After the "AGE of WRECKERS and EXTERMINATORS?"

Confronting the Limits of Eradication and Entanglement Narratives

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Abstract This essay delineates the material and conceptual limitations of two prominent ways of figuring the relationship between humans and harmful beings; narratives of eradication and entanglement. Ecological concern about the legacies of twentieth-century attempts to eradicate life deemed dangerous to humans (such as the damage fostered by DDT and the overuse of antibiotics), coupled with declines in the efficacy of some major medical and chemical techniques for eradicating harmful beings, means that exterminism is increasingly seen as both ethically undesirable and materially impossible. At the same time, it is insufficient to fall back on narratives about the ontological inevitability of entanglement with nonhumans because the harms—for humans and other species—that are posed by particular relations are tightly bound with socioeconomic inequalities and asymmetries in power. Through situating contemporary viral relations in relation to existing literatures focused on pests and parasites, the essay argues that harmful beings are not just exceptions that can be worked around and ultimately accommodated within relational ethics. Instead, harmful entanglements offer more fundamental provocations, forcing attention to the question of how to create more livable worlds through situated acts of distancing without descending back into narratives of eradication.

Keywords entanglement, eradication, animals, new materialism, insects, microbes, viruses, anthropocentrism

In his foreword to the Christian Aid report ▲ Tipping Point: How the Covid-19 Pandemic Threatens to Push the World's Poorest to the Brink of Survival, ex-UK Prime Minister Gordon Brown (2020) called for international cooperation to "eradicate coronavirus on every continent." This narrative of eradication was echoed by institutions ranging from the World Economic Forum and World Health Organisation to local governments. Such discourses resonate with what David Kinkela (2011: 84), drawing on the terminology of historian Lewis Mumford, describes as "the age of wreckers and exterminators"—a phrase he uses to characterize the widespread ethos of eradicating life deemed harmful to humans. This ethos, he suggests, permeated high-profile public health interventions throughout the mid-twentieth century.

Initiatives underpinned by an ethics of eliminating particular life-forms included the widespread use of DDT (Kinkela's own focus), which was itself part of a wider "domestication" of gases used during the First World War for peacetime use (Feigenbaum 2017), wherein "bed bugs, flour moths, ticks, and above all cloth lice" became the new targets of chemical interventions that attacked "not the body of the enemy, but his environment" (Sloterdjik 2009: 43).1 Attempts to make human environments inhospitable to other beings, moreover, were not simply reflected in overtly violent interventions, but in commonplace medical technologies: most notably antibiotics, antiseptics, and treatments to kill parasites (Giraud et al. 2019). In the previous century, in other words, the problem of how to deal with harmful life was often resolved through creating distance between these beings and (certain) humans.

The contemporary context in which eradication narratives have resurfaced,

however, is one that is less hospitable to the logic of wrecking and exterminating itself. The ethical and ecological damage wrought by these logics, for instance, has given rise to concern about technoscientific practices of eradication. As this short essay describes, running parallel with these wider social critiques is a body of social and cultural theory that has sought to depart from exterminism by instead emphasizing the relational, entangled composition of the world. What current events have thrown into relief, however, is that recognizing the inevitability of human entanglement with other beings needs to be the starting point for moving beyond logics of eradication, rather than the end of the conversation. In particular, further attention needs to be paid to the ethical and material challenges of being entangled with harmful life.

The Ethics of Being Entangled

Entanglements between species are often treated as a site of hope for extending ethical responsibility beyond the human, as with the burgeoning body of theoretical work emerging in the decade after Donna Haraway's When Species Meet (2008) with its refrain "we have never been human." In a reworking of Bruno Latour's We Have Never Been Modern (1993)—and Latour's framing of the bifurcation of nature and culture as the historical product of humanist thought systems, which obscure the ongoing and proliferating dependencies between humans and nonhumans—Haraway offered a vision of a world where what it means to be a particular species is contingent on its relations with other entities. Even though the notion of humans as possessive, bounded individuals might have always been a Eurocentric, humanist construct (see Jackson 2020), logics of eradication that gained primacy

in the previous century were founded on the sense that a neat cleaving of unruly nature from culture could be enacted. It is the ethical implications of the presumption that separation from the nonhuman world is both desirable and possible, which a theoretical emphasis on relationality, entanglement, and coming together has sought to contest.

Unlike prior critiques of humanism (such as Heideggarian antihumanism), for Haraway—and allied thinkers—an emphasis on entanglement is bound up with the ethical agenda of securing the flourishing of nonhuman beings.² This body of theory has thus offered a counterpoint to the treatment of the so-called natural world as a series of resources for human use or, perhaps more pertinently, as something whose less desirable elements can be "wrecked and exterminated" wantonly. Notably, in subsequent work, Haraway uses virality as a productive metaphor for figuring these ethical arguments. Once humans' entanglement with other beings has been acknowledged, she argues, this effectively opens a Pandora's box wherein further relations, dependencies, and attachments become visible, in ways that are (in turn) generative of new ethical obligations. Recognition of irreducible entanglement, Haraway (2016: 114) argues, can thus trigger a form of "viral response-ability" that "infect[s] processes and practices that might yet ignite epidemics of multispecies recuperation and maybe even flourishing on terra in ordinary time and places."

Across fields such as the posthumanities, new materialisms, animal studies, and more-than-human geographies, narratives of entanglement have, correspondingly, offered routes for navigating a contemporary political moment when anthropogenic problems—including

climate change and mass extinction—require ways of thinking and acting in the world that resist anthropocentrism (Giraud 2019). Recently, however, some of the more discomforting ramifications of grounding an ethics in relationality and entanglement have been foregrounded. Though there is not scope to discuss all of these emerging points of tension (see Diener 2020 for an overview), a critical question is how to conceive of and negotiate relationships between life-forms that are actively harmful for at least one of the parties involved.

Difficult questions of how to make sense of relations that are dangerous or, at best, undesirable have not been entirely omitted or swept aside by theoretical perspectives that center relationality. This body of work has, for instance, reiterated that for all the hopeful potentials of relational thought, no form of relating is ever "innocent." The ethics of flourishing Haraway puts forward in When Species Meet, moreover, recognizes that the needs of some species may clash and thus focuses on maximizing the potential for diverse beings to thrive rather than assuming that everything can flourish equally. Despite this nuancing, it nonetheless remains difficult to determine exactly how to address which relations should be allowed to thrive or, perhaps more pertinently, which relations need to be contested to enable the flourishing of others. If no form of relating is innocent, how might it be possible to engage with political questions about which—of all the non-innocent possibilities available—should be pushed for? As Alexis Shotwell (2016: 11) puts it, "The specifics of how we would understand and act on the specifically ethical call [these bodies of work] make are somewhat thin. In these texts, theorists do not tell us how to parse the specifics of the ethical call, or the

relational economy toward which we might aim to behave more adequately." How, therefore, might it be possible to address the dangers posed by harmful life, when eradicating logics have been found ethically untenable, but relational ethics lacks a clear sense of how to negotiate these modes of entanglement?

Negotiating Harmful Relations

In the wake of what has sometimes been an over-exuberant valorization of relational ethics (Colebrook 2014), a number of thinkers have delineated cases that elucidate the challenge of "flourishing with awkward creatures" (Ginn, Beisel, and Barua 2014): such as slugs (Ginn 2014), mosquitoes (Beisel 2010, 2015), and "uncharismatic" invasive species (Clark 2015), as well as bed bugs, antimicrobial-resistant bacteria, and hookworms (Giraud et al. 2019). These examples, as Ginn (2014: 540) puts it, bring into relief the limits of "the vitalist emphasis on gathering together and relationality" in accommodating "anything that might question the desirability of being attached."

On one level, conclusions drawn from examining "awkward creatures" echo the sentiment of relational, more-than-human thought, by foregrounding the need to move beyond logics of eradication. Ethically speaking, the argument could—and should—be made that in a period of population collapse for insects and the species that depend on them, finding less damaging ways of fostering distance between ourselves and beings such as slugs and mosquitoes is imperative (Gunderman and White 2020). Even if some of these relationships are difficult to celebrate per se, perhaps it is possible to find ways of at least tolerating discomforting species; this is the line taken by Heather Lynch (2019: 375), for instance, whose ethnographic

research on human—bed bug relations traces how the insects can shift over time from being fear and panic inducing to, as she puts it, simply a routine annoyance that "require[s] management more than violence."

In part, therefore, research focused on awkward creatures opens space to foster something more akin to the "viral response-abilities," or commitment to finding new ways for diverse beings to share the world, that Haraway pushes for. Perhaps even in the most undesirable relations between humans and other species, there is still hope of finding new ways of living together that resist eradicating logics: even if certain encounters cause a degree of discomfort for those involved; after all, no form of relating is ever "innocent."

The problem is that, despite the fecundity of viral relations as a metaphor in Staying with the Trouble (Haraway 2016), actual viruses pose more difficult questions than perhaps even the most alien nonhuman animals.4 Though narratives of entanglement offer a more promising ethical alternative to wrecking and exterminating, what about relationships with beings who are more deadly than, say, bed bugs? Viruses' liminal status as not-quitealive could, perhaps, be used to exclude them from the sort of life-oriented (or more specifically zoe-oriented) ethics often offered by non-anthropocentric thought (e.g., Braidotti 2013).5 Here a focus on life has routinely been appealed to in order to foreground the differential ethical obligations humans might have toward varied forms of nonhuman life, "transform[ing] the human/nonhuman distinction into an animate/inanimate distinction that is able to differentiate between stones and anteaters" (Conty 2018: 75). Yet the stability of any life/nonlife boundary—and thus

its capacity to neatly bracket to one side concerns about how flat ontologies can account for harmful life—has also been troubled in recent years.

Echoing wider concerns about the universalisms (related to categories such as "humanity" and "nature") that are often inadvertently reinscribed by posthumanism and new materialisms (Sundberg 2014; Jackson 2020), a number of thinkers have pointed out that the animate/inanimate boundary is similarly culturally contingent (see in particular Kohn 2013; TallBear 2017). Elizabeth Povinelli (2016) argues in Geontologies, moreover, that the virus is one of the key contemporary figures that has frayed any sense of a neat distinction between life and nonlife—even in contexts where such classifications have formerly oriented (bio)political thought and action.

Of course, even if it is difficult to constitutively exclude viruses from consideration using neat epistemological frameworks, it might still be possible to do this in ethical terms. As Beisel and Ginn (2016) have argued, while insects such as mosquitoes might be dangerous to certain species (notably humans), their role in pollination allows others to flourish; the reproduction of viruses, in contrast, is entirely predicated on invasion and destruction. Viruses, in other words, almost by definition fail to contribute to any communal ethics predicated on flourishing. 6 Yet these discussions about what can or can't be included in relational approaches, to what extent these beings trouble any ethics predicated on a celebration of entanglement, and what this means for the resurgence of wrecking and exterminating logics are almost beside the point. One of the main issues facing the present moment is not justifying in what contexts practices of eradication could remain ethically desirable, because practices of

eradication are not even possible in many settings. Disentanglement through eradication, in other words, has been troubled not just in ethical and epistemological but also in material terms.

The Impossibility of Disentanglement

In recent years there has been a shift from framing the recognition of entanglement with other species as an ethical good, to suggesting it also offers a more accurate reflection of material reality (as with uses of Karen Barad's (2007) philosophy-physics to shore up non-anthropocentric ethical agendas for instance).7 The act of articulating, as Jamie Lorimer (2015: 23) puts it, the "ontological impossibility of extracting a bounded and uniquely human body from the messy relations of the world," offers a concrete foundation for contesting ethical and political logics of domination that are naturalized by the presumption that particular groups of humans are exceptional.

In a sense, the impossibility of disentangling from other beings is highlighted by the failure of prior acts of wrecking and exterminating. As touched on above, in recent history many relations with other species have been dealt with through eradication programs. What has been notable during the past two decades, however, is that these acts of distancing are far from permanent, with a resurgence of life-forms who were the target of intervention in the spaces from which they were previously expunged. Over half a century after wrecking and exterminating was at its heyday, a range of social and technological factors mean that this approach is often no longer an option in a practical sense. In the wake of Rachel Carson's Silent Spring, DDT is obviously no longer a possibility for eradicating bed bugs, but there has also been concern about using pesticides that are still effective within the home (Lynch 2019).

These issues are quite aside from growing evidence of chemically resistant bed bugs, due to overuse of such interventions.

The problems of AMR (antimicrobial resistance) have likewise been well documented, with widespread uses of antibiotics in agricultural contexts creating environments where resistant bacteria thrive (Helliwell, Morris, and Raman 2020). This resistance has given rise to uncertain medial futures in which the capacity to disentangle from harmful bacteria is foreclosed. Parasites such as hookworms are more complex: in certain tropical and subtropical contexts they remain pathological, while their widespread extirpation from North America and Europe has been linked to autoimmune disorders, and there has been a development of helminthic therapies (i.e., the deliberate, controlled ingestion of the parasites) to ameliorate these conditions (Lorimer 2017).

In very different ways, this array of awkward creatures being grappled with in the literature suggests that one of the challenges of the contemporary moment is finding ways to negotiate relationships with beings who are impossible to disentangle from human worlds but equally impossible to live with (Giraud at el. 2019: 364). However, this line of argument needs to be developed further. While the ethical focus on multispecies entanglements has opened up some vital trajectories, it is insufficient to simply acknowledge the inevitability of being entangled (and need to simply "get used" to these entanglements), as this can obscure (and perhaps even naturalize) the role of social inequalities in intensifying particularly harmful relations. The broader histories and contexts of particular relationships between species can make engagements with the same life-forms benign, or even positive, in certain contexts but deadly in others. In the

case of hookworms, AMR, and bed bugs, as well as coronavirus, for instance, the question of who can choose to be entangled with particular beings, as well as how harmful these entanglements are, is tightly bound with socioeconomic inequalities.

In relation to bed bugs, narratives of resurgence often point to the insects bouncing back after extirpation: but this framing neglects the way that the insects (like malaria) have never vanished from the majority of the planet. Although the narrative is that bed bugs are a leveler that "cut the wealthy down to size" (as Dawn Day Biehler [2013: 206] puts it), even with their return to Western Europe and the United States, questions about how easy it is to remove the bugs and—most notably—the stigma attached to those who harbor them are explicitly classed and racialized. As Lynch (2019) foregrounds, moreover, though finding ways to live with a species as abject as bed bugs could offer space to unsettle some of the most profound assumptions about how humans can relate to other beings, at present it is those already facing poverty and discrimination who face the burden of negotiating these experiments in multispecies living.

The relationship between the harms fostered by particular life-forms and other, often racialized, inequalities has, of course, also been playing out in contemporary viral entanglements. Again, in communities where poor housing and working conditions are prevalent, viral hot spots have been most common, with stark differences in death rates between nations that appear to correspond with their levels of investment in public health infrastructure. Even with growing evidence of the spread among younger, white, middle-class populations, some of the stigma and restrictions

to everyday life have been spared. It is important, therefore, to reflect on the differential composition and consequences of particular relations that humans have with the world, and develop context-specific ways of fostering distance from harmful life—in Joanna Latimer's (2013) terms, strategies for living alongside as opposed to being entangled with particular life-forms. The stakes of this argument come further to the fore when turning to a slightly different set of questions, not of how humans can disentangle from harmful beings, but rather the reverse.

Disentangling from Humans

The need to complicate narratives of both eradication and entanglement seems increasingly urgent in the present moment, in the wake of a discourse that has emerged in relation to COVID-19 that has rearticulated the language of wrecking and exterminating to different ends. Rather than suggesting dangerous life needs to be eradicated, instead it is humans who are positioned as the threat for being the wreckers. As Adam Searle and Jonathon Turnbull (2020) trace, for instance, events related to coronavirus have been opportunistically leveraged in support of environmental and animal activist agendas—as creating space for rethinking relationships with the so-called natural world. The widespread circulation of imagery of (apparent) ecological resurgence—from the return of wildlife to Venetian canals to clear skies over Delhi enabling city residents to see the Himalayas on the horizon for the first time in thirty years—has given rise to slogans such as "humans are the virus." Echoing wider debates about the flattening of ethical responsibility that comes with the label "Anthropocene," these overly simplistic framings fail to grapple with the uneven geopolitical responsibilities both

for histories of wrecking and exterminating and the environmental racism that is often the product of their legacies.

Yet even as it is dangerous to invoke a purified nature that needs to be distanced from human culture, this should not be used to eschew difficult questions about the need for certain relations to be contested or reworked. Amid broad-brush condemnations of "human" relations with the environment and nonhuman animals, which often fall back on ethnocentric references to wet markets and bush meat, more thoughtful ecological arguments have also emerged. Thom van Dooren (2020) points out, for instance, that recent (and often exoticized) media discourse about pangolins as the likely COVID-19 disease vector should be contextualized in relation to all manner of other examples of human-animal entanglements and agricultural practices that have given rise to novel zoonotic diseases, most notably bovine spongiform encephalopathy in the UK. From a different perspective, Joshua Specht (2020) points to the emergence of high-profile viral outbreaks in contexts such as US meat-processing plants, where the exploitation of human and animal labor are most intimately bound together (a process that has been replicated across Europe). At the same time as resisting uncritical invocations of "nature," therefore, urgent questions do need to be asked about whether some of the most harmful relationships with nonhuman life can be reconfigured. As van Dooren (2016: 43) puts it, "We don't need to buy into a simplistic nature/culture distinction to believe that some creatures, in some places, would be better off in a range of different ways if we carefully and deliberately limited our involvement with them."

Beyond Wrecking and Exterminating

In sum, therefore, while it is increasingly impossible—as well as undesirable—to revert to legacies of wrecking and extermination, narratives of entanglement do not offer any straightforward solution. In earlier work, Haraway (1997: 104) foregrounds the importance of centering the question "what counts for nature, for whom, and at what cost." Recent events underline the value of this point, highlighting both a need to avoid any naturalization of human domination of "nature" (and the logics of wrecking and exterminating that often accompany this presumption) and the reverse of this logic—the naturalization of naturecultures and relentless entanglement. While recognizing that certain relations with nonhumans are difficult to avoid, it is important that this doesn't slide into a position where it becomes difficult to contest especially damaging entanglements that emerge at the nexus of other oppressions. Although nothing is innocent, some relations are far less innocent than others.

The questions posed by harmful life, as exacerbated by recent events, thus offer pause for thought. It is not good enough to simply fall back on rhetorics of wrecking and exterminating that promise disentanglements which are, on one hand, likely impossible and, on the other, have ecological consequences that will be difficult to reckon with in the future. From this perspective, entanglement narratives offer a useful vocabulary for moving beyond logics of eradication. Yet what are the implications of centering entanglements with other beings at a period when poverty and racialized inequalities are determining factors in who has the choice to be entangled with harmful life and who lives and dies as a result? Though it is insufficient to invoke some sort of purified

nature (especially in light of the ethnocentric assumptions and colonial histories of prominent conservation initiatives and environmental campaigns), difficult questions about which relations with nonhumans to preserve and which to contest need to be addressed.

At the moment, however, while concerns with distance, detachment, and disentanglement are routinely evoked in discussions of nonhuman ethics, they tend to be treated as peripheral to a theoretical emphasis on entanglement and relationality. Issues posed by "awkward creatures" for instance, are often read as something that can be addressed by some form of Kuhnian problem solving (Hollin 2019), tinkering around the edges of an otherwise unproblematic conceptual paradigm, or acknowledged only via caveats of noninnocence that play a role akin to the limitations portion of a methods section (Hollin and Giraud 2019). The urgency of how to grapple with harmful life, as brought home by recent events, however, has renewed the urgency of questioning whether the relation can or should form the baseline for ethical engagement, or if more serious attention needs to be paid to the ethics of distance and contestation. For all the importance of relational, entangled ethics in departing from specific individualizing and extractive relations with the world, is there a need to move beyond perceiving the tensions associated with this body of theory as minor problems to resolve or as necessitating more of a paradigm shift?

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Notes

- It should be noted that the development of pesticides was not a straightforward process of chemical weapons being domesticated, as new developments in pest-control industries also fed into initiatives that were put to genocidal ends. Hydrogen cyanide gas, for instance, was honed as a means of removing termites and bed bugs from residences, before being trademarked as Zyklon B and used in Second World War extermination camps (Raffles 2010: 155). As Anna Feigenbaum (2017) illustrates, wartime gases were also "domesticated" for riot-control purposes, as with tear gas.
- 2. See Braidotti 2013 on the distinction between posthumanism and antihumanism.
- Michelle Murphy (2015) offers a useful discussion of work that has centralized the noninnocence of relational care ethics, for instance.
- 4. The difficulty of ethically accommodating viruses in the same way as other "awkward creatures" was helpfully articulated by Uli Beisel and Franklin Ginn (2016), whose paper contrasted the affordances of mosquitoes with Ebola.
- Again, this life-centered form of posthuman ethics offers a direct counterpoint to an antihumanist framing of animals as "poor in world" and the zoe/bios distinction that separates politically qualified life from the act of being alive.
- 6. Beisel and Ginn's point in making a comparison between viruses and insects, however, is decisively not to find some way of excluding lifeforms that are difficult to accommodate within relational, more-than-human ethics and thus circumvent any tensions associated with such approaches. Instead, they use this comparison to test the limits of relationality itself for grounding an ethics.
- 7. Barad's concept of intra-action (the sense that entities are never autonomous but have properties that emerge by and through their relations with others) underpins Haraway's argument that relations between species are irreducible, that is, it is impossible to separate humans as a discreet entity because what it means to be human—in a material sense—has emerged only by and through encounters with

other species. These arguments have also been used to add ontological weight to arguments about animal ethics, as with Lori Gruen's *Entangled Empathy* (2015).

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