Disappearing bees Sumugan Sivanesan & Tessa Zettel



un Magazine 9.1

Wald

At the annual beekeepers fair in Berlin's Prinzessinnengarten, one *Imkerin*¹ describes the honey at her stall as 'a gift from the bees'.She tells us how she asks her bees for permission to take their honey, what most beekeepers call 'robbing the hive', and they agree as long as she passes it on to others. She duly gives jars of honey to friends and relatives, and to tradespeople as a thank you for a job well done. Such implicated gifts highlight the interplay of goodwill and obligations that bind us to one another, crossing species lines and straying from more rational economic relations.

The fair this year bustled with around thirty stalls, talks, and a tour of hives kept on a nearby rooftop by Berlin's celebrity beekeeper-activist, Erika Mayr. Most of the beekeepers are retired couples or bearded men, though there are growing numbers of young *Imker* and *Imkerinnen* also displaying their wares, including our friends the 'Moabees', a collective of women whose bees live above a shipping container at the artist residency we're staying in on the outer edges of the inner city.

Sociologists Lisa Jean Moore and Mary Kosut remark on the irony that 'only when bees vanish do they tangibly appear to us'.² In recent years bees have been doing just that. The peculiar phenomenon of worker honeybees suddenly abandoning their hive en masse was named Colony Collapse Disorder (CCD) in 2007 by US scientists concerned about its rapid spread throughout an entire industry,³ and threats to the many crop species – alfalfa, sunflower and numerous fruits and vegetables-that depend entirely on Apis mellifera, the European honeybee, for pollination. Finding no single cause, they attributed the 'disorder' to multiple converging conditions that include the prolonged use of insecticides, new parasites and pathogens such as Varroa mite and Nosema, environmental stresses including a lack of biodiversity in monocultural farming environments, and effects of climate change like 'season creep'. Farmers also noted the strain on constantly moving hives deployed for pollination, and the weakening of bees' immune systems over generations where a diet of sugar syrup has long replaced honey.

Public attention around CCD has since contributed to renewed global interest in urban beekeeping, particularly in fortuitously overgrown and biodiverse postindustrial cities such as Detroit and Berlin. A heightened concern for the wellbeing of honeybees and their habitats is borne out in documentaries and media reports, and the actions of a plethora of scientists, artists, activists and lobby groups. International community-led initiatives like the citizenscience project Open Source Beehives⁴ have also sprung up in response to a surprising lack of scientific knowledge about pollinator species and the 'wild' ecologies that support agricultural land.

In *The Bees* (1978),⁵ a typical 'nature's revenge' genre film of the era, ferocious swarms of mutant Afro-Brazilian honeybees bring down military aircraft, target politicians and deliver an ecologically-driven ultimatum to the United Nations via a human interpreter. Such fantastic narratives can be read as popular cautionary tales of the consequences of modern science allowing humans to 'play god', underpinned by a Cold War fear of biological warfare and retaliation against economic imperialism. Curiously these films attribute agency and political intentionality to groups of angry, organised non-human actors set on upending human behaviours and policies that are defuturing for other species.

What if we read the sudden disappearance of bees today as a deliberate political action taken similarly to redirect the course of human/planetary behaviour? Individual bee colonies already expel drones and reduce their population to prepare for winter, perhaps demonstrating a capacity for suicide biopolitics that could extend to collective self-sacrifice for the greater good of the species. Might this imaginative leap animate the question of if (and how) the non-human can speak?

Our protesting bees join an array of outsider explanations for CCD that include the Rapture, interference from mobile phone towers and alien abduction. More empirical findings⁶ currently point towards sublethal exposure to neonicotinoids, newer systemic insecticides (with lower toxicity for humans) that were introduced not long before the first hives were abandoned. The difficulties of conducting reliable 'in the field' experiments however, have meant that a direct causal link between neonicotinoids and CCD remains elusive. Symptomatic of a dominant

Sumugan Sivanesan & Tessa Zettel: Disappearing bees

scientific ideology that does not adequately account for the categorically unknowable, the bees' disappearance may constitute a kind of 'collateral damage' in the unpredictable chemical warfare waged against organisms designated as pests, which not coincidentally thrive in the enfeebled monocultures of contemporary agriculture.

Here we have a nature-culture assemblage in which cause and effect are not so easily unravelled. Insecticides and fertilisers arguably maintain the scale of food production needed by post-industrial populations in the developed world. Neonicotinoids might then be considered one of a cluster of influential 'matters of concern'7 implicated in the human-induced changes to ecosystems that in the Anthropocene era mark even the most remote geographies. If the end of bees signals the collapse of industrial agricultural ecosystems, this would necessarily alter the carrying capacity of industrialised human populations. From here you might consider the bees' death a kind of 'industrial action' or workers' strike in which anthropocentric lifeworlds are at stake. Framed thus, what problematics are involved in discerning the demands of the worker(bee)s, and how could they reshape the socio-political paradigms that we operate in?

Arguments for realising the political agency of non-human actors are heightened by the Anthropocene thesis that humans have become a 'significant geological, morphological force'8 via their widespread proliferation and actions. Author and theorist Idelber Avelar⁹ describes politics as the art of taming the human animal; along with culture, it is an 'anthropotechnique' used historically to distinguish the human life force from undifferentiated nature. If humans are now understood to be geological actors, perhaps even a force of nature, then we have effectively left this tidy nature-culture division behind. Moreover as human-induced climate change impinges on all species and planetary processes, historian Dipesh Chakrabarty¹⁰ urges us to find ways of producing culture and politics in which 'nature' is a co-author. In terms of justice, this means inventing ways in which non-humans are able to 'speak' in these traditionally anthropocentric domains.

The bees in the eponymous film use a human translator to make their demands

known to the UN-a scenario not dissimilar to philosopher Bruno Latour's proposition for a radically democratic collective vet to come, in which non-humans overcome their 'speech impediments' to participate in a parliamentary-style assembly. Experts like scientists would act as official human 'spokespersons' for other species. representing (what are perceived to be) their interests in debates in which they are implicated.¹¹ Scholars from the emerging field of multispecies ethnography such as Eben Kirksey and Susan Leigh Star critique his formulation as it offers no recourse for non-humans if misrepresented by their human spokesperson. They accuse Latour of ventriloquism and even 'speciesism', likening the term 'non-human' to 'non-white' as both are defined by a lack.¹²

Back in Berlin we walk iconic streets named for their bee-friendly flowering trees-Unter den Linden, Kastanienallee, Birkenstrasse-visible traces of campaigning a century ago by the then-powerful beekeepers lobby. Today the activist group Mellifera e.V. claim explicitly to 'interfere politically on behalf of the bees',¹³ recently helping to secure a temporary ban on neonicotinoids in the EU that is soon to be followed in parts of the US. Heinz Risse, one of Mellifera's key players, manages his hives in Prinzessinnengarten in ways that demonstrate more interspecies sensitivity than most: knocking politely when he needs to open a hive and taking only minimal amounts of honey so as to leave enough for the brood. He also keeps fifty thousand bees on the roof of the Abgeordnetenhaus (Berlin House of Representatives), in order that they may influence the decision-making of the parliamentarians inside.

States such as Bolivia and Ecuador have recently conferred the rights of subjects to nonhuman entities that include lakes, plants and the Pachamama, acting to protect 'nonhuman rights' within a legal system pressed to accommodate indigenous cosmologies.¹⁴ Such moves to acknowledge other species in existing political frameworks follow many long struggles around animal liberation and ethics, and are modulated by particular and specific instances of colonisation. Multispecies ethnographers suggest we might also think more critically about human imperialism, overcoming our species prejudices and human/non-human binaries by adopting a multispecies framework that could more fully incorporate non-human rights.

Latour posits multinaturalism as one way of understanding a range of collective experiments occurring across species that disrupt the hierarchy of beings positioning humans above all other actors.¹⁵ For Moore and Kosut this leads through to cultivating an 'intra-species mindfulness'¹⁶ that addresses our limited ability to 'know' bees using human senses, terms and concepts. Acquiring 'new modes of embodied attention and awareness'-ways of standing back, intra-acting and simply 'being with' - Moore and Kosut follow the bee through social interactions with objects, humans and insects, apprehending it as operative within its own world of meaning.¹⁷ They recognise moreover other kinds of agency that bees have in the formation of engaged alliances within urban landscapes, through their embodied labour even constituting us physically as a species. Confronting this 'ontological murk of relations' that encompasses 'the idea of the bee, humans' material relationship with the bees, including use of them, and the actual bee as its own thing',¹⁸ Moore and Kosut thus move away from strict definitions between human and animal towards 'an enmeshed and porous relationship' wherein the species, and their surroundings, are intimately entangled.¹⁹

At Prinzessinnengarten again to buy flowering plants, a gift for the bees who visit our windowsill, Heinz's co-worker Anna tells us she would like to be a bee for a day, to know how a bee thinks and experiences the world. Of course, this is biologically impossible, surely one must *be* a bee in order to think as one?

Amerindian perspectivism, the source of the term multinaturalism, would suggest that this gap is not so wide after all, that we might think more similarly to bees than we know. Anthropologist Eduardo Viveiros de Castro argues for this philosophy of the indigenous peoples of the Amazon basin, in which 'everything and everyone can be human'²⁰ such that 'nothing and no one is human in a clear and distinct fashion', to be taken up as a potentially radical decolonial tool. According to perspectivism, all species see the world the same way, but the world that they see changes; e.g. a jaguar may see itself as human, humans as we would see wild pigs, and blood as we see beer, or a tapir would approach a mudflat as we would a ceremonial house. Each referent then takes on multiple inflections, so that behind the taste of beer is blood and below the ceremonial house is mud.

In this 'transformational' world, all things—human, animal, plant, spirit, earth—can variably occupy the prime subject position, and their habits and actions understood under the rubric of culture rather than nature. From a perspectivist point of view it would be no more unusual for bees to undertake political action than it would be for them to practice ceremony or drink beer. Perhaps honey, consumed by us both, might be a substance through which our distinct perspectives intersect, a site of ontological undoing where interspecies translation and transformation could occur. Honey may then take on shamanic properties, as a figure that can metamorphose and (mis)communicate—'speak'—across species.

In their study of urban beekeeping in New York City, Moore and Kosut wonder if the CCD crisis, 'in which bees are literally disappearing, is [their] attempt to avoid contact with humans, to move away from us'.²¹ It's doubtful we could ever be certain of the bees' reasons, intentional or otherwise, for disappearing, and perhaps this is not even the point. It may be however that mindfully 'being with' bees, as they withdraw doubly from our ways of making and of making meaning, is one step towards thinking as far as we are able—away from us, and towards a different set of relationships with the multinatural world.

This text is part of an ongoing collaborative interdisciplinary research project, *Plan Bienen*, begun by the authors during a three-month residency at ZK/U—Centre for Art and Urbanistics (Berlin) in 2014. Their project blog is: www.planbienen.net.

Notes

- 1 'Beekeeper' in German
- Lisa Jean Moore and Mary Kosut,
 'Among the colony: Ethnographic fieldwork, urban bees and intra-species mindfulness', *Ethnography*, vol. 15, iss. 4, 2014, pp. 517.
- 3 Marla Spivak, Eric Mader, Mace Vaughan & Ned H. Euliss, 'The Plight of the Bees', Environmental Science & Technology, no. 45, 2011, pp. 34–38, available at: www.xerces.org/wp-content/ uploads/2011/02/plightofbees.pdf
- 4 Open Source Beehives is a collaborative project to install standardised plywood beehives across the world, equipped with data sensors to monitor bee health and behaviour, available at: www.opensourcebeehives.net
- 5 Alfredo Zacharias (dir), The Bees, 1978.
- 6 For example: L.W. Pisa, V. Amaral-Rogers, L.P. Belzunces, J.M. Bonmatin, C.A. Downs, D. Goulson,
 D.P. Kreutzweiser, C. Krupke, M. Liess,
 M. McField, C.A. Morrissey, D.A. Noome,
 J. Settele, N. Simon-Delso, J.D. Stark,
 J.P. Van der Sluijs, H. Van Dyck,
 M. Wiemers, 'Effects of neonicotinoids and fipronil on non-target invertebrates', *Environmental Science and Pollution Research*, vol. 22, iss.1, 2015, pp. 68–102.
- 7 The word 'concern' allows for more leeway than 'fact', as Latour argues, the more one learns about a phenomenon or subject, the less established facts hold. Furthermore he claims that 'matters of fact' are often determined in the interests of politics. See Bruno Latour, *Politics* of Nature: How to Bring the Sciences into Democracy (tr. by Catherine Porter), Harvard University Press, Cambridge, Massachusetts, USA, 2004, p. 63.
- 8 Paul J. Crutzen and Eugene F. Stoermer, 'The "Anthropocene", *Global Change Newsletter*, no. 41, May 2000, p. 17.
- 9 Idelber Avelar, 'Amerindian perspectivism and non-human rights', *Alter/ nativas*, Winter, 2013, available at: alternativas.osu.edu/en/issues/ autumn-2013/essays/avelar.html
- 10 Dipesh Chakrabarty, 'The Climate of History: Four Theses', *Critical Inquiry*, no. 35, vol. 2, 2009, pp. 197–222.
- 11 Bruno Latour, *Politics of Nature*, Harvard University Press, 2004.

- 12 Eben Kirksey, Craig Schuetze and Stefan Helmreich, 'Introduction' in Eben Kirksey (ed.) *The Multispecies Salon*, Duke University Press, 2014, pp. 1–24, available at: www.multispecies-salon.org/ working/wp-content/uploads/2014/10/ Kirksey-et-al-The-Multispecies-Salon.pdf
- 13 Mellifera e.V., 'Neonicotinoids— Beekeepers interfering on behalf of the Bees', *Mellifera e.V. News*, 13 March 2014, available at: ev.mellifera.de/en/en.news/ news.en/index.html.
- 14 Avelar 2013.
- 15 Bruno Latour, 'From Multiculturalism to Multinaturalism: What Rules of Method for the New Socio-Scientific Experiments?', *Nature and Culture*, vol. 6, no. 1, Spring 2011, pp. 1–17.
- 16 Lisa Jean Moore and Mary Kosut, Urban Beekeeping and the Power of the Bee, NYU Press, New York, 2014.
- 17 Ibid, p. 527.
- 18 Ibid, p. 525.
- 19 Ibid, p. 526.
- 20 Eduardo Viveiros de Castro, *Cannibal Metaphysics* (tr. by Peter Skafish), Univocal, Minneapolis, 2014, p. 70.
- 21 Moore and Kosut, 2014, p. 535.

un Magazine 9.1



Bienen Hotel

Sumugan Sivanesan & Tessa Zettel: Disappearing bees