Animals (forthcoming in *Research Ethics in Human Geography*, edited by Helen Wilson and Jonny Darling)

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Key Objectives

- To introduce animal geographies as a sub-discipline of human geography.
- To present some key ethical issues involving geographic research with nonhuman animals.
- To illustrate through a research case-study the complexities of research ethics involving nonhuman animals in geography.

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Introducing animal geographies

Animal geographies is a fast-growing field within the discipline of human geography. Animal geographers aim to 'decenter the human' in human geography to consider the lives and geographies of nonhuman species and their ecosystems. This move to 'decenter the human' and to focus on nonhuman lifeworlds follows the growth of the cross-disciplinary intellectual field of animal studies. Animal studies is a broad-sweeping area of academic inquiry that encompasses fields as diverse as ethology and animal behavior, philosophy, feminist care ethics, the use of animals in biomedical research, anthropology, ecology, and many others. A renewed interest in nonhuman animals in the late 1990s and 2000s has been marked by a proliferation of geographic scholarship on a range of other-than-human species, on human-animal interaction, and on questions of how to incorporate the nonhuman into a traditionally humanist field (Wolch and Emel, 1998; Philo and Wilbert, 2000).

This 'animal turn' in geography has involved research that interrogates the messy boundaries between 'human' and 'animal' (acknowledging that humans themselves are animals). In these blurry boundaries and categorizations, animal geographers aim to understand the lives and experiences of nonhuman animals, which are often intimately entangled with human social and economic processes. Animal geography research has focused on all kinds of species in a variety of different contexts. This includes elephants in captivity and in the wild (Whatmore and Thorne, 2000); sea turtles in Indian contexts of conservation (Srinivasan, 2014); cougars in British Columbia (Collard, 2012); lobsters in US research labs (Johnson, 2015); slugs in the English garden (Ginn, 2014); and cows raised for dairy in India (Narayanan, 2016), the UK (Holloway et al., 2014), and the US (Gillespie, 2014). Geographic studies of nonhuman animals not only span the globe, but they encompass analyses at the level of both the population (Srinivasan, 2014) and the individual, or singular, animal (Bear, 2011).

Geographic research on animals demands ethical consideration, and the ethics involved in this research are complex and complicated by a variety of methodological questions. These concern how

it might be possible to come to know another species; the institutional processes of ethics review (or lack thereof); and questions related to the harm and anthropocentrism involved in geographic research on animals. The remainder of this chapter outlines some key ethical issues, and offers two case studies that highlight some of the ethical complexities of animal geographies.

Key ethical issues

Care for animals is deeply entangled with, and often involves, harm. For example, Srinivasan's (2013, 2014) research on 'street dogs' in India and 'stray dogs' in the UK highlights how these different geographic contexts manage free-roaming dog populations and how practices framed through narratives of care (such as spay/neuter programs, sheltering, and euthanasia) also inflict harm, pain, confinement, and even death, on dogs (Srinivasan, 2013). In a very different context, sea turtle conservation in India also involves various degrees of harm to individual turtles in the name of conservation, thus obscuring the ethical impacts of this harm in service to broader conservation objectives (Srinivasan, 2014). These intertwined relationships of harm and care pose an ethical challenge for animal geographers who should consider the potential of their research to actively (or through complicity in ongoing violence against animals) harm the animals they are studying. Animals do not consent to research participation in the way that human participants can consent (see Greenhough [2007] for a discussion of consent and alternative ways of thinking about animal participation in research). Animals in research are vulnerable in a range of ways, perhaps most evident in the possibilities for harm to which they are often exposed. Importantly, this harm may not always manifest in forms of bodily violence, confinement, physical pain, or psychological effects (e.g., boredom, fear, Post Traumatic Stress Disorder). Rather, animal geographers might also consider the kinds of harm done through less obvious means: for instance, building an intimate, consistent relationship with a certain animal during field research and then leaving the field and severing that daily bond may cause emotional or psychological harm or grief for that animal.

These questions of obvious and less obvious forms of harm must be central to research agendas involving other species and they must be considered in not only the subject of the research, but also in how this research is done. For animal geographers, how humans come to know the intimate lifeworlds of other species are key methodological and theoretical concerns. Methods involved in studying nonhuman animals in geography vary widely, from participant observation in spaces of animal life (zoos, conservation sites, farms, free-roaming animal habitats, laboratories, etc.), to GPS tracking of individual and herd behavior, multispecies ethnography, and interviews with animal caretakers (Hodgetts and Lorimer, 2014). These methods involve varying amounts of disruption and/or harm to animals' lives. For instance, trapping and tracking animals can involve direct contact, sedation, sometimes injury or death (in the case of bird tracking, for example). Observing animals *in situ* (in their 'wild' habitats) involves a degree of incursion into spaces where the presence of humans may be disruptive (either through humans being present to observe animals, or through the introduction of recording devices and technologies). Participant observation sometimes involves participating in practices that actively confine, interfere with, or cause physical or emotional harm to animals in spaces of captivity (e.g., active participation in the daily practices of zoos, labs, or farms). Even with interviewing animal caretakers, there are ethical issues to consider: for instance, how the interviewee's view of the animal is shaped by their embeddedness in norms of anthropocentrism and in their own emotional attachment to the animal in question.

Modes of recording animal life also differ and include such practices as hand-written fieldnotes, photography, video, and audio. Of course, these methods of recording and documenting nonhuman life are fraught with complexity: from questions of efficacy to questions of ethics. In a course I teach

called 'Doing Multispecies Ethnography,' students spend half their time at a sanctuary for pigs; they are paired with a single pig for the term and write a mini-ethnography of the singular pig, their budding relationship, and a geography of the sanctuary. After teaching this course twice, I have become increasingly concerned with the medium of writing (a fundamentally anthropocentric form) to render multispecies ethnography. Writing is primarily a human activity, raising questions about whether there is something significant lost in attempting to translate nonhuman experiences into an anthropocentric form. Concerns over the medium of writing are taken up by other animal geographers; see, for example, Brown and Dilley (2012) and Laurier, Maze, and Lundin (2006). It can be argued that any method of collecting or disseminating knowledge about other-than-human species is filtered through human technologies (video, audio, the human mind), but the forms of media used and how they represent nonhuman life are important considerations in animal geography research. Recent responses to this concern have prompted a turn to video and audio documentation of nonhuman lifeworlds (e.g., Lorimer, 2010). However, Collard (2016) points out the ethically problematic (and sometimes lethal) dimensions of wildlife documentary filmmaking, highlighting the harm that can emerge from making an animal encounterable. In short, the encounterable animal becomes an object of the filmmaker's, the photographer's, or the researcher's gaze and study. In doing so, the encounterable animal is exposed to risks and potential harm that would not otherwise be present.

From the above examples, it is clear that how research, which involves animals, is conceived of, performed, and regulated in academic institutions is a fraught ethical issue. Although there are numerous ethical questions to consider, the remainder of this chapter is organized around two case-study examples from doctoral research I conducted between 2012 and 2013 on the lives of cows in dairy production in the Pacific Northwestern United States. The first example has to do with the institutional ethics review process I underwent prior to beginning my research. The second example is focused on ethical concerns that arose while I was in the field.

Institutional practices of ethics review

Prior to beginning my doctoral research, which was focused on trying to understand the effects of commodification processes on the lives of cows in the US dairy industry, I went through the necessary ethics review process. At the University of Washington in Seattle (where I completed my PhD), there is a human subjects review process overseen by the Institutional Review Board (IRB). The aim of the IRB is to ensure that any research involving human subjects is conducted in accordance with the university's guidelines for ethical research practice. Because my research involved interviewing human farmers and other bovine caretakers, as well as participant and/or spectator observation in spaces of dairy production, I had to obtain 'human subjects' ethics approval. When filling out the IRB form, one of the questions asked if my research involved nonhuman animals. I ticked 'yes' in response to this question, a choice that routed my human IRB application out of the social sciences review system and into the biomedical sciences system. As a result, even my human subjects application was routed through biomedical sciences, causing a review delay lasting several months because the reviewers for biomedicine were unfamiliar with methods commonplace in the social sciences (participant observation as a method, for instance, caused much consternation and additional paperwork to explain it). The immediate rerouting of my application itself is telling: the university as an institution still predominantly conceptualizes nonhuman animals as research subjects narrowly in terms of those animals used in biomedical laboratory research. This was reaffirmed for me as I proceeded through obtaining ethics review approval for nonhuman animals as *research subjects*.

The institutional body that oversees ethics review for nonhuman animals at the University of Washington is the Institutional Animal Care and Use Committee (IACUC). One of the first tasks in securing ethics review approval was for my PhD advisor and me to complete an online IACUC training course on ethical best practices for animals in research. This training program was focused entirely on the use of animals in laboratory settings. We learned the "Three Rs" for ethical animal research (*replacement*, where possible, of animals in research; *reduction* of the number of animals used; and *refinement* of research practices to involve less suffering for the animals). We also learned best practices (methods and protocols) for anesthetizing animals during a protocol and euthanizing animals at the end of a study. I also had to categorize the level of pain and invasiveness that would be involved in the study I was proposing. Cows or farmed animals were not mentioned at all in the training program, and when I was interviewed later by an IACUC staff person as part of the approval process, it became all the more clear that the ethics review was not designed to oversee or even inform ethical practice in the kind of research I was proposing. The IACUC staff member asked what kind of contact I would have with the animals in my research; I responded that I would be observing them at farms, auction yards, and sanctuaries. I added that I might be involved with feeding them, but mostly my role was observer. She asked if I would have any other kind of contact with them—any kind of contact at all. I replied that I might pet them. She laughed and replied that that would not be a problem, ethically speaking.

Concerned that I had not been provided with any relevant ethical guidelines for the research I planned to conduct, I asked if there was anything else I should be aware of to ensure that I was following ethical research practices in my encounters with the cows I would meet and study. The staff person advised me to follow all animal welfare laws that governed farmed animals in the US (and in Washington and California, the states where I would be conducting my research). I informed her that the only federal law protecting farmed animals in the US was the Humane Methods of Livestock Slaughter Act, and she encouraged me to make sure I was familiar with those guidelines and to follow that law. I replied that I would not be involved in slaughtering any animals and was informed that, given this, the necessary paperwork would be filed to get my IACUC approval moving through the system.

By contrast, Rosemary-Claire Collard (2015) writes about her own experience with the ethics review process at the University of British Columbia, where she did not have to undergo an ethics review process for nonhuman animals since she was not undertaking research in a lab research setting. Whether animal geographers complete animal ethics review processes or not, institutional ethics review involving nonhuman animals are inadequate and anthropocentric. Collard writes, 'it is evident that the animal ethics review relies on the human–animal dualism, as animal experimentation does. Animals are, according to this dualism, killable and confinable. This power dynamic is assumed, not questioned, in the animal care ethical review' (2015: 134). Inadequacy and ambivalence in ethics review has been an ongoing critique of human subjects ethics review—that it does not adequately or completely ameliorate potentially unethical practices, that it is politically fraught and ambivalent (Valentine, 2005; Martin, 2007). Thus, I do not mean to suggest that having a more robust and inclusive ethics review for animals would radically improve actual conditions for animals in research, but it is certainly a much-needed and necessary first step for two key reasons: 1) it requires researchers working with animals to engage in more critical thought and reflection in their research design about how their proposed research will impact nonhuman animals, and 2) it institutionalizes a more widespread, formalized consideration of animals in research that signals how important it is for the university to take the lives and wellbeing of animals in various kinds of research seriously.

The violence of knowledge production in animal geographies

The IACUC ethics review process presumes that research on animals will likely involve harm to the animals involved. Through the pain and invasiveness rating system, the focus on euthanasia and anesthesia, there is an implicit understanding (made explicit in these metrics and guidelines) that ethical practice should involve a consideration of this harm. And yet, how this harm is defined and where harm counts as harm (or violence as violence) is narrowly defined, and obscures a host of thoroughly normalized acts of violence that are part of routine human-animal encounters. Violence against animals in dairy production has been made so thoroughly mundane that it is not the kind of violence or harm that warrants institutional review. In the case of Collard's (2015) research on the exotic pet trade, the successful reintroduction of a captive animal to the wild is framed as necessarily requiring tactics of aggression and the infliction of pain so as to make animals fear humans. Collard (2015) laments the total lack of institutional or disciplinary guidance when confronted with her own participation in having to enforce conditions of captivity and often engage in violence and practices that cause fear to the animals she was studying as a part of standard wildlife rehabilitation practice; she writes that it "felt, in no uncertain terms, unethical" (Collard, 2015: 134). While I was not directly involved in inflicting additional physical pain on the cows I studied, my role as a researcher in places where animals were being subjected to painful procedures, confinement, separation, and physical and emotional suffering as a result of routine dairy industry practices raises key ethical issues related to witnessing violence and a persistent anthropocentrism even in research aimed at critiquing animal use. Indeed, this anthropocentrism is so deeply embedded that even witnessing extreme cases of violence against animals can, in the moment, be made to feel normal or mundane.

Take for example Elizabeth Johnson's (2015) ethnographic account of watching an experiment on a live, conscious lobster in a US neuroethology lab: describing a scene where the researcher drills a hole in the lobster's head, then removes portions of the shell, and fails in his attempts to measure the lobster's neuroelectric activity, Johnson reflects on the ethical dimensions of this encounter. She explains that, in the moment, she was not especially concerned about the lobster, but in reviewing subsequent photographs of the conscious, cut-open lobster out of water, she felt much more uneasy, ethically. Rendered in photography, and reflected on outside of the laboratory setting, she writes of the photograph: 'It seems to uncover a grotesque, almost medieval set of practices, suggesting that the experiment is more easily read as a scene of violence than as one of knowledge production. Of course, it need not be one or the other. The entanglement of violence in knowledge production has been well documented' (Johnson, 2015: 299). Questions related to ethics and knowledge production, then, should be concerned with how to alleviate, prevent, or eliminate this violence.

During my research on dairy production, one of my primary field sites was the farmed animal auction yard where, in addition to other farmed animal species, cows used for dairy are exchanged with exceptional efficiency. The auction yard highlights in a stark rendering the commodification process and its impacts. Cows, heifers, and steers in all stages of life—newborn calves with their umbilical cords still attached, young steers raised for beef, cows and heifers in prime shape for dairy production, and spent cows on their way to slaughter—move through the auction yard, a public display of their evaluation, pricing, and sale. These auctions are profoundly mundane, and many of the animals move through the auction ring in less than a minute, their fates determined with the barely discernable flick of a buyer's hand in bidding. But my research highlighted that it was in these mundane situations and human-animal encounters that ethical consideration is all the more urgent. When a practice becomes routine the violence involved in that practice becomes more difficult to notice. Indeed, I caught myself thinking a number of times that the auction yard was boring given

the monotonous sale of animals, one after the other. In these situations, it is important for researchers to remain vigilant about resisting this kind of routinization in their research sites because it has the potential to obscure important features of animals' lives and experiences in these contexts. This resistance might involve asking questions to prompt critical engagement with the ways of seeing in which the researcher is involved; for instance, by asking, *What am I taking for granted as a norm here*? *Am I focusing on each individual animal in this site and making an effort to center their experience of this space?* More specific or relevant questions may be appropriate to prompt this kind of ethical consideration and would be usefully considered at the research design phase as well as early in the fieldwork.

It was a few singular animals that ruptured this boring monotony and highlighted the violence and ethical ambiguities of the auction yard as a space of animal commodification and exchange, and as a research field site. I witnessed animals collapsing in the ring, being kicked, poked, and prodded with electric prods, being separated from their calves, and animals in the process of dying of disease and dehydration in the auction yard (Gillespie, 2016). Amidst the more mundane flow of animals moving through the pen, these animals demanded ethical reflection on the broader logics of the auction yard and dairy farming as an institution, the impacts of these logics and institutions on the animal body, and it caused me to reflect on my role as a researcher. As I have theorized elsewhere (Gillespie, 2016), I had initially imagined being a spectator-observer in these spaces to be somewhat ethically neutral (I was not participating in the sale or contributing to the auction—financially or otherwise), but a few minutes into my first 'cull market' auction (where spent cows are sold for slaughter), I realized how wrong I was. An emaciated cow with wounds and abrasions and a severe limp collapsed in the ring while I watched, unable to get up. So worn out was she by dairy commodity production that no one bid on her. She finally managed to rise, and was quickly herded out the door and into the auction yard's rear holding pens. Unable to forget her, I called the next day to ask about her condition. I was informed that she died in the auction yard that night.

What was my ethical responsibility to that cow? Should I have purchased her when she did not sell for $35 and found her veterinary care and a home in an animal sanctuary? What was my ethical responsibility to all the cows who limped through the ring before and after her, subjected as they were to fear, psychological trauma, and physical pain? What are the ethical and political costs of doing nothing? I have since been reassured by colleagues and other animal geographers that this is an unfortunate, yet unavoidable, price of doing research on nonhuman animals in spaces of commodity production. Some have insisted that I did what I was ethically obligated to do: to observe and record this experience to contribute to knowledge-making about the effects of commodification on other species. But I remain troubled by this and other encounters with suffering animals during my fieldwork. What does my observation and inaction say about anthropocentrism and ethics in animal geography research? Put differently, I cannot imagine having sat there and watched as a *human* collapsed before me, later dying in the night from dehydration. Would it have been ethically acceptable for me to do nothing if my research subject was viewed as *human* and not a *nonhuman animal*?

These questions and the others offered below are a humble step in trying to determine what ethical engagement with animals in human geography looks like. As Beth Greenhough articulates, ethics are not a 'kind of rational, distanced, objective reflection . . . ethical reflection is a relational and situated process, less about being distanced and objective, and more about recognizing how our ethical decisions are shaped by our social and material environment' (2007: 1140). Ethics are relational, contextualized, and dynamic (Lawson, 2007; Thomas, 2015; Collard, 2015). Pinning down

universalized ethical guidelines that work for all animals in all geographic and spatial contexts is not only impossible but also undesirable. In this sense, ethical guidelines and consideration cannot be static, but instead must be constantly challenged, revised, rearticulated through different embodied lenses and geographies.

Summary

Research ethics in animal geographies prompt important questions about the entangled relationships of harm and care in human-animal relationships and how these play out in research settings. With this in mind, animal geographies (whether it is the researchers' intention or not) have the potential to inflict profound violence on nonhuman animals, whether directly or through complicity in practices that are already underway. A commitment to engaging in ethical research with animals, then, requires attending to this violence and engaging in constant vigilance to resist anthropocentric ways of viewing animals in research settings. It also requires resisting the normalization and routinization of animal use more generally in order to center animals' experiences of these everyday practices. As in research on human populations, researchers who study animals should attend to uneven power relations between themselves and their research subjects, and be attuned to the need for different forms of communication and observation. In this vein, animal geographies research requires a readiness to adapt and reformulate what constitutes ethical practice as more is learned about other-than-human animals. Animal geographers should also consider a relational approach to ethics built from an understanding that universalized ethical norms will not be appropriate for all species and individuals in all geographic contexts.

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Questions to prompt ethical consideration

These questions should be taken seriously and should, where harm to the animal is involved, potentially alter the course and plan of the research to avoid harm wherever possible. Importantly, these questions (and others) should be asked at every stage of the research, from planning and conceptualizing, to seeking ethics approval, to conducting fieldwork, to analysis, and writing up.

- Why am I doing this research? What are my political, personal, professional, and ethical objectives?
- Who will this research benefit? Will it benefit the animals I am studying? Future nonhuman animals? Humans? Or will it primarily benefit me and my career advancement?
- What are the costs of this research? What are the harms or impacts for animals involved in this research? As a researcher, am I actively causing harm to the animals I study? Am I a passive spectator observing harms being done to the animals I study, not intervening on their behalf? If I witness violence or harm in animal research, should I intervene?
- Does the animal have a choice whether or not to participate in my research? Am I creating the conditions where they can exercise a choice? For instance, in captive spaces, this might involve ensuring that the animal in question is given the opportunity to move away or have privacy from the researchers as they indicate a desire to do so. Attending to the question of choice involves close attention to individual animals' personalities, needs, and desires (and these may shift over time and under different conditions).
- Do the methods I have chosen: 1) cause any harm to the animals I study, and 2) best achieve a de-anthropocentric approach and representation of those I study?
- Can I answer my research questions in other, less harmful or disruptive ways?
- If my research subject were human, is it likely that this research would be approved?

- What am I missing? What have I failed to consider? How might my anthropocentric positioning be obscuring ethical issues related to this research?

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Recommended Reading

Buller, Henry. (2016) 'Animal geographies III', *Progress in Human Geography,* 40(3): 422-430.

- This article reports on the status of animal geographies, with a focus on ethics. It reviews the literature on ethics in animal geographies and poses some insights for ethical research practice.

Collard, Rosemary-Claire. (2015) 'Ethics in research beyond the human', in T. Perreault, Gavin Bridge, James McCarthy (eds.), *Routledge Handbook of Political Ecology.* London; New York: Routledge, pp. 127-139.

- This article draws on Collard's experience of working at a wildlife research center as part of her fieldwork and provides an excellent discussion of ethics in research involving nonhuman animals and ecologies in the context of political ecology.

Gillespie, Kathryn. (2016) 'Witnessing animal others: Bearing witness and the political function of emotion', *Hypatia*, 31(3): 572-588.

- This article explores the ethical ambiguities attendant in research that involves witnessing animal suffering, trauma, and death in the context of a farmed animal auction yard.

Johnson, Elizabeth. (2015) 'Of lobsters, laboratories, and war: Animal studies and spaces of encounter', *Environment and Planning D: Society and Space,* 33(2): 296-313.

- Johnson argues for an attention to ethics and politics in geographic research on nonhuman life through an attention to geographies of encounter in the research laboratory (the temporal as well as spatial dimensions of this encounter).

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Key terms

Anthropocentrism: A human-centered view of the world, wherein human beings are seen as the center or the apex of ethical consideration. Other ways to describe anthropocentrism include: human exceptionalism (the notion that humans are exceptional in capabilities and in moral hierarchies) and human supremacy (the belief that humans are superior to all other species).

Nonhuman animal: The categories of *human* and *animal* are socially constructed and operate to keep power imbalances between humans and other species intact. The use of the term *nonhuman animal* signals the biological reality that humans themselves are animals and that constructing a binary with humans on one side and all other animals on the other can be problematic. At the same time, these categories are useful for understanding and marking out the ethical and political consequences of potentially harmful research involving other species.

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