On Eating and Killing

Multispecies Entanglements and Implications for Ecology

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More-than-Human Worlds: A NatureCulture Blog Series

It was a late morning in early October. The sun shone brightly and the air was crisp. The kind of autumn day that in southern Ontario, Canada brings to mind chunky knit sweaters and pumpkin spice lattés. The trees had turned and the world was resplendent in shades of crimson, orange, gold, and brown. I was almost home after having had an amazing interview with a farmer that lived just outside of town. As I rounded a corner on a suburban street, I saw something in the middle of the road. I pulled up slowly and weaved to the left coming alongside it. I felt a clutch in my chest. As I looked out the passenger window, the dark wings fluttered. It was a very large hawk and it was rending apart a rabbit. Fur, sinew, blood, and a long strip of flesh stretched from the rabbit to the razor-sharp beak. Blood speckled the chest feathers of the bird and my chest clutched again as I saw the rabbit twitch. I desperately hoped it was an involuntary spasm of the rabbit's nerves and not that it was being eaten alive. I pushed the gas pedal and rushed around the corner and home, my heart pounding in my chest and tears threatening at the corner of my eyes. That image stays with me. It has been over a year since I saw it and still the image lingers. A visceral reminder of what it means to be eaten.

"When exploring the intimacies of multispecies relationships, eating is central. One's eating and living also means killing other species, directly or indirectly" (Satsuka 2011:137). Killing is essential to survival. Humans kill directly when we send livestock to the slaughterhouse; when we hunt; when we cultivate; when we weed— plucking a plant from the ground and throwing it on the compost pile. We kill indirectly in countless ways: through industrial monoculture which destroys the food and habitat of non-domesticated species; through the use of pesticides which contaminate soil and water, poisoning the lives of fish, insects, birds and protozoa; through the use of antibacterial soaps and washes which indiscriminately kill the 'good' bacteria along with 'bad'; when we hit a meandering racoon on the highway late at night…

My research explores the role of farmers as agrarian citizen scientists and the potential of their knowledge to contribute to resilience in the face of a rapidly changing climate. I am interested in how farmers make sense of their local ecologies and how that information is shared, altered, incorporated, or discarded as they make decisions that ultimately affect the sustainability of their farming systems. Adaptation is necessary for farmers to be able to cope with changing soil conditions, adjust to changes in climate and deal with the volatile economic situation. For many of the farmers I spoke with, adaptive capacity is limited if other species are not allowed to flourish. Biodiversity is valued as a means of buffering against changing weather patterns, ongoing economic challenges, and the emergence of new disease pressures that may threaten certain plant or animal species. Considering multispecies entanglements within the context of wider ecological relationships is more of a necessity than a conscious choice. The farmers with whom I work are acutely aware of their relationships with other species and of the complex processes and interactions that are critical in the food web. Plants and animals are entangled with labour, economics and identity in complex ways. As one farmer I spoke to put it: "With the fungi, microbes, bacteria, sun, rain, light and darkness, the planets and all the life forces and the nature spirit, I sometimes feel like I'm just going for a ride. What a ride" (personal interview, 2016).

Figure 1: Draft horses partaking in farm labour in Southern Ontario, Canada (photo by author)

Fostering the relationships between humans and other species is an integral part of farming life. Many species are nurtured and cared for. For instance, among the farmers with whom I work, protecting bees and other pollinators is seen as essential to the ability to produce food in the future. This belief is transformed into action through the planting of bee friendly flowers and plants, the creation of beetle banks, and fighting for the ban on neonicotinoids. However, the realities of death and the necessity of killing are also an inevitable part of agriculture. Many of us are shielded from having to grow and kill our own food. The farmers with whom I work often discuss how removed many of us are from the realities of food production. Farmers do not enjoy the luxury of being removed from the realities of killing. They understand what it means to grow food and the labour involved in tending to the livelihoods of plants and animals in the hopes that they will feed us. They understand that we rely on other species for survival and that in order to eat, we must kill. Their labour requires them to make decisions about which plant and animal lives will be nurtured, and which lives become expendable as a result. Like Agamben's (1998) concept of political lives/bare lives, farmers reduce plant and animal life to *zoē*, recognized as only biological beings and outside the domain of the political, and therefore killable (183). Although Agamben's concept of "bare life" does not explicitly attempt to disrupt the human-animal divide, it critically engages with the concept of human life to the point where it eradicates the distinction between human and non-human animals - a distinction most farmers are not willing to let go of.

We kill so that we may eat. Eating is a multispecies affair. The act of consumption is intimate. When we eat, we incorporate another living being's DNA into our own. When we eat, we don't just consume the plant or animal, we welcome the multitudes of 'others' that coexist with what we are eating (see Haraway 2016). Some of those 'others' may be killed or evacuated during food preparation, but this is often only partially successful. Parasites and bacteria can wreak havoc on human immune, social, political and economic systems, as we have witnessed with BSE, e-coli, listeria and salmonella (see Smart and Smart 2008). The processes of eating are mediated by an immense ecosystem of microbiota in our gut which includes bacteria, protozoans, viruses, yeasts and fungi, that live in our digestive system and aid in our ability to break down the organisms we have consumed into usable nutrients, and which influence everything from immune response to mental health (Shelhub et al. 2014). These relationships are about more than just survival. Mutispecies intimacies move beyond predation, mutualism or symbiosis (relationships that aid in survival), to include relationships that affect *quality* of life. What we eat changes the microbiome in our body, which in turn affects our entire health and well-being (see contribution by Emma Cook in this series; Cook 2018). If we have limited access to certain food sources our microbiome is impacted, consequently affecting our own physical and mental health.

Killing and eating is a multispecies connection that sustains us and allows us to survive, always at the expense of 'others.' We imbue the 'others' with whom we share Earth's ecology with different values, histories and identities based on the category of 'species' despite the reality that 'species' as a biological concept is more flexible than one would suppose (Hey 2006). These attributions are always political. The concept of 'species' fixes measurable ideas of relatedness causing humans to align with some species more than others (Ingold 2006 cited in Yates-Doerr 2015:39). Species hierarchies exist often privileging what we find recognizable, valuable, or pleasing in its countenance. From Christian stories of the Ark to Aristotle's Scale of Nature, it is common among some cultures and religious traditions to value mammals much more so than plants, insects or bacteria. Most of us would recoil if asked to kill our own cow for dinner, but we pluck plants out of gardens and thrust them unceremoniously away, paying no attention to their death throes. We minimize killing plants, even as their leaves shrivel, or while their roots gasp for water and get only air. This is not because any one species has any more intrinsic value to our survival or to ecology than any other, but precisely because we imagine that some species are *like* us in some way. We lobby to protect polar bears, elephants and whales, while mosses, lichens, trees and arachnids are just as seriously endangered (Blok, 2013.

Figure 2: *Chenopodium album L.* - Lamb's Quarters, a highly edible plant and ubiquitous weed in fields and gardens throughout southern Ontario. This one has been plucked and left to die. (photo by author)

There are a number of multispecies discussions that reinforce species hierarchies, using posthumanist rhetoric to elevate the status of other animals, often mammals, in order to spare them from the horror of being killed and eaten. The problem with these political arguments is that they ignore the complexities of multispecies entanglements. These politics shape our food system in complex ways. In Canada, there are increasing pressures from the vegan and vegetarian movements. The arguments surrounding animal agriculture often centre on animal welfare and the environment. These are important issues. Factory farming is implicated in horrific animal abuses and increased meat consumption has resulted in rising greenhouse gas emissions (Weis 2013).

However, animals have an important role to play in agriculture. The majority of farmers in southern Ontario understand that healthy ecologies rely on both plants and animals. From an ecological perspective, farming works best when plant cultivation is combined with animal husbandry. Animals provide much needed fertilizer to help aid in plant growth, reducing the need for chemical fertilizers, while at the same time providing nutritional and economic diversification (Reynolds et al, 2015). The horrors of factory farming are often attributed to small and medium scale farmers despite the fact that many of these farmers have complex and sometimes loving relationships with the animals in their care. This is even the case with some industrial farmers who have been forced by the market into a certain mode of production (see contribution by Paul Hansen in this series; Hansen 2018).

Complicating things further, soy is a favoured protein replacement in vegan and vegetarian diets. Soybean fields are largely genetically modified, chemically intensive agriculture operations with massive potential fallout in terms of environmental contamination from pesticides and chemical fertilizers. Run-off from these fields can have devastating effects on water quality and impact the health of plants and 'wildlife' in ways that are inadequately understood (Girard et al. 2014). Deforestation from the perpetuation of high yield industrial agriculture causes massive carbon emissions and the loss of habitat and food sources is devastating to many non-domesticated plants, animals, insects and aquatic species (Thornes 2016). Discomfort with the reality that killing is a part of living forces a disconnect with unfortunate consequences. Distancing ourselves from suffering enables us to overlook the consequences of factory farms, or on the other extreme—gives us the illusion we can solve the problems of animal welfare and environmental degradation through veganism, while ignoring the importance of animals in our ecosystem and the very real impacts of vegetable and grain cultivation on ecology.

Sites of agricultural production are what Ogden refers to as "assemblages of collective species, the products of collective desires and the *asymmetrical* relations among humans and non-humans" (2011:28; emphasis added). Donna Haraway (2008) stresses that these

complex ways of relating to one another are "almost never symmetrical" ("equal" or calculable), but that: "relations of use are exactly what companion species are all about" (74). So, the political impetus behind multispecies ethnography is not about trying to create the illusion that all species are equal (and by species I am borrowing from Haraway 2008), a definition that is inclusive of all sorts of human and non-human beings, and "others besides" (164). It is about acknowledging the asymmetry, respecting our relationships with other species and about bridging the divide between different ways of knowing and experiencing the world (*ibid*). It is about dismantling Marxist notions of use value and exchange value and considering how our relationships with others shape who we are.

All species rely on other species to survive. We are not alone in this. Biodiversity as a biological and ecological concept confers adaptive capacity and resilience through genetic diversity (see Petersen et al 2018). In other words, the more diversity there is on the planet, the easier it is to survive. The fossil record provides evidence for smaller piecemeal extinctions prior to most mass extinctions, suggesting that biodiversity loss is a predictor of mass extinction (see Stanley 2016). In the face of a changing climate and feeding a burgeoning world population, the greater the diversity, the better our chances of survival.

In my research I advocate for what I call a *politics of mutual enhancement*, the basis of which is humility and acknowledgment of the right of every species to survive. A politics of mutual enhancement does not preclude killing. In fact, these processes are integral to life and ecology. What we must take seriously is the difference between eating and dying, versus capitalist exploitation and waste. Many animals die in fear and pain, including humans. While it can be argued that there is a nobility in wanting to spare another animal the fate of being consumed, it stems from the type of enlightenment rhetoric that places humans somehow above other species. As self-proclaimed protectors, we reinforce the same dangerous dichotomy of nature/culture that has propelled us to our current state.

It is only through the humility of realizing we are animals too, that we can dismantle the nature/culture divide and attempt to repair our relationship with the other species with whom we share the planet (Latour 1993). The fallacy of human omnipotence is reinforced by elevating humans to protectors of the planet, or of other species. It is a responsibility that we have proven time and time again that we are ill-equipped to deal with. A politics of mutual enhancement calls on us to dismantle species hierarchies and understand that we all have a place within Earth's ecology. Encouraging the survival of other species is not just preferable, but essential for the survival of humanity.

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