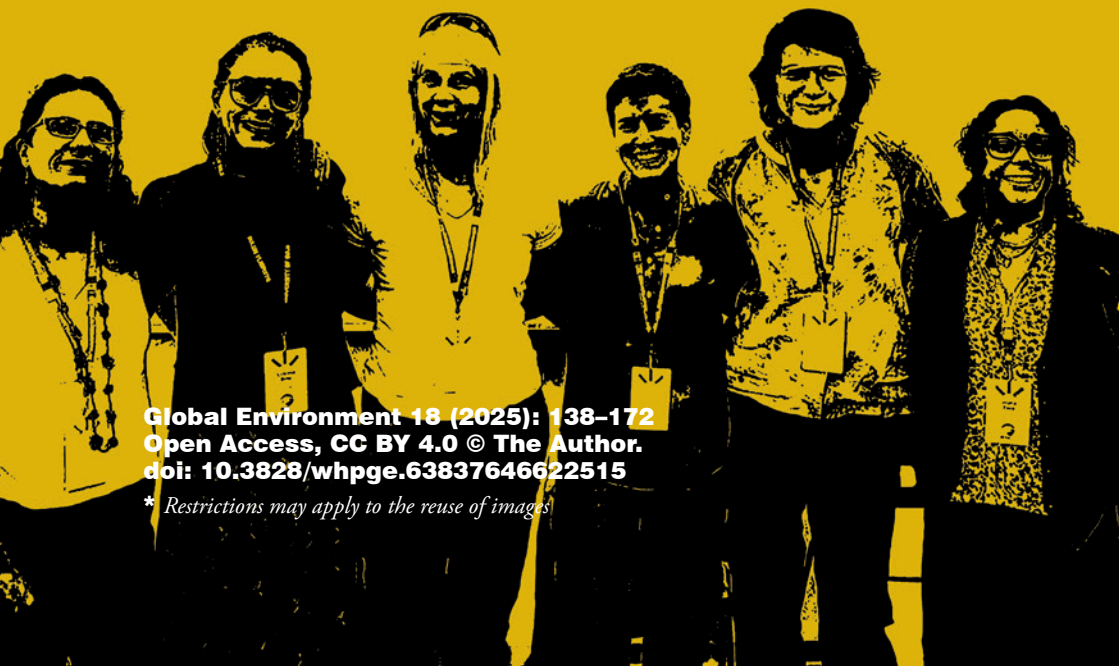
Transdisciplinary Histories and the Rise of the Environmental Humanities

Libby Robin, Amanda Wells, Claudia Leal, Joana Baço, Cristina Brito, Patricia Carvalho, Susanna Lidström, Tirza Meyer, Ursula Münster, Kate Rigby, Sandra Swart and Nina Vieira

A conversation from the Fourth World Congress of Environmental History, Oulu, Finland, August 2024[1]

Claudia Leal: Libby Robin, a historian who is among the founders of the environmental humanities, summoned us one by one for this dialogue and we all accepted enthusiastically. We will very conveniently start our round-the-world tour in Australia, quite literally since Libby couldn't make it to Oulu and is joining us on the screen from her home; she will take us back to the roots. We will



Global Environment 18 (2025): 138–172
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doi: 10.3828/whpge.63837646622515

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then tour various European localities and projects to see examples of what is being accomplished in this multifaceted field. We will end our presentations by heading South, first to Africa and then to Latin America, where the environmental humanities are much less salient and where we will examine their relation to environmental history. Discussion will follow.

Australian Roots

Libby Robin

The idea for this roundtable came from conversations in many places: environmental humanities has emerged with support from different disciplines in different places, and at different times, depending on needs. It is now widespread, after about twenty years of patchy developments. The concept of 'environmental humanities' includes environmental history, and therefore is important for our World Congress at Oulu. It also reaches well beyond what people recognise as 'history' – but historians in many places have been important in developing its potential, in partnership with others.

In Australia at the turn of the millennium, which is where my first discussions were held, we were a small group, mostly historians, philosophers and anthropologists. We called our venture the 'ecological humanities' and described it in a manifesto that called for 're-threading the fabric of knowledge'.[2] Our methods included Curiosity, Acknowledging Uncertainty, and Concern to repair damage. The first publications, hosted by the *Australian Humanities Review*, travelled under this header, but, in 2012, we moved to 'environmental humanities' when our publication became a stand-alone journal, reflecting the way interdisciplinary environmental work had developed independently and internationally over its first decade.[3]

I learned a lot about experimenting with the Humanities at KTH

[1] This conversation has been edited for length and clarity and a conclusion added.

[2] Robin, Rose et al. 2003; Rose and Robin 2004; Rose 2006.

[3] Rose et al. 2012.

Environmental Humanities Lab, which was established while I was a guest professor at the Royal Institute of Technology in Stockholm in 2011, in the Division of History of Science, Technology and Environment.[4] The Lab recently launched a new Centre for Anthropocene History. The 'Anthropocene moment' invites engagement in very different ways, as we grapple with living in Anthropocene times and places. Love, loss and hope, not just science, are all elements of our environmental predicament.[5]

Much of my own experience in the environmental humanities has been developed through practical projects with ecologists, archaeologists and artists in Australia.[6] Rethreading the fabric of knowledge demands that we *all* adopt the methods and insights of various other collaborating disciplines. This is the only hope for a truly 'integrated' interdisciplinary space where we can work to create new knowledge.

A Transformative Process

Natural scientists tend to add disciplinary experts to a long list of collaborators and make 'integrated' research through an additive rather than a transformative process. By contrast, the humanities do interdisciplinarity 'in one head' – a synthetic approach that has very much been led by history, where many methods come together to explore the past. Sandra Swart, in *The Lion's Historian*, describes it as 'interdisciplinary incorporation rather than … multi-team collaboration', noting that historians are 'not social animals'.[7]

Perhaps we are now influencing the way natural sciences think about this too. For example, in a review entitled 'What should the Anthropocene mean?' Jan Zalasiewicz, an accomplished geologist, and colleagues (including historian Julia Thomas) argue for allowing a 'wide sense' of our complex times. The Anthropocene *sensu lato* already has meaning for the humanities and for creative artists,

4 Sörlin 2022; Lowenthal 2019.
4 Muir et al. 2020.
5 Martin et al., 2005.
6 Swart 2023: 30.

quite apart from official decisions of the geological community.[8] The Anthropocene Working Group now embraces more than stratigraphers, or even Earth System scientists: the humanities are there too. The genie is out of the bottle! The group includes the creative writer and theatre maker, David Finnigan, whose philosophical blog at *New Rules for Storytelling* is always thoughtful. He isn't a historian, but he blogs about the importance of history.[9]

We are here today to advance partnerships between history and environmental humanities within and beyond universities that can enable 'cultural, biological, and academic diversity, all of which are necessary for sustainable futures for flourishing life on earth', in the words of the Australian manifesto.[10] At the beginning of the twenty-first century, when this manifesto was drafted, Australian environmental history was very different from the United States model, which was older and came out of histories of the American West and from a patriotism of Wilderness.[11] In Australia, there were different dreams: people died in the bush. Environmental history was *not* Australian studies. It came from natural resource managers, archaeologists and others who sought practical local history to complement their work. Their focus was on the 'productive' land, the places that grow the nation's food and fibre.[12]

Environmental history now – in Australia and beyond - is inclusive of more than land. It embraces the oceans and atmospheres, considering environmental and ethical flows at a global scale. It is actively engaged in dialogues with Indigenous peoples, and with those who disproportionately suffer from global change, not just those who have the power to curb excesses. Environmental humanities reach beyond the human, to include whole kingdoms of life (plants, animals, fungi), exploring reciprocal relations and developing new understandings of justice and ethical care.

[7] Zalasiewicz et al. 2024.

[8] David Finnigan, 'Coming of age on the new planet', Blog 3 Aug. 2024: https://davidfinnigan.substack.com/p/coming-of-age-on-the-new-planet

[9] Robin, Rose et al. 2003.

[11] Nash 1967.

[12] Dovers 1994.

Key themes raised by this international roundtable are Animal Histories, the Blue Humanities, Soils (and underground connectivities) and Multispecies Studies. All contribute in different ways to practical and theoretical ways to live in the Anthropocene. No longer can we stem the tide, but we *can* live better (or worse). The humanities focus our minds on the ethical elements of climate justice and mass extinctions, of life for more-than-human others, and of making the very best of the world that 'we' humans have changed irretrievably. Our diverse panellists will continue this scholarly trip around the world in search of the rich variety of styles of new scholarship in environmental humanities.

Place-Based Stories, Changing Environments

Claudia Leal: We now turn to Cristina Brito and Joana Baço, historian and archaeologist, who work in Lisbon on a project entitled '4-Oceans: Human History of Marine Life', a good example of the 'Blue Humanities', an area that, for the last decade or so, has coalesced to drive our attention to watery environments, particularly oceans.[13]

Joana Baço and Cristina Brito (working with Nina Vieira and Patricia Carvalho)

We wish to start our presentation on the Blue Humanities by engaging with formats beyond academia. The environmental humanities are rich with ways of presenting and communicating scientific and historical knowledge. We open with a preview of the new video *Whales in Fault Lines*.[14] It's about whales and more-than-human entanglements in early modern environments. In the video, Joana Baço draws on the character of the poem with Baleia (En)Canto, or *Whale Enchantment*, a song she wrote herself while the team was undertaking a marine survey in a boat off Lisbon. The video is both

[13] See '4-Oceans': https://www.tcd.ie/tceh/4-oceans/ (ERC Synergy Grant no. 951649). On the Blue Humanities see: Mentz 2023; Ferwerda 2024; Syperek and Wade 2024, Holm et al. 2022.

[14] https://www.youtube.com/watch?v=z-PEtSOu2Ek.

a visual composition that resulted from empirical research, and an artistic practice of science communication. Central to the images are sounds, voices, and words. Some originate from an oral story about encounters, reimagined in song, and some have been written down and kept in books and archives.

To the Baleato Fish

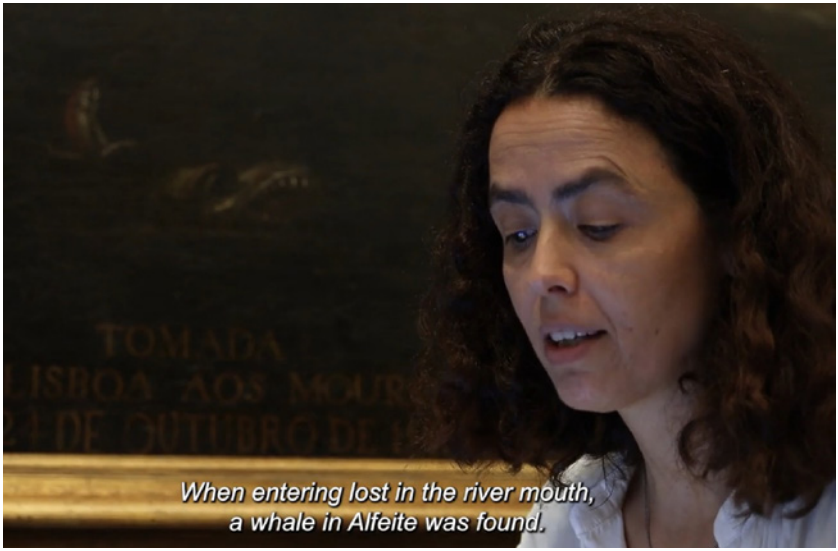
Friends with good taste hear me, listen to me
and if it's boring, forgive me.
I want to tell you without being afraid,
the story of a fish that once here came.
When entering lost in the river mouth,
a whale in Alfeite was found.
The news spread to the local people
and they went to help with their fishing gaffs.
Many were the names selected,
until Baliato was elected.
It arrived with remarkable apparatus,
this large fish Baliato.
That such a funeral
has rarely been seen in Portugal.
First was the time
when funeral ceremonies were held in Ribeira.
The people were countless
and seeing such, made for dizziness.
Women with crinolines, nobility.
All of the people and youth.

[Patrícia Carvalho and Nina Vieira, respectively an archaeologist and historian, expand on the meanings of the stranded whales and their role as a valuable resource. Patrícia continues reciting the poem].

All of this occurred
among people that about a whale have not heard.

The poem speaks of the *curiosity* aroused by the strange stranding, and how it unites people of different walks of life. It speaks of human reactions towards the animal as they seek to identify it, to find a use

Figure 1. Patricia Carvalho reading the eighteenth-century anonymous poem 'To the Baleato Fish', a still image from the video 'Whales in Fault Lines'.



for it, to dispose of it and to bury it. Moreover, it is explained that this type of event brought different feelings among the people that witnessed it together. Some felt fear and awe at the grand animal characterised as a monster. Some remained anxious about whether it was a bad omen. Others still felt solidarity, or empathy, for the animal itself as it languished lost outside its natural environment.

Our research mostly centres marine environmental history in methods and problems, but we are an interdisciplinary team, drawing widely on other perspectives that allow us to answer our broad research questions. We are now moving forward and beyond technical research into this new realm of the aquatic or blue humanities, and we read the natural and cultural worlds together. We draw on traditional disciplines like history, archaeology, historical climatology and so on, including the creative humanities, like literary studies and artistic production.

Art is central to our way of thinking and the outputs we produce – it is a way of translating and synthesising scientific knowledges. We engage many new and different audiences. Our formats are accessible for people outside academia. Our work tries to be encompassing, inclusive, just and fair. Including the more-than-human world is one of our ways of doing and communicating science.

We are Portuguese, but most of our academic work appears in English, so a video like this is a way we can share results, including the Portuguese and Spanish-speaking worlds. The video is more than just 'general outreach' to many people across the world. It is also a call to our local people who have suffered a long and harsh past of colonialism. We are trying as much as possible to *decolonise* the science and scholarship that we undertake. Making sure that people understand what we are saying, and that people are included in the productions that we are putting together, is of great relevance. Including people – researchers, scholars, children, the public at large – from several countries in Africa, and in South America, and many other parts of the world, is a way to learn as well as to share knowledge.

The images, the song, the poem, the words, are about Lisbon and a whale, and the environment that surrounds both humans and other animals, but there are similar tales on South Atlantic shores, and in Africa, Central and South America. Other stories, about other peoples and other aquatic animals, can be found for the early modern period, connecting humans with the oceans.[15] These can be told, discussed and (re)conceptualised through the Blue Humanities. To do that, we work with local and Indigenous scholars, and we have included in a podcast of the sounds for the *Humanities 4 the Ocean* project, a poem in Tupi language about manatees and mermaids as well as symbolic meanings of the animals and entities.[16]

Our work tries to be encompassing, inclusive, just and fair. Including all-other and the more-than-human world and realities and manifestations is one of our ways of doing and communicating science.

[15] Brito 2023: 270; Vieira 2023.

[16] 'Oceanities' [a 4-Oceans' project podcast]: https://open.spotify.com/show/1ZTffoLAHBduakejknOnFb

Claudia Leal: We now turn to Tirza Meyer and Susanna Lidström who will continue to show us the possibilities that come with exploring the oceans and will bring to the table the experience of an institution that has a prominent place in the development of the environmental humanities in Europe.

Tirza Meyer and Susanna Lidström

While Joana Baço and Cristina Brito explored the stories of a stranded whale, an animal of the ocean that came into a human space on the shore, we discuss the opposite case. We focus on when humans reach far beyond human habitats, deep in the ocean.

Hydrothermal vents and life in the ocean depths

We worked together as part of the team at the Environmental Humanities Lab at KTH in Stockholm. In a project on the *Mediated Planet*,[17] we studied the technologies used to access and explore the ocean's depths and its natural structures. We focused on deep underwater features called *hydrothermal vents* (Figure 2), which form where tectonic plates shift and hot water seeps up from beneath the seabed. The hot water contains dissolved metals, which, when they cool, form large structures that rise from the deep seafloor.

While hydrothermal vents may appear, and were once assumed to be, lifeless, in fact they are unique ecosystems with abundant life – crabs, mussels, tubeworms, and other fascinating creatures. They sustain themselves through chemosynthesis, instead of photosynthesis, a form of life that was not known to science until hydrothermal vents were first discovered in the 1970s, when new technologies enabled scientists to dive deeper and reach new ecosystems hidden in the depths, far from shore.

We became interested in how these early discoveries were reported by scientists and media. When vents were first discovered in 1977 in the warm waters near the Galápagos Ridge, researchers – mainly geologists – were amazed by the life they found. They spoke of these

[17] KTH Royal Institute of Technology, 'The Mediated Planet: Claiming Data for Environmental SDGS': https://www.mediatedplanet.proj.kth.se/

Figure 2. Mineral deposits forming a so called 'chimney' at a hydrothermal vent in the Pacific Ocean near the Mariana Islands. Image courtesy of the NOAA Office of Ocean Exploration and Research, 2016 Deepwater Exploration of the Marianas.

ecosystems with wonder. Fields like the Rose Garden were named for their life forms. In the ensuing decades, as more vent ecosystems were discovered, the emphasis shifted. Vents became resources. When Norwegian researchers, working in colder places, discovered vents along the Arctic Mid-Ocean Ridge they came up with names like Loki's Castle, named for the Norse god. The wonder of natural histories was replaced by a more systematic documentation of the 'treasure chest' of potential mineral deposits. This shift highlights how hydrothermal vents occupy a contradictory space between 'marvelous deposits' of life and 'valuable resources' for extraction. As Norway moves to open deep-sea mining activities in its waters, there is growing tension between those who value hydrothermal vents primarily for their living, unique and, so far mostly undisturbed, ecosystems and those who foremost perceive their potential as economic resources.

Symbols of the deep

Elsewhere in the deep ocean, the deep-sea anglerfish has become another symbol for life in extreme depths, despite the fact that some argue it's not truly iconic because other fish live much deeper down. The angler fish occupies a central role in a new book project (undertaken by Tirza), in press with Chicago University Press. The book explores how humans discover and engage with remote ocean places: such places don't come to us, but rather, we must venture *into* them, ourselves and with technologies, to 'see' what is there and understand how they work.

Such a book represents a new sort of environmental history, drawing widely on traditional sources, and also on a variety of sources in the environmental humanities that reach beyond the 'dusty archives'. Environmental humanities, with its eclectic sources, can offer history new insights. Key sources for Tirza's book are the bodies of fish, specimens collected during deep-sea expeditions from the Challenger Expedition (1872–1876) to the present. While this history may seem brief in a historical sense, it represents a significant period in scientific exploration. One strength of the environmental humanities is the ability to collaborate across disciplines, bringing together different sources of knowledge. Working closely with deep-sea scientists has brought new understandings and perspectives. Specimens housed at the Natural History Museum in London have become historical sources for questions well beyond natural science.

Claudia Leal: We now hear from Ursula Münster' to 'We will now hear Ursula Münster, director of the recently founded (2022) Oslo School of Environmental Humanities. While much of her work has been on multispecies studies in India, she will talk to us today about her current project on anthropogenic soils.

Ursula Münster

The question at the heart of my current thinking is: how does attentiveness to the below-ground, to the lively worlds of soils, shape the environmental humanities? Soils are important sites where the Anthropocene/Capitalocene/Plantationocene unfolds.

Soils as common ground to think with

The decline of below-ground-biodiversity and the depletion of soils is a long-neglected environmental problem that is increasingly recognised. A decade ago, in 2015, the International Union of Soil Scientists called for an International Decade of Soils, in recognition that planet Earth has already reached what many call a 'crisis of soil'. Just as some speak of Peak Oil, predicting the peaking and subsequent exhaustion of oil, some scientists speak of Peak Soil, a time that we have already reached where capitalist extraction has caused so much harm that soils are disappearing faster than they can be rebuilt naturally. Our planet's soils have become degraded, polluted, radioactive and toxic. Soils have become dangerous through chemical agriculture, pollution, compaction, urbanisation, sealing, nutrient degradation and many other extractive and exploitative practices.

A diversity of disciplines has responded to the crisis of soil, not just the natural sciences. The vibrant and emerging field of what some call 'Soil Humanities' is part of this response. This lively matter is important to life, including human life. Humanists, together with a large community of other scholars of all fields, have reacted to the twin predicaments of depleting and disappearing soils, by engaging with issues of soil sovereignty and injustice, ethical care and alternative practices of soil recuperation. Simultaneously, while mourning the extinctions, depletions and losses of below-ground worlds, soil humanists have celebrated the wonders of soils, their often-unknown complex multispecies relationships and their great potential to heal through human care.

In the Anthropocene, soils have become complex and dynamic natural-cultural compositions that call for a multitude of ways of learning about and knowing them. Soils need to be studied from a multispecies and multi-kingdom approach, as they are composed of a multitude of organic and inorganic matter as well as a multitude of microbes, other single cell organisms, a million individual fungi and hundreds of 'larger' animals such as nematodes, springtails and insects. At the same time soils have been shaped, manipulated and cared for in manifold ways, in different times and places. As a consequence,

soils cannot be understood and studied by one discipline alone.

I currently coordinate a large-scale interdisciplinary project *Anthropogenic Soils*, based at the University of Oslo, funded by the Norwegian Research Council until 2028.[18] What makes the project special is that it is led by questions coming from the humanities to show that soils call for new and experimental approaches that go beyond disciplinary boundaries. We bring together a diversity of scholars, including from the fields of environmental humanities, STS, medical anthropology, philosophy, art history and the arts, and science fiction studies, to study soils in their multiplicity, through a range of practices that work to recuperate depleted soils. Despite our diversity of interests, methodologies and questions we ask, our engagement with the materialities and realities of soils create common ground on which to build our scholarly connections:

1. The complexity of soil's assemblages calls for humility. Soils take us to the realm of the unknown and of speculation.
2. Soils are a frontier of science. Many of the complex processes and multispecies relationships of soil remain unexplored by scientists.
3. Science alone cannot help us to understand all about what soils actually are.

In our project, we have included the arts and science fiction to help us reflect on soils and to speculate about what sustainable human-soil relationships might look like.

Finally, soils can bring us into the realm of hope, beyond extinction and dystopian endings. Soils have been eroded, extracted and depleted at alarming rates. Yet, people all over the globe, in different places and times, have always manipulated and tinkered with soils, and we know a lot about recovering soil. People of many different cultural traditions have used diverse techniques and practices to enhance, enrich and heal soils to grow food. From composting and using biochar to collaborating with microbes, plants and fun-

[18] University of Oslo, 'Anthropogenic Soils: Recuperating Human-Soil Relationships on a Troubled Planet': https://www.hf.uio.no/ikos/english/research/projects/anthropogenic-soils/

gi, people have made soils richer, healthier, more diverse through their interventions. Our Anthropogenic Soils project studies these practices in different parts of the world, and across a range of communities – from scientists to gardeners, farmers, activists and others. The humanities help us to imagine how sustainable human-soil relationships can look in the future, and to realise that different and more sustainable human-soil relationships have been possible at different places and in different times. Finally, engaging with soils has inspired us to re-think the environmental humanities as more collaborative, more relational, more processual, strengthening the belief that change can actually be built through healing soils.

Claudia Leal: Sandra Swart, known for her work on animal history, will now address the environmental humanities from that standpoint and take us to Southern Africa.

Sandra Swart

Allow me to lower the tone. We had an introduction to environmental humanities from Libby, then we listened to Joana's hauntingly beautiful song, then we did a deep dive into the ocean, then we did a surface-level but similarly deep dive into soils. I shan't be doing any of that. I shall be doing a little bit of a cynical, a little bit of a sceptical, and a little bit of a critical think about what else we do. When we think about the environmental humanities, I think we should go in excited, but cautious. Like me in a nightclub in the 1990s.

You'll remember the economist John Kenneth Galbraith said, 'When you see reference to a new paradigm you should always, under all circumstances, take cover', because it probably isn't as paradigmatically shifty as all that.[19] In fact, when I think about the environmental humanities, I'm frequently reminded of being a little girl, because when the English teacher was teaching us about poetry, I was very excited, and then she said we were going to do something even more exciting called 'prose'. And I realised we had been doing it all along. It was a bit of an anticlimax. And that's a little bit how

[19] Laurance and Keegan 1998.

I feel sometimes about the environmental humanities. Most of us have been doing something like this for a long time. I'm worried about trying to sell a brand-new product and doing a disservice to people who've been doing this for a long time. You'll forgive me a little bit of healthy scepticism. I worry also about the creation of new silos, beyond the disciplines we already have. Nevertheless, I see that wicked problems need wicked solutions, and this where we come in now.

So what is the role of environmental history in all this? Here we segue seamlessly to my own work in South Africa, at the Cape, where there are two very dangerous primate species: baboons, and us. We're struggling to get along, as close family often does. We inhabit the same cities and, as we steal their territory, they encroach into ours, and it's just a big fat mess. You really do need to take the environmental humanities very seriously in solving the wicked problem of the synanthrope that comes into towns. It highlights three things that perhaps we're not doing enough about in environmental humanities, but that are starting to happen in South Africa. (1) Environmental history should take deep time seriously (including the *longue durée*); (2) it should take vernacular knowledge more seriously; and (3) it should have a great deal of respect for context and place.

Baboons are perfectly lovely when they're not in your garden or your kitchen or killing your Maltese Poodle. And of course, people can strike back disproportionately. The scientists are not the ones to explain this – they are very puzzled. It takes a historian or a sociologist to say that something very deep is happening in the human psyche here. It is a frightened society, it is a dangerous society with a very fractured past, and it really resents the Outsider coming into the high fences, the burglar bars on the windows. This is an intruder that has legal protection, that you cannot take vengeance against. So there is a great deal of disproportionate violence towards baboons. When necropsies (autopsies) are done, animals are shown to be riddled with actual pellets, with bullets, or they're covered with paintball paint. None of these problems can be solved with just the baboon science working group, because you're not dealing with just baboons, you're actually dealing with people.

It's a relationship, and the relationship is long, but here's where deep history comes into it. People are wondering why it isn't just outraged suburbanites trying to protect their property that visit this violence; it's not just the darkness at the edge of town. There's something else going on too. In fact, baboons are feared for other reasons, and the reasons are very long. They go back to the first break in the relationship between humans and baboons, which happened several millennia ago when humans stopped finding baboons to be useful neighbours. They were good proxies and watchdogs warning us of predators. Then they became bad neighbours, and that's because of the *human* switch to agriculture and livestock farming. And so baboons became a threat to food security. Rock art, our oldest archive, holds evidence of this history of long rupture.

But it was at this rupturous point that the baboon became something more – it became a terror of the night, a witch's familiar. The baboon is also akin to a very feared South African creature called the Tokoloshe, who is a priapic – and I don't want to lower the tone even further – but he's got this massive penis that he carries over his shoulder. Try to overlook that, but it's very threatening. And it often segues into a baboon, or a creature born of an unnatural coupling between human and baboon. So, in many rural communities, there is a lively fear of seeing a baboon out of place. The scientists will be the first to tell you that this baboon out of place is a natural part of being a baboon, because the males don't stay in their natal troops, they always move elsewhere. As humans expand, these unnatural baboons pop up in urban settings. And it is the historian who can explain all this.

So, you see how we all have to work together to really understand the long history, the deep history, the immediate history – the history of fear and anxiety coming from all different directions – in order to keep this neighbour of ours alive at the Cape in South Africa. This is the power of environmental humanities, as it draws on environmental history and more-than-human histories and takes them in new directions.[20]

[20] See, for example, Emily O'Gorman's comments on HCNSW podcast, Oct.

And finally, I could turn to the therianthrope, a shapeshifter. There are groups like the Ncube and the Amatola who consider the baboon to be totemic. Such beliefs can protect baboons in other areas. But we can leave that for the discussion.

Environmental humanities contain many possibilities for a new look at living together and working together, and crossing boundaries.

Claudia Leal

So now to Latin America. I come from Colombia, where I live and work as a professor of history and geography. It was a bit unexpected that Libby invited me to participate in this round table, because the environmental humanities are not yet something in my region. For the past two decades we've been building environmental *history*, which went from being a curiosity to a thriving field. We still have a lot to do, but almost every historian in Latin America now recognises the existence, and often the relevance, of environmental history.

When we inquire about the environmental humanities, as my friend Alejandro Ponce de León pointed to me, we find a single programme offered by Universidad Nacional Tres de Febrero, from Argentina, which provides a diploma that is not a bachelors nor a masters either. So far, the development of a field under that name is minor. Yet, a seed has been planted, for the most part, by Latin Americans and Latin Americanists working in the US in 'ecocriticism'.[21] Of late, these scholars have also been identifying under the banner of environmental humanities, because in the US this label has a broad meaning. But those in Latin America have not, so far, joined the ecocriticism club nor the environmental humanities club. So, I asked myself, 'What am I going to do in this presentation?' I could just say now: 'The end.'

However, we can think about the environmental humanities differently – not as an established academic field, but as a way in which

2024: https://open.spotify.com/episode/224dLK6uCw7OokEFwx8ZMH?si=fd5587b30a114f26. Also Swart 2023.

[21] French and Heffes 2021; Andermann et al. 2023.

the humanities engage with what we call the environment or nature. I will focus on art, which has incorporated nature – has been inspired by and has been entangled with nature – since day one. Just as environmental history was growing in Latin America, so too was the art world shifting in response to the current environmental crisis. I'll mention four kinds of examples from Colombia.

In 2012 our main public cultural institution (*Area Cultural del Banco de la República*) organised an exhibit on the history of landscape art in the country. This exhibit reveals how this moment has led to revisiting and revaluing different kinds of art that incorporated nature in the past.[22] Another example comes from academia: the book *Visible Empire*, which offers a fresh look at the prolific botanical drawings made by José Celestino Mutis and his team, as well as other naturalists of the late eighteenth century.[23]

Awareness of the current crisis has also allowed for a more thorough recognition of the work of some Indigenous artists. Colombia is a country in which less than five per cent of the population is Indigenous. I particularly like Abel Rodríguez' paintings. He is part of the Nonuya people; like so many Colombians he was displaced from his homeland in Amazonia and ended up in Bogotá. When he arrived in the city, he got in touch with Tropenbos, an environmental NGO with which he had previously worked. After reconnecting, he started painting his forest and eventually became very well known, nationally and internationally.[24]

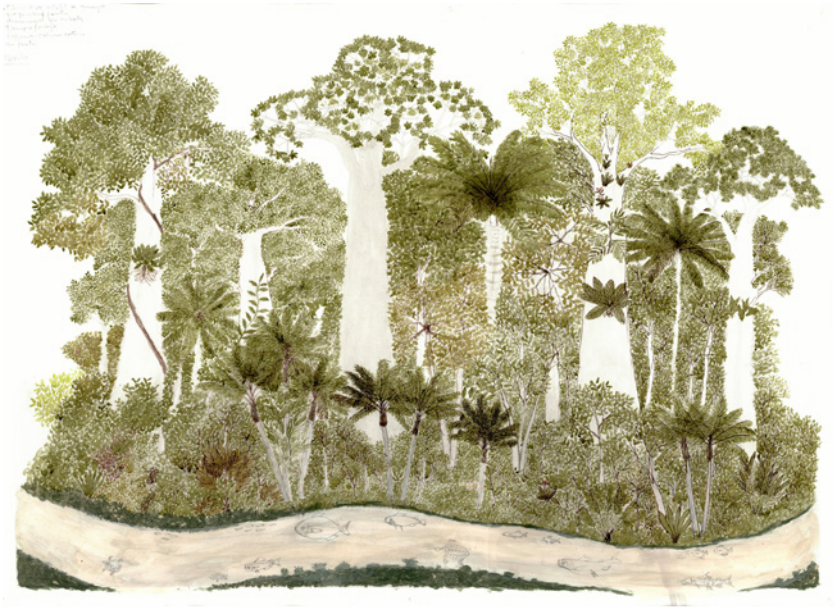
There are many other artists working on nature-related topics in an astounding variety of ways, which is the third and most salient change that I want to highlight through the case of Alberto Baraya. This Colombian-Spanish artist became an 'artificial naturalist': he engages in expeditions and collects artificial (plastic) plants, which he displays in a traditional botanical fashion. He also did an exhibit

[22] Decir el lugar: Testimonios del pasiaje colombiano: https://www.banrepcultural.org/exposiciones/decir-el-lugar

[23] Bleichmar 2012.

[24] 'Abel Rodríguez', La Biennale Di Venezia: https://www.labiennale.org/en/art/2024/nucleo-contemporaneo/abel-rodri%CC%81guez

Figure 3. Abel Rodríguez, From the series *Ciclo anual del bosque de vega* [Annual cycle of the flooded forest], 2017. Courtesy of Tropenbos Colombia.



consisting of a big greenhouse full of artificial plants.[25] Environmental historians can easily relate to his underlying question: 'What's nature?' or, 'What does it mean to separate nature from culture, society or artifice?'

Many art projects related to environmental topics are not done just by official artists, they are more of the kind that we've been hearing about earlier today, which brings me to my fourth and last point. One such project that I have visited with my students was started by artist Maria Buenaventura, who collaborates with an archaeologist, a lawyer and other professionals as well as local people, including an

[25] Alberto Baraya, 'Herbarium of Artificial Plants' [Installation], 8th Berlin Biennale, 2013–2014: https://www.berlindrawingroom.com/alberto-barayas-herbarium-of-artificial-plants/

Indigenous Elder (quite something for a city that supposedly doesn't have an Indigenous population). They reconstructed the way of growing crops in pre-Columbian times, which included canals and terraces that were ubiquitous at 2,600 metres in the highland plateau where Bogota sits.[26] Bogotanos don't know about this past way of relating to what used to be an aqueous territory. So, what they are doing is big: it helps change the way we think of the landscape in which we live and of our past. Furthermore, this kind of art, that doesn't look like art and is not exhibited in a museum, is part of an activist project of defending a very particular nature reserve on the outskirts of the city. It is a project grounded in place.

So, where does this leave us? As historians, we have two very powerful tools: we deal with nonfiction (at a time of fake-everything) and we tell stories. We interpret the past, always sticking to the traces it left to craft our narratives. Artists have other superpowers. They can do things that go well beyond what we do. Alberto Baraya says that art is a form of knowledge and that modern art is inspired by everyday experience. There's a huge array of possible collaborations and creations if we flirt with artists.

I've done a little bit of this. I got together with an Argentinian illustrator, Daniel Rabanal, to do a book for children (*El agua de Bogotá: Historia de un páramo*) and with a group of students did graffiti regarding *copetones*, sparrows, which are considered Bogota's bird and which many believe are disappearing.[27]

Like Sandra said before, perhaps we're giving a new name to things that we have been doing before. But my invitation, especially for Latin Americans, is to engage with the world of possibilities that is out there and can take us –environmental historians, artists or environmental humanists – quite far.

[26] Maria Buenaventura, 'Zanjas y Camellones' [Ditches and Ridges]: https://mariabuenaventura.com/portfolio/zanjas-y-camellones-3/

[27] Leal 2022.

On Methods and Labels

Claudia: As you heard, my region's detachment from the label 'environmental humanities' has made my learning curve very steep. I see here several common themes. First, interdisciplinarity and collaboration. Collaboration not only with artists and people who are in other social sciences or humanities fields, but also with scientists, and perhaps even doing work *their* way and introducing ways of working with history to them. While the word 'humanities' doesn't immediately bring to mind oceanographers or soil scientists, there is work to be done to draw out the human elements in their areas. Collaboration is good: talking more to people with other expertise benefits everybody. And there's also collaboration beyond academia, to make things even richer!

A second theme is related to the first one and has to do with what in my university we call 'products'. It is what we *produce*. We started off with a video and a song. We have a children's book. What can we do to go beyond writing, and especially beyond writing academic pieces?

And the last thing that figured prominently is topics. I'm from the mountains, very grounded on earth, and can easily relate to the call of giving more attention to the distant ocean and to the soil beneath our feet. I am sure there are many other topics that merit attention, that will expand our world views, such as the animals that Sandra and I study.

As Sandra already mentioned, if this is a new label for old endeavours, how can it help? Maybe we do need a new umbrella to fit everything into this 'mish mash' house. I am a geographer and geography is a mish mash discipline. The environmental humanities have emerged in different ways in different places. Even the two journals called *Environmental Humanities* don't publish the same kind of things. Can we carry forward multiple meanings of this common house usefully?

Joana: I was trained as a nautical and underwater archaeologist. Years later, I started to work with Cristina and environmental

history. I shifted from anchors and wrecks to whales and manatees, adding environmental to cultural history. I'm still an archaeologist, so I still bring material culture to the project. Our video is a 'mix-and-match' of what we do. I was not trained as a singer, but my song arose out of our daily scholarly work. I would call environmental humanities a hub, a platform.

Cristina: We don't teach 'environmental humanities' (yet) in Portugal, or even 'environmental history'. But our research has led us down this pathway, and many Portuguese scholars have been doing both for many years now. We do have literary and art scholars that are doing great eco-creative work. They read the environment and the animals of the sea through the lens of artistry, literature, poetry, music, song writing, videos, films and so on. Even if we don't have a name for it, it is creating important conversations across the scholarly disciplines that we move beyond. The creative connections have their own momentum, and they can align with empirical research and environmental history. It is not a subdiscipline, but rather a space that opens up new ground for thinking.

We can all aim to teach such connections to students and build a new generation of scholars.

Tirza: I'm a bit annoyed by the label of 'blue humanities'. The ocean is not even blue, so what do we need this colour label for? But I like the conversations it stimulates.

Since we were studying the *naming* processes of hydrothermal vent systems, we've become very aware of the narratives that are created by giving names to hydrothermal vent features. The 'Rose Garden' was all about nature. In the highly extractive Norwegian waters, we discovered 'treasure'. A label can open up a bigger trend. This is why the label 'environmental humanities' might be useful.

Deep Time is another useful name. Working in the natural history museum's collections and talking to scientists working on genetics and evolution has given my idea of history depth. The genetics of deep-sea fish reveal long-ago geographical events in the deep ocean, even the life history of an entire species. Biologists are very interested in time, and they work like historians, but on different

time scales. The deep sea is not a beach. All scholars have to make an effort to understand the reports of those who have visited the deep over centuries, telling their own stories. The environmental humanities are another way in, to work together, joining natural science, history and creative thinking. I see deep time in the deep-sea specimens, and they can enrich my history-making. The *Challenger* reports provide precise older measurements to consider change over more than 100 years. We are working with exactly the same archival sources, but telling different histories. That's where new insights emerge.

As environmental humanities scholars, we can be liberated from some of the limits of traditional disciplines. I like the free approach that the label enables. I'm trained as contemporary historian, so my thinking is anchored by my discipline. But I like that I can venture away, under the guise of doing 'environmental humanities research', to present my work beyond audiences of historians, to enjoy the creative friction of other ways of thinking too.

Ursula: Environmental history is a term that really *connects* people and ideas. As director of the Oslo School of Environmental Humanities, I found that the field really helped shape a 'lighthouse' where people who worked on environmental issues came together no matter their disciplinary training. You could be a political ecologist, an eco-critic, whatever. My background is anthropology. It's an umbrella term that enabled us to all come together and have enriching conversations.

I became so much more *historical* through working at the Rachel Carson Center in Munich, and now in Oslo, seeing other disciplines at work. Musicology, archaeology and others are really strong. We can look to new strengths and create new scholarship by crossing the natural sciences and the humanities. You're no longer a solo scholar working on an interesting text or problem, so you have tools to speak and connect beyond academia. Activists and artists joined with our Oslo team and felt welcome. This has been really positive.

But it can also be dangerous. Losing your disciplinary depth is a risk, especially for the new generation. We needed our Ph.D. schol-

ars at the Carson Center to join the new wider humanities, but also to feel confident in the depth of their disciplinary Ph.D. training, as most future jobs will require them to be well-schooled in their own disciplinary tools. Making sure that traditional learning also happens needs to be a priority. You need to be really familiar in one field before you can play around.

Sandra: I agree with that. Get your own discipline right, and *then* expand. I take the natural science part so seriously. When I was doing my Ph.D., I also did an MSc in environmental change and management, because getting the science right is crucial to environmental work of all sorts. I have found myself at odds with other departments working on the so-called environmental humanities or 'green humanities', which are suspicious or even openly hostile to including natural scientists in a project. I defy them to draw the carbon cycle on a piece of paper! One must get the science right and pay respect to the fact that scientists themselves are not only open to but *welcoming* of collaboration with humanities scholars.

I do see the value of using the badge environmental humanities. Power is important. It is important to not be on a team as the mere clipboard-holding handmaiden, ancillary to a 'scientific project', which in the past has sometimes been the case. But if the project is led from the front by our gang, our mob, that certainly shifts the power, and that's great. I'm very open to that. There's value in that. And it changes the conversation a lot.

But we're almost past 'leading and following'. Instead, we must let one hundred flowers bloom. Different things are great. We mustn't be prescriptive at all.

I've just started the Africa Anthropocenes Research Centre. Because it is Anthropocene*s*, plural, I avoid inevitable critique of the idea of only one 'anthropos'. I do not wish to privilege anyone. There is no C.P. Snow 'two cultures' in this.[28] We come together from all disciplines, but are not led by any one in particular. We solve 'problems'. In some projects, some people take the lead, and in

[28] Snow 1959.

others, others do. We work together to *frame* the problem in terms meaningful to us all.

Claudia: I have also worked with scientists, yet it's confusing to me to hear that working with scientists is part of the 'environmental humanities'. The people who I know who do 'environmental humanities' are often literary scholars who do work quite different from mine. So, I also have a hard time calling what I do environmental humanities.

We don't want to be the environmental humanities police, and try to decide who is right or wrong, but rather 'liberate' ourselves, as Tirza suggests. Let's all move towards the beam from the Norwegian lighthouse that Ursula evoked. Joana inspires me to reconsider the 'boxy' way of thinking that we often encourage as professors. I tend to ask my students: 'what is your argument? What is the evidence?' But some students are more intuitive – perhaps they are good painters or have some other strength. One of my students, Diana Herrera, created an illustrated cookbook. She is working with animals and understanding their place in history through the kitchen. She's not officially doing environmental humanities, she's doing *history* because she enrolled in a history programme. Labels matter in how academia works. If I go to my dean and say 'The environmental humanities are huge – there's this environmental humanities centre here and another one there…' then it gets accepted and what this student is doing becomes *something* – it's not just me letting her draw, because she has talent. Those labels can be enabling, for students and professors alike.

Joana has inspired me because she hasn't stopped being an archaeologist. Now she's an archaeologist who sings and composes too. She doesn't go to choir at night, after being an archaeologist during the day. She can integrate music and archaeology. That freedom I find fascinating.

I see that we have the fortune to have with us in the audience, via zoom, another one of the founders of the environmental humanities in Australia, Kate Rigby, who joins us on screen from Cologne. So we will now have the pleasure to listen to her.

Kate Rigby: Reflections on today's conversations

Thank you so much for all the insights shared and connections made. Like Libby, I join this conversation as one of the Australian ecological humanities mob, albeit from a different disciplinary background: namely, comparative literature and cultural studies. Whilst ecocriticism has really taken off in Australia now, it was not an original driver, as it was in North America, as Claudia has discovered. In fact, the idea that environmental humanities is principally literary in orientation is largely foreign outside of the US. In addition to history, anthropology and philosophy, religious studies was also present in the Australian eco-humanities.[29] Together with work in association with artists, galleries and museums, researching and collaborating with communities of faith provides another vector for engaging with wider publics. Many faith-based actors as well as an array of local community groups are doing amazing environmental and activist work, whilst some strongly resist action on the ecological (and especially climate) crisis. Both aspects need to be examined.[30]

Going back to the original Australian ecological humanities push, many of us had indeed been bringing humanities perspectives to bear on environmental concerns in our own ways with our own methods and disciplines for some time.[31]

However, since many of us felt marginalised and boxed in within our own disciplines, we felt that we needed to make common cause in order to raise the visibility of how the humanities can contribute to addressing environmental, or rather socio-ecological, concerns. So Sandra's point about power is important. But what has also come out of those conversations, as Ursula experienced at the Rachel Carson Centre, was the emergence of *new forms of knowledge*. Disciplinary depth is really, really important. But we also need to be open to genuinely new inter- and transdisciplinary innovations. One of

[29] Rigby 2019.
[30] Rigby and Kearns 2023.
[31] Mathews 2021; Plumwood 1993, 1995.

those is multispecies studies.

In Australia, this field arose in particular out of the collaboration amongst Thom van Dooren, James Hatley and Deborah Bird Rose, among others, which brought continental philosophy into deep conversation with ethnography, ethology and ecology in order to open up new perspectives on species extinction.[32] So the environmental humanities is a space not only for conversation and collaboration, but also for quite profound methodological innovation. But I'm also extremely aware of the trap of creating new scholarly silos. In the dance between innovation and ethical care we have to negotiate porous borders in the environmental humanities that are able to include the unexpected. As this unfolds differently in different places, we also need international and transnational, as well as interdisciplinary and transdisciplinary, conversations. It's so fantastic that they're happening, right here right now, at this conference.

Questions and Comments

Audience Question: Many of you work across institutions, including museums. How do you regard the rise of a new field, like the environmental humanities, in negotiating institutional systems of power?

Sandra: In academia, like museums, power and money are never separated! There is value in a shiny new 'product' that you can show your boss. It is a way of getting funding. But it also creates a feeling of liberty. With the right funding, you are able to do more meaningful things. For me it is the power of not being secondary, and ancillary to the scientists. We really come together now on an equal basis. Maybe even being on the top! That really matters.

Libby: Museums have a special value as they force you to think about *audiences*, something academics often don't do very well. How is this idea meaningful for children aged 5–12? What can this object tell you about a natural disaster? These are the sorts of questions sel-

[32] Rose et al. 2011; van Dooren and Chrulew 2022.

dom raised at academic conferences! Use your institutional connections to create networks that can help Sandra get her money from the dean, or get a museum to pay a creative film-maker to work on a university project. There is a lot of added value in cross-sector collaborations.

Audience question: What use is history?

Sandra: One of the reasons historians are tolerated is because we're very obnoxious in how we insist everything must be evidence-based and all the best policymaking has to be *evidenced*.

Historians can fight the vague polemic of 'breaking barriers'. Sometimes good fences make good neighbours. In the case of baboons, two things happened. The first was habitat encroachment by the rapidly growing Capetonian population. But the second, more surprising thing, revealed by 'multi-species history', is how the cultures of *both* primates have changed. Baboons have become bolder, and humans have become more fearful, and more alienated from understanding how nature works.

We are not breaking down barriers in a romantic Lion-King-at-Disney-World way. Rather we need to return to an older historical era – the landscape of fear where baboons feared us, and we feared them. What's causing most of the conflict is that the baboons are *not afraid* to come into our kitchens and our gardens, not fearing a powerful and dangerous species. Some of the more romantic among us put out food stations, breaking a barrier from our side as well. Historians are useful in that they can describe how landscapes of fear used to function, and work with primatologists on this. Good hard evidence gets us beyond romanticising polemic like 'why can't we all just be kin and live together?'

Audience question: Why 'humanities'?

Cristina: Adding to Sandra's comments: orcas and other whales are again interacting with boats on the Iberian coasts. Some say the orcas are 'doing an uprising'. But biologists note 'Oh! Those are just orcas being orcas.' Anthropomorphising is dangerous. We can all learn from ethology and ecology too and include that sort of evidence.

I come from a centre of humanities that was grounded in history. Here we discuss the human, alongside the more-than-human, the human-other, and see how we can decentralise history from being only about humans. Orcas have cultures, as do baboons, other primates and many other animals too. How can we do this multispecies work, thinking beyond our own species in ethical and moral terms? The word 'humanity' is in this realm that we are working in, and we should keep it. We need to discuss it, and critically analyse it, and reconstruct it – do the work of constructing and deconstructing the terms and the words. But I think we need the humanities within the many fields of environmental studies.

Tirza: I have been thinking about this discussion a lot. Maybe we are closing a circle here, where we are returning to what the naturalists did, when there was no 'data' or other 'scientific information' and they relied on observation and descriptions in their reports about nature.

Ursula: Yes! To me 'humanities' is also important because the human calls us into responsibility. If you call it something else, it can lose its ethical imperative.

When we designed the soils project, we worked with who was there, 'on the ground'. We asked who could add new competence to the field. We now collaborate with a museum that will have an exhibition as part of the project. We also have science fiction, Indigenous science futurism to imagine another world – you know, how soil relationships could look differently. So, it was really seeing who was there. Arts, science, STS all needed to be part of it, so after all these years thinking what environmental humanities could be, we simply started with people could work on soils and brought their own expertise. Obviously, personalities matter in a team and other practical considerations, but the topic itself draws in the people it needs. The individuality of soils definitely needed to have both sciences and the arts. It's a combination of all.

Concluding Thoughts: Environmental Humanities in the Anthropocene

Claudia Leal, Libby Robin and Amanda Wells

The strength and weakness of environmental humanities stem from the field's openness and its constant process of definition. It can be thought of as a meeting point, for it has had different developments around the world, and what is understood in each place, and by people from different disciplines, reflects the trajectories of both. The environmental humanities can lend tools and collaborations to scholars from the humanities, and the social and natural sciences, interested in the environment who wish to break disciplinary convention. If we want to truly decolonise our imagination and tell histories of the *more*-than-human – the more-than-documented, even – then the suite of tools, theories, connections and methods available through our sister-disciplines may help us chip away at the restraints embedded in home-discipline(s) through tradition. Whatever fusions we make and however diverse our understandings of what the environmental humanities are and can be, they place the humanities and the social sciences at the forefront of environmental thinking and action, for they also include collaboration beyond academia. We need a minimum core and much flexibility, although this can make it difficult to engage with as an early career researcher, or to convincingly use the field as a foundation for project design.

This openness begs the question of its relation to what is being called Anthropocene Studies: are they emerging as part of the environmental humanities or are they a separate but overlapping field? They stem from the idea that humans are a geological force terraforming the planet,[33] which certainly has at its heart the mutual enfolding of the natural and cultural worlds traditionally separated. Sandra Swart has the African Anthropocenes in the plural. This is a good start – it is more inclusive and also acknowledges the fine work over two decades by interdisciplinary Earth Scientists to recognise that something major has changed in the relation between

[33] Chakrabarty 2009; Robin 2018.

our species and the planet through the release of carbon to the atmosphere and other mechanisms. We tend to think that work that chooses the house of Anthropocene studies is part of the larger and older village of the environmental humanities but has a particular concern with the current crisis that ultimately motivates most of us.

The variety found within this village comes from academic traditions and motivations, but even from older linguistic differences that we tend to forget when we communicate in English but carry with us meanings from other tongues. So, translating environmental humanities to different linguistic and cultural settings may be helpful in expanding what is possible through these two English words. Words from German, once very much a language of European academia, offer interesting suggestions, for example. 'Humanities' becomes 'Geisteswissenschaft', where 'Geist' means 'spirit' or 'mind' or 'ghost'. 'Wissenschaft' is 'scholarship', but 'wissen' is more accurately 'knowledge' ('schaft' is like '-ship' for scholarship', a suffix meaning a state of being.)

Perhaps we should consider what Darug artist and Indigenous knowledge holder Chris Tobin, from Australia, reveals to us through his art: that the naming of things brings with it colonial baggage, and can erase the fullness of true meaning.[34] There's something to be said for a label as placeholder, imprecise and broad, rather than pinning something so narrowly that it doesn't reflect the fullness of the thing itself. It may be unsettling to be in definitional flux, but perhaps living in poly-crisis, in 'the' Anthropocene, demands that we be unsettled.

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[34] 'The Naming of Things', Blacktown Arts (Sydney, Australia): https://blacktownarts.com.au/event/the-naming-of-things/

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