Chapter 1

Introduction: Of Territories and Temporalities

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> *Utopia, today, is to believe that current societies will be able to continue*
> *along on their merry little way without major upheavals. Social modes*
> *of organization that prevail today on earth are not holding up, literally*
> *and figuratively. History is gripped by crazy parameters: demography,*
> *energy, the technological-scientific explosion, pollution, the arms race…*
> *The Earth is deterritorializing itself at top speed. The true utopians are*
> *conservatives of all shapes and sizes who would like for this "to hold up*
> *all the same", to return to yesterday and the day before yesterday. What*
> *is terrifying is our lack of collective imagination in a world that has*
> *reached such a boiling point.* (Guattari 1983 [2009]: 307)

Félix Guattari did not have the terminology of the Anthropocene at his disposal when he was asked to respond to a survey on the subject of Utopia by *La Quinzaine Littéraire* in 1983, but the ingredients are all there. A history gripped by 'crazy parameters', the failure of traditional social systems and the collective imagination to confront a boiling planet, and the Earth itself 'deterritorialized' to the brink of collapse. Critical theory did not need the Anthropocene to see the interconnections between all of these elements, but we cannot deny the generative qualities of the term. As a newly designated geological time interval the Anthropocene signifies a fundamental change in environmental conditions and processes across the globe, one brought about by human activities on a vast scale. From soil erosion and species loss to the chemical composition of the atmosphere, the magnitude of these transformations can only be understood in a multi-scalar fashion, tacking endlessly between the

gods-eye view and the molecular, between the satellite and the microbe. This sense of destabilization and boundary crossing has stimulated novel creative practices and redirected scholarly attention in many areas. No matter what angle we approach it from, however, the geological roots of the Anthropocene foreground certain territorial themes and registers: strata, fossils, emissions, extractions, minerals, the Earth itself. More than simply a temporal threshold, the emergence of the Anthropocene as a socio-material concept and empirical reality is marked by this sense of ongoing and irreversible *territorialization* – 'we' have created a new age for the planet, which 'we' must live with in all its contradictions and vulnerabilities. Whether the Anthropocene ends up being added to the Geological Time Scale as a period, an epoch, an age or a boundary event (the difference between these intervals might be "a few billion human lives", Jan Zalasiewicz reminds us (2008: 157)) the term therefore makes a distinct claim on the present and the future – a claim inscribed to varying degrees in bodies, sediments, historical narratives and social worlds. To what extent the grip of the Anthropocene might be loosened is the core concern of this book, framed here through the reciprocal if sometimes counterintuitive logics of deterritorialization and critical heritage thinking.

In an increasingly interconnected world, deterritorialization has emerged as a key conceptual framing through which to apprehend the flow of people, ideas, artefacts and cultural practices around the globe, whether physically or via a disembedded digital mediascape. Arjan Appadurai for example identifies deterritorialization as a 'central force' in the modern world, paying particular attention to the movement of people – especially "labouring populations" – who are brought into the "lower-class sectors and spaces of relatively wealthy societies" (1990: 11). Deterritorialization and globalization here are mutually reinforcing cultural-spatial processes, characterized by the emergence of new social relations in dispersed yet interconnected geographic contexts. This echoes the use of the term in anthropology (e.g. Tomlinson 1999) and mobility studies (e.g. Sheller and Urry 2006), where a core focus has been the weakening of ties between culture and place in a globalized world. Communication technologies are given a central place in this reading, as the ability to maintain close relationships at considerable distance is

a key component in the deterritorialized experience of modernity. As Anthony Giddens argued some time ago now, in the modern world "the very tissue of spatial experience alters, conjoining proximity and distance in ways that have few parallels in prior ages" (1990: 140).

This notion of deterritorialization provides a useful jumping off point for the present volume, but it is not our main focus. The apparently immaterial flows of data, people, ideas and cultures around the globe has encouraged a 'whole Earth' vision that is both fundamental to and inconsistent with the Anthropocene as a spatialized and inherently material phenomenon. This contradiction surfaces in well-known projects such as Globaïa's CGI-driven Anthropocene films, which aim to raise awareness of how 'one species changed a planet' (see further discussion in Breithoff and Harrison, this volume). As digital lines representing transport, resource and communication networks connect up towns, cities, countries and continents over the past two centuries – beginning with the Industrial Revolution in England and spreading to every corner of the globe – so the Earth itself fades from view, an invisible territory against which a familiar narrative of globalization and ecological degradation might unfold. While the planetary scale of the Anthropocene is central to its formal designation as a geological time interval (thus underlining the deterritorialized nature of the concept), the legacies and resonances of this global signature are stubbornly territorial, from landfills and plastic islands to polluted cities slowly choking their most vulnerable residents to death. Just as the frontier landscapes of the Western imagination relied on the violent suppression of Indigenous populations, so your ephemeral digital avatar is rooted in poisonous earthly extractions.

It is in this context that deterritorializing the future emerges as a project of urgent theoretical, practical and political concern. While Guattari was right to claim that the Earth has been deterritorializing itself at 'top speed' for some time now, parallel forces and practices of (re)territorialization exert an equally strong pull on the present and the future. Some of these are intentional; driven – as Guattari identifies – by a nostalgic longing to 'return to yesterday'. Others surface in the vast environmental reconfigurations enacted through mining, drilling and land reclamations, as recorded for example by Edward Burtynsky under the banner of The Anthropocene Project (www.theanthropocene.org).

The disorienting scale of Burtynsky's aerial photographs make clear the limitations of familiar representational practices when confronted by this new geological framework. Vast and totalizing, the Anthropocene as seen through Burtynsky's lens reasserts the centrality of the Earth to a supposedly post-industrial and deterritorialized planet. Missing here however are the differential drivers and consequences of such change, at least at the level of human social and political systems. Consequently, the territorializing force of the Anthropocene is universalized and flattened, "obscuring the accountability behind the mounting eco-catastrophe and inadvertently making us all complicit in its destructive project" (Demos 2017: 19).

We might begin to disentangle such universalizing gestures by critically reframing the Anthropocene as a diffuse yet concrete material inheritance; one that requires careful and distinct forms of management in the present, for the future. As Kathryn Yusoff has argued, approaches to the Anthropocene that "flatten agency across different material economies" have little to contribute to the "geological inheritances and forces that are capitalized upon over generations through the vagaries of hominin evolution and deep history" (2013: 791). To help resituate this debate, Yusoff focuses on the human as fossil-to-come – "an ancestral statement" which underlines the "symbolic and imaginative function" of such artefacts, caught up "in the making of stories of history, futurity, and identity" (2013: 793). The framework of inheritance here responds to the multi-temporal nature of the Anthropocene whilst mobilizing a concern for the enduring and shifting qualities of diverse material legacies, questioning "what it is that is taken forward into the future, what is inherited under the concept of the human, and what survives it as excess or exclusion within its formations?" (ibid). This mode of apprehending the Anthropocene recognizes its territorializing qualities without surrendering to these completely: a form of *critical* inheritance that has direct resonances with ongoing work in the rapidly expanding field of critical heritage studies. If this volume can be said to have one aim it would be centring heritage within the Anthropocene debate, not as a nostalgic longing for how things were, but as a means of expanding our collective imagination. This means thinking differently about the temporalities and territories of heritage, which is precisely

one of those social modes of organization that Guattari identified as *no longer holding up*.

Critical heritage and Anthropocene futures

A familiar view of heritage – at least in the Western tradition – would evoke themes of continuity and nostalgia, played out through historical consumption and a kind of kitsch romanticism, oriented towards the production of origin myths connecting territory, tradition, citizenship and the nation-state. As a heavily commoditized industry, heritage is closely tied to global tourism and the preservation of 'grand' architecture, but it is also deeply personal and embodied, drawing together both collective and individual genetic, cultural, artistic and economic modes of inheritance. Across these domains, heritage can be seen to intersect with the issues raised by climate change and the Anthropocene in numerous ways. Historic sites around the world are at risk from rising sea levels and melting permafrost; museums have become spaces of protest over sponsorship by big oil companies; biobanks and frozen zoos have been created to house genetic material in danger of becoming extinct; oral history projects have been undertaken to record memories of changed landscapes in an attempt to counteract the 'shifting baseline syndrome'. Custodians of 'natural' and 'cultural' heritage may deal with questions of vulnerability, scarcity, loss and sustainability in different ways, but both are forced to confront lasting and systemic change in the face of climate breakdown. Against this backdrop, exhibitions, museums and heritage sites have emerged as important tools in communicating this threat to the general public (e.g. see Cameron and Neilson 2014; Harvey and Perry 2015), while certain sites have been scrutinized to try and understand how previous civilizations responded to rapid environmental change (e.g. Hambrecht et al. 2018). Case studies in adaptation are not only historical, however. Bringing historic buildings back into use has emerged as a key trend in contemporary architecture, offering an alternative to the damaging ecological impact of new developments. At the other end of the scale, traditional skills have been 'rediscovered' by conservationists and survivalists alike (although with different intentions and motivations). As a sign of their growing interconnectedness, 2018

saw the inaugural Climate Heritage Mobilization meeting at the Global Climate Action Summit in San Francisco – the first time the issue had been given a significant platform at a major climate event. In 2019 the Climate Heritage Network held its launch event in Edinburgh, galvanizing work in this area.

Such activities are an important indication of the different ways in which the *practice* of heritage can overlap with and complement action on climate change, but they are not the focus of this book.[1] There are three main distinctions between the work we want to undertake in this volume and more familiar approaches to heritage and climate change. It is worth introducing these here to help frame subsequent discussions, which in many cases depart significantly from mainstream heritage discourse. This is a reflection of the transdisciplinary approach taken to formulating this collection and – we hope – one of the key strengths of the book.

Perhaps the most obvious point of departure concerns the overarching question of **the Anthropocene**, which we see as *related to* but not *synonymous with* global warming and climate breakdown. Whilst anthropogenic climate change clearly shares many roots and points of origin with the Anthropocene – from rapid industrialization and resource extraction to biodiversity loss and human population increases – the (possible) onset of a new geological timeframe for the Earth does not necessarily follow from changes to climate, no matter how profound these may be. As Lewis and Maslin contend, "people began to change the planet long ago, and these impacts run deeper than just our use of fossil fuels. And so our responses to living in this new epoch will have to be more far-reaching" (2018: 6). The Anthropocene is thus, in the words of Ben Dibley (2012), both *epoch* and *discourse;* a discourse which he notes embodies simultaneous nostalgia and repulsion for the notion of the human and its ending (on these contradictions see Dibley 2015, 2018) and which itself acts as a newly emerging apparatus to direct and determine certain ways of acting in and upon the world.

The emergence of the Anthropocene from this perspective insists on something more than just 'action', as responses to climate change are commonly framed. Indeed, 'action' if tied to endless growth and progress in neoliberal terms is liable to result in even greater environmental degradation. In this sense the Anthropocene represents an opportunity for

collective planetary rethinking, not further technocratic solutions. One of the main virtues of the Anthropocene as a geopolitical concept is the fact it *anticipates* our current temporality whilst naming it from within (but see Bastian 2012 and discussion in Ginn et al. 2018). It is both reflective and predictive, which is surely at the root of its take up across the arts and humanities in recent years. A caveat needs to be added here, however. The emergence of a new planet altering species (there have been others previously) is cause enough for contemplation; the fact this transformative potential seems to belong to certain ways of living and not others has prompted an even deeper self-examination. As Christophe Bonneuil and Jean-Baptiste Fressoz put it in a passage that is worth quoting in full:

> The challenges of the Anthropocene demand a differentiated view of humanity, not just for the sake of historical truth, or to assess the responsibilities of the past, but also to pursue future policies that are more effective and more just; to construct a common world in which ordinary people will not be blamed for everything while the ecological crimes of the big corporations are left unpunished; in which the inhabitants of islands threatened by climate change will see their right to live on their territories recognized, without their weak numbers condemning them to statistical and political non-existence; a world in which the 30,000 people who still live as hunter-gatherers and are threatened with extinction by the year 2030 will continue to exist. The wealth of humanity and its capacity for future adaptation come from the diversity of its cultures, which are so many experiments in ways of worthily inhabiting the Earth (2016: 71-2).

It is here that we can begin to locate the second key contribution of this volume in terms of **thinking *with* heritage** in the shadow of the Anthropocene. Following Bonneuil and Fressoz's call for a 'differentiated view of humanity' – one that might bring to the surface marginalized, alternative and experimental ways of inhabiting the Earth – *Deterritorializing the Future* builds on recent scholarship in critical heritage studies that aims to track and stimulate multivocal, heterogeneous and dialogical ways of apprehending the past in the present (see Harrison

2013). Critical heritage studies is an emergent and inherently interdisciplinary field that overlaps considerably with archaeology, anthropology, history, cultural geography, architecture, art and – increasingly – the environmental humanities. Although it has roots in a peculiarly British trend of 'heritage-baiting' (see Lowenthal 1985, 1998; Hewison 1987; Wright 1987; Samuel 1994; Waterton 2010), the scope and target of critique has expanded over the last two decades, with prominent work now carried out in Australia (e.g. Smith 2006; Waterton and Gayo 2018), North and South America (e.g. La Salle and Hutchings 2018; Breithoff 2020), mainland Europe (e.g. Macdonald 2013), Scandinavia (e.g. Storm 2014; Appelgren and Bohlin 2017), Africa (e.g. Meskell 2011; Peterson, Gavua and Rassool 2015; Giblin 2018), the Middle East (e.g. Exxel and Rico 2014) and Asia (e.g. Winter 2011; Byrne 2014; Zhu 2015; Rico 2016), alongside significant multi-regional comparative projects (e.g. Harrison et al. 2020), to name but a few examples. The globalized reach of 'critical' heritage (e.g. Meskell 2015) is testament to the rapid spread of heritage around the world, whether as a set of logics and practices associated with colonization and globalization (Byrne 2014; Harrison and Hughes 2010; Labadi and Long 2010), or as a branch of UNESCO's universalizing agendas and principles (Meskell 2013, 2018). Here it is worth noting that much critical heritage scholarship has focused precisely on the territorializing qualities of these practices, from the insistence on the relationship between culture, history, 'blood', 'soil' and citizenship as part of the logics of the formation of the modern nation state (e.g. Anderson 1983), to the emptying of towns, villages and landscapes in the services of heritage tourism (Winter 2011, 2013, 2019). Pushing back against such developments, critical heritage studies typically seeks to illuminate and examine the socio-material effects of such territorializing practices to encourage a greater awareness of alternative modes of engaging with the past in the present to create more equitable futures. This relies on a nuanced commitment to cultural diversity and the flourishing of lifeways that may challenge universalizing, imperialist and, increasingly, capitalist worldviews – a task that aligns with recent thinking in the Anthropocene debate.

From this perspective we can begin to see how critical heritage studies and critical Anthropocene research might share a common set of

interests and underlying impulses that go beyond issues of mitigation, adaptation and sustainability. The central logic of heritage – a cliché paraded on countless reports, tag lines and marketing brochures – is captured in the notion of 'saving the past, for the future' (see Harrison 2013; Harrison et al. 2020). Rather than focus on *what* is being 'passed down' and 'taken forward' in this framework and *how* it might be better protected, critical heritage studies poses a different set of questions that correspond with the geopolitics of climate change and the Anthropocene: Who is involved in decision making processes of inheritance and care for the future? How is this future defined and articulated? What 'pasts' are given priority in the present, and whose histories are obscured through such work? How might alternative and marginalized concepts of nature and culture challenge familiar methods of preservation? What stories are waiting to be told about the past, in the present, and what is their role in shaping future worlds? The historical inequities and present injustices that shadow both heritage and the Anthropocene as universalizing (we might also say territorializing) concepts are brought to the surface through such questions, which provide an important foundation for further transdisciplinary inquiry at the intersection of these fields.

While different strands of research have developed around the micropolitics of heritage as a practice and an industry, a central concern has been with humanizing the discipline (see Smith 2006). By this we mean highlighting social, emotional, affective (e.g. Tolia-Kelly, Waterton and Watson 2016) and cultural factors in the management of the past over and above issues of physical preservation and conservation – an exploration of 'why' people preserve natural and cultural heritage, rather than 'how' they should do it more effectively (c.f. Harrison 2013). Such thinking has been hugely important in driving forwards emancipatory heritage projects that seek to radically subvert the values afforded to people, things, places and cultural practices when it comes to 'saving the past, for the future'. Without denying the impact of this critical agenda, the approach to heritage we foreground in this volume takes the concept beyond familiar notions of social production, commodification and the 'politics of the past' to consider alternative modes of 'taking on' and 'passing down' across human and non-human worlds. Here, we aim to engage with the ways in which heritage and conservation practices, understood

broadly, can be seen as practices which actively resource the construction of future worlds (Harrison et al. 2020). This reorientation – the third critical gesture we make in response to the Anthropocene – asks us to rethink contradictory approaches found in natural and cultural heritage management, such as the celebration of existence value in biodiversity conservation and the prioritization of social value in the protection of cultural artefacts (e.g. see Harrison 2015, 2018). The Anthropocene is both a prompt for this reconceptualization and a focal point for assessing the implications of an expanded heritage field (see also Solli et al. 2011; Edgeworth et al. 2014; Harrison 2015; Olsen and Pétursdóttir 2016; Pétursdóttir 2017; Harrison, Appelgren and Bohlin 2018; Saul and Waterton 2019). Our key argument here is that **heritage should not be reduced to a human construct**. Instead we look to apprehend processes of care, inheritance, sustainability and connectivity *in excess of the human*, as a way of thinking through the entangled and dialogical nature of all heritage processes. This is no simple task, but we might find an opening or fissure in the call to reimagine heritage in the wake of the posthumanities (see Fredengren and Åsberg this volume), which aims to dislodge anthropocentric concepts of memory, transmission, precarity and affect, all of which are central to the emergence and ongoing work of heritage across various domains.

The three pathways outlined above – **beyond climate action, thinking with critical heritage studies, more-than-human approaches** – resituate heritage in relation to the Anthropocene. No longer to be seen primarily as a set of places or things to be 'saved' (c.f. DeSilvey 2017; DeSilvey and Harrison 2020) in the present, for the future, heritage as we understand it in this volume is an intersubjective and inherently transdisciplinary space where ongoing concerns over climate breakdown, environmental justice, more-than-human legacies and alternative modes of care and stewardship might be worked through by different actors in different ways. To help explore these overlaps and trajectories, the present volume includes contributions from scholars who are firmly situated in heritage studies alongside essays that may avoid the term completely. It is our contention that the cross-fertilization of geography, media studies, philosophy, archaeology, museum studies and geology provides a more useful grounding for heritage research moving forwards. This line

of thinking draws out multiple encounters with the Anthropocene as a concept and as an empirical reality across history, the arts and the social sciences. The territorializing status of the Anthropocene is fragmented through this approach, which begins to imagine alternative futures beyond the destructive legacies of the present.

Deterritorializing what?

By now it has become something of a platitude to suggest that the Anthropocene destabilizes familiar concepts of space and time. In one measure it asks us to look millions of years into the future to consider the human as fossil (Yusoff 2013); in another it seeks to undo taken-for-granted assumptions about the distinction between natural and human history (Chakrabarty 2009). In spatial terms meanwhile the diffuse qualities of the Anthropocene bring distant places into close dialogue. 'The loneliest tree in the world' on a remote New Zealand island is marked by radiation from post-war nuclear tests in Nevada (Turney et al. 2018). Antarctic ice-cores document a short-lived dip in atmospheric carbon-dioxide in the early seventeenth century, the result of huge numbers of people succumbing to disease as Europe colonized the Americas (Lewis and Maslin 2018). There is a material intimacy to the concept when seen from this perspective: a proximity that may appear to contradict the grand sweep of geologic timescales but is in fact densely interwoven with such epic narratives. We see this also in the central conceit of naming the 'Anthropos' as a homogenous geological agent, a discursive gesture that effectively erases historical inequities and present injustices through the figure of a universal human agent. The gravitational pull of the Anthropocene is such that the differentiated spatial and temporal rhythms of contemporary social life collapse in on one another. The Anthropocene as concept and as empirical reality is everywhere and nowhere. It is anchored and free-floating, close and distant. It demands action *now*, yet is only truly legible through the lens of the deep future and the deep past. These paradoxes do not undermine the Anthropocene: they are part of its very fabric.

This nebulous yet grounded character underlines the 'territorializing' dimensions of the Anthropocene. As described above, these are

connected to issues of climate breakdown, pollution, biodiversity loss and resource extraction, but also to the adoption (or appropriation) of the term beyond geology and the environmental sciences. In many ways the rapid spread and constant fragmentation of the Anthropocene *as a concept* is a perfect example of how territorialization and deterritorialization work across different spatial, material and discursive contexts. New trajectories of creative practice and critical thinking constantly branch off from and feed back into processes of scientific knowledge production. These operate alongside and often in tandem with other territorializing apparatuses, from data algorithms and digital bubbles to rapid processes of urbanization. As we explore below and throughout this book, the cross-currents between such phenomena are not separate to the Anthropocene, but rather part of its historical formation and anticipatory logics.

Against this backdrop the notion of 'deterritorializing the future' emerges as an important *modus operandi* for critically disentangling the Anthropocene and its effects. First articulated by Deleuze and Guattari in *Anti-Oedipus* (1972), deterritorialization as we understand it here names the movement by which one leaves a territory – a process which simultaneously extends the territory in new ways. Such territories are not solely or even primarily topographic, but instead describe all forms of social, organic and political organization. As Claire Colebrook puts it, "the very connective forces that allow any form of life to become what it *is* (territorialize) can also allow it to become what it *is not* (deterritorialize)" (2002: xxii, emphasis in original). Through the act of deterritorialization a set of relations is undone or decontextualized, allowing new relations and actualizations to occur. The territory of 'the future' can never be reduced to a single space or time, but rather oscillates between a multiplicity of temporalities and potential worlds. In the shadow of the Anthropocene however these worlds seem increasingly narrow, reduced to post-human dystopias or capitalist techno-states. In this reading the very concept of the territory as a thing to hold on to or escape from has been surpassed by a colonizing force that leaves no room for deterritorialization, because the planet cannot become *what it is not already* (i.e. irrevocably altered by humans). Despite its remarkable capacity to generate critical and creative work across the arts and humanities, the geopolitics of the Anthropocene

are more despotic than democratic. Put simply, if the Anthropocene can be considered a particular assemblage of past-present-future materialities, practices and legacies, then it is also a territorializing apparatus – not just spatially but discursively and socially. It claims the present and the future as a distinctly human territory. Deterritorialization seeks to undo this, or at least expose its fragilities; somehow making the future less beholden to the present, less dependent on the now.

At this point we need to acknowledge the discursive gap between a present temporality that is viewed from the future and a future reality that is shaped by the present. These are mutually constitutive, for sure, but they point to very different capacities for change and action. From one perspective the present is a thing to be read and interpreted, a dense entanglement of matter and meaning waiting to be deciphered. From the viewpoint of the present however the Anthropocene is a thing to be apprehended and – potentially – (re)directed: a chance to 'take stock' of our impact on the planet and ask what other forms of living with the Earth might be possible. These two outlooks feed into each other in useful ways – highlighting unforeseen material legacies and significant disparities in the (future) geological record, for example – but they can also be counter-productive. Most notably, the first implies a sense of inevitability and temporal distance which may well serve to amplify the sociopolitical inertia of the second. Perhaps this explains the febrile search for a 'golden spike' to help designate a singular moment of origin for the Anthropocene, as if the fluctuating possibilities of the present could be contained in a straightforward genealogy of the future.

Of all the strategies that have emerged to trouble this picture in recent years a key pattern has developed around the morphological transformation of the very term 'Anthropocene.' Neologisms such as Plantationocene (Tsing 2015) and Chthulucene (Haraway 2015) seek to decentre the human from the Anthropocene equation, drawing attention respectively to the specific social formations that have given rise to climate breakdown and the multispecies collaborations that might offer a way out of this predicament. Jason Moore's notion of the Capitalocene (2015, 2017) has gained the most traction in this respect, naming – in the words of Demos – the real culprit behind climate change (2017: 54). Instead of placing the blame for planetary environmental collapse on

humanity's 'species being', the Capitalocene thesis emphasizes "complex socio-economic, political, and material operations, involving classes and commodities, imperialisms and empress, and biotechnology and militarism" (2017: 86). As Haraway argues, "If you think the Capitalocene, even in a remotely smart way, you're in a whole different cast of characters compared to the Anthropocene" (2016: 240). While the historiographic possibilities of this concept are immediately apparent, it is less clear how the Capitalocene might help us to imagine alternative futures beyond the more destructive regimes of the present. Worth noting here is the fact that, for Deleuze and Guattari, capitalism in all its fluid, schizophrenic and dissipated states is intimately tied to ongoing processes of territorialization and deterritorialization. As they explain in *Anti-Oedipus*,

> The prime function incumbent upon the socius, has always been to codify the flows of desire, to inscribe them, to record them, to see to it that no flow exists that is not properly damned up, channelled, regulated. When the primitive *territorial machine* proved inadequate to the task, the *despotic machine* set up a kind of overcoding system. But the *capitalist machine*, insofar as it was built on the ruins of a despotic State more or less far removed in time, finds itself in a totally new situation: it is faced with the task of decoding and deterritorializing the flows. Capitalism does not confront this situation from the outside, since it experiences it as the very fabric of its existence, as both its primary determinant and its fundamental raw material, its form and its function, and deliberately perpetuates it, in all its violence, with all the powers at its command. Its sovereign production and repression can be achieved in no other way (1972: 47, original emphasis).

To speak of deterritorializing the future in this context risks maintaining or even celebrating the productive destabilizations of the Anthropocene/Capitalocene. As Colebrook argues in this volume, seen from the perspective of capital and various horizon scanning initiatives, the future is already 'deterritorialized' in ways that many would find profoundly disturbing. But while the capitalist machine may depend on continual processes of territorialization and deterritorialization for its very

existence, the Anthropocene seems to ground such flows in environmental degradation, human suffering and species extinction (Jørgensen 2017, 2019). This recognition aligns with Manuel DeLanda's reading of deterritorialization, which builds on Deleuze and Guattari's thinking and forms part of his wider theory of the assemblage (2006, 2016). Assemblages for DeLanda are made up of material and expressive components (things and discourses), which are stabilized or destabilized through processes of territorialization and deterritorialization. Crucially, these concepts are to be understood literally in DeLanda's model, as processes that occur *in a particular place*, from the spatial setting of a conversation through to the architectural manifestations of juridical and bureaucratic organizations. From this starting point – where social relations and human and non-human assemblages are understood in quite concrete terms – deterritorialization is formulated as a process through which change occurs, sometimes causing entirely new assemblages to come into being. Stable entities, concepts and identities are constantly unravelled through such movements, which spatialize change over time through real material connections. There is a dense back-and-forth here between territorial qualities of boundedness and situatedness (however real or imagined) and the flows of deterritorialization *in progress*, which evokes a certain form of liquidity that is easily (too easily?) translatable to the realm of commodity circulation. Deleuze and Guattari would see this as an inescapable component of capitalism, which confronts territorialization and deterritorialization as part of its make-up, rather than a problem to be solved. And yet the fragmentations on which capitalism depends seem to harden in the Anthropocene narrative, which effectively codifies the future – possibly for thousands of years – as a 'human' epoch. Does it help us to label this future as capitalist instead? Probably not. New vocabularies are required to deterritorialize the future in a way that is not beholden either to the human or to capital: a project this book contributes to through the lens of critical heritage thinking.

The varied uses of deterritorialization within anthropology, cultural studies, critical theory and philosophy speaks to the inner vibrancy of the term, and we should not imagine that Deleuze and Guattari's conceptualization marks out an 'original' sense that all subsequent work must follow. By definition it cannot be contained, but neither is it a form of

romanticized escape. These are material processes just as much as they are discursive (the two are entangled rather than hierarchical in this reading). While deterritorialization in Deleuze and Guattari's thinking is densely interwoven with the oppressive nature of capitalism, it also names something else: the possibility for branching off and becoming new; the moment of decontextualization that leads to a different state; the uncertain mutations that radically transform a given territory. It is this broader conceptualization that animates our use of the term in this volume, suggesting a fragility and openness that may help to counteract some of the more problematic territorializing gestures of the Anthropocene.

From 'Learning to Die' to 'The Arts of Living': Heritage in, of and after the Anthropocene

The Anthropocene/Capitalocene occupies a central place in what we might describe as **the new inheritance paradigm**. Across science, philosophy, culture and the arts the question of inheritance has been posed anew in various disciplinary contexts, from environmental criticism to biogenetics (van Dooren 2014; Gilbert 2017). There are many branches to this reconceptualization, but a central thread can be located in the slow erosion of boundaries between human and nonhuman, between subject and object, and between 'natural' systems and 'cultural' formations. As Haraway notes, the whole question of nature/cultures is about "the dilemma of inheritance, of what we have inherited, in our flesh" (2016: 221). This 'we' extends beyond the human to consider the diffuse material, chemical and biological residues 'taken on' and 'passed down' in different settings within the Anthropocene matrix. Indeed, in many ways the complexities of the Anthropocene all circle back to this central problem: how to account for and ultimately redirect the entangled inheritances of capital and toxins, of fossil fuels and marginalized groups, of political ideologies and nonhuman genetics. Given that inheritance always points in multiple directions at once – to the deep past and the distant future; to the legacies of yesterday and the relics of tomorrow – these transdisciplinary concerns are also marked by a renewed interest in alternative historiographies and radical futures thinking. It is here that we find a particular role for heritage both as a field of inquiry in and of

itself and as a potential mode of critical Anthropocene praxis, focused on the shifting logics, ethics and practices of inheritance. Two contrasting notions of heritage are introduced here to help open up these pathways to further investigation.

Roy Scranton's slight but engaging book *Learning to Die in the Anthropocene* (2015) offers one way of thinking about heritage within this new geological framework. For Scranton the climactic changes wrought by humanity signal the demise of global capitalist civilization: "The sooner we confront this situation," he argues, "the sooner we can get down to the difficult task of adapting, with mortal humility, to our new reality" (2015: 23). Tellingly, Scranton identifies the "variety and richness of our collective cultural heritage" as one of the key facets of this new humility (2015: 24). This leads to a familiar assertion made in the face of the apocalypse: build arks. These would not just be biological but cultural, carrying forward genetic data and 'endangered wisdom' alike: "The library of human cultural technologies that is our archive, the concrete record of human thought in all languages that comprise the entirety of our existence as human beings, is not only the seed stock of our future intellectual growth, but its soil, its source, its womb" (2015: 109).

Such projects are of course already underway. The Memory of Mankind project (www.memory-of-mankind.com) for example aims to store millions of ceramic tablets recording human life in all its banality and diversity deep underground in the mountains of Austria. The Arch Mission (www.archmission.org) meanwhile looks to outer space as a site of preservation, with hi-tech storage devices designed to last billions of years planned for distribution across the solar system and beyond (one such 'Archive of Civilization' was attached to a privately funded lunar lander that crashed into the moon in 2019, another will be orbiting the sun for the next 30 million years in the glove compartment of Elon Musk's Tesla). These join well-known global initiatives such as the Voyager Golden Records and the Svalbard Global Seed Vault (see Breithoff and Harrison, this volume) as premeditated fragments of material, cultural or biological inheritance: a 'gift' from the present, to the future (see discussion in Harrison et al. 2020). What such projects often fail to register however is the fact that – as Scranton admits (echoing arguments in Derrida's *Archive Fever*) – 'the heritage of the dead' always needs

nurturing: "This nurturing is a practice not strictly of curation… but of active attention, cultivation, making and remaking. It is not enough for the archive to be stored, mapped, or digitized. It must be *worked*" (2015: 99, emphasis in original).

What are the concepts, practices and methods that will enable heritage to be 'worked' differently in the context of the Anthropocene? To what extent might *doing* and *thinking* heritage in new ways help us to engage with the systemic foundations and (potentially) dire consequences of this new geo-philosophical reality? Can changing the way we approach notions of care and inheritance have a meaningful impact 'at scale,' as the Anthropocene seems to demand? What pasts should be prioritized in this new framework, and what futures might we open up by reconceptualizing heritage as a 'deterritorializing' apparatus?

While *Learning to Die in the Anthropocene* relies on a familiar conception of heritage to take forward certain aspects of the past and the present into the future, other ways of confronting the more-than-human entanglements of the new inheritance paradigm ask fundamental questions about what heritage *is*. Take genealogical research for example – one of the most popular heritage pastimes that has developed into a multinational industry supported by DNA testing, in-depth archival research and popular entertainment (e.g. see Basu 2007; Colimer 2017). Typically framed through human-focused narratives of familial descent, economic inheritance, individual triumph or repressed trauma, the search for 'ancestors' is symptomatic of the free-floating nature of modern life, which searches for roots in historical traces and half-remembered echoes of the past. Such pursuits veer between individual curiosity about lost family members and highly politicized attempts to prove certain connections to history. What these investigations rarely draw attention to however is the fact we are 'multilineage organisms' made up of various human and non-human genomes: "The volume of the microbial organisms in our bodies is about the same as the volume of our brain, and the metabolic activity of those microbes is about equivalent to that of our liver. The microbiome *is* another organ; so we are not *anatomically* individuals at all" (Gilbert 2017: M87-83, emphasis in original). This model of genetic heritage is anathema to a discipline and industry built on the prioritization of human modes of inheritance (whether in cultural,

biological or individual form), but it may prove vital if we are to rethink notions of care and vulnerability in the age of the Anthropocene. Just as the Anthropocene destabilizes long-held certainties about the break between human and natural history, so recent work in biology, anthropology and the environmental sciences underlines the co-evolution and embedded entanglement of all life. As Donna Haraway puts it, "beings – human and not – become with each other, compose and decompose each other, in every scale and register of time and stuff in sympoietic tangling, in earthly worlding and unworlding" (2017: M45).

The above quotes are taken from the edited collection *Arts of Living on a Damaged Planet* (Tsing et al. 2017) – a volume which takes the notion of entanglement as a critical point of departure to reconsider the 'monsters' and 'ghosts' of the Anthropocene. Monsters in this reading are held to signify the symbiosis of "enfolding bodies" against the "conceit of the individual," while ghosts act as guides to the "haunted lives and landscapes" of environmental degradation (2017: M3). As the editors note, a major challenge of the Anthropocene is "how to think geological, biological, chemical, and cultural activity together, as a network of interactions with shared histories and unstable futures" (2017: 176). Ghosts and monsters are not fantastical figures from this perspective; they are "observable parts of the world" that we might learn "through multiple practices of knowing" (2017: M3). Arts of living in this context are necessary to counteract threats to our very survival. Crucially, this cuts across technological solutions to ecological collapse, new modes of storytelling and creative practice, and political encounters with diverse forms of oppression and marginalization. "There is something mythlike about this task: we consider anew the living and the dead; the ability to speak with invisible and cosmic beings; and the possibility of the end of the world" (2017: 176).

Working along this grain, we might situate heritage as a vital though often overlooked aspect of the Earth's very 'livability'. There are multiple pathways to think with in this regard. Non-Western practices of care and conservation for example often dissolve the boundaries between natural and cultural heritage through their insistence on the spirituality and enchantment of material things (Byrne 2004; see Ugwuanyi this volume). Alternatively, we might consider Indigenous claims of 'human rights for

nonhumans' (Surrallés 2017) as a politically charged mode of heritage protection across natural-cultural worlds, or look to Caitlin DeSilvey's concept of 'curated decay' (2017) to inform new approaches to material and environmental change. Identifying heritage as a key component in the 'arts of living' underlines the need to rethink and redirect notions of care, curation, management and preservation, from museum objects to urban landscapes. These activities draw on and intersect with key questions in geology, biology, history, anthropology and the environmental humanities. Heritage *in* the Anthropocene must embrace this multiplicity to encourage new ways of imagining and engaging with the past in the present to shape alternative futures. There is no single model to adopt in this respect; no 'one-size-fits-all' approach for a radically posthumanist critical heritage practice. Instead we should look to situated and relational forms of knowledge making that transcend human/non-human and nature/culture boundaries, recognizing that such dichotomies are an obstacle to understanding let alone confronting the Anthropocene as a material and conceptual force in the world. This will no doubt require (inter)subjectivities that look beyond liberal humanist ideas of progress and development for critical purchase. Like Anna Tsing (2015) we are not quite sure what form a progressive politics without progress might take, but this does not mean we should not seek it out via new and old ways of *doing* heritage.

An important line of inquiry here concerns the interpretive nature of many heritage 'experiences'. Various storytelling devices are employed by heritage to create links between past, present and future, from audio guides and wall plaques to films and museum displays. As well as constantly rethinking these tools, we need to construct alternative genealogies to populate them. One of the most notable reverberations of the Anthropocene has been a renewed commitment to entangled histories when describing the emergence of the modern world. Such narratives bring together histories of resource extraction and social formations, marginalized voices and non-human agencies. A heritage *of* the Anthropocene will depend on these more-than-human stories and entangled lines of descent. Crucially such accounts also bring to the surface unintended material residues and socio-political legacies. Despite – or perhaps because of – its geological framing, the Anthropocene cannot

be divorced from urgent and lingering historical questions surrounding slavery, empire, colonialism and the rise of capital (Ghosh 2016; Moore 2017; Yusoff 2018). Again, in this sense the notion of 'Anthropocene heritage' extends rather than subverts progressive and emancipatory work in critical heritage studies scholarship and related fields. A crucial responsibility here is to constantly differentiate the 'we' of Anthropocenic thinking (c.f. Thomas 2016) – a task that might usefully build on the critiques of universality that characterize critical engagements with 'World Heritage' (Meskell 2018) and the 'endangerment sensibility' (c.f. Vidal and Dias 2016; see also Harrison 2013; Rico 2015) which animates it.

Finally, the possibility of heritage *after* the Anthropocene points in two directions at once. The first concerns the future legacies diligently being produced today (plastic bodies and toxic landscapes, scarred minds and broken climates); the second concerns the critical gesture of *post-*Anthropocene thinking – a peculiar consequence of the rapid take-up of the term in the arts and humanities and the equally swift recognition that it is wholly unsatisfactory as a socio-political diagnostic. What of heritage and the Capitalocene, or the Plantationocene, or the Chthulucene (Haraway 2015)? Such labels ask us to look again at the differential legacies and material disparities of a planet altered by 'humans'. The fossil-to-come is a useful frame of reference for this project, but other modes of post-Anthropocene heritage should also be brought to bear on the subject, from museums and archives to augmented digital experiences. The challenge of the Anthropocene is such that entirely new modes of relating past, present and future are liable to emerge in its shadow, whether as unintended consequences of inheritance and precarity or as subversive strategies of survival and flourishing. Conceiving of heritage after the Anthropocene must remain a speculative gesture at this stage, bound up with the politics of the present and the radical need for new temporal and territorial imaginaries.

Learning to Die and *The Arts of Living* represent two very different ways of thinking about heritage in the context of the Anthropocene. Save, conserve, collect and safeguard, or fundamentally rethink emergent relationalities (see also DeSilvey and Harrison 2020). We might see this as a version of debates already being played out across the academy and wider society. As Guattari warned almost four decades ago now, the

environmental impact of capitalist civilization confronts us with stark choices, demanding new modes of social organization to avoid ecological collapse. It hardly needs stating that the current rise of populism across the world, with all its territorializing discourses and agendas, is both a response to this predicament and a doubling down of current global systems. More exploitation, more oppression, more boundaries, more suffering. Against this backdrop the rapid breakdown of environmental conditions is viewed with morbid fascination (see again the work of Edward Burtynsky) or disregarded completely. To imagine heritage after the Anthropocene is really to ask what heritage *sans* capitalism and beyond the confines of the nation-state might look like. Would we still collect and preserve things in the same way? What stories might be told about past, present and future without the buttresses of capitalist modernity? Whether in the form of globalized historical 'assets' or as a component of the reterritorializing discourses of nation, nostalgia and home, heritage is fully immersed in the flows that perpetuate and underpin this system. Despite a superficial concern for the past, it is also inherently future-oriented (this is part of its capitalist formation). Rather than reject the concept outright, however, we want to displace the familiar ontologies and cosmologies on which heritage practices have been built to establish new frames of reference and lines of inquiry. Referencing Tim Morton's call for an 'ecology without nature' (2007), we might think of this new framework as a call for inheritance *without* heritage, recognizing that the *idea* of heritage may well stand in the way of a more meaningful relationship with ongoing and inherently more-than-human concepts and processes of care, transmission and vulnerability. To do this we look to new disciplinary collaborations and practices, as well as alternative and marginalized narratives of life beyond, after and in excess of the Anthropocene.

Heritage unbound

Any story is a form of control, an attempt to wrestle the endless fragmentations of reality into a coherent thread of histories and potentialities. This collection is no different, and may be read as a territorializing apparatus, with all the pitfalls and opportunities this framing implies. However, to borrow another concept from Deleuze and Guattari, the stories told in

this volume do offer multiple lines of flight, constantly destabilizing the territories on which our assumptions are based. The mapping we undertake here is transdisciplinary in its composition, drawing on recent and ongoing research across cultural geography, anthropology, literature, philosophy, media studies, archaeology and the arts to inform new theories and practices in and for heritage. At the same time, heritage itself is 'liberated' over the course of this book, with many of the central concerns of the field unsettled through new critical-creative approaches. Loosely assembled around the core themes of time and territory, the chapters gathered here may thus be read individually or sequentially, with each 'unburdening' heritage in different ways.

In their chapter on the waste management plant of Gärstad in Linköping, Sweden, Christina Fredengren and Cecilia Åsberg immediately open up the timescales and materialities of heritage to more-than-human forces and imaginaries. Gärstad is a high-tech garbage disposal plant that turns waste from across Sweden and northern Europe into energy for the local community. It is also the site of an Iron Age sanctuary, where the bodies of the dead were burned with clothes and other personal items. Drawing on feminist and posthumanist perspectives on intragenerational care and cross-species co-becoming, Fredengren and Åsberg place Gärstad at the centre of a broad ecology of material and immaterial inheritances, from prehistoric land clearings that reshaped the environment to the lingering effects of CO_2 in the atmosphere – a by-product of the waste incineration carried out at the plant. Connecting the dots between different "domains of inheritance" – including genetics, pollution, waste, art and heritage conservation – the authors put forward a new model of "equity between non-contemporaries" that does not simply aim at flattening hierarchies, but rather seeks for new companions in 'merriment' and 'awe'. This experimental path is deeply attuned to Gärstad as a 'time-giver' – a place where multiple interventions seen and unforeseen are made across generations, prompting a revised ethics of multi-species ancestry. Extending the logics of preservation, care and inheritance means rethinking such 'temporal relations' across nature-culture boundaries. As Fredengren and Åsberg write, there is no "purity of categories to be had in the Anthropocene, and we cannot afford it anyway".

Staying in Sweden, Anna Bohlin turns our attention to an altogether different domain of inheritance: that of second-hand furniture and the "unfolding [of] human-thing entanglements" that such objects are bound up with. Inspired by vital materialist perspectives and new approaches to ruination across archaeology and heritage, Bohlin investigates the different ways in which "material liveliness" is valorized in the consumption and use of old things. Temporality becomes a key factor in this analysis, as second-hand objects are seen to transform, age and decay over time; they are "porous and leaky things" according to Bohlin – "involved in a form of 'growing' as they accumulate traces and sociality". Here a stark difference emerges with the meaning of time in relation to conventional heritage objects, which are typically 'frozen' at a particular moment. Questioning this "myth of stability and fixity", Bohlin suggests that second-hand objects have a greater freedom to "follow their own trajectories and unfolding" – a realisation that underpins a post-anthropocentric view of sovereignty over things. As Bohlin concludes, this temporal-material shift opens up the possibility of responding differently to the acute Anthropocene challenges of mass-production, over-consumption and waste.

The liveliness of matter is also central to Adrian Van Allen's chapter on museum taxidermy, which brings together themes of care and the more-than-human to investigate the different temporalities associated with animal collections. Drawing on ethnographic and archival research at two natural history museums, Van Allen carefully examines how animal bodies are "made and remade" in relation to shifting logics of ecology, evolution, biodiversity and conservation. Here novel techniques in preparation, storage and analysis sit alongside methods of fixing, preening, dissecting and stuffing that have changed little in over four centuries. Unpacking the simplistic notion that taxidermy animals are "frozen in time", Van Allen explores "the intimate and fluid connections between the minutiae of biological organisms, their tissue samples, their data and their DNA, and the embedded visions for shared human and non-human futures". This close reading of a traditional museological environment opens up the future-making practices of heritage to renewed scrutiny. It also helps to unsettle dominant narratives of the Anthropocene by focusing on "specific assemblages" where people, places and things

interact. More commonly associated with geological strata and vast extraction sites, Van Allen shows how the Anthropocene is equally made and unmade in the bodies and spaces of the museum and the conservation laboratory.

A similar claim is made by Esther Breithoff and Rodney Harrison in their chapter on biobanks and seed vaults, where the authors ask what it means to conserve 'nature' in the 'post-wild' context of the Anthropocene (Marris 2013; Lorimer 2015). Looking across two sites in particular – the Svalbard Global Seed Vault in Norway, and the UK's Frozen Ark – Breithoff and Harrison identify a shift in the core purpose of such facilities. From an initial role as isolated arks that might "carry endangered DNA into an uncertain future", biobanks are now increasingly valued for their restorative potential, being seen as active players in *current* de-extinction and agricultural renewal programmes. As the authors make clear, the first withdrawal of seeds from the Svalbard vault happened many years earlier than anticipated, as a result of the war in Syria rather than any more widespread climate catastrophe. This unexpected demand acts as a pivot to consider biobanks as a form of *"speculative biocapital accumulation"* wherein new futures are actively shaped as part of the broader bioeconomy of the Anthropocene. Crucially, this economy relies on folding time and nature within the space of the vault, with the seeds themselves characterized as archives of "inter-generational, inter-species, human/plant kinship relations" (van Dooren 2007: 83). A natural companion piece to Van Allen's chapter in many ways, Breithoff and Harrison also push forward the notion that more-than-human heritage is inescapably political, as the things and relations brought together in and through conservation practices enact highly unequal futures.

Drawing together numerous threads from the preceding chapters, Colin Sterling's contribution explores a growing trend in art practice that leverages familiar heritage concepts such as the museum, the ruin and the monument to critique the Anthropocene as a *historical* phenomenon. Here the author focuses on the future anterior temporality of the Anthropocene concept, which implicitly asks us to look forward to view the present as the past. Playing with this notion, projects such as the Museum of Capitalism, the Museum of Nonhumanity and the Anthropocene Monument aim to defamiliarize the present to better

understand its underlying tensions and occlusions. Thinking *with* heritage in this way is both a satirical gesture and a form of critical practice, where the Anthropocene is historicized and provincialized to highlight alternative ways of living and acting across human and non-human worlds (Jørgensen 2018). Building on some of the questions around multi-species care and equitable futures outlined in preceding chapters, Sterling suggests that such work not only helps to demonstrate where heritage *might* be heading, but also questions the Anthropocene "as a totalizing concept and inescapable reality". This mode of deterritorialization is played out through curatorial experiments and creative interventions, from floating museums to fossilized iPhones.

While the expanded temporalities of the Anthropocene open up questions of care, inheritance, memory and preservation to renewed critical scrutiny, the territorial dimensions of the concept challenge familiar notions of place, matter, belonging and boundedness. To help explore the place of heritage in this new spatiotemporal frame, the second part of the volume opens with two chapters that deal in very different ways with water as a liquid territory. Joanna Zylinska offers us a way of thinking with the fluid ontology of water in relation to media and mediation, which emerge here as complex, hybrid processes that humans partake in alongside other organisms. Taking two recent films on water – *The Pearl Button* and *Even the Rain* – as critical points of departure, Zylinska looks to build a "water-rich picture of the world, in all its entanglements, spillages and overflows". Water in this sense emerges as an "ethical medium" for the way it foregrounds a lack of enclosure in the definition of any life or being. Drawing on recent media theory that emphasizes the embeddedness of all forms of mediation with infrastructures, elements, atmospheres and bodies, Zylinska outlines a form of "geo-history as heritage" built on the flows and cascades of water rather than the stability of land.

The constant commingling of water with other things, bodies, spaces and environments is also a key concern of Denis Byrne, only here it is the attempt by humans to impose hard boundaries between water and land in the form of coastal reclamations that acts as a springboard to reconsider the territories of the Anthropocene. As Byrne argues, there has been a rapid increase in coastal reclamations for agricultural, industrial, infrastructural and residential purposes over the last two to three centuries,

and these waterlines are now a key site of "nervousness and stress" in an era of climate breakdown. Made possible by fossil fuel driven development on a vast scale, such spaces tend to be hard-edged and hostile to non-human life, becoming in the words of Byrne "a signature landform of the Anthropocene". Rather than see these coastal reclamations as part of a progressive heritage of human ingenuity (a familiar narrative in relation to industrial heritage), Byrne asks that we 'unwind' such ecological interventions to give them a history; this being a first step towards understanding how the world was, and how it might be. Deterritorialization in this context implies making the Anthropocene visible and tangible to help inspire "widespread popular mobilization against the dark future which it portends".

The impossibility of drawing boundaries between human and non-human worlds is also central to J. Kelechi Ugwuanyi's investigation of the trees that play such an important role in village life among the Igbo of Nigeria. Drawing on ethnographic fieldwork and his own experiences as a member of this culture, Ugwuanyi asks how human existence and recreation are made possible in the Igbo cosmology through an intimate connection with the territory of trees. Here the author puts forward a novel conception of heritage as "alive", not through human consciousness or society, but as a manifestation of the "utilitarian" provision all things afford in the "community of life". Stitching together animist and posthumanist philosophies, Ugwuanyi focuses on the key question of survival across human and non-human species in the shadow of the Anthropocene, emphasizing a form of territoriality and belongingness in which human beings share life with *Ala* (the Earth). Heritage in this reading is "of the Earth, living among the community of beings, and should belong to all".

Caitlin DeSilvey's photo essay also takes a site-based approach to question and redirect notions of transformation and loss in different Anthropocene territories. Drawing on ethnographic fieldwork carried out at a former mining site in Cornwall, an abandoned military complex on the east coast of Britain and a valley in Portugal identified as a potential rewilding location, DeSilvey suggests that ecological disturbance is now the norm in most parts of the Earth, and heritage agencies must acknowledge that "strategies for survival will depend on making

alliances with more-than-human entities and agencies". Such contexts force us to engage with what DeSilvey calls "ruderal heritage" – a term that references opportunistic plant species that are adapted to take root in disturbed environments. Ruderal heritage then "is orientated to ongoing instances of both destruction and renewal, and focused on the opportunities that emerge from inhabiting disturbed substrates and sensibilities". Through images and stories DeSilvey shows how ruderal thinking may offer a productive conceptual tool for heritage practice, which is too often focused on stability and the possibility of returning to an original time or state of being. Such a shift seems vital in the face of ongoing Anthropocene transformations, which emphasize uncertainty as a condition for history and memory across human and non-human worlds.

Anatolijs Venovcev's brief illustrated slam poem – a provocative "call from the North" – continues in this vein of thinking by exploring the uneven impacts of the extractive industries and technologies which have supported the development of a global Capitalocene on geopolitically marginalized landscapes and their inhabitants. His lyrical critique and the accompanying photographs remind us that "New ways of understanding humanity need to be rooted in the real material costs and consequences of our new and future technologies". Urging us to "remember the waste as we venture forth", he engages with one of the key leitmotifs of Anthropocene studies (e.g. see Morton 2013; Bastian and van Dooren 2017) whilst picking up on points made by DeSilvey in the previous chapter. In doing so, he gestures towards new ways of thinking across critical heritage studies which emphasize the relationship between heritage and waste (e.g. Storm 2014, this volume; Holtorf and Högberg 2015; Olsen and Pétursdóttir 2016; DeSilvey 2017; Harrison et al. 2020) and the productive ways of engaging with anthropogenic material and discursive legacies which might emerge from such comparisons.

Anna Storm's chapter ends Part II and brings us back to Sweden by way of the United States and Belarus. Looking across three sites where nuclear power stations have been decommissioned, Storm asks how certain processes of withdrawal and restoration effectively render history and memory invisible, deterritorializing toxic legacies through the production of supposedly "controlled environments". Such human legacies

are counteracted and sustained by non-human forces, with animals, vegetation, bedrock and clay all "attributed the role of guardians of radioactive remains". In these quasi-mythical landscapes, waste and wildlife collide to unsettle narratives of future progress. As Storm makes clear, "it will take several decades, if ever, before children will dig and play in sandboxes on the former nuclear territory".

Finally, in her provocative coda to the volume, Claire Colebrook both challenges and expands the sense of deterritorialization developed over the preceding pages. Here two distinct forms of deterritorialization are identified and critiqued. The first is linked to post-apocalyptic narratives and existential threats, where the Anthropos of the Anthropocene is held up as that which must be protected and preserved against all threats. As Colebrook explains, "it is deterritorialization that enables the Anthropocene, both geologically and conceptually; a potentiality of the species reaches such an intensity that it generates a whole new scale and range of relations. A part overtakes the whole; humanity, man, or Anthropos comes to appear as the ground and organizing whole". The future in this sense is *already* deterritorialized, as a "detached fragment" of humanity has "generated a distinct temporality and modality of the imagination" that effectively shuts down other futures. Building on a specific critique of Oxford University's Future of Humanity Institute, Colebrook suggests that what is needed is an altogether different mode of deterritorialization, one that might "expand the range of the problem of the human". Through an engagement with Karen Barad that implicitly links back to Fredengren and Åsberg's opening chapter, Colebrook stresses the relationality and impurity of life as one way in which deterritorialization may be 'decolonized' to generate new forms of living in and with the world. As a conclusion of sorts to the volume, this re-theorisation helpfully captures and pushes forward one of the key messages of the book; namely that heritage in all its complexities and contradictions might provide a grounding to imagine ways out of the Anthropocene – or at least that version of the Anthropocene in which humans can think of no future other than their own demise. This opening up of the human is intimately bound to a revised conception of the territories and temporalities of a radically posthuman critical heritage studies.

Notes

1. Readers interested in such issues should consult the 2019 ICOMOS report *Engaging Cultural Heritage in Climate and Action,* and the work of David Harvey and Jim Perry (2015).

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