



UNIVERSITY OF LEEDS

This is a repository copy of *Deep Time Visible*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/148867/>

Version: Accepted Version

Book Section:

Marland, P orcid.org/0000-0001-5458-8821 (2021) *Deep Time Visible*. In: Parham, J, (ed.) *The Cambridge Companion to Literature and the Anthropocene*. Cambridge Companions to Literature . Cambridge University Press , Cambridge , pp. 289-303. ISBN 9781108498531

<https://doi.org/10.1017/9781108683111.019>

© Cambridge University Press 2021. This chapter has been published in a revised form in *The Cambridge Companion to Literature and the Anthropocene* <https://doi.org/10.1017/9781108683111>. This version is free to view and download for private research and study only. Not for re-distribution or re-use.

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk
<https://eprints.whiterose.ac.uk/>

Deep Time Visible: New Nature Writing from the Scottish Islands

In accounts of the Anthropocene, the assertion that human culture is ill-equipped to respond to the epoch's spatio-temporal dimensions has become something of a commonplace:

Timothy Clark identifies irreconcilable “derangements of scale” in our thinking as we try to move between individual and planetary considerations; Bruno Latour states that it is “easy for us to agree” that people lack “the mental and emotional repertoire to deal with such a vast scale of events”; and Timothy Morton describes the emergence of uncanny “hyperobjects” that defy comprehension, either through their massive distribution in time and space or their resistance to organic processes of decay.¹ It seems, then, that the crisis of the environmental imagination identified by Lawrence Buell in an early articulation of ecocriticism, far from receding under the onslaught of environmentalist critique and growing ecological awareness, has only deepened further in the 21st century.² Adam Trexler, like Buell two decades earlier, calls for a “*cultural* transformation” that can address the ongoing crisis, and asks, “What tropes are necessary to comprehend climate change or to articulate the possible futures faced by humanity? What longer, historical forms aid this imagination?”³ Clark, more radically, questions whether “certain limits of the human imagination, artistic representation and the capacity of understanding [are] now being reached.”⁴

If this encounter with cognitive and imaginative limits is the case with any form of artistic representation, however innovative, then what hope might arguably more traditional forms of literature, such as prose nature writing, have of responding in any useful way to the new epoch? As early as 2003 the American scholar Dana Phillips argued against what he saw as ecocriticism's rehabilitation of mimesis, challenging Buell's championing of the writing of Henry David Thoreau and seeking to divert the attention of the movement away from “one of literature's more pedestrian, least artful aspects”.⁵ Likewise, Morton has critiqued the notion of “ecomimesis” in nature writing – the idea the genre can offer unmediated access to the world of nature through its reliance on a sense of situatedness and authenticity of experience.⁶ Tellingly, in framing his enquiry into Anthropocene literature, Trexler omits to mention prose nature writing at all, listing fiction, poetry and drama before settling on the climate change novel as his primary focus.⁷ In the midst of this crisis of representation, and in a world that exists “post-nature” (in which no area of the planet's surface has escaped the touch of anthropogenic activity), what role can nature writing hope to fulfil? Recent years have seen a popular resurgence of the genre. While the term “New Nature Writing” remains an area of contention, not least around its “newness”, these texts are nevertheless increasingly

characterised by a growing apprehension of the plight of the environment and an awareness of the contingency of conceptualisations of “nature”. Moreover, in Graham Huggan’s view, nature writing is now, and has been throughout its modern incarnation, “as much an interrogation as a performance of mimesis”.⁸ A genre marked by anxieties and tensions such as these might be regarded as evincing a usefully fractured quality, one potentially open to the access of new light.

The very notion of the “Anthropocene” inevitably raises questions of subjectivity and of the place of the human on the earth – elements that might be seen as central to modern nature writing. While Terry Gifford and Anna Stenning note that the ‘personal epiphanies’ associated with nature writing are perhaps more prevalent in British and American traditions than those of other areas of the world, broadly speaking they see the genre as hinging on, and enriched by, a ‘subjective appreciation’ of nature.⁹ Semantically-speaking, the term Anthropocene places *anthropos* centre-stage, not in a celebratory fashion, but rather in what Don McKay identifies as a form of “negative recognition”, of naming and “owning” an atrocity.¹⁰ Thus, Latour argues, the time for objective natural science has passed; he cites Michel Serres, who says of the Earth, “Now it *has a subject once again*”.¹¹ This is not the historical, transcendent human subject, but one utterly enmeshed with the world, with whom the non-human world is likewise inescapably enmeshed. “To be a subject”, writes Latour, “is not to act autonomously in front of an objective background, but to share *agency with other subjects that have also lost their autonomy*”.¹² It is a moot point, perhaps, as to whether the Earth *has* lost its autonomy, given that one of the greatest ironies of the Anthropocene is that while its naming recognises anthropogenic effects on a planetary scale, humans are ultimately powerless to predict or manage its course. But insofar as this refers to the earth’s post-natural state, then it is also indicative of a kind of shared subjectivity of all planetary life. To borrow and paraphrase Morton’s term, if the Anthropocene is a hyperobject, the Earth itself might be regarded as a “hypersubject”: an assemblage of animacies and agencies brought together in the complex multispecies entanglement Donna Haraway has named (in preference to ‘Anthropocene’) the *Chthulucene*, signifying “a kind of timeplace for learning to stay with the trouble of living and dying in reponse-ability on a damaged earth”.¹³

With its tendency toward subjective reflection and its increasing preoccupation with navigating the territory of damage, New Nature Writing might yet provide a site of witness to the Anthropocene as it unfolds. This chapter explores the ways in which the genre offers insights both in relation to the term’s stratigraphic frame of reference, and to its more discursive and affective aspects. In doing so, I hope to challenge an assumption prevalent in

contemporary literary criticism: that the Anthropocene is “ungraspable” – cognitively and imaginatively – by the kinds of situated, descriptive and autobiographical registers that operate within prose nature writing. I also suggest that there is a strand of New Nature Writing that can be regarded as particularly relevant to this enquiry. A prominent feature of much of the genre’s recent output in the British Isles is its attraction to the peripheries of the archipelago and its attendant interest in the rich histories and far-reaching interconnections that have been obscured by the dominant narratives of centralised power.¹⁴ This archipelagic orientation is certainly significant in relation to the Scottish islands, which feature powerfully (among other locations) in the work of established nature writers such as Kathleen Jamie, Adam Nicolson and Robert Macfarlane, as well as that of newer voices including Amy Liptrot and David Gange.¹⁵

This chapter is divided into four sections. In the first two, I offer examples of the ways in which these authors’ Scottish island-themed writings speak to the cognitive and imaginative challenges of the Anthropocene’s geological and planetary scales. The topographies encountered in these works set the human within a massively more-than-human context, bringing deep time into view and facilitating the contemplation of global interconnections through the presence of birds and marine mammals whose migrations trace lines across the globe. In the third section, I explore the manner in which the texts enable us to think through other, more elusive elements of the epoch, through their registering of the kinds of phenomena that are, as it were, *hiding in plain sight* in these terrains – species decline and the effects of plastic pollution, both of which speak to complex forms of human and non-human entanglement. Finally, I reflect on the ways in which these encounters foster an Anthropocene imaginary for the future, enabling us not just to see ourselves as spectres of epochs to come, but also, in the shorter term, to imagine alternative human possibilities based on, to use Gange’s resonant phrase, “routes as yet untravelled”.¹⁶

Deep Time Visible

Jeremy Davies suggests that “the world of the early twenty-first century is undergoing changes that can be grasped only by switching to timescales of tens of thousands or even millions of years”.¹⁷ Thinking in these scales is, as already noted, problematic for humans, especially given that we measure our own lives in scores and tens of years, and our existence as a species in hundreds of thousands. Caspar Henderson writes, “Even if we accept the idea of deep time as a reality, it is still hard to *understand* because its dimensions are so far outside our normal cognitive range”.¹⁸ Rather than looking for conceptual analogies to

explain this (he gives the example, “if all Earth history is a 24 hour day then humans emerged around 3 seconds before midnight”), Henderson argues that a better way to feel deep time is “a walking meditation among ancient rocks”.¹⁹ There’s no doubt that such a meditation informs the island texts discussed here. The very pedestrian quality Phillips disparages takes literal form; these writers walk (or in the case of David Gange walk and kayak) and this kinetic methodology opens them to embodied insight. On these outcrops in the Atlantic, ancient rocks are an inescapable feature of island life; here we find geologies laid bare, deep time made visible.

In *The Outrun*, Amy Liptrot chronicles her retreat from a life of addiction in London to her childhood home on the Orkney Islands, so beginning her gradual and hard-won recovery. In a process of recuperative re-grounding she discovers that the islands put her in touch with scales of time and space that dwarf the urban hub she has left behind. Walking around Papay [Papa Westray], she observes,

it is hard not to start thinking about how the land itself was formed. [...] Layers of rock are clearly visible on the cliffs, like the pages of a book. These layers on different islands once met up when the archipelago was one continuous landmass but have been worn away by the action of sea and ice over millennia. [...] Most of Orkney is formed from Caithness flagstone [...] dating back to the Devonian period 400 million years ago.²⁰

Her observations bring out the notion of landscape as textual, as “storied matter”, to use the discourse of material ecocriticism, in a way that both productively shrinks the human subject and demonstrates archipelagic, geological connections that reach outward spatially from the local and travel millions of years back in time.²¹

A similar contextualising effect can be seen in historian David Gange’s hybrid work *The Frayed Atlantic Edge: A Historian’s Journey from Shetland to the Channel*, which combines historiography with travel memoir and nature writing.²² His research methodology involves navigating the British and Irish Atlantic littoral by kayak and on foot, developing an archive formed through “slow travel”.²³ This approach affords new insights gained when the islands are viewed from the seas that surround them, not least the apprehension of histories that massively predate the human. The Shetland Islands inspire a sustained meditation on deep time in which Gange traces their history back three thousand million years to before the formation of the Caledonian mountains. Gazing up at the cliffs, he observes, “I was staring through cross-sections of those ancient hills, with an access to the distant past that is rarely possible from land”.²⁴ It is a perspective that brings the passage of thousands and millions of

years into view, giving a glimpse of the very strata that form the Earth's geological record, and that are beginning to mark the accelerated passage of the Holocene into the Anthropocene. Jos Smith notes insightfully that one of the qualities of the New Nature Writing is the way in which, in the face of environmental uncertainty, it simultaneously encompasses both "the intensely local and [...] the globally interconnected".²⁵ The additional information Gange offers – that these specific "drowned mountains" once "stretched from what is now Norway to the present day United States" – draws disparate parts of the globe together conceptually in a way that troubles ideas of nationhood, a perception that may prove increasingly valuable as climate breakdown results in ever greater displacement of human populations.²⁶

If the visibility of deep time is one notable "island effect", then another is the apparent instability of linear time in these sites, such that the past remains a powerfully tangible presence. In *The Old Ways: A Journey on Foot*, Robert Macfarlane, encounters on the coast of Lewis a deep time that still seems fresh and vital underfoot:

The peat thinned as I gained height and rock began to show through the heather: Lewisian gneiss, the most ancient surface rock in Europe – 3.1 billion years old, zebra-striped, scarred and smoothed by multiple glaciations. The Pleistocene felt only a few weeks gone, the ice just recently retreated.²⁷

The same is true for ancient human history (which, of course, enters Earth history relatively late in the day): earlier human occupation remains extraordinarily legible on the islands, again giving a sense of strands of island time that weave together and coalesce rather than replacing each other in linear fashion. The effect leads to a strong sense of continuity and community with the past. On Mainland Orkney, Liptrot, repairing drystone dykes after a particularly savage storm, writes, "I start to think in decades and centuries rather than days and months. I think about the people who built the original dykes".²⁸ Jamie, whose two essay collections *Findings* and *Sightlines* see her frequently gravitating to the Scottish islands, visits the Neolithic village of Skara Brae, also on Mainland Orkney, and comments

There, you can marvel at the domestic normality, that Late Stone Age people had beds and cupboards and neighbours and beads. You can feel both their presence, their day-to-day lives, and their utter absence. It's a good place to go. It re-calibrates your sense of time.²⁹

It is this interplay of presence and absence that enables a sense of personal, affective, and phenomenological involvement in both deep and (relatively) more recent spans of time that perhaps offers a foothold for an Anthropocene temporal imagination, which ultimately

requires us to understand what humans *have been* in order to negotiate what we *might become*. In this, it perhaps begins to answer Trexler's question about the longer historical forms that might aid a cultural transformation.

Deep time's spatial corollary is, of course, the cosmos. On the Scottish islands planetary effects make their presence felt, and as a result alter perceptions and recalibrate attention. After a few weeks on Papay, Liptrot notices that she is "always pretty much aware of the height of the tide, the direction of the wind, the time of sunrise and sunset, and the phase of the moon".³⁰ Thinking of how these phenomena are related, she goes on,

The tide is influenced not just by the earth's rotation and the positions of the moon and the sun, but also the moon's altitude above the equator and the topography of the seabed – or bathymetry – and the complicated way water moves between islands. I think about the earth's rotation, and realise that it's not the tide that is going out or the moon rising: rather, I am moving away from them.³¹

It is a subtle form of re-orientation that unmoors ideas of both the fixed self and the static Earth and sets them afloat in a cosmic ocean. If the Anthropocene planet is a hyperobject, these reflections put some of its constituent parts in dialogue, extending our cognition of the kinds of planetary interconnections that might otherwise elude our understanding.

"The Palm of the World's Hand"

It is not only through direct contact with the mineral evidence of deep time and with the phases of the moon and tides that the temporal and spatial imaginations are expanded in these accounts. Some of the animals that inhabit the islands are also tangible evidence of deep time, as well as extraordinary navigators of the globe. Adam Nicolson, in *Sea Room*, his "love letter" to the Shiantis, writes of one of the bird species that populates the islands: "The oldest shag, identical to its modern descendants, has been found in rocks laid down sixty million years ago".³² The Scottish islands have long been a site in which the navigational attributes of the avian world have been recognised. Martin Martin, considering the properties of the solan goose (or gannet) in his 1698 volume *A Late Voyage to St Kilda*, describes the way in which "the inhabitants [of the islands] take their measures from the flight of those fowls, when the heavens are not clear, as from a sure compass".³³ This respect for avian abilities is one the Western ecological imagination is perhaps only just beginning to recover, as we learn ever more about the astonishing trajectories of bird migration.

New Nature Writing, with its combination of natural history, autobiography, and a reflective stance that combines the two, is perhaps the ideal genre in which to explore the

gradual reassessments of thought and belief that arise from such knowledge. Gange's hybrid history from the "outside in" involves a recovery of the interweaving of human and animal lives that has been in evidence since the islands were populated, but has been lost in the urban- and anthropocentric narratives that have dominated historical discourse over the centuries. He writes, "seabirds, fish and species of seaweed play roles as significant in this book as politicians or their institutions: they had as great an effect on past shoreline lives".³⁴ In an echo of Martin Martin's late 17th century sentiments, Macfarlane, describing the importance of the invisible but highly travelled sea routes around the Scottish archipelago, notes that the first sea-road mariners would have used navigation aids such as watching "the direction of flight at dusk of land-roosting birds like fulmars, petrels or gannets".³⁵ Moving into a larger geographical frame, Nicolson's description of the migratory passage of Barnacle geese marks a growing, global-ecological sensibility. He sees them tracing an arc "from the west coast of Ireland, across to the Inner Hebrides, up past the Shiantis to Rona and Sula Sgeir, on to the Faeroes, Iceland and Greenland", their flight imagined beautifully as "a line creased into the palm of the world's hand".³⁶

For Nicolson, our increasing knowledge of avian lives offers an opportunity to apprehend something of their *umwelten* – the world as it is experienced through their species-specific subjectivities.³⁷ There is certainly a sense of expanded understanding in Jamie's account of finding the body of a Leach's storm petrel on the island of North Rona. The bird had been ringed at some point in an ornithological survey, and after sending off its tag, Jamie receives a letter telling her this had happened "twenty-four years previously, not on Rona [...] but 170 miles northeast of there, on the island of Yell".³⁸ As she reads this, "a connection shot between them [i.e. Rona and Yell]. Suddenly they were linked by a flight-path, straight as an arrow. I thought I knew my maps, but not as the storm petrel does".³⁹ The information instils in her a new sense of non-human waymaking, of "mappings" unrelated to human geographical and geopolitical understandings. In Liptrot's account of her conservation work with the RSPB monitoring corncrake populations on the Orkney Islands she also reveals a process which involves her entering into the bird's world, while it in turn infiltrates hers, in a suitably Chthulucene, tentacular manner: "Somehow this bird has become my thing. I am hallucinating a *Crex crex* call in the background music on the radio and at night I dream of corncrakes".⁴⁰

"The fundamental Earth is trembling"

All of these accounts bring out a sense of time scales, connections, and vibrant non-human lives that, without the tangible markers of rock and flesh on the islands, might be difficult to grasp. Some of the authors' reflections also prepare us for the notion of flux, establishing the idea that the landmasses and oceans of the earth have seen massive changes over the eons, either through slow accretions or sporadic accelerations. These are not Anthropocene effects, but merely a feature of the Earth's long history. Liptrot writes, "I hear that Europe and America are gradually getting further apart, as lava bubbles up into the gap between the tectonic plates in Iceland".⁴¹ The islands themselves are dynamic forms; Gange notes that "Shetland may have sunk as much as nine metres in 5,000 years [...] This scale of change, over so short a time – the absence of a 'million' in the number is not an error – explains some of the extraordinary transitoriness of this coastline".⁴² Animal species also morph and fluctuate; bird numbers plummet and rise again according to global cycles and patterns of wind and weather, and on some of the islands unique evolutionary effects can be seen in the biologically-isolated populations. Gange discovers on Shetland that several species, including wrens, voles, moths and mosses, "have evolved along unique trajectories".⁴³ He concludes, "There is as much social change in nature, and as little permanence, as there is among people."⁴⁴

These reflections bring out the notion that the universe is itself a process and not a static being; however these works also begin to differentiate between flux and the kinds of anthropogenically-influenced changes making their presence felt as the Anthropocene begins to gather pace. In a sense, the time for cognitive and imaginative readjustments around time and space, while still a necessary component of our understanding, has already passed. Instead we are faced with the question of what is now frequently being referred to as an "existential crisis" in which, to use Serres' phrase, "the fundamental Earth is trembling".⁴⁵ How is the New Nature Writing responding to such an intensification of crisis? Again, just as these island texts speak to ideas of deep time and planetary connection, so do they also register affective, existential impacts, along with an increasingly complex understanding of the entanglement of human and non-human lives. For example, where the celebratory tone of Nicolson's *Sea Room* revelled in the Shiant Islands as a hub for "millions of birds and animal lives",⁴⁶ *The Seabird's Cry*, coming nearly two decades later, documents the drastic decline in their numbers. The title can be seen as referring not just to the seabirds' vocalisation but also to an inter-species cry of anguish, a more-than-metaphorical keening for the lost.⁴⁷ Nicolson draws heavily on the latest research into seabird lives, but, in an echo of Latour's sense of the belatedness of objective science – or perhaps its inadequacy if not combined with

subjective soul searching and a broader cultural understanding – he writes, “science is coming to understand the seabirds just as they are dying. By one measure, in the last sixty years they have declined across the world ocean by about two-thirds”; climate change, pollution, and the effects of industrialized fishing “ripple through the seabird community like songs to be sung at the apocalypse”.⁴⁸

Nicolson also brings out the sense of reduction of what it means to be human if the world loses these animals. In introducing his subject, he cites Seamus Heaney’s poem “set questions for the ghost of W.B.”: “What came first, the seabird’s cry or the soul/ Imagined in the dawn cold when it cried?”⁴⁹ Human soul and seabird cry are imagined here as co-existent from the very beginning. In Nicolson’s view, the birds have been integral to the development of the myths and legends humans have created in order to understand ourselves, and yet “it looks as though we are now destroying them”.⁵⁰ As the ecocritic and nature writer Michael Malay argues, ‘Animals have worked their way into the very fabric of our imagination, and into the nature of our being. They have shaped what it means to be human’.⁵¹ It is perhaps the perception of this interweaving that restores Liptrot’s commitment when, “On tough nights”, she begins to entertain doubts about her work with the corncrake: “And then I learn that, in 1977, corncrake remains were excavated from the Pictish and Viking Age site at Buckquoy, in Orkney’s West Mainland”.⁵² The knowledge that the birds have been the islanders’ earth companions for millennia and yet have now been all but wiped out by human activity shocks Liptrot and reinvigorates her dedication to monitoring and protecting them: “it seems right that we should take responsibility to conserve the last few”.⁵³ Associating the decline of species such as these with human diminishment is undoubtedly an anthropocentric perspective. But in both cases, the authors also reflect on human responsibility. An insight into the ways in which animals constitute the human, combined with a sense of both culpability and a duty to conserve might be viewed as an articulation of the kind of complex “response-ability” for which Haraway calls.

It is not enough, though, to recognise the interweaving of animal lives with our own, along with our culpability as a species, albeit markedly unequal across the globe; the Anthropocene also demands of us an investigation of the human *per se*. This is an area one might assume to lie beyond the scope of prose nature writing, but, in registering the more uncanny phenomena that come to light in these terrains, the texts in question evince at times a haunting and haunted quality that gestures us towards just such an enquiry. Plastic waste is a case in point – items washing up on the shores of long-uninhabited islands bring a troubling sense of matter out of place. Landing on the Monach Islands, Jamie finds the sand dunes

“choked with plastic” including a plastic doll’s head, a discovery that stimulates a meditation on the human desire for durability:

I wondered if it’s still possible to value that which endures, if durability is still a virtue, when we have invented plastic, and the dolls head with her tufts of hair and rolling eyes may well persist after our own have cleaned back down to the bone.⁵⁴

The episode brings out both a need to rethink human “values” and an uncomfortable recognition of plastic items as uncanny objects that, though we might think of them as dead or inert matter, will outlive us by hundreds of years or more, continuing in their environmental effects long after their creators are gone. Liptrot’s account of the Papay fisherman Douglas’s stories of seeing “gannets flying, trailing plastic necklaces – they had dived straight through the holes in plastic drinks can packaging” conjures a similar feeling of disjunction.⁵⁵ The metaphor of the necklace makes the image all the more mortifying – birds encumbered and restricted, sometimes fatally, by an item that resembles a human form of decoration. But what is more eerie and perhaps more profoundly alarming is when the plastic is present but not visible. Nicolson writes, “It is a literal truth that every albatross and fulmar has eaten plastic and it is reliably predicted that by 2050, about 99.8 percent of all seabird species will have plastic in their stomachs”.⁵⁶ The observation reveals that it is not just the geological record but the hidden fleshy strata of the planet’s creatures – including, of course, the human – that evidence the Anthropocene. Again, material ecocriticism has drawn our attention to the porousness of the body (see, especially, Stacy Alaimo’s concept of “transcorporeality”) but this particular rupture of structural integrity perhaps brings Latour’s concept of an overarching loss of autonomy more sharply into focus, with a clear sense of *Anthropos* as the author of that loss.⁵⁷

Anthropocene Futures

Macfarlane argues that “The Anthropocene compels us to think forward in deep time”, and to imagine ourselves as “ancestors”.⁵⁸ Again, these island texts seem to heighten opportunities for such reflection, both in their ability to think forward to the lives of human generations to come and, ultimately, to imagine a time when the human species will no longer exist. As Gange kayaks around the Orkney islands, he witnesses geological ‘freaks of deep time’ which, he notes, in the manner of W.G. Sebald, “felt like the imaginary future ruins of a civilisation lost to the rising seas of the Anthropocene”.⁵⁹ His perception involves thinking towards a distant future which is looking back to the point (still in the future from our perspective) at which human civilisation (or at least an element thereof) will have been

engulfed by the ocean. A similar perspective figures in Jamie's consideration of the human abandonment of the island of Rona. She uses the island's history as a model for two potential future scenarios. In the first, expressed in a piece written for *The Guardian* newspaper, she imagines

A remote, changed future, when more once-inhabited places will be abandoned. We can see beginning already floods here, drought there. We may need such images as Rona provides to help us imagine the world to come, because beneath the surf and birds' calls you can hear the long withdrawing roar of human occupation.⁶⁰

Here the abandoned landscape of Rona is seen as prefiguring other future abandonments as humanity recedes in the face of climate breakdown. For Gange, there is almost something to be relished in that long withdrawing roar, particularly when it is accompanied by a re-encroachment of the natural world. Though registering the tragedy implicit in abandoned places that were once full of human life, he feels that, given the propensity of humans for violence, both against each other and the natural world, "it might be heartening to see the agency of animals reshaping realms to which humans are, more than ever, peripheral".⁶¹

Jamie's second futuristic vision, from the *Sightlines* essay "On Rona", is a little more optimistic; contemplating the remains of a dwelling that has been inhabited, abandoned and then re-inhabited over a period of thousands of years, she imagines the possible re-population of Rona in times to come: "perhaps someday in the future, when unimaginable change has come to the life we know, a few acres far out in the Atlantic might be pressed into service again".⁶² Moreover, these acres may be graced with modes of human habitation we have not yet explored fully in western modernity; Gange also presents a more positive, and at the same time more politicised, scenario, finding that his "outside-in" historical method "shows us there are other ways to live than those practised today".⁶³ He argues,

the past is not full of dead things but of unfinished business: germs of fruitful routes as yet untravelled. Every coastal ruin whose living creatures were once steamrollered by the homogenising logics of industrial capitalism is a site at which the possibilities for an escape from those logics can be entertained.⁶⁴

There are signs that some such possibilities are even now being realised on the islands, as they show the way towards an alternative future. For example, while not necessarily departing from capitalism, the Orkney archipelago is a world leader in terms of renewable energy.⁶⁵ As Liptrot notes, in describing the view from the Outrun (a large coastal field on her family's farm), "Out at sea, bobbing on the surface, I can make out wave-energy devices

being tested by engineers.”⁶⁶ Nicolson also sees potential for a new era, at times viewing the Anthropocene as an ontological threshold rather than the apocalypse he fears:

The Anthropocene will have brought one geological moment to an end; it could now usher in the Ecozoic. [...] an age which has at its heart the belief that all living beings have a right to life and to the recognition that they have forms of understanding we have never shared and probably never will.⁶⁷

In this optimistic vision, scientific advances in knowledge about non-human life will be rewoven into new ontologies able to incorporate a regard for, if not a full ability to understand or enter into, the *umwelten* of other beings.

Nature writing is often framed in terms of simple nostalgia for modes of being in the world that are passing, but Huggan has recently identified another layer of temporal complexity in the genre – the prevalence of the *future anterior*, or future perfect tense, which is oriented towards a future which is always, already looking back.⁶⁸ This is the orientation that inflects the future imaginaries cited above. In this, New Nature Writing, particularly texts grounded in the materialities of archipelagic spaces, offers us a mode uniquely suited to the Anthropocene, the temporal frame of which requires us to conjure ourselves imaginatively, David Farrier writes, “as ghosts that will haunt the very deep future”.⁶⁹ The works discussed in this chapter identify and coalesce around a crucial juncture – a time in which the implications of the Anthropocene are inexorably revealing themselves, and in which, though we may not be able to reverse or control the passage of the new epoch, we have become aware of ourselves as “ancestors” who must address, and might yet mitigate to some degree, the record we leave behind for the deep future to read.

¹ Timothy Clark, “Scale”, n.p. in Tom Cohen (ed.), *Telemorphosis: Theory in the Era of Climate Change, Vol 1*. (Michigan: Open Humanities Press, 2012) DOI: <http://dx.doi.org/10.3998/ohp.10539563.0001.001>; Bruno Latour, “Agency at the Time of the Anthropocene”, *New Literary History*, Vol. 45, pp. 1-14, 2014; Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World*, (Minneapolis, MN: University of Minnesota Press, 2013).

² Lawrence Buell, *The Environmental Imagination: Thoreau, Nature Writing and the Formation of American Culture*, (Cambridge MA and London: Harvard University Press, 1995).

³ Adam Trexler, *Anthropocene Fictions: The Novel in a Time of Climate Change*, (Charlottesville, VA: University of Virginia Press, 2015).

⁴ Timothy Clark, *Ecocriticism on the Edge: The Anthropocene as a Threshold Concept*, (London and New York: Bloomsbury, 2015), p.24.

⁵ Dana Phillips, *The Truth of Ecology: Nature, Culture, and Literature in America*, (New York: Oxford University Press, 2003), p.8.

-
- ⁶ Timothy Morton, *Ecology Without Nature: Rethinking Environmental Aesthetics*, (Cambridge, MA and London: Harvard University Press, 2007).
- ⁸ William Abberley, Christina Alt, David Higgins and Graham Huggan, *Land Lines: Modern British Nature Writing:1789-2019* (Cambridge: Cambridge University Press, 2020 forthcoming)..
- ⁹ Terry Gifford and Anna Stenning, "Introduction: European New Nature Writing", *Ecozon@*, Vol. 6, no. 1, pp. 1-6, 2015.
- ¹⁰ Don McKay, "Ediacaran and Anthropocene: Poetry as a Reader of Deep Time", in Elizabeth Ellsworth and Jamie Kruse (eds.), *Making the Geologic Now: Responses to Material Conditions of Contemporary Life*, (Punctum Books, 2012) n.p., available at http://www.geologicnow.com/4_McKay.php
- ¹¹ Latour, "Agency", p.4.
- ¹² *Ibid.*, p.4
- ¹³ Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene*, (Durham, NC: Duke University Press, 2016), p.2.
- ¹⁴ Jos Smith proposed the term "archipelagic literature" in preference to new Nature Writing (see 'An archipelagic literature: reframing 'The New Nature Writing'', *Green Letters: Studies in Ecocriticism* 17, (1), pp. 5-15) and, while he has returned to the latter term in *The New Nature Writing: Rethinking the Literature of Place*, (London and New York: Bloomsbury, 2017), he still regards "Periphery" and "Archipelago" as key tropes.
- ¹⁵ For example, islands such as The Shiant, Orkney, Shetland, Sula Sgeir, Rona and St Kilda.
- ¹⁶ David Gange, *The Frayed Atlantic Edge: A Historian's Journey from Shetland to the Channel* (London: Harper Collins, 2019), p.114.
- ¹⁷ Jeremy Davies, *The Birth of the Anthropocene* (Oakland, CA: University of California Press, 2016), p.20.
- ¹⁸ Caspar Henderson, *The Book of Barely Imagined Beings* (London: Granta Books, 2012), p.33.
- ¹⁹ *Ibid.*, p.33.
- ²⁰ Amy Liptrot, *The Outrun*, (Edinburgh: Canongate Books, 2016), p. 210.
- ²¹ See Serenella Iovino and Serpil Oppermann, (eds.) *Material Ecocriticism*. (Bloomington, IA: Indiana University Press, 2014), p. x, for discussion of "storied matter".
- ²² Gange, *TFAE*.
- ²³ *Ibid.*, p. x.
- ²⁴ *Ibid.*, p. 33.
- ²⁵ Smith, *The New Nature Writing*, p.17.
- ²⁶ Gange, *TFAE*, p. 33.
- ²⁷ Robert Macfarlane, *The Old Ways: A Journey on Foot*, (London: Hamish Hamilton, 2012), p. 141.
- ²⁸ Liptrot, *Outrun*, p.89.
- ²⁹ Kathleen Jamie, *Findings*, (London: Sort of Books, 2005), p.11.
- ³⁰ Liptrot, *Outrun*, p.149.
- ³¹ *Ibid.*, p.149.
- ³² Adam Nicolson, *Sea Room: An Island Life*, (London: Harper Collins, 2001), p. 184.
- ³³ Martin Martin, *A Description of the Western Islands of Scotland Circa 1695 [1703]; A Late Voyage to St Kilda [1698]*; with Donald Munro's *A Description of the Occidental i.e. Western Islands of Scotland [1549]*. (Edinburgh: Birlinn. 1999), p. 239.
- ³⁴ Gange, *TFAE*, p. xii.
- ³⁵ Macfarlane, *Old Ways*, pp.91-2.
- ³⁶ Nicolson, *Sea Room*, p.134.
- ³⁷ In *The Seabird's Cry*, (London: William Collins, 2018) Nicolson discusses Jakob von Uexküll's development of this term and related area of study, pp. 17-20.
- ³⁸ Kathleen Jamie, *Sightlines*, (London: Sort of Books, 2012), p. 215.
- ³⁹ *Ibid.*, p.216.
- ⁴⁰ Liptrot, *Outrun*, p.130.
- ⁴¹ *Ibid.*, p. 218.
- ⁴² Gange, *TFAE*, p. 49.
- ⁴³ *Ibid.*, p. 18.
- ⁴⁴ *Ibid.*, p. 47.
- ⁴⁵ Michel Serres, *The Natural Contract*, (Ann Arbor: University of Michigan Press, 1995), p. 86.
- ⁴⁶ Nicolson, *Sea Room*, p. 13.

-
- ⁴⁷ The knowledge that many species of seabird mate for life, a fact iterated several times in *The Seabird's Cry*, perhaps renders less anthropocentric a sense of shared grief.
- ⁴⁸ *Ibid.*, p. 15.
- ⁴⁹ *Ibid.*, p.3.
- ⁵⁰ *Ibid.*, p. 15.
- ⁵¹ Michael Malay, Unpublished essay, 2018.
- ⁵² Liptrot, *Outrun*, p. 131.
- ⁵³ *Ibid.*, p. 131-2.
- ⁵⁴ Jamie, *Findings*, p.59.
- ⁵⁵ Liptrot, *Outrun*, p. 258.
- ⁵⁶ Nicolson, *Seabird's Cry*, p.22.
- ⁵⁷ See for example, Stacy Alaimo, "Trans-corporeal Feminisms and the Ethical Space of Nature", in Stacy Alaimo and Susan Hekman (Eds), *Material Feminisms*. (Bloomington IA: Indiana University Press, 2008), pp. 237–264.
- ⁵⁸ Robert Macfarlane, *Underland*, (London: Hamish Hamilton, 2019), p.77.
- ⁵⁹ Gange, *TFAE*, p. 78.
- ⁶⁰ Kathleen Jamie (2006). 'Island at the edge of the world'. [Online]. Available from: <http://www.theguardian.com/books/2006/aug/26/featuresreviews.guardianreview4>
- ⁶¹ Gange, *TFAE*, p. 48.
- ⁶² Jamie, *Sightlines*, p.207.
- ⁶³ Gange, *TFAE*, p. 114.
- ⁶⁴ *Ibid.*, p. 114.
- ⁶⁵ See, for example, Laura Watts, *Energy at the End of the World: An Orkney Islands Saga*, (Cambridge, MA: The MIT Press, 2018).
- ⁶⁶ Liptrot, *Outrun*, p.4.
- ⁶⁷ Nicolson, *Seabird's Cry*, p. 22-23.
- ⁶⁸ Graham Huggan, *Colonialism, Culture, Whales: The Cetacean Quartet*, (London: Bloomsbury, 2018), p. ix.
- ⁶⁹ David Farrier, "Deep time's uncanny future is full of ghostly human traces", *Aeon*, 31st October 2016, available at <https://aeon.co/ideas/deep-time-s-uncanny-future-is-full-of-ghostly-human-traces>.