On dying ecologically in the Anthropocene

What might we learn about living a more ecocentric life from contemplating death? Alongside persistent calls for radical, large-scale cultural transformations, this article contends that we ought also to turn our attention to the humble and humbling task of caring for the dead. As we learn to dwell on Earth in the Anthropocene (a concept critiqued in the article), we would do well to incorporate dying, death, decay, decomposition and 'deathcare' into our critical lexicon. A genuinely ecocentric culture must come to terms with the intimate entwinement of life and death. Focusing on ecological deathcare practices in the US, the article demonstrates how innovative approaches to deathcare may be propelling our bodies into more ecocentric relationships with(in) the teeming more-than-human world. *Recompose*, a public benefit corporation which serves in this essay as an exemplar of these emergent deathcare practices, invites us to enter our dead bodies into new assemblages. In its efforts to develop a human composting system, *Recompose* enjoins us to give our bodies (back) to the ecological systems that sustain them, to become soil with others in the compost heap. Living ecologically, this article sustains, must also come to mean dying ecologically.

"Have you guess'd you yourself would not continue?
Have you dreaded these earth-beetles?
Have you fear'd the future would be nothing to you?"
(Whitman, 1867: 298)

Although troubling in many respects, the Anthropocene concept has productively prodded many among us to rethink long-standing and taken-for-granted aspects of human life.[1] From one angle, the notion of the Anthropocene seems to highlight what we might call, begrudgingly, the geological force of the human species. Over and against the well-intentioned efforts of many thinkers to destabilize tales of human exceptionalism, the Anthropocene concept suggests that not only are *Homo sapiens* able to exert force on the Earth but that 'we' have been doing so for millennia.[2]

From another angle, the idea of the Anthropocene appears to suggest that the same forms of power that have made it possible for us to alter Earth's systems may also be securing our species' demise. As one spokesperson for the Anthropocene concept, Roy Scranton, recently lamented, "The odds of our species surviving [this new geological epoch] are slim" (2015: 27). Through ignorance, disregard and greed, the argument goes, we have so damaged our only home that it now threatens to annihilate us unless we radically transform our relation to Earth (Serres, 1995). And so the Anthropocene is a "sign of our power, but also of our impotence" (Bonneuil and Fressoz, 2016: xi).

Power and impotence: the twin currents of the Anthropocene exert their force upon us as we chart a way forward. Faced with the fact that, as a species, human beings have attained a level of force that makes us actors on a geological scale and that, as individuals, we are tragically ineffective at rolling back ecological damage, we must find ways of responding that both avoid arrogance and escape defeatism. As Ian Whyte put it in the first issue of *The Ecological Citizen*, "It is time – way past time – that those who wish to defend life on Earth became effective" (2017: 13). Vexed by our seeming inability to enact large-scale transformations, Whyte directs the

Joshua Trey Barnett

About the author

Joshua is Assistant Professor of Communication at the University of Minnesota Duluth, Duluth, MN, USA.

Citation

Barnett JT (2018) On dying ecologically in the Anthropocene. *The Ecological Citizen* **2**: 23–9.

Keywords

Anthropocentrism; dying ecologically; sustainability

readers of the Journal to focus "our time and energy on doing what is necessary to change society, not fighting individual issues" (2017: 13).

Whyte's call to action is both damning and inspiring: Don't sweat the small stuff, he proclaims. Save the world instead! "We need fewer of the single-issue campaigns of the 'Save X' variety," Whyte writes. "And we don't need a plethora of tiny groups, each jealously defending their miniscule turf and each acting alone in the face of gargantuan forces" (2017: 14). Those "gargantuan forces" – be they cultural, economic, governmental, legal or something else – seem to demand equally gigantic counter-forces. There is, from this perspective, good reason to support global climate agreements and other far-reaching efforts to change society's impact on the more-than-human world.

Large-scale cultural transformations are certainly necessary if we hope to establish sustainable relationships on Earth, but small-scale, intimate changes are also an important part of any attempt to live more ecologically. Grounded in the specificity of places and their inhabitants, the notion of ecology calls for very particular actions that take local conditions into consideration and thus operate on the small rather than the large scale. Sometimes the "miniscule turf" defended by "tiny groups" is actually solid ground with its own rhythms and peculiarities understood best by local inhabitants. And if ecology has taught us anything, it is that there is no such thing as an 'individual issue'. Furthermore, if the aim is to change societies, it is difficult to see how any unified approach will do. Beyond reifying the East–West, Third World–First World or Global North–Global South dualisms that both help and hinder so much thinking about ecological calamities, it is certainly the case that cultures and ecosystems vary in myriad ways and that those differences pose not only challenges for conceiving a sustainable future but also supply occasions for creating viable relationships with our more-than-human kin.

"Cultures and ecosystems vary in myriad ways and those differences pose not only challenges for conceiving a sustainable future but also supply occasions for creating viable relationships with our more-than-human kin."

Every set of conditions invites and enables certain forms of response. The challenge before us is to find ways in every context to disrupt anthropocentricism. Following Eileen Crist, I am convinced that much good can come from our refusing human-centredness and that, as she recently suggested in the Journal, "Another way of life will emerge into view when we embrace another worldview to live by" (2017: 64). It seems to me that we come closest to glimpsing that other worldview – ecocentrism – and enacting that other way of life when we turn to humble and humbling things.

What is more humbling than death? Grappling with our mortality not only helps us better understand who and what we are, as thinkers such as Martin Heidegger (1953) and Ernest Becker (1973) have demonstrated in their own ways. Engaging with our finitude also sheds light on the ways in which we are intimately entwined in ecological systems, and thus can potentially unsettle entrenched forms of anthropocentrism (Barnett, 2018). Death and its aftermath graphically remind us of our entanglement with more-than-human cohabitants small and large, as well as of how we are susceptible to the deep rhythms of decay and renewal that pulsate throughout and enliven ecosystems.

As the ecofeminist philosopher Val Plumwood put it not long before her own death, "At the individual level, death confirms transience, but on the level of the ecological community, it can affirm an enduring, resilient cycle or process" (2008: 74). For instance, although we tend culturally to deny it, dead human bodies can and do provide sustenance to our more-than-human kin. As our dead bodies decay and are consumed by others, the nutrients contained within them are stored, temporarily, in other creatures' and plants' bodies and so are distributed throughout the ecosystem. And as our corpses decompose underground, they enrich the soil, making it possible for other plants and animals to flourish. From an ecological perspective, Plumwood writes, "we can see death as recycling, a flowing on into an ecological and ancestral

community of origins" (2008: 70). If we open ourselves up to this humbling view, we see that life and death are intimately entwined "on the level of the ecological community."

In the US, a very different conception of death and 'deathcare' has taken hold during the past century and a half. Prior to the American Civil War, the dead were mostly cared for by family. Bodies were kept in the coolest parts of the home to delay decay long enough for loved ones to visit. Simple wooden caskets were commissioned from local cabinetmakers, and bodies were moved by horse or by hand to gravesites dug in family cemeteries or churchyards (Laderman, 2003).[3] Since the American Civil War, Mark Harris writes, "the once simple and natural act of laying our dead to rest has been transmogrified into a large-scale industrial operation that, like any other manufacturing process, requires the inputs of vast amounts of energy and raw materials and leaves a trail of environmental damage in its wake" (2007: 6).

While they have traditionally escaped the ire of environmentalists, both conventional burial and cremation create significant and demonstrable impacts on ecosystems.[4] For instance, as Alexandra Harker notes, "Every year in the United States, the chemicals and materials buried along with bodies in a conventional burial include approximately 30 million board feet of hardwoods, 2,700 tons of copper and bronze, 104,272 tons of steel, and 1,636,000 tons of reinforced concrete. Also buried are approximately 827,060 gallons of embalming fluid, primarily formaldehyde" (2012: 151). All of these materials are enrolled either to delay decomposition or to shield dead bodies from the elements and from other creatures who might make meals of them. This array of funereal mediations materialize what might be called a logic of sequestration, which is both derived from and allied with human exceptionalism.

The "American Way of Death," so designated by Jessica Mitford in a 1963 book by the same name, remained mostly intact since its emergence in the mid-1800s. However, for the past several decades the other major deathcare practice in the US – cremation – has been challenging the dominance of conventional burial. When Mitford's book was published, just four per cent of Americans were cremated. By the end of the 20th century, a quarter of deaths were followed by cremation (Prothero, 2001). Today, cremation is slightly more common than conventional burial and is expected to reach more than 70% by the year 2030 (National Funeral Directors Association, 2015).

In many ways, cremation does provide an ecological alternative to conventional burial. Certainly, fewer material resources are required by the process and many who are cremated are not embalmed, thus reducing the volume of carcinogenic chemicals circulating in the air, water and soil. And although some families choose to bury their loved ones' cremated remains, far less land is taken up by buried ashes than by buried bodies. And yet, like conventional burial, cremation is not without its flaws from an ecological perspective. Cremation is energy intensive, requiring coal, natural gas or some other fuel to reach and sustain the high temperatures needed to break down a human body. Incinerating corpses also releases greenhouse gases and heavy metals into the air, and it may destroy much of the nutrient content of the body, thus making the remaining material less valuable to other members of the land community (Huffman, 2009).

The twin practices of conventional burial and cremation are deeply embedded in American culture, but they are not the only options available to us for dealing with dead bodies. Even beyond the historical and cross-cultural examples of more ecological deathcare practices, since at least the late-1990s ecological entrepreneurs and activists have been developing alternative deathcare customs that take the more-than-human world into consideration.[5] Along with more well-known practices such as natural or

"Like conventional burial, cremation is not without its flaws from an ecological perspective. It is energy intensive, requiring coal, natural gas or some other fuel to reach and sustain the high temperatures needed to break down a human body. Incinerating corpses also releases greenhouse gases and heavy metals into the air, and it may destroy much of the nutrient content of the body."

conservation burial, the list of alternatives now includes such things as:

- mushroom burial shrouds, which can replace caskets and detoxify corpses (Barnett, 2018);
- alkaline hydrolysis, a technical process that dissolves bodies (Olson, 2014);
- memorial reefs composed of concrete and cremated remains that help restore coral reefs (Harris, 2007);
- restoration burial, which integrates conservation projects into interment practices (Harker, 2012).

Instead of delaying bodily decomposition, these alternative practices embrace the inevitable and seek to make deathcare a productive rather than destructive part of ecological systems.

In confronting deathcare (and, no doubt, other practices of everyday life), we encounter entrenched and ecologically destructive cultural habits, but we also unearth openings for rethinking and remaking our relationships with the more-than-human world. In the US, a century and a half of industrialized deathcare practice has cultivated anything but a humble or humbling orientation to our mortality. Indeed, Plumwood reads the modern funeral industry as a symptom of modernity itself, as "the western war of life against death" that entailed "the loss of humbling but important forms of knowledge, of ourselves and of our world" (2008: 70–1). As ecological activists and entrepreneurs turn their attention to the end, however, they are also revealing what a more ecocentric worldview might show us.

> "We are embodied creatures among other embodied creatures, all connected in webs of relations where living and dying well are at stake. We are ourselves edible matter, part of the food web, consumers and consumed."

The lessons are, as Plumwood suggests, profoundly "humbling." We are ephemeral beings, contingent compositions of various materials held together for a while. We are embodied creatures among other embodied creatures, all connected in webs of relations where living and dying well are at stake. We are ourselves edible matter, part of the food web, consumers and consumed – all differently comestible. We are of this world, not apart from or above it. We are entwined at every level with more-than-human bodies and forces such that all easy distinctions are thwarted from the very beginning. We are, if we can permit ourselves to see and feel and understand it, always already other-than-human.

Here is another humbling thought: *We are soil*. That is the basic contention of *Recompose*, a public benefit corporation that has grown out of the Urban Death Project (UDP), which was conjured up by Seattle-based architect Katrina Spade during a Master's programme at the University of Massachusetts Amherst. *Recompose* reperesents an ongoing effort to create a system that "gently converts human remains into soil, so that we can nourish new life after we die" (https://www.recompose.life/faq/). It is a response to population increases in urban areas and the attendant stress on cemeteries. Many metropolises – New York City, for instance – are simply running out of room for conventional earth burials, forcing city dwellers to pay for one of a dwindling number of burial sites or flee to the countryside where burial plots are still abundant (Garrison, 2012).

Instead of interring bodies in the ground, Spade proposes to bury bodies in three-story human composting cores, in which they will slowly decompose alongside other bodies and collectively cultivate new soil. When combined with carbon-rich materials like wood chips and sawdust, the nitrogen-rich bodies – human or otherwise – heat up and initiate the composting process. As the pile warms up and cooks for several months, the bodies break down and produce a rich soil material that can be used to nourish new plant life. Based on the principles of 'livestock mortality composting', a process used by farmers who need to dispose of livestock carcasses, the idea is to harness rather than destroy (or sequester) the nutrients contained within organic bodies.

Recompose invites us to enter into different assemblages when we die. Instead of reifying the toxic and

resource-intensive assemblages produced again and again by the modern funeral industry, human composting opens onto more ecological assemblages. Anna Tsing notes: "Assemblages don't just gather lifeways; they make them" (2015: 23). Where conventional burial sequesters, composting engenders encounters among diverse materialities. Composting is productive. Within compost piles, things transform. They become otherwise. Bodies comingle and make dirt. Human composting draws us back into the land community as plain members and citizens.

Composting calls us to rethink what it means to be human, to reimagine and remake some of our more enduring rituals. It invites us to give our bodies (back) to the more-than-human world and so to enrich the ecosystems that have nourished us. *Recompose* asks us to humbly remember that, as David Abram put it, "the body's decomposition into soil, worms, and dust can only signify the gradual reintegration of one's ancestors and elders into the living landscape, from which all, too, are born" (1996: 15). Ecological deathcare practices invite us to reconceive of our own bodies (and thus our selves) as integrally involved with the "living landscape."

Human interment as imagined by *Recompose* would affect not only those bodies placed in the compost heap, but survivors' bodies as well. In its plans for composting facilities, *Recompose* has been careful to consider the living. The three-story composting core is circled by a spiralling walkway that leads from the foyer to the top of the building. Loved ones will slowly carry the deceased's body from the ground level to the core's opening, stopping along the way to cleanse and shroud the corpse. And these same loved ones can take part in the "laying in" of the body, the placing of the corpse into the composting core. In this sense, human composting re-ritualizes burial into a communal affair. It encourages friends and family to participate, to take part in the body's transition from one state to another.

Significantly, *Recompose* also proposes to bring human composting into urban centres. Unlike the natural, conservation and restoration burial grounds being opened in rural areas, these human composting facilities are designed to be integrated into existing cityscapes, places where the majority of Americans already find themselves. Spade imagines the composting centres existing side by side with other staples of ordinary life – banks, schools, shopping malls. They could become gathering places in their own right with spacious plazas and lush gardens for pedestrians to enjoy. While the bodies decompose inside the core, new soil material will emerge from the base of the building to nourish plants in the surrounding courtyards, thus bringing the cycle of birth, life, death, decomposition and renewal into the spaces of everyday life.

As we learn to dwell on Earth in the Anthropocene, we must fundamentally rethink those taken-for-granted habits of thought and action that have inured us to all-too-human ways of life and death. In ecological deathcare practices we discover an unexpected but nourishing locus of possibilities for inhabiting our only home differently. In particular, the practice of human composting harbours lessons for those of us who desire to live more ecologically in this emergent geological epoch. Not only can we compost human bodies; we can and should also compost human cultures. This does not mean destroying those practices that bring us joy or comfort or connection but, rather, transforming them such that they might also enrich the ecological systems to which we belong. Decomposing a cultural practice also entails recomposing it, jumbling it up and reassembling it into something else. Thoughtfully engaging with the humble and humbling task of caring for the dead offers us an opportunity to resist some of anthropocentrism's unquestioned assumptions about our bodies and the worldly relationships they enroll us in – and, therefore, an opportunity to live more ecocentric lives. ■

"Composting calls us to rethink what it means to be human, to reimagine and remake some of our more enduring rituals. It invites us to give our bodies (back) to the more-than-human world and so to enrich the ecosystems that have nourished us."

"Thoughtfully engaging with the humble and humbling task of caring for the dead offers us an opportunity to resist some of anthropocentrism's unquestioned assumptions about our bodies and the worldly relationships they enroll us in – and, therefore, an opportunity to live more ecocentric lives."

Notes

1 Debates about the term 'Anthropocene' have been ongoing since Paul Crutzen and Eugene Stoermer (2000) proposed its use in the *Global Change Newsletter*. Donna Haraway, for her part, has challenged the ease with which the humanities and social sciences have adopted the term: "Surely such a transformative time on earth must not be called the Anthropocene!" (2016: 31). Citing major changes in scientific and philosophical understandings of human beings, Haraway is at pains to discourage the boastful ignorance she senses in the term. Others, like Timothy Morton, have learned to "stop worrying and love the term 'Anthropocene'" (2016: 14). For Morton, the term is not without flaws, but the benefits of taking responsibility for anthropogenic climate change outweigh his lexical misgivings. In *The Shock of the Anthropocene*, Christophe Bonneuil and Jean-Baptiste Fressoz (2016) rehearse several of the more compelling critiques of the term.

2 It is worth pausing on the word 'we', which has the unfortunate effect of seeming to apportion blame and responsibility somewhat indiscriminately. As Dipesh Chakrabarty (2009) has explained, one consequence of the Anthropocene concept is that it forces those who ponder it to think in terms of *species*. While we could debate precisely who is to blame and who ought to be responsible, Chakrabarty laments that "scientists' discovery of the fact that human beings have [...] become a geological agent points to a shared catastrophe that we have all fallen into" (2009: 218). That climate chaos will impact all human beings and not just those from the wealthiest, industrialized (or industrializing) nations that emit the largest quantity of greenhouse gases is unfortunate and unfair, but it also underscores the challenges of thinking about the Anthropocene in critically reflexive ways. In this essay, when I use the words 'we', 'us' and 'human beings' I mean to name, on the one hand, all human beings collectively and, on the other hand, to point specifically at certain practices carried out mostly by wealthy, Western cultures.

3 Of course, this is not a universal description of pre-war deathcare practices in the US. Rather, it describes the burial practices of the mostly white, Protestant populations in the northern US. I recount it here, rather than other burial customs practised by other groups (slaves, for example), because it was northern whites who demanded and ultimately gave rise to the modern funeral industry.

4 It is important to note that, although conventional burial and cremation continue to hold sway in the US, some communities have long practised different interment customs and, thus, have not participated in the ecologically destructive elements of the modern funeral industry. Traditional Jewish burial rituals, for instance, prohibit embalming and make use of simple wooden caskets. Thus, Judaic funeral rites already mirror what are today called 'green' or 'natural' burials.

5 In the US alone, one can find both historical and cross-cultural examples of alternative deathcare practices. Certain indigenous groups – the Sioux and Lakota tribes, for instance – historically practised what are called 'sky burials' in which corpses were suspended above the ground on wood scaffolding (van Huygen, 2014). Similar to Tibetan sky burials, in which bodies are dismembered and then placed in an elevated area where vultures and other scavengers can consume it, the Sioux and Lakota custom made corpses available as sustenance to other members of the land community.

References

Abram D (1996) *The Spell of the Sensuous: Perception and language in a more-than-human world*. Pantheon Books, New York, NY, USA.

Barnett JT (2018) Politics of edibility: Reconceptualizing ecological relationality. *Environmental Communication* **12**: 218–31.

Becker E (1973) *The Denial of Death*. Simon & Schuster, New York, NY, USA.

Bonneuil C and Fressoz J-B (2016) *The Shock of the Anthropocene* (translated by Fernbach D). Verso, London, UK.

Chakrabarty D (2009) The climate of history: Four theses. *Critical Inquiry* **35**: 197–222.

Crist E (2017) The affliction of human supremacy. *The Ecological Citizen* 1: 61–4.

Crutzen PJ and Stoermer EF (2000) The 'Anthropocene'. *Global Change Newsletter* **41**: 17–18.

Garrison C (2012) Running out of space to bury New York City's dead. *Metro*, 26 August. Available at https://is.gd/tLj3Oc (accessed December 2017).

Haraway D (2016) Tentacular thinking: Anthropocene, capitalocene, chthulucene. In: *Staying with the Trouble: Making kin in the chthulucene*. Duke University Press, Durham, NC, USA: 30–57.

Harker A (2012) Landscapes of the dead: An argument for conservation burial. *Berkeley Planning Journal* **25**: 150–9.

Harris M (2007) *Grave Matters: A journey through the modern funeral industry to a natural way of burial*. Scribner, New York, NY, USA.

Heidegger M (1953) *Being and Time* (translated by Stambaugh J). State University of New York Press, Albany, NY, USA.

Huffman ML (2009) Cremation waste and toxins. *Metals in Medicine and the Environment*. Available at: https://is.gd/eZArja (accessed December 2017).

Laderman G (2003) *Rest in Peace: A cultural history of death and the funeral home in twentieth-century America*. Oxford University Press, New York, NY, USA.

Mitford J (1963) *The American Way of Death*. Simon & Schuster, New York, NY, USA

Morton T (2016) *Dark Ecology: For a logic of coexistence*. Columbia University Press, New York, NY, USA.

National Funeral Directors Association (2015) *Trends in Funeral Service*. Available at: https://is.gd/Z37SbQ (accessed December 2017).

Olson PR (2014) Flush and bone: Funeralizing alkaline hydrolysis in the United States. *Science, Technology & Human Values* **39**: 666–93.

Plumwood V (2008) Tasteless: Towards a food-based approach to death. *PAN: Philosophy, Activism, Nature* **5**: 69–75.

Prothero S (2001) *Purified by Fire: A history of cremation in America*. University of California Press, Oakland, CA, USA.

Scranton R (2015) *Learning to Die in the Anthropocene: Reflections on the end of a civilization*. City Lights Books, San Francisco, CA, USA.

Serres M (1995) *The Natural Contract* (translated by MacArthur E and Paulson W). University of Michigan Press, Ann Arbor, MI, USA.

Tsing A (2015) *The Mushroom at the End of the World: On the possibility of life in capitalist ruins*. Princeton University Press, Princeton, NJ, USA.

van Huygen M (2014) Give my body to the birds: The practice of sky burial. *Atlas Obscura*. Available at: https://is.gd/hVqNl6 (accessed December 2017).

Whitman W (1867) Burial. In: *Leaves of Grass*. WE Chapin & Company, New York, NY, USA: 298–305.

Whyte I (2017) Life's defeat is imminent: We must become effective. *The Ecological Citizen* **1**: 13–14.

Photo series

by Ian Whyte

The photos are of: scarlet cup (this page); tracks in snow, brown pelican and wild geranium (clockwise from top on next page); and common buckeye, tawny crescent and calico pennant (clockwise from top-left on next-but-one page). All photos were taken in Gatineau Park, Chelsea, QC, Canada, except the brown pelican (Gulf Shores, AL, USA) and the tawny crescent (Brookfield, NS, Canada).