Chapter 27 Animal Geographies in a Pandemic



Richard Gorman

1 Animal Geographies in a Pandemic

The flourishing sub-discipline of animal geography has demonstrated the multiple and complex ways in which humans are enmeshed in social relations with animals. As Philo and Wilbert (2000, p. 4) argue, "any social science which fails to pay at least some attention to these relations, to their differential constitutions and implications, is arguably deficient". Understanding how COVID-19 is (re)shaping humananimal relations is a vital part of any analysis of the pandemic.

Quarantines, lockdowns, and social distancing have acted to reconfigure domestic spaces, with many people spending substantially more time at home. Amidst the many social relationships that this shift enacts, these changes are felt by the companion animals that many of us share our homes with. Veterinarians have warned that this sudden upsurge in closeness and attention is likely to lead to intense separation anxiety for many animals when people begin to return to their routines. For many, animals have been a source of companionship and emotional support during times of uncertainty and stress, highlighting the increasing ways in which animals are integrated into understandings and conceptualisations of 'the social'. With animal care (e.g., dog walking) being a permitted reason for leaving the home during lockdowns in many localities, animal ownership created uneven hierarchies of mobilities-though also anxieties-as people struggled to balance care for their animals with a desire to stay safe and isolated. Other inequalities were exacerbated by people's relationships with companion animals; the reticence of some emergency accommodation providers to welcome pets meant many homeless people had to choose between separation from their companion animals or support. Animal shelters on the other hand faced initial prospects of being overwhelmed by a reported

R. Gorman (🖂)

Brighton and Sussex Medical School, Brighton, UK e-mail: r.gorman@bsms.ac.uk

[©] The Author(s), under exclusive license to Springer Nature Switzerland AG 2021

G. J. Andrews et al. (eds.), *COVID-19 and Similar Futures*, Global Perspectives on Health Geography, https://doi.org/10.1007/978-3-030-70179-6_27

rise in pet abandonment, followed by a surge in adoption as volunteers opted to home animals as shelters closed, and as pets became an increasingly valued affective commodity the longer lockdowns lasted.

A critical task of animal geography is exploring the many ways in which animals are 'placed' by human societies, both in terms of material spaces, and in semiotic imaginations and orderings of where (different) animals 'belong' (i.e., pigs on a farm) (Philo and Wilbert 2000). Scholars like Searle and Turnbull (2020) have discussed the rapid proliferation of images and media during the pandemic that aim to demonstrate how animals are 'reclaiming' or 'returning' to normatively 'human spaces', a discourse that relies on the (long critiqued) binary separation of humans and nature. These narratives, Searle and Turnbull argue, both fetishize and obscure 'the everyday-ness of certain ecologies'—that animals are regularly present along-side humans; urban wild boars are not exceptional, just under-visualised.

Animals are central to telling the stories of COVID-19, and as Haraway (2016, p. 12) describes, "it matters what matters we use to think other matters with; it matters what stories we tell to tell other stories with". Animals, and our intensified and industrialised relationships with them, have been the focus of much attention throughout the coronavirus event, with the virus 'blamed' on human-animal encounters, reigniting discussions about globalised agriculture, meat consumption, habitat encroachment, and the exotic wildlife trade. Although the original source and route of viral transmission to humans remains unclear (at the time of writing), this has not stopped much speculation and controversy. Initial genetic sequencing of the SARS-CoV-2 virus traced strong genetic similarities to viruses circulating in wild horseshoe bat populations, but suggested that the virus was probably transmitted to humans by another intermediary animal. Thus potentially following a similar pathway to the 2002 SARS-CoV-1 outbreak, which spread from horseshoe bats to civets before 'jumping' to humans. The involvement of an intermediary animal prompted questions about what human activities provoke the juxtaposition of species and lead to opportunities for interspecies viral transmission-very geographic matters. As events unfolded, a commonly held hypothesis was that the COVID-19 virus emerged at the Huanan Seafood Wholesale Market in Wuhan, as the result of an interaction between an infected animal and a human. However, later analyses have instead theorised that the market was the likely site of a 'super-spreader' event, rather than the primary site of zoonotic spillover. Whatever the case, (mis)imaginations of the geographies of a 'wet market' have become a central part of political and media rhetoric in attempting to apportion origins, in ways that have lodged in the public mind, and led to calls for restrictions on the sale of live animals as well as 'wet markets' themselves. Finding pathways to discuss how we live with other animals which avoids reifying forms of cultural imperialism is a critical task for animal geographers. Zoonotic origin stories have been a key feature of many contemporary epidemics, from Ebola to H1N1 and H5N1. However, as Bezan (2020, para. 9) points out, there is potential that this "myopic focus on zoonotic origin points" risks "bolstering racist and speciesist ideologies". Animals are frequently deployed in the production of cultural difference, particularly through a strict policing over which animals are socially constituted as (im)proper to consume (Elder et al. 1998). A focus on (or perhaps, moral panic about) local (agri)cultural practices, rather than wider geographic interdependencies, through lodging bats, pangolins, and 'wetmarkets' as central to the origin stories of the pandemic serves to absolve capitalist logics and hegemonic forms of animal consumption from blame. Limiting discussions of viral risk to localities ignores the fact that human-animal relations are entangled with globalised economic and political systems (Wallace 2009). As Van Dooren (2020, para. 19) concludes, "the broader reality is that no part of the world has a monopoly on the kind of animal cruelty and destruction of animal lives and habitats that is today driving the production of zoonotic disease". Interrogating the narratives of animals and place emerging during the pandemic is a key task for animal geographers, one that can aid in understanding how such stories are mobilised in producing discourses that enable human and more-than-human exploitation.

Exploring representations of animals is only part of an inquiry into animal geographies-there are also animals' own geographies to consider too; those which Philo and Wilbert (2000, p. 23) describe as "the beastly places made by animals themselves, whether wholly independent of humans or when transgressing, even resisting, human spatial orderings". Whilst the virus has undoubtedly resulted in a restructuring of human lives, the impacts of coronavirus—and the subsequent management strategies deployed to manage these impacts-have more-than-human ramifications. For example, Garlick (2020) describes how the absence of human activity has had disastrous consequences for many animals that have adapted to live commensally alongside humans, decreasing the availability of food for opportunistic feeders; from roadkill-consuming birds of prey, to tourist-fed monkeys. Other commensal species have had to range further than usual, exploring new spaces, to meet their daily food consumption-often in ways that transgress what humans consider established and acceptable boundaries, provoking conflict. Animals' own place making and world building are remapped through the retreat of humans, changing animals' 'landscape of fear', their behaviours, and mobilities (Goldman 2020). Such has the capacity to further change localised geographies, with animal bodies constituted by a wide variety of other bodies, relations, and associations. Indeed, Arregui (2020, para. 7) discusses how the movement of wild boars into urban Barcelona "could increase the presence of tics and pathogens such as enterobacteriaceae in urban parks and green areas". Arregui questions whether this might lead to human-wild boar 'social distancing' in the future, as humans become more cautious about zoonotic transmission.

Questions about whether animals themselves can be infected with COVID-19 have been a matter of interest throughout the pandemic—mainly out of concern that animals might play a role in spreading the virus to humans. Evidence of this has been limited (though changing rapidly), and guidance from the CDC (when this chapter was being written) concluded that the risk of animals spreading COVID-19 to people is low. This has not stopped much speculation and anxiety amongst different publics fearful that animals could spread the virus, a case which led to Dr. Mike Ryan, Executive Director of the World Health Organisation's Health Emergencies Programme, asking people not to retaliate against animals, stating in a press conference:

"It's extremely important that if people worry and have concerns about sources of transmission that we refrain from any act of cruelty to animals. They're beings in their own right and they deserve to be treated with kindness and respect and they are victims like the rest of us." (WHO 2020)

Whilst animal-to-human transmission appears to have been limited, emergent scientific evidence suggests that the virus can spread from people to animals in some situations, with cases of SARS-CoV-2 confirmed in cats, dogs, lions, tigers, and minks who had been in contact with people with COVID-19. The possibility of human-to-animal transmission caused great concern that the pandemic could hit already endangered species, such as great apes, hard. Yet the major source of concern relating to human-to-animal transmission has been that infected animals may then act to further spread (or even, mutate) the virus. Cases of human-to-animal-tohuman transmission of SARS-CoV-2 were reported on mink farms in Europe (particularly in the Netherlands and Denmark), leading to government-ordered culls of millions of minks, out of concern that affected animals could act as long-term reservoirs of the disease, frustrating efforts to control the pandemic (Mallapaty 2020). The different values at play-concern and culling-here are examples of how animals are "simultaneously subjectified through biopolitical techniques of government, and objectified as components in a system valued on anthropocentric terms" (Hodgetts 2017, p. 24).

Culls of animals have occurred in other sectors as a response to the pandemic. The closure of slaughterhouses caused a bottleneck in food supply chains, with many agricultural animals unable to be killed for food (despite simultaneous reports of widespread hunger). Opportunities to stop or slow the production cycle within contemporary agribusiness are limited. According to Kevany (2020), in the US alone, more than ten million hens are estimated to have been culled due to COVID-19 related slaughterhouse shutdowns, with the potential for similar numbers within the pork industry. This is a huge reshaping of agricultural geographies and a cause of emotional stress for farmers and others embedded in rural landscapes.

Matters of culling also arose in laboratories, as researchers were faced with difficult choices about the futures of research animals in the face of lockdowns. Some facilities have been forced to euthanize large numbers of animals, focussing on cryopreservation of embryos to preserve specific research programmes. Yet in other laboratories the pandemic has 'skyrocketed the demand for new strains of mice' as part of research into COVID-19—to such an extent that shortages of specific strains were reported (Ananthaswamy 2020). The impact on animals here should not be forgotten; many animal models of coronavirus involve suffering and death.

Elsewhere, non-human labour is being enrolled in the hopes of securitising postpandemic borders, as efforts to utilize 'bio-detection dogs' to detect potential carriers of the virus are stepped up. Even enigmatic animals like horseshoe crabs are entangled and drawn into efforts to alleviate coronavirus, with the billions of potential vaccines requiring testing for contamination during the production process—a test reliant on the blood of horseshoe crabs. Animals worldwide are enmeshed and impacted through responses to COVID-19, their involvement, and their stories, are a vital part of understanding the new geographies being created by the pandemic. The pandemic has done much to re-centre and revitalise discussions about humananimal relations, and the entanglements between human and animal health—discussions which geographers are well placed to contribute to.

Geography as a discipline has much to offer in understanding (and indeed, creating a rationale for understanding) the multispecies worlds impacted by, and involved in responding to, coronavirus—and future health crises. The presence of zoonosis at the forefront of societal imaginations has the potential to reconfigure many humananimal relations (Arregui 2020), and demand a new modality of human-animal coexistence (Philo and Wilbert 2000). Geography's engagement with concepts and approaches like biopolitics (Hodgetts 2017), political ecologies (Wallace 2009), and multispecies ethnographies provides the discipline with a strong toolkit and framework to provide insight into (post)pandemic multispecies worlds. Matters of health are always multispecies matters. Responding to a pandemic involves responding to multiple, more-than-human, entangled bodies.

References

- Ananthaswamy, A. (2020). Building a mouse squad against Covid-19. Knowable Magazine. https://doi.org/10.1146/knowable-051420-1.
- Viralscapes. The bodies of others after Arregui, A. G. (2020,March 31). COVID-19. Allegra. Retrieved June 16, 2020, from https://allegralaboratory.net/ viralscapes-the-bodies-of-others-after-covid-19/
- Bezan, S. (2020, June 14). Novelty, desire, and the nature of precedent: Human-animal relations in the age of COVID-19. Retrieved June 16, 2020, from https://biosecproject.org/2020/06/14/ blog-novelty-desire-and-the-nature-of-precedent-human-animal-relations-in-the-age-ofcovid-19/
- Elder, G., Wolch, J., & Emel, J. (1998). Le Pratique Sauvage: Race, place, and the human-animal divide. In J. R. Wolch & J. Emel (Eds.), *Animal geographies: Place, politics, and identity in the nature-culture borderlands* (pp. 72–90). London: Verso.
- Garlick, B. (2020, May 1). Lockdown isn't good news for all wildlife—Many animals rely on humans for survival. *The Conversation*. Retrieved June 16, 2020, from http://theconversation.com/ lockdown-isnt-good-news-for-all-wildlife-many-animals-rely-on-humans-for-survival-137213
- Goldman, J.G. (2020, May 21). How the coronavirus has changed animals landscape of fear. *Scientific American*. Retrieved June 16, 2020, from https://www.scientificamerican.com/ article/how-the-coronavirus-has-changed-animals-landscape-of-fear/
- Haraway, D. J. (2016). *Staying with the trouble: Making kin in the Chthulucene*. Durham: Duke University Press.
- Hodgetts, T. (2017). Wildlife conservation, multiple biopolitics and animal subjectification: Three mammals' tales. *Geoforum*, 79, 17–25.
- Kevany, S. (2020, May 19). Millions of US farm animals to be culled by suffocation, drowning and shooting. *The Guardian*. Retrieved June 16, 2020, from https://www.theguardian.com/environment/2020/may/19/

millions-of-us-farm-animals-to-be-culled-by-suffocation-drowning-and-shooting-coronavirus Mallapaty, S. (2020). What's the risk that animals will spread the coronavirus? *Nature*. https://doi. org/10.1038/d41586-020-01574-4.

Philo, C., & Wilbert, C. (2000). Animal spaces, beastly places. Milton Park: Taylor & Francis.

- Searle, A., & Turnbull, J. (2020). Resurgent natures? More-than-human perspectives on COVID-19. *Dialogues in Human Geography*, 10(2), 291–295. https://doi. org/10.1177/2043820620933859.
- Van Dooren, T. (2020, March 22). Pangolins and pandemics: The real source of this crisis is human, not animal. *New Matilda*. Retrieved June 16, 2020, from https://newmatilda.com/2020/03/22/ pangolins-and-pandemics-the-real-source-of-this-crisis-is-human-not-animal/
- Wallace, R. G. (2009). Breeding influenza: The political virology of offshore farming. Antipode, 41(5), 916–951.
- WHO. (2020). COVID-19 virtual press conference—8 April, 2020. Retrieved June 16, 2020, from https://www.who.int/docs/default-source/coronaviruse/transcripts/who-audio-emergenciescoronavirus-press-conference-full-08apr2020.pdf?sfvrsn=267145f5_2

Richard Gorman is a human geographer currently working at Brighton and Sussex Medical School in the UK. His research is grounded within cultural geography and combines qualitative social science and interdisciplinary approaches to understand situated practices of health, care, and medicine. Particularly, Gorman's work explores how health often intersects with people's cultural, ethical, and emotional relationships with animals and nature, opening up complex policy interfaces relating human and animal care. Gorman's previous research has involved exploring the roles of animals within various caring and health-promoting practices, as well as more recently, examining patient perspectives and engagements with practices of laboratory animal research.