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Research with the Moving, the Vivacious Many: A Practical Poetry of Paces in More-Than-Human Worlds

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Abstract

This paper addresses the methodological question of how researchers can meaningfully and ethically include non-human beings not only as research subjects or informants, but as active participants in the research process. Following a review of relevant existing more-than-human and multispecies methodologies, we recognise that non-human beings are already part of academia, yet their capacity to actively shape research remains largely unaccounted for. We engage Springgay and Truman's (2018) practice of 'walking-with' as a methodological approach for bringing non-human beings into the research process, developing what we call 'a practical poetry of paces' as a contribution to this work. We illustrate its application in two different 'fieldwalks' – with a donkey in North Kenya and a dog on Canvey Island in the UK – focusing on the absences that can thus be made present, as well as the types of relational engagement this mode of conducting research engenders. We conclude with ethical considerations about the impossibility of dismantling power relations between human and non-human beings and its implications for the ethicality of conducting research with non-human collaborators.

Keywords

More-than-human, multispecies methodologies, walking, animals, dog, donkey

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Introduction

Who can guess the luna's sadness who lives so
briefly? Who can guess the impatience of stone
longing to be ground down, to be part again of
something livelier? Who can imagine in what
heaviness the rivers remember their original
clarity?

Strange questions, yet I have spent worthwhile
time with them. And I suggest them to you also,
that your spirit grow in curiosity, that your life
be richer than it is, that you bow to the earth as
you feel how it actually is, that we – so clever, and
ambitious, and selfish, and unrestrained – are only
one design of the moving, the vivacious many.

- *The Moth, The Mountains, The River* by Mary Oliver (2012)

How can we meaningfully and ethically include non-human beings, not only as research subjects or informants, but as active participants in the research process? This is the central concern of this paper – and a far more prosaic formulation of the "strange questions" Mary Oliver mulls in her poem. Hers are ponderings with important epistemological implications regarding the sensations of non-human others. She also implies a certain kinship among all the "moving, the vivacious many" – namely movement itself. On this theme, following a brief review of relevant existing animal geographies and more-than-human and multispecies methodologies, this paper expands on Springgay and Truman's (2018) practice of 'walking-with' to suggest a 'practical poetry of paces' as a methodological approach that recognises non-human beings' contributions to the research process and discuss its ethical implications[1]. We go on to illustrate this contribution with examples from our respective fieldwork: Theo studies how a planned infrastructure corridor in North Kenya is anticipated by the people living in its vicinity; Kate studies how humans coexist with environmental disturbance, degradation and destruction on the 'anthropocene island' of Canvey in the UK. We both use mobile methodologies as a central epistemological entry point

[1] A note on terminology: we use the terms more-than-human, non-human and animals throughout this paper. While our ontological position is one of relationality, which disrupts distinctions between humans and animals and refers to a more-than-human world, when discussing our methodology and fieldwork we distinguish between us as 'human' researchers and our 'non-human'/'animal' collaborators (both moving through a more-than-human world) for the benefit of clarity.

and have been accompanied by animal collaborators on our fieldwalks – Theo by the donkey Muunganishi and Kate by the dog Daisy – acknowledging not only their practical contributions but the more-than-human insights they bring to researching multispecies worlds[2]. In conclusion, we share the contributions we think a practical poetry of paces brings to the practice of walking-with as a more-than-human methodology.

Animals in Academia

Non-human beings are, of course, already part of academia. The lab rat, Pavlov's dog, Schrödinger's cat, microorganisms under a microscope, invading bacteria contaminating the sample, the fly in the office, the wild beast counted by the flying ecologist, projections of fish stocks, and the ham sandwiches served at the cafeteria. Conventional research already includes non-humans, either explicitly as an object from which knowledge is extracted, implicitly as a resource to be consumed, or as an interloper to track down and exterminate. Our ambition is, therefore, not to open the gates of academia to animals (they are already here), but rather to better understand the ways they co-constitute the worlds we explore.

At the core of the literature we draw on for this paper lies the simple assertion that the boundaries between human and non-human beings are both diffuse and fluid. There are many sub-disciplines and epistemic currents that acknowledge "the foolishness of human exceptionalism" and accept that "becoming is always becoming *with*" a multitude of others (Haraway, 2008, 244, emphasis in original). Summarised as the 'animal turn' (see Ritvo, 2007), many of these approaches originate in anthropology, such as general calls for *Anthropology Beyond The Human* (Kohn, 2013) or *Anthropology Beyond Humanity* (Ingold, 2013) and the emergence of multispecies ethnography (Smart, 2014; Kirksey and Helmreich, 2010). These anthropological approaches find a parallel in (more-than-)human geography, which has developed *animal geographies* as a distinct category since the 1990s (Lorimer and Srinivasan, 2013; Buller, 2015; Hodgetts and Lorimer, 2015; Whatmore and Thorne, 2000), later developing into *critical animal geographies* (e.g., Gillespie and Collard, 2015), which pays particular attention to the fraught power relations existing within these multispecies places and spaces[3].

Post-colonial and critical race scholars add an important dimension to this work by bringing to the fore concerns that arise with every attempt to speak for the 'other'. As Weil (2010, 3) comments, questions such as, "How do we bring animal difference into theory? Can animals speak? And if so, can they be read or heard?" deliberately echo Spivak's (1988) deliberations about the representability of the subaltern. However, while we recognise that much can be learned about the inclusion of animals in

[2] Another note on terminology: we use the term collaborator to describe our research relationships with Muunganishi and Daisy. Following the work of Matsutake Worlds (2009) and Bawaka Country (2013; 2015; 2016), for example, we recognise that all knowledge is a product of collaboration, and that collaboration is always a more-than-human affair. This is not to ignore the inevitable asymmetries between human researcher and animal collaborator; on the contrary, acknowledging collaboration in this way "enables us to explore the overlaps and gaps among these relationships and the different roles nonhumans are playing in them" (Matsutake Worlds, 2009, 393).

[3] According to Emel, Wilbert and Wolch (2002), an identifiable branch known as "animal geography" was actively researched at least since Newbigin (1913) but the term had disappeared from geographic discourse by the last quarter of the twentieth century. Interest revived in the 1990s, "inspired by the encounter between human geography and social theory, cultural studies, selected natural sciences, and environmental ethics" (Emel, Wilbert & Wolch, 2002, 408).

academia from previous and ongoing struggles for the inclusion of other marginalised groups, we are also attentive to the fact that attempts to go beyond 'the human' too often move too quickly over the plight of those never considered properly human in the first place (Guha-Majumdar, 2019, 375). As Johnson discusses in her book *Race Matters, Animal Matters* (2018), ethical extensionism tends to presume that either racial violence has been overcome and that ending violence against animals is the logical next step, or that only white people can access the privilege to jump over thorny and unfinished racial issues to address violence towards animals. Conversely, Aph and Syl Ko argue that racism and speciesism are "inextricably entangled phenomena that are not merely 'connected' but all make up the same territory" (2020, 72). And thus, a negotiable position vis-à-vis the border between human and other is enrolled in the formation of racialised and gendered bodies and identities (ibid., 73).

In doing this work, then, we are ethically encumbered to pay attention to our own particular subjectivities within the multiple and contested category of 'the human' and recognise how this affects our research in the context of our non-human collaborators. In other words, how Haraway's 'becoming with' occurs alongside (particular) topologies of social, racial and gendered identities (academic, white, woman) and when applied in a Black diasporic context, as Boisseron does in her *Afro-Dog: Blackness and the Animal Question* (2018), for example, can mutate into 'becoming against' where, "the dog and the slave are mutually shaped by the construction of themselves as inherently violent beings" (ibid., 49).

Another ethical challenge that arises is the question of whether the integration of animals into human ways of knowledge-production automatically implies the annihilation of animal subjectivities. Here a "twin peril" (Celermajer et al., 2020, 6) impends: on the one hand, interpretation of interests and meaning risks epistemic assimilation; on the other, avoiding this challenge altogether by not representing beings other than human only serves further exclusion. But, as Spivak (1988, 71) argues, does representation necessarily imply substitution and thus expulsion? We argue that while representing 'others' is always problematic, it is possible to create understanding together-with, rather than about-on non-human beings during ethnographic fieldwork, thus mitigating to a certain extent the double peril. As Boisseron states: "You are not, I wouldn't say, a fraud speaking on behalf of the animal, but you should feel uneasy with that position and this uneasiness is very productive" (quoted in Fielder, 2019, np.).

At this point it is important to acknowledge the significant – and founding – contribution of Indigenous scholarship to more-than-human ethnographies. As Zoe Todd (2016) and Kim Tallbear (2011; 2016) discuss, insights into the more-than-human, sentience and agency, and the ways through which to imagine and understand our 'common cosmopolitical concerns' are not *new*, they have existed as fundamental elements of diverse Indigenous and Aboriginal ontologies and cosmologies for thousands of years. However, these insights have at best been articulated by those who are only recently being accepted as "having-a-real-voice-in-the-academy" (TallBear, 2011) and at worst, been violently appropriated by "white intermediaries", Indigenous stories employed without Indigenous peoples present to hold the use of them to account (Todd, 2016, 7). Ethics in multispecies research then, must also account for 'multiepistemic literacy', a term proposed by Sami scholar Rauna Kuokkanen (2007). Recognising the pluriversal world, and the ontological violence that 'universal' claims of Eurocentric knowledge produce, assist us in advancing our methodological approaches and the ways we can account for a sociality that is co-produced by a multiplicity of entities. The work of the Bawaka Collective (Bawaka Country, 2013; 2015; 2016), "an Indigenous and non-Indigenous, human-more-than-human research collective" that includes Bawaka Country, "the diverse land, water, human, and nonhuman animals, plants, rocks, thoughts, and songs that make up the Yolŋu homeland of Bawaka in North East Arnhem

Land, Australia"[4], has offered us insights into what a more-than-human methodology can look like from an Indigenous perspective. This has encouraged us in our work to consider not only the relationship between researcher and more-than-human collaborator, but our immersion in "an active and lively world" that can "create and communicate" (Bawaka Country, 2013, 192; ibid., 2015, 276).

While we cannot deny being fascinated and moved by the ontological riddles proposed by more-than-human theories, the main concern of this paper is a methodological one. Specifically, we wonder not only how non-human animals can contribute to scientific endeavours – since we are taking their contribution as axiomatic – but also how human animals can recognise and respond to it. Even though there has been a plethora of new (and 'new-to-the-academy') approaches to understanding more-than-human worlds, Buller (2015, 375) maintains that "the methodological ramifications of this [ontological and epistemological] reassessment are under-explored yet nonetheless crucial". Further, while there have been a number of recent attempts to develop methodological approaches that are appropriate for more-than-human research (see: Bell, Instone, and Mee, 2018; Bastian et al., 2017; Pitt, 2015; Lorimer, 2010; Hinchliffe et al., 2005; Hitchings and Jones, 2004) there is still "ample scope to build on these approaches and develop a larger range" (Bell, Instone, and Mee, 2018, 136). With this paper we – Muunganishi, Theo, Daisy and Kate – thus seek to explore some of these ramifications and expand on these approaches.

Walking-With Animals: A Practical Poetry of Paces

In the following, we propose one way of dealing with the central dilemma established above: the question of whether non-human beings can 'speak' to human academics and whether we are able to understand what they 'say', while avoiding the "twin peril" (Celermajer et al., 2020, 6). We suggest embodied movement – walking, to put it simply – as one language through which humans and non-humans can conduct research together. By engaging with this multispecies movement as a practice of *walking-with* donkey and dog, we signal our commitment to research that is informed by an ethics of entanglement (see Sundberg, 2015) that positions us with-in an unfurling wave of life, "being taken up in its motion, moving *with* it" (Kontturi, 2018, 8). It also demands we deconstruct our (received) notions of human privilege, while offering a tangible methodological practice that affords opportunities for bringing humans into affective, impactful relation with seemingly distant, abstracted, inconceivable worlds (see Neimanis and Phillips, 2019). Finally, we suggest that the epistemological care created through walking-with beings other than human allows a recognition of uncomfortable complications that are inherent to more-than-human relations and mobilities, but often remain unaccounted for in academic work.

The aim of walking-with animal research collaborators, then, is to co-become in and through a shared lifeworld and to create understanding of this lifeworld by moving through it together. Animal mobilities do not exist in a realm distinct or disconnected from human mobilities. The two have been tightly woven for most of human history – be it groups of hunter-gatherers following their prey; herders navigating landscapes together with their animals; merchants and armies riding on horses; oxen towing ploughs across fields; or donkeys schlepping burdens too heavy for humans to carry and dogs assisting in hunting, foraging and shepherding. In light of this coevolution, a distinction between human and animal mobilities appears untenable (Bull, 2011, 27). This is particularly true in our case, as both donkeys and dogs are domesticated animals that have been bred for the specific purpose of walking-with human

[4] http://bawakacollective.com/about-us/ [Accessed 22nd April 2021]

companions. This *humanimal mobility*, therefore, describes both a moment of experiencing a shared lifeworld, as well as a history of entangled paths, lines and lineages that is woven into the land and inscribed into the genes of domesticated animals.

Bringing this thinking together, in the rest of this paper we argue for, and offer ethnographic examples of, expanding the practice of walking-with non-human animals to a poetical way of *thinking-and-doing* research (Tsing, 2005, 28). This is not simply an aesthetic stance, but a political and methodological one. As Tsing states, her use of the poetic is to allow readers to feel and be moved, to go beyond what is "sensible and ordinary" and offer new ways of expressing and imagining what is possible (ibid.). How then can walking be understood as poetry? The power of poetry lies in the densification of meaning in lines of writing: a single phrase denotes not only itself but branches out and gently touches meanings outside of its original syntactical territory. We seek to use the same poetic power in the densification and concurrent extension of meaning in lines of more-than-human pacing. Similar to the way, for example, Chao uses what she calls 'living maps' to reveal that "place is a dynamic entity shaped by the lives and doings of multiple actors, both human and nonhuman" (2017, 17), we suggest a 'living poem' or, as we call it, 'a practical poetry of paces'.

A practical poetry of paces also highlights the second part of the term ethnography: the process of *writing*, and thus a way to understand language that is not limited to the human word-based rendering of language. In *Ways of Walking* (2008), Tim Ingold succinctly compares writing and walking: both processes leave traces – letters or footsteps – that could be seen as separate instances, but in fact only reveal their meaning when regarded as a continuous line, similar to the continuous movements that created them (see also Gooch, 2008). A single footstep doesn't tell the observer much about the walker and her direction, unless regarded in sequence. This is the basic heuristic of making sense of the world that we use to understand how human and non-human animals can co-create a form of 'embodied text' by reading and writing each other's movement through a shared lifeworld. However, as our fieldwalks reveal, the linearity and sequential nature described by Ingold is challenged and disrupted through practices of walking-with donkey and dog where subtle subversions and muddled immersions abound.

Fieldwalks with Donkey and Dog

Muunganishi and Theo

From January to April 2018, I conducted fieldwork concerned with the planned construction of an infrastructure corridor (including a road, railway, and oil-pipeline) in the north of Kenya – the Lamu Port-Southern Sudan-Ethiopia Transport (LAPSSET) corridor. As construction of the LAPSSET was not completed at the time of research (apart from some well-hidden concrete beacons marking its way), I was confronted with the awkward situation that the apparent object of my research did not exist materially. I therefore decided to walk along the planned route of the LAPSSET as closely as possible in an attempt to map the *landscapes of anticipation* that people navigate in their everyday lives: the hopes and anxieties projected onto the landscapes that are expected to be crossed by the corridor. Close companions were not only several human, but also one non-human research collaborator: a donkey I named Muunganishi, who accompanied me on my approximately 350 kilometre hike.

As a 'beast of burden', Muunganishi not only travelled across the arid landscape carrying water and camping supplies, but also "bearing her own untold burdens and histories", as Karin Bolender (2020, 18) says of her donkey travel companion Aliass. These histories are inscribed into Muunganishi's body:

the cuts on her flank that mark her as property, and deeper still, the rewriting of her very genes through generations of breeding and domestication. It is a history entangled with human stories in which donkeys feature as silent side-kicks, from the unnamed donkey carrying the virgin Mary to Bethlehem and Sancho Panza's donkey El Rucio, to the (not so silent) Donkey of the *Shrek* movies. A poetry of paces draws attention to these histories and stories and how the foot and hoof steps taken by Muunganishi and myself perpetuate them, too.

At the time I met Muunganishi, she was fatally entangled with humanimal lines of transport. Increased demand for donkey hides in China has advanced commodity chains deep into rural areas of Kenya (Maichomo et al., 2019). According to a report commissioned by The Brooke East Africa[5], 15% of Kenya's donkey population was slaughtered between April 2016 and December 2018 (Maichomo et al., 2019, 2)[6]. Donkeys are mustered and sold to local distributors, who then transport the donkeys to be killed in centralised abattoirs by the lorry-load. It was there, at the last stopover before the slaughterhouse, where I bought Muunganishi.

According to the LAPSSET Development Authority (LCDA), one of the goals of the LAPSSET corridor is to "revive the livestock sector" (LCDA, 2015, 35) through an alignment with existing livestock corridors, creating a "lifeline" for the regional economy (ibid., 24). These "lifelines", however, constitute deathlines for the animals who are consequently connected more efficiently to the global trade of animal bodies. Traditionally, donkeys in the region are used exclusively as a beast of burden and eating donkey meat is taboo. This also means that while they are not needed to carry water or chattels, they are often left to their own devices, roaming the landscape freely. A new infrastructural embeddedness now changes the identity of donkeys from an exploited mover of goods who is primarily defined by their use value to a commodity primarily defined by its exchange value, which is traded on global markets (Bull, 2011). Wayfaring (Ingold 2007) between seasonal grazing grounds and around temporal settlements is superseded by the deadly destinations of transport.

Here, too, the burden of history weighs heavy. "Civilization", Churchill declared in relation to colonial infrastructure projects "must be armed with machinery if she is going to subdue these wild regions to her authority" (1909, 23–24). Similarly, the LCDA states that "the corridor will […] *tame* the persistent raids that characterize these areas and help control animal diseases associated with livestock movement across the region" (LCDA, 2015, 24, emphasis added). Taming here means the channelling of movement through lines of transport, and consequently the forced disentangling of humanimal mobilities through the inclusion of 'tamed' human and animal bodies into industrial capitalist commodity chains.

The One Who Causes Connections

In Karen Lane's (2015) account of walking through Belfast together with her dog Torridon, she sees Torridon's role mostly as one of *connector*. With a similar expectation in mind, I named the donkey that would accompany me for several weeks on my journey from Isiolo to Nginyang *Muunganishi* – meaning "the one who causes connections" in Swahili. I had two modes of connection in mind when naming her. First, I would simply not have been able to walk a distance of almost 350 kilometres alone,

[5] https://www.thebrooke.org/about-us [Accessed 22nd April 2021]

[6] At the time of writing, Kenya has recently banned the commercial slaughter of donkeys (BBC News, 2020).

without any help in carrying my gear and water and food supplies – Muunganishi would thus help me to connect to more places compared to me walking alone. I could have rented a car, but I was worried that this would impede the second way I hoped Muunganishi would help me as a research collaborator: by connecting me with people I met on the way.

Indeed, in this second task she proved tremendously successful. People walking with donkeys between small settlements are a common sight. Donkeys are often used to carry water from remote boreholes, and are occasionally employed as removal entrepreneurs, when for example the head of a Samburu *Boma* (a small settlement housing one extended family) decides to move to another location. What is, however, a rare sight is a white person walking with a donkey – and thus one that attracts curiosity. Most conversations I had on the way started with shoptalk about the behaviour of donkeys, their diets, and *Have you seen the blooming acacia tree down this way? Donkeys love acacia flowers*! Even later, when I returned to the same places I had visited with Muunganishi weeks or months before, people would recognise me as the "Donkey Man" – Muunganishi's popularity would outlast her actual presence. "Wapi punda?!" – where's the donkey? – was a common greeting and the beginning of new conversations.

Many people took pity on my attempts to motivate Muunganishi to walk at the pace and direction I intended. In the beginning, I had decided that yelling "Ta! Ta!" sounded right – I had overheard others making this sound while herding cows – but I was later told by two Samburu herders, that "Ta!" was cow-talk, and that donkeys would only be spurred on by me yelling "Surr! Surr!". Others were convinced that clicking sounds were more effective. Most interviews I recorded on the way are a trialogue between at least three persons: the human interlocutor, Muunganishi and myself. Discussions about the future of pastoralism after LAPSSET are interspersed with clicking sounds, and exclamations of "Surr!" or "Eh, tuende! Tuende punda!" ("Hey, let's go! Let's go, donkey!").

This raises the question of whether Muunganishi actually went along on my research trip on her own volition, or was rather compelled by me prodding her along with sounds or the occasional gentle pull on her leash (whose mere existence illustrated and manifested the uneven power relations and instrumentalisation imbued in our relationship). Despite her infamous mulish wilfulness, romantic notions of companionship gloss over who ultimately held the reins. Conversely, unequal power relations do not mean that Muunganishi did not have any mind of her own.

The Infamous Wilfulness of Donkeys

This is an indication of what Lane (2015) also found while going on walks with her dog: while non-human research assistants are really good at networking, they are more than just neutral mediators that introduce the human researcher to others – they also take an active part in the fieldwork (and whether you agree with the influence they are exerting or not is only of mild interest to them). Muunganishi has keen senses, and often I would be made aware of other people coming our way by a sudden twitch of her ears or a more cautious body language long before I saw what she was reacting to. It made me aware of a landscape of sounds and smells to which I had been largely ignorant before: the direction of the wind as a treacherous companion, one moment revealing the presence of potential danger to her sensitive nostrils, the next betraying our own presence to other snouts, muzzles, and trunks. Muunganishi showed me these previously hidden layers of the landscape.

Donkeys are famous for their wilfulness – which is often portrayed as ignorant stubbornness or literally mulishness[7] – and there is certainly truth to it. While I had a general idea of where I wanted to go based on the fragmentary maps and information I had gathered, Muunganishi constantly opposed this straight line I was staring at on my GPS device with sensible objections regarding the way we should take, and the pace to get there. She would not only find the safest way down and up gullies, but also suggested breaks (see Figure 1), and made sure that my impatience to get to the next destination didn't make me forget about our surroundings. The act of walking-with Muunganishi thus embodied a dialectical relationship between the straight lines of transport on the display of my GPS device and the muddled lines of wayfaring. Muunganishi entangled purposes into our mutual journey that were foreign to my research design: browsing and foraging for food, eloping and evading potential predators are modes of movement that did not figure into my itinerary but are vital to the navigation – and ultimately to the understanding – of the landscapes we crossed.

This contrast between the straight line on a map indicating the route of the LAPSSET corridor on the one (my) hand, and the constant negotiation between landscape, human, and non-human animals on the other constitutes an important contribution to my fieldwork. It illustrates and embodies the contrast and potential conflict between different modes of mobility that are competing in the same area I was traversing with Muunganishi. One mode means listening and responding, moving around an obstacle, and requires constant awareness of the real and potential relations one strikes with one's environment. The other mode is as hard as concrete, unyielding in a way that would literally rather blast a mountain than deviate from its preconceived path; a mode that requires as much shielding from the relations with the surroundings as possible, achieved by fences, asphalt, metal bodies and armed patrols. The *practical poetry of paces* – walking-with Muunganishi through a shared terrain, understanding the landscape step by step, the many vivacious lines of more-than-human lives springing forth from each of them – put the prosaic fantasy of tarmac roads and GPS coordinates into stark contrast.

Walking-with Muunganishi has shown the existence of ways of relating to the world that are physically and ontologically threatened by paving over with competing ways of relating that emphasise not the connections to the immediate environment, its smells, sounds, sights and the sensations of soil under soles, but rather the connection of nodes within a global economy. This calls attention to the ways in which infrastructure projects such as the LAPSSET quite literally overwrite the poetry of paces described above.

In the beginning of our journey I walked in front of Muunganishi – not walking-with her, but leading the way. But after a few days we got to know each other better; I would walk beside her, resting an arm on her shoulder, pinching it gently to emulate the nibbling lips of another donkey. Often, I would simply walk behind her, following her lead – but also driving her through encouraging and impelling sounds. Walking-with Muunganishi meant a negotiation between the two of us, through a terrain of power dynamics that was as difficult and *uneasy* (see: Boisseron, quoted in Fielder, 2019, np.) as the path we walked physically. Were the micro-decisions Muunganishi made about our route equivalent to my macro-decisions that we would walk the route in the first place? Was her dependency on me equivalent to my dependency on her? These questions testify to the often thorny and always mutual ethical entanglements of human and non-human beings during academic fieldwork.

[7] Mules are, admittedly, only half donkey, but the slur still stings.

The lifeworld shared between Muunganishi and myself does not constitute an epistemological capsule, unrelated to what has come before and might come after. The moment of walking-with one another might create the impression of shared purpose, a mutual recognition of each other's needs and wants. In these specific moments, a flatter hierarchy might be possible. Nevertheless, a focus on these

Figure 1: Muunganishi browsing a dry riverbed during a break

moments in isolation is myopic in the sense that it loses sight of our respective embeddedness in other relations of power. I chose Muunganishi to be my companion, not the other way around, and if I had not chosen her, she would have been killed and her corpse would have been sold on international markets. After our journey I sent her to an animal shelter, while I continued processing the empirical material I had extracted with her help into something that would further my academic career.

This begs the ethical question: in how far are Muunganishi's contributions to the research process a case of collaboration between human and non-human animal, or a case of exploitation? Asked more generally, is it possible to include non-human animals in the research process without exploiting their labour? In the context of farm animals, Emel, Johnson and Stoddard (2015, 164) speak of collaboration between human and non-human animals, calling for a recognition of "a flatter hierarchy". "Immediately", they admit "all manner of questions arise regarding exploitation, power imbalances, and instrumentalities" (ibid.). With reference to Haraway, they argue that freedom and a relation of use are

not mutually exclusive, and that certain farming practices can be more equal than others, even if non-human animals eventually end up on the dinner plate (Emel, Johnson, and Stoddard, 2015). While walking-with Muunganishi I had similar thoughts about equal relationships between us. Hadn't I rescued her from certain death in an industrial abattoir? Didn't I treat her more as a friend than a means of transport? But these rationalisations served mostly the soothing of my own sore conscience. Even though we both needed one another, the hierarchies between us were clear, substantial and granted by the authority of species membership.

Daisy and Kate

Daisy and I have been spending time together on Canvey Island in the Thames Estuary, UK, for fieldwork since August 2017. Canvey is in many ways an archetypal anthropocene place: a densely populated, socio-economically deprived, heavily industrialised 'reclaimed' wetland sitting below sea level (the island's highest point is a former landfill 'returned to nature' in the form of a park) defended from rising tides by a seven metre wall, and boasting an abandoned oil refinery that is now one of the most biodiverse places in the UK[8]. During our time there, Daisy and I have engaged in participant-led walk-and-talks, intertidal mud-walking, interviews and fieldwork, as ways of attending to and engaging with the richly emplaced, intimate, more-than-human, relational experiences of Canvey as an anthropocene island.

Involving Daisy, a lean, long-legged, short-haired, enthusiastic hound of indefinite origins, in the project was part practical and part inquisitive. Practically speaking, as her primary companion I had to find ways that we could 'go-along' together in my work. But I was also interested in what she might be able to contribute. How might her presence change the ways I access and move through places? What might she help me to understand and experience (differently) about Canvey? How might her processes of knowing compliment and complicate my own? What might she be able to teach me about learning to live well, together, in the tangled, troubled times and places of the anthropocene?

Daisy's Desire Lines: Marsh and Muddle

It was during our first wander together on the island through West Canvey Marshes that Daisy helped me to begin experimenting with an inventive mode of mobile research – one that I have called 'muddling'.

As you can see in Figure 2, Daisy made it clear that the quaking muddy border between wet and dry in wetland places is where all the action is. Or, to put it more academically, as Owain Jones says: "Intertidal spaces and their land margins are spaces of extraordinary richness for entangled human and non-human becomings" (2010, 190).

While I felt tied to the path, the line in front of me trodden by those (humans) who came before me, Daisy followed desire lines of her own. It was not long before I, gingerly, began muddling too, placing my feet in places that were somewhere between land and water, sometimes dabbling, sometimes – accidentally! – wallowing (see Figure 3).

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[8]https://www.theguardian.com/lifeandstyle/2017/oct/15/canvey-wick-the-essex-rainforest-that-is-home-to-britains-rarest-insects [Accessed 28th April, 2021]

Immersed in the quaggy mire, even my meagre (when compared to Daisy's) sensory receptors became attuned to a lively richness that had been insensible before. I could hear the trickling of the tide through hidden creek crevices, and the popping of the mud as it drained. The sulphuric haze of microorganisms hard at work munching through mulch thrust itself uncomfortably up my nose. Muddy maws, formless yet forceful, sucked at my feet; just two metres from the well-worn path I was suddenly subject to a slimy ontological assault, the line between wallow and swallow fine. The (traditional Western) regimented opposition of subject and object became muddled; my (perceived) sense of bounded impermeability challenged. In walking with Daisy, I had begun *walking-with* the marsh. I was, as John Wylie puts it, "'in' the landscape, but also up against it" (2005, 240). My mode shifted from walking as movement, as journey, to walking as entanglement, as intra-action and relationship (Barad, 2007).

Figure 2: Daisy mud-splattered and satisfied after a muddle through the marshes

As Karen Lane (2015) notes, dog-walking is rarely a direct journey from A to B; and further, there is much research in social sciences and animal studies to support the argument that dogs encourage social interaction (e.g., Wood et al., 2007; Hart, 1987; Messent, 1983). Yet Lane's engagement with these points remains firmly on a one-dimensional (and one-directional) human-dog spectrum. She is interested in doggy meanderings only insofar as they "vastly increas[e] the random-stranger-to-anthropologist

Figure 3: (S)wallowed

encounter ratio" (Lane, 2015, 28), opening her up to human interactions that might not have happened otherwise. (Lane's use of the word 'random' here is also revealing in how she accounts for Torridon's contribution to the research). Attending to Daisy's particular mode of moving through and engaging with

the marsh-world, her 'wayfaring', as it were (I cannot call it meandering for she travels with such conviction), was the beginning of my experiment with the notion of 'muddle', into which I engage the word's two meanings, one contemporary – "to bring into a disordered or confusing state" – the other historic – "to wallow or dabble in mud" (Pearsall, 2002, 934). *Muddle* has grown into a central conceptual and material metaphor for my research, a place-based (but not place-bound[9]) and place-responsive tool for both *thinking* and *doing* research (differently), and thus, by extension, for thinking and doing the world (differently). The *idea* of *muddle*, as disorientating and confusing, mobile and immersive, helps me to understand the world as ever-emergent and in-between; and account for ways of knowing that are indistinct and slippery, often contradictory, and always more-than-human. The *practice* of *muddle*, wallowing with-in Canvey's intertidal wetlands, helps me to disrupt anthropocentric expectations of moving singularly, smoothly, rhythmically through space and place; tethers experience to concrete (nature) time; and draws my attention to the sticky frictions between bodies, or what Tuana calls "viscous porosity", "a means to better understand the rich interactions between beings through which subjects are constituted out of relationality" (2008, 188).

By following Daisy, by allowing myself to 'be moved' by her, I became immersed in a whole atmosphere of forceful affects that included all manner of non-human entities, both animate and inanimate. The consequent slowing down of my movement on the slimy and unstable terrain, the sharp focus it demanded and the hesitation it produced, made me viscerally aware of my experience being made up of ongoing and indeterminate encounters, inter-actions, and intra-actions. When figured *poetically*, this mode of moving, walking-with Daisy and the Canvey marsh, is *paratactic*, each pace placed without apparent connection to the one that came before, or the one that comes after; a productive discomfort that at once disorientates and immerses, disconnects and interconnects. "Paratactical conventions", says Hayden White, "try to resist any impulse to […] hierarchical arrangement" (1971, 67) and thus challenge the "dominating" hypotactic "logos" that demands the subordination of one (clause) to another (Adorno, 1992, 140). It is, says Spivak (2000, 338), "the power in language to withhold its own power of making connections", a "thinking into openness" (Adorno, 2000, 7). By disrupting the path that is habitually negotiated, by demanding the unsettling and unlearning of what has come before (and thus, what will come after), paratactic pacing insists on new connections and relations being made, on alternate orderings being assembled.

In ethico-ecological terms the effect is profound. Following Daisy into the murky, muddled marsh, unplanned and inappropriately shod, felt uncertain and precarious. My (academically expected) position as well-prepared researcher, with methodological and ethical plans made *a priori* at my desk, was brought into question. Exchanging my syntax of pedestrian plodding for paratactic pacing viscerally reminded me of the myth of human exceptionalism, and demanded instead an experience of Alaimo's (2016) corporeal ethics, an ethics of entanglement and accountability that emerges with each (faltering) step that I take, ever under negotiation with multiple and diverse bodies. And this in turn intensified and immersified my relationship with the marsh, drawing me deeper into the urgent question of worldly survival that is playing out in the mattering of Canvey Island's margins, between concrete wall and wet-land. Mud has been seen as resistant to Progress for as long as the idea of Progress has existed. One of the most striking manifestations of this, what I call 'miso-muddy' (hatred of the muddy), is the draining and 'reclaiming' of wetlands, of which Canvey Island is a product. It's estimated that 64% of the world's

[9] See, for example, Escobar (2001)

wetlands have disappeared since 1900[10]; in England alone up to 90% of wetlands have been vanquished since the industrial revolution[11]. Perhaps the biggest challenge facing wetlands, and the main driving force behind their destruction, is the human perception of them. "In the patriarchal western cultural tradition wetlands have been associated with death and disease, the monstrous and the melancholic, if not the downright mad […] They have been seen as a threat to health and sanity, to the clean and proper body, and mind" (Giblett, 1996, 3). They have also been seen as simply useless – and as Barbara Hurd reminds us "lack of function in our [Western] culture means lack of value" (2001, 13). Yet wetlands are one of the most productive ecosystems on earth, providing vital energy and shelter to myriad species, as well as acting as natural water filters and carbon sinks (Potouroglou, 2016; Alonso, Gregg and, Morecroft, 2012), not to mention flood protection. This ticking off of wetlands' benefits certainly plays a powerful part in the practice of their preservation. But what is revealed through paratactic pacing is something far richer and further reaching, an encounter at the edge of the human and into openness, where responsibility to others becomes response-ability *with* others, and the muddle of the marsh is given the power to both move and be moved.

When considering these findings in relation to my larger research project exploring how humans coexist with-in environmental disturbance, degradation and destruction, it is clear that walking-with Daisy and the marsh offer opportunities for a richer, more accountable, more immersive acknowledgement of humans' fraught implications in the often overwhelmingly abstracted anthropocene. Accepting the messy, uncomfortable, ambiguous and precarious contributions of the more-than-human into my ethnographic work – rather than only welcoming those contributions deemed (often *a priori*) neat, clean, useful and easily extractable – demanded that I slowed down, not only my movements but also my thinking. In this sense, walking-with became more than a methodological approach, and more of an orientation to research – an invitation, as Tsing puts it, "to patiently sit in a muddle, not trying to solve it, but to take the time to consider incommensurability" (2016, 5). It is here that I see a practical poetry of paces offering a particularly valuable and, I would argue, underrated contribution to multispecies methodologies and research with more-than-human others: not only opening our work to a deeper consideration of the worlds we humans inhabit and the ways they are produced and transformed by a multitude of others (which is of undeniable importance), but in actively, productively – and perhaps even poetically – distorting the forms of our research and its expectations. If we consider 'slowness' in the way Stengers (2005, 2018) does it becomes not (only) about speed but about political and transformative research that creates "opportunity to arouse a slightly different awareness of the problems and situations mobilizing us" (2005, 9). It is a process of unlearning and unsettling what has come before – and what is anticipated to come after – through what Stengers refers to as "collective thinking in the presence of others" (ibid.). Others, like Daisy and the Canvey marsh, who bring with them opportunities for spontaneity, curiosity and possibility but also risks of unpredictability, precarity and contradiction.

Conclusion

[10] https://www.ramsar.org/sites/default/files/documents/library/factsheet3_global_disappearing_act_0.pdf [Accessed 1st November 2020]

[11] https://www.wwt.org.uk/ [Accessed 1st November 2020]

Starting with the acknowledgement that non-human beings, the 'moving the vivacious many,' are already ubiquitous in academia, we set out to make sense of this under-recognised presence. We sought the answer to the question *what does it mean to meaningfully include non-human animals as active participants in the research process?* using walking-with animals as a methodology. This includes the activity of walking itself, as well as the perspective thus engendered. We thus suggest that animals are not mere fieldwork clutter or instruments, but an active part of creating knowledge, their contribution transforming not only what we know, but *how* we know and the ethics of this knowledge production. When thinking and doing, being and acting, are understood as always already in the presence of others, author-ity and response-ability become situated and indeterminate, with, as Haraway (2008) reminds us, inheritance demanding accountability.

The ways in which we collaborated with animals during our fieldwork was different, yet shared some fundamental similarities. While Daisy had more agency in following her own 'desire lines' than Muunganishi, both non-human research collaborators revealed a multitude of trails and traces that criss-crossed the landscape in addition to the more linear human-made roads and paths. We described the multitude of these associations created by moving bodies, the steps that sometimes followed a straight line (such as the planned route of the LAPSSET), and were sometimes a nonhierarchical *paratactic* faltering, as a poetic practice: a *practical poetry of paces*. Even though the relationship between Daisy and Kate extends far beyond their fieldwork experience and Muunganishi and Theo only shared a common path for a couple of weeks, each encounter was able to create meaning by walking together in a shared lifeworld.

The descriptions of our own fieldwork experiences were not meant as a 'how to' guide, but rather the start of a conversation on the extent to which it is possible and meaningful to do research with animals, as well as some of the ethical implications it entails. In order to initiate this conversation, we somewhat provocatively referred to these non-humans as our research *collaborators*. While the word suggests the possibility of human and non-human animals *working together*, it is necessary to acknowledge significant inequalities and differences in how, why and under what terms this work was undertaken. While the boundary between the human species and the other 'moving, vivacious many' may be diffuse, abolishing the notion of difference without addressing the reality of difference only serves to hide exploitative power dynamics and to conjure a mirage of coequality where unequal power-relations are formative (Malm, 2018). Here, further studies, perhaps taking lessons from action-research oriented approaches, are necessary to not merely acknowledge but actively address and minimise the inequalities between human and non-human beings in academia.

The moments of walking-with during which a lifeworld can be shared between human and non-human beings are therefore even more important. Like words in a poem, the steps taken while walking-with animals branch out and associate with meaning outside their specific momentary-ness, making absences present. Though transitory, they thus show, sometimes with blunt brutality, the extent to which humanimal encounters are permeated by relations of exploitation and oppression. These moments show how this is not a natural or inevitable condition. The point here is not that living in the discomfort this awareness creates constitutes in itself absolution for our complicity. Rather, it is the humbleness that Mary Oliver describes in the poem quoted in the introduction. Our particular perceptions, our particular ways of walking and knowing are like our bodies, only one design among the moving, the vivacious many.

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References

Adorno, Theodor W. 1992. "Parataxis." In Notes to Literature, translated by Shierry Weber Nicholsen. Vol. 2. New York: Columbia University Press.

———. 2000. Metaphysics: Concept and Problems. Edited by Rolf Tiedemann. Translated by Edmund Jephcott. Cambridge: Polity Press.

Alaimo, Stacy. 2016. Exposed - Environmental Politics and Pleasures in Posthuman Times. Minneapolis & London: University of Minnesota Press.

Alonso, I, K Weston, R Gregg, and M Morecroft. 2012. "Carbon Storage by Habitat: Review of the Evidence of the Impacts of Management Decisions and Condition of Carbon Stores and Sources.".

Barad, Karen. 2007. Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning. Durham, North Carolina; London, UK: Duke University Press.

Bastian, Michelle, Owain Jones, Niamh Moore, and Emma Roe. 2017. Participatory Research in More-than-Human Worlds. London, New York: Routledge.

BBC News. 2020. "Kenya Bans Commercial Slaughter of Donkeys." BBC News Africa, February 25, 2020. https://www.bbc.com/news/world-africa-51629660.

Bell, Sarah J., Lesley Instone, and Kathleen J. Mee. 2018. "Engaged Witnessing: Researching with the More-than-Human." Area 50 (1): 136–44. https://doi.org/10.1111/area.12346.

Boisseron, Bénédicte. 2018. Afro-Dog: Blackness and the Animal Question. New York: Columbia University Press.

Bolender, Karin. 2020. The Unnaming of Aliass. Goleta, California: Punctum Books.

Bull, Jacob. 2011. "Introducing Movement and Animals." In Animal Movements – Moving Animals. Essays on Direction, Velocity and Agency in Humanimal Encounters, edited by Jacob Bull. Uppsala: University Printers Uppsala.

Buller, Henry. 2015. “Animal Geographies II: Methods.” Progress in Human Geography 39 (3): 374–84.

Chao, Sophie. 2017. "There are no straight lines in nature": Making Living Maps in West Papua." Anthropology Now 9 (1): 16-33. https://anthronow.com/feature-preview/there- are-no-straight-lines-in-nature

Churchill, Winston Spencer. 1909. My African Journey. Toronto: William Briggs.

Celermajer, Danielle, Sria Chatterjee, Alasdair Cochrane, Stefanie Fishel, Astrida Neimanis, Anne O’Brien, Susan Reid, Krithika Srinivasan, David Schlosberg, and Anik Waldow. 2020. “Justice Through a Multispecies Lens.” Contemporary Political Theory 19 (3): 475-512.

Bawaka Country, Sandie Suchet-Pearson, Sarah Wright, Kate Lloyd, and Laklak Burarrwanga. 2013. “Caring as Country: Towards an Ontology of Co-Becoming in Natural Resource Management.” Asia Pacific Viewpoint 54 (2): 185–97.

Bawaka Country, Sarah Wright, Sandie Suchet-Pearson, Kate Lloyd,Laklak Burarrwanga, Ritjilili Ganambarr, Merrkiyawuy Ganambarr-Stubbs, Banbapuy Ganambarr, and Djawundil Maymuru. 2015. “Working with and Learning from Country: Decentring Human Author-Ity.” Cultural Geographies 22 (2): 269–83.

Bawaka Country, Sarah Wright, Sandie Suchet-Pearson, Kate Lloyd, Laklak Burarrwanga, Ritjilili Ganambarr, Merrkiyawuy Ganambarr-Stubbs, Banbapuy Ganambarr, Djawundil Maymuru, and Jill Sweeney. 2016. “Co-Becoming Bawaka: Towards a Relational Understanding of Place/Space.” Progress in Human Geography 40 (4): 455-75.

Emel, Jody, Chris Wilbert, and Jennifer Wolch. 2002. “Animal Geographies.” Society & Animals 10 (4): 407–12.

Emel, Jody, Connie L. Johnson, and Elisabeth (Lisa) Stoddard. 2015. “Livelier Livelihoods – Animal and Human Collaboration on the Farm.” In Critical Animal Geographies. Politics, Intersection, and Hierarchies in a Multispecies World, edited by Kathryn Gillespie and Rosemary-Claire Collard, 203–12. London & New York: Routledge.

Fielder, Brigitte. 2019. “Why Animal Studies Must Be Antiracist: A Conversation with Bénédicte Boisseron.” Edge Effects, March 2019.

Giblett, R. J. 1996. Postmodern Wetlands: Culture, History, Ecology. Edinburgh: Edinburgh University Press.

Gillespie, Kathryn, and Rosemary-Claire Collard. 2015. Critical Animal Geographies: Politics, Intersection, and Hierarchies in a Multispecies World. London & New York: Routledge.

Gooch, Pernille. 2008. “Feet Following Hooves.” In Ways of Walking – Ethnography and Practice on Foot, edited by Tim Ingold and Jo Lee Vergunst, 67–80. Aldershot, Burlington: Ashgate.

Guha-Majumdar, Jishnu. 2019. “Blackness and Animality beyond Recognition.” Qui Parle 28 (2): 373–89.

Haraway, Donna. 2008. When Species Meet. Minneapolis, London: University of Minnesota Press.

Hart, B. L. 1987. “Behavior of Sick Animals.” The Veterinary Clinics of North America. Food Animal Practice 3 (2): 383–91. https://doi.org/10.1016/S0749-0720(15)31159-2.

Hinchliffe, Steve, Matthew B. Kearnes, Monica Degen, and Sarah Whatmore. 2005. “Urban Wild Things: A Cosmopolitical Experiment.” Environment and Planning D: Society and Space 23 (5): 643–58.

Hitchings, Russell, and Verity Jones. 2004. “Living with Plants and the Exploration of Botanical Encounter within Human Geographic Research Practice.” Ethics, Place and Environment 7 (1–2): 3–18.

Hodgetts, Timothy, and Jamie Lorimer. 2015. “Methodologies for Animals’ Geographies: Cultures, Communication and Genomics.” Cultural Geographies 22 (2): 285–95.

Hurd, Barbara. 2001. Stirring the Mud: On Swamps, Bogs and Human Imagination. Boston & New York: Houghton Mifflin Company.

Ingold, Tim. 2007. Lines: A Brief History. London & New York: Routledge.

———. 2013. “Anthropology Beyond Humanity.” Suomen Antropologi: Journal of the Finnish Anthropological Society 38 (3): 5–23.

Ingold, Tim, and Jo Lee Vergunst. 2008. Ways of Walking: Ethnography and Practice on Foot. Edited by Tim Ingold and Jo Lee Vergunst. Hampshire, UK: Ashgate Publishing Limited.

Johnson, Lindgren. 2018. Race Matters, Animal Matters: Fugitive Humanism in African America. New York: Routeledge.

Jones, Owain. 2010. “‘The Breath of the Moon’: The Rhythmic and Affective Time-Spaces of UK Tides.” In Geographies of Rhythm: Nature, Place, Mobilities and Bodies, edited by Tim Edensor, 189–203. Abingdon, UK; New York: Routledge.

Kirksey, S. Eben, and S. Helmreich. 2010. “The Emergence of Multispecies Ethnography.” Cultural Anthropology 25 (4): 545–76.

Ko, Aph, and Syl Ko. 2020. Aphro-Ism: Essays on Pop Culture, Feminism, and Black Veganism from Two Sisters. 2 [2017]. Brooklyn, NY: Lantern Publishing.

Kohn, Eduardo. 2013. “How Forests Think: Toward an Anthropology Beyond the Human.” University of California Press, 282.

Kontturi, Katve-Kaisa. 2018. Ways of Following: Art, Materiality, Collaboration. London: Open Humanities Press.

Kuokkanen, Rauna Johanna. 2007. Reshaping the University: Responsibility, Indigenous Epistemes, and the Logic of the Gift. Vancouver, Britich Columbia: UBC Press.

Lane, Karen. 2015. “Canine Connections: Fieldwork with a Dog as Research Assistant.” Anthropology in Action 22 (3): 27–38.

LCDA. 2015. “Investment Prospectus.” Nairobi. http://www.lapsset.go.ke/reports/.

Lorimer, Jamie. 2010. “Elephants as Companion Species: The Lively Biogeographies of Asian Elephant Conservation in Sri Lanka.” Transactions of the Institute of British Geographers 35 (4): 491–506.

Lorimer, Jamie, and Krithika Srinivasan. 2013. “Animal Geographies.” In The Wiley- Blackwell Companion to Cultural Geography, edited by Nuala C. Johnson, Richard H. Schein, and Jamie Winders, 332–42. Wiley-Blackwell.

Maichomo, M. W., T. Karanja-Lumumba, M. O. Olum, J. Magero, T. Okech, and S.N. Nyoike. 2019. “The Status of Donkey Slaughter in Kenya and Its Implication on Community Livelihoods.” Kikuyu. http://www.kalro.org/sites/default/files/donkey-kalro-report-final-trade-crisis.pdf.

Malm, Andreas. 2018. The Progress of This Storm. Nature and Society in a Warming World. Journal of Chemical Information and Modeling. Vol. 53. London: Verso.

Matsutake Worlds. 2009. “A New Form of Collaboration in Cultural Anthropology: Matsutake Worlds.” American Ethnologist 36 (2): 380–403.

Messent, P. R. 1983. “A Review of Recent Developments in Human-Companion Animal Studies.” California Veterinarian.

Neimanis, Astrida, and Perdita Phillips. 2019. “Postcards from the Underground.” Journal of Public Pedagogies 4 (127–139).

Newbigin, M. I. 1913. Animal Geography: The Faunas of the Natural Regions of the Globe. Oxford: Clarendon.

Oliver, Mary. 2012. A Thousand Mornings. New York: Penguin Press.

Pearsall, Judy, ed. 2002. Concise Oxford English Dictionary. 10th, revi ed. New York: Oxford University Press Inc.

Pitt, Hannah. 2015. “On Showing and Being Shown Plants: A Guide to Methods for More- than-Human Geography.” Area 47 (1): 48–55. https://doi.org/10.1111/area.12145.

Potouroglou, Maria. 2016. “Assessing the Role of Intertidal Seagrasses as Coastal Carbon Sinks in Scotland.” Edinburgh Napier University.

Ritvo, Harriet. 2007. "On the Animal Turn." Deadalus 136: 118-22

Smart, Alan. 2014. “Critical Perspectives on Multispecies Ethnography.” Critique of Anthropology 34 (1): 3–7.

Spivak, Gayatri Chakravorty. 1988. “Can the Subaltern Speak?” In Marxism and the Interpretation of Culture, edited by C. Nelson and L. Grossberg, 271–313. Basingstoke: Macmillan Education.

———. 2000. “Thinking Cultural Questions in ‘Pure’ Literary Terms.” In Without Guarantees: In Honour of Stuart Hall, 335–58. London & New York: Verso.

Springgay, Stephanie, and Sarah E. Truman. 2018. Walking Methodologies in a More-than- Human World: WalkingLab. Walking Methodologies in a More-than-Human World WalkingLab.

Stengers, Isabelle. 2005. "The Cosmopolitical Proposal". In Making Things Public, 994-1003. Cambridge, Massechussetts: MIT Press.

———. 2018. Another Science is Possible: A Manifesto for Slow Science. Heboken, New Jersey: Wiley.

Sundberg, Juanita. 2015. "Ethics, Entanglement and Political Ecology." In The Routledge Handbook of Political Ecology, edited by Tom Perreault, Gavin Bridge, and James McCarthy, 117-26. London and New York: Routledge.

TallBear, Kim. 2011. "Why Interspecies Thinking Needs Indigenous Standpoints."

Fieldsights, no. November 18. https://culanth.org/fieldsights/why-interspecies- thinking-needs-indigenous-standpoints.

———. 2016. "Standing with and Speaking as Faith: A Feminist-Indigenous Approach to Inquiry." Sources and Methods in Indigenous Studies 10 (2): 78–85.

Todd, Zoe. 2016. "An Indigenous Feminist's Take On The Ontological Turn: 'Ontology'Is Just Another Word For Colonialism." Journal of Historical Sociology 29 (1): 4–22.

Tsing, Anna Lowenhaupt. 2005. Friction - An Ethnography of Global Connections. Princeton, Woodstock: Princeton University Press.

———. 2016. The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins. Princeton, New Jersey: Princeton University Press.

Tuana, Nancy. 2008. "Viscous Porosity: Witnessing Katrina." In Material Feminisms, editedby Stacy Alaimo and Susan Hekman, 188–213. Bloomington, IN: Indiana University Press. https://doi.org/10.2979/reseafrilite.47.2.09.

Weil, Kari. 2010. "A Report on the Animal Turn." Differences 21 (2): 1–23.

Whatmore, Sarah, and Lorraine Thorne. 2000. "Elephants on the Move: Spatial Formations of Wildlife Exchange." Environment and Planning D: Society and Space 18 (2): 185–203.

White, Hayden. 1971. "The Culture of Criticism." In Liberations: New Essays on the Humanities in Revolution, edited by Ihab Hassan. Middleton: WEsleyan University Press.

Wood, Lisa J., Billie Giles-Corti, Max K. Bulsara, and Darcy A. Bosch. 2007. "More than a Furry Companion: The Ripple Effect of Companion Animals on Neighborhood Interactions and Sense of Community." Society and Animals 15 (1): 43–56.

Wylie, J. 2005. "A Single Day's Walking: Narrating Self and Landscape on the South West Coast Path." Transactions of the Institute of British Geographers, New Series 30 (2): 234–47.