

Animals, Angelenos and the Arbitrary: Analyzing Human-Wildlife Entanglement in Los Angeles

Abstract

Multispecies entanglement has been a major research focus in environmental humanities, allowing a re-thinking of the ontological and ethical possibilities for theory. But entanglement is more often simply noted (and implicitly lauded) than it is analyzed, often as a way to gesture towards the need for more-than-human ethics or theory beyond nature/culture. In this paper we present the results of two years of fieldwork and analysis of entanglements of multiple species of animals in Los Angeles, and the precise ways in which that entanglement takes shape. We offer a four-fold framework to understand how entanglement works—spatial, emotional, behavioral, and political—and articulate the role of private property and forms of technical control practiced by individual residents, emotional commitments (from inciting fear, to expressing frustration), actions like feeding or killing animals, and the involvement of multiple overlapping jurisdictions of animal control in the city. Fundamentally, we also suggest the concept of arbitrariness as the key through which to read the urban matrix that unfolds: drawing on philosophical ideas of arbitrary domination, as well as works exploring the relation of settler colonialism, racism, and justice, we argue that this arbitrariness produces a form of domination that serves neither humans nor animals well, and that the challenge of reducing this arbitrariness, even if it means restricting human freedom or introducing new forms of control over animals, may be necessary for a more-than-human city to be just.

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Introduction

Los Angeles is a city of 4.1 million humans and an unknown number of other animals. While companion animals—dogs and cats—are ubiquitous, they are in turn tangled with the city’s abundant wildlife in multiple ways: house cats and small dogs are threatened by coyotes; dogs attack humans; humans feed feral cats who kill songbirds; dogs and cats kill and sometimes eat rodents, risking secondary poisoning of animals higher up the food chain, including mountain lions; rodents chew through soy-based car wiring and carry fleas, which pose disease risks to pets and humans; gophers are everywhere in the lawn-filled megalopolis; and the average garden-owner is in constant warfare with animals, insects, fungi and microbes in the effort to cultivate the orange and avocado trees which stretch from the ocean-side habitat of sea lions to deserts of Joshua trees. In short, Los Angeles is a preeminent example of multispecies entanglement.

Novel, complex, boundary-crossing, ontology-changing, reciprocally capturing; these have been the terms of analysis in recent literature focusing on animals in cities.¹ Much of the literature on entanglement and more-than-human storytelling is intended to crack open a Western anthropocentric bias that “functions to anesthetize its adherents to their intimate relations to and entanglements with other kinds of life.”² As a result, what has emerged is a conceptual frame in which entanglement is inevitable, common, and often implicitly *good*, even though this can be *bad* for some of those entangled, as it also involves death, killing, abuse, and power. Entanglement, then, encompasses the problem of how animals are, or should be, governed in cities, and how our relations with them represent answers to the question of how to live with, or without them. Therefore, we attempt here to deepen our understanding of the shape and contour of these entanglements, and to propose a more general political theory of how residents and experts do in

¹ Stengers, *Cosmopolitics*; Kirksey et al., “Feeding the Flock”; Lulka, “The Posthuman City”; Byrne, “The human relationship with nature”; Byrne and Wolch, “Urban habitats/nature”; Haraway, *When Species Meet*.

² Erev, “What is it Like” (132). See also Latimer, “Being Alongside”; Rose et al., “Thinking through the environment”; Byrne, “The human relationship”; and Sundberg, “Decolonizing posthumanist geographies.”

fact entangle themselves with animals on a daily basis, and with what consequences, specifically, for arbitrary domination.

Indeed, we argue here that the more-than-human entanglement with animals in Los Angeles, and we suspect in many other US cities, is primarily arbitrary in a political sense, marked by capricious judgment that follows no agreed upon procedure, nor takes into account the interests of those who are at stake (human or animal). The concept of arbitrary domination comes from well-trodden debates in political theory, specifically neo-republican debates about the nature of freedom and domination, but it has not been widely applied to debates about animals.³

Arbitrariness helps refine debates about negative and positive freedom to suggest that even in cases where no actual interference occurs, a form of domination is nonetheless possible. In this paper we extend the concept from its primary focus on human domination to include domination of non-human residents of cities. Such domination is by definition an attempt to capture a supra-individual form of violence (e.g. “structural” racism, enslavement, or colonialism) without losing sight of the nature of the freedom of individual beings.

In the city, this arbitrariness comes about not because of an absolute form of power, such as that exhibited in slavery or colonialism, but because our sense of justice regarding animal residents of cities is a knotty mess. To exhibit this, we propose four analytics of entanglement here—spatial, emotional, behavioral, and political—drawn from the analysis of social media interactions, including over 400 conversations about wildlife on Nextdoor, a social media networking site in which neighbors can ask for help and advice. At the center of these analytics lies the problem of arbitrariness, which we argue emerges from these types of entanglement and produces a form of domination that is unhappy for both humans and animals.

Ultimately, instead of only signaling a certain randomness, arbitrariness here refers to a specific political relation that exhibits procedural and substantive capriciousness.⁴ Resulting from the devolution of decision-making from municipal to private actors in the 21st century, existing legislation, regulation, and market-based behavior towards animals (e.g. pest control and pet

³ Key texts include Pettit, *Republicanism*; Skinner, *Liberty before Liberalism*; Lovett, *General Theory of Domination and Justice*. Among the critiques are Markell, “The insufficiency of non-domination” and Roberts, *Freedom as Marronage*. For an exception in the case of animals, see: Essen and Allen, “*The republican zoopolis*”

⁴ There are debates about the definition of arbitrariness and its relation to freedom; the definition given here most closely parallels that given by Lovett in *General Theory*.

ownership) is contradictory, poorly understood, and often makes entanglement grow tighter the more people struggle to escape it. Thus, we raise the question of whether a reduction in this arbitrariness would result in more justice for humans and animals, and what might be needed to accomplish that reduction.

Entanglement and Arbitrariness

The study of urban animals is uneven and spread across multiple disciplines. In Los Angeles, pioneering work by Jody Emel and Jennifer Wolch and the writings of Jenny Price are still the most widely known analyses of how Angelenos relate to nature.⁵ Other urban environments, such as Delhi, Hong Kong, London, Detroit, Sydney, Berlin, and Birmingham, have attracted more analysis, especially from geographers, sociologists, and anthropologists.⁶

Scholars demonstrate an increasing awareness that cities are not separated, nature-free spaces of human flourishing, but saturated with interactions with non-human life of all kinds.⁷ Scholars in humanities, animal studies, science and technology studies, geography, and elsewhere have proposed “multispecies entanglement” as a theory of human-animal relations “beyond nature and culture.”⁸ This literature starts with particular forms of humans “learning to be affected” by other creatures, including pet dogs, birds, and insects.⁹ Sometimes these approaches seek to decenter or demote humans from their presumed perch; others use the approach to explore shared ways of

⁵ Price, “Thirteen Ways of Seeing Nature in LA”; Wolch and Emel, *Animal Geographies*.

⁶ Singh and Naisargi, “On the Killing and Killability of Animals”; Naisargi, “Witness”; Keck, *Avian Reservoirs*; Gandy, “The Fly That Tried to Save the World”; Jerolmack, “How Pigeons Became Rats”; Draus and Roddy, “Weeds, Pheasants and Wild Dogs”; Kirksey et al., “Feeding the Flock”; Stoetzer, “Ruderal Ecologies”; Hinchliffe et al., “Urban Wild Things”; Hinchliffe and Whatmore, “Living Cities”; Steele, Wiesel, and Maller, “More-than-human cities”; Houston, Hillier, MacCallum, Steele, and Byrne, “Make kin, not cities!”; Franklin “The more-than-human city”; Metzge, “Cultivating torment.”

⁷ Brighenti and Pavoni, “Situating urban animals.”

⁸ Whatmore and Hinchliffe, *Ecological Landscapes*; Hinchliffe and Whatmore, “Living Cities”; Lorimer, *Wildlife in the Anthropocene*; Asdal, Druglitrø, and Hinchliffe, *Humans, Animals and Biopolitics*; van Dooren, Kirksey, and Münster, “Multispecies Studies”; Kirksey and Helmreich, “The Emergence of Multispecies Ethnography.”

⁹ Haraway, *When Species Meet*; Weaver, “‘Becoming in Kind’”; Boisseron, *Afro-Dog*; Maxwell, “Queer/Love/Bird Extinction”; Kirksey et al., “Feeding the Flock”; van Dooren, *The Wake of Crow*; Gandy, “The Fly That Tried to Save the World”; Raffles, *Insectopedia*

being and flourishing that open out into critiques of other kinds, such as settler colonialism or capitalism.¹⁰ More recently, anthropologists and geographers have attended more closely to the practice and science of conservation in and out of cities, along with its struggles to define what belongs and what does not,¹¹ and to systematically put all “urban nature” under critical scrutiny.¹² Alongside this work in humanities, work in (urban) ecology and evolutionary biology has begun to rethink the role and structure of cities in the analysis of biological systems, “novel” ecologies or altered strategies for conservation in the Anthropocene.¹³

At a philosophical level, the entanglement of multispecies entanglement is often associated with Karen Barad’s study of quantum physics, where the word entanglement (orig. *Verschränken*) refers to the classic experiments on quantum entanglement (EPR, Schrodinger’s cat, Heisenberg’s uncertainty principle, etc.), and as such is focused on squaring an epistemological and ontological circle.¹⁴ Similarly focused on this conundrum of thinking beyond nature and culture is Eduardo Kohn’s (along with those by Descola or Viveiros de Castro) work, which presents entanglement as a form of bio-semiotic interaction with the world not dependent on human language, yet nonetheless attuned to the selfhood and value present when humans interact with nature in one way or another.¹⁵ Also influential is the work of Eben Kirksey, Deborah Bird Rose, Thom Van Dooren and their collaborators,¹⁶ who draw from the notion of “reciprocal capture” developed by Isabelle Stengers.

Additionally, such “ontological” re-definitions of human-animal entanglements have also seen critique, extension, and alliances of various other sorts which call on scholars to rethink the

¹⁰ van Dooren, Kirksey, and Münster, “Multispecies Studies”; Tsing, *The Mushroom*.

¹¹ Bocci, “Tangles of Care”; Wanderer, “Biologies of Betrayal”; Lorimer, *Wildlife*.

¹² Arcari, Probyn-Rapsey, and Singer, “Where Species Don’t Meet.”

¹³ Donihue and Lambert, “Adaptive Evolution”; Rivkin et al., “A Roadmap”; Alberti, *Advances in Urban Ecology*; Alberti, “Eco-Evolutionary Dynamics”; Marris, *Rambunctious Garden*: Draus and Roddy, “Weeds, Pheasants and Wild Dogs”; Tsing, Mathews, and Bubandt, “Patchy Anthropocene”; Heise, *Imagining Extinction*.

¹⁴ Barad, *Meeting the Universe Halfway*.

¹⁵ Kohn, *How forests think*; Viveiros de Castro, *Cannibal metaphysics*; Descola, *Beyond Nature and Culture*.

¹⁶ Kirksey et al., “Feeding the Flock”; van Dooren, Kirksey, and Münster, “Multispecies Studies.”

human in contexts of settler colonialism, racial injustice, and queer “inhumanisms”.¹⁷ Sometimes this work is at odds with the more traditional forms of “animal rights” or animal welfare frameworks.¹⁸

While these works help orient us theoretically, they often create a sense of almost conspiratorial liberation, which has its own limits in terms of identifying and effecting change. As Eva Giraud says: “Irreducible complexity, in other words, can prove paralyzing and disperse responsibilities in ways that undermine scope for political action.”¹⁹ Multispecies entanglement, therefore, is not only about representation or ontology, but even more urgently, about justice, power, and domination. Abandoning, or overcoming a split between nature and culture would have significant consequences for political theory and practice. But it is also not the case that nature in cities is ignored or unseen; entangled forms of life are routinely subject to theoretical and practical debate, both among experts and among everyday citizens. Entanglement is a political fact of life, for which there are a range of different responses.

It is for this reason that we rely here on the political theory of domination, and especially on the concept of arbitrariness, in order to try to make some sense of the forms of entanglement we identify.²⁰ Arbitrariness is especially closely related to the “neo-republican” approach to freedom and domination which defines freedom in terms of non-domination, or freedom from arbitrary domination.²¹ Arbitrary domination can be procedural (no regular or predictable procedure is followed in the domination of another) or it can be substantive (domination occurs without regard for the interests or rights of those subject to it, whether consensual or not).²²

¹⁷ Todd, “Fish Pluralities”; Todd, “An Indigenous Feminist’s Take”; Whyte, “Settler Colonialism”; Whyte and Cuomo, “Ethics of Caring,” 234; TallBear, “Beyond the Life/Not Life Binary”; Cattelino, “From Locke to Slots”; Boisseron, *Afro-Dog*; Dayan, *The Law*; Weaver, ““Becoming in Kind””; Chen, *Animacies*; Luciano and Chen, “Queer Inhumanisms”; Livingston and Puar, “Interspecies.”

¹⁸ Sunstein and Nussbaum, *Animal Rights*; Diamond, “Eating Meat”; Singer, *Animal Liberation*; Regan, *The Case for Animal Rights*.

¹⁹ Giraud, *What Comes after Entanglement?*

²⁰ Pettit, *Republicanism*; Skinner, *Liberty Before Liberalism*; von Essen and Allen, “The Republican Zoopolis”; Bufacchi, “Colonialism, Injustice, and Arbitrariness.”

²¹ Skinner, *Liberty Before Liberalism*; Pettit, *Republicanism*.

²² Lovett, *A General Theory*.

Perhaps unsurprisingly, most political theories of a neo-republican sort do not focus on animals. Conversely, most animal rights and animal welfare theorists do not employ an analytic of domination; the language of autonomy, rights and liberation is far more common. In many such cases, a theory of “negative liberty” is implied, especially for wild animals: that we should “let animals be” rather than governing them at all, even though it is clear that this subjects them to all kinds of harms which they cannot avoid: freeways, skyscrapers, toxic rivers, abundant human food, and diminished wild resources. In other cases, theorists have proposed citizenship is the salient category, as in the case of Kymlicka and Donaldson, who distinguish among domesticated, wild, and “liminal” animals and argue for a form of co-citizenship with domesticated animals, for an nearly absolute sovereignty for wild animals, and for a denizenship (cohabitation without full citizenship) of liminal animals.²³ The clean categorization fails to account for the kinds of entanglements we describe in this paper, where liminal animals mix with both wild and domestic and all are subject to management and governance by humans in different ways.

A republican theory of non-domination, we suggest, provides a better starting point for thinking about animals in cities today. Many animals are dominated by humans in non-arbitrary ways: they are killed for meat, they are enclosed in zoos, they are hunted in non-urban environments, etc. Each of these forms of domination is perpetrated in ways that humans themselves oversee, regulate, and control in non-arbitrary and highly predictable ways, both for humans and for animals. In cities, by contrast, the lives of animals are not dominated in these ways, but arbitrarily and capriciously, and this has implications for the freedom and flourishing of both humans and animals. Arbitrariness as we use it here does not mean random: the concrete historical reasons for the existence of this arbitrariness can and should be illuminated, even if we do not attempt that here. It is also not the case that any individual human is treating animals arbitrarily or capriciously, but that, from the perspective of animals (and, arguably, that of humans as well), there is no procedural or substantive consistency to their treatment in the city. Thus, although it might be the case that animals are not interfered with in a given case, there is nonetheless a system of arbitrary domination that governs the possibility for freedom in the city: at any point one could be fed, killed, cared for, poisoned, relocated or many other things, without

²³ Donaldson and Kymlicka, *Zoopolis*.

a clear reason. Twentieth century forms of wildlife management, the intensification of pet capitalism, the general devolution of governmental roles to private actors and the growth of specific patterns of building and ecological management in cities ground this arbitrariness. The structure of arbitrariness is, in general, visible in places with multi-level democratic institutions whose jurisdictions overlap or are incomplete with respect to any given problem. It may also be most visible in cities that have engaged in extensive suburbanization, of which Western US cities are paradigmatic. For our purposes here, we demonstrate the existence of this arbitrary relation in a snapshot of Los Angeles in the 21st century.

Method

Knowing people's attitudes towards animals is a methodological challenge under any circumstances. Most studies have used standard survey techniques, and as Wolch, Brownlow and Lassiter have rightly noted, these not only oversimplify attitudes but fail to capture the often-contradictory ideas and feelings that people have about animals within an urban context.²⁴ Social media platforms represent a minor advance in this respect and have become a common site of inquiry for such issues. They not only constitute spaces where people share content based on their identities, ideologies and interests, but also represent a fruitful locus to estimate human opinions toward wildlife online, something that remains largely unexplored.²⁵

Social media thus sit between ethnographic inquiry (which can be embodied, immediate, and intentionally select subjects) and survey or focus groups (which can be representative but sacrifices emotional immediacy or contextual cues). For this paper we rely on the platform Nextdoor, a location-based social media app in which users may post text, images and video, respond, like, report users, and edit their own previous posts.²⁶ We highlight here two specific

²⁴ Wolch, Brownlow, and Lassiter, "Constructing the Animal Worlds."

²⁵ Ellison and boyd, *Sociality Through Social Network Sites*; Fidino, Herr, and Magle, "Assessing Online Opinions"; Bradley et al., "Some animals are more equal than others."

²⁶ A user's view of conversations is restricted to their immediate physical neighborhood, which is determined (how exactly is obscure) by Nextdoor. Users can only view the names and addresses of other posters only in their neighborhood and there is no "global" view of all posts in a city or on a topic. Conversely, businesses and advertisers can pay to have ads targeted to specific neighborhoods or particular keywords. Similarly, city agencies like police, animal services, or the Mayor's office can also negotiate with Nextdoor to reach multiple audiences across many neighborhoods.

features of this platform. First, *conversations*, our unit of analysis, have a particular structure, rhetoric, and performative capacity that give insight into how some people interact with animals in Los Angeles. Conversations represent *events*, a moment in time often immediately following a lived encounter with wildlife. Sometimes this happens within minutes (most coyote sightings, for instance), sometimes over a longer period (a repeated, frustrating battle with a raccoon or a rat, for instance). Such conversations are relatively organic (by comparison with survey and focus group methods), and they capture an emotional and behavioral aspect that *ex post facto* questioning cannot, even if that behavior is not representative. Second, conversations *animate* animals in particular ways. Usually only the original poster has had any direct contact with an animal, visual or otherwise. But respondents then discuss and debate such animals *as if they had seen them*, creating a kind of *ghostly* animal that is different from either any real animal, or any idea or representation of an animal. These advantages allow us to give more precise detail to the ways in which entanglements *can and do happen*, even if they do not always happen that way, and to explore how Nextdoor itself becomes part of the way animals in cities are dominated.

We collected 461 conversations, which range from a post and no comments, to a post and 200+ responses. We relied on a team of eight researchers who used their personal accounts in their own neighborhoods using their real names and addresses, thus allowing our team to access public posts and conversations in the normal manner, but across a range of neighborhoods.²⁷ To find conversations of interest, each researcher searched for posts containing one of our key terms and their variants: raccoons, possums, skunks, coyotes, rats, mice, squirrels, bobcats, mountain lion, pest control, animal services, wildlife, and a handful of other terms.²⁸ Preliminary research conducted on sample posts resulted in a code book (made accessible to all members of the team) organized around the three broad categories of ‘emotions,’ ‘moral orders’ and ‘institutions,’ as well as sub-codes in each category, given that these responded to our main questions: How do residents feel about animals in the city? What is socially believed to be right or wrong when it

²⁷ This research was part of a collaborative interdisciplinary project into ecological, animal, and human diversity in the metro Los Angeles region including faculty members, graduate students, and undergraduates from anthropology, environmental science, communication, science studies, public health, and information studies. The research was conducted under IRB #17-000297 at UCLA.

²⁸ The terms refer exclusively to mammals because the interdisciplinary project to which this article contributes was concerned with “Urban Mammals” in Los Angeles. However, the conversation elicited through these gave way to discussions on entanglements with other species, to which we are also attuned here.

comes to animals in the city? Which authority or entity do residents expect will or should intervene?

We analyzed these conversations in depth by coding them (Atlas.ti Cloud), creating memos, and analyzing the codes for emerging themes. Based on this coding, we established four analytics of entanglement outlined in the next section: spatial, emotional, behavioral and political. Informed by the literature discussed above, these analytical categories assume that humans and non-humans are always already entangled in the city. Thus, our goal is not to document those interactions from an urban ecology perspective, but rather to parse what the conversations humans have about the nonhumans they encounter in the city say about that “more-than-human” space.

Several caveats are necessary. The nature of the platform constrains what we found: it is designed to be used by neighbors to ask for help, offer help and advice, or otherwise pursue an idealized image of neighborly interaction. In practice, Nextdoor rarely meets these goals: it not only fails to be a representative platform, racially or socio-economically, but further perpetuates exclusionary and often hateful behaviors by residents towards each other (accusations of racial profiling by neighbors are common).²⁹ Uncivil mockery, emotional abuse, and righteousness are as common on this platform as other social media, even though posters could literally walk out of their homes and talk face to face with neighbors. It meets the criteria for what Benjamin and collaborators call a “captivating technology” that participates in generalized forms of carcerality.³⁰ We make no claim that users of this platform represent Los Angeles generally—they are who they are, but what they say and do is real.

²⁹ As of June 2020, Nextdoor has seen more criticism for its reputation as a space uniquely capable of racism, or what our research team internally referred to as “volunteer racial profiling.” See for example <https://www.theverge.com/21283993/nextdoor-app-racism-community-moderation-guidance-protests> or <https://mashable.com/article/nextdoor-racism/>; Payne, “Welcome to the Polygon.”

³⁰ Benjamin, *Captivating Technology*

Analytics of entanglement

“Coyote just sighted trotting down 16th street just south of Montana in Santa Monica. Keep your small pets inside!”³¹

The most common conversation-starter on Nextdoor is a warning of this kind. Despite its simplicity, we can analyze four different types of entanglement (See Fig. 1). The warning is *spatially entangling*: it pinpoints a specific intersection in a neighborhood, and it signals an animal *out of place*, in the city, on the streets, clearly visible, that does not belong there. Such a warning also intends to produce fear in neighbors, entangling them *emotionally* in what the poster has experienced, especially those who own cats or small dogs. Once emotionally entangled by fear, various provocations to action often follow, entangling dog owners in a form of both moral and physical behavior: keep pets inside, keep dogs on a leash, inside, safe. Ultimately, it supports a kind of political entanglement because it immediately and implicitly makes the problem of wild animals in the city an individual responsibility, and not the responsibility of a municipal, county or state agency.

[Fig 1]

Although most conversations, especially those about coyotes, revolve around the rights and duties of individual residents and their animals, cases of collective action do emerge. For example, residents in the City of Torrance, situated in southwest Los Angeles, were frustrated by the contradictory or incoherent advice they often received about what to do regarding coyote predation: police would argue it was not their responsibility; city Animal Services would respond that coyotes are a known danger in the city and not an animal to be removed; private pest control would offer to attempt to trap and kill a coyote if a resident wanted to pay for the service; and so on. Spurred on by an angry councilman, a group of residents started an #EvictCoyotes campaign and attended a city council hearing dressed in red T-shirts to share stories of pets they had lost. So, to placate angry residents, the city identified a piece of land where coyotes were known to gather and both advised residents to “haze” coyotes (i.e. act aggressively towards them or employ deterrents in the hopes of scaring them away and discouraging further visitation), and

³¹ All quotations here are from our database of conversations, unless otherwise noted. The conversations are anonymized here with respect to the original posters and respondents, as well as with respect to names and identifying details. The research was conducted under IRB #17-000297 at UCLA.

contracted with a private pest control professional to trap and kill coyotes. Because this particular piece of land was county property, the city also contacted the county of Los Angeles, which dispatched an employee who promptly killed 13 coyotes—one of whom had already been trapped with a snare by the private pest control company.³²

This case also demonstrates the arbitrary nature of human-animal entanglement. The mess of reactions exemplifies the fact that humans and animal relations are arbitrary with respect to both procedure and the interests of animals (both domestic pets, and coyotes, as well as humans). Coyotes do not, so far as we know, recognize the legal boundaries of city and county land; they likely recognize particular humans who are experienced as safe or dangerous in different situations. Yet they are confronted with a form of domination that in one case (on this side of a property line) means death and in another (within city limits) means hazing or survival. One human may threaten them with a noisemaker (and never more than that), another may shoot and kill them without warning.

Like the coyote, the residents and the officials in Los Angeles are ensnared in such arbitrary traps, mixed jurisdictions and emotional maelstroms. In what follows we offer a tour of these four kinds of entanglements, and a reflection on the problem of the arbitrary.

Spatial Entanglement

Los Angeles is a paradigm of the subdivided, gated, single-family, fenced, defended, and personalized use of urban space. It boasts few public parks, and the private ownership of land famously restricts access to both beaches and the surrounding hillsides. Although seemingly unaware of these property lines and documents of ownership, animals nonetheless must navigate the roads, fences, lights, and other hazards, intentional and not, which humans create to make their property lines more tangible.

When private, non-wild space is invaded by ostensibly out-of-place wildlife, residents react in various ways and conversations often have different and opposing views in a single exchange. Some residents evince a sharp, sometimes absurd, sense of ownership that extends not only to human neighbors but to animals and plants of all kinds. Most, however, default to an

³² We are grateful to Chase Niesner for providing the details of this story from his own ethnographic research on coyotes in LA.

understanding that constructs the human inhabited space—the “city”—as separate and qualitatively different from the space wildlife inhabits, usually referred to as either “the wild” or simply, “nature.” For example, in a conversation regarding a coyote sighting, one neighbor stated, “I like seeing them in the mountains, but not so much around our homes” to which another neighbor replied, “I am with you, I love wildlife in the forest, not so much in my backyard.” In the same exchange, a third neighbor synthesized these and similar opinions by concluding, “Where do you draw the line? Are bears OK in the city? Mountain lions? Coyotes have no more place in an urban area than bears or mountain lions.” Some neighbors seem to be able to geographically pinpoint the threshold between these realms: “By the way, the wild is not 4 miles away but around 2 from my house,” while others can draw clear temporal distinctions: “... we don’t live in a wild area. I could see if we were a new spot that uprooted their living space [in relation to coyote populations], but [this neighborhood] is old.”

There are also many examples of conversations in which animals are said to have a right to the city—“Remember that all creatures have the right to be here. I know it’s a bit scary but rats belong here also;” or “Regardless of what you think of any of these animals, they have just as much right to be here as we do. They live here. We have moved into their neighborhood.” Yet others react strongly against such rights talk: “I’m not sure why people talk about coyotes ‘belonging’ or ‘always being here’. Coyotes migrated here. There have always been some, but now there a LOT more, especially in the urban setting.”

Such spatial relations are also often temporalized by individuals’ memories or even nostalgia for an earlier time when coyotes were supposedly absent:

I remember growing up here...many of the neighbors cats would cross our backyard for over a decade with no threats. I would play through the canyons hunting spiders and snakes. I would often go running for several miles through the canyons with our other family dog, a boxer. Never saw a coyote... What a wonderful time to grow up in a family environment... I’m so grateful to have my experiences as a child and teenager here. Did I mention, never saw a coyote... Get rid of the coyotes. Let’s let children play outside again.

Spatial entanglement is necessarily arbitrary: property lines are a senseless marker for a rat or a coyote, existing as they do in the symbolic register of planning documents and legal rights. Nonetheless, they produce a certain kind of order in the city by separating private from common space, requiring easements, rights of way, medians, underpasses, and other infrastructural features that facilitate many animals' experience of the city. When animals cross these features between public and private land, an arbitrary human reaction can confront the animal. This is perhaps best illustrated by the turn to technological means of trying to control animal behavior.

Residents on Nextdoor share experiences and report a myriad of instruments to prevent wildlife from entering *their* backyard. Among the wildlife deterrents are cayenne pepper, chili powder or red pepper flakes; moth balls; motion detector water sprayers; bobcat/wolf urine; peppermint oil; motion sensor lights; stomping of feet and waving of arms; ammonia-saturated rags; boombox, loud radio, tin cans filled with a handful of pennies. Benson has described devices and practices meant to isolate a system from its living environment, like pans and spikes on electric towers, as bioinsulators.³³ In this context, these vernacular pest-control technologies work more like biomembranes—allowing some nature forms in and deterring others. Cayenne pepper or a radio blasting rock music are not trying to isolate Angelinos' backyards from “nature;” rather, they are trying to keep certain “nature” away while allowing other to enter.

For example, one neighbor wanted to deter a raccoon from their buckwheat shrubs, but also to hang birdfeeders from the trees in his property. Similarly, one might interpret a coyote entering their garden as a threatening invader while a deer, a fox or even a mountain lion can become a welcome visitor—one that grants authenticity and added aesthetic value—free to come and go. These *biomembranes* are material instantiations of aesthetic and ecological values: some users seem to want their own slice of “nature,” interpreted as a private space marked by the distinct (and often contradictory) ways of valuing the worth of multiple kinds of non-humans at once.

Emotional Entanglement

Emotions such as empathy and fear have ecological consequences.³⁴ To experience empathy and intense affect for cats and dogs in the city is to entangle songbirds, lice, fleas, rats and coyotes

³³ Benson, “Generating Infrastructural Invisibility.”

³⁴ Laundre, Hernandez, and Ripple, “The Landscape of Fear.”

along with other humans and their differing emotions and experiences. To experience fear of coyotes—or for that matter of stray dogs, a more likely danger—is preliminary to the political entangling of city councils, police and animal services, veterinarians, dog-lovers and coyote feeders, pest control companies and more. Different animals evoke different emotions: opossums, gophers and squirrels are generally likely to provoke humor, surprise, disgust or an appeal to cuteness while coyotes, raccoons and mountain lions evoke fear, suspicion, or worry.

Positive affective connections with wild urban mammals are rare, but some do consider themselves “lucky to get to see these creatures as part of our every day.” One poster shared a picture of a bobcat near his house, and a neighbor replied “[I]ast summer, we watched a couple of twin cubs drink from our bird bath! Cuter than cute!” Even skunks, who are more commonly referred to as smelly pests or annoying (even threatening) creatures, can be subjects of positive emotions: “I love the little squeaks they make to communicate with one another. We have a family living on the property, so sometimes I hear their chatter at night. Smelly, but so CUTE!” While the cute-ification of animals is a problematic phenomenon with derogatory and de-animalizing effects,³⁵ it is also a common mode of emotional entanglement between humans and nonhumans in the city.

One of the most generalized feelings, however, seems to be frustration. The majority of the conversations we analyzed were prompted by neighbors who describe a problem they are experiencing with an animal and seek help or advice regarding this “nuisance.” To some extent, this is a feature of the platform, which is organized around neighbor-to-neighbor discussions, most of which are requests for advice or assistance, and so the trigger for posting to Nextdoor is often, in fact, a sense of frustration.

For example: “Hi neighbors, I need recommendations to remove an animal from under our house. It grinds wood at night or early morning. Sounds like a larger animal like an opossum or a raccoon. Any ideas? How much would it cost?” Or another: “It’s bad enough they are eating my pond fish like sushi! But now I have huge piles of feces! Does anybody know how to get rid of raccoons? I would really love to know????”

³⁵ Malamud, “Looking at Humans”; Berland, *Virtual Menageries*

Beyond the emotion of frustration, *fear* is the most common emotion expressed as an immediate reaction, almost always to coyotes. Nextdoor conversations often provide vivid evidence of fear of wild animals:

“I encountered a large coyote in the [local] Church parking lot at 8:30 in the evening. I was walking my two dogs—one is 8 pounds and the other is 14 pounds. At about 20 feet from me, this animal was blocking my exit from the lot and I couldn’t escape. We had about a 10-minute stare down and I’m certain he was deciding whether or not to take a chance and attack us. I waved my arms, stomped my feet and shouted but it didn’t faze him. Finally, he trotted off toward the assisted living home behind the lot and I backed up toward the exit and my puppies made it home in one piece. But I was terrified. I only walk my dogs in the daytime now and on hot days we go to the dog park.”

Fear also reverberates through posts that, although *intended* to cause fear in neighbors, also evoke forms of gratitude and responses that indicate solidarity in the face of threat as others respond. For example, it is common for a conversation about the predation of a cat or dog to include both intense agony for the loss of one animal and a total lack of sympathy for “normal” forms of prey like rabbits or rodents.

In turn, this illustrates how emotional entanglement is arbitrary. As many Nextdoor neighbors will point out without emotion, coyotes “play an important role in our ecosystem by hunting mice and rats and keeping the rabbit population down.” While it is fine for a coyote to eat a rabbit, it is a horror for it to eat a dog. The distinction here is largely about the difference between a free-roaming animal and a domesticated pet, but the line between wild and domestic in urban settings is difficult to establish, as the following quotation illustrates:

“This afternoon a coyote fatally attacked my feral cat of 8 years. The coyote was very aggressive and entered the side yard and the cat had no chance to escape. Please be mindful of the perils of allowing your cat outside! It’s a heartbreaking experience”

The “feral cat” in this example is neither a conventional pet nor a fully wild animal--probably either a roaming cat that has been loosely adopted, or an abandoned cat, of which there are

approximately 400,000 in Los Angeles.³⁶ This poster nonetheless feels propriety for the cat (“my feral cat”) and imagines the world through the cat’s experience—a sentiment that would likely be absent if the coyote were to kill and eat a possum or a rat.

Behavioral Entanglement

Fear and concern for pets’ safety, alongside frustration and anger are the most common emotions that entangle humans and animals in Los Angeles. They enjoin people to act differently towards animals, to become behaviorally and consequentially involved in the lives, bodies and behaviors of the offending animal or species. Often, this form of entanglement is a radically individualized (and thus arbitrary) response that enables each person to do as they see fit with respect to urban wildlife, whether that is to care for them or to destroy them.

Caring for sick or injured animals is a common behavior among humans who often bring sick or injured animals to shelters, and occasionally seek help or advice via Nextdoor. Even animals that are commonly feared, like coyotes, can evoke caring behaviors. One neighbor posted about spotting on his property a “frail, hungry-looking” and limping female coyote with “a little mange” and, after putting out some water for her, began calling wildlife rehabilitation programs, which were suggested in the conversation thread. Because none of these organizations would go fetch the animal, neighbors started offering monetary contributions to whomever would volunteer to trap and drive the coyote somewhere (they even suggested a Go Fund Me page). With over 100 comments, this conversation exemplifies that some neighbors are willing to go out of their way to care for a nonhuman other in need.

Based on observations and interviews among Los Angeles residents and experts, *feeding* animals is the most common and most contentious of relationships. Many people feed birds uncontroversially; some feed squirrels (intentionally or not), and some feed raccoons. Pest Control professionals lament the fact that humans feed animals regularly--both intentionally and unintentionally. As noted above, many neighbors relay their experiences feeding their feral cats, a practice that is openly and commonly discussed, ubiquitous across neighborhoods, and a source of many entanglements. Residents even feed coyotes, as we learned from a canyon-dwelling couple who adopted one coyote from a pack, fed and welcomed it into their home, and named it.

³⁶ Hillier, “If Schrödinger’s cat miaows.” See also, Lynch and Kelty, “Saturating the feral-docile spectrum”

Because it is contentious, it is rare to find any explicit admission that one feeds animals (as in the case above), in part because it is illegal (though very rarely enforced) in most cities in the area, and in part because it is often frowned upon by other neighbors. Indeed, such an admission will unleash a wave of angry accusations, claims about the harm that feeding does, just as it will expressions of sympathy and solidarity, concerns about disease, nostalgia about “pet raccoons” and so on as well. What wild animals should eat, and where they should get it is tangled up with what humans do both intentionally (leaving out food for animals) and unintentionally (making trash, growing fruit trees, keeping compost bins, etc.).

Alongside feeding, the most consequential behavioral entanglement of humans and nonhumans is the killing of animals. In some cases, there is an unwavering conviction about the need to kill some wild animals, as one neighbor expressed: “Definitely rodents. Most likely rats. They are filthy and brazen. . . . They will overrun your home if you don’t take action now.” Unsurprisingly, rats tend to be the most common target of these types of comments: they cause damage, they carry disease, and they seem to evoke a fundamental human horror that even other rodents like squirrels or mice are not capable of: “Violence is the answer. A good old killing trap from Amazon is the tool;” “You have roof rats. . . . you need to put out some good food for a few weeks and then fill it with rat poison and wipe them all out.” Examples of such bloodlust are abundant and are contested rarely.

But while there is widespread agreement on the need to remove rats from the proximity of human residents, there is also a heated debate about the killing or removal method—something that is prevalent in regard to more charismatic species. Some find opossums and raccoons beautiful and thus would never consider terminating their lives (or, in some cases, even forcibly removing them from their property), while others are eager to get revenge on the raccoon that destroyed a garden or lawn. Some consider coyotes and to a lesser extent bobcats to be pet-killing-machines, while others believe that they can be useful in controlling certain unwanted lifeforms, such as the rodent and squirrel population but also grubs and similar garden pests like snails or slugs, which makes their life worth preserving.

In such cases, rather than killing, the action of moving or relocating animals is often discussed in Nextdoor conversations. This is a controversial issue because California state law prohibits relocation of wildlife by anyone, including licensed trappers (California Code of Regulations,

Title 14, § 465.5), which means that if a neighbor wants to get rid of an unwanted wild animal in their premises and proceeds to trap it (or hires a pest control service to do so), the lawful courses of action would either be to kill the animal on the spot or to release it back exactly where it was caught. Most Nextdoor posters were not aware of this regulation and some trapped and relocated animals themselves, such as the poster who commented that, “Over the last several months, our relatives in Pasadena have had 8 !!! racoons trapped in their backyard and relocated,” and another who said, “I put water in it and some food, and when I caught mice I drove them up to Griffith Park and let them go in an area where there were lots of good hiding places.” Moreover, Angelenos also hired pest control companies who promised relocation: “Seriously, hire a humane trapper. These people relocate skunks and other animals to the wild. We used a humane trapper who relocated a pesky possum back to the San Gabriel Mountains where other possums live.”³⁷

As all of these examples throughout the city demonstrate, residents' behavioral entanglement with animals creates situations in which some *care for*, and some *take care of* animals that are present in the city.³⁸ Both types, however, signal an intimate (sometimes brutal, but not always) engagement with the vitality of the nonhuman actors that are part of the urban fabric. But the lack of any coordinated policy or practice at a government level means that such behavioral entanglements are heterogeneous: in some cases, killing of animals goes on unquestioned, and even unnoticed by most residents, while in others residents actively care for animals, rehabilitate and feed them. These heterogeneous behavioral entanglements are driven by emotions and feed those emotional entanglements. Yet as we will see in the next section, they also define the city as a lived space within which definitions of natural, urban, safe and unsafe, clean and dirty, rooted and displaced are contested.

Political entanglement

The emotional, spatial and behavioral entanglement with wildlife in the city sometimes culminates in a form of *political* entanglement, whereby humans and nonhumans enroll a range of other actors in dealing with real and perceived problems. Nextdoor contains a lot of confusion

³⁷ Trappers are not required by law to tell clients that a trapped animal will be euthanized (or re-released in the client's yard), which enables companies to claim that they relocate to a “wildlife-friendly spot.” If not carried through, the claim is a lie; if carried through, it is an unlawful practice.

³⁸ Bocci, “Tangles of Care.”

and misinformation regarding *how* to deal with wildlife and *who* should be in charge of doing so. Consequently, attempts to engage political entities, often feed the emotions of frustration, as well as fan the confusion over the spatial jurisdiction of political entities.

“The city” is an agent often attributed both power and responsibility, as well as ineffectiveness and disregard for the needs of citizens. Los Angeles County (of which the city of Los Angeles proper is the largest political entity in size and population) has 88 cities and a patchwork of incorporated and unincorporated areas strewn across multiple ecosystems. So “the city” can refer to local representatives, animal services, animal shelters and local animal control officers, county sheriffs, or city police officers. Because the city of Los Angeles has almost no dedicated employees to deal with wildlife, they often direct residents to pest control as a solution, while many smaller cities contract directly with pest control to deal with such issues. A third political entity commonly involved includes the many nonprofit and volunteer organizations, such as the Humane Society, the SPCA, or the various activist organizations regarding wildlife, or the feral cat caretaking organizations.

The result of this complexity is that, even though there is a strong demand for political responsibility, we found that *individual approaches to wildlife management* far outweigh any other type of intentional, coordinated institutional response. When coordination happens, it often occurs, perhaps ironically, on platforms like Nextdoor. But for the most part, residents express dismay about political responsibility. For example:

“NO ONE WHO WE ARE TOLD ARE THE PROPER AUTHORITIES to do does anything (...) ... residents know the reality of what is and has been going on for a while AND WE ARE SICK OF IT;”

especially when domestic pets are part of the assemblage:

“I feel helpless as long as the City Council is strictly partial to the coyotes and their ‘rights.’ In other words, our pets have NO RIGHTS, nor do we the pet owners.”

In the quotation above, the invocation of rights in scare quotes, is not an accident. It signals the very central confusion around what rights animals do and do not have in Los Angeles. Legally speaking, pets have dramatically more protections in the law than wild animals do; but the poster is referring less to the legal than the moral rights attributed to wild animals in an

attempt—perhaps an arbitrary one—by Animal Services or others to protect wild animals from human vengefulness.

The devolution of authority to individuals is therefore asserted not only as a right or responsibility, but as a duty to fill in where the city has failed: “Bottom line... The city doesn’t care. They can’t even repave our roads (...) Better to take matters into your own hands if you see a coyote, sad, but true.” Although menacing, this “need to do something” mostly materializes in a myriad of (sometimes contradictory) deterring and hazing practices meant to be carried out by individuals, promoted with uneven enthusiasm by different agencies, scientists, and politicians. There is also some evidence that Nextdoor itself provides an opportunity for grass-roots responses, as one neighbor suggested “forming a workgroup to create a strategic plan to resolve this ever-increasing problem. Email me if interested.” Another suggested petitions; “I think we need to start some sort of petition to get animal control to take this more seriously so no one else loses their beloved pet!!,” while a third offered to host a meeting: “None of us can use our yards the way we intended to when we bought our houses. Very frustrating. Maybe a large group would make a difference. I have a place we can meet.”

As a further sign of the arbitrary regulation of wildlife, many on Nextdoor are unsure not only about killing, but about saving wildlife when they feel compelled to help an injured or sick animal they encounter. A typical example: “Does anyone know of a possum rescue or want to come get a possum from my front yard? Dude doesn’t look happy... Any suggestions or ideas? I don’t believe that the humane society deals with these critters – or do they? Spent some time on hold with them this morning but no answer.” Some respondents will recommend one of various wildlife centers, or humane societies, but this is often met with comments that warn the same neighbor *not* to call them based on their own personal experience of finding the organization either unresponsive or unwilling to help. Other neighbors directly present solutions by offering to pick up the animal or lending a trap, to care for the injured animal, or to deliver it to someone they know who is capable of doing so.

Finally, many conversations demonstrate that companion animals are frequently conscripted, politically speaking, into the role of wildlife management. Most conversations about rats and mice include the injunction to “get a cat.” in a post labeled “avoiding rat poisons” a poster wrote “GET A CAT!! Quick, clean, thorough, 24/7, earth-friendly and great company!” Similarly, in a

heated post about a resident's problems with raccoons tearing up his lawn, a poster said: "Get a coonhound! Ours ran them off the first night we had her and they never came back. ... Coonhound was very specialized: she only chased raccoons!" Such examples demonstrate that not all residents view humans as separate or superior, but instead implicitly understand (and encourage) the complicity of some animals in human projects of re-making the city to their liking. Most often these are companion animals, but similar sentiments often occur around coyotes and mountain lions, and even raptors: a group calling itself "Raptors Are The Solution" (RATS) for instance, urges an increase in urban raptors as a way to deal with rats (instead of using poison). Political entanglement thus enlarges to include the problem-solving capacities of animals themselves, whose very involvement contributes to the arbitrary environment, even while recommended as a "natural" solution.

Conclusion: The arbitrary

Using the limited medium of an online neighborhood social media platform, we can clearly glimpse the complex system of human involvement in the lives of wild animals in Los Angeles. These entanglements go far beyond the occasional sighting of a wild animal to include intense emotions about the safety of companion animals, frustration with coinhabitants, assertions of power over private property, demands for local or state involvement in the protection, movement, or governance of wild animals, the active feeding and care of animals, as well as their annihilation both directly, and through the mediation of pest control professionals. Recognizing these forms is important because animals in Los Angeles are not invisible; social media platforms themselves make animals more visible and yank them out of the background and into a problematic foreground.

And yet, no clear consensus exists, whether among residents or among professionals, as to what rights or obligations animals in the city might have. Killing them indiscriminately is not acceptable; and yet "just letting them be" is similarly impossible given the kinds of entanglements we highlight above. Ultimately, the kind of arbitrariness at stake in many of the preceding examples is not just that the world is random, contradictory, and unpredictable; it is rather that in any given case, the action taken does not match the action taken in other similar

cases where the same situation obtains. Different individuals and different agencies react to the same problem in different ways.

In cities wild animals are dominated by humans arbitrarily: there are few clear norms, laws, or regulations that are followed by everyone, even where they exist, and the default mode of justice for animals is radically individualized—in almost all cases, it is up to individuals to make decisions about what happens to an animal. To be more precise, the form of domination is neither procedurally nor substantively regular, but instead left to the whims and caprices of those who are in a position to act. To be clear, any given individual may act reasonably, after a fashion, but they do not necessarily follow a rule that is in general followed by others. In Los Angeles, such action itself is also subject to a kind of administrative arbitrariness, in that there is no agreement about who actually holds the power to dominate wild animals. It thus devolves onto individuals who, even if they dominate animals non-arbitrarily *qua* individuals, effectively produce arbitrary domination across the collective of differently-acting individual humans. Most humans experience this arbitrariness as a source of frustration, and only occasionally as a source of power. But these forms of power are also arbitrary *for the animals*. Whatever capacities animals have for experiencing freedom from domination, an arbitrary domination, by virtue of its very capricious, whimsical, nature is likely both physically and mentally tortuous.

We conclude by raising the question: what would it take to produce a less arbitrary relationship to animals in the city? And if our relationship to animals in the city were non-arbitrary, then would it be better for humans and/or animals? Would our domination of them be more just? A negative theory of animal liberty—non-interference with animals in the city—is, and has long been, impossible. As we have explored here, city residents are bound to interfere in one way or another with the urban wildlife they are always already entangled with, and so the defining feature of their freedom cannot be to not interfere with them. Any proposal to rationalize the governance of animals in cities is likely to produce less arbitrariness, even if on the face of it, it appears to increase control of animals, or reduce the freedom of individuals. Thus, if we cannot simply “let them be,” then we at least have to be more consistent in our entanglements with them.

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References

- Alberti, Marina. *Advances in Urban Ecology: Integrating Humans and Ecological Processes in Urban Ecosystems*. New York: Springer, 2008.
- Alberti, Marina. “Eco-Evolutionary Dynamics in an Urbanizing Planet.” *Trends in Ecology & Evolution* 30, no. 2 (2015): 114–26. <https://doi.org/10.1016/j.tree.2014.11.007>.
- Arcari, Paula, Fiona Probyn-Rapsey, and Haley Singer. “Where Species Don’t Meet: Invisibilized Animals, Urban Nature and City Limits.” *Environment and planning. E, Nature and Space* (July 2020). <https://doi.org/10.1177/2514848620939870>.
- Asdal, Kristin, Tone Druglitrø, and Stephen Hinchliffe. *Humans, Animals and Biopolitics: The More Than Human Condition*. London New York: Routledge, Taylor & Francis Group, 2017.
- Barad, Karen. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham N.C: Duke University Press, 2007.
- Benjamin, Ruha. *Captivating Technology: Race, Carceral Technoscience, and Liberatory Imagination in Everyday Life*. Durham: Duke University Press, 2019.
- Benson, Etienne. “Generating Infrastructural Invisibility: Insulation, Interconnection, and Avian Excrement in the Southern California Power Grid.” *Environmental Humanities* 6, no. 1 (2015): 103–30. <https://doi.org/10.1215/22011919-3615916>.
- Berland, Jody. *Virtual Menageries: Animals as Mediators in Network Cultures*. Cambridge, Massachusetts: The MIT Press, 2019.
- Bocci, Paolo. “Tangles of Care: Killing Goats to Save Tortoises on the Galápagos Islands.” *Cultural Anthropology* 32, no. 3 (2017): 424–49. <https://doi.org/10.14506/ca32.3.08>.

Boisseron, Bénédicte. *Afro-Dog: Blackness and the Animal Question*. New York: Columbia University Press, 2018.

Bradley, Alexander, Neil Mennie, Peter A Bibby, and Helen J Cassaday. “Some animals are more equal than others: Validation of a new scale to measure how attitudes to animals depend on species and human purpose of use.” *PloS one* 15, no. 1 (2020). <https://doi.org/10.1371/journal.pone.0227948>

Brighenti, Andrea Mubi and Andrea Pavoni. “Situating urban animals – a theoretical framework.” *Contemporary Social Science* 16, no. 1 (2021): 1–13

Bufacchi, Vittorio. “Colonialism, Injustice, and Arbitrariness.” *Journal of Social Philosophy* 48, no. 2 (2017): 197–211. <https://doi.org/10.1111/josp.12182>.

Byrne, Jason. “The human relationship with nature: Rights of animals and plants in the urban context. In *The Routledge Handbook of Urban Ecology*, edited by Ian Douglas, David Goode, Mike Houck and Rusong Wang, 63–73. London: Routledge, 2011.

Byrne, Jason and Jennifer Wolch. “Urban habitats/nature.” In *International Encyclopedia of Human Geography*, edited by R. Kitchin and N. Thrift, 46–50. Oxford: Elsevier.

Cattelino, Jessica R. “From Locke to Slots: Money and the Politics of Indigeneity.” *Comparative Studies in Society and History* 60, no. 2 (2018): 274–307. <https://doi.org/10.1017/s0010417518000051>.

Chen, Mel. *Animacies: Biopolitics, Racial Mattering, and Queer Affect*. Durham, NC: Duke University Press, 2012.

Dave, Naisargi N. “Witness: Humans, Animals, and the Politics of Becoming.” *Cultural Anthropology* 29, no. 3 (2014): 433–56. <https://doi.org/10.14506/ca29.3.01>.

Dayan, C. *The Law Is a White Dog - How Legal Rituals Make and Unmake Persons*. Princeton, NJ: Princeton University Press, 2013.

Descola, Philippe. *Beyond Nature and Culture*. Chicago London: The University of Chicago Press, 2013.

Diamond, Cora. “Eating Meat and Eating People.” *Philosophy* 53, no. 206 (1978): 465–79. <https://doi.org/10.1017/s0031819100026334>.

Donaldson, Sue, and Will Kymlicka. *Zoopolis : A Political Theory of Animal Rights*. Oxford New York: Oxford University Press, 2013.

Donihue, Colin M., and Max R. Lambert. “Adaptive Evolution in Urban Ecosystems.” *AMBIO* 44, no. 3 (2014): 194–203. <https://doi.org/10.1007/s13280-014-0547-2>.

Draus, Paul, and Juliette Roddy. “Weeds, Pheasants and Wild Dogs: Resituating the Ecological Paradigm in Postindustrial Detroit.” *International Journal of Urban and Regional Research* 42, no. 5 (2018): 807–27. <https://doi.org/10.1111/1468-2427.12627>.

Ellison, Nicole B., and danah boyd. *Sociality Through Social Network Sites*. Oxford Handbooks Online. Oxford University Press, 2013.

<https://doi.org/10.1093/oxfordhb/9780199589074.013.0008>.

Erev, Stephanie. "What Is It Like to Become a Bat? Heterogeneities in an Age of Extinction." *Environmental Humanities* 10, no. 1 (2018): 129–149.

Fidino, Mason, Seth W. Herr, and Seth B. Magle. "Assessing Online Opinions of Wildlife Through Social Media." *Human Dimensions of Wildlife* 23, no. 5 (2018): 482–90.

<https://doi.org/10.1080/10871209.2018.1468943>.

Gandy, Matthew. "The Fly That Tried to Save the World: Saprophytic Geographies and Other-than-human Ecologies." *Transactions of the Institute of British Geographers* 44, no. 2 (2019): 392–406. <https://doi.org/10.1111/tran.12281>.

Giraud, Eva. *What Comes After Entanglement? : Activism, Anthropocentrism, and an Ethics of Exclusion*. Durham: Duke University Press, 2019.

Haraway, Donna. *When Species Meet*. Minneapolis: University of Minnesota Press, 2008.

Heise, Ursula. *Imagining Extinction : The Cultural Meanings of Endangered Species*. Chicago London: The University of Chicago Press, 2016.

Hillier, Jean. "If Schrödinger's Cat Miaows in the Suburbs, Will Anyone Hear?" *Planning theory (London, England)* 14, no. 4 (2015): 425–443.

Hinchliffe, Steve, Matthew B Kearnes, Monica Degen, and Sarah Whatmore. "Urban Wild Things: A Cosmopolitical Experiment." *Environment and Planning D: Society and Space* 23, no. 5 (2005): 643–58. <https://doi.org/10.1068/d351t>.

Hinchliffe, Steve, and Sarah Whatmore. "Living Cities: Towards a Politics of Conviviality." *Science as Culture* 15, no. 2 (2006): 123–38. <https://doi.org/10.1080/09505430600707988>.

Jerolmack, Colin. "How Pigeons Became Rats: The Cultural-Spatial Logic of Problem Animals." *Social Problems* 55, no. 1 (February 2008): 72–94. <https://doi.org/10.1525/sp.2008.55.1.72>.

Keck, Frédéric. *Avian Reservoirs: Virus Hunters and Birdwatchers in Chinese Sentinel Posts*. Durham, N.C.: Duke University Press, 2020.

Kirksey, Eben, Paul Munro, Thom van Dooren, Dan Emery, Anne Maree Kreller, Jeffrey Kwok, Ken Lau, et al. "Feeding the Flock: Wild Cockatoos and Their Facebook Friends." *Environment and Planning E: Nature and Space* 1, no. 4 (2018): 602–20.

<https://doi.org/10.1177/2514848618799294>.

Kirksey, Eben and Helmreich, Stefan "The Emergence of Multispecies Ethnography." *Cultural Anthropology* 25, no. 4 (October 2010): 545–76.

<https://doi.org/10.1111/j.1548-1360.2010.01069.x>.

Kohn, Eduardo. *How forests think: toward an anthropology beyond the human*. Berkeley: University of California Press, 2013.

- Kurwa, Rahim. "Building the Digitally Gated Community: The Case of Nextdoor." *Surveillance & Society* 17, no. 1/2 (2019): 111–17. <https://doi.org/10.24908/ss.v17i1/2.12927>.
- Lambright, Katie. "Digital Redlining: The Nextdoor App and the Neighborhood of Make-Believe." *Cultural Critique* 103, no. 1 (2019): 84–90. <https://doi.org/10.5749/culturalcritique.103.2019.0084>.
- Latimer, Joanna. "Being Alongside: Rethinking Relations amongst Different Kinds." *Theory, Culture & Society* 30, no. 7-8 (2013): 77–104.
- Laundre, John W., Lucina Hernandez, and William J. Ripple. "The Landscape of Fear: Ecological Implications of Being Afraid" *The Open Ecology Journal* 3, no. 3 (2010): 1–7. <https://doi.org/10.2174/1874213001003030001>.
- Livingston, Julie, and Jasbir K. Puar. "Interspecies." *Social Text* 29, no. 1 (2011): 3–14. <https://doi.org/10.1215/01642472-1210237>.
- Lorimer, Jamie. *Wildlife in the Anthropocene: Conservation After Nature*. Minneapolis: University of Minnesota Press, 2015.
- Lovett, Frank. *A General Theory of Domination and Justice*. Oxford, New York: Oxford University Press, 2010.
- Luciano, Dana, and Mel Y. Chen. "Queer Inhumanisms." *GLQ: A Journal of Lesbian and Gay Studies* 25, no. 1 (2019): 113–17. <https://doi.org/10.1215/10642684-7275600>.
- Lulka, D. "The Posthuman City: San Diego's dead animal removal program." *Urban Geography* 34, no. 8 (2013): 1119-1143.
- Lynch, Jessica and Christopher M. Kelty. "Saturating the feral-docile spectrum" (manuscript forthcoming).
- Malamud, Randy. "Looking at Humans Looking at Animals." In *Critical Animal and Media Studies: Communication for Nonhuman Animal Advocacy*, edited by Nuria Almiron, Matthew Cole, and Carrie P. Freeman, 154–68. New York: Routledge, 2015.
- Markell, P. "The insufficiency of non-domination." *Political Theory* 36, no. 1 (2008): 9–36
- Marris, E. *Rambunctious Garden: Saving Nature in a Post-Wild World*. Bloomsbury USA, 2013.
- Masden, Christina A., Catherine Grevet, Rebecca E. Grinter, Eric Gilbert, and W. Keith Edwards. "Tensions in Scaling-up Community Social Media: A Multi-neighborhood Study of Nextdoor." *CHI '14: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (2014): 3239–3248. <https://doi.org/10.1145/2556288.2557319>.
- Maxwell, Lida. "Queer/Love/Bird Extinction: Rachel Carson's Silent Spring as a Work of Love." *Political Theory* 45, no. 5 (2017): 682–704. <https://doi.org/10.1177/0090591717712024>.
- Payne, Will. "Welcome to the Polygon: Contested Digital Neighborhoods and Spatialized Segregation on Nextdoor." *Computational Culture*, no. 6 (2017).

<http://computationalculture.net/welcome-to-the-polygon-contested-digital-neighborhoods-and-spatialized-segregation-on-nextdoor/>.

Pettit, Philip. *Republicanism: a theory of freedom and government*. Oxford University Press, USA, 1997.

Pettit, Philip. *A Theory of Freedom: From the Psychology to the Politics of Agency*. Oxford: Oxford University Press, 2001.

Price, Jenny. “Thirteen Ways of Seeing Nature in LA: Part I. Believer Magazine,” April 1, 2006. <https://believermag.com/thirteen-ways-of-seeing-nature-in-la/>.

———. “Thirteen Ways of Seeing Nature in LA: Part II. Believer Magazine,” May 1, 2006. <https://believermag.com/thirteen-ways-of-seeing-nature-in-la-2/>.

Raffles, Hugh. *Insectopedia*. New York: Pantheon Books, 2010.

Regan, Tom. *The Case for Animal Rights*. Berkeley: University of California Press, 1983.

Rivkin, L. Ruth, James S. Santangelo, Marina Alberti, Myla F. J. Aronson, Charlotte W. de Keyzer, Sarah E. Diamond, Marie-Josée Fortin, et al. “A Roadmap for Urban Evolutionary Ecology.” *Evolutionary Applications* 12, no. 3 (2018): 384–98. <https://doi.org/10.1111/eva.12734>.

Roberts, N. *Freedom as marronage*. Chicago: The University of Chicago Press, 2015.

Rose, Deborah Bird, Thom van Dooren, and Matthew Chrulew. “Thinking Through the Environment, Unsettling the Humanities,” *Environmental Humanities* 1 (2012): 1-5.

Singer, Peter. *Animal Liberation*. City: Open Road Media, 1975.

Singh, Bhrigupati, and Naisargi Dave. “On the Killing and Killability of Animals.” *Comparative Studies of South Asia, Africa and the Middle East* 35, no. 2 (2015): 232–45. <https://doi.org/10.1215/1089201x-3139012>.

Skinner, Quentin. *Liberty Before Liberalism*. Cambridge: Cambridge University Press, 2012.

Stengers, Isabelle. *Cosmopolitics I*. Minneapolis: University of Minnesota Press. 1996

Stoetzer, Bettina. “Ruderal Ecologies: Rethinking Nature, Migration, and the Urban Landscape in Berlin.” *Cultural Anthropology* 33, no. 2 (2018): 295–323. <https://doi.org/10.14506/ca33.2.09>.

Sundberg, Juanita. “Decolonizing Posthumanist Geographies.” *Cultural Geographies* 21, no. 1 (2013): 33–47.

Sunstein, Cass, and Martha Nussbaum. *Animal Rights: Current Debates and New Directions*. Oxford New York: Oxford University Press, 2004.

TallBear, Kim. “Beyond the Life/Not Life Binary: A Feminist-Indigenous Reading of Cryopreservation, Interspecies Thinking and the New Materialisms.” *Cryopolitics: Frozen Life in a Melting World*, 2017, 179–202.

Todd, Zoe. “An Indigenous Feminist’s Take on the Ontological Turn: ‘Ontology’ Is Just Another Word for Colonialism.” *Journal of Historical Sociology* 29, no. 1 (2016): 4–22.
<https://doi.org/10.1111/johs.12124>.

———. “Fish Pluralities: Human-Animal Relations and Sites of Engagement in Paulatuuq, Arctic Canada.” *Études/Inuit/Studies* 38, nos. 1-2 (2015): 217–38.
<https://doi.org/10.7202/1028861ar>.

Tsing, Anna. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*. Princeton: Princeton University Press, 2015.

Tsing, Anna, Andrew S. Mathews, and Nils Bubandt. “Patchy Anthropocene: Landscape Structure, Multispecies History, and the Retooling of Anthropology: An Introduction to Supplement 20.” *Current Anthropology* 60, no. S20 (2019): S186–S197.
<https://doi.org/10.1086/703391>.

van Dooren, Thom. *The Wake of Crows: Living and Dying in Shared Worlds*. New York: Columbia University Press, 2019.

van Dooren, Thom, Eben Kirksey, and Ursula Münster. “Multispecies Studies.” *Environmental Humanities* 8, no. 1 (2016): 1–23. <https://doi.org/10.1215/22011919-3527695>.

Viveiros de Castro, Eduardo. *Cannibal metaphysics: for a post-structural anthropology*. Minneapolis: University of Minnesota Press, 2014.

von Essen, Erica and Michael P Allen. “The Republican Zoopolis: Towards a New Legitimation Framework for Relational Animal Ethics.” *Ethics and the Environment* 21, no. 1 (2016): 61–88
<https://doi.org/10.2979/ethicsenviro.21.1.03>.

Wanderer, Emily Mannix. “Biologies of Betrayal: Judas Goats and Sacrificial Mice on the Margins of Mexico.” *BioSocieties* 10, no. 1 (2014): 1–23.
<https://doi.org/10.1057/biosoc.2014.13>.

Weaver, Harlan. “‘Becoming in Kind’: Race, Class, Gender, and Nation in Cultures of Dog Rescue and Dogfighting.” *American Quarterly* 65, no. 3 (2013): 689–709.
<https://doi.org/10.1353/aq.2013.0034>.

Whatmore, Sarah, and Steve Hinchliffe. *Ecological Landscapes*. Oxford Handbooks Online. Oxford University Press, 2012. <https://doi.org/10.1093/oxfordhb/9780199218714.013.0019>.

Whyte, Kyle. “Settler Colonialism, Ecology, and Environmental Injustice.” *Environment and Society* 9, no. 1 (2018): 125–44. <https://doi.org/10.3167/ares.2018.090109>.

Whyte, Kyle Powys, and Chris J Cuomo. “Ethics of Caring in Environmental Ethics.” *The Oxford Handbook of Environmental Ethics*, 2016, 234.

Wolch, Jennifer, Alec Brownlow, and Unna Lassiter. “Constructing the Animal Worlds of Inner-City Los Angeles.” In *Animal Spaces, Beastly Places*, by Chris Philo, edited by Chris Philo, 2000.

Wolch, J. R., and J. Emel. *Animal Geographies: Place, Politics, and Identity in the Nature-Culture Borderlands*. Verso, 1998. <https://books.google.com/books?id=-AWag5IvaHkC>.