, each one like a gleaming pebble polished by water.

Many of these sentences read almost like haikus, formed of precise language and often constructed of three distinct parts and around seventeen syllables. For example: ‘Over time, springing up from the in-between space, new islands form’ (2021, 3). Powles’ writing also echoes the way that haikus use strong images intended to capture the essence of a specific moment in time. For example: ‘I hold my breath and swim out towards the place where the sun touches the surface’ (2021, 9); or ‘I dip my head backwards and there is Mākaro Island hanging upside down in my vision, perfectly symmetrical and green, as if it’s only just risen out of the water’ (2021, 6).

This restraint is also found in Powles’ fragmentary approach, in which each paragraph appears to stand alone. Each short paragraph is an island in an archipelago, marooned by blank space on the page but loosely grouped into sections. These sections are then further distanced from each other by more blank

page space and section breaks indicated by tildes – each one a single wave in an oceanic expanse. This spaciousness denies the reader any easy pathways or routes to follow through the text. Like Jamie and Renkl's work, Powles' essays encourage the reader to consider the relationship between part and whole, and to find their own way through them by seeking connection. The relations between each paragraph and section are there, but they are implicit, rather than explicitly mapped out. Watery images and metaphors flow through disparate subjects and settings, and the themes of home, migration and belonging ring out in each paragraph. In his review, Kelly criticises Powles for her 'tenuous connections', complaining that the genre of creative non-fiction to which *Small Bodies of Water* belongs might be better known as 'miscellany or gallimaufry', full of disparate topics and styles, 'some of which are absolutely fascinating and some of which are tooth-grindingly banal' (2021). But Kelly fails to recognise that the seeming disconnect is where the real richness of the text is found. The connections are there, but the reader has to do the work to find them, and Kelly has not, perhaps, done the work. If the text is *terra firma*, then its absence is *mare oceanum*, but like the planet's oceans and seas, the seemingly empty space on the page becomes rich in meaning when attended to with care and curiosity. From this perspective, Powles' restraint is a form of generosity that gives the reader the opportunity to trace connections, echoes, and refracting images, finding meaning in 'rhyming between unlikely things' (Farrier 2021).

Powles' narrative approach poses the question: why shouldn't reading be a form of work? As feminist Indigenous scholars have noted, most of us read extractively (Liboiron 2020; Tuck qtd. in Liboiron 2020), mining words, quotes, and ideas in a 'consumptive mode that uses texts like a resource rather than collaborating with them' (Liboiron 2020, 95) or treating reading as an active, participatory process. As Liboiron explains, a more reciprocal reading practice requires the reader to not just passively consume, but to contribute, collaborate, exchange, 'or otherwise engage in the text outside their own head' (2020, 92). In this way, we treat a text 'not as a site to mine for goods or a way to achieve a list of accomplishments, but as a gift, an event, a body of work, and entities with their own terms' (Liboiron 2021b). Powles offers the reader the space to collaborate with her in forging connections and uncovering another level of meaning in her work. Her silences make the connections

that bridge them richer and stronger; and the participation of the reader only increases the impact of the reading experience.

Powles and Horrocks further disrupt traditional, masculine, objective conventions of writing and reading with immersive perspectives. Both narratives are rooted in the first-person and are intensely personal, as well as political. They tackle global issues – migration, climate breakdown, the inheritances of colonial history – from a thoroughly first-person position. Neither writer ever breaks her flow to float off into objective explanations of history or current affairs. Instead, they introduce these issues as they intersect with their own life experiences. For example, for Horrocks, species decline enters her narrative through a lone whale in Wellington harbour; greenwashing and virtue signalling are considered whilst cycling to work; and the extractive industries are engaged with when visiting her brother in iron ore mining country in Western Australia. Similarly, for Powles, colonialism flows into her narrative on the threads of family history; racism is highlighted through comments in the family WhatsApp group; sea level rise floods into her thoughts whilst rubbing sun cream into her friend's shoulders; and climate breakdown enters the text in the experience of an unseasonably early spring in London: 'sweat on my neck, white sun in my eyes. The pavement was too hot to touch and covered in magnolia petals, crumpled and browning at the edges but still pink like slices of meat' (2021, 39).

Both Horrocks and Powles' narratives are immersed in their human, everyday subjectivity. And the real impact of this is its frustration of the objective, elevated, god trick perspective that characterises Anthropocene discourse. It is impossible to get a bird's-eye view in Powles and Horrocks' work, where the perspective is always at sea level – or actually submerged. Like Jamie and Renkl, instead of transcendence Powles and Horrocks seek 'inscendence': 'the impulse not to rise above the world … but to climb into it, seek its core' (Macfarlane, 2017) – with the core, or heart, of the world being everyday life. As Bryony White writes in her review of Powles' text: 'The memoir form is arguably a salutary undoing of the taxonomic impulse, an injection of the affective, lived experiences into the factually given.' Readers like Kelly may find this emphasis on the personal and mundane trivial, but as Powles, Horrocks, Renkl and Jamie all show, the point is that the issues that the Anthropocene presents *are* part of our everyday lives. Alaimo writes that,

> …even the smallest, most personal ethical practices in the domestic sphere are inextricably tied to any number of massive political and economic predicaments, such as global capitalism, labor and class injustice, climate injustice, neoliberalism, neo-colonialism, industrial agriculture, factory farming, pollution, climate change, and extinction. The ethical and the political, like many other questions of and in the Anthropocene, become matters of scale-shifting—improvisational interventions in lives and worlds where there is no stable background and nothing can be set straight (2016, 10-11).

When reading Powles and Horrocks' texts, we do not forget that we are immersed in the Anthropocene. The urge to zoom out to a place where its complex issues can be neatly separated and examined is thwarted by perspectives that are thoroughly submerged in the everyday, entangled, personal experience. As Alaimo writes, 'saturated life worlds call for immersive practices and methodologies rather than dry, detached assertions' (2016, 11). Powles and Horrocks, and blue humanities scholars more broadly, show us that we must think *from* the water (Anderson and Peters), submerged in the flush and flow of things as we experience them.

Conclusion

Small Bodies of Water and *Where We Swim* surged out into the world at the same time, responding to a distinct Anthropocene moment. Recognising the need for new 'ways to evoke being part of the nonhuman world' (Horrocks 2022) and new forms 'fit to weather the 21st century' (Horrocks 2022), Powles and Horrocks disrupt traditional expectations of swimming – who gets to swim, how swimming should be done, and who gets to write about it. Their texts form a distinct departure from a male-dominated tradition and introduce swimming as a practice that is convivial rather than individualist, everyday rather than spectacular, and that seeks awareness rather than escapism.

As well as responding to a need to reimagine swimming in literature and culture, their texts also reflect shifts occurring in environmental and blue humanities scholarship, in which water is taken seriously as a medium with socio-political agency, specificity, and vital importance in the Anthropocene. Offering a shift in understandings of how the Anthropocene is experienced, Powles and Horrocks' texts are watery rather than terrestrial – fluid in form, theme and style. Immersion

becomes both a material and writerly practice as they write from, through and with the water. Objective, detached scientific perspectives are thwarted as experiences of water flood into the everyday sphere and submerge the subject's point of view.

Decentring masculine, Eurocentric ideas of bounded individualism, Powles and Horrocks utilise fluid ontologies of connection, relationality, and dynamism, through which Indigenous peoples have understood the world for millennia and feminist posthuman scholars have adopted more recently – expressed through concepts such as trans-corporeality, bodies of water, and the more-than-human hydrocommons. Further reflecting the concerns of feminist posthuman and Indigenous scholars, Powles and Horrocks approach these fluid, interconnected understandings whilst maintaining a clear politics of location, centring difference amidst entanglement, and attending to the ways in which their unique socio-political location makes their experience of a watery Anthropocene divergent to that of others.

Mentz writes about swimming as 'a distinctively Anthropocene form of embodied practice' (2020b). When we submerge our bodies in oceans, seas, rivers, lakes and ponds, we feel 'the physical realities of our terraqueous globe' (Mentz 2016) on our skin. For Mentz, the 'dynamic ecologies' (2016) of these planetary waters 'attunes us to groundlessness and disorientation' (2020b) and to 'disorder, fluidity and inhospitality' (2016). In this sense, he claims that swimming teaches us 'to endure the uncertainties and cataclysms of a post-climate change world' (Mentz 2016). Mentz's ideas are mirrored in Powles and Horrocks' work, both of which have a central concern for the climate emergency and the ways in which humans and more-than-humans must respond to and experience it. At the core of both texts is an acceptance of instability. As feminist women writers and swimmers in male-dominated waters, aware of their colonially inflected heritages and their impact in more-than-human worlds, they never held the detached presumptions of objectivity and mastery that can afford a sense of stability or groundedness in a world that, for many, has always been volatile and inhospitable.

However, Powles and Horrocks' writing broadens Mentz's ideas by teaching the reader that it is possible to find, if not stability, forms of equilibrium in a watery world

– a world that can be dynamic, unpredictable, and inhospitable for complex, interconnected reasons that far predate this Anthropocene present. Powles shows us about finding a sense of home in the quicksilver currents of multiple languages; about enduring precarity in the face of hostile geopolitical borders and barriers to access; and about seeking connections with human and more-than-human others dispersed across vast spatiotemporalities. These are connections that then help her to anchor herself, perhaps not in one body of water, but in multiple bodies of water. Similarly, Horrocks teaches us about understanding global Anthropocenic issues through the vector of the fleshy body, by attending to the intersection of embodied self and environment as a practice of making knowledge. Like Powles, by accounting for her politics of location, Horrocks uncovers her unique obligations to the others she shares the Anthropocene world with, which provide her with a path through it. And by adopting a fluid mindset that allows her to bend and yield, both in writing and living, she finds a new way to move through this slippery, volatile Anthropocene context. For both writers, what their watery texts offer is not the opportunity to find stable ground in an unstable world, but a way to stay afloat in it.

Chapter Four

Stories of otherness in entangled worlds: Narrating empathy in the work of Elizabeth Rush and Rebecca Giggs

Introduction

As the three previous chapters have shown, there are multiple issues with the Anthropocene narrative and the way in which we tell Anthropocene stories. Principally, Anthropocene discourse only reflects one cultural imaginary – white, scientific and usually male – whilst purveying false universals about who exactly is at fault. Within this imaginary, Anthropocene issues are dominated by an allegiance to 'the technoscientific desire for specificity, objectivity and fact' (Grusin, xi). This 'fetishizing of factuality' (140), as Eilieen Crist calls it, serves to alienate the layperson reader, told through inaccessible, alienating language that has no relevance to everyday experiences of a changing world.

As Candis Callison has highlighted, this technoscientific, fact-based approach is particularly alienating for some Indigenous communities, such as the Inuit, whose lived experiences of changing weather, landscape, and species behaviour in an interconnected world are fundamentally at odds with the abstract term 'climate change', which is 'something they talk about on CNN' (44). Callison highlights the 'absurdity of trying to sum up a lifetime of discrete observations layered on oral histories and community consensus about witnessing environmental change' (45) in neat terms and statistics. Even for a Western audience, this approach can be highly counterintuitive, alienating those who find scientific language inaccessible and causing climate-sceptical readers to become more defensive and less receptive (Hayhoe). Providing more and more facts and data may be effective for some topics, but, as Katharine Hayhoe explains, when it comes to Anthropocene issues, 'politics, ideology, identity and morality get tangled up in science' (52), and 'our frames as George Lakoff calls them, get in the way' (52).[33] In the face of such complexity and

[33] Cognitive scientist George Lakoff's concept of 'framing' (2014) acknowledges that the way we say something – the language we frame it in – is more important than what we actually say. Lakoff's principal example is to challenge the reader with the instruction, 'don't think of an elephant', which, inevitably, causes everyone to think of an elephant. To try to negate a frame is actually to evoke it – a truth that Lakoff claims Richard Nixon discovered when he declared to the nation, 'I'm not a crook'.

subjectivity, a data-driven approach can backfire, causing people to double down on what they already believe and reject science outright.

Another element of Anthropocene storytelling that requires problematising, as other writers in this thesis have shown, is the god trick perspective's characteristic air of neutrality and detachment (Haraway 1988). Describing anthropogenic destruction, pollution, global warming, and extinction with detachment leads to a loss of meaning and significance, 'cognitively mut[ing]' human domination into what seems like 'the pure truth' (Crist, 140). Neutrality provides the reader with a comfortable spectator position, 'an unmarked, disembodied perspective' (Alaimo 2016, 145), which allows the human to remain external to the trouble – unentangled and uninvolved. Further, as Alaimo writes, 'scientific neutrality lends itself to a mode of popularization that cleanses the term Anthropocene from any entanglement with political genealogies, specificities and identities' (2016, 153). Thinking of anthropogenic damage through data immaterialises our messy entanglement in the world and allows us to externalise the events of the Anthropocene, as well as the vulnerability and suffering of others in which we are implicated.

Furthermore, another issue with this form of storytelling is its frequent use of an apocalyptic register. Stories of 'tipping points' describe risk sliding into catastrophe, before descending into apocalypse. 'Climate porn' is exploited by a sensationalist media (Callison, 45), representing the climate crisis in a series of dramatic images and videos of drowned villages, eroded coastlines, raging wildfires, and collapsed glaciers. Nowhere in these narratives is the possibility of mediation or human agency. The futures we are presented with in these stories leave no room for hope. As Hayhoe writes, 'fear works well when coupled with uncertainty to induce inaction rather than action' (66). Unless fear is immediately connected 'to people's everyday lived experiences' and 'viable and appealing options for dealing with that threat' (Hayhoe, 71), it leads only to apathy and despondency. Roman Krznaric echoes this, arguing that 'Framing collapse as "inevitable" creates feedback loops of passive despair rather than of radical hope that inspires action' (2020, 155).

The frames through which we perceive a statistic, fact, idea, issue, person or group prevent us from objectively understanding it.

Detachment, apathy, objectivity, domination, and an abject refusal to see the self as implicated in the other: these are arguably the same values, registers and approaches that characterise the mindset behind our slide into the Anthropocene in the first place. Feminists argue that if we want to change the course of history, then we need to change the narrative. We need stories that create space for the imagining of different futures, that are attendant to the different histories, beliefs, and value systems present in the scientific record and the way that this informs the possibilities it presents us with. As Haraway writes, 'It matters what worlds world worlds. It matters what stories tell stories' (2016b, 35). And these stories of Western anthropocentric innocence and planetary doom are fundamentally unsuitable for a world undergoing new and untold forms of collective change, suffering, and dying.

This chapter will explore the writing of Elizabeth Rush and Rebecca Giggs. Rush is an American journalist, writer and Assistant Professor of Creative Non-fiction at Brown University. She lives in Rhode Island and has recently published her second book, *The Quickening: Creation and Community at the Ends of the Earth* (2023), which explores motherhood and Antarctica. Rush's journalistic background and an interest in the treatment of climate victims in the media pervade her work in *Rising: Dispatches from the New American Shore*, as she listens to and reports on vulnerable coastal communities. She weaves first-hand testimonials with personal experience and reflection in her exploration of fundamental questions of climate injustice, what it means to live in a time of climate emergency, and how to live amongst so much loss.

Giggs is a writer from Perth, Australia. She holds a PhD from The University of Western Australia in ficto-criticism and ecological philosophy. In 2018 she was appointed a writing fellow at the Rachel Carson Center for Environment and Society, where she looked at 'forms of interspecies intimacy vitalized by technology' (Rachel Carson Center). This background is visible in her debut text, *Fathoms: The World in the Whale*, which probes the complexities and ambiguities of interspecies relationships, or as Giggs puts it on her website: 'how people feel toward animals in a time of ecological crisis and technological change.' Giggs is currently an Honorary Research Fellow at Macquarie University.

Rush and Giggs are changing the narrative by injecting empathy into Anthropocene storytelling. It will argue that their work counters alienation with interdependency, apathy with care, and alterity with the constant labour involved in trying to know. Along with all the other writers examined in this thesis, Rush and Giggs push back on the dominance of dry, scientific data with an affective register that engages with the more-than-human world in ways that are subjective, speculative, and emotional. What makes their work interesting is the way in which they centre empathy, as both theme and practice, and draw attention to the need for an Anthropocene discourse that is capable of evoking empathy for both human and more-than-human others, and that can navigate tangled relations of similarity and difference.

Rush and Giggs' engagement with empathy is startling and new, but it is also reflected in the work of several other emerging and established female writers. Robin Wall Kimmerer's text *Braiding Sweetgrass* (2013) shares the Indigenous wisdom of reciprocity, which teaches us about an inherently empathetic approach to the living world. Katherine Norbury's introduction to her anthology, *Women on Nature* (2021), openly acknowledges the practical constraints – time, money, accessibility, space – that have long held and continue to hold women back in telling stories about the changing natural world. And Josie George's writing challenges the narrow scope of contemporary nature writing and its erasure of the experiences of people with disabilities, whilst calling for less hubristic certainty and more vulnerability in narrating relationships with the natural world: 'tell me that you don't really know after all', she writes, 'Tell me that your stories, your perceptions, your truths, are all as unreliable as mine' (George 2021, 164). This shift towards empathy and vulnerability marks a change in Anthropocene storytelling and contemporary nature writing more broadly. It is a shift whose contours are defined by a feminism for the Anthropocene that prizes difference over similarity, immersion over detachment, care over apathy, and interconnection over separation.

Rush's *Rising* explores the changes taking place on the US coastline, already greatly unsettled by the rising sea levels and extreme weather events of the Anthropocene. *Rising* is a book of essays on climate change, but it marks a significant departure from the genre of non-fiction climate change literature; it is a text created entirely on

its own terms. Written against the heavily politicised vernacular of scientific authority and a paralysing apocalyptic register, Rush endeavours to reach a new audience: 'an audience that isn't necessarily going to pick up a climate change book' (qtd. in Babendir) and who would be alienated by 'jargony' (qtd. in Babendir) language around 'carbon taxes and mitigation and offsets' (qtd. in Babendir). Rather than leaning into facts, data, and objectivity, Rush prioritises affective, lyrical language as the main driver of her narrative. In telling situated stories of real people and places, she is concerned with language and the need for a vocabulary capable of adapting to the rising tides, a language that can story the movement of the shore as land slips into water.

Rising unfolds through first-person lyric reportage that makes space for the testimonies of others. Rush grounds the abstract subject of climate change not in science, but in the experiences of real people. She centres their stories as a way to 'cut through the thickness' (qtd. in Babendir) – the impenetrability and inaccessibility of data and jargon – of the language around sea level rise and flooding. In this way, she acts as a 'conduit' (qtd. in Babendir) for flood victims, people from marginalised communities who would never normally be invited to speak, but whose stories we need to hear most. *Rising* intends not to scare, catastrophise, or discourage, but to unsettle its readers, waking them up to the 'ungrounding of the ground' (N. Clark 2010, 16) already taking place around us. It works to bring these uncanny events uncomfortably close to even those who live far from the shore, and to evoke empathy for those already suffering their effects – human and more-than-human – whose presence is not as far removed from the rest of us as we may imagine. *Rising* offers a journey without endpoint. It is a journey of understanding, a slow, creeping awakening to the reality of sea level rise and the fact that 'the future is, in many cases, already here' (Rush 2018, 120).

Giggs' *Fathoms* is an intellectual exploration of epic proportions. Her central objective is to explore different aspects of our relationships with whales, past and present – from mythology to whaling, environmentalism to iconography, charisma to corsets. But this central question also allows her to branch out into other tangential topics, restlessly pursuing multiple lines of interest, all orbiting around the broader theme of 'how people feel towards animals in a time of ecological crisis and

technological change' (Scribe). Giggs' literary practice is one of speculation, depth, and care, with empathy as not only a writerly tool, but also a major concern. *Fathoms* is an exploration into our connections – seen and unseen – with other creatures, and the obligations that shadow this. It asks what it means to care about non-human animals in the Anthropocene, what it is that makes an animal charismatic, and provokes us to consider how we can learn to care and feel empathy for distant and unmet things. *Fathoms* offers no linear narrative arc. It is a wide-ranging pursuit of numerous lines of inquiry. It has multiplicity, restlessness, and speculation at its heart, and, like the rest of the writers in this thesis, it offers no endpoint or conclusion.

This chapter will show that, for both Giggs and Rush, an empathy capable of incorporating entanglement and navigating relations of similarity and difference is critical for storytelling in Anthropocene contexts. The chapter will begin by cementing the importance of entanglement in the Anthropocene. By looking to the work of feminists such as Cecilia Åsberg and Rosi Braidotti, entanglement will be situated as an ethical position and its relation to empathy established through its fundamental concern with difference. This understanding will then be mapped onto the ways in which both Rush and Giggs engage with and evoke an entangled approach. Rush utilises entanglement to emphasise responsibility and complicity, and to remove the possibility of a safe, neutral spectator position. Similarly, for Giggs, entanglement is about confronting the reader with protracted, complex forms of culpability that refuse externalisation or detachment. Like the rest of the writers in this thesis, both Rush and Giggs emphasise the need to move away from outdated logics of hierarchy, objectivity and categorisation and to adopt an entangled perspective. In their work, such a perspective emerges as capable of comprehending the unexpected connections across difference that enmesh us all; it is a perspective that is capable of empathy.

The next section builds on this by exploring how Giggs and Rush incorporate empathy into their writing practices. Giggs is intentional about resisting judgment and conclusion, and instead seeks complexity and alternative understandings, keenly aware of her own bias. This restraint allows her to withhold disgust or judgment in her text, consistently meeting alterity with empathy. For Rush, narrating with

empathy speaks not just to a practice of writing, but to the purpose of writing itself. She writes so that others' voices can be heard, and as such, her empathy is born from advocacy and empowerment.

The final section in this chapter identifies a key catalyst that Rush and Giggs are motivated by: Anthropocenic empathy gaps. For Rush, this deficit is an environmental justice issue and it pertains to society's treatment of climate crisis victims and the way in which the relation between social stratifications of power and vulnerability to risk is often overlooked. This section draws upon Ulrich Beck's theory of the risk society to explore how Rush navigates these dynamics. Further, utilising Lori Gruen's concept of entangled empathy, it argues that Rush both incorporates and extends Gruen's work, adapting it for an Anthropocene context and a feminist lens. For Giggs, the empathy gap also requires an entangled approach but for an entanglement that isn't necessarily pleasant, and that requires us to forge ethical relations with unknown and unappealing others. Giggs questions the limits of our empathy and experiments with alternative routes towards it. Drawing upon the work of Danielle Sands, Denis Donoghue and Paul Ricoeur, this section will explore her innovative retooling of metaphor and anthropomorphism towards these ends. Ultimately, both writers pair their innovation of empathy with a recognition of the irrecuperable gap between self and other, and the impossibility of fully understanding the other. Holding this tension and trying anyway, despite knowing that it's futile, emerges as an Anthropocene imperative.

Empathy and entanglement

As the previous three chapters have shown, one of the key concepts of Anthropocene feminism is entanglement. Åsberg and Braidotti begin their *A Feminist Companion to the Posthumanities* with the assertion that:

> …it is more conspicuously so now than ever before: people are entangled in co-constitutive relationships with nature and the environment, with other animals and organisms, with medicine and technology, with science and epistemic politics. We live and die, play, thrive, and suffer by each other (1).

Elsewhere, Braidotti defines 'the critical posthuman subject within an eco-philosophy of multiple belongings, as a relational subject constituted in and by multiplicity' (2013, 49), echoing Latour's writing on Actor-Network-Theory, in which everything exists in

constantly shifting networks of relations, through ‘a very peculiar movement of re-association and reassemblage’ (Latour 2005, 7). As discussed, this shift is important but often does a poor job of acknowledging its precedents in the ontologies and epistemologies of diverse Indigenous cultures, and their understandings of ‘a cosmos of relations that speak to complex entanglements of the human with the more-than-human’ (Adamson and Monani, 2). Keeping this heritage in mind, entanglement is a useful ethical mode through which to think the Anthropocene as it is fundamentally concerned with difference – with the understanding that we are distinct from, yet profoundly interconnected to multiple others, with whom we are always engaged in processes of interaction and intra-action (Barad). It provides a method through which to navigate ‘the muddied space between relations of similarity and difference’ (Phillips, 24).

Giggs and Rush both take entanglement as a key theme and framework for their texts. For Rush, part of her agenda is to ‘lessen the distance between humans and the world of which we are a part’ (2018, 6). She illustrates how the troubles of the Anthropocene are a consequence of people acting in ways that do not acknowledge their entanglement with and interdependency on place and the others that they share it with. She uses Silicon Valley, the embodiment of techno-capitalism, as an example, in which global tech corporations pay millions of US dollars to site their offices on wetland:

> …when the salt marsh harvest mice living just east of the parking lot drown, few working at Facebook will know. Because what they do and who they are is not dependent upon the land where their company rests; if Facebook eventually relocates to higher ground, it will be exactly what it was before—a social networking platform that connects users globally, while disconnecting them from the physical setting where their lives take place (2018, 245).

In contrast to this detached, abstract approach, Rush communicates entanglement as a conclusion that she has come to through situated experiences. During a residency in the H.J. Andrews Experimental Forest in Oregon, Rush describes looking at the Rufous Hummingbird and perceiving not just a singular creature filled with ‘the pump and flow of blood beneath the skin’, but also as ‘a map of its migratory route, and the many swamps and wooded lowlands that it passes through along the way’ (2018, 188). Rush sees the bird, but she also sees the climatic

changes occurring in the places it depends on, which mean that 'by 2080 this glittering hummingbird will lose 100% of its nonbreeding range in the United States' (2018, 190). In this way, she heeds Alaimo's call for visual depictions of the Anthropocene that include nonhuman agencies and trajectories, that make space for 'the movements, the activities, the liveliness of all creatures' (2016, 146). Like Jamie, Renkl, Powles and Horrocks, Rush actively refuses to absent the human to the god trick position, the 'transcendent, incorporeal perspective' (2016, 147) that the corporations in Silicon Valley represent so well. Her physical presence in the homes of flood victims up and down the American shore declines the safe position of incorporeal spectator. She is an embodied witness to their stories, to their pain, and to the physical and climatic changes taking place in their homes. To many, such as Chris Brunet from the slowly disappearing Isle de Saint Charles in Louisiana, Rush is a repeat visitor, forming personal relationships forged from care rather than research based on extraction alone. She makes a point of bringing gifts for Chris and fellow islander Edison, aware that most visitors 'want to carry the story of the island away from the island […] Few, I imagine, leave something, anything behind' (Rush 2018, 172). Through research infused with care and empathy, Rush establishes connections that recognise others as individuals, rather than interview subjects.

The ways in which Rush refuses the position of spectator also extend to an assertion of her implication. Like all the other writers in this thesis, Rush is candid about reflecting upon her own involvement in systems of carbon consumption and anthropogenic damage, systems that are causing the decline of species such as the hummingbird. She writes, 'I too have travelled far to get to these fifteen thousand acres […] But unlike the hummingbirds', my journey wasn't nectar fuelled. I watched two movies and ate a ham sandwich while my Boeing 737 burned through thousands of gallons of jet fuel' (2018, 185-6). The juxtaposition of the everydayness of eating a ham sandwich alongside the fiery combustion of fossil fuels conveys the contradiction Rush recognises between the material reality of generating carbon emissions and the detached experience that protects the self from reflecting on it. Elsewhere in her writing, Rush is similarly unequivocal about the reality of being an environmental journalist or writer at a time of climate crisis, and emphasises that there is no pure, external position from which to spectate from. In an essay for *Emergence magazine*, she writes: 'my mind is a cleft thing: one side calculating the

carbon cost of running up the coast to promote my book on climate change, the other strangely comfortable in the subterranean parking garage with its Explorers, Grand Cherokees, Beetles, and Corollas' (2019). In both quotes, Rush is open about the uneasy tension that exists between the two sides of her psyche – a kind of cognitive dissonance. She holds both conflicting states while being honest about the impossibility of resolving or existing outside of the tension between them.

Like Rush, Giggs' emphasis on entanglement is partly motivated by the reduction of distance between the human and the wider world. Her examination of the relationship between humans and whales seeks to go beyond the environmentalist success story of the late twentieth century, in which whales became poster children for a globally imagined 'triumph of activism' (Giggs 2020, 18), a charismatic, abstracted 'super-whale' (Giggs 2020, 153). She strives to expose the multitude of connections we have with real whales beyond this iconography. Tracing histories, physical phenomena, and the flows of capital and industry around the globe, Giggs uncovers whales 'melted into toast' (2020, 60), whales as feed for fur farms (2020, 63), whale voices 'portaged […] into living rooms with paisley drapes and corduroy lounge suites' (2020, 174), and a whale carcass plasticised and turned into a living room, in which 'attendants sometimes served dinner and coffee' (2020, 124). Giggs' point is that the new global narrative of whales – or of human–whale relations – in the Anthropocene is not a linear, teleological story of success and benevolence, but a complicated and ongoing tale of 'protracted kinds of culpability' (2020, 15). The whale is both the primary subject of her text and 'a node' (Jabr) used to explore entangled networks: 'one of many points of connection in a vast and knotty ecological web whose ever-shifting fibers we are still tracing, even as we inadvertently shear them' (Jabr). The whale's body, Giggs writes, 'serves as an accounting of the legacies of industry and culture that have not only escaped the limits of our control, but now lie outside the range of our sensory perception, and, perhaps even more worryingly, beyond technical quantification' (Giggs 2020, 19). We take comfort in the imagined distance between ourselves and those things we externalise: pollution, extinction, suffering, death and degradation. And for this reason, 'We struggle to understand the sprawl of our impact' (Giggs 2020, 19). But in Giggs' hands, the whale lays bare a global ledger of our worldly implication: 'there it

is, within one cavernous stomach: pollution, climate, animal welfare, wildness, commerce, the future, and the past. Inside the whale, the world' (2020, 19).

For Giggs, entanglement is such a profound part of her work that it is found not just as a theme, but also at the level of sentence, grammar, and narrative structure. On a structural level, each of Giggs' chapters begins with a title page that includes a précis: a paratactic list or 'telegraphic preview' (Jabr) of the ideas, themes, events, questions, subjects, and referenced works included in the chapter, connected by spaced em dashes – like chains of arms holding distinct, yet related, bodies together. For example, 'Sounding' is preceded by a list that includes 'Ship-Strike — Terrorism as Recorded by Right Whales — What is "Silence"? – Blue Whales Drop Three White Keys on a Piano — Voices with No Origin — The Beluga That Learnt to Talk Like a Man — Spies in Sperm Whales' (Giggs 2020, 171). It is difficult to define these summaries: they are microcosms to the chapters that unspool in the pages after them, maps to the wide-ranging worlds that Giggs builds, driven by the unearthing of the unexpected, and the drawing closer of the seemingly far away. They are textual evocations of the kinds of uncanny Anthropocene assemblages that Giggs examines: the 'agglutinating' (2020, 81) rubbish of an oceanic gyre; the 'brightly coloured cairns' (2020, 270) of plastic leftover when a fulmar's body decomposes; or, as Ferris Jabr suggests, the innards of a whale's stomach, 'whether it contains krill and squid beaks, or a greenhouse and several tarpaulins' (Giggs 2020, 122).

Even though these are summaries rather than elements of the chapter structure by which the reader could navigate, each fragment is written in title case. This gives the impression that each is distinct and stand-alone (which the topics themselves would seem to confirm – a ship strike appearing to have little to do with Right whales that have somehow recorded terrorism). However, by using spaced em dashes (a punctuation mark that would normally be enclosed, without spaces), Giggs implies that each fragment is also connected to and interdependent upon the fragments on either side of it, and that these connections will be unpacked and explained in the chapter itself. In this way, Giggs emphasises, similarly to Powles, that all things are distinct, yet in constant relation, bonded across disparity by unseen or unexpected connections. These fragmentary arrangements 'echo one of the book's central

concerns: finding the hidden connections between seemingly unrelated pieces of the world's flotsam and jetsam—between its wonders and its wrecks' (Jabr).

These summaries can also be read as a nod to an outdated publishing convention. In the eighteenth and nineteenth centuries, books often included summaries at the beginning of each chapter (Inglis). For example, in Jonathan Swift's *Gulliver's Travels*, each chapter begins with a brief, list-like summary of the chapter's contents, such as:

> THE AUTHOR GIVETH SOME ACCOUNT OF HIMSELF AND FAMILY; HIS FIRST INDUCEMENTS TO TRAVEL. HE IS SHIPWRECKED, AND SWIMS FOR HIS LIFE; GETS SAFE ON SHORE IN THE COUNTRY OF LILIPUT; IS MADE A PRISONER, AND CARRIED UP THE COUNTRY (33).

Further, in Charles Dickens' *The Pickwick Papers* (1836), the text includes not only a contents list, but an additional 'detailed contents', which provides a short summary of each chapter, oscillating between the use of semi colons and em dashes to separate the paratactic phrases. For example, '4. A Field Day and Bivouac—More new Friends—An Invitation to the Country', or '11. Involving another Journey, and an Antiquarian Discovery; Recording Mr. Pickwick's Determination to be present at an Election; and containing a Manuscript of the old Clergyman's'.

Despite both these examples being from works of fiction, this convention was more often seen in non-fiction (Inglis), such as natural history, travel, science, and biography, all of which could be said to have bequeathed the hybridised, contemporary genre that Giggs herself writes in. This conceit allows her to gesture to a period of history in which knowledge production and narrative were dominated by men – usually belonging to the category of the normative white, heterosexual 'Man' – and that operated within Cartesian ideas of human superiority and separation from the rest of the living world. As this thesis has explored in Chapter One, this worldview was framed by enlightenment, scientific attitudes that saw the world as a series of separate moving parts – complex mechanical systems for taxonomy to dissect, identify and categorise. As such, it perceived through a lens of hierarchy and opposition: human vs. animal, mind vs. body, culture vs. nature. It was a worldview predicated on dualism and alienation, on categorisation and each thing being unentangled and placed in its rightful box.

In parallel, it was also a time of empire and conquest, and this worldview enabled the British empire to categorise Indigenous people as different, and therefore inferior, to them, using frameworks such as Human vs. Nature (Moore 2016b), savage vs. civilised, and native vs. European. It was a stratified worldview that through false dichotomies, fragmentation, and a total emphasis on difference, enabled imperial forces to plunder the world and bequeath a legacy that directly led to the Anthropocene world we inhabit now. Therefore, the historical period this publishing convention represents is exactly what Giggs' entanglement agenda works against. By adopting this paratactic convention but utilising em dashes to connect each phrase, she both nods to the male-dominated, scientific, imperial legacy which she inherits as an Australian settler descendent and 'nature writer', but also subverts it, emphasising instead the bonds between each fragment in the whole – the connections across difference.

At sentence level, Giggs writes in a style that is replete with semicolons, colons, commas, em dashes and brackets. Her sentences constantly branch and interconnect, diverge and circle back. They are mostly compound sentences; no single phrase is isolated or self-contained, but instead entangles with those around it in complicated ways. Whereas both Powles and Jamie opt for a restrained, polished writing style, Giggs delights in more opulent prose. This prose is generous, lengthy, and complicated, resplendent in superfluity, repetition, and interruptive, self-conscious asides. For example, describing a whalefall, Giggs writes:

> After the whale's soft tissues and cartilage are consumed, these tiny organisms broadcast their larvae into the sea to drift in dormancy; infinitesimal, barely perceptible, and hopeful (if the larval can be said to be hopeful) of finding more dead cetaceans. A whale body is, to this glitter splash of biology, a godsend; and an occasion for gene exchange. To think such extremophiles indestructible — too ancient or too deep to be affected by the impoverishment of the sea above — is to disregard their interaction with the corpse whales, which function as engines of evolution, and stepping stones for their migration between stringent, oxygen-poor habitats (2020, 21–22).

These three lengthy sentences demonstrate how semicolons, colons, and commas facilitate this writing style. Used by Giggs as waymarkers and landmarks, they help

the reader to navigate through the tangled thickets of her writing. At the same time, asides contained within brackets and spaced em dashes allow pauses, as if in light-filled clearings, providing space for reflection, connection-making, and clarity.

Another example is found in Giggs' description of the 'shadow kingdom of subtending connections' (2020, 315) that characterises Anthropocene ecology:

> …perhaps most unsettling is the system that connects our lives intimately with the fate of the whale — as was once the case with the whalebone corsets women wore; and is exemplified, today, on discovering whales girdled by toxic blubber (the chemical legacy of our industries). This much closeness can be painful — and yet the infolding of our lives with those of remote wildlife has much to teach us about how interlinked the future will be (2020, 315).

In this passage, Giggs' writing – a web of semi-colons, em dashes, and brackets – reflects the 'infolding' and 'interlink[ing]' of the ecological systems that it takes as its subject. To navigate these two sentences requires concentration – just as in the living world, the more one looks, the more one sees. However, it is Giggs' use of semicolons that is most effective. In this extract, she conducts a shift from fact to metaphor in order to highlight an uncanny temporal mirroring between the whalebone corsets once worn by women, and the toxic girdles that humans have burdened whales with now. Across centuries, both human and whale are bonded by the fact of being encased by the other: a whale bone constrains a human; human waste constrains a whale. Both images on their own demonstrate the startling entanglement between humans and whales, as part of an interspecies relationship that spans thousands of years. But the intimate mirroring that happens between the two gestures to a high level of nuance and insight, which Giggs captures through a single semicolon. With both clauses independent but also intimately connected across time, the semicolon communicates a connection in the form of both legacy and a grotesque kind of echo. Giggs uses it to bring a complex, fragile and highly nuanced relation to light.

This is one example of the way that semicolons contain a unique tension capable of accommodating complex relations. As John Pistelli writes: 'The period separates, but the semicolon separates as it joins. Its push-pull suggests the tense relationship of the clauses it both marries and divorces.' This push-pull relationship is between the

clauses as both independent fragments, and also as part of a wider whole, whether that be the sentence, the chapter, or the text itself. This is a particularly apt metaphor for ecological relationships in the natural world, with each living being both separate and also inextricably connected to others. In an essay on the Bogong moth published in *Emergence Magazine* (2022), Giggs writes about being drawn to the moth in part because of its wing markings, which give the impression that the moth is 'adorned with semicolons.' Semicolons, Giggs writes, gesture 'to the branching nature of sentences, and therefore of time; the possibility of subclauses running into the future, paths taken and not taken' (2022). This is reflective of the entangled nature of the living world – of branches, forks, connections, possibilities, and bonds that reach across time – but it is also emblematic of Giggs' writing style as it appears across multiple scales.

The 'branching nature' of Giggs' sentences, in which independent clauses are connected by semicolons and other connective punctuation, is replicated on a thematic level in the way her highly speculative, wandering approach joins seemingly separate ideas and topics together. For example, petroglyphs lead to a description of different whale killing practices, which – by way of Basque whaling, harbour settlements, and colonial encounters in Western Australia – branches off into an account of the many ways in which nineteenth-century people furnished their lives with whale-derived products, before moving onto modern industrial commerce and the 'haunting' of extinct species. This branching effect is compounded by Giggs' use of repetition and echo. The unfolding connections at sentence and chapter level, described above, are captured in the paratactic summaries at the beginning of each chapter; but these summaries also find their echo in the rich descriptive lists that run throughout Giggs' prose. For example, the running archive of the various, differentiated sounds that each whale species makes: 'Beluga purr and chirp; killer whales whistle, ping, and pip. Minke make a noise like an old-fashioned dial tone, the ringing of a dormant signal exchange. Beaked whales buzz. Bowheads wail up and down; glissando. Right whales crack' (Giggs 2020, 180–181). Refrains such as 'Inside the night-time house of itself, the humpback sings' (Giggs 2020, 173) repeat across pages. Giggs uses certain devices, like jarring, self-conscious asides that speak directly to the reader, to punctuate the third-person narrative. For example: 'Picture it this way (2020, 187); 'Do you also recall hearing this?' (2020, 131). And

central questions and themes reappear across the text, including the pivotal question of ‘how to care for unmet things’ (Giggs 2020, 292).

In line with the majority of the other writers in this thesis, *Fathoms* doesn’t follow a linear trajectory or arc. Its essays don’t strive for telos or conclusion. Instead, each of Giggs’ chapters explores one aspect of humans relations with whales, such as charisma, pollution, and hunting, before branching out into threads and sub-threads, restlessly generating new avenues for investigation and raising more questions than it can answer. Branching and connective movements self-replicate across scales; familiar refrains and tactics echo throughout the chapters. In this sense, *Fathoms*’ self-replicating narration is comparable to a tree, the fractal structure of which conveys the infinite and ongoing nature of entanglement in the living world, and the way that connections between living beings can be pursued without end.

Clearly, the Anthropocene requires the ability to think with and through entanglement. This mindset is comparable to Timothy Morton’s ‘ecological thought’ (2010), which is the thinking of ‘interconnectedness in the fullest and deepest sense’ (2010, 7). Morton calls it ‘a practice and a process of becoming fully aware of how human beings are connected with other beings—animal, vegetable, or mineral’ (2010, 7). He acknowledges that the affective states most important to the ecological thought include ‘compassion, curiosity, humility, openness, sadness and tenderness’ (Morton 2010, 125-6), but this aspect remained undeveloped. Feminist, posthuman and animal studies scholars have since built on this amidst a surge of interest in empathy (Gruen; Phillips; Sands; Weil). An entangled perspective requires the ability to see oneself not as self-contained, but as radically connected to others. It necessitates an understanding of interdependence: how our actions impact upon a whole host of others, and how we in turn are affected, changed, and altered by them. As Braidotti writes, ‘a posthuman ethics for a non-unitary subject proposes an enlarged sense of inter-connection between self and others, including the non-human or “earth” others, by removing the obstacle of self-centred individualism’ (2013, 49-50). This requires curiosity (Tsing), and it calls for an outlook that embraces difference, rather than prioritising sameness. It demands that we can recognise the lifeworlds built by others, with all their attendant complexity and

vulnerability – even if they fall far outside one's own range of experiences. In this sense, thinking entanglement requires empathy.

Empathy in the Anthropocene

The crises of the Anthropocene are arguably borne, at least in part, from anthropocentric selfishness – from the inability of some groups of humans to consider the consequences of their actions on others (King, 135). The Anthropocene could therefore be understood as a crisis of empathy. And, perhaps not coincidentally, empathy is now rising up the agenda (Brown et al.; Sands; Weil). Writer and public philosopher Roman Krznaric has called for an 'empathy revolution' (2014, 200); journalist Charles King has argued that 'a historic wave of empathy is challenging our highly individualistic, self-obsessed cultures' (135); sustainability scholars posit that 'empathy with the non-human world can bring significant advances to understanding sustainability challenges' (Brown et al., 2) and according to Kari Weil, 'empathy is in' (126), with contemporary animal studies scholars replacing rights with relations (Sands).

Both Giggs and Rush evidence a highly empathetic writing practice. Like Powles, Giggs' approach is consistently non-judgmental and refuses easy conclusions, instead seeking complexity and alternative understandings, even when covering inflammatory or divisive topics. Writing about a young Franciscan dolphin (an endangered species) that was killed on Santa Teresita beach in 2016 by a crowd of selfie-seeking tourists, she is candid about her effort to remain objective: 'I try to look past my own disgust — a knee-jerk response [...] I am searching, instead, for a dispassionate answer to the question: *why didn't they stop?*' (Giggs 2020, 136, emphasis in original). Giggs searches for a different lens through which to understand the crowd's actions. She explores the idea of biophilia in an age of mass extinction, which allows her to perceive a small child's 'excruciating' (2020, 144) gentleness – his '*agony of loving the disappearing*' (2020, 144, emphasis in original). Through this alternative perspective, Giggs disrupts the media narrative of 'a selfie orgy' (Hider) and seeks a way to 'grant these people some reprieve' (2020, 147), as human subjects grieving for an Anthropocene world disappearing all around them.

However, it is perhaps the chapter ‘Sea Pie’ and its treatment of Japanese whaling that best exhibits Giggs’ empathetic restraint. Taking a topic that is almost universally condemned in the West – and to which her readers will likely respond with a strong existing frame (Lakoff) – Giggs opens it up, complicates it, and explores it in a way that is not moralistic or judgmental. She begins by acknowledging that ‘decisions made in the space between the spoon and the mouth are deeply personal, yet […] also a factor of culture, class, geography, science and story’ (Giggs 2020, 215). She is suspicious of a universal approach to the right and wrong of food consumption, asking ‘is it ever possible to be impartial on the subject of what we eat, and why?’ (Giggs 2020, 218). However, despite her restraint, Giggs differs from the traditional scientist or nature writer by never removing herself from the picture, remaining highly self-reflexive and aware of her own biases, limitations, and privileges. She writes that ‘Eating is intimately individual. Yet what we wish to eat — and what we refuse to eat — can clue us into a circle of intimates, or inculcate us within hallowed traditions that connect back to our culture’s past’ (Giggs 2020, 216). But Giggs acknowledges that such cultural norms do not apply to her: ‘I know I am two-faced on the subject. My own background has permitted me to shift my diet without estranging myself from my origins’ (2020, 216). She recognises that it is easy to judge others on their decision-making around food when you are unrestrained by cultural and familial expectations.

Cognisant of what sets her apart from others when making decisions about diet, Giggs is intentional about challenging herself and stepping outside of her own biases. This is never more striking than during her visit to the Nishin Maru, Japan’s whaling factory ship, during which she eats whale meat. Despite being a vegetarian, Giggs describes her experience of consuming whale without horror or repulsion, but quiet rationale and self-awareness:

> While I’m examining the shred with my tongue, I can feel my brain turning over. The whale in the bowl. The whale in my mouth. The whale swallowed into me. This charismatic, personified creature. And yet, at the same time, I am aware that what is going through my mind in this moment is so far away — astrally far away — from the feelings that the whaler, and these children, experience, eating whale soup. For them, this is a meal that signals a homecoming: a reunion (2020, 242).

Even when confronting this difficult, taboo-like experience, Giggs still recognises that her relationship to whales and thus to the meat in her bowl, is different to, 'astrally far away', from the relationships that the Japanese whalers have, and that she cannot begin to account for their experiences or to judge them from such distance.

It appears to be this empathy – this recognition of other ways of relating to the whale and the world – that allows Giggs to withhold disgust or judgment. When describing the sight of the whale meat soup, she uses metaphors of Western homeliness and familiarity. Cooked in 'Tannin broth, [and] tiny mushrooms as if from a Lewis Carroll woodland' (Giggs 2020, 241), the strips of minke meat are 'a cocoa, brickish red, marinated in a sauce the stripy colour of an antique chair' (Giggs 2020, 242). These cosy, comfortable metaphors juxtapose with an experience many Western people would find alien or transgressive. But this contrast makes these images highly empathetic, in that they serve to remind the reader that to others, eating whale *is* a familiar experience, connoting 'a homecoming: a reunion'. What is alien to one is familiar to another. Always, Giggs calls our attention to the relations of similarity and difference that bind us all, and the way in which these relations can become strained and complicated. In her writing, differences – even those that span the widest gulfs – are met with intentional empathy rather than easy judgment.

Rush's writing practice is about empowerment, and this rests upon a clear distinction between empathy and sympathy. Unlike empathy, which requires 'an imaginative engagement … an affective or creative porosity between subjects' (Sands, 3), sympathy involves detachment; it trends towards pity. It is 'not so much a matter of feeling someone's pain as of feeling bad or regretful about the pain someone is feeling' (Slote qtd. in Sands, 3). To feel sympathy towards another is to regard them from afar: their pain is an externality, something to be observed but not felt. In this sense, a sympathetic perspective disempowers the other, perceiving them as passive and unable to take action to protect themselves. It can also have the effect of 'writing off' the other, consigning them as something lost, to be lamented but without hope of recovery or action. This is reflected in some contemporary nature writing, whose practitioners have long been criticised for 'writ[ing] like undertakers: an elegy on every page' (Wallace). This inertia is also mirrored in the catastrophist register of much climate crisis discourse, which implies that 'the conclusion is

foregone' (Rush 2018, 256) and leaves little room for hope or the possibility of human agency or transformation.

In stark contrast, Rush refuses to treat the flood victims she meets with pity or sympathy. Instead, she practices empathy as a means to convey vulnerability, but also complexity and agency. Her approach centres around the question: 'How to tell this story so that it becomes more than elegy alone, both a record of these uncanny times and also a rallying cry?' (Rush 2018, 256–7). Her answer to this is testimonial storytelling. Instead of telling flood victims' stories for them, she acts as a 'conduit' (Rush qtd. in Babendir) for them to tell their own stories through. This technique is used most famously by Belarusian writer and Nobel laureate Svetlana Alexievich. With subjects including World War II, the Soviet-Afghan war, and the Chernobyl disaster, Alexievich uses witness testimony as a way to approach new experiences, new futures, and new horrors for which there are no pre-existing forms of narrative or language. Like the uncanny future of sea level rise that Rush writes towards, the experiences of war and nuclear disaster create worlds for which 'we do not yet have a name' (Rush 2018, 13). But rather than resorting to the 'veil of banality' (Alexievich qtd. in Vergara) or the 'thickness' (Rush qtd. in Babendir) of scientific reporting, Rush and Alexievich utilise the words of witnesses to 'cut to the marrow of lived experience' (Rush 2018, 257). In this way, Rush and Alexievich are able to access 'the stories that s[i]ng; the stories that will bind us to one another as our homeplaces change irrecoverably right under our feet' (Rush 2018, 257).

Like Alexievich, Rush creates a polyphonic narrative of voices that is multi-layered and democratic. However, where they differ is in Rush's inclusion of her own narrative voice – which Alexievich largely chooses to remove. But rather than drowning out the witnesses, Rush's voice contextualises, facilitating a deeper understanding of 'the larger structural reasons' (qtd. in Babendir) behind their trauma. She guides the reader through the uncanny and unsettling experience of listening to her witnesses' stories and provides an emotional touchpoint, sharing first-hand the unfolding of her empathy and ethical relations with the people she meets, rather than leaving the reader to try and engage with the raw material of suffering and trauma alone. Whilst navigating this role, she is transparent about her recognition of the power balance between interviewer and interviewee and the way

that mediation or ‘giving voice’ can disempower the latter. Rush is ‘skeptical of using the verb “to give” […] Oppressed peoples have voices of their own. I think of the testimonies here not as an example of my giving voice to oppressed peoples but rather my giving them a microphone’ (qtd. in Babine).

For Rush, this empathetic, enabling practice goes right to the purpose of writing:

> Sometimes writing seems futile these days, but lately I’ve been thinking what if writing isn’t about communication so much as it is about agency building? Instead of just using my expertise to better communicate the impact of rising seas on frontline communities, I have been working within those communities to help them share their stories themselves. Hope for me dwells in the possibility that climate change demands that the authorship become a right, not a privilege (qtd. in Literary Hub).

For Rush, the duty of empathy in the Anthropocene is to empower and enable. Its purpose is not to tell others’ stories but to ‘figure[e] out how to bring difficulty into the light so it can be seen by all’ (Jamison qtd. in Rush, 142), not to wield authorship as a special status but to empower others to claim this right too. It is in this sense that she echoes the subversive decentring and centring dynamics utilised by so many other writers in this thesis, motivated by ‘a desire to make central voices often left on the margins’ (Rush qtd. in Babine). In parallel, Rush argues that empathy alone isn’t enough. She is ‘suspicious of the emotional satisfaction’ involved in feeling that ‘this work is an end in and of itself’ (Rush qtd. in Babendir) and emphasises that it must always be followed by action. For her, this begins with testimonial storytelling and making space in her text for the voices of marginalised others, but it continues with volunteering with a nationwide coalition of flood survivors called ‘Flood Forum USA’. In her practice, Rush shows empathy to be both a catalyst and an ongoing, active process.

As shown, Rush is intentional about considering the purpose, responsibilities, and potential pitfalls of empathy. As well as narcissism, others have identified the primary limitation of empathy as its bias in favour of proximity (Bloom; Brown et al.; Gruen; Sands). Research underlines the potency of ‘parochial empathy’, by which ‘empathy is constrained by group affiliations and intergroup competitiveness. People are disposed to feel more care for ingroup than outgroup members’ (Brown et al., 14).

Empathy is certainly limited by geographical proximity (most would agree that it's harder to care for climate crisis victims on the other side of the world than it is for someone who has been flooded out in a neighbouring village), but this proximity can also be cultural and social, relating to the extent to which we judge the other to be similar to us. With empathy limited in this way, sameness becomes the defining factor in determining ethical relationships and obligations.

In the Anthropocene, 'the limits of empathy are especially stark' (Bloom). Moral entanglements are dispersed across time and space, our spheres of influence so enlarged and distorted that we are morally implicated in the lives of many people we will never meet. With relations of harm fragmented and dispersed in this way, we no longer encounter the majority of those with which we are morally entangled, and even if we did, their alterity would run counter to an ethics based on similarity. As Petra Tschakert writes, 'The further away from the Self and the Known Other, not just in physical distance but in our ability to engage across difference, the greater the effort needed to enact empathy and responsibility' (282). As Rush and Giggs show us, empathy in the Anthropocene is imperative, but not straightforward.

Risk and relationality in entangled worlds

For both writers, the emphasis on empathy in their work is arguably motivated by what they identify as empathy gaps in this Anthropocene moment. For Rush, this gap relates to victims of the climate crisis and how they are perceived. Quoting sociologist Rebecca Elliot, Rush explains that before the creation of the US National Flood Insurance Programme, flood victims were considered 'blameless victims, facing misfortune that might befall anyone' (qtd. in Rush 2018, 150). But, with the development of scientific flood data and risk modelling, each flood is now seen as a 'scientifically foreseeable, patterned event' (qtd. in Rush 2018, 150), something that can be predicted and subsequently insured against. Therefore, any uninsured victims of flooding 'are perceived as having participated in their own undoing' (qtd. in Rush 2018, 150) and undeserving of empathy.

Aside from the over-reliance it places on data, the main issue with this perspective is that it assumes that risk is something that everyone can avoid. Ulrich Beck's theory of a 'risk society' (1992) provides a useful frame through which to explore this topic

in Rush's work. For Beck, the risk society has succeeded industrial society. In industrial society, the natural risks and hazards that threatened pre-modern society were replaced by human-made, often work-related risks, such as traffic or machinery accidents. The goal was to avoid and insure oneself against these, ultimately reducing uncertainty and increasing security. But in the risk society, risks are still anthropogenic but no longer avoidable. Risk is less a single event than a pervasive condition of jeopardy emerging from the modern project of domination over the natural world. This includes threats such as toxic pollution, the climate crisis, radioactive leaking, artificial intelligence, terrorism, and genetic engineering.

The Anthropocene world that Rush's witnesses inhabit is a risk society. And this is reflected in the strong sense of uncertainty that pervades all of her writing. Beck's sense of the risks in the risk society as being entirely new and different is mirrored in a narrative that actively seeks out destabilisation – that asks what it means to 'dwell in the world's dwindling' (Rush 2019). *Rising* is a book set in the midst of multiple unmoorings: the physical unmooring of the flood victims who have lost their homes; the psychological unmooring that comes from the realisation that the world is 'coming undone' (Rush 2018, 19); and Rush's own emotional unmooring, having just fled a long-term relationship. Rush writes: 'My faith in natural processes, in the intricate systems of reciprocity that I was raised to believe keep nature from tilting out of balance, is lost. Gnawing uncertainty takes its place' (2018, 13). She is candid about her changing psychological state as she develops climate anxiety, or what she calls 'endsickness' (Rush 2018, 66). The disorder of the outer world is reflected in her dreams, in which 'unprecedented storm surges rearrange the furniture' and unsettle her 'family lineage' (Rush 2018, 13). Rush finds that to acknowledge sea level rise, to imagine 'an end to the world as we know it means also, at least partially, losing your own mind' (2018, 89). She echoes Beck's assertion that we have reached the end of modernity's 'solid faith and optimism about the future' (Sørensen et al., 19), writing that: 'The commonly held notion that what has happened will happen again, that there are no new stories, this idea becomes fat with water, fully saturated, then it too slips beneath the sea's dark surface' (Rush 2018, 13).

In Rush's narrative, the future is no longer a source of optimism. It is also no longer a fixed or stable entity. Time collapses as images of deep time glacial change collide

with present-day scenes of melting ice caps and flood devastation, and data visualisations of sea level rise that leave familiar places 'buried under a layer of blue' (Rush 2018, 13). In parallel, residents testify to scenes of seasonal disorder, with 'seaweed now in August and sand flies and blackflies where there used to be none' (Rush 2018, 13). A strong sense of the uncanny haunts Rush's narrative as she finds things to be not just out of time but increasingly out of place too. In San Francisco, commuters wade through submerged sidewalks: 'the Bay isn't supposed to be here, their faces seem to say' (Rush 2018, 228). And in Staten Island a woman floats 'for hours on her couch in her wine-dark living room, which swiftly and inexplicably had become part of the Atlantic Ocean' (Rush 2018, 129). Metaphors that mix the external and internal worlds – internal in the sense of both the domestic and embodied – leave familiar images of home rendered newly strange and threatening. For example, Rush writes of 'trailer homes with their contents spilling out like organs from a wrecked body' (2018, 172); a row of garden swimming pools filled with 'algae bloom' and 'minnows' (2018, 126); and flood lines circling buildings 'like the trace cold coffee leaves inside a porcelain cup' (2018, 121). This disarrangement of time and space leaves the reader adrift, floating through images of 'waterlogged doppelganger[s]' (Rush 2018, 121) with an increasingly confused sense of what is real and unreal, what is past and future, what is solid ground and unknown watery depth. Uncertainty creeps throughout Rush's narrative and haunts the reader. Just as Beck observed, risk has become a pervasive condition – everywhere all at once (1992).

However, there is one important way in which the world at risk of sea level rise that Rush evokes differs from Beck's vision of a risk society. One characteristic of the risk society, for Beck, was that people were suddenly exposed to risk equally, 'beyond class and status' (1992, 49), driven by 'coalitions of anxiety' (1992, 100) rather than intersecting categories of inequality. He famously wrote, 'poverty is hierarchic, smog is democratic' (Beck 1992, 36). Although Beck later distanced himself from this viewpoint (2010), he has found support for the notion of democratic risk at least as recently as 2012, with one introduction to his work claiming that in the risk society, 'our usual way of distinguishing between "us" and "them" more or less collapses […] We are all, by now, decisively in the same boat' (Sørensen et al., 20). However, this claim relies on an understanding of risk as non-situated and non-specific, and it

glosses over how the politics informing our position in the world also inform our exposure to risk. Beck was clearly wrong about this; we are decisively *not* all in the same boat, and such claims invisibilise how risk and inequality are mutually constituted (Olofsson et al.). As Rush outlines in *Rising*, those who suffer the Anthropocene's worst effects are usually also the most disaffected by society, othered by race, class, wealth, gender, and other historical factors that determine vulnerability or privilege. Understanding this requires adopting an environmental justice lens. It demands a reckoning with 'our country's history and how it has left so very many bodies unjustly exposed to risks that only continue to mount' (Rush 2018, 161). In Rush's context of sea level rise in the US, this looks like the most oppressed social groups living in the most vulnerable coastal areas – usually as a result of historical marginalisation – and receiving the least amount of support and funding to help them adapt to flooding, mitigate its effects, or retreat from the water's edge.

For Rush, therefore, the empathy gap is an environmental justice issue, and it is found in a risk society in which the risks are much greater for some than for others. *Rising* is full of this juxtaposition between wealthy and impoverished victims of flooding. For example, in the Tanyard, Pensacola, flooded homes 'like half-dipped Easter eggs' (Rush 2018, 158) are abandoned due to federal and governmental negligence, whilst a few miles away in Gulf Breeze, a couple's 'McMansion' has been raised up, using $124,000 of federal money, complete with 'an elevator to help ferry groceries up from the garage, where their BMW [is] parked' (Rush 2018, 159–160). Similarly, 'in Miami Beach the water pumps whir, while five miles north there is a barefoot woman who carries her sandals' (Rush 2018, 82) through flooding. This woman lives in Shorecrest, which, like the Tanyard, contrasts with the billionaire riches of Miami Beach by being one of several 'low-to-middle-income neighborhoods where the majority of residents are people of colour and municipal services have long been difficult to maintain, thanks to the discriminatory banking practice known as redlining and the resulting decline in property taxes' (Rush 2018, 87).

The vulnerability of the people who live in these neighbourhoods is not arrived at by coincidence or bad luck; it is 'inherited, like a garnet necklace or a debt' (Rush 2018, 147). Like Savoy, Rush highlights how historical dynamics of oppression and white privilege have bequeathed the vulnerability of many of the poorest and most

marginalised communities today. She also shows how this is maintained by contemporary attitudes towards poverty and class, and a lack of empathy, as evidenced by Elliot. Rush notes, 'Ironically, the more information we have about the likelihood of flooding events, the less likely we are to consider those most "at risk" as being deserving of aid' (2018, 150). In doing so, she identifies a direct correlation between an increase in objective, fact-based knowledge – scientific data, probability calculations, risk modelling – and a paucity of empathy.

The connection between the two can be explained by Western society's faith in science and the rational. More specifically, it is couched in what Francis Ewald called the 'insurance society' (2009). In the insurance society, all uncertainty and risk can be eliminated through private insurance protection, enabled by technoscientific knowledge production and risk calculation. For Ewald, this was a key differentiator, as 'insurance is at the core of modern society' (qtd. in Sørensen et al., 16). Ewald was of great inspiration to Beck (Sørensen et al., 16), however one of Beck's central arguments around the risk society was the need to problematise quantitative, scientific techniques for measuring risk. He argued that knowledge about risk is not neatly categorisable but is conveyed in 'admixtures' and 'amalgams' (Beck 1992, 55), and that the new risks we face undermine attempts to predict, calculate and insure. In the risk society, in the face of pervasive, volatile forms of jeopardy, insurance protection is a 'Potemkin façade' (Beck 2009, 139).

Rush explores the dynamics between risk, empathy, and social stratification in the chapter 'Risk', set in Florida. She does this through a tripartite structure between herself; Samuel, a male academic expert on risk calculation who studies decision-making processes of at-risk people and groups; and Alvin, an ailing Black man whose 'trailer sits about a quarter of a mile from the water, in one of the city's lowest-lying neighbourhoods, the Tanyard' (2018, 137). Samuel embodies both the faith in scientific data and the hubris of the privileged individual in the insurance society. Sitting in Alvin's trailer, Samuel pressures him to disclose his flood insurance status, and is seemingly surprised, 'rais[ing] his eyebrows' (Rush 2018, 148) at the low income that prevents him from having any. Samuel attempts no understanding of Alvin's situation, makes no effort to cross the gulf that separates them or to feel empathy for him. Instead, he is solely focused on what he can gain from the

encounter: on the information he can extract from Alvin for his work studying risk calculation and making policy recommendations to the National Flood Insurance Program (NFIP). Samuel's cold and detached approach represents the way in which objective risk calculations both invisibilise and maintain structural inequality. As both a wealthy man and a key mechanism in the NFIP's risk calculation process, Samuel is part of the system that keeps Alvin vulnerable.

The differentiator that enables Samuel to treat Alvin this way is that for him, risk is purely fiscal. As Rush writes, there are two forms of risk: fiscal and physical. If the risk is financial – as it is for Samuel – then the person perceiving it must necessarily be 'standing at a safe remove, far from the flood lines' (2018, 149); if they were any closer then the risk would be physical, a threat to their embodied self. At this safe remove, Samuel exemplifies the disembodied, rational 'Man' of the Anthropocene and his god trick perspective (Alaimo, 2016; Haraway 1988; Liboiron 2021a), surveying from a distance and refusing any material or emotional involvement. But with distance comes distorted perspective; from afar 'risk looks like something that can be managed, through informed decision making or insurance' (Rush 2018, 149). The irony is that the privilege and power that enable Samuel to observe from a safe remove also preclude him from any real understanding of his subject of expertise. He does not see that there is no protection or insurance for someone like Alvin in an unjust, stratified society.

In deliberate contrast, Rush's approach to Alvin engages a much more empathetic, self-aware attitude, which can be interpreted using Gruen's 'entangled empathy' as a lens. This form of empathy is based not on proximity but interconnectedness, and it values not similarity but difference. Gruen offers the following definition:

> Entangled empathy is a type of caring perception focused on attending to another's experience of wellbeing. An experiential process involving a blend of emotion and cognition *in which we recognize we are in relationships with others* and are called upon to be responsive and responsible in these relationships by attending to another's needs, interests, desires, vulnerabilities, hopes, and sensitivities (Gruen, no page numbers, my italics).

This approach to empathy is foremostly about accepting relatedness to others, about embracing entanglement in an interconnected world. Indeed, as Danielle Sands

writes, ‘For Gruen, empathy, an ethical attitude, is the appropriate response to the ontological condition of entanglement’ (12).

However, as Gruen stresses, embracing the condition of entanglement is not about collapsing difference. Connection doesn’t have to mean similitude, and rather than ‘total enmeshment’ (Sands, 12), the imperative to examine relations between self and other requires attentiveness to differences as well as similarities. In this way, entangled empathy is a framework for relating across distance. Gruen suggests alternating ‘between first- and third-person points of view’ – allowing one ‘to perceive and to connect with a specific other in their particular circumstance, and to recognise and assess one’s place in reference’ to them. This approach enables the empathiser to remain cognisant of their relation to the other at all times, rather than succumbing to ‘narcissistic projections’ (Gruen). This ability to hold both first- and third-person perspectives at once ‘is a central skill for being in ethical relations’ (Gruen). In this sense, Gruen’s entangled empathy echoes the work of testimony theorists Shoshana Felman and Dori Laub, who mandate that the listener becomes ‘a participant and a co-owner of the traumatic event: through [their] very listening, and comes to partially experience trauma in [themselves]’ (57), but that they must also ‘preserve [their] own separate place, position and perspective’ (58). This empathetic position outlined by Gruen, Felman and Laub both embodies and capitalises on tension – the tension of the implicated listener, of the empathiser as both participant and observer, of being both connected to and distanced from the trauma.

Entangled empathy is reflected in Rush’s work in a variety of ways. For her, relationality is the foundation for empathy. Rush’s approach upholds Gruen’s assertion that ‘We can’t make sense of living without others’, and it brings to life her recommendation that ‘rather than trying to accomplish the impossible by pretending we can disentangle, we would do better to think about how to be more perceptive and more responsive to the deeply entangled relationships we are in’. Rush is transparent about her attempt to practice this entangled, other-focused empathy in her encounter with Alvin, and she does this by being candid about her initial failures. When Alvin first opens his door to her, Rush has an instinctive reaction to what she perceives to be alterity: ‘I am ashamed to say that for a second I consider turning

around—that for a second I am afraid of this elderly, ailing, black man' (2018, 13). However, during their interview, Rush reflects on this failure:

> As I probe, I feel as though I am pressing the gash on his leg and asking how much it hurts. "I'm sorry," I say, and mean it. Sorry for digging into the fertile soil of your pain. Sorry for asking you to tell me how the floodwater chewed through the foundation, how the wind removed the roof, how little there was to come back to […] Sorry for purchasing my plane ticket without contemplating how extraordinarily easy it is for me to visit a place so far from where I am from, knock on a stranger's door and expect to be let in. Sorry for momentarily fearing you, the man I met when I arrived unannounced, because all I could see at first were the differences between us (2018, 140–141).

It is not just the pain her questions cause Alvin that Rush regrets; it is her failure to navigate their encounter with attention to the similarities and differences between them. Whilst initially fearing Alvin because she was overcome by an otherness that she found potentially threatening, she failed to consider how her own differences threatened him in turn: how the privileges of race and class that enabled her to 'purchas[e] a plane ticket', 'knock on a stranger's door and expect to be let in' were not available to Alvin, who is made vulnerable by the same forces behind her empowerment. Rush realises that she failed to consider how the privilege that has sheltered her from the experiences Alvin has suffered also enables her to ask questions about it without awareness of their potential to trigger or retraumatise. This ethical failure renders her initial approach toward Alvin as primarily extractive. As explored in Chapter Two, an essayistic approach that seeks to take away a story for the purposes of making conclusions, with no regard for the impacts of this removal, is highly extractive and characteristic of both traditional essay writing and the Anthropos or 'Man' of the Anthropocene. However, once Rush begins to move between the first- and third-person points of view, she recognises how her privilege and carelessness could be harmful to Alvin, and takes more care to 'recognize and assess [her] place in reference to him' (Gruen). This, as Gruen writes, 'is a central skill for being in ethical relations', and it is a central skill for storytelling.

Indeed, 'There are other ways forward' (2018, 141), Rush writes, and she deepens her attention to the relations of similarity and difference between herself and Alvin, embracing entangled empathy as a framework for relating to him. In particular, she

attends to how the forms of vulnerability they both inhabit – she, as a woman, and Alvin as a Black man from a low-income community – both separate and bind them. Attending to these respective vulnerabilities involves an openness on Rush's part about another dimension of her relationship with Samuel, the third party in this multivalent exchange across difference. Rush discloses that he sexually harassed her during their trip:

> Samuel. Who suggested we swim in the Gulf before leaving Pensacola. Who asked me to hold his luggage in my hotel room instead of leaving it at the front desk. Who, on our way to the beach, offered me a 'senior fellow' position. Who invited me to present at the National Academy of Sciences. His flattery and his grant money. His federal connections and his reputation. Samuel – the expert in calculating risk (2018, 145).

In blistering prose, Rush describes Samuel as manipulative and arrogant. As 'the expert in calculating risk', he is confident of those that he, as a white, wealthy man, can afford to take. Carefully leveraging his privilege to exploit the vulnerability of others, he represents the 'autonomous and independent' self that Gruen sees as the antithesis of the empathetic, entangled self, and that characterises the Anthropocenic extractive approach. But in narrative, power dynamics shift. And in *Rising*, Rush takes on the position of author with Samuel as her exposed male subject, cataloguing his list of manoeuvres and exposing him to judgment – showing the reader, again, how the purpose of writing isn't just about communication, but agency building (Literary Hub).

With agency and control over the narrative, Rush situates Samuel in a broader category of threatening, manipulative and abusive men that she, along with her female students and peers, regularly encounters. She writes, 'being masturbated in front of, getting my ass pinched, and having my mind filled with lewd comments are regular parts of my work life' (Rush 2018, 143). She shares that Samuel wasn't even the only man to harass her on their trip to the Panhandle: an interviewee also threatened to kidnap her, claiming he had the FBI out looking for her and they were going to 'strip-search' her (Rush 2018, 143).

Rush and Alvin's respective vulnerabilities place them in relation, both part of a system in which certain 'bodies are often subject and, as such, susceptible to a

seemingly endless stream of external aggressions' (Rush 2018, 156). Samuel represents 'the edifice of white male power' (Rush 2018, 155) at the pinnacle of this system. He represents those 'who, should they happen to be close to the storm's wet center, are able to get out in advance … whose power, in its various shapes and forms, keeps their bodies safe' (2018, 156) – those for whom the risk society isn't as much of a risk. For Rush, this ethical relation enables her to close some of the distance between herself and Alvin, subverting the traditional environmental justice dualism of self and other (Antadze), which often sets up an opposition between a privileged self and an oppressed other.

However, Rush is careful not to collapse the irrecuperable difference between herself and Alvin. As Gruen emphasises, the key to entangled empathy is that the empathiser does not presume to fully know or understand the experience of the other. The empathiser should endeavour to inhabit the lifeworld that the other has built – 'what the world seems, feels, smells, and looks like from their situated position' (Gruen) – rather than their point of view. But this endeavour is always and only that: an endeavour. It stops short of any presumptions of fully knowing the other's experience or perspective.

This caution is reflected in Rush's recognition that 'Alvin's experiences are not synonymous with—are more damaging than—my own' (2018, 156). She takes care not to align herself and Alvin in too close an opposition to Samuel; they are not on the same side of a dualism, but more like nodes in an entangled network. This is a clear example of the importance of a feminist politics of location as explored in Chapter Three, of being self-aware of one's unique situatedness in the world and how it influences one's relations to others. Being mindful of her difference is a model for how Rush works throughout her text, finding ways to empathise and connect with flood victims whilst acknowledging the 'horizon' (Jamison, 5) of her understanding, remembering that she 'will always be from away […] not the one who has to figure out how to say goodbye to a swollen home on a sodden island' (Rush 2018, 176). To begin to understand Alvin's situation and establish an empathetic relation towards him, Rush must first be aware of herself and her own social, economic, geographical position – and how this affects both Alvin and her perception of him. Only once situated in her difference can she start to examine the relations between them.

This situated, entangled empathy requires Rush to not only shuttle between self and other, first- and third- person, as Gruen dictates, but also to navigate different social categories of oppression with an intersectional mindset. When relating to Alvin, Rush must consider multiple axes of social stratification – race, gender, class – and account for how they intersect and inform his exposure to risk. Rush situates herself in a female body that places her in a category of oppression – making her vulnerable to male abuse and harassment. But she also situates herself in her whiteness and acknowledges that this elevates her to a level of privilege: 'as a white woman […] I also know that I have blind spots, biases, responsibilities [….] And I know, even in a moment of fear, that what might feel convincingly like instinct is actually learned and poisonous' (Rush 2018, 138). On the other hand, Alvin's racial identity as a Black man overlaps with his class position as low-income, working class. As a tool of social analysis, intersectionality states that 'people's lives and the organization of power in a given society are better understood as being shaped not by a single axis of social division, be it race or gender or class, but by many axes that work together and influence each other' (Hill Collins and Bilge, 11). Alvin's race, gender and class should not, therefore, be treated as separate or independent categories, but as related and overlapping parts of a 'prism' (Crenshaw qtd. in Bello and Mancini, 12), making him more oppressed than, for example, a middle-class Black man or a low-income white man.

Rush highlights how these intersecting parts of Alvin's identity also make him much more likely to be living in harm's way, 'on the edge of a neighbourhood threatened from all sides' (2018, 141). She explains that 'many of the absolute lowest-lying areas – the places that flooded most regularly even when the ocean was more static – have historically offered shelter to those who literally couldn't afford to live anywhere else' (Rush 2018, 139), thus highlighting inextricable connections between race, class and the climate crisis. Rush adopts an intersectional approach to her environmental justice inquiry by acknowledging that her category of disempowerment, as a woman, is not equal to or the same as Alvin's complex identity as a Black, low-income man living in a low-lying area. Rush knows what it is to be vulnerable, but she also knows that as well as being empowered to travel

around the country, ‘knock on a stranger’s door, and expect to be let in’ (2018, 141), she also has the privilege to leave again.

Rush’s complex approach to establishing ethical relation challenges the fallacy of an insurance society and Beck’s one-dimensional theorisation of risk by reminding us that there have always been groups of people for whom risk is unavoidable. And that these unavoidable risks originate from those in power who maintain the illusion that insurance protection is universally possible. Just like the historic vulnerability that Alvin inherits as a Black, lower-class man in a neglected area, ‘There is no insurance we can purchase against the act of rape, against the hand lifting our skirts, against the kiss on the seashore or the threatening text messages’ (Rush 2018, 154–155). For particular social groups and individuals, there has never been insurance against prejudice, against discriminatory governments, against an angry mob. These groups have always been exposed, even as those standing at a distance have refused to recognise it.

Rush demonstrates an environmental justice perspective and an approach to empathy that is other-focused, relational, and intersectional. It is also explicitly grounded in the context of an Anthropocene founded on inequality, in which those demographics who have seen ‘chemicals blossoming on the water’s surface’ (Rush 2018, 156) are a result of the fact that ‘toxic waste sites, factories, and other sources [of toxins] are most often located near the neighbourhoods of African Americans or other people of colour’ (Alaimo 2010, 117). As Chapter One explored, this is the context of what Kathryn Yusoff calls ‘Black Anthropocenes’, based ‘on the presumed absorbent qualities of black and brown bodies to take up the body burdens of exposure to toxicities and to buffer the violence of the earth’ (2018, xii). Rush extends Gruen’s work, making it fit for purpose in the Anthropocene, by demonstrating that to truly adopt an entangled empathy approach, intersectionality is imperative. As the consideration of how multiple forms of social oppression overlap, an intersectional approach is necessarily an entangled approach – one that seeks to understand an individual’s world based on the diverse and entangled relations they are enmeshed in, rather than one-dimensional perceptions such as Black or white, male or female, self or other. In this sense, entangled empathy is a critical tool for feminism in the Anthropocene.

Empathising with the unknown other

The empathy gap Rush identifies is for the other – the socially oppressed human subject of environmental justice discourse. This other is remote culturally, socially, and/or geographically, but their experiences as humans are recognisable and communicable. However, the empathy gap that Giggs is interested in relates to relations with *unknown others*: those so remote in time, space, and experience that they are fundamentally unknowable. Whilst Rush seeks to evoke new empathetic imaginings for known others, Giggs asks, how do we empathise with those who 'we remain oblivious to or possess no cognitive ability to know?' (Tschakert, 280).

For Giggs, this empathy gap has a more-than-human focus and is located in the shadow of charismatic creatures. It is a deficit of care for more-than-human others who are not generally perceived as charismatic or compelling. Giggs defines charisma as 'a species' capacity to function as a mascot, to sustain a riveting narrative, and to motivate a crowd to action' (2020, 149). She explains that charisma can be compelled by 'phylogenetic relatedness' (Giggs 2020, 152) – animals that we perceive to look like us – intelligence, uniqueness, sociality, or in the case of whales, remoteness and endangerment. Whatever the cause, 'charisma establishes a hierarchy. Charismatic species are those that especially arouse compassion, so charisma influences the type of animals thought to warrant protection' (Giggs 2020, 149), and those that don't.

Giggs repeatedly asserts that in the Anthropocene – an epoch of extinction, defaunation, and the waning of the wild as both a physical and imaginative space – 'how to care for unmet things would seem to be a key question' (2020, 292). These shadowy, unmet others include vulnerable and remote creaturely life, and those species whose alienness, whose 'irreducible alterity' (Tschakert, 284) repels us, such as parasites, whale worms, and deep sea scavengers. It also includes the undocumented species who inhabit 'the as yet unwritten world' (Giggs 2020, 295) – our deepest seas, densest rainforests, and most remote ecosystems. On this note, Giggs also explains that, in an interconnected world, no loss is singular. To remove one animal is to remove another's ecosystem; the effects cascade down through chains of interdependence towards extinctions of unknown others that may go unnoticed. An empathetic perspective – one that is cognisant of the relations of

interdependence that each being is entangled in – allows one to see the broader implications of these 'eye-blink extinctions' (Giggs 2020, 295).

Like Rush, Giggs' work of empathising with unknown others also involves an empathetically entangled approach, but one that acknowledges an Anthropocene entanglement that is unsettling rather than thrilling. Like Jamie's insistence on a version of 'nature' that can include not only 'dolphins arching clear from the water, but [also] the bacteria that can pull the rug from under us' (2012, 24), Giggs' understanding of multispecies entanglement recognises the unknown and perhaps unpleasant others we are connected to, those who, as Deborah Bird Rose and Thom van Dooren write, 'are less visible, less beautiful, less a part of our cultural lives' (2011, 1). And her approach to empathy is based on the difficulty of acknowledging these connections. For Giggs, it's about asking questions about the limitations of our ethical relations: How is it possible to care for the unknown other in practice? How do we develop empathy for a being whose otherness is so irreducible that we cannot experience or even imagine it?

Giggs explores these questions on a personal level by interrogating her own feelings towards what could be the most alien of othered creatures: parasites. The chapter 'Scantling' broadly investigates our relations to unknown others, from mythical sea creatures to grotesque plastic–animal amalgamations, and from rare species of cetacean never seen alive to the unfamiliar creatures that inhabit our own bodies – what Giggs calls 'the gothic-domestic aesthetic of marine parasites and decomposers' (2020, 299). Giggs is frank about the instinctive horror and revulsion that the whale worm induces in her, a being of such alterity that it 'lives apart from any common familiarity' (2020, 296). She writes:

> The worm in the whale's unlit interior inverts charisma so completely, it engrosses me. Mucilaginous and mixing in its own elixir. An abhorrent jack-in-the-box. The worm makes me shudder. For whole days, I can't get it off my mind. What is the expression? I can't stomach it (Giggs 2020, 297).

As James Hatley writes, 'in animals such as these we perhaps meet the limit case of any discourse that would characterize the extinction of a species as one of the unmitigated moral evils of our time' (64). The alterity of these unknown others disrupts normal ethical relations.

For Giggs, the horror of parasites lies in their ability to evoke the uncanny on multiple levels, what Hatley has referred to as their 'eeriness' (64). This eeriness is evoked, first, in their resistance to conventional human understanding: they 'occupy a categorical wall-cavity between two more beloved groups of animals: wild species and tamed ones' (Giggs 2020, 300). The second aspect of the parasites' uncanny nature is their paradoxical ability to be both 'very like death' yet also possessing of 'profuse, persistent vitality, the wiggling in the womb, the itch on the skin, clinging, consuming, breeding' (Giggs 2020, 301). Both unnervingly death-like and disturbingly abundant, they are 'worse than a ghost somehow' (Giggs 2020, 301) – and this is compounded by their microscopic or 'scantling' stature. Third, parasites' terrible fecundity gives them a machine-like quality that troubles the boundary between human and automaton, the original border whose blurring inspired the 'uncanny valley'.[34] Giggs is unsettled by 'How they proliferated, reduplicated simple bits of code making copies, extruding one another […] how closely their natural accretion resembled a computational process' (2020, 302). And the final uncanny aspect of parasites is the way in which their 'primitiveness, plenitude, partiality, [and] purposelessness' (Giggs 2020, 302) repudiates ideas of natural order or harmony. Although Giggs accepts that the parasite's world 'too, was nature' (2020, 302), a kind of 'integral underside to the wild' (2020, 302) the loss of the human belief in a natural order is an uncomfortable and unsettling concession. Having openly acknowledged all the uncanniness, revulsion, discomfort, and horror that these parasitic others provoke, Giggs' question remains: Are these beings truly beyond the limit of our empathy?

Giggs pursues this by experimenting with alternative routes to empathy. Like Rush, one of these routes is through entanglement. Taking the charismatic whale, Giggs underlines the interconnection between it and the parasite, exposing their mutualistic interspecies relations. To the parasite, the whale is not only a home but an

[34] Popularised by robotics professor Masahiro Mori in the 1970s, the Uncanny Valley theory describes how our feelings towards robots shift depending on how life-like or human they look. The more human-like a robot appears, the more familiar we feel towards it – to a point. When the robot becomes too human-like, it provokes a sense of discomfort, eeriness, or even repulsion. Giggs targets this uncanny boundary between living things and machines in order to further elucidate and evoke feelings of uncanniness and repulsion around the whale worm.

ecosystem; to the whale, the parasite is ‘a pennyweight presence’ (2020, 298), but also often a necessary partner in symbiosis, potentially aiding immunity and preventing infection. Even when the parasite afflicts rather than assists, its entanglement can still serve other purposes. For example, Giggs explains, the whale louse is a ’valuable dataset’ (2020, 299) attesting to the evolution of different cetacean species – ‘an index card’ (2020, 299) to the deep time history of its host–partner.

The entanglement of the whale and its parasitic partners is so complete that it requires a mindset shift, from viewing them as separate beings to one creature – a holobiont of sorts.[35] ‘Each animal is an ecosystem and a home’ (2020, 296), Giggs asserts. The whale is not only itself, and when a whale dies it is not the only being lost. She refers to the belief that many unknown species that depended on whale carcasses were lost when industrial whaling decimated cetacean populations. These ‘unknown extinctions’ (456), as Michelle Bastian calls them, are strongly supported by many scientists, yet remain a form of speculation. They record a new category of uncertainty, a type of shadowy knowledge described by Bastian as a ‘“void”, that stretches beyond what we might classify as “absent”’ (456). In this, Giggs perceives a lesson for the Anthropocene: ’What we fail to see, and fail to name, may nonetheless still fail to survive us’ (2020, 295). The loss of the unknown other still matters. And thinking about the unknown other through its entanglement with the wider world is one way to start relating towards it.

Another method of empathising with unknown others that Giggs tries involves a retooling of her imaginative faculties – an attempt to step outside of a human point of view. For her, thinking about parasites with empathy instead of disgust is an imaginative exercise: ‘In contemplating this kingdom of dependent organisms, I have found myself stepping away from my own senses to some zone of thought eerily outside of the human scale on which I experience the world’ (Giggs 2020, 305). In order to try and access ‘the grey space of what is perceptible’ (2020, 305), Giggs has to let go of many of her existing beliefs: in the integrity of the body, in human

[35] Holobiont names a multispecies entity made up of a host, and all the resident microbes that live in and on it. Humans are holobionts, and the concept troubles the idea of individualism.

containment and control. Because creatures of the parasitic order are imperceptible to humans, both visually and imaginatively, she strives to transcend the limits of her human-framed perception. This means thinking on a different scale (the microscopic), and in a different mode (embodied enmeshment and trans-corporeality [Alaimo 2010]). It involves reframing understandings of interiority and embracing experiences of interspecies integration, interconnection, and even invasion.

Giggs is offered the opportunity to put this thought experiment into practice during a research trip to the Blue Mountains, where she and her peers contract an amoebic parasite after swimming. Using the language of hospitality, Giggs reframes this parasite as 'a microbial guest [that] had climbed aboard' (2020, 307) their host bodies. Strikingly, she refers to a pregnant colleague who 'had to wait to be treated until after she returned, notionally, to living as a single organism' (Giggs 2020, 307). In doing so, she draws a silent parallel between the unborn foetus and the parasite as both organisms living inside the host body of her colleague. Giggs reflects on the *Cryptosporidium* outbreak in Sydney in the 1990s as 'a kind of communality … A city's populace is something else's reservoir' (2020, 308). Resisting instinctive feelings of horror, disgust and the uncanny, Giggs adopts alternative ways of imagining our porous relations with the parasitic, bacterial world. Her language of hospitality and communality is fundamentally empathetic – couched in the desire to find alternative ways to think about and understand the other, outside of human assumptions and on something closer to their own terms.

Ultimately Giggs knows that it is not possible to inhabit the experience of a parasite, but she shows us that we are obligated to try anyway. The limits of our empathy and understanding are there to be troubled, not accepted. And the impossibility of fully knowing the other and their lifeworld is not a source of frustration for her, but a motivator – a catalyst for her writing, thinking and wondering. She writes, 'The beyond our ken part; that's the part, of course, that keeps me writing' (Giggs 2020, 306). And this forms part of her model for caring for the unknown, for which 'the call is to stay mystified' (Giggs 2020, 291). This approach establishes ethical relations not by trying to classify or unearth 'suppressed knowledge' (Giggs 2020, 291), but by preserving 'nature's innate chaos' (Giggs 2020, 291) – by being motivated to understand whilst knowing that a full understanding is impossible, and staying with

this tension. In this approach, the unknown other is worth caring about by virtue of their unknowability.

Another important aspect of Giggs' experimentation with empathy is her use of metaphor. As an attempt to try and access other ways of understanding something or someone, metaphor is a fundamentally empathetic mode. Like empathy, metaphor strives to provide a kind of portal to the experience of another being through a movement of border crossing or transformation. *Fathoms* is notable for its innovative use of metaphor, but this has also become the main source of criticism for some of its reviewers. Writing in the *Sydney Review of Books* in 2020, the text's principal detractor, James Ley, charges Giggs with using 'a dizzying array of malapropisms, solecisms, pleonasms, and mixed metaphors'. It is, he writes, 'a book to give a grammarian the howling fantods'. Ley provides a sardonic list of examples of this grammatical rule-breaking:

> Even when you are writing with a condor's quill and a crater for an inkstand, you still need to be conscious that (for example) a blue whale might be said to vocalise, but it definitely does not 'verbalise'; that stocks are not something you 'reap […] that you can't really 'shore up' a taproot; that an animal, not being a piece of equipment, does not 'equip' a menagerie; that you can't 'equip' an appetite either; that a turning point does not have a 'fulcrum'; that you can prise something apart, but you can't 'ply apart' anything…

With his forensic concern for the correct and proper use of language, Ley encapsulates the masculine technoscientific perspective that dominates Anthropocene discourse: the perspective that polices what the Anthropocene is, how it should be discussed, and who is qualified to take part in these discussions. This rigid, authoritarian point of view is particularly notable in Ley's disparaging assertion that parts of Giggs' work are so speculative as to amount to 'little more than an exercise in the most unsupportable whimsy'. In doing so, he echoes the debate around 'facts' and 'fancies' in nature writing, repeating a tired and outdated opinion around the dangers of 'fancies' as 'poisonous companions to the enjoyment and appreciation of nature' (Fisher qtd. in Smith 23).

Ley's concern for fact-based authority is also paralleled – perhaps unsurprisingly – by an allegiance to similitude:

> The more you read Giggs' baroque stylings, the more it becomes apparent that, on a fundamental level, she simply isn't paying attention. She is constantly using words in a figurative sense – verbs, in particular – without considering that, even if you are using a word as a metaphor, its literal meaning is still the measure of its precision and thus its rhetorical effectiveness. For a writer, this is a bit like covering your eyes with your hands and thinking it makes you invisible.

Ley's criticism begs the question: Is it true that the value of a metaphor is always its precision? The Anthropocene is, fundamentally, a time of great change, of leaving one age and entering another. There is arguably less value in similitude when fewer and fewer things make sense according to the world we have known in the past. This point comes illustrated by the increasing number of 'dead' metaphors, long-established figures of speech made newly and unnervingly nonsensical by Anthropocenic shifts (Nixon).[36]

If, as Denis Donoghue writes, 'the force of a good metaphor is to give something a different life, a new life' (2), then it could be the most useful tool we have for an Anthropocene context in which every being is encountering new conditions for living. Donoghue instructs us to 'pitch [y]our senses into derangement' (101), and urges us to 'give up protecting "the rational" and "the logical" […] stop assuming that a metaphor must always be a nuance of resemblance' (101). He reminds us that there is value in disparity. Facing such new forms of horror and disaster, Rush and Alexievich choose witness testimonials. But following Donoghue, Giggs (like Jamie) chooses innovative, uncanny metaphor. Because Anthropocene storytelling requires language that can match the unsettling nature of this new epoch, that is capable of destabilising, unnerving, and capturing the strangeness and uncanniness of these improbable times – language that is, itself, improbable.[37]

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[36] For example, weather idioms in the English language related to ice – to break the ice, the tip of the iceberg – are no longer effective in a material reality in which wintery weather is a novelty, a rapidly disappearing vestige of a vanishing epoch. Rob Nixon sums this up in the observation that, were he to deliver the same criticism to his doctoral students that he received from his supervisor – that he was 'proceeding at a glacial pace' – then 'the student might assume that I was rebuking them for writing too darn fast' (2018).

[37] Jesmyn Ward refers to the use of improbable metaphor in the Anthropocene in an additional interview in the 2017 edition of her Hurricane Katrina text, *Salvage the Bones*. Ward writes that it was only when she experienced a hurricane like Katrina, that she 'understood then how hurricanes […] unmade the world, tree by water by house by person […] Even in language it had reduced us to

Giggs' metaphoric prose is often very improbable indeed. Chefs smoking beneath bell-shaped umbrellas are 'red smidgens, like imagination moving through a school of jellyfish' (Giggs 2020, 245). Waves are 'water hammocks [that] heap into hummocks' (Giggs 2020, 87). Pollutants 'hopscotch' through the atmosphere: 'Like Van Gogh's Starry Night: the chemicals whorl in pointillist air' (Giggs 2020, 251). And, reading like a poem, the Southern Ocean is an 'Unlit omnisphere, far-fetched. White noise; ice shifting; krill krilling. Trundled by see-through salps, orbital sponges, and other questionably animate organisms, the seabed shillyshallies into murk, lacking all tactility and aspect' (Giggs 2020, 79). Giggs' writing defamiliarises the familiar, destabilises the stable, disorients the oriented. It bewilders the mind with the lack of easy connection between the metaphorical components of tenor (the subject being described) and vehicle (the image used to describe it). The result is that the reader is, to use Donoghue's words, pitched into derangement. They are thrown into a sense of strangeness, temporarily unmoored from normalcy, and opened up to new ideas and understandings.

Paul Ricoeur argued that in metaphor, it is this tension – that which arises between an unlikely tenor and vehicle – that is the point (1975). The metaphoric partnering of dissimilar words induces a 'semantic shock […] a rupture in a given classification' (Weichert, 68). This tension 'discloses a relationship of meaning hitherto unnoticed (Ricoeur 1975, 79) and forces the reader to broaden or transform their understanding. Ricoeur shows us that metaphor provides new meaning, but only when we are able to perceive and accept incompatibility as a condition of that meaning. The tension or gap that this incompatibility creates is the generative space in which metaphoric meaning arises, and we must maintain this gap at all costs. From this perspective, both unlikely metaphor and the semicolon emerge as writerly tools well-suited to encapsulating and holding the multiple tensions of living in an Anthropocene world.

improbable metaphor'. The alien effects of the Anthropocene find no hooks to hang on, no landmarks to navigate by in the language created by now outdated standards of normalcy. Henry Ivry writes: 'This is what it means to write and think crisis in the Anthropocene. The Anthropocene inaugurates a literary form of "improbable metaphor", the couplings of disparate entities that are brought into being' (392).

Giggs achieves her destabilising effect by crossing multiple 'classification boundaries' (Weichert, 65) in her use of metaphor. Indeed, part of the improbability of her metaphors is that they know no limits; they are unrestrained by categories of scale, species, theme, or logic. This rejection of divisions and taxonomies recalls Savoy's relational form of history-making or Powles and Horrocks' aqueous, embodied writing – all refusing the violence of stratified, hierarchical logic in favour of more fluid, collaborative ways of generating knowledge. Giggs' subversive approach to metaphor is therefore a particularly apt technique for evoking an entangled Anthropocene. Traversing borders and boundaries, her prose establishes a reciprocal ecology of metaphor, in which language from the human world is extracted and used to describe parts of the non-human world, and vice versa. For example, dark clutches of seaweed loom out of breaking waves 'like decapitated heads' (Giggs 2020, 310); the shapes of beached whales recall 'fingerprints inked onto a criminal record' (Giggs 2020, 7), and deep-sea marine creatures resemble 'bottled fireworks, reticulated rigging, and musical instruments turned inside out' (Giggs 2020, 20).

One effect of this is to generate meaningful, frictional metaphors. Another is to underscore the entanglement of the Anthropocene, in which nothing and nowhere escapes the residue of human activity. Giggs depicts an Anthropocene world in which 'Icebergs [are] opaque with wet wipes like browning hibiscus' (2020, 250); 'A basketball, sailed all the way across the globe with its resplendent chandelier of goose barnacles growing from its lower hemisphere' (2020, 250); and 'an unopened tin of spam [is] found ten kilometres down in the stygian depths of the Mariana Trench (surely the furthest point any swine, dead or alive, has ever travelled to: that pig, an astronaut to its kind)' (2020, 250). Her metaphors cycle through human and non-human, capitalism and ecology, enfolding the detritus of material consumerism into remote places and creatures. The entanglement evoked in these extracts is a claustrophobic one, reinforcing the idea that many of the writers in this thesis have engaged with, that there is no 'outside' or 'away' (Wood, qtd. in Clark 2008). 'This much closeness can be painful' (2020, 315), Giggs writes. It is a 'shameful familiarity' (Giggs 2020, 157) and 'unwanted intimacy' (Giggs 2020, 156) that can be difficult for us to accept. But this only emphasises Giggs' point: that accepting an unsettling form

of entanglement is vital to developing empathy and care for an Anthropocene world and its full host of others – not just those we find appealing.

Ley may find it distracting and inaccurate, but Giggs' persistent use of challenging and border-crossing metaphor is itself a way to encourage empathy in her readers, for there is a scientifically proven link between the two. In studies, psychologists have found that 'daily metaphor use was positively associated with daily empathy and perspective taking' (Fetterman et al., 23). Crucially, metaphor also has an interpersonal function: 'people use metaphors to understand other people's emotions' (Fetterman et al., 24). Destabilising her readers with strange and startling metaphors, Giggs opens the mind to newness. As Jeffrey Millstein writes, metaphor 'moves me away from the familiar to a place where nothing impedes my gut reaction. It opens a much wider door to empathy and human connection' (305). The metaphorical force of Giggs' descriptions changes the way the reader thinks about her subjects, and fosters a tendency to make unusual connections, look at things askance, and question whether there are other ways of understanding the world.

Giggs also extends this technique into her use of anthropomorphism. In her work, the more-than-human is frequently afforded human qualities. For example, gulls are found 'unzipping' young Southern right whales 'from snout to fluke' (Giggs 2020, 267). In Sydney, 'Dry lightning quivered over our quarter of the city; the sky taking and retaking its own photo, fretful and adolescent. Thunder shouldered across the lawn' (Giggs 2020, 310). And on the beach 'the sun drags its fingers along ferrous runnels in the sand' (Giggs 2020, 316). Ley criticises Giggs for, on the one hand, acknowledging the irrecuperable otherness of the natural world, and on the other, 'indulg[ing] in her own version of anthropomorphism', with 'flamboyantly imprecise metaphors [that] become a form of gratuitous ornamentation'. Traditionally, many critics would have agreed with Ley about the use of anthropomorphism, as a kind of 'sloppy thinking' (Bekoff and de Waal qtd. in Sands, 74) or imaginatively limited approach to the more-than-human world. The accusation of anthropomorphism is normally a criticism, 'both intellectual and moral, which implies naivety and delusion' (Sands, 74), and evokes what Sandra D. Mitchell calls 'the stale dust of nineteenth-century anecdotal evidence for the continuity of humans with nonhuman animals' (qtd. in Sands, 74). But, as Sands documents, there is a new resurgence in the use

of anthropomorphism as ‘an inescapable component of cross-species relations’ (69). As Marc Bekoff writes, ‘anthropomorphism allows other animals’ behaviour and emotions to be accessible to us’ (qtd. in Sands, 74). Like metaphor, it is a fundamentally empathetic approach, allowing the human to reach across the gulf using the power of imagination, and attempt to get closer to understanding the world of the more-than-human other. It is ‘an intuitive or affective engagement, an instinctive empathy’ (Sands, 75), and thus has the potential to reconfigure new relations and new understandings between human and more-than-human.

Giggs’ desire to understand and access (rather than project or compare) more-than-human worlds is evident in anthropomorphic metaphors that are highly attentive and precise. For example, she employs them to differentiate between species of whale and their specific sounds: from the sperm whale’s ‘click and crackle […] recall[ing] the snicking of an old-fashioned cinema reel’ (Giggs 2020, 180), to the ‘noise like an old-fashioned dial tone’ that comes from the minke whale (Giggs 2020, 181), to that of a humpback whale, comparable to ‘a licked fingertip dragged across rubber. A metal train bridge rattling […] like glassware, tinkling in a flight attendant’s trolley during turbulence’ (Giggs 2020, 181). These quotes show us that even when the gulf between vehicle and tenor is vast, powerful meaning can be generated that enables precise understandings. Attention to detail on this level demonstrates an empathetic approach that centres difference and is capable of seeing beyond the generalised, lazy understandings that charisma often gives rise to, such as the homogenous ‘super-whale’ (Giggs 2020, 153).

Anthropomorphism is also a form of recognition, a way to empathise with the agency of the more-than-human and the rich diversity of lifeworlds outside of human experience. Ley’s criticism of Giggs’ work signals a failure to recognise this. For example, discussing the terrestrial damage wrought by whaling ships releasing ship-bound captive species, Giggs writes, ‘hogs disembarked opportunistically to author other kinds of local damage’ (2020, 53). In his claim that ‘“author” is probably not the most appropriate verb to describe the destructive behaviour of some escaped pigs’, Ley fails to recognise that more-than-humans are ‘narrative agents’ (Sands, 75) with the capacity to affect. He also disregards the profound knock-on effects that these

‘escaped pigs’ had on global ecosystems, dismissing an interspecies encounter that profoundly shaped the world we live in today**.**

In contrast, Giggs pairs anthropomorphism with an empathetic approach. Her approach to anthropomorphism as a form of recognition is explicit when she discusses why we describe whale sounds as ‘songs’. For Ley ‘whale song’ is a sticking point: ‘it is a metaphor and only a metaphor’. But for Giggs, describing whale sounds as ‘song’ isn’t anthropocentric. Instead, it gestures to ‘cross-cultural common ground’ (Giggs 2020,182), a shared space in which a partial understanding can be reached and the foundations of empathy can be laid. Part of this common ground lies in Giggs’ assertion that the emotion of a song, or the existence of emotion in a song, transcends the boundaries of language: ‘it expresses a deeper significance than its surface meaning’ (2020, 182). Whilst we cannot understand the meaning of a whale song, we know that one exists. We understand that the existence of whale song ‘suggests that within the singer there subsists an emotional inner life, recognised by, and akin to, that of the listener’ (2020, 182). Whilst this is still a form of speculation, it changes the way the speaker relates to the whale, as an undeniably imaginative attempt to empathise across species boundaries.

However inventive Giggs’ empathy may be, like Rush, it is always shadowed by its limits, by the differentiation between self and other and the impossibility of escaping a human perspective. In accordance with the Anthropocene feminism principle that questions can be productive to ask, even if only speculatively (Grusin, xi), she recognises that ultimately, in most cases, ‘we cannot tell’ (Giggs 2020, 181). Arguably, Giggs’ anthropomorphism is not only a way of adhering to these limitations, but of actively highlighting them. Whilst Ley accuses her of ‘overreach’, if anything her use of profoundly human metaphors and concepts to describe animal worlds is a clear gesture to the impossibility of thinking outside of these frameworks. As Sands writes, ‘we cannot wholly escape our own conceptual frameworks; however, we can treat them reflexively’ (2020, 82). Reading Giggs’ work, the scent of a trumpet-flower obviously does not move in literal ‘warm cupboards of air’ (312), but its metaphoric tension is powerful, and it reminds the reader that the quotidian, human realm that Giggs inhabits is the only reference point she has to narrate the wider world with. She makes this explicit in her description of humpback whale song,

which is preceded with the statement that: ‘The songs humpbacks sing are myriad, and cannot be sufficiently characterised using only this printed alphabet, our human language. Though, an attempt?’ (2020, 181). Within Giggs’ innovative literary world, it is not human mastery that is centred, but human inadequacy; and it is not similarity that is the goal, but disparity.

This maintenance of difference and the tension between human self and more-than-human other is critical to Giggs’ ability to practice a form of anthropomorphism that is empathetic rather than narcissistic – an anthropomorphism that examines difference on a horizontal rather than vertical plane, and that avoids elevating or centring the human as something to measure up to. In her analysis of Karen Joy Fowler’s work, Sands coined the term ‘empathetic anthropomorphism’. This concept references Fowler’s ability to use anthropomorphism ‘as a clumsy but useful tool for understanding kinship and difference’ (Sands, 83) without collapsing difference or transcending the innate otherness of animals.

In its narcissistic desire to subsume more-than-human difference under the pressure of a human yardstick that all else must be measured against, traditional anthropomorphism shares many of the characteristics of the male, colonial, technoscientific viewpoint that all of the writers in this thesis critique. It is perhaps a masculine anthropomorphism, reflective of hierarchy, domination, and anthropocentric and phallogocentric authority. In contrast, we can read Giggs’ approach as a way of expanding upon Sands’ definition of empathetic anthropomorphism, resulting in what could be called a feminist anthropomorphism for the Anthropocene. In accordance with Grusin et al.’s definition of Anthropocene feminism, Giggs shows this form of anthropomorphism to be other-focused, centring difference and embracing entanglement between self and other. Her anthropomorphism decentres the human, and proceeds with care and sensitivity, grounded in the need to provoke awareness of and concern for more-than-human others, particularly those normally obscured or overlooked. Speculation and imaginative reconfigurations are key to this empathetic project, destabilising readers into new understandings, recognising the agency of more-than-human others within Anthropocene entanglements that also include us, and relating in ways that preserve, rather than transcend, their innate otherness.

Perhaps the key element of this feminist anthropomorphism remains its ability to situate the self as separate – even if also related – to the other, and to recognise the limitations of its practice. This need to maintain distance in anthropomorphism mirrors Ricoeur's need to maintain tension in metaphor. Jessica Phillips outlines how both imaginative devices echo an empathetic imperative to attempt to understand – even with the knowledge that this understanding will always be partial. She connects this to the Derridean imperative that any 'ethical response to the crises of the Anthropocene' must come through the 'struggle between relations of similarity and difference' (Phillips, 27). The gap is the point, but the attempt to cross it is also the point. And this attempting is clear in Giggs' imaginative, innovative use of metaphor and anthropomorphism – a prose style that Ley implies is, at best, 'an extended exercise in phrase-making'. Ley might deride Giggs for the labour and effort that is evident in her approach, but this is the point. Donoghue wrote that it 'takes muscle' (116) to create good metaphors; it also takes muscle to anthropomorphise in a way that attempts to understand rather than project. And, as Gruen shows and Leslie Jamison makes explicit, it takes muscle to empathise: The 'confession of effort chafes against the notion that empathy should always rise unbidden, that genuine means the same thing as unwilled, that intentionality is the enemy of love. But I believe in intention and I believe in work' (Jamison, 23).

Metaphor, anthropomorphism, entanglement: together they form part of a diverse toolkit that Giggs experiments with, striving to access alternative understandings and to destabilise preconceived ideas and mindsets. They evidence a form of labour, as she attempts to navigate similarity and difference, and establish ethical, empathetic relations within an uncomfortable Anthropocene entanglement. Rush's empathetic work also involves confronting difficult questions about uncomfortable relations – relations of asymmetry, complicity, and neglect. Motivated by an environmental justice perspective, she practices an empathy that is capable of responding to an Anthropocene founded on inequality and oppression, an empathy that is other-focused, situated, and intersectional.

Both writers are cognisant of irrecuperable difference, and the importance of situating the self in relation to the other in a way that does not collapse this difference. But in diverse ways, this tension becomes the heart of their empathetic

work. Through this form of empathy – situated, entangled, experimental – the unknown becomes a catalyst for care, a form of obligation, and a condition of meaning. And to attempt to understand becomes an ethical imperative.

Conclusion

The Anthropocene offers us a story that challenges our ideas about the human place in the world. In this new geological epoch, feminists and other Anthropocene scholars have established that humans are no longer held aloft in a state of separation and superiority, but are enmeshed in messy webs of responsibility and interdependence with human and more-than-human others. Rush and Giggs both centre this in narratives that convey entanglement at the level of form, theme, language, and structure. They demonstrate an entanglement that is also about complicity, involvement, and the difficulty of the unknown. They show us that inhabiting and storytelling the Anthropocene is about learning to navigate relations of similarity and difference. It is about recognising difference as something to be upheld, not flattened, whilst striving to find new ways to bridge the gulfs in between.

In an entangled world, empathy offers a way forward. Rush and Giggs emphasise this in narratives that explore it as a practice, theme and ethical imperative. For Rush, an empathetic approach is critical for connecting with others and establishing ethical relations. In turn, this both enables and mandates some of the more challenging forms of understanding in an Anthropocene founded on inequality: understandings of chains of inheritance, complex forms of risk and responsibility, and intersecting axes of oppression. In this sense, empathy is a critical tool for environmental justice. Drawing upon new and old feminist practices of situated knowledge and intersectionality, the empathy that Rush models disrupts hierarchy, upholds self-awareness, and is capable of accommodating multiple, complex forms of difference. Crucially, Rush shows us that empathy is a mindset and practice, rather than an end in and of itself. It is not about pitying or saving the oppressed other; it is about empowering and enabling them, and taking action.

For Giggs, empathy is also an urgent response to the need to care for the other, but this pertains to a different kind of otherness – an unknown, more-than-human otherness that can be both unsettling and alienating. Faced with the challenge of

establishing ethical relation across gulfs of alterity in an Anthropocene landscape of hierarchy and detachment, Giggs shows us that the practice of empathy demands both restraint and innovation. In *Fathoms* this innovation takes multiple forms, including experimenting with empathetic modes of relating to the other, such as metaphor and anthropomorphism; or attempting to reconfigure imaginative frameworks, striving to step outside of human perception.

However, whilst the conventional limitations of empathy are there to be disrupted, the horizon of one's own understanding must always be recognised. And both writers acknowledge the inherent and inevitable failure to their ethical projects – the impossibility of ever fully knowing the experience of the other. But it is the attempt that is the point. In different ways, Rush and Giggs teach us to both uphold and trouble the limitations between self and other, between similarity and difference, and between connection and alienation.

Fathoms and *Rising* mark a shift away from Anthropocene storytelling defined by technoscientific fact, neutrality, and an apocalyptic register. Like other texts in this thesis, they also depart from the need for definitive conclusion and concrete knowledge. Instead of clarity and understanding, it is tension that lies at the heart of their empathetic work: the tension between distinct yet connected things, held by the semicolon and the unseen bonds it represents; the cognitive dissonance of being both nature writer and carbon consumer; the generative tension between tenor and vehicle in unlikely metaphor; the empathetic tension maintained between self and other; and the tension between the imperative to understand and the recognition that understanding is impossible. At the core of all of these tensions is difference: difference as something to be upheld rather than collapsed, and difference as a catalyst for empathy and care. In diverse ways, Rush and Giggs' narratives teach us to tell stories that centre this difference in ways that spark imagination, curiosity, and care. Because this is at the heart of entangled, ethical life.

Conclusion

This thesis has analysed the work of contemporary, female, non-fiction nature writers across the US, the UK, Australia, and Aotearoa New Zealand, to explore how they engage with the concept of the Anthropocene and the aspects of planetary degradation and injustice it names.

There are two shifts that catalysed this study. The first is the rise of the Anthropocene concept, which was coined by geologists in 2000 but has really entered popular and scholarly imaginations in the last ten years. The second is the diversification of contemporary nature writing, caused by a surge in female, BIPOC, neurodivergent, working-class, and non-heteronormative voices, which this thesis dates to around 2019.

If the Anthropocene represents the ultimate work of white male domination – both literally and conceptually – then it is significant that the apparent intensification of this project in 2019 (the 'year zero of the climate apocalypse' [Goldrick]) was contemporaneous with the emergence of diverse, female voices publishing alternative stories about human–nature relations. Given that the nature writing canon has historically been dominated by white male writers, this is rich terrain for storytelling.

These two, indubitably intertwined shifts form the main points of departure for this thesis, but they have also been matched by a comparative change in scholarship: the emergence of an Anthropocene feminism, voiced by posthuman, feminist, science and technology studies, Indigenous, queer studies, de- and anti-colonial, new materialist, disability studies, and blue and environmental humanities scholars. This thesis has located key characteristics of this feminism as it responds to the Anthropocene, which can be directly mapped onto the primary texts it examines. These include intersectionality and collaboration, an ethos of disruption, relationality, alternative modes of knowledge production, experimenting with perspective, and a concern for the politics of knowledge.

Although much has been published on contemporary nature writing in the UK (Macfarlane 2003, 2015b; Moran; Smith; Stenning), and a previous doctoral study has already mapped out the influence of the Anthropocene on American nature writing (Hummelsund Voie), there has not yet been a detailed study into the way that women's non-fiction nature writing is responding to the Anthropocene, nor to how this writing reflects and engages with shifts in feminist scholarship of the Anthropocene.

The writers in this thesis speak to a seismic shift in writing about the natural world, in which the privileged white male narrator has finally fallen off his pedestal, not into obscurity but into a crowd of diverse voices. This change has broadened the scope of what is considered 'nature writing', and imbued it with new depth, texture, and relatability. Many new ways of connecting to and experiencing the natural world are showcased, admitting more readers into the fold and engaging more people with the living world around them. With these shifts, the genre is now more innovative, accessible, adaptable, and important than ever before. Arguably, it is a genre much more capable of responding to the challenges that the Anthropocene presents.

Every writer engaged with in this thesis can be read as rewriting a dominant narrative – challenging an aspect of the Anthropocene story and offering a different version of our relationship with the natural world in a time of planetary emergency. As such, this thesis has organised itself around four main aspects of the Anthropocene narrative: when it began, where it is located, how it is experienced, and how we can tell its stories.

Chapter One explored how Lauret Savoy's search for origins offers us an alternative understanding of when and how the Anthropocene originated, located not in the AWG's golden spike of the 1950s but in the processes of European colonialism and settler colonialism. This historical period marked a huge change in human–nature relations, and saw the construction of hierarchical, violent logics of power, stratification, and division. This chapter explored how this way of ordering the world has shaped our understandings of race, history, geology and our place in the natural world, as well as creating the vastly unequal capitalist reality through which the Anthropocene has emerged. This reading interpreted Savoy's text as an implicit

critique of the risks of origin stories, which are often based on erasure, as well as offering an alternative way of forging origin stories: as relational histories that can account for inheritances. This way of understanding history seeks excess and complexity, pursues lines of legacy, traces earth and human pasts together, and teases apart tangled webs of responsibility. Savoy's text not only offers us the opportunity to read an alternative story of when the Anthropocene began, but it also rewrites the narrative on how stories of the past should be created and told. It reminds us of the political stakes of this work, and the asymmetrical power structures we have all inherited – differently. Drawing on the work of Kathryn Yusoff, Jason W. Moore, Christina Sharpe, Zoe Todd and Heather Davis, this chapter read Savoy's text as offering an alternative origin for the Anthropocene, and an alternative way of locating ourselves within this past that is still ongoing.

Chapter Two read the essays of Kathleen Jamie and Margaret Renkl as providing a different account of where the Anthropocene is located. By decentring the male, the technoscientific and the spectacular with first-person narratives of domestic life, Jamie and Renkl bring the Anthropocene home, so to speak, by evoking planetary crisis as something very much experienced in the everyday world. Enriched by the ideas of Maria Puig de la Bellacasa, Robin Wall Kimmerer, Donna Haraway, and Neera M. Singh, this chapter interpreted Jamie and Renkl's quotidian accounts of affective relations with the more-than-human as catalysed by care, gift, reciprocity, and response-ability. Through a disposition of close attention and curiosity, they evoke the domestic sphere not as mundane or atemporal, but as a dynamic, more-than-human world, rich in wonder, crisis, and meaningful multispecies encounter. And they illustrate care duties and household responsibilities not as counter to an appreciation of the natural world, but as actively enabling it, part of a broader web of affective relations woven in the everyday realm. This chapter argued that their work makes a case for small-scale acts of resistance to the capitalist forces of inattention – 'tiny blows' made from within. And it highlighted how Jamie and Renkl make space for a 'serious noticing' of the Anthropocene in everyday spaces, which enables an appreciation of both life and death, beauty and decay, connectivity and vulnerability. Though quiet subversion and acts of decentring, they offer a form of resistance that emerges from unlikely, overlooked places.

Chapter Three explored how Nina Mingya Powles and Ingrid Horrocks' 2021 swimming texts challenge ideas about how the Anthropocene is experienced. Their texts push back on Eurocentric ideas of bounded individualism, human superiority, and the dominance of technoscientific data, as well as the idea of the Anthropocene as a terrestrial phenomenon. Instead, this reading of Powles and Horrocks' watery narratives drew upon currents of Indigenous, new materialist, feminist, and blue humanities thought from Stacy Alaimo, Astrida Neimanis, Steve Mentz and Max Liboiron, in order to interpret their texts as immersed, situated, embodied, and interconnected accounts of Anthropocene life that also think carefully about obligation and inheritance. Powles and Horrocks reflect on how the Anthropocene is experienced differently, challenging the universalising narrative of 'we' and reminding the reader that the unequal structures of power that position us all differently in the world also afford us vastly different forms of exposure, vulnerability, and harm. Their writing evokes Neimanis' idea that experiences of the Anthropocene world must be filtered through an understanding of the body as both individually situated by specific vectors of power, and also physically interconnected to others in an entangled more-than-human world. Powles and Horrocks offer swimming as a practice of equilibrium or staying afloat in times of urgent planetary crisis, rather than a form of escapism. In their texts, the Anthropocene emerges not in experiences of data, science, or objectivity, but in connection, plurality, self-awareness, and the intersection of embodied self and watery world.

Finally, Chapter Four read the work of Elizabeth Rush and Rebecca Giggs as offering a new perspective on how Anthropocene stories should be told. Further challenging the technoscientific, anthropocentric imaginary and its god trick perspective, Rush and Giggs reject fact-based discourse on the Anthropocene and the crises it enfolds and offer examples of how to story these times with empathy. In a fundamentally entangled world, empathy emerges as a way forward, an ethical mode capable of navigating the complex relations of similarity and difference we are all enmeshed in. Each writer responds to what they see as a different empathy deficit in these Anthropocene times, relating to our lack of ethical relations towards those we are entangled with, even and especially when this entanglement is unpleasant or unwelcome. This chapter engaged with the ideas of Lori Gruen, Danielle Sands, Jessica Phillips, Ulrich Beck, and Denis Donoghue, in order to examine how Rush

and Giggs address these empathy gaps by employing innovative methods of practicing and writing empathy, enabling them to engage with the urgent question of how to care for the other – both known and unknown. This chapter interpreted this kind of writing as not only catalysing an affective response, but also as capable of accommodating the uncomfortable tensions and complexities that are at the heart of Anthropocene life. Their work enables writer and reader to hold those tensions while always striving to move beyond them, seeking new ways to connect, relate, and move forwards with care.

These seven primary texts have much in common and they directly reflect the emergence of an Anthropocene feminism. Principally, they speak to the ongoing feminist project of decentring 'Man' as the dominant and normative model of the human. The rejection of the 'Man' or 'Anthropos' of the Anthropocene is an overarching framework that every writer in this thesis engages with, sometimes explicitly but more often implicitly. Notable not only in his absence from their texts (which are part of fields and genres he historically dominated), 'Man' is also actively subverted through the troubling of his objective, scientific registers; the problematisation of his stratified, dualistic logic; the exposure of his extractive, unjust frameworks; and the dismantling of his universalising, patriarchal myths. These historic aspects of human subjectivity as codified by the privileged white male are replaced with other ways forward.

Furthermore, these writers all share certain practices and methods which are key to the Anthropocene feminist project, such as close attention, curiosity, and speculation. They forge affective, reciprocal, and caring relations, whilst remaining alert to the dangers of romanticism, pastoralism, and escapism. Their texts contain poetic, sensory language – sometimes opulent, sometimes restrained – that both inspires and destabilises the reader, opening them up to the changes taking place all around them.

But this poetic, lyrical language is always matched by feminism's political edge and pragmatism. The universalising myth is undone by a strong engagement with environmental and social justice issues, in which the dynamics of power and privilege structuring the Anthropocene are never absent or glossed over. And in

writing about this emergency, rather than being paralysed by panic, guilt or apathy, these writers are concerned with the *how*: how to inherit, how to be accountable, how to relate, how to empathise, how to attend, how to notice, how to entangle. The need for action is emphasised: from challenging history to planting a pollinator garden, from swimming in polluted waters to volunteering with flood victims. And this action is always grounded in the reality of everyday life. Indeed, the everyday is reclaimed in these texts; no longer an overlooked, background realm of stasis, atemporality and mundane life, the domestic, everyday world is defamiliarised as a site of crisis, wonder, change and more-than-human encounter. It emerges as a crucial – if not the most crucial – setting for Anthropocene experience.

As is characteristic of Anthropocene feminist scholarship, each of these texts engages with the politics of knowledge and the conditions under which knowledge is produced. Rather than feigning abstraction or taking comfort in objectivity, their work is situated, immersed, and implicated. Knowledge is organised in ways that are fluid rather than rigid, confluent rather than hierarchical, entangled rather than stratified. There are no attempts to conclude or find stable ground; instability and uncertainty are accepted as conditions of Anthropocene life. A strong feminist politics of citation emerges in essays that are often polyphonic, ringing with a diverse plurality of voices, and a desire on behalf of the writer to acknowledge those whose work they have thought and written with.

In terms of form, in line with contemporary nature writing like that of the NNW, all of these writers utilise and innovate the creative non-fiction essay form. Employing a blend of memoir and discursive narrative, the essay enables these writers to seamlessly weave together the personal and political, creating lyrical accounts of lived experience that are capable of engaging the reader and speaking to wider worlds. By grounding their narratives in subjective, individual experience, they displace the objective expert and make Anthropocene issues accessible and relatable. Running through these personal accounts are multiple, diverse threads of knowledge, capable of disrupting ‘the official story’ and engaging the reader in complex, inspiring and often challenging ideas. The medium and short essay form that these writers employ refuses conclusion and definite forms of knowledge,

emphasising feminism's allegiance to curiosity, speculation and the understanding that 'we are not in charge of the world' (Haraway 1988, 594).

Echoing scholars such as Haraway and Alaimo, these texts all share a refusal of the god trick, with perspectives that are immersed in the material world, down in the muck and mess of everyday life. These writers are consistently self-aware, always interrogating their own complicity rather than entertaining ideas of innocence or neutrality. They confront implication, even and especially when it's uncomfortable. Grusin's ethos of disruption is strongly felt in writing that is highly speculative, restless, and curious, and that isn't afraid of challenging and decentring aspects of the world as produced by the dominant power of 'Man'. Another significant form of subversion that emerges across these works is the centring of themes, subjects, and settings that would historically have been deemed unworthy of the attention of a nature writer. Not only do they all exhibit a close attention to embodied material life, but meaningful Anthropocenic encounter emerges in surprising places: in the domestic world, in untold histories, in garden plants, in the colour of bikinis.

Entanglement is centred, not only as a theme, but also as a form of writing and an ethical mode. Relationality, hybridity, plurality, and implication are all depicted as vital conditions of being in Anthropocene worlds. In these texts, connections are always there to be found. Sometimes they're obvious but more often they're unlikely or unsettling, and the work of making these connections is a labour and responsibility shared by both writer and reader. In engaging with any of these texts, the reader recognises that they too are entangled, embroiled, involved. They are confronted with the fact that there is no externality. Indeed, navigating this entanglement isn't always a comfortable experience and these writers are attendant to the nuances of an Anthropocene world built on asymmetrical power relations. In diverse ways, their texts seek alternative ways forward whilst never trying to universalise, collapse difference, avoid tension, or gloss over complexity. In different ways, with different agendas, their shared central project is to stay very much with the trouble.

The writers in this thesis reflect the shifts and ideas of an Anthropocene feminism, shaking up the once staid field of nature writing and making these important ideas accessible to a wider audience. Themes and concepts, such as transcorporeality,

the god trick, a more-than-human hydrocommons, matters of care, situated knowledges, politics of citation, intersectionality, and entanglement, provide key lenses and frameworks through which each chapter interprets its primary texts. Vital knowledge shared by Indigenous scholars and thinkers around gifting, obligation, reciprocity, and ethical relationality complicate and enrich these feminist readings. And there are certain voices that resound across multiple chapters: Astrida Neimanis, Stacy Alaimo, Zoe Todd, Max Liboiron, Kathryn Yusoff, Donna Haraway. Their thinking offers instruction for staying with the trouble in Anthropocene times: for grit amongst guilt, for intention alongside despair, and for action amidst grief.

The seven writers examined in this thesis think with and alongside the scholars of an Anthropocene feminism to show that there are many ways to story the planetary emergency we find ourselves in. The purpose of this study isn't to flatly refuse the Anthropocene concept as created and narrated by the white male world of science and technology – nor is it to reject nature writing by white men. Indeed, to do so would be to reproduce the dualisms that the many voices in this thesis work so hard to discredit. Instead, by centring other – often marginalised – voices, this thesis intends to show that there is a surge of new, diverse female writers who have valuable insights to offer us about the idea of the Anthropocene, and about relations with the natural world in these troubling times. Savoy, Jamie, Renkl, Powles, Horrocks, Rush and Giggs offer new lenses through which to read this epoch – and ourselves. Their work is productive in problematising the Anthropocene's claims and assumptions, and exposing those aspects of the dominant narrative that are most harmful. They add depth and texture to a tale that is often narrated by only one voice, in one way. And by providing alternative ways to tell the Anthropocene story, they offer hope to a narrative that often seems like a foregone conclusion.

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