Since it was first proposed as a new geologic epoch by Paul J. Crutzen and Eugene F. Stoermer in 2000, the Anthropocene has garnered widespread scientific and political attention. The concept is frequently invoked in critiques of anthropogenic global warming to illustrate the gravity of the current man-made climate crisis threatening life on Earth, and to stress the importance of an urgent social and political response to this threat. However, as it has fixed itself within the academic and cultural zeitgeist, the notion of the Anthropocene has often been critiqued for its tendency to reduce humanity to an undifferentiated mass, or to propagate the Cartesian dualism that cleanly breaks human apart from animal. At its most dangerous, the Anthropocene reduces the planet to an agentless construct, subordinated to the some-7,000,000,000 people who occupy its surface.
The University of Sydney’s Human Animal Research Network’s 2015 collection, *Animals in the Anthropocene: Critical perspectives on non-human futures*, seeks to challenge these assumptions, shifting critical focus away from the humans from whom the epoch derives its name and toward the assemblage of non-humans living and dying with us amid the Anthropocene. The volume’s editors are an interdisciplinary collective formed in 2011 at the University of Sydney, consisting of members from the arts and social sciences, natural sciences, veterinary science, public health, and law. The uniquely multidisciplinary nature of the Human Animal Research Network (HARN) allows for innovative approaches to issues inherent in human-animal studies to flourish, as they employ humanist, socio-political, and scientific methodologies to address questions of human-animal interaction. Throughout, *Animals in the Anthropocene* works to shift our understanding of the Anthropocene away from the Anthropos and, instead, to approach the concept “from the perspective of ‘the animal question’ — asking how best to think and live with animals” (viii). In doing so, the collection offers more questions than answers, complicating current Anthropocene discourse and drawing readers into a web of human-animal relations.

Though there has been frequent critique of the Anthropocene in much recent environmental scholarship — work by Jason W. Moore or Andreas Malm, for example — for HARN the concept exists as a useful lens through which to view human-animal relations, calling attention simultaneously to humanity’s tendency toward anthropocentrism and revealing the human “species” as merely one among many. This tension between the human-centeredness of the Anthropocene and the revelation that we are living as an interconnected network of humans and animals regularly reemerges in the collection’s chapters. Throughout, Karen Barad’s “agential realism” looms large, as does the eco-feminist work of Donna Haraway. Chapters make frequent reference to the ways in which the Anthropocene displaces human agency as much as it reinforces it, and the editors themselves note that many of the book’s authors “re-appropriate the term” “towards relatinality and away from the presumptions of human mastery and separation that are embedded in anthropocentric thinking” (x). The Anthropocene, then, becomes not only a geologic marker of anthropogenic impact, but an opportunity around which the collection’s contributing authors are able to interrogate the human-animal question, with multiple perspectives and differing approaches, spanning the apiaries of California, the island of Cyprus, and the streets of India.

The collection’s first two chapters deal in paradox. Florence Chiew’s “The paradox of self-reference” employs Emile Durkheim’s sociological approach and Niklas Luhmann’s
and Gregory Bateson’s work in systems theory in order to rethink what it means to act in the Anthropocene. Chiew is interested in the self-referential nature of Anthropocene narratives, emphasizing the ways that the Anthropocene (and the current philosophical and scientific discussions surrounding it) paradoxically present the human as cause and effect. In situating humans as the source of both destruction and restoration, Anthropocene discourse frequently ascribes agency only to humans. Instead, Chiew proposes a self-referential system of life that links human and non-human species. Acknowledging these ecological entanglements, Chiew argues, will affect the ways we address the “questions of blame, ethical accountability, and political intervention … that implicate us” all (17). Ben Dibley’s “Anthropocene: the enigma of ‘the geomorphic fold’,” the book’s second chapter, works to understand another seemingly paradoxical component of the Anthropocene, what he describes as a “difficult dance … to negotiate [the] ends of the human” (22). The Anthropocene, he writes, presents us with a “strange paradox that simultaneously demands, recognising that we know not what the human is, and, yet acknowledging that what is definitive about the human, will be inscribed in the stratigraphic record” (23). Dibley’s chapter strives to complicate the accepted notion of the human as it persists in the humanities and social sciences, emphasizing human agency while, at the same time, arguing against the narcissistic hubris of the Anthropos. For Dibley, the very notion of the human is challenged by recent developments in continental philosophy, and work by scholars like Timothy Morton informs the chapter. The sheer geologic scale of the Anthropocene, for Dibley, forces us to rethink time, human agency, and human responsibility, ultimately necessitating an ontic reconceptualization of what it is to be human.

Shifting away from the more philosophical questions of the first two chapters toward a more critical, historical exploration of humanity’s impact, the book’s third chapter, Agata Mrva-Montoya’s “Cycles of anthropogenic interdependencies on the island of Cyprus,” undercuts discourse that assumes the Anthropocene begins with concurrent industrialization, some 150 years ago. Mrva-Montoya argues for the inclusion of pre-modern societies in our conceptualizations of humans as geologic agents. She employs a “long-term view of the interdependencies of human societies and the rest of nature” (34), exploring archeological records on the island of Cyprus that reveal the anthropogenic changes that occurred over the course of 10,000 years. Human engineering of the animal world in Cyprus, Mrva-Montoya writes, “carries implications for the current animal conservation and management issues” around the world (35). She points to repeating cycles of introduction, feralization, naturalization, control, and extinction that complicate distinctions between what are considered wild and domestic or native and alien animals. These complications make conservation efforts challenging,
as protection and management efforts are “littered with examples of fixing one problem by introducing another, which questions the capacity of humankind to effectively mitigate anthropocenic damages” (55). Human intervention, then, is both problem and solution.

Dovetailing with Mrva-Montoya’s discussion of the ways in which humans have intentionally and unintentionally engineered the animal world, Adrian Franklin’s “Ecosystem and landscape: strategies for the Anthropocene” addresses the inconsistent reactions to feral and introduced animal species across Britain and Australia. Franklin’s chapter traces the concepts of ecosystem and landscape, noting that while “ecosystems” tend toward ideologies of “belonging,” referencing “wider territorialisation, governance and etic concepts such as biomes,” “landscape references detailed life worlds of experience, complexity, culture, knowledge and change” (72). Franklin then explores the nativism and naturalization of feral cats in both Australia and Britain in order to demonstrate the very different forms of nationalism to which landscape and ecosystem orderings subject animals. In the UK, Franklin writes, feral cats exist as a generally accepted component of society. “[T]here is practically no scientific effort put into their eradication and control, nor public support/demand for it” (74). However, in Australia, “anti-cat sentiments are widespread and substantial,” and “feral cats are widely considered to be ‘un-Australian’ in civil society” (74). Franklin concludes that these antithetical positions reflect the respective social cultures, and that both landscape and ecosystem are artificial concepts invented to make sense of the anthropocenic changes happening in the world. Franklin’s and Mrva-Montoya’s chapters also illustrate the kind of case-study approach frequently found in Animals in the Anthropocene, as each employs specific, localized models that are then metonymically expanded. In this way, the unique lessons the authors engage take on more general significance, enacting a kind of network of examples that mirrors the connectedness of the Anthropocene.

Vanessa Barbay’s chapter, “The matter of death: posthumous wildlife art in the Anthropocene,” explores the possibility for posthumous collaboration with animal subjects through art. Barbay traces this human-animal collaboration across X-ray art, natural-history illustration, and taxidermy, concluding that the Aboriginal art practices she explores “have more to offer contemporary animal artists, compared with colonial representations and memorialization” (94). This chapter is somewhat of an outlier in the collection, presenting an overview of Barbay’s own artistic, image-making process as she worked to “facilitate the agency of the dead animal subject” (105), rather than focusing on any sociological or scientific debates or on questions of ontics, as do the other chapters. The inclusion of this chapter speaks to the diversity of the collection as a
whole and offers a fascinating and unique perspective on creating co-constitutive art in the Anthropocene.

The book’s sixth chapter, Madeleine Boyd’s “A game of horseshoes for the Anthropocene,” returns us to the core of the collection, employing theories of agential realism (Barad) and a new materialist (Haraway) approach to explore the connection between human and horse in the horseracing industry. Boyd argues that the commodification of current horseracing has destroyed humans’ historical social contract with horses, as she traces the violence inflicted on horses through the practices of breeding, medicating, and killing. The antidote to this violence, she writes, channeling the companion dynamics of Donna Haraway, requires “a system of intra-actions-that-matter between significant bodies” and “interspecies empathy” (130). The model for the future, then, according to Boyd, is one that involves humans evolving in relation with others to become “Homo sapiens relationata,” rather than “Homo destructus” (131).

The seventh and eight chapters of Animals in the Anthropocene address industrialized food production and theories of dominance implicit in species thinking. In “Painfully, from the first-person singular to first-person plural,” Daniel Kirjner considers the role of feminist theory and implications of feminism in the study of human-animal interconnections. Kirjner links the Anthropocene to conceptions of masculinity and to patriarchal thinking, connecting the idea that men should control women to the concept that men must overpower nature (140). Industrialized food production, which inflicts large-scale harm on animals and creates environmental side effects for other animals, Kirjner argues, reproduces patriarchal forms of domination that celebrate violence and aggression. Ultimately, he writes, the central characteristic of domination within the Anthropocene is that of predation, connecting sexism, speciesism, environmental degradation, and masculinity in patriarchal cultures. Approaching the topic of food production from a different perspective, Simone J. Dennis and Alison M. Witchard tackle the topic of in-vitro meat in “We have never been meat (but we could be).” They employ the biopolitical framework of Foucault to explore the ways in which meat materializes social and species hierarchies. The meat industry, they argue, has significantly contributed to the conceptual split between human and animal: “Our access to flesh is made on the basis that it is significantly different from human flesh: we do not, by and large, consume our own flesh, but instead that of the animal other” (151). The biotechnology of in-vitro meat, however, has the potential to disrupt this dichotomy. In-vitro meat has the potential “to violate our accepted norms and cherished categories, such as those of difference between humans and animals, between nature and culture” (160). Theoretically, creating in-vitro meat produced from human

*Humanimalia: a journal of human/animal interface studies*

*Volume 10, Number 1 (Fall 2018)*
cells might completely undo the categorical distinction between animal and human, offering the potential to erase species thinking, break down traditional categories, and reconceptualize being.

Chapters nine, ten, and eleven argue in favor of the inclusion of animals in contemporary political theory, forcing us to reconsider the political arrangements that determine life in the Anthropocene, and look toward a politics of shared human-animal futures. Gwendolyn Blue’s “Multispecies publics in the Anthropocene,” as the title implies, offers a posthuman rethinking of the “public,” engaging the work of John Dewey, Karen Barad, and Donna Haraway to craft an argument in favor of a multispecies public. In order to make sense of the Anthropocene, Blue argues, it is necessary to reconceptualize the “we” that comprises political subjectivity, to move away from a subjectivity based in anthropocentrism and to explore the ways boundaries and distinctions fall apart, decentering the human political subject.

Richie Nimmo’s chapter, “Apiculture in the Anthropocene,” acknowledges a similar Anthropocene paradox to that of Florence Chiew (Chapter 1), the pull between modesty and hubris. Nimmo, like others in the collection, explores human agency amid an ostensibly posthuman world, arguing in favor of a nontraditional kind of responsibility and a new politics in light of our co-constitutive, materially heterogeneous entanglements with non-humans. Nimmo employs colony collapse disorder of honeybees to illustrate both the potential inherent in and need for a posthumanist approach to politics. The honeybee — Nimmo writes about the Western honeybee (Apis mellifera) specifically — is very much linked to humans; it is used throughout the world as “the pollinator of choice” (183) for commercial agricultural crops, and the crisis of the honeybee functions perfectly to illustrate the shared harms of the Anthropocene. Bees are a particularly interesting example, as they form non-human collectives — colonies — and make up large, industrial human-animal agribusiness networks from which humans derive profit from animal labor. Nimmo concludes by arguing in favor of what he calls a posthumanist politics that reorients discourse. “Rather than beginning by asking what is wrong here; what is unacceptable; and what must stop; the key questions become what is good here; what is of value; and how can this be developed” (193). An approach that tries to develop “a more explorative, local, and entangled politics” (196), then, offers an opportunity to transform not just human relations with non-humans, but to potentially change how we see and experience our very existence.

Krithika Srinivasan’s “The welfare episteme” transports readers from the apiaries of California to the streets of Bengaluru, India, taking up the biopolitics of controlling
stray dog populations. Srinivasan asks how is it that humans, given our power over life, might seek to improve interactions with non-human others while simultaneously safeguarding human interests? Srinivasan complicates ideologies of “improvement” and traces the ramifications of biopolitical control in human-animal interactions. She draws on Foucault’s work on epistemes to better understand the dynamics of welfare discourse, and his theories regarding the complicated ways in which power functions in society. For Srinivasan, neutering and vaccination exemplify biopolitical control of dog populations, and, while noting that this type of “management is not, in and of itself, problematic” (210), she considers the increasing intervention by humans in the lives of animals for their own good a matter of concern. Again, like many of the chapters in Animals in the Anthropocene, Srinivasan produces more questions than answers, opening up for examination the privileging of human interests within the Anthropocene, even in the pursuit of animal welfare.

The book’s twelfth and final chapter is Michael Hathaway’s “Wild elephants as actors in the Anthropocene.” Hathaway pivots away from the political explorations of the previous three chapters and offers what is perhaps the book’s most hopeful moment, chronicling the year he spent in a rural village in Southwest China living among the country’s last remaining herds of wild elephants. Hathaway looks at the relationships that have formed between these elephants and the villagers, mediated by a conservation organization, and the concessions made by highway developers because of the impact on the elephants. Though human-elephant conflict is a complicated issue — elephants prove destructive to local crops and to human infrastructure — Hathaway argues that these activities of “resistance” are only part of their behavior. He argues that to fixate only on the problems caused by animals is to reinscribe notions of anthropocentrism. Instead, he hopes we might negotiate conflicts to find nonviolent resolutions, considering non-humans as “active beings and historical actors that shape the worlds that both they and other species — including humans — live in” (240).

HARN’s Animals in the Anthropocene proves to be a valuable contribution to the interdisciplinary field of human-animal studies. It is wide-ranging in scope and in methodology, presenting a diverse set of frameworks through which we might begin to answer questions of multispecies responsibility and justice. The collection demonstrates that the Anthropocene need not be anthropocentric. Humans need not be at the center of the biological world, nor should we consider our own moment temporally outside of history. Instead, as Mrva-Montoya does, we must locate the present within the geohistorical networks that date back thousands, even millions, of years. Approaches
such as those in this volume might ultimately allow us to look toward a relational model of human and non-human life that makes possible a future for us all.