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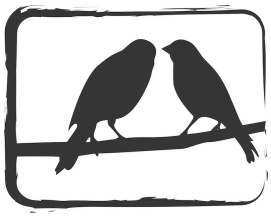

The Smell of Selfless Love: Sharing Vulnerability with Bees in Alternative Apiculture

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ABSTRACT The sudden decline of bee pollinator populations worldwide has caused significant alarm, not least because *Apis mellifera*, the European honeybee, is thought to be responsible for pollination of 71 of the 100 crop species which provide 90% of the world's food supply. Here we investigate the response to colony collapse disorder of a committed group of beekeepers who live in southern England, UK. These beekeepers are inspired by the writings of Rudolf Steiner and the principles of biodynamic agriculture, and they care deeply about bees. Drawing on Judith Butler's work on vulnerability as a shared condition of living, we examine the philosophies and practices of alternative apiculture along two axes: the gifts of honey and poison; longing, connection and bee-worship. The first emphasizes how poison and honey draw bee and beekeeper together in uneven gift relations; the second axis emphasizes how beekeepers make their bodies and their selves vulnerable to bees. We show how these beekeepers want us to do more than reshape bees' vulnerability to colony collapse disorder; they want to recognize, and reconstitute, their own vulnerability to the bee. The lessons to be drawn are less about solving bee decline and more about how becoming less uncomfortable with vulnerability and seeking to put ourselves at risk to others becomes an ethical practice. The example of these alternative beekeepers suggests that we might learn to accept more generously the risks of cohabiting with awkward nonhumans, so as to loosen the hegemonic grip of a self-certain subject that is disrupted by an outsider.

The house is incredible. The ceilings are high, the rooms huge; paintings hang on the walls and marble statues stand in corners. The library is filled floor to ceiling with books: mostly Steiner lectures, in German. A conservatory abuts the house: a small glass enclosure with a sofa, paintings, overhanging grapevines, and—bizarrely—home for six sheep. And then there are the bees. Spread out across the surrounding grounds, each hive like a little Bavarian cottage or tiny palace. Each has a name and, I was told, a personality. An entire garden is dedicated to these creatures, and construction of a £4,000 'temple' is underway to house three new hives. Bees are everywhere; wherever you might walk, you find yourself in the flight line of one hive or another. I would learn to walk carefully and listen intently, tuning in to any changes in the frequency of sound

> *from the hives. The house sits in a small village, Ashurstwood, which in turn nestles in the gentle hills of West Sussex, in England's Home Counties. As a place, the village is, to put it colloquially, posh: houses resemble small castles; children on shiny ponies clop along the narrow streets; violin music wafts from open windows. Londoners daytrip down for the quaint atmosphere, to soak up the rural idyll, and to seed the southeast of England with their metropolitan cash. Every shop is well-maintained, with just the right amount of charm and rusticity. Everything is expensive. This house and its two biodynamic farms have a bizarre energy about them, a ready sense of life; nothing is timid or apologetic.* (Kelsey, Field Notes)

Honeybees are dying. Many other species are dying too, but the European honeybee, *Apis mellifera,* has attracted special interest thanks to their labour in the industrial agricultural system that underpins life as many of us know it. *Apis mellifera* is credited with pollinating 71 out of 100 crop species which provide 90% of food worldwide.[1] Conveniently, pollination can now be quantified, and is estimated to deliver $153 billion of benefit a year to humans.[2] In recent decades honeybee populations have been crashing: most drastically a 26.5% drop in Europe and a 49.5% drop in North America between 1961 and 2007.[3] What might honeybee decline mean for humans? According to apocryphal prophesy (variously mis-attributed to Einstein, Darwin, or Maeterlinck), when bees disappear "mankind will have just four more years to live; no bees, no pollination, no plants, no animals, no humans."[4] Media coverage flirts with this warning: she may be "the flag-bearer for the whole of the insect race," but some believe that the bee is also "raising the alarm for humankind."[5] Pollinator decline is being taken seriously by citizen groups, military spooks, and all those with a stake in industrial agriculture, from derivatives traders, to small-holders, to regulatory bodies.[6]

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[1] United Nations Environmental Protection, "Emerging Issues: Global Honey Bee Colony Disorders and other Threats to Insect Pollinators," accessed 7 February 2013, http://www.unep.org/dewa/Portals/67/pdf/Global_Bee_Colony_Disorder_and_Threats_insect_pollinators.pdf.

[2] Nicola Gallai *et al*., "Economic Valuation of the Vulnerability of World Agriculture Confronted with Pollinator Decline," *Ecological Economics* 68, no. 3 (2009): 810-821.

[3] Dennis van Engelsdorp and Marina Doris Meixner, "A Historical Review of Managed Honey Bee Populations in Europe and the United States and the Factors that May Affect Them," *Journal of Invertebrate Pathology* 103, no.1 (2010): 580-595.

[4] Jürgen Tautz, *The Buzz about Bees: Biology of a Superorganism* (Berlin: Springer, 2008), 271.

[5] Alison Benjamin and Brian McCallum, *A World Without Bees* (London: Guardian Books, 2009), 262.

[6] Rachael Winfree *et al*., "Valuing Pollination Services to Agriculture," *Ecological Economics* 71 (2011): 80-88. Tom Breeze *et al*., "Pollination Services in the UK: How Important are Honeybees?," *Agriculture, Ecosystems and Environment* 142, no. 3-4 (2011): 137-143. Alexandra-Marie Klein, *et al*., "Importance of Pollinators in Changing Landscapes for World Crops," *Proceedings of the Royal Society B* 274, (2007): 303-13. Food and Agriculture Organization of the United Nations, "Protecting the Pollinators," accessed 7 February 2013, http://www.fao.org/ag/magazine/0512sp1.htm. Millenium Ecosystem Assessment, "Ecosystems and Human Well-being: Synthesis," accessed 7 February 2013, http://www.millenniumassessment.org/documents/document.354.aspx.pdf.

What is the reason for such a drastic crash in population? The most likely culprit has been labelled Colony Collapse Disorder (CCD). This grab-bag term encompasses a range of symptoms including: habitat deterioration leading to fragmented populations and degraded food sources; pollution interfering with the symbiotic relationship of plants and bees; increased pathogens in commercially managed bee species; invasive species which negatively impact colonies such as the parasitic mite *Varroa destructor*; chemical drifts from spraying affecting reproduction; systemic insecticides such as neonicotinoids which affect memory and navigational abilities; and climate change.[7] The symptoms and physical manifestations of CCD are equally if not more confounding: hives suddenly deserted with no sign of dead bees in or around them. And while bees and other insects often raid the honey from thriving hives, abandoned hives remain eerily untouched.[8] CCD can be attributed only to a set of possible drivers which affect and magnify each other.[9] In short, decline is much more complicated than it may first appear, and no-one really knows for sure why bees are dying.

Instead of asking why the bees are dying, several commentators have put forth a different approach: to ask how the changing relationship between bees and humans has brought "the modern bee into existence in a way that has made it vulnerable to new threats."[10] Convinced that modern agriculture has made the bee vulnerable, groups of committed alternative, or 'natural' beekeepers have emerged in many places, from urban New York to rural New Zealand. Such groups focus on caring for bees.[11] This article analyses the philosophy and practice of one such group in Ashurstwood, England. We will suggest that these beekeepers see CCD less as a problem that arrives from the outside to be solved, and more as a situation that requires responses that re-make the bee and human relations with the bee. This group of alternative beekeepers, however, are not only aiming to reshape the bee's vulnerability to CCD, but also to make themselves vulnerable *to* the bee. In other words, they seek to share the bees' vulnerability. Vulnerability, as we explore, works on several levels: from the corporeal (bee stings hurt; bee stings damage bees more than humans), to the inter-subjective (talking to bees in the hope that they respond; bees sensing humans), to the sexual (sexless bees reflect displaced human desire), and from the individual to the multitude (the good of the bee or the good of the hive). Sharing unequal vulnerabilities, we argue, forms the ethical heart of this alternative apicultural community. We begin by outlining the relevance of Judith Butler's thinking for sharing vulnerability across species lines, before describing the practices of alternative apiculture in more detail. The rest of the article then proceeds along two axes unique to interactions between bees and these particular humans: the gifts of honey and poison; longing, connection and bee-worship.

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[7] van Engelsdorp and Meixner, "A Historical Review of Managed Honey Bee Populations."

[8] James Ellis, Jay Evans and Jeff Pettis, "Colony Losses, Managed Colony Population Decline, and Colony Collapse Disorder in the United States," *Journal of Apicultural Research* 49, no.1 (2010): 134-136.

[9] Simon Potts, *et al.*, "Global Pollinator Declines: Trends, Impacts, and Drivers," *Trends in Ecology and Evolution* 25, no. 6 (2010): 345-353.

[10] Jake Kosek, "Ecologies of Empire: On the New Uses of the Honeybee," *Cultural Anthropology* 25, no. 4 (2010): 650-678, 651; see also Freya Mathews, "Planet Beehive," *Australian Humanities Review* 50, (2011).

[11] And not on securing ecosystem services, natural resilience, the value of bees to the rural economy, or any of the current, mainstream ways to approach bees.

Vulnerability

In recent years concerted effort has been made to understand the ways animals, plants and other more-than-human things come to create shared social worlds. However, at the same time as bees have become both more and less visible—more visible in registers of alarm; less visible out there in meadow and hedgerow—a growing number of scholars have been rethinking the emphasis of the more-than-human turn and vital materialism on the dynamic, rambunctious, or exuberant appearance of life.[12] In particular, a number of theorists have emphasized how vulnerability is intrinsic to embodied life. On one level vulnerability can be considered a potential diminishment of being, as through disease, infection, injury, insult, or—ultimately—death a creature's capacities are reduced or changed in some way inimical to its on-going flourishing. Clearly, any meaningful response to pollinator decline must take account of the ways in which bees have become more vulnerable. Yet vulnerability also works at a more profound level, as Judith Butler has theorized in a number of recent works.[13] For Butler, for all that corporeal life is an on-going performance of historically-layered flows of practice, matter, and information, it is always open to the outside, is always exposed beyond itself to forces that may, or may not, be internalized. Seen in this way, the forces and events that make a being vulnerable arrive from the outside; by the same token, a being is always already constituted such that vulnerability must arrive, perhaps. Vulnerability represents the "inherent susceptibility of corporeal life, its inherent and incessant exposure to what exceeds its abilities to contain and absorb."[14] As Harrison (reading Butler) concludes, vulnerability is a condition of receptivity as much as it is a condition of susceptibility.[15] In other words, to be vulnerable to that which arrives from the outside is also to be capable of receiving (and incapable of not receiving). Following Butler, then, life is never self-contained, but is constantly open to that which arrives from beyond it; life begins with exposure and with the potential to receive, life must be vulnerable even before life can *do* anything.

For Butler the irreducible vulnerability of life has ethical implications. If vulnerability is inherent to life, all life depends upon more than itself, and therefore we are joined together in our precarity, in our shared-but-different vulnerability to that which arrives to change us. This shared vulnerability creates a shared sociality, a set of "largely unwilled interdependencies."[16] For Butler, recognizing the fact of our shared vulnerability points to an ethics which must begin with the other, with life's vulnerability to the other which is both what makes life possible and ultimately extinguishes life. Such a recognition may prompt us, Butler argues, to consider our interdependencies and to examine those vulnerabilities we might otherwise disavow, those lives which we care not to acknowledge as being vulnerable, or at least being vulnerable in ways that matter to us. Or it may not. The ethical mode is anarchic: it arises, or not, unbidden from our being entangled with others in the world. It is anarchic because it cannot be wholly

[12] Nigel Clark, *Inhuman Nature: Sociable Life on a Dynamic Planet* (London: Sage, 2011).

[13] Judith Butler, *Precarious Life: The Powers of Mourning and Violence* (London: Verso, 2004); Judith Butler, *Frames of War: When is Life Grievable?* (London: Verso, 2009).

[14] Paul Harrison, "Corporeal Remains: Vulnerability, Proximity, and Living on After the End of the World," *Environment and Planning A* 40 (2008): 423-445, 436.

[15] Harrison, "Corporeal Remains."

[16] Butler, *Frames of War*, 75.

captured by principles or rules, nor can we reach any settlement of the question of the morally good.[17] Instead of settling who counts and why, ethics is more a question of "un-selfing, of suspending, or being suspended from … self-referential obsessions,"[18] or as Haraway has it, being curious enough about the world to know and feel something at the end of the day that we didn't when we crawled, leapt or groaned our way out of bed that morning.[19]

While Butler's work is predominantly human-oriented, her arguments about vulnerability need not be limited to the human.[20] We can recognize that vulnerability cuts across species: it is a condition of all life forms, rather than anything specific to humans. Humans may be open to vulnerability in a multitude of ways, from the emotional to the climatic to the extra-planetary, but the difference between humans and other species is one of degree, not of kind. Moreover, humans are vulnerable in many ways *to* nonhumans, as well as sharing vulnerability as a condition of existence *with* nonhumans. Haraway's concept of shared suffering is apposite here. Her much remarked-upon example centres on the description of an animal experiment in 1980's Zimbabwe in the novel *A Girl Named Disaster*. This experiment required guinea pigs to be exposed to clouds of biting tsetse flies, in order to find better ways of managing sleeping sickness and its effects on cattle. In the novel, one of the caretakers sticks his own arm into a tsetse cage to be bitten by the flies, in order to share the suffering of the guinea pig. Haraway argues that this has much to tell us about caring for nonhuman others without disavowing one's embeddedness or relationships with them: the "bitten arm is not the fruit of heroic fantasy of ending all suffering or not causing suffering, but the result of remaining at risk and in solidarity in instrumental relationships that one does not disavow."[21] Crucially, this act is not symmetrical, nor does it aim to 'solve' or eliminate suffering—the caretaker does not free the guinea pigs— but rather brings to light suffering that is "both ordinary and forgotten."[22] For Haraway, such gestures open up settled ethical spaces that go well beyond law, calculation or instrumental intervention: they are an attempt to share the vulnerability of an other, to reach some sense of sharing creaturely life—not knowing or understanding, but yet still grasping towards some relation with another creature and its own particular vulnerability (a vulnerability moreover in which we are often complicit).

Thus ethics can arise from our recognition of shared vulnerability in the borderlands of species difference, though without any presupposition about what form that ethics might take. Butler's take on vulnerability is not supposed to be solely or even predominantly ontological—her injunction is not to find some irreducible condition at the heart of 'life,' but rather to trace the particular vulnerabilities of particular lives. With this in mind, we will shortly turn to the negotiation of shared vulnerability in alternative apiculture, and the way that this creates new

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[17] Mick Smith, *Against Ecological Sovereignty: Ethics, Biopolitics, and Saving the Natural World* (Minneapolis: Minnesota, 2011).

[18] Smith, *Against Ecological Sovereignty*, 150.

[19] Donna Haraway, *When Species Meet* (Minneapolis: Minnesota, 2008).

[20] James Stanescu, "Species Trouble: Judith Butler, Mourning, and the Precarious Lives of Animals," *Hypatia* 27, no. 3 (2012): 567-582.

[21] Haraway, *When Species Meet*, 70.

[22] Gail Davies, "Caring for the Multiple and the Multitude: Assembling Animal Welfare and Enabling Ethical Critique," *Environment and Planning D: Society and Space* 30, no. 4 (2012): 623-638, 632; see also Franklin Ginn, "Sticky Lives: Slugs, Detachment and More-than-human Ethics in the Garden," *Transactions of the Institute of British Geographers*, (2013): doi. 10.1111/tran.12043.

communities of ethical practice. We demonstrate how recognizing vulnerability can lead not to withdrawal, contemplation, or melancholic musings on the fragility and finitude of life, but instead to a worldly project which affirms a desire to act and to make a future in which vulnerability, while still present, is nonetheless reshaped just a little for both humans and bees. Before this, however, we review how the alternative apiculture practiced by this community differs from commercial beekeeping.

Alternative Apiculture

Conventional beekeeping today is a utilitarian practice centred on gaining maximum benefit from bee products and services. In the last 100 years, worker honeybees have changed: their bodies are one-third bigger, hairier and have changed colour; they have a reshaped digestive tract, and an exoskeleton nearly double in size.[23] Honeybee social organization has changed too, with fewer guard bees, a shortened hibernation season (or none at all), and more docile workers with a 15 per cent shorter lifespan.[24] A growing number of beekeepers believe that conventional beekeeping methods are harming bees. Of particular concern to natural beekeepers are: the predominant design of hives with removable combs, which disturbs the bees' carefully-maintained hive environment; artificial breeding of queens, which replaces bees' natural instinct to swarm (which happens when a hive is big and healthy enough to divide in two and the incumbent queen flies off with half the brood to settle a new colony); the reduction of 'useless' male drones in commercial hives (their function in maintaining the hive environment and 'morale' is contested); chemicals, management and pervasive interference. Under the loose umbrella of the natural beekeeping movement, these individuals and groups advocate a more harmonious way of living with bees.[25]

The particular form of natural apiculture practiced at Ashurstwood follows principles laid out by the Austrian philosopher and scientist, Rudolf Steiner (1861-1925). In 1924 Steiner delivered a set of eight lectures on the perils of modern agriculture, including loss of soil fertility, reliance on chemical fertilizers and pesticides, and livestock health. These lectures eventually became known as 'biodynamic' agriculture, described as a "spiritual-ethical-ecological approach" which seeks to "integrate ecological, social and economic sustainability."[26] While often considered synonymous with organic, biodynamics differs in both practice and ideology. While organic agriculture strives to create a 'living soil' by removing chemicals and adding compost and manure, it does not generally venture beyond physical processes. By contrast, Steiner viewed nature as "an interconnected whole, a totality, an organism endowed with archetypal rhythm" and proposed a "new, conscious relationship, not only with the soil but with the complex energies and forces that sustain life."[27] Biodynamics enlivens the soil through 'preparations,' which function as conduits for "the subtle forces in the

[23] Kosek, "Ecologies of Empire."

[24] Ibid.

[25] 'Natural' is an un-policed, self-ascribed term. See www.naturalbeekeepingtrust.org.

[26] Biodynamic Farming and Gardening Association, "What is Biodynamics?" accessed 15 January 2013, https://www.biodynamics.com/biodynamics.html.

[27] Demeter, "Biodynamic Principles"; Tom Petherick, *Biodynamics in Practice: Life on a Community Owned Farm: Impressions of Tablehurst and Plaw Hatch* (Forest Row: Rudolf Steiner Press, 2010), 16.

earth and cosmos to radically enliven the soil in a way that solely physical measures could not achieve," and function to increase fertility and light absorption.[28] Such preparations include field sprays and compost additions—various mixtures of cow manure, chamomile, yarrow, and other herbs—using containers such as cow horns or intestines, stag's bladder or skulls, and subjects the substances to processes such as burying, hanging, or fermenting before being mixed with "dynamized" water and applied to crops in very small quantities.[29] Advocates maintain that biodynamic methods are highly effective, but the evidence is decidedly mixed.[30] Regardless, biodynamics continues to gain momentum worldwide among a range of practitioners.[31]

Steiner also predicted the ill effects of industrialized beekeeping.[32] His 1923 *Nine Lectures on Bees* form the foundation for much natural beekeeping, which diverges from conventional beekeeping in most areas of practice, as well as in spiritual belief. First, to minimise disruption to the hive natural beekeepers will only gather honey in conjunction with other bee activities. Steiner's natural beekeeping philosophy sees honey not as a commodity or food source, but as a 'sacred' and 'medicinal' substance. Beekeepers consume honey in very small quantities, never mixed with other foods or beverages, and treat honey reverently when they eat it. If it is sold at all, honey is generally sold within the biodynamic community or at extremely high prices which reflect its special value. Furthermore, colonies are allowed to keep the bulk (if not all) of their honey as their food source through all seasons, but especially in winter when they are unable to forage outside the hive. As such, the sugar feeding (where honey is replaced by a syrup liquid as a foodstuff through the winter) often seen in conventional apiculture is only employed in hives which are in distress; moreover, the practice is seriously frowned upon, since natural beekeepers believe it weakens bees' immune systems and makes them more susceptible to disease.

A second component of Steiner-inspired natural beekeeping is the design of the hive. Conventional hives are commonly made of rectangle frames with pre-fabricated comb, since this enables the beekeeper to remove frames to inspect the bees or to collect honey easily. The distance of frames from each other is measured in 'bee space'—the amount of space needed for bees to pass back-to-back—thus maximizing the number of frames that can be present in a hive and, thus, honey production. Many natural beekeepers believe these models and intense handling hinders communication, heat-regulating abilities, and the overall capacity of bees to maintain healthy immune systems. Natural beekeeping hives mimic hives found in the wild, such as in logs or trees, where the naturally built comb forms an egg-shape. Illustrating this concept is the relatively new 'Sun' hive (Figure 1). Made of straw and dung, this hive is gaining in popularity, and by design limits easy handling or honey extraction.

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[28] Petherick, *Biodynamics in Practice*, 16.

[29] Ibid., 20.

[30] John Reganold, "Soil Quality and Profitability of Biodynamic and Conventional Farming Systems: A Review," *American Journal of Alternative Agriculture* 10, no.1 (1995): 36-45; Petherick, *Biodynamics in Practice*.

[31] Petherick, *Biodynamics in Practice.*

[32] Rudolf Steiner, *Nine Lectures on Bees*, trans. Thomas Braatz (New York: Anthroposophic Press, 1998).

Figure 1 *Sun hive. Photo by Kelsey Green.*

Natural beekeeping also differs from conventional practice in chemical use. When commercial hives are subject to disease, or infestation by parasites such as *Varroa destructor*, a mite implicated in CCD, they are usually treated with chemicals. Natural beekeepers, however, will not generally use chemicals in the hive. They believe that when the hive is not subjected to intense honey extraction or to invasive management techniques the bees can ward off brood diseases or infestation on their own.

One of the most notable disparities between conventional and natural beekeeping is attitude to protective clothing. In natural apiculture, the iconic white suits and hoods associated with conventional beekeeping are replaced by unhooded, ungloved and sometimes unmasked natural beekeepers. We discuss this in more detail in a later section. Finally, allowing hives to swarm is a key hallmark of natural beekeeping, as we also discuss in more detail later. Healthy colonies may swarm any time between Spring and Autumn. Swarming involves the queen departing the hive with many other bees to establish a new colony elsewhere, leaving a new queen to replace her in the original hive. Colony population and productivity drops when swarming happens, and so conventional beekeepers take measures to prevent this, including clipping wings and killing virgin queens in their cells. Conventional beekeepers will also artificially breed more productive queens, kill drones, and replace older queen bees. Natural beekeepers, by contrast, let the hive manage its own leadership.

Through all these practices natural apiculture claims to put the health of the bee foremost. This article draws on ethnographic research conducted by Kelsey in the summer of 2012 with one natural beekeeping community in West Sussex, in England's Home Counties. The community has approximately 30 hives, runs courses and workshops, and is closely tied to

the two biodynamic farms in the area.[33] The Trust is led by Claudia, a severe German woman with wide acclaim in the field of natural beekeeping, and her property acts as a base of operations.[34]

These beekeepers are united by their concern over conventional apiculture and its exploitative beekeeper-bee relationship. Richard, a German priest and beekeeper of two decades' experience, concluded that "the greatest enemy of the bee is the [conventional] beekeeper." Most other beekeepers agreed. Sarah equated conventional beekeeping to "battery farming" that was "really, really extremely bad for the bees, not only to have all their honey taken and replaced with sugar, but to be disturbed constantly in that way, which is quite violent … there's all these complaints to save the bees, but we should be saving them from conventional beekeepers." Conventional beekeeping is seen as being part of the problem, but—according to the community—conventional beekeepers are now "coming around," and starting to use natural methods, albeit grudgingly, because they are seeing that they "work." Do they work? While natural beekeepers receive heavy criticism from mainstream bee-world, in Ashurstwood something is undeniably not happening: *the bees are not dying*. The bees under the care of the trust are alive and healthy, even vibrant. While pollinator decline continues to impact conventional apiaries across the UK, these hives are full. The forming of new practices (or perhaps more accurately, the reinvention of old ones), a new way of getting on together seems to be working if not to solve CCD, then at least to re-work the contours of vulnerability a little. We now turn to the way that bees and beekeepers get on at Ashurstwood through two axes unique to bee/human interactions: the gifts of honey and poison; longing, connection and bee-worship.

The Gift of Honey / Poison

> *Now I steal honey. I've been here for weeks, long enough to know that you don't put honey on toast, or in your tea (both of which I normally do); it's not a food, it's sacred and it's medicinal. Yet there is a jar of honey that sits by the stove to feed newly captured swarms, and I try it; I'm doing research after all. Does biodynamic honey taste different? I think it might. Yes I know the properties of honey vary based on location and flower and such, yet this honey has a gel-like quality; it changes in the light; it's golden and godlike and nearly white. The texture is fluffy, airy with bits of comb. Honey is not food. Yet every time I come to the kitchen I steal some to eat. Stealing the lifework of tiny bees.*
>
> *One afternoon we dissolve a queen-less hive. This is rare, but the colony was floundering without their queen. The bees get dusted in icing sugar so they may be licked and liked in new homes, and the hive is taken apart bit by bit. Six frames stand upright against the kitchen walls, dripping honey. The smell infuses everything: propolis, sweetness, wax. A few lone bees buzz here and there. It is intoxicating, induces giddiness. What the hell is it about honey, anyway? I steal bits of comb from this too, and the taste*

[33] Since the group does not sell honey or provide pollination services commercially, it can be categorized as "hobbyist." Moreover, none of the members are dependent on apiculture for their livelihood. Since we are interested in bee/human dynamic at play, the question of the socio-economic status of the community is beyond our scope here.

[34] All names have been fictionalized.

> *changes depending on from which part you take it. The comb is uneven, parts almost black from bee living. I try to comprehend the amount of labour, the amount of work that I am told this takes. It's hard, and I feel guilty. In this place, the consumption of honey is frowned upon; it elicits an enormous amount of guilt. I struggled to comprehend this when I first arrived. Now that I am stealing honey, though, I think I understand it more.* (Kelsey, Field Notes)

Honey is a special, highly desired bee product. Honey is especially valuable since in their entire lifetime each bee may produce no more than a quarter of a teaspoon of honey. For natural beekeepers, transformation seems to be the key. Henry explained it as the distillation of "sunlight and flowers into candles and honey for us." For Claudia it's magical because they take the "love life of the flowers … out of their own body, out of … who they are, and … transform, every substance." Richard talked at length about how honey had brought humans and bees together over very long timescales. He offered theories of human evolution that might be "different from the normal ones." He asked: "So what makes us human physically? It's our uprightness, right?" He stood, mimicking the head of a primate, forward and hanging, versus resting on top of the spine like a human.

> So this whole humanisation, so to speak, of the human being, has to do with this uprightness, and that had very much to do with our whole bone system … Early man and the bees evolved in a parallel, and that honey was needed already in early stages of human development to develop the bones in this way that could then be an expression of this uprightness, because the uprightness, so to speak, is first, and then the bones come.

Richard implies that bees have physically altered our evolution, echoing Haraway's assertion that "there are other ways to think about domestication that are … more powerful … for nurturing better ways to live in multispecies sociality."[35] Other beekeepers, too, believed that honey and wax were why bees and humans had been drawn together. This begins to help us to understand why these beekeepers regard bees so highly, and offers a glimpse into why these people do what they do, as well as why they might feel a stronger connection to bees than other insects.[36] Honey, for the beekeepers in Ashurstwood, is to be taken very seriously.

As the field note above suggests, stealing honey is transgressive: so why do these beekeepers not normally eat the bees' honey, or do so only with great reverence? The difference hinges, we suggest, on them seeing honey not as a product of bees' labour but as a gift. In conventional beekeeping, hive ecology and management aims to maximize the efficiency of honey production for barter or profit: to extract value, in other words, from the nonhuman labour of the bee through the methods we briefly described in the previous section, such as sugar-coating. The way honey is used in natural beekeeping, by contrast, much more closely resembles a gift relationship; as one interviewee, Heather, responded "we feel like they're giving us something."

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[35] Haraway, *When Species Meet*, 207.

[36] Hugh Raffles, *Insectopedia* (New York: Pantheon, 2011); Bee Wilson, *The Hive: The Story of the Honeybee and Us* (UK: John Murray Publishing, 2004).

From the anthropologist Marcel Mauss, we know that a gift is never freely given, but is instead given and received by interested parties to reflect and produce social obligations.[37] Mauss' survey of Indigenous societies, much of which he argued was relevant to modern, industrialized nations, showed the various obligations attached to gifts: the obligation to give gifts (to show oneself as generous); the obligation to receive them (showing respect to the giver, and by extension demonstrating one's generosity); the obligation to return the gift (to reach some level of parity). Since Mauss, 'gift' has been theorized as central to social relations, although his ideas have been much re-worked, in particular redressing his emphasis on the strategic and self-interested nature of gift-giving. Of relevance to this article are a set of thinkers who have theorized more-than-human gift ecologies, from the cosmos, to the microbial, to the domestic, to the corporeal.[38] Each takes on Mauss' basic insight, so that more-than-human gifts are seen not as something freely given to humans to do with as we please, but as obligations which tie us into wider networks of life and which make us responsible and mandate response to the giver.

Since a gift is never freely given and is always a matter of webbed relations that exceed the self and its capacity to know, questions of intent and calculation become less important. This allows us to sidestep—for now—the question of whether bees offer their honey as a gift. Instead, we can ask if honey is currency in a web of social obligation. It is clear that the beekeepers take a small amount of honey as recompense for all they do to ensure the bees flourish. The ceremonial way honey is consumed (on its own, never on toast) heightens the sense that honey is valued symbolically, a small token of an inter-species social bond. Additionally, taking small amounts of honey puts the beekeepers in the position of *having received*, and obligated to return the gift and achieve some measure of parity. In eschewing the market relations of honey production the beekeepers of Ashurstwood are making honey *more* important, not less. Furthermore, to pull back to our abiding concern in this article, giving and receiving gifts entails a certain vulnerability on the part of both giver and receiver. If the gift draws people into a relationship of giving and receiving, there is still always the chance of being cheated. The giver will never know for certain, in advance, that the gift will be accepted—they have to take a chance. Nor does the giver know in advance if the gift will be returned in kind: giving a gift makes one vulnerable to exploitation. A gift always involves taking a chance that the net of obligations the gift entangles us in will be more porous than we anticipated, more fragile, more transitory or that there is some other, hidden, game going on. Thus, honey draws bees and beekeepers into a web of obligation which is deep yet fragile, and which makes each party beholden to the other.

Derrida's thinking on the gift is helpful here to understand the gift relation between bee and beekeeper, and in particular to see how the beekeepers act ethically even amid uncertainty. To simplify, Derrida notes that since the gift demands a response of whoever receives it, the gift becomes an imposition, and an opportunity for the giver to take something for themselves. Derrida argues that the only way for there to be a gift is for both giver and

[37] Marcel Mauss, *The Gift: Forms and Functions of Exchange in Archaic Societies* (London: Cohen & West, 1954).

[38] Nigel Clark, "Ex-orbitant Generosity: Gifts of Love in a Cold Cosmos," *Parallax* 16, no.1 (2010): 80-95; Myra Hird, *The Origins of Sociable Life: Evolution After Science Studies* (Basingstoke: Palgrave, 2009); Haraway, *When Species Meet*.

receiver to be unaware of its very existence: "for there to be gift, it is necessary that the gift not even appear, that it not be perceived or received as gift."[39] And of course if the gift is not perceived as such by the giver, then it cannot really qualify as gift. The gift is riven by paradox: the condition of the possibility of the gift is also its impossibility. The gift can never be absolutely altruistic, but it is also impossible to rid gifting of the imperative to be altruistic. Derrida's sense of the ambivalence of the gift, in which we are driven because of—rather than despite—the gift's paradoxical nature to aspire to give and receive well, captures something important about the beekeeping world at Ashurstwood. For Derrida the true gift must go beyond reciprocity or calculation into an infinite responsibility—this captures the way that bee and beekeeper are drawn together in ways that defy measurement and certainty. If honey is a currency in co-emergence, as Richard suggested above, this puts the human in a pre-existing gift relationship with bees, since one of their sacred substances in some ways made 'us.' Such a gift goes beyond nutritional transaction. Since the layered human/bee histories are ultimately unknowable for these beekeepers they are on incalculable terrain, but still driven to reciprocate. Eating honey is therefore a kind of sacrament that acknowledges an earlier, unpayable debt to nonhuman ancestors.

One question arises, however: do bees offer a perfect, altruistic, gift without recompense? We might assume that: the bees don't know they are offering honey as gift to the beekeepers; the bees don't know honey has been received as gift, even if the beekeepers know they receive it (as when Heather reports that, to repeat a quotation above, "we feel like they're giving us something"). Do bees then give us a glimpse of the limitless and infinite ideal against which gifting occurs in practice? Let's not ask Derrida, but instead ask the beekeepers of Ashurstwood —do bees give a limitless gift? They would give a qualified "yes." This is a question we take up again in the next section when we examine bee-worship, but the qualifier is a simple, painful one which must give us pause. Honey is not freely given: when you approach a hive, you might get stung.

> *It turned out that I was very scared of the bees. I didn't want to be. But the thing is, conventional beekeeping looks very easy. You see beekeepers fully suited, cracking open boxes, messing with frames; inconsequential really. Protection, however, makes an incredible difference. In reality, when you approach a hive, you can hear the sound, you can smell some powerful bee smell, and somewhere you can sense an energy. An energy not malevolent—yet. And with natural beekeeping, you're completely exposed. All you can do is ask. My first sting at Ashurstwood came as a complete shock. A small dagger-stab, like electrocution. Unfortunately, this first sting happened to be followed in close succession by five more, all in the head, which made me feel dizzy and nauseous. The connection between getting stung in the head and academia would be mused upon by the Ashurstwood beekeepers (who had a general distaste for conventional university knowledge). Later in the month: another sting in the neck, and then one in the face. This last one hurt the most. The fact is that getting stung really hurts. And, rough sadness, bitchy universe, the bee also dies. I pull the detached stinger from below my lip, watch it pump poison for ten minutes; the bee drags along the ground, the stuff it's made of*

[39] Jacques Derrida, *Given Time: 1. Counterfeit Money* (Chicago: Chicago University Press, 1992), 16.

> *coming out its rear, emptying. Translucent wing and fuzzy-body struggles, limping. I purse my lips, already swelling up: the sting is a powerful thing.* (Kelsey, Field Notes)

Claudia remarked that although we think of bees as pollinators, there was "a lot more to it than that" and that "it might really well be that the fine quantities of poison that they spread as they fly or as they visit a flower also have an effect on nature, on building up, on maintaining nature." She suggested that since "every poison is also a therapy," bee poison is a powerful therapy. This surfaced in discussions of nonhuman-nonhuman relationships, especially cows and bees. This makes sense in the context of biodynamics, where cows are central to the philosophy, and historical beliefs such as *Bugonia*, where bees were thought to be created out of bovine carcasses.

> And then I said to Tom, the farmer, "the cows go right up to the beehives?" and he said "oh yes, they love those beehives. They're really interested. Sometimes you can get three cows standing around the beehive, just looking." The bees, when they forage in the sort of pasture that cows are on, they impart to the plants this sort of special bacteria, and when the cows eat whatever plant it is, that bacteria is helping their digestion … Sometimes if you see a cow pat that's dried out a bit, and then it's rained, so there's a little pool of water in it, you'll quite often see bees, going and taking that water. Maybe that [water] has something or some energy in it for the bees. (Anne)

The underlying belief here echoes that of honey: poison is a currency in co-emergence. Moreover, it is a currency that goes beyond knowledge and human sense, to interspecies gifts these beekeepers can only guess at. As Steiner wrote, "every time the insects are developing their activities on the earth, the earth is, as it were, quickened by their poison"[40] This makes poison, like honey, a gift given by the bees.

Although poison is attributed with vital powers, it is also of course associated with the sting. Bees possess power, which has led to their use in war, from Roman front lines to the lab-altered cyborgs of the US military.[41] Bees elicit a visceral response which is at once both threatening and exotic, "the romantic thrill of muted danger … even dead, bees continue to reverberate with a certain energy or force."[42] As Tim put it, while the wonderful "golden produce" is great to have, "you've got to get it from animals that aren't terribly happy that you've got in there, and so it's that sort of double edged sword of honey and stings … it does excite some people." This makes sense since the 'gift' relates etymologically to pharmakon, which also implies charm, remedy, or poison.[43] Fear of the sting remains for all apiculturists. Henry recalled how in his first year of beekeeping he thought that the bees would love him because he was looking after them, and how when he opened the roof "they all just came at me … just like a flock of little miniature sheep—the ones that kill you." So it can be scary. Beekeepers are vulnerable to bee poison, and although that vulnerability can be managed and taken into account in practice, it is also an irreducible part of the human/bee relation, one

[40] Steiner, *Nine Lectures on Bees*, 59.

[41] Kosek, "Ecologies of Empire."

[42] Heather Johnson, "Dangerous Skin: Bees and Female Figuration in Maher and Plath," in *Insect Poetics*, ed. Eric Brown (Minneapolis: Minnesota, 2006), 129-152, 131.

[43] Derrida, *Given Time*.

which cannot be fully overcome. But the image of a bee, dying, on the ground and the human, standing, lip throbbing in pain at the sting, reminds us how uneven the stakes are when the bee and the beekeepers' lifeworlds collide.[44] Honeybees, while having the capacity to induce pain or in extreme circumstances death, are still tiny creatures. This also reminds us that gift-giving is corporeal and fleshy in ways that see some beings, wilfully or otherwise, accrue benefit from the gifts of others sometimes at the others' expense.[45] Rather than exploit the bee, these 'natural' beekeepers try to avoid accruing too much of the bee's generosity. The sting is what reminds us—painfully—that the gift of honey should not be taken for granted: its offering is not an unconditional, infinitely generous gift since sometimes, for reasons of their own, the bees don't want the beekeeper rummaging around their hive.

Longing, Connection and Bee-worship

> *I was more scared of bees than when I first arrived. After getting stung, stealing honey, catching swarms, I watched Claudia interact with the colonies. Bare hands; no smoke. No veil, except occasionally, and even then she inevitably fails to bring it over her tied-back hair, resulting in bees actually trapped inside the veil next to her face: nightmarish. We open hives. Beeness thrums everywhere, audible increases in intensity, buzz, buzz louder; they are alerted, the air vibrates, I can feel their wingbeats, I can smell them close to my eyes, my skin; I am nauseous with fear, my legs itchy to run. Claudia is calm and collected. For all her human idiosyncrasies there is no denying what happens. We open hives and bees crawl on her hands, her arms, go up her sleeves, their legs stuck in her sweater wool, their antennas brush her skin; bees are in her hair. She doesn't flinch, and somehow, they don't sting. I struggle with wanting this experience, to do this honourably— and wanting to be very far away. I watch her claim this space for them both, hold it, reinvent it somehow, form something new that I am definitely outside of. I can't even begin to grasp at the layers of this, how to do this practice. Give me a bee suit.* (Kelsey, Field Notes)

Natural apiculturalists have very specific attitudes to wearing protective clothing. Conventional beekeepers generally wear full bee suits, including boots, gloves, elasticated arm and leg bands, and mesh hoods. Natural apiarists, by contrast, wear very little or no protective clothing at all. The gravity of this should not be underestimated: too many stings in the wrong places, even if one is not allergic to the poison, can have lethal consequences. (Henry described how the movements humans make instinctively when they approach a hive are the ones that bees find the most upsetting—rapid eye movement, exhalation of breath, increased sweat—and how bees 'went for his pulse points' when they wanted to sting.[46]) Despite this, not using full bee

[44] Franklin Ginn, "Jakob von Uexküll Beyond Bubbles: On Umwelt and Biophilosophy," *Science as Culture* 23, no.1 (2014): 129-134.

[45] Rosalyn Diprose, *Corporeal Generosity: On Giving with Nietzsche, Merleau-Ponty, and Levinas* (New York: SUNY, 2002).

[46] We might say that standing naked in front of the bees, the bees' capacity to respond raises into question much more than the canon of Western philosophy and its deconstruction: it raises the

suits, or even veils, is very important to the beekeepers in order to connect more deeply with bees. Here is Claudia, who as described above approaches hives with minimal protection:

> I cannot tell you how every single one of your movements is very, very different when you've got no gloves, no veil, nothing. You just move in a different way, you think in a different way, your whole inner attitude becomes different, and then you realize "this is something to aim for … in your relationship to the bees" As long as you are protecting yourself against them, their guarding instincts will be elicited. And then you don't get anywhere. I think the measure of how one succeeds with that is a measure of how … willing you are to really engage with the bees.

Dika described the approach in a similar way:

> You try to depend on intuition more than what you can figure out … It's another consciousness … always, with respect, and humility. You must be very, very calm, and very centred … they can panic like this [snaps fingers], and they have so much power and so many forces … you are always in fear of being stung, but if you really give them blessings, and tell them that you like them, meet them with a loving attitude.

Both Claudia and Dika suggest that an articulation encompassing body, consciousness, intention, and energy is the way to respond to bees. It became clear through these conversations that people were constantly attempting to open up, grappling with the panic bees seem to instil, to find some way of holding themselves that the bees could recognize as non-hostile, or perhaps even friendly. This included Heather, who still wears a full suit: "Yeah! All the way elasticated, so I feel safe. If I went and stood there now, I think I'd be scared if one landed on me. I'm really, I haven't got that, which I really want, but I haven't got that calmness yet." Even though she is clearly excited about bees, Heather is not where she'd like to be with them: she still experiences fear. Henry expands on this: "When I had my experience with the killer bees and suddenly thought, 'I'm gonna wear my space suit at all times'; I just lost it, because I got so stung." He now gets stung much less frequently, which he attributes to being calmer. Like Heather, wearing the bee suit is an expression of fear for Henry, but a constant internal struggle still takes place. Approaching the hive without protection is always risky, for no matter how skilled or how attuned the beekeeper is to the signals their body, consciousness, intention, and energy send out there is always a chance that the bees will not react well.

Not using bee suits is about more than bodily exposure to potential poison. It expresses a profound longing for connection—to expose oneself and *not* be stung; to acknowledge the bees and want the bees to look back, to return the acknowledgement with friendship and not hostility. To address the bee, and to seek to be addressed by the bee, is to make oneself vulnerable at a deeper level than the body. Certainly, one asks: What if I get hurt in the address, what if the bee stings me, or interprets my bodily signals in a way inimical to my health? But perhaps more importantly, one also asks: What if the creature just ignores me, what if it spurns my address? Even further, as the quotations above show, these beekeepers are yearning to approach Claudia's depth of interaction with bees. But since they cannot know in advance

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prospect of getting stung very, very badly (Cf. Jacques Derrida, "The Animal That Therefore I Am (More to Follow)," trans. David Wills, *Critical Inquiry* 28, no. 2 (2002): 369-418).

what this practice is really like; another question arises: What if I am surprised by who I become during the meeting? Rather than coming to and leaving this kind of thick encounter unchanged, the recognition of being vulnerable to the other changes the person. As Butler puts it, when we ask for recognition from the Other we are not asking them to see us "as we are, as we already are, as we always have been" since we are changed by the very "petition" to be recognized. Butler continues: "To ask for recognition, or to offer it, is precisely not to ask for recognition of what one already is. It is to solicit a becoming, to instigate a transformation … it is also to stake one's own being, and one's own persistence in one's being in the struggle for recognition."[47] This is what Claudia refers to in the above quotation when she talks of a different "inner attitude" that is "something to aim for." Thus there is more at stake than a sting: at stake is the beekeepers continued being in the world, the chance that these bee-lovers might leave the hive different than when they approached it. As much as they seek to help the bees in the face of CCD, the beekeepers also stake themselves on the bee, giving themselves, or at least some part of themselves, to the insect's power. We suggest that these layers of vulnerability—from the bodily, to the response, to the uncertainty involved in opening up to the bee—is the transformative, ethical heart of alternative beekeeping.

Still, despite any recognition or response that might occur the bees retain alterity, a strangeness that refuses to be domesticated. These beekeepers, instead of merely wanting to 'save the bees,' suggest that if we attend to them closely, if we are ready and willing to address and be addressed by the bee, we might get the feeling that the bees have some answers from their own alien realm to give *us*. The beekeepers were united in their disenchantment at the current state of world affairs. In response to pervasive environmental and social crises there was an overarching desire for bees to enter our world and address these issues, and a belief that they could, successfully. Katherine, a beekeeper in her early forties who seemed to have replaced intimate human relationships with bees, took inspiration from bees:

> And I feel, and I've always felt, that the bees have a far greater knowledge and wisdom than humans have … as a human being, we have such a limited knowledge and understanding, and our views of the world, and … how it works is so limited and so basic, that we can't possibly begin to understand how they work. In fact, they're far more developed than we are. And they're here to show us how to live, and to learn from them, and they're the example to follow.

The sense of what these beekeepers intend us to learn from bees is difficult to articulate. German priest, Richard, attempted to explain:

> And a German beekeeper in the thirties developed a wonderful expression that you can't really translate into English … it's something like the fragrance, warmth, entity … so in German it's *Duft*, *Wärme*, *Bindung*, which is the maleaur, inside the colony. The environment which they produce, so it's dark and warm, and it has this fragrance, this specific bee smell, which I call, actually, from a spiritual point of view: "the smell of selfless love."

[47] Butler, *Precarious Life*, 44.

This has been inspired by Steiner's lectures, and suggests a kind of selfless love hovering at the edge of sense. It also clearly has something to do with sex. Henry recalled that it was monasteries and churches who kept bees because wax (a key light source), was produced by a "celibate" creature. He also noted that in Greek mythology a reward was given to the nymph Melissa "by turning her into a bee and sparing her the indignity of sex." The underlying message seemed to be that, like the rest of society's problems, human sexual hang-ups can be solved by bees. Claudia talked of the "high form" of love that exists in the hive, selfless and purposeful, which she contrasted to human love, which being bound up with sex, led to "selfishness, jealousy, all those kind of things." The bees-as-gods philosophy was expressed most strongly by Claudia and Katherine; their bee-worship was underpinned by a longing for bee-ness, a release from the human shackles of messy sexual relations, to be constantly surrounded by the warm, flexuous bodies of celibate and cooperative sisters, and always on a purposeful life mission.

Yet bees aren't sexless of course. On her 'wedding flight,' the queen mates with up to ten drones, exploding their abdomens in mid-air when she extrudes their endophallus, and returning to the colony filled with a lifetime's supply of semen.[48] This important aspect of bee biology was barely acknowledged by these natural beekeepers.[49] In addition, the oft-touted concepts of love and godliness were not applied to the winter months when all the males, duties apparently considered complete, are forced out of the hive into the cold to starve or, if noncompliant, stung to death. Despite these unsavoury aspects of bee ecology, the consistent message from the beekeepers was that the world is a bit broken and bees can fix it: bees are greater than us; bees are tiny gods.

Swarming is key here. As we mentioned earlier, while conventional beekeepers do all within their power to prevent queens leaving in a swarm to set up new hives, natural apiculturalists will let the bees manage their own leadership. Healthy, vibrant colonies can swarm many times in a season (as they do at Ashurstwood). When they swarm bees are very docile and can be handled easily; often, while scouting for a permanent location, the bees will land on an object to scout—a tree branch, bike, or fence—and can often then be shaken into baskets or even moved handful by handful. If the bees successfully take to the new location, they can create a whole new colony. Sometimes, however, swarms are impossible to recover or they depart the colony before anyone can notice. In such cases, the bees are gone for good. Swarming therefore is a time of anxiety. Nevertheless, natural beekeepers view this process as the hive 'reproducing,' which elicits feelings of celebration and is taken as a sign of health and vitality. For Steiner, swarming demonstrated bees' desire to leave the merely physical world of their hive to reach a spiritual world. He compares the swarm to the human soul: "Just as the human soul takes leave of the body, so when the young Queen is there, the old Queen with her company leaves the hive; one can truly see in the flying swarm an image of the departing human soul."[50] Swarms represent the image, for Steiner, of reincarnation, of nature pushing at the boundaries of the material towards the spiritual realm. In front of this we can be humble

[48] Tautz, *The Buzz about Bees*.

[49] On bees as domestic emblems see Anna Tsing, "Empowering Nature, or: Some Gleanings in Bee Culture," in *Naturalizing Power: Essays in Feminist Cultural Analysis*, ed. Sylvia Yanagisako and Carol Delaney (New York: Routledge, 1995), 113-143.

[50] Steiner, *Nine Lectures on Bees*, 68.

and marvel, he suggests. This is when we can also, Steiner writes, bring these bees back from the brink of their spiritual transformation by helping them form a new colony. Steiner, in other words, enjoins the beekeepers not to sit back and watch but to interfere, to try and find a new home for these bees as an expression of love and care.

From the swarming process the beekeepers seek insight and reassurance about renewal and transformation in the face of death. Steiner writes that "We have something within us that we wish to transform into tiny creatures, into bacilli and bacteria—into minute bees."[51] For these Steiner-inspired beekeepers, there is something shared deeply between bees and humans, something that goes beyond gifts of honey and poison, beyond unprotected, physical encounters between species. That something is the necessity of transformation, the always possibly-present call of death and transmutation into soul, or the disintegration of the human into "tiny creatures."[52] This spiritual dimension, no doubt unpalatable to many in the wider bee community, is nonetheless inseparable from the practical aspects of natural beekeeping at Ashurstwood, and from the fact that, when all is said and done, the bees of Ashurstwood are flourishing and swarming. These beekeepers invest so much time and energy in the bees *because* they believe that deeper lessons can be learned: these spiritual beliefs are not an add-on, but deeply embedded in their practice. The beekeepers believe that the bees can alleviate the burden of the messy shackles of sexual and social life, and—ultimately—the burden of vulnerability to death. Freighting bees with the desire to give lives meaning or even to save the world might seem like a step too far. But evidence from Ashurstwood shows that bees do have some power to reshape shared vulnerabilities, at least for these people who have invested themselves in the bee's world.

Figure 2 *Colourful paintings, which often resemble doorways, mark the entrance to an indoor hive. Natural beekeepers often believe this facilitates orientation. Photo by Kelsey Green.*

[51] Steiner, *Nine Lectures on Bees*, 68.

[52] Ibid.

Conclusion

The gift of a disaster—for all its negative and unequally distributed consequences—is to stop us in our tracks and prompt us to think about what we are doing, and how it might be done differently.[53] This article has explored how one group of bees and humans are making a new community out of a disaster: colony collapse disorder. What lessons might be drawn from this community for responses to CCD? We have seen that bees flourish when their immediate environment and stewardship practices are oriented towards bee health. This is a simple point, but seems to bear out the beekeepers' criticisms of modern agriculture. These beekeepers do not understand bees through any of the dominant ways of knowing, including the ecosystem services they provide, the labour they can offer in pollination, or the economic value of honey. Rather, the beekeepers see the bees as vulnerable companions who require, by virtue of intertwined history, care and perhaps even love. We also saw how the practical responses of these beekeepers are bound up with spiritual responses, which include encountering and worshipping the alterity of the bee. Would their practices be translatable to commercial beekeeping? This is doubtful: the architecture of 'natural' hives is not amenable to commercial harvesting, nor are the colonies mobile—they cannot be put on trucks and driven across North America to meet the pollination demands of the Californian almond harvest, for example (which requires 1.8 million bee colonies to be transported from across North America each year). Would getting commercial beekeepers to throw away their bee suits end CCD? No. Must all beekeepers yearn to be transformed by their encounters with bees, or deitize bees, to end CCD? No. But to ask the question, 'Can these practices solve CCD?' is to miss much of the point. For these beekeepers, as concerned as they are, do not set out to solve CCD. They are not acting in a consequentialist framework, where their actions are judged against tallies in a species inventory. Nor are they calculating the benefits of their actions, although they do seek more healthy colonies. Rather, what they are doing is offering a response beyond calculation. They do what they do because they feel it to be right; they feel it gives new life to relations between bees and humans, and that doing so is good for both. If there are answers to be found at Ashurstwood, they are not about solving CCD. The answers are, perhaps, more in the way a small group of creatures has come together to remake modestly the histories they each inherit.

We have stressed that sharing vulnerability is at the heart of ethical practice at Ashurstwood. The beekeepers want us to do more than recognize the bees' vulnerability; they want us to recognize, and reconstitute, our own vulnerability to the bee. This account might help us think about living with pestilent, dangerous or unpleasant nonhuman companions—those creatures that bite or sting or harm us. Becoming less uncomfortable with vulnerability and seeking to put ourselves at risk can be a productive ethical practice. We might learn to accept the risks more, to loosen the hegemonic idea of a self-certain subject to whom an outsider arrives to disrupt. Instead, encountering awkward nonhumans pushes us to recognise our corporeal vulnerability to the other, a vulnerability "that is part of bodily life, a vulnerability to a sudden address from elsewhere that we cannot pre-empt."[54] Acknowledging this vulnerability can lead not to enclosure, to barriers we hope cannot be breached, but to a more turbulent biopolitical terrain in which the question is living and dying with rather than control over. Sharing vulnerability puts the onus not just on classifying, managing, or (in the

[53] Clark, "Ex-Orbitant Generosity."

[54] Butler, *Precarious Life*, 29.

context of CCD) saving the animal, but on opening ourselves up to the possibility that we are already given over to them and that we might have to change.

There are limits to such an ethic. As we noted very briefly earlier, the beekeepers of Ashurstwood do not have to worry about making a living from their bees; other beekeepers do, and face very different socio-economic pressures. There are plenty of beekeepers already vulnerable to the vicissitudes of agricultural markets, to commercial pressures on honey production, and so on. And as Butler reminds us, despite universality on some level, corporeal vulnerability is not evenly distributed and "becomes highly exacerbated under certain social and political conditions, especially those in which violence is a way of life and the means to secure self-defense are limited."[55] Becoming comfortable with one's vulnerability in the face of awkward companions is not a tactic for all people in all contexts. It might, rather, as Butler points out, be most useful for those in the least precarious position as a way to loosen their self-assured insularity.

In the end, despite its flaws, the multispecies community at Ashurstwood shows us how loss and vulnerability can lead not just to melancholy or withdrawal, but to action. Butler points out that loss, which is closely associated with vulnerability, can become "condition and necessity for a certain sense of community, where community does not overcome the loss, where community *cannot* overcome the loss without losing the very sense of itself as community."[56] Loss here denotes something more than a subtraction or negation. Loss creates something new: loss becomes a creative force to structure patterns of relation and existence in new ways. While there is a long tradition of loss of nature or of particular nonhumans leading to regret, nostalgia, or melancholy, in this article loss is the spur for an intervention.[57] Paradoxically, then, a world without CCD would make this alternative bee community less precious, less precarious, less special, and perhaps impossible. In the end, the gift offered to us by the beekeepers and bees at Ashurstwood is the possibility of a vital, common world of unequally shared vulnerability to poison, collapse, rejection, joy, transmutation, love, and the temptations of honey.

[55] Butler, *Precarious Life*, 29.

[56] Judith Butler, "Afterword: After Loss, What Then?" in *Loss*, ed. David Eng and David Kazanjian (Berkeley: University of California Press, 2003), 467-473, 468.

[57] John Ryan, "Why Do Extinctions Matter? Mourning the Loss of Indigenous Flora in the Southwest of Western Australia," *Philament* 15 (2009): 51-80.

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