Re-wilding the Environmental Humanities

A Deep Time Comment

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In Deep Past – Deep Futures Felix Riede favourably raises the questions of how the humanities, particularly archaeology and heritage studies, can meet the planetary challenges of the Anthropocene: the time when humans have crossed over from being a mainly cultural actor to becoming a geological one. At one level it seems that Riede shares Haraway's (2016:100) concerns 'to make the Anthropocene as short/thin as possible and to cultivate with each other in every way imaginable epochs to come that can replenish refuge'. This according to Riede is to be achieved through archaeological storytelling across the subject's internal divides, with a particular 'palaeo' element in order to engage with the emerging field of the Environmental Humanities. Archaeology, as implied in the heading of the paper, supplies the building blocks of Riede's Deep Pasts and Deep Futures. Palaeo-archaeology in the Riede version mainly seems to contribute to baseline studies on climate, ecology, past societal collapse and heritage studies with reflections on nationalism and identity (local, national and so forth). As Riede's figure 1 suggests, such studies would focus on the shared temporal window in which shallow and deep time disciplines meet.

That is of course all good and well, but Riede seems to skim lightly past significant parts of the knowledge genealogies of the Environmental Humanities. This field of research – which has summoned its powers in the

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last 10 years or more – has a grounding in a plethora of humanities disciplines including post-colonial studies, gender studies and environmental philosophy, all of which concern power inequalities and disturb the figure of the human. It has grown from science and technology studies, via new materialism, into studies of human-animal relations and beyond, and is a growing intellectual, global movement (Emmett & Nye 2017). Thus the Environmental Humanities have the potential to change humanities as a field in itself as well as the power to engage with the urgent matters of today through interdisciplinary collaborations, with far-reaching implications for both archaeology and heritage studies.

However, and somewhat surprisingly, the paper does not quite connect with how a new range of prominent scholars have occupied themselves with in particular Deep Time matters in recent writings and by that omission Riede narrows down what the Environmental Humanities is and could be.

Troubles of Deep Time

Many researchers alert us that we are in Deep Time Trouble, where archaeology may be part of the problem as well holding the potential for new avenues of research. As stated by one scholar, Bird Rose (2013:1) '[t]ime and agency are troubled, relationality is troubled, situatedness is troubled. We are tangled up in trouble'. So, what is meant, why are time and temporality in trouble?

Bird Rose's (2013) reasoning draws on Chakrabarty's (2009) foundational paper *The Climate of History*, an eye-opener which shows that it is no longer possible to continue writing history in the traditional ways. First of all, the Anthropocene blurs the boundaries between nature and culture, so that human history can no longer set apart from the deep registers of natural history. Second, the climate crisis has put an end to many of the ways western history could be told, where former history writing has cherished modernity, mastery of nature and freedom, as for example in the movement of goods and capital. While such history-writing has interlinked with the global history of capitalism, it has done so without realizing that such progress came at an exceptionally high price for a range of othered humans and for the environment. Importantly Chakrabarty (2009) questions the 'we' of the Anthropocene and underscores how we are not all in the same boat: poverty lines divide the human species and people's ability to cope with environmental change are very unevenly distributed. Chakrabarty (2009) points out that the historical narratives at hand do not prepare us well for the unfathomable and environmentally challenged futures to come. In here lies the call for new ways of storying planetary time.

Engaging with Deep Time in the humanities thus also means, as aptly pointed out by Parikka (2016:201), engaging in time-scales that 'are not necessarily authored only by the loose category of humans' and being alert to encounters with the non-human and its various temporalities. It is important not to turn a blind eye to the disrupting powers of environmental catastrophes and fracturing of time prevalent in earlier events, scholarship and storytelling (Ghosh 2016). However, there is a great urgency to acknowledging the significant forces and vivacity of non-human temporal authorship across both natural and humanistic sciences, in order to recognize ruptures of catastrophic times both in the past and those that might happen in futurity, and hence we need to break out of our designated temporal windows.

Other emergent temporalities need also to be heeded here: Rob Nixon (2011) has explored how oil spills, toxic wastes from industrial accidents such as that of Bhopal, or nuclear disasters of Chernobyl, have had formerly ignored effects that spread out, seep into and influence the lives of humans, animals and crops over longer periods of time. These are captured by the concept of *slow violence* that focuses on the uneven distribution of toxic burdens and place and brings attention on the drawn-out temporalities of environmental harm. Moreover, this notion of slow violence also underscores the critical question of the 'we' of the Anthropocene as people are differently situated and exposed to its workings, with the death count in the global south on the rise. Environmental problems move across conceptual, spatial and temporal scales (Parikka 2016) and in effect such slow violence stretches in-between, affects and connects not only human, but also multispecies generations in uneven ways for times to come. Furthermore, I do want to point out that it is urgent to map how temporal relations are challenged and negotiated in these troubled times and to expose the politicization of the long-term. It is both a question of human-animal relationships and extinction stories, but also how actions today affect future multispecies generations. In this lies the urgency in how to figure out possible paths for future human and more-than-human conviviality under adverse climate conditions.

Deep Time interventions

The plastic waste that infiltrates water systems and forms layers on the seabed, as well as in landfills; toxic waste and fertilizers which follow rivers and cause bottom-death and species depletion at sea; these can be registered as Anthropocene archaeologies. It is important to note such heritages, where human and more-than-human actions leave marks in the sediments of the

planet, but it is not enough to ask only what meaning they have: we need also to track how these work and have material effects that stretch into a variety of futures. As suggested by Parikka (2016:283) these effects need be better documented in order for us to follow the flow of materials and their biotoxic workings, instead of just excavating their cultural meaning (which may have been the priority for a postprocessual archaeologist; perhaps this is what Riede alludes to with the wide swipe on postmodernism?).

Radiation, pollution, species loss, biotope changes, but also gene-editing techniques make *deep time interventions*. There are several material features, including heritages of all kinds (from collections, to landscapes, to nuclear power or climate change) that implicate and sign up future generations for coming duties of care: a study of Deep Time includes a tracking and understanding of these. As Sarah May (n.d.) has pointed out, heritages may not always be of the wanted kind. And in particular the inheritances of environmental degradation may indeed form a part of such unwanted heritage, which will stretch over several generations to come and even into generations we may not recognize as fully human and generations that might not be human at all, but more-than-human. In effect, these interventions rein in the freedom of not only present, but also future generations. This in ways that range beyond our present humanistic imagination (Åsberg et al. 2011; Holtorf & Högberg 2016). Furthermore, as Bird Rose (2013:7) alarmingly speculates, 'our past is now racing towards us from the future', meaning that a variety of temporal interventions overwhelm us in presents to come.

Not only is time bending in the way Bird Rose (2013) discusses, but curiously, nuclear reactions and the radiation of the atom bombs, so to say, twist time in other ways, both at micro and macro level. Besides serious adverse effects on ecosystems, they also affect our ability to probe archaeological deep time with radiometric dating, since they disturb the equilibria and abundance of long-lived radioisotopes in the biosphere. Hence, such events are affecting the ways archaeologists carry out the most commonplace linearization of time, through radiocarbon dating. Furthermore, climate change, environmental problems, Anthropocene accumulations and depositions all disturb layers of time and temporality by affecting the pace through which materials in designated heritage collections erode, how they are infiltrated by chemicals and toxic compounds, which affects diageneses – how materials level out with their environment. Not only are archaeological materials polluted by Anthropocene actions, but the times we live in also demand other analytical tools and imaginaries to deal with time and temporality.

As expanded upon in Fredengren 2016 (and therein cited works), archaeological remains occasionally appear unexpectedly and disturb the chain of events in modernity, contributing to clashes and disjunctures in

time. Encounters with materials from deeper temporal strata can give rise to what are captured as enchantment effects. Such emotional upshots have been seen by Bennett (2010) as important in the processes in which people step up from environmental ethical thinking to real environmental action. To some extent we live in haunted landscapes (Gan et al. 2017), where such pressing temporalities can be captured as Derridean hauntologies (Fredengren 2015, 2016), where we are bothered and spooked by both pasts and futures, injustices, extinction histories, and how these are stitched into the fabric of the world, where if not our present, then future generations will reap what was once sown. In order to fathom how we, as the climate activist Greta calls it, steal from future generations, we need to make inventories of Deep Time interventions and highlight when these take place, to be able to understand better how actions of the past infringe on the future.

The queer temporalities of the Anthropocene

To engage in Deep Time thinking, besides writing history in other ways, also means working on other temporal registers, and probing into how temporal workings themselves structure how we relate to each other through time. The term *chrono-normativity* has been used by Freeman (2010:xxii, 3) to describe 'the interlocking temporal schemes necessary for genealogies of descent and for the mundane workings of domestic life' and 'the use of time to organize individual human bodies toward maximum productivity' (Freeman 2010:3) or in retrofilia, which is probed into by Fjelkestam (2018). However, the term can be favourably adapted to critique the temporalities of modernity – the clock time, factory time, time-management that so many modern institutions are built upon – and to challenge these for to enable alternative ways of forming relationships. Furthermore, as Bastian (2012) articulates, such calendars and clocks also structure power relations, where your timeslot directs my time-choreography and where the temporalities of a range of different non-human others are not related to, but ignored. Bastian asks, are there ways in which time and calendars could be designed elsewise, for us to build more sustainable relations. This is a very apt question for an archaeological enquiry into deeper time stretches: how could material processes, times and temporalities, and relations be knotted together elsewise and in less damaging ways? How can our temporal appreciation and language be improved and stretched? Do deep time interventions need to be marked in people's lives, through exhibitions, apps or ceremonies?

Taken together, the argument within recent Environmental Humanities writing is that the temporalities that modernity is built on are over, they are damaging, they have passed their expiration date. Here is also my main

worry with Riede's exposé in the Deep Time, Deep Past keynote. It favours a continuation of archaeology as it has always been, with palaeo-ecological contributions to climate modelling, but misses the long discussions and ethics-infused scholarship within the field of Environmental Humanities which have engaged with deep time, deep pasts and futures from a much more inclusive horizon. For that reason (I guess) he gets stuck in thinking that Environmental Humanities only engage in the recent past while the whole texture of time and temporality are in fact under scrutiny. I have in several papers lifted my concern about the flat presentism in many heritage studies (Fredengren 2015, 2016), but that problem – and the current predicament – may not be particularly assisted by singing the praises of and falling back into a restraining chrono-normativity of palaeo studies, and dividing such studies into shallow- and deep-time disciplines, just as if nothing has happened or is about to happen though climate change. Instead we need to follow the odd temporalities of slow violence, extinction and decay, and deep time interventions, and see what futures they lead us into and what relations they imply and what futures are in the making.

Gender studies and the Environmental Humanities

It is against this background I also see Riede's narrow reading of Braidotti (2018); a paper that is not about scrapping Environmental Humanities as if it were a fad, but instead an airing of disappointment at how Environmental Humanities has been taken into the metabolisms of the university system as if it were business as usual. As an alternative, the paper lifts the game-changing notion that 'the proper study of the humanities is no longer "man"' (Braidotti 2018:5) – and here we are not only talking about the nurturing support systems of the old-boys networks – but something far more wide-reaching: critiquing power structures that are fundamental and limiting for western academia. Such structures we cannot afford to keep given the present predicament.

The argument of Braidotti (2018) is rather that two newcomer stars to the disciplinary scene of the humanities – Environmental Humanities together with Digital Humanities – all too easily find themselves framed with a cognitive capitalism, thereby losing their critical edge and transformative powers, instead of finding new and vital transversal connections. Hence, is there really a need to cement what archaeology contributes to the Environmental Humanities? Why ignore important scholarship on for example human-animal relations and gender (cf. Jennbert 2011; Haraway 2016; Oma Armstrong 2018)? Is it not more urgent to creatively and constructively find new routes for research and fresh alliances and research collaborations

with the excitement of what each and everyone brings to the table? Is it not the time to explore how the links between university environments and other institutions can be strengthened or how citizens humanities can be practiced in for example museum environments, and how to form hybrid and open learning environments?

Heritages in the Anthropocene

My own contribution to the Environmental Humanities, at present, comes through interests in temporality, water, human-animal and intra-generational relations, care and a critique of gendered power structures, as well as a curiosity into how sustainability could be configured in more creative ways to meet with the heritage sector and the more-than-human. To cement the relationship between the Environmental Humanities and archaeology is also a way of denying the urgency of these environmentally challenged times – which require unprecedented transitions as stated by IPCC and quoted in the beginning of Riede's paper. Why should we put the lid on, set a frame around the subject before it has reached its potential – where a restructuring of both academia and the impact of the humanities field is more urgent than ever.

At the same time, while many scholars problematize the connectivity between heritage and human identity, not only due to its anthropocentric connotations, Riede (this volume:17) seems to fall into an identity trap. This by simply celebrating identity as a major *raison de être* for heritage, whereas the challenges of linking heritages to identities is a well-rehearsed field in critical heritage studies, which have taken this knowledge onboard and moved on to discuss nature-culture relations and heritage futures (cf. Harrison 2015). Here, I have written on several occasions (Fredengren 2012, 2015), that whilst biases and injustices based on identity in heritage selection need to be noted (an obvious one is the anthropocentric focus and how to move beyond 'man'), resolution does not necessarily lie in a further lock-in into similarly oppressive identity categories. Further, there are other pressing issues related to heritage studies that need attention (see Fredengren & Åsberg forthcoming).[1] The making and labelling of heritage is a part of a variety of material and immaterial processes with a very political interface – one that literally shapes the fabric of the earth, makes it appear

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1   Some of these thoughts are already anticipated and will be published in a paper by Christina Fredengren & Cecilia Åsberg in connection with the UCL conference proceedings *Deterritorialising the future*. Many of the ideas have been conceived through relations with Edinburgh Environmental Humanities and explored in our Formas-funded project Checking in with Deep Time – Intragenerational justice and care.

as material phenomena, makes it work in various temporally situated political strategies. Such strategies need to be mapped and critically reviewed in order to open up a discussion of the often under-articulated politicization of the long-term, where the livelihood of future generations is facilitated or reined in. But there are also other ways to fold out heritage places in conversation with the Environmental Humanities field. To engage with such places draws us into paying close attention to the mixed and temporally queer environments we live in: constitutive parts of our situated and materialising political ecologies.

Moreover, as mentioned in Fredengren 2012, 2015, heritage is increasingly linked to sustainability – to the extent that possibly a new sustainable heritage paradigm can be spotted on the horizon (cf. Albert 2015). Here, it is important to keep a critical eye on both emerging and intertwined discourses of sustainability and that of conservation (Alaimo 2012), but also to make moves beyond using sustainability as a window-dressing exercise while the heritage-making process continues as before. It is important to focus on risk mitigation, but also to deal with transformation and loss linked to heritage (cf. Holtorf 2018). Furthermore, there is a need to revisit conservation, as Da Silvey (2016) has done, reframing it as a type of curated decay. Perhaps this reasoning from heritage studies aids us in practising the art of letting go, which talks to other faculties of the human, even from the viewpoint of being an endangered species. Going further, there is also room for creativity and affirmation, to capture the societal urge for creative re-use, re-work, and re-cycling of heritages of the past and moving beyond a 'human-only' or anthropocentric sustainability paradigm to envisage more inclusively that future generations are multispecies entanglements of humans and more-than-humans, and explore what intra-generational care could be (Fredengren & Åsberg forthcoming). Here I am not as negative as Riede (this volume:19) about using archaeology or ethnology for finding useful ecological knowledge or knowledge of other ways of relating to humans, animals or the environment to get on in a changing world. More importantly (and in line with Haraway 2016:100) our general field of study allows for situated knowledges for finding both practices and places for human and animal refuge, this by paying close attention to space, place and materializing temporalities.

Undisciplined Environmental Humanities

To sum up: the reasoning around the Anthropocene starts with a sobering clarification – human agency has not only created high culture, such as buildings, tools or art, by its actions. What are left are also heritages of

species and gender inequalities, scarred landscapes, waste, toxicities, species extinctions, mono-cultures, layers at the beds of oceans, climate and environmental change. This is a mixed heritage (often unlabelled) that is the result of material interferences that change the textures of times, that territorialize futures to come, that shape the spaces and cartographies within which future (multispecies) generations can manoeuvre.

I ask again, with Haraway (2016:100), what measures need to be taken to make the Anthropocene as thin as possible? What are the means with which the humanities, however loosely formed, can contribute with towards that end? Here I share the visions of Riede, but find the paper somewhat limiting. Does the present predicament not demand of us a more undisciplined academic encounter – and a rewilding of the humanities – to form these transversal modes of querying past, present, futures? Does it not need a lot of creativity to find a range of engagements, knowledges and inspirations to work elsewise? What interests me is how to expand on scientifically informed multi-species storytelling, with a base in archaeological materials that deals with how to tie human-animal knots and temporal relations in other ways. There are other ways to relate to and be related to by the environment (see Fredengren, this volume). For such it is very premature to set boundaries for what archaeology may bring to the Environmental Humanities table, as both subjects are on the move.

Likewise, I ask how heritage is captured as time elements, in presentisms, in merges of materialities and meaning, in troubled bodies, in how to deal with anthropocentrism in heritage making, how to capture heritages as process ontologies as human-animal relations (Fredengren 2015, 2018). I also ask what modes and models of stewardship (who cares for whom, according to what ethic and on what mandate) come with the heritage business? I am curious about people's relationships with the more-than-human, with things, place and spaces, and with care and curatorship in a wider sense. However, I do not envisage the meeting between environmental humanities and archaeology to be limited to these matters, but to be developed through various creative and affirmative encounters.

And then I ask … for what causes do we do this? Is it to establish subject boundaries and to carve up academic terrain, or for forming new types of unexpected collaborations? And perhaps, at the end of the day … as many of us would say, don't we do it … for the love of the world?

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