

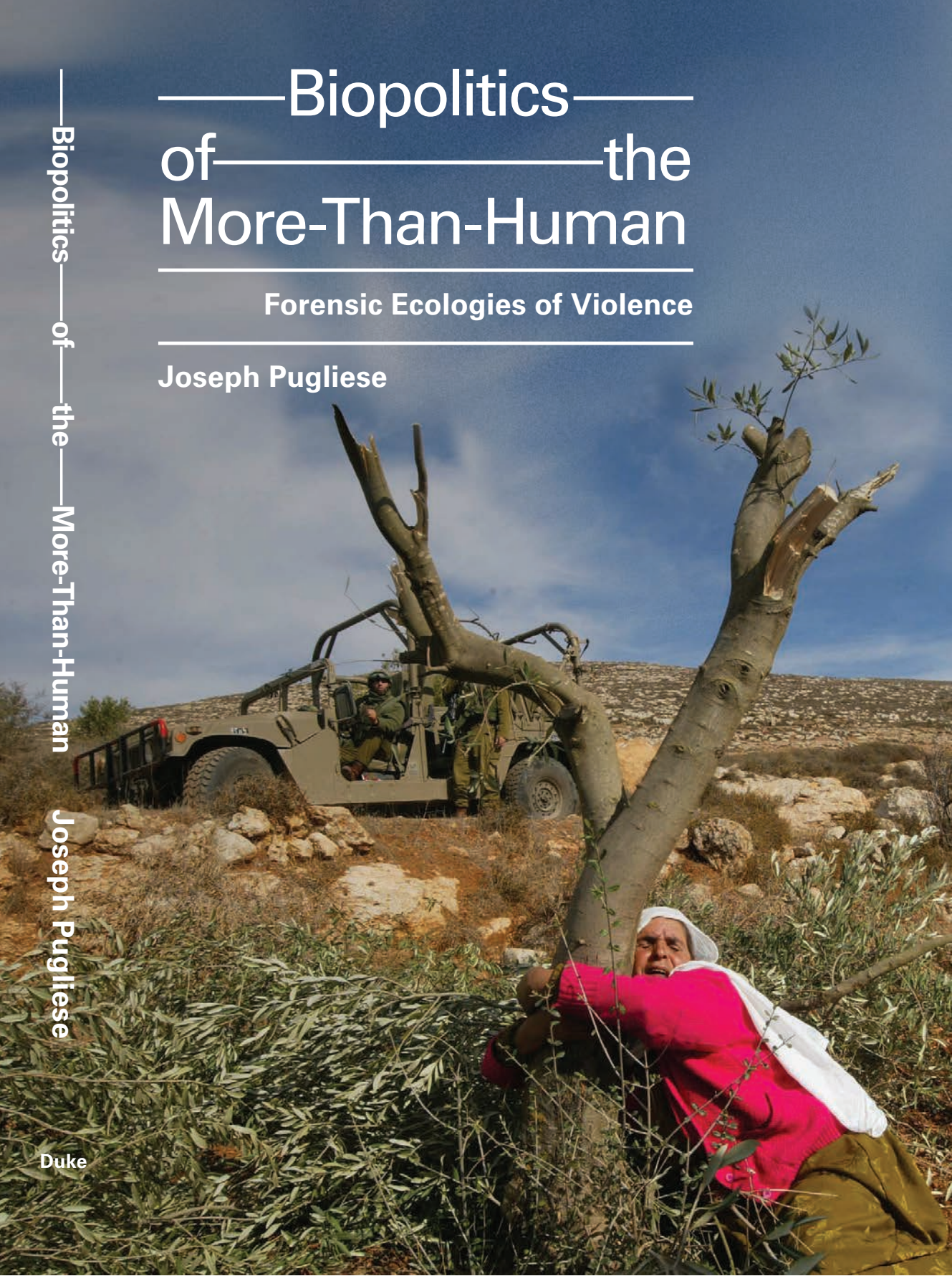
# Biopolitics of the More-Than-Human

Forensic Ecologies of Violence

Joseph Pugliese

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# Biopolitics of the More-Than-Human

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# — Biopolitics — of — the More-Than-Human

*Forensic Ecologies of Violence*

**Joseph Pugliese**

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Writing in the midst of the unfolding militarized violence unleashed on Gaza by the Israeli state through its Operation Protective Edge in July 2014, Atef Abu Saif, a citizen of Gaza, documented the breadth of the destruction he was compelled to witness. In the fraught context of the relentless military assault, he repeatedly negotiated the wreckage of his bombed neighborhood to put on public record the enormity of the devastation wreaked by the Israeli Defence Forces (IDF). In one account, Saif describes the corpses of donkeys killed by the IDF's strikes: "Half a dozen lie in the road in front of the school. Their stomachs and intestines hang from their bellies. A seventh donkey is still alive, though critically injured."<sup>1</sup> As he walks away from the site of this killing, he encounters a tree that is also a victim of the strike: "The fig tree in front of the homes is painted white with dust. Branches lie on the ground with fruit still on them."<sup>2</sup> Then, entering one of the bombed homes of his neighborhood, he is confronted by "one boy [who] is still hysterical after seeing the flesh of his father and uncle, mixed together like meat in a butcher's shop."<sup>3</sup> Saif's testimony encapsulates the concerns of this book.

At this opening juncture, Saif's testimony serves to provoke a number of questions, which establish the interrogative coordinates of this project: Is it possible to begin to enlarge the concepts of biopolitics and forensics beyond their anthropocentric frames so that they work to encompass more-than-human entities who are also victims of military violence—such as the disemboweled donkeys and the fig tree with its lopped-off limbs? What if I were to attempt to resignify the traditional disciplinary understanding of "forensic ecology," which presently focuses exclusively on mapping the causes of only human deaths, so that it would work to make the death of other-than-human

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victims a justiciable issue? What forms of law would begin to do justice to the heterogeneous entities caught in the violent matrix of forensic ecologies of militarized violence and occupation—as the focal sites of this text? I deploy, in this book, two concepts through which I attempt to answer these questions: biopolitics and forensic ecology. I will presently discuss these concepts in some detail, but I offer here synoptic definitions to orient the reader with regard to the approach that informs the analytical framework of this book.

In his theorizing of biopolitics, Michel Foucault raises the ontological question of who is allowed by the state to flourish and who may be left to die or be killed with impunity.<sup>4</sup> Biopolitics, in its on-the-ground deployment by a state, pivots on the governmentalized management of life and death. Forensics is a discipline of law. It is a discipline concerned with interpreting material found in a crime scene and in establishing the evidentiary dimensions of this material; forensic material—a shard of glass or an item of clothing—is mobilized by a forensic expert in the court of law as a form of demonstrative evidence that will speak truth to the crime by disclosing how the criminal act was perpetrated. Ecology refers to the matrix of relations that binds living entities with the complex infrastructure of their environment. The key term here is *relationality*: a rupture of one relational link invariably produces other effects across the broad spectrum of entities that constitute a given ecology.

In my analysis of sites of saturated violence, I deploy the concept of forensic ecologies in an attempt to *articulate* and to bring into *relational visibility* phenomena that would otherwise remain outside the domains of either biopolitics or law—except in the most circumscribed or token ways: for example, the rendering of more-than-human entities as worthy of legal consideration only after they have been processed through the Eurocentric grid of property law.<sup>5</sup> My focus on the operations of biopolitics on both human and more-than-human entities is critically informed by the forensic ecologies that constitute their conditions of survival and that, in death, work to proffer evidence of the criminal violence that transpired in those sites of destruction.

The possibility of making visible the different phenomena that inhabit the fractured terrain violated by military violence—to attend to their articulations as modes of evidentiary testimony and to begin to situate them as entities worthy of ethical consideration—is what animates this study. The shattered and dispersed fragments that remain in the wake of the military assault Saif documents in his wartime diary emerge from the rubble as something more than mere dead matter. The fig tree with its truncated limbs and its mineralized coating of concrete dust, the donkeys with their gaping bellies and hanging entrails, and the butchered bodies of a father and uncle whose intermixed

remains appear as so much meat disgorged from the shambles—they are what charged me to become attentive to the agentic and ethical articulations of a host of human and more-than-human entities calling for justice in the face of military violence.

My analytical attention to the victims of military violence and occupation encompasses both the categories of the human and the more-than-human because I see the two as inextricably entangled; indeed, as I discuss in the context of a number of military strikes, the two categories often become so enmeshed as to make it impossible to separate one from the other. Throughout the book, I deploy both the categories of more-than-human and other-than-human, rather than nonhuman and posthuman, for the following reasons: the category of the nonhuman is visibly and conceptually marked by the negative prefix *non-* that functions to define its other (animals, rocks, water, or plants) through a series of tacit or explicit deficits (they do not have language, emotion, culture, and so on); it thus reproduces, by semantic default, yet another form of anthropocentrism. By contrast, the category of the more-than-human refers to that which is other to the human without reproducing an attendant positive/negative hierarchy. The adjective *more* affirms the way more-than-human entities exceed human qualities and conceptual parameters, while the phrase itself visibly marks, through its hyphenated formation, the relational ecologies that constitute the very conditions of possibility for both human and more-than-human entities. Moreover, the hyphenated formation *more-than-human* effectively brings into focus my refusal, in this book, to view either human or other-than-human entities as categorically separated from each other. On the contrary, I work to challenge the sort of human exceptionalism that returns, often by sleight of hand, in seemingly progressive environmental and animal studies when they declare the need for the categorical isolation of the one from the other. As I demonstrate throughout the book, this is a conceptually and physically untenable position once situated in the context of Indigenous cosmo-epistemologies, and it thereby works to reproduce a distinctly Eurocentric position.

I also draw on the category of the *other*-than-human as a way of materializing the constitutive alterity that inscribes animals, plants, rocks, and so on and that continues to defy my definitional and categorical maneuvers. Furthermore, my analysis reflexively refuses to draw on the category of the posthuman. As has transpired with so many other categories inscribed with the prefix *post-* (postcolonialism, postracial, and so on), the conceptual marking of a moment of supersession has, after the fact, too often proven to be premature. This is strikingly so with the category of the posthuman: if the era of the Anthropocene evidences anything, it is that not only has the figure of the human

not been superseded but also its power and influence will continue to have global effects for millennia.

In sum, my discussion of the impact of military violence and occupation on the human and more-than-human world is foundationally grounded in *forensic ecologies* precisely because the concept evinces the following: as a modality of law, forensics valorizes precisely what has otherwise been dispatched as beyond the purview of the justiciable—here the more-than-human. As a concept predicated on inextricable lines of relationality, ecology foregrounds those zones of determinacy and indeterminacy within which human and more-than-human lives are entangled: they remain determinate in their distinct alterities, even as they are relationally bound in zones of indistinction in the wake of acts of military slaughter that often fuse the flesh of one with that of the other. Borrowing a term from Maurice Merleau-Ponty, I call this fused flesh of animal, vegetal, and mineral entities the *flesh of the world*.<sup>6</sup> As this book unfolds, I traverse a terrain harrowed by military violence and occupation, and I examine the forensic remainders of the flesh of the world. I attend to these remainders precisely to do justice to their forensic testimonies of militarized violence.

### **Biopolitics of the More-Than-Human and Its Differential and Interlocking Elements**

My concentration on biopolitics throughout this book pivots on examining the caesura that divides the human from that which is cast as altogether other-than-human and is thus categorized as lawfully killable. Within the context of this biopolitical schema, law plays a foundational role in determining where diverse subjects are placed along the life–death continuum. Within formations of biopolitical state power, I argue, law becomes yet another adjunct to the ensemble of governmentalities oriented toward expanding and consolidating statist ends. My focus on forensic ecologies will be oriented by a concern to delineate the complex assemblage of biopolitical forces mobilized by the Israeli state and the United States in their respective militarized campaigns. Understood in Foucauldian terms, I analyze these military campaigns as biopolitically oriented by statist objectives “to *foster* life or *disallow* it to the point of death.”<sup>7</sup>

In designating the domain of biopolitics as effectively driven by the concern to gather “information on the state’s environment, its population, its resources,”<sup>8</sup> Foucault establishes the ground to investigate the *different* modalities of biopolitics that are deployed across a range of contexts and that have diverse targets. I emphasize “different” because, in my work on the Israeli state’s militarized occupation of the Palestine territories, it became increasingly

evident to me that the homogeneous term *biopolitics* could not do justice to the material specificities that distinguish different modalities of biopolitics as they operate in terms of situated practices.

Both Israel and the United States evidence, in their exercise of biopolitical regimes, what Neel Ahuja terms the “government of species,” with its focus on “how interspecies relations and the public hopes and fears they generate shape the living form and affective lineaments of settler societies, in the process determining the possibilities and foreclosures of political life.”<sup>9</sup> Drawing on Ahuja’s conceptualization of the government of species, I delineate how the possibilities of political life for the settler subject are indissociably predicated on infrastructural foreclosures of political life for the broad spectrum of more-than-human entities attempting to survive within regimes of settler occupation and militarized violence. Inscripting these infrastructural foreclosures of political life is a speciesist logic that designates, in the context of the biopolitical continuum, both targeted Indigenous and more-than-human subjects as eliminable. These infrastructural foreclosures are essential in reproducing the settler state’s biopolitical “elimination” and “replacement” of the Indigenous people who have never formally ceded sovereignty over their lands.<sup>10</sup> The settler apparatuses of biopolitical attempted elimination, segregation, and subjugation that I analyze all function to evidence, I underscore, the undiminished resistance of the targeted Indigenous subjects in their contestation of settler rule.

Writing on the historical emergence of biopolitics, Foucault marks the epistemic shift that brings a “new technology” into view, one that is “addressed to a multiplicity of men, not to the extent that they are nothing more than their individual bodies, but to the extent that they form, on the contrary, a global mass that is affected by overall processes characteristic of birth, death, production, illness and so on.”<sup>11</sup> Foucault registers the epistemic recalibration that ensues from this shift:

So after a first seizure of power over the body in an individualizing mode, we have a second seizure of power that is not individualizing but, if you like, massifying, that is directed not at man-as-body but man-as-species. After the anatomo-politics of the human body established in the course of the eighteenth century, we have, at the end of the century, the emergence of something that is no longer an anatomo-politics of the human body, but what I would call a “biopolitics” of the human race.<sup>12</sup>

At this very juncture Foucault offers an opening to disrupt the massifying effects of thinking about biopolitics in exclusively anthropocentric terms and to disaggregate his biopolitical analytics by bringing into focus the range of

more-than-human entities that stand beyond the speciesist figuration of that “global mass” of the “human race.” Underpinning the biopolitics of the human race is the category’s foundational, but unspoken, dependence on speciesism. Foucault elaborates on the centrality of the (anthropocentric) concept of the human race in the operations of the “race struggle”:

It [the discourse of race struggle] will become the discourse of a centered, centralized, and centralizing power. It will become the discourse of battle that has to be waged not between races, but by a race that is portrayed as the one true race, the race that holds power and is entitled to define the norm, and against those who deviate from that norm. . . . At this point, we have all those biological-racist discourses of degeneracy, but also all those institutions within the social body which make the discourse of race struggle function as a principle of exclusion and segregation.<sup>13</sup>

The discourses of biological-racist degeneracy and the institutionalized apparatuses of exclusion and segregation are all conceptually enabled by the concept-specter of speciesism and the superordinate category of anthropocentrism that transmute the race struggle into distinct racio-anthropocentric registers designed to impact diverse targets that are scripted as deviating from the norm. Racio-speciesism is what enables the inversion of human/animal categories according to the biopolitical expediencies operative in a given context. It enables the “putting to death as denegation of murder. The putting to death of the animal, says this denegation, is not murder.”<sup>14</sup> In the fraught war-torn terrains that I examine, I track concrete instantiations of this racio-speciesist denegation of murder. In marking the question of the animal as “not one question among others” but, in fact, the “decisive” question “in itself and for its strategic value,” Jacques Derrida discloses how a number of other questions ensues from this pivotal question “because, while it is difficult and enigmatic in itself, it also represents the limit upon which all the great questions are formed and determined, as well as the concepts that attempt to delimit what is ‘proper to man,’ the essence and future of humanity, ethics, politics, law, ‘human rights,’ ‘crimes against humanity,’ ‘genocide,’ etc.”<sup>15</sup>

As I discuss across the chapters of the book, the question of the animal effectively establishes the onto-epistemological ground that determines the cultural intelligibility of the human/animal binary<sup>16</sup> and that, moreover, establishes what can be executed on the body of the animal other (and, concomitantly, those humans designated as “mere animals”) as lawful practice. To bring into visibility the otherwise disavowed way that various modalities of violence are predicated on the question of the animal, in chapter 4 I coin the term

*inanimality*. Inanimality, I contend, is the zoopolitical phantom that beckons from the very limits of the Euro-anthropocentric discursive field, even as, from its bestial and outlaw locus, it supplies the epistemological ground for what can be lawfully perpetrated against whatever is designated by the category of “the animal.” For the epistemic and physical violence that underpins the practices of inanimality to register as violence, I argue that Euro-anthropocentric language and thought would have to drop the dogma of human exceptionalism and its attendant reductionism, a reductionism insistently animated, as I remarked above, by a series of speciesist negatives: animals do not have language, subjecthood, society, law, play, altruism, and so on. In this zoopolitical schema, the stripping away of any of these attributes from captive human subjects initiates the vertical descent toward the state of a purely immanent animal biologism that stands as the baseline for the opposite of “the human.”

By refracting the seemingly singular concept of biopolitics through a non-anthropocentric prism, a spectrum of otherwise invisibilized biopolitical modalities come into view and the homogenizing effects of anthropocentric massification are fractured to disclose the operations of biopolitics on trees, soil, air, water, rocks, and other-than-human entities. These different modalities of statist operation must be seen as operating within inextricable systems of relation that are nested in the superordinate matrix of the biopolitical. Furthermore, these different modalities of statist operation are tributaries that flow from the governing category of biopolitics. As tributaries, they affirm, consolidate, and extend biopolitical relations of power in a capillary manner through grounded, site-specific modalities. They are at once its adjuncts and its site-specific, on-the-ground operatives designed to target specific ecological entities: water, animals, soil, air, and vegetal life. Collectively, they delineate the contours of the forensic ecologies that I investigate in this book, and in the context of the occupied Palestinian territories, for example, they evidence the Israeli state’s differential and diffuse operations of biopolitical war by other means, including the bulldozing of orchards, the contamination of aquifers, the poisoning of soil, and the military shooting of cows and sheep. Even as they emerge as differential categories, they simultaneously evidence interlocking relations of site-specific modalities of biopower that work to intensify biopolitical outcomes.

### **Occupied Palestine and Indigenous Theories and Alliances**

In my analysis of the biopolitical operations of Israeli settler colonialism in the context of the occupied Palestinian territories, I draw on a number of Indigenous decolonizing and deanthropomorphizing cosmo-epistemologies. I do

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this for two interconnected reasons: they work effectively to illuminate the structural forces at work in the consolidation and expansion of the occupation, and they also underscore the profound political and philosophical alliances that have been established between Palestinian and First Nations peoples. The infrastructural resonances among Native American, Aboriginal and Torres Strait Island peoples, First Nations in Canada, and Palestinian experiences of settler colonialism have been formally acknowledged across a number of statements of solidarity.<sup>17</sup> The Native American and Indigenous Studies Association, for example, has formally declared its support for the Boycott, Divestment, Sanctions movement, refusing to legitimate Israeli moves that appear to support Native American rights while Israel continues the settler colonial occupation of Palestinian lands: “As the elected council of an international community of Indigenous and allied non-Indigenous scholars, students and public intellectuals who have studied and resisted the colonization and domination of Indigenous lands via settler state structures throughout the world, we strongly protest the illegal occupation of Palestinian lands and the legal structures of the Israeli state that systematically discriminate against Palestinians and other Indigenous peoples.”<sup>18</sup> These statements of solidarity include, from the Palestinian position, an acknowledgment of the parallel structures of colonial violence endured by Native Americans, First Nations peoples, and Palestinians and the militarization of Indigenous lands to secure settler colonial occupation: “As an indigenous people whose lands have been robbed and pillaged, and face existential settler colonial expansion in Palestine, we recognize that Native Americans and First Nation peoples have endured centuries of violent settler colonialism that has dismantled and robbed them of home, heritage, dignity, security, narrative, land, language, identity, family, trees, cemeteries, animals, livelihoods and life.”<sup>19</sup> In naming, in this catalog of violent dispossession and extermination, the loss of land, trees, and animals, the Palestinian signatories to this statement of solidarity with Native Americans acknowledge the critical valence of Indigenous cosmo-epistemologies that refuse Euro-anthropocentric perspectives and that encompass the gamut of more-than-human entities within their eco-ethical worldviews. The Palestinian signatories write: “We also heed the wise leadership of a people who first conceived of mountains and rivers as sacred, who look upon a prairie with reverence, who consider trees as family and who risk their lives to protect the water and the integrity of their ancestral lands.”<sup>20</sup> As I demonstrate in my two chapters on the occupied Palestinian territories, it is precisely these more-than-human entities—trees, water, soil, and so on—that are exposed to practices of destruction due to the various biopolitical campaigns deployed by the Israeli settler state.



My concern in this book is to examine the rich intersectional qualities that emerge from the deployment of Indigenous theories of decolonization and their interconnected cosmo-epistemologies of the more-than-human in contexts of settler colonial domination and occupation. As I discuss in some detail below, the power of Indigenous theories resides in how they insistently bind the issues of decolonization with deanthropocentrizing understandings of ecology and life—revealing, in the process, how more-than-human entities are invested with their own cultures, languages, and laws and how, by definition, they are a priori political and always already possess ethico-jural standing. In contrast to a number of Western disciplines—such as critical animal studies and the new materialisms that largely neglect the issue of decolonization—Indigenous positions insist that the instantiation and nurturance of ecological worldviews can be realized only through the nonnegotiable deployment of decolonizing practices. At the close of their extensive historical documentation of Indigenous decolonizing movements that have been inextricably linked to ecocentric concerns, Donald Grindle and Bruce Johansen succinctly sum up this indissociable relation: “Liberation of the environment involves liberation of Native American people.”<sup>21</sup>

## Law

Across the chapters of this book, I focus on the entrenched Euro-anthropocentrism that inscribes both international environmental law and the laws of war and the environment to underscore the inadequacy of current laws either to address or deliver justice to other-than-human victims of armed conflict. I mark this infrastructural Euro-anthropocentrism not only because it inscribes the key branches of international law that are of concern to this study but also because, as I discuss in the concluding section of my introduction, it continues to generate laws that, in their anthropocentrism, stand in contradistinction to Indigenous law and its relational conceptualization of the law/environment nexus.<sup>22</sup> Furthermore, I qualify the anthropocentrism that inscribes these two fields of international law with the racial prefix *Euro-* because the anthropocentrism that supplies the conceptual infrastructure for the various laws that I discuss is a product of a particular geopolitical legal history fundamentally informed by Eurocentric values.<sup>23</sup> For example, the very point of origin of international environmental law, the London Convention Designed to Ensure the Conservation of Various Species of Wild Animals in Africa, Which Are Useful to Man or Inoffensive (1900),<sup>24</sup> is marked by asymmetrical relations of imperial domination that dictate the “protection” of wildlife in Africa to

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make it readily available for “sustainable” extermination by European hunters and traders: “Its primary goal was to preserve supplies for trophy hunters and traders and dealers in ivory and skins.”<sup>25</sup> Nature, in this foundational moment of international environmental law, is instrumentalized into another form of “livestock” and property, where the ostensible “protection” of nature is in fact underpinned by predatory imperial relations of power that transmute wildlife into a gaming and market resource for European hunters and traders.

This first international environmental agreement is, in other words, based on the expansion of European power into yet another domain, wildlife, of an already imperially subjugated and exploited continent, Africa. European imperial politics, in this instance, was instrumental in the formulation of what would count as the legal values of international environmental law: *the commodification of nature in law*. And European imperial economic interests, and the prospective regulation of competition and attendant conflict, were foundational in establishing the legal norms of international environmental law. Cast in a materialist register, “[international] law is the regulatory mechanism generalised in an economy based on commodity production. The legal form is that form which regulates the legal relationship: dispute is central, because without dispute there would be no need of regulation.”<sup>26</sup> Without the disputes between the imperial European powers that centered on the trade in wildlife there would have been, in this foundational instance, no need for an international environmental law.

In the epilogue to his extended analysis of the animal/property/law nexus, Gary Francione writes: “Given that the treatment of animals raises moral questions, one would think that animal welfarism, our current legal framework for resolving human/animal conflicts, would reflect, however imperfectly, some *moral* theory. That, however, is the problem. There is no moral theory that even attempts to justify the present level of abuse permitted under the law.”<sup>27</sup> While no explicitly articulated moral theory attempts to justify the abuse of animals permitted under Western law and its various international law embodiments, a type of sublimated moral theory animates and orients it. Precisely as Francione illustrates in the early stages of his analysis, the animal/property nexus finds its originary locus in the orthodox Judeo-Christian view that humans have, according to Genesis, dominion over the earth and all its other-than-human entities.<sup>28</sup> The moral basis of this right of dominion is founded on the culture/nature binary and the theo-onto-epistemological view that only humans possess the cognitive faculties for moral reasoning and that animals (and all other-than-human entities) are congenitally devoid of such a capacity and are thus lesser beings on the biopolitical hierarchy—with all the attendant noncriminal

practices against animals that this thus licenses. As I discuss in detail in chapters 3 and 4, at the heart of Western law and its various international law incarnations there is a “theological phantasm or concept” of noncriminal animal sacrifice. It is what animates the 1900 London Convention.

“Theological phantasm,” coined by Derrida in his discussion of sovereignty, can be effectively transposed to illuminate the operations of Euro-anthropocentric law. Western society secularizes theological concepts: “That is what it means that our culture lives on secularized sacred concepts, secularized theological concepts.”<sup>29</sup> Francione, although he does not cast his discussion in these terms, offers a genealogical tracking of the conversion of the theological into the secularized by delineating the key figures—including Thomas Aquinas, René Descartes, John Locke, and so on—who were foundational in theorizing a Euro-anthropocentric jurisprudence of animals as property. The forces of European imperial expansion and the concomitant hegemonic rise of extractive capitalism worked to intensify the juridical instrumentalization of animals into property and their commodification into what Nicole Shukin calls “animal capital.”<sup>30</sup> The transmutation of animal life into animal capital achieved its cogent articulation in a form of law that articulates and governs capitalist modes of production and exchange “between inherently uneven polities, with unequal coercive violence implied in the very commodity form. This unequal coercion is what forces particular content [here animals as property] into the legal form.”<sup>31</sup>

Western environmental law and its international incarnations make both animals and the environment coextensive with the concept of property; it is only thus that they can achieve the minimal conditions of possibility for legal standing. As Sean Coyle and Karen Morrow succinctly put it: “Most of [Western] environmental law is, of course, a set of restrictions and limitations on the use of property.”<sup>32</sup> The question of property, indeed, is critically aligned, in the annals of Euro-anthropocentric epistemologies, with the question of propriety in terms of the right and proper properties of the human subject. Vinciane Despret terms this the “proprietary rights of properties,” which insistently arrogate the very attributes that must be “confiscated” from animals so that humans may continue to make their claim to human exceptionalism.<sup>33</sup> Zoopolitical practices of confiscation ensure the consequent scripting of animals as marked by a series of congenital deficits—they lack language, reason, or emotion—that render them into fungible biological matter that can be liquidated in a noncriminal manner.

That the London Convention, as the first piece of international environmental law, was drafted in the geopolitical context of the European imperial domination of Africa is not surprising when situated in the colonial genealogy of international law. Indeed, as Antony Anghie has demonstrated, this is

precisely in keeping with international law's colonial moment of foundation. "Colonialism," he writes, "was central to the constitution of international law," shaping "many basic doctrines of international law" and creating, in turn, "a set of structures that continually repeated themselves at various stages in the history of international law."<sup>34</sup> The undiminished power of this imperial reiteration of Eurocentric values is evidenced across diverse branches of international law. "Western nations," notes Carl Bruch, "have driven much of the development of international law, including the law of war, humanitarian law, and international environmental law."<sup>35</sup>

Prior to the Vietnam War, the law of war developed, in Richard Falk's telling words, "against a background of virtual environmental unconsciousness."<sup>36</sup> This is graphically evidenced by the way the military campaigns of World Wars I and II produced unprecedented levels of ecological devastation that culminated in the atomic obliteration of both Hiroshima and Nagasaki.<sup>37</sup> Following the enormity of environmental destruction caused by the US military in its use of Agent Orange toxic defoliants during the Vietnam War, a number of international conventions and protocols were developed to address the environment and the laws of war.<sup>38</sup> Two of the key texts on the laws of war and environmental damage to emerge in the aftermath of the Vietnam War are the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD) (1976) and the Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977. Article 35 (3) of Additional Protocol I states: "It is prohibited to employ methods or means which are intended, or may be expected, to cause widespread, long-term and severe damage to the environment."<sup>39</sup> A number of commentators have remarked on the "inadequacy of the threshold set in Additional Protocol I to protect the 'environment,'"<sup>40</sup> precisely because "the threshold of damage is set at the causation of 'widespread, long-term and severe damage to the natural environment.'"<sup>41</sup> Despite their avowed commitment to the protection of the environment in times of war, the seemingly environmentally focused articles of Additional Protocol I are Euro-anthropocentric in their orientation, riven with "loopholes," lacking in "authoritativeness" and "coherence," and marred by a "difficulty of implementation."<sup>42</sup>

In the conclusion to his analysis of the law of armed conflict and the environment, U. C. Jha places the topic in the context of the ecological devastation wreaked by the Gulf War and argues that "the contention that the present environmental law of war is adequate is not reasonable. It is an imprecise law that is full of gaps and open to different interpretations. . . . It is apparent from this

example that international systems to deter and redress wartime environmental damage remain ad hoc.”<sup>43</sup> The UN International Law Commission appears to be cognizant of these critical failings, as it recently initiated a “Preliminary Report on the Protection of the Environment in Relation to Armed Conflicts” to be included in “its long-term programme of work.”<sup>44</sup> Significantly, however, the report concentrates exclusively on “the relevant rules and principles applicable to a potential armed conflict” within the frame of “*peacetime obligations*,” and as such, “it will not address measures to be taken *during an armed conflict* or post-conflict measures per se, even if preparatory acts necessary to implement such measures may need to be undertaken prior to the outbreak of an armed conflict.”<sup>45</sup> The possibility of drafting new UN rules and principles concerned with protecting the environment during armed conflict has been placed on indefinite hold—as have calls to establish “a ‘Fifth Geneva Convention,’ an environmental law-of-war treaty in the tradition of the four Geneva Conventions of 1949, or an ‘Ecocide Convention,’ similar to the Genocide Convention,”<sup>46</sup> in which the crime of ecocide would signify the “destruction of the environment for military purposes.”<sup>47</sup> Thus, ecocide is not recognized as a crime within the statutes of international law, and acts of ecocide in the context of armed conflict can be perpetrated with impunity.

In her review of existing laws of armed conflict and environmental protection, Karen Hulme soberly observes: “The simple truth is that environmental damage cannot be enforced. Whilst signature states remain bound to suppress any such violations, the obligation to conduct criminal prosecution of individual violators is absent. If such acts do not constitute war crimes they cannot be tried and punished by international tribunals.”<sup>48</sup> I would add that more is at stake than the key problematic of “enforceability.” Questions concerning the enforceability of international law are, in realpolitik terms, often determined by the geopolitical standing of a state and the attendant double standards that may ensue. Outlined here is what China Miéville identifies as the “paradoxical form” of international law: “It is simultaneously a *genuine relation between equals*, and a form that the weakest states *cannot hope to win*,” precisely because “for a decision to be authoritative—for a particular interpretation to defeat rivals—it must be backed up by the more powerful coercive force in a particular legal relationship.”<sup>49</sup> This is clearly evident across a number of the military campaigns that both the United States and Israel conduct and that I examine across the chapters of the book.

The entrenched Euro-anthropocentrism that continues to inscribe laws of war, of the environment, and so on and the consequent failure effectively to prohibit crimes against the environment in the context of militarized zones

have driven me to develop the concept of forensic ecologies. Again, I deploy this concept to examine the physical remains, in particular, of more-than-human entities left in the aftermath of the violence and destruction unleashed in zones of militarized occupation. I treat these remains as though they were evidence of culpable war crimes that must be brought to justice, even though currently they are not necessarily proscribed by law. The concept of forensic ecologies, then, is at once outside law, as it covers the gaps and deficiencies not covered by existing law, and inflected by law, precisely through the application of an enlarged sense of forensics.

### **Forensics: Rhetoric, Narrative, and Topology**

In this book, I attempt to listen to the voices of the rubble in Gaza, a lemon tree in occupied East Jerusalem, the ants of Guantánamo, and in the wake of a drone missile strike, the leaves and rocks that fuse with human and animal flesh in a field in Yemen. In attending to these more-than-human voices and testimonies, my concern is to account for the other victims of militarized violence and occupation that traditional forensic approaches fail to acknowledge and that yet unquestionably constitute the violated entities of a forensic ecology. My aim is to articulate both the relational ecologies that constitute such sites and the sentient expressiveness of the heterogeneous actors that animate these ecological assemblages. Listening to the material actors of these sites entails the deployment of the concept of *distributed cognition*. Distributed cognition means, in Edwin Hutchins's words, "locating cognitive activity in context, where context is not a fixed set of surrounding conditions but a wider dynamical process of which the cognition of the individual is only a small part."<sup>50</sup> As I discuss below, Hutchins's theorization of distributed cognition is antedated by Indigenous cosmo-epistemologies that both understand and appreciate the constitutive role of more-than-human actors in any relational process of meaning production and attendant biocultural exchange.

Forensics signifies a type of legal evidence. When conjoined with the discipline of science, forensics promises to deliver the science of ascertaining the legal evidence of a crime or an accident. Built into the concept of forensics is the notion that an evidentiary truth can be revealed about the identity of a suspect or crime victim, how a crime was committed, or what caused a fatal accident. The term *forensics* can be etymologically traced to the Latin root *forensis*: "The definition," Suzanne Bell notes, "roughly translates as, 'to speak the truth in public.'"<sup>51</sup> Inscribed in the term are the concepts of truth, evidence, and a performative rhetoric of speech that encompass both the expert witness who testifies in

court and the material artifacts that speak to the truth of a crime. Always already embedded in the concept of forensics, then, is a combination of rhetorical, performative, and narratological techniques that are deployed to convince the jury and the courtroom audience to adopt a particular point of view.

In this book, I transpose this analytical model of forensics to sites marked by the operations of military violence and occupation. Yet even as I transpose the model of forensics to a gamut of fraught contexts, I refuse to reproduce the discipline's insistence on deploying a scientific and objectifying lens in the analysis of its "objects" of inquiry. Rather, I inscribe my forensic analyses with the very elements and techniques that the discipline outlaws and disavows: namely, the animating and inescapable influence of embodied affect, rhetoric, tropology, and narrativity. My analysis of forensic ecologies can be seen, for example, as enacting the forensic scientist's equivalent of attempting to constitute a "chain of custody" precisely by materializing the discipline's disavowed *narratological* assemblage of trace evidence; simultaneously, my forensic analysis works to bring to the fore the disavowed, because embodied, *affects* that ineluctably inscribe the production of this same trace evidence. These embodied affects, I contend, cannot be wholly eliminated from the operations of any rational or objective analysis.<sup>52</sup> The seemingly neutral and unemotive style of Western scientific discourse is, after all, just another textual style constituted by a series of effaced rhetorical elements that work metonymically to displace the markers of affective engagement and emotional investment constitutive of scientific knowledge production.<sup>53</sup>

Against Western science's disavowal of the constitutive role of affect in its processes of meaning production, Gregory Cajete counterposes a Native American understanding of science that views affect and tropology as constitutive of the field: "To understand the foundations of Native science one must be open to the roles of sensation, perception, imagination, emotion, symbols, and spirit as well as that of concept, logic, and rational empiricism." Native science is, moreover, "both ecological and integrative."<sup>54</sup> *Forensic evidence*, as I deploy the term, is constituted by a narrator, spatiotemporal markers, affective and rhetorical elements, and the complex interplay between an ecological site and the material actors that enable an entity to assume its veridictional status. My focus on the diverse actors that compose an ecology of military occupation and war will be oriented by what forensics terms "the remnants, or proxy data, of those events [that] are left behind" in the wake of a violent event.<sup>55</sup> I will thus be analyzing, in the process, "evidence of past criminal events to interpret the actions of the perpetrator(s) and victim(s)."<sup>56</sup> "Forensic scientists," Bell notes, "are archaeologists of the recent past."<sup>57</sup>

Eyal Weizman, founder of the group Forensic Architecture, illuminates the key attributes that inscribe architecture and the built environment within the domain of forensics and that enable the “considering of buildings as historical documents”: they are, he writes, “both storage and inscription devices,” and “they sense or *prehend* their environment, they hold this information in their formal mutations, and they can later *diffuse* and externalize effects latent in their form.”<sup>58</sup> In his work on forensic architecture and the built environment, Weizman mobilizes a form of “counterforensics” (drawing on Thomas Keenan’s term) to turn “the state’s own means against the violence it commits.” Counterforensics, he notes, “is a civil practice that aims to interrogate the built environment to uncover political violence undertaken by states.”<sup>59</sup> Weizman’s acute analyses of forensic architecture in the Palestinian occupied territories demonstrate the deployment, in practice, of counterforensics to document and indict state violence.

In analyzing my selected crime scenes of militarized occupation and violence, I draw on three categories of legal evidence: written and oral testimonies of survivors and detainees; textual documents, such as official reports, that investigate particular criminal actions and crime scenes; and the materiality of physical evidence. I expand the semantic boundaries of forensic evidence by viewing my selected evidence through a *geobiophysical* prism. I take this term from the discipline of physical science and resignify it so as to bring to light the way physical evidence is, at any one time, shot through with both geopolitical and biopolitical vectors.

In the chapters that follow, I situate the concept of forensics within specific ecologies harrowed by regimes of biopolitical violence. My choice of the term *ecology*, rather than *environment*, is one way of attempting to overcome the untenable separation between human subjects and the larger ecological context within which they are situated and which must be preserved in its own right. The concept of ecology, as I use it, is sourced from Ernst Haeckel’s first formulation of the term in 1866 in his *Generelle Morphologie*. Drawing on the etymology of the Greek word *οἶκος*, which he glosses as “household,” “living relations,” and “dwelling place,” Haeckel writes: “By ecology, we mean the whole science of the relations of the organism to the environment including, in the broad sense, all the ‘conditions of existence.’ These are partly organic, partly inorganic in nature.”<sup>60</sup> Already embedded, then, in the etymology of *ecology* is an indissociable relation between nature and culture, as clearly evidenced by Haeckel’s inscription of a household within a system of living relations: his ecological attention is on “the relations of the organism to the environment, in the household of nature, in the economy of all nature.”<sup>61</sup>



Furthermore, it is precisely Haeckel's expansive conceptualization of *ecology*, encompassing both the organic and the inorganic, that resonates with my use of the term. The concept of ecology, thus, draws attention to the inextricable relations that, in a specific time and place, bind an assemblage of more-than-human entities. As I discuss below, this is a view that has been prefigured, and continues to be *embodied as lived practice*, in many Indigenous cultures. And I emphasize *embodied as lived practice* to preclude the understanding of ecology as a reified scientific category. As Grindle and Johansen note, "While 'ecology' has become a relatively new abstract slice of reality in the Western mind, to Native Americans (including the Navajo) ecology was, and remains, an integral part of living and knowing."<sup>62</sup>

An ecology, crucially, generates the very conditions of possibility for life as such. Situated in this Haeckelian context, I do not view ecology as something that can be found only in "wilderness" or "nature." Rather, I deploy the term *ecology* in the most expansive sense, so that it embraces a range of ecosystems, including urban and rural settings. Moreover, as I discuss in detail below, I draw on Indigenous cosmo-epistemologies of relationality and animism to do justice to the enlarged sense of *ecology* that I propose to deploy, in which a collectivity of different entities are bound within inextricably relational formations: in the words of Ambelin Kwaymullina and Blaze Kwaymullina, "All life—and everything is alive in an Aboriginal worldview—exists in *relationship* to everything else."<sup>63</sup> Before I proceed further, however, I want to underscore that I do not envision Indigenous cosmo-epistemologies of relationality as somehow homogeneous and essentialized in terms of their address of the more-than-human and related ecological concerns, thereby constructing, by default, yet another iteration of the trope of the "noble savage" in harmony with the environment.<sup>64</sup> Indigenous nations are, it goes without saying, inscribed by internal differences and contradictory positions on these matters, including positions that advocate such things as mining.<sup>65</sup>

## **Indigenous Epistemologies of Relationality and Forensics'**

### **Disavowed Animism**

The flesh, stones, trees, ants, and rubble that I discuss in my forensic analyses of zones of militarized violence and occupation are not reducible, I emphasize, to an ensemble of narratological and rhetorical constructions or to a series of anthropomorphically animated tropes. On the contrary, they are embedded within the very materiality of the ecological relations that inflect and orient their significations. In the words of Daniel Wildcat, Euchee member of the

Muscogee Nation, these other-than-human entities demand that one exercise what he terms “attentive living,” that is, a modality of being-in-the-world that is acutely responsive to and respectful of “the relationships and relatives that constitute the complex web of life.”<sup>66</sup> In a similar vein, Linda Hogan, Chickasaw Indian, writes that only in this way can one actually “hear what the material has to say to you.”<sup>67</sup> And by material, Hogan includes “the corner of a house, the shaking of leaves on a wind-blown tree, the solid voice of bricks. A fence post talks back. . . . A wall sings out its presences.”<sup>68</sup> This animist vision of the world is precisely what underpins, in a disavowed and occluded form, the practice of the forensic scientist, who is taught to listen attentively to the very material signification of the trace evidence of a crime scene—from the pattern of blood-splatter evidence, which indicates the specificity of the weapon used in a homicide, to a clothing fiber, which may identify either the victim or the perpetrator of a crime. The disavowed animist vision that underpins forensics is exemplified by one of the canonical quotes of the discipline by Paul Leland Kirk, founder of the subdiscipline of criminalistics (the use of the androcentric pronoun *he* is in the original):

Wherever he steps, whatever he touches, whatever he leaves, even unconsciously, will serve as a silent witness against him. Not only his fingerprints or his footprints, but his hair, the fibers from his clothes, the glass he breaks, the tool marks he leaves, the paint he scratches, the blood or semen he deposits or collects. All of these and more, bear mute witness against him. This is evidence that does not forget. It is not confused by the excitement of the moment. It is not absent because human witnesses are. It is factual evidence. Physical evidence cannot be wrong, it cannot perjure itself, it cannot be wholly absent. Only human failure to find it, study and understand it, can diminish its value.<sup>69</sup>

Here numerous forensic materials—including footprints, paint, blood, and so on—is invested with an animism that at once bears witness to the agents of the crime and that refuses to forget what it has witnessed—precisely because the event in question has left an indelible imprint on the material entity. Animated by its own uncanny “aliveness” and obdurate facticity, forensic material bespeaks an evidentiary truth. In Kirk’s iconic quotation, forensic evidence is represented as very much fulfilling Bruno Latour’s actorial vision, with blood, footprints, and shards of glass *articulating* a series of *propositions* to the forensic expert. “Articulation,” Latour writes, “is not a property of human speech but an ontological property of the universe.”<sup>70</sup> “Instead of being the privilege of a human mind surrounded by mute things,” he contends, “articulation becomes

a very common property of propositions, in which many kinds of entities can participate.”<sup>71</sup> Propositions “rely on the articulation of differences that make new phenomena visible in the cracks that distinguish them.”<sup>72</sup> Kirk presents an understanding of forensic evidence that transcends the fallibilities of the human subject and endures, as trace evidence, regardless of the absence of a human subject. Forensic evidence is, in this Latourian scene, represented as speaking through the idiom of its own material medium—glass, blood, or paint—and offering, in turn, a series of propositions to the analyst in question. Moreover, in Kirk’s schema, forensic evidence is invested with a moral rectitude and veridictional status that enable it to make judicative statements on what is in fact the truth of the crime: “It cannot perjure itself.”

At this scientifico-animist juncture, I want to take a moment to unpack the denegatory logics that inscribe Kirk’s canonical quote. In his text, the evidentiary truth status of forensic material is rendered possible through a circumlocutionary movement that denegates, through the deployment of the strict and rigorous protocols of forensic scientificity, any nonscientific, anthropomorphic, and animist projection onto the material in question. At the same time, however, the forensic evidence is invested with a disavowed animism that is presented as inherent in the empirical object in question and that, in effect, can come to voice only through the attentive use of the same scientific protocols. Here, in this disavowed animist vision of forensic physical evidence, we have what could be called *partial* actors whose conditions of enunciation can be fully realized only through the performative (scientific, rhetorical, and narratological) procedures of the forensic scientist as, by definition, *disclaimed animist*. As Latour sardonically remarks, “Being a matter of fact is not a ‘natural’ mode of existence but, strangely enough, an *anthropomorphism*. . . . ‘Inanimism’ is just as much a figuration as ‘animism.’”<sup>73</sup> This realization, I would add, appears strange only in the domain of a science that forgets the foundational tropes that constitute its conditions of possibility and that, ipso facto, condition how its objects of inquiry may speak and what they have to say. In the disciplinary space of Western forensics the latent metaphysics that inflect this animist scene are occulted by a set of scientific procedures that conjure up a type of rebus, where the objects in the crime scene constitute an ensemble of cryptic indexes (for example, the pattern of the blood spatter or the angle of a puncture wound) that can be brought to intelligible speech and resolved only through the disciplinary interventions of the forensic scientist.

Despite its avowed scientific undergirding, Western forensic science is shadowed by a disavowed animism. Forensics, indeed, is a field where the epistemology of Western science unreflexively crosses over into the domain

of animist cosmologies and epistemologies. The discipline's dependency on (disavowed) animism generates a cognitive contradiction that can be reconciled only through the deployment of a number of disciplinary strategies, including anthropocentric ableism predicated on the deficit model of disability (the forensic object is rendered into a "mute witness"); rhetorical effacement (the animating tropes that constitute a forensic object as "witness" must be airbrushed); and human-centered inflation (only the scientist can bring the "mute witness" to speech). As I have discussed elsewhere, the field of Western science is inscribed by the constitutive operations of denegated tropes that work to animate everything from particle matter to genes.<sup>74</sup> By contrast, Cajete underscores, Native science openly draws on symbols and tropes, and language is viewed as what "choreographs" one's engagement with the entities of the world; and, critically, it does not view the diverse entities of the world as "mute objects" that dumbly await the scientist to be brought to speaking life; rather, "Native science continually relates to and speaks of the world as full of *active* entities with which people engage."<sup>75</sup> In Indigenous "cosmopolitical theory," Eduardo Viveiros de Castro notes, the "distinction between society and nature is internal to the social world," thereby overturning the Eurocentric nature/culture binary that relegates nature to an external nonsocial world from which science extracts its truths and facts. In this worldview the "diverse type of actants or subjective agents" include "gods, animals, the dead, plants, meteorological phenomena, and often objects or artifacts as well."<sup>76</sup>

In the context of Western forensic science, the legendary ability of Indigenous trackers to read accurately a forensic ecology for the plenitude of signs that inscribe it is rendered "uncanny" through the occlusion and/or dismissal of their avowedly animist understanding of the land and all its entities. The crossing of forensic science with Indigenous animist cosmo-epistemologies that I stage here is neither fortuitous nor arbitrary. On the contrary, it is grounded in the historical practice of Western colonial police forces employing Indigenous trackers to find escaped criminals or lost civilians in the bush precisely because of their unerring capacity to be acutely attentive to the trace evidence inscribed in the landscape when tracking their subjects.<sup>77</sup> In the words of David Mowaljarlai, Wandjina elder, "When you touch them, all things talk to you, give you their story."<sup>78</sup> Mowaljarlai elaborates on the deep resonances he experiences between the entities of the earth and himself: "These things recognise you. They give their wisdom and their understanding to you when you come close to them."<sup>79</sup> In this worldview, forensic entities are not mute objects awaiting the animating intervention of the human subject; rather, they acknowledge the presence of the human subject, and through the

relational practice of haptic exchange (“when you touch them”), they speak and offer, in the idiom of their materiality, their own understanding of what has transpired through “their story.” Ludwig Leichhardt, who was dependent on Aboriginal guides and trackers as he explored the Australian continent in the mid-nineteenth century, wrote in his journal: “The impressions on their retina seem more intense than on that of the European; and their recollections are remarkably exact, even to the minutest details. Trees peculiarly formed, broken branches, slight elevations of the ground—in fact, a hundred things, which we should remark only when paying great attention to place—seem to form a Daguerreotype impression on their minds, every part of which is readily recollected.”<sup>80</sup> I read scores of Western histories of forensic science in my research for this book, but nowhere are Indigenous trackers mentioned or acknowledged as key players in the field of forensics, despite their celebrated abilities to read the land for its forensic traces. In the state of New South Wales alone, between 1862 (when the state’s police force was established) and 1973, more than two hundred police stations employed Aboriginal trackers because of their outstanding forensic skills.<sup>81</sup> During the Boer War, “about 50 Aboriginal trackers were summoned by the British forces in South Africa to join the war to locate Boer fighters. When Australian forces withdraw later that year [1902], the trackers are thought to have been left behind.”<sup>82</sup> Regardless of the crucial role of Indigenous forensic expertise across both domestic and international contexts, Indigenous forensic science simply fails to figure in the annals of Western forensic histories. The effacement of Indigenous forensics from the Western canon is crucial in enabling Western science to secure the scientificity of its own practices precisely by categorizing Indigenous forensics as little more than (un)canny folk know-how, animist superstitions, or infra-epistemologies that are dispatched beyond the policed domains of certified scientific knowledge; what becomes unthinkable in such a dichotomous schema, thus, is the very possibility of Native science. This is a familiar colonial move that cuts across diverse disciplinary practices and categories, not the least law, where Western law is represented as the Law, whereas Indigenous law is categorized as a proto-form of “customary law.”<sup>83</sup>

Furthermore, the critical intersection of Western forensic science, colonialism, and Indigenous histories that I am staging here must be located at the very historical point of origin of the discipline: Western forensic science was born in the charged context of empire, race, and colonialism. The forensic practice of fingerprint identification, often presented as the foundational forensic practice, emerged in British colonial India and the need of its white administrators to identify, track, and monitor insurgent Indian tribes.<sup>84</sup> Moreover,

the discipline of forensic pathology established its medico-legal epistemological grounding on the study of, and traffic in, expropriated Indigenous and enslaved African American bodies.<sup>85</sup> Consequently, Western forensic pathology's epistemologies were founded on the criminal expropriation and violation of Indigenous corpo-ontologies and the dismissal, if not attempted obliteration, of their epistemologies.

In what follows, I want to flesh out in some detail the disavowed animism that haunts the field of forensic science. In the discipline of forensics, material evidence is inscribed by its own animating force and the attendant exchange of properties between seemingly inanimate entities, including soil, dust, or fibers, that come into contact with each other. Matter, even apparently inorganic or mineral matter, is never simply inert. On the contrary, it is enlivened by an exchange of particles between the various entities that constitute a designated forensic context. There would, in fact, be no forensics as such without this process of animated particle exchange. In forensic science, Locard's exchange principle exemplifies this vision of animist exchange: "Every contact leaves a trace.' This principle reflects the belief that every contact between a person and a person or a person and a place results in the transfer of materials between them."<sup>86</sup> Forensic testimony is what is produced by deploying a relational methodology: "A goal of forensic science is to link a potential offender to a crime scene by way of testimony as to individual characteristics, connecting a physical sample obtained from the suspect with a similar sample from the crime scene."<sup>87</sup> Testimony, in this forensic scene of animist exchange, emerges as a relational assemblage of heterogeneous materials that, collectively, is mobilized to speak an evidentiary truth.

### **Forensic Ecologies' Flesh of the World**

Indigenous relational cosmo-epistemologies, with their distributed and heterogeneous sense of agentic entities, closely resonate, as Cajete contends, with "a number of the central premises of phenomenology (the philosophical study of phenomena)" and, in particular, he adds, with Merleau-Ponty's call to "return to things themselves" in order to make sense of the world.<sup>88</sup> Merleau-Ponty, moreover, insistently overturns anthropocentric hierarchies by positioning the earth and nature as constitutive of human perception, cognition, speech, and so on: "Nature," he writes, "must be our interlocutor in a sort of dialogue."<sup>89</sup> These points of intersection are also clearly evidenced in the resonance between Indigenous and Merleau-Pontian philosophies of embodiment and intercorporeality. In conceptualizing our relation to the world,

Merleau-Ponty posits the flesh as that which conjoins one to the other: “The presence of the world is precisely the presence of its flesh to my flesh.”<sup>90</sup> This intercorporeal understanding of the world meshes, as Robert Yazzie, chief justice of the Navajo Nation, notes, with “Native philosophy,” which he describes as “the practice of an epistemology in which the mind embodies itself in a particular relationship with all other aspects of the world.”<sup>91</sup> In accord with Indigenous philosophies, Merleau-Ponty’s theorizing of flesh disrupts the circumscriptions of the anthropocentric frame. Flesh emerges, for him, as both a general and a specific modality of being in the world. It is a general modality as flesh signifies the condition of possibility of being in the world. It is a specific modality because flesh is always already situated in the particularity of its worldly locus.

In the field of forensics, the discipline of forensic ecology refers to the gathering and analysis of soil, entomological samples, plants, and other material to provide evidence about a suspect and the time and place of death of a human victim.<sup>92</sup> In the doxic understanding of forensic ecology, animals, plants, and land are equivalent to negative space in a painting: they are mere background to the positive figures (the human victims of criminal acts) that are seen to dominate the setting. Animals, plants, and soil are mere supplements that are mobilized to offer up the physical evidence that will help solve the crime. They are not themselves seen as the victims, for example, of a military strike. My intention is to challenge and overturn this relationship of (human) figure to ground (all other-than-human entities) and to bring into focus the broad spectrum of entities that may lay claim to speaking an evidentiary truth about a particular crime. In broad terms, my aim is to map suffering’s communal dimensions by situating it beyond traditional anthropocentric delimitations and by locating it within ecologies of relationality. In the forensic ecology schema I deploy in this book, human and more-than-human subjects emerge, in Cajete’s words, “as dynamic bodies intimately cradled in the body of the world” and thus inextricably inscribed in the “flesh of the world.”<sup>93</sup> My attention will center on the destruction that results from militarized assaults, violating and scarring what Hogan calls “this body of earth.”<sup>94</sup>

In attempting to theorize a communal and ecological understanding of the experience of suffering that challenges anthropocentric circumscriptions, I want to underscore the critical necessity to articulate a different order of entities that evidences not a binarized subject/object world but a world of differential and yet mutually constitutive actors.<sup>95</sup> As I demonstrate in the chapters that follow, more-than-human entities speak through their own embodied media and through the specificity of their own semiosis, including zoosemiotics (animal

languages) and phytosemiotics (plant languages). Biocultural networks of relationality enable mediative and transitive lines of exchange between human and more-than-human entities. In my conceptualization of more-than-human entities as actors, I no doubt will be accused of indulging in acts of anthropomorphism. I would argue that, from a deconstructionist point of view, there can be no zero degree of anthropomorphism for anyone who inhabits the locus inscribed by the figure of “the human”—as a category critically dependent for its cultural intelligibility on its definitional opposition to whatever is deemed to be other-than-human. Any theory, scientific or otherwise, that claims to speak outside a position not inflected to some degree by the operations of anthropomorphism can do so only through an act of disavowal.<sup>96</sup> Furthermore, I am not sure what it means to write outside the inescapable frames of rhetoric and its constitutive repertoire of tropes—metaphor, prosopopoeia (personification), and so on—except by lapsing into catachrestic forms that found their very facticity and literality on the denegated bodies of dead metaphors, where, for example, through customary use we forget that the “leg” of a chair is just another anthropomorphic trope. The charge of projecting anthropomorphic values onto more-than-human entities is yet another instantiation of an untenable human exceptionalism that insists on denying speech, thought, intentionality, emotion, and so on to the other-than-human. Standing at the juncture of tropology and catachresis, I can avow only one thing: that outside the frames of my anthropomorphizing language there still reside entities that are not reducible to the narcissism of the Same.

### **New Materialisms, Old Eurocentrisms**

The relational, animist, and ecocentric Indigenous cosmo-epistemologies I have been invoking resonate with a cluster of relatively new Western theoretical formations, including the new materialisms, critical animal studies, the new ethology, and nonhuman studies. In what follows, I want to focus on the field of the new materialisms. As I discussed above, many Indigenous cosmo-epistemologies are foundationally underpinned by a “kincentric” view of the world, in which all entities are inscribed within ecologies of relationality.<sup>97</sup> Jane Bennett, one of the leading theorists of the new materialisms, defines her approach as one that “emphasizes the shared material basis, the kinship, of all things, regardless of their status as human, animal, vegetable, or mineral.”<sup>98</sup> The isomorphism between the key principles of Indigenous cosmo-epistemologies and the new materialisms is striking. Bennett’s concept of “vibrant matter,” in which all matter is viewed as animate, reproduces Hogan’s view of a “vibrant land”



scored by the “old, slow pulse of things.”<sup>99</sup> Bennett’s belief that “*all* forces and flows (materialities) are or can become lively, affective, and signaling” echoes Leroy Little Bear’s mapping of the “Native American paradigm,” which “is comprised of and includes ideas of constant motion and flux, existence consisting of energy waves, interrelationships, all things being animate, space/place, renewal, and all things imbued with spirit. . . . What Native Americans call ‘spirit’ and energy waves are the same thing.”<sup>100</sup> In a Native American context, Cajete notes, “cosmology” means the “lived story of place, kinship, and environmental knowledge.”<sup>101</sup> In Indigenous cosmologies, kinship stands in contradistinction to Western understandings of the term that restrict kinship relations solely to human bio-genealogies. In Indigenous cultures, kinship cuts across and beyond human categories to encompass rocks, water, trees, and so on. Rebecca Adamson, Cherokee, founder and president of First Peoples Worldwide, amplifies this cosmology of the lived and vibrantly alive environment as what is “perceived as a sensate, conscious entity” in which

all particles of matter, property, position, and velocity are influenced by the intention or presence of other particles. Stated in simpler terms, atoms are aware of other atoms. According to this law of nature, a people rooted in the land over time have exchanged their tears, their breath, their bones, their elements, oxygen, carbon, nitrogen, hydrogen, phosphorous, sulfur, all of their elements with their habitat many times over. In the words of the Diné traditionalist Ruth Benally, “Our history cannot be told without naming the cliffs and the mountains that have witnessed our people.”<sup>102</sup>

In Benally’s vision, the cliffs and mountains are not inert and mute objects in the landscape; on the contrary, they are agentic witnesses inextricably enmeshed in the everyday life of her people. “Modern science,” Adamson adds, “is just beginning to catch up with such ancient wisdom.”<sup>103</sup> Despite the manifold ways in which such Indigenous cosmo-epistemologies at once antedate and are contemporary with the theories of the new materialisms, the field is largely marked by the very absence of any mention of their work. Reproduced across a number of the foundational texts of the new materialisms is a Eurocentric erasure of the Indigenous knowledges that, seemingly, can inscribe the field only through their absence.<sup>104</sup> For example, Bennett begins the introduction to her book *Vibrant Matter* with this statement: “The idea of vibrant matter also has a long (and if not latent, at least not dominant) philosophical history in the West. I will reinvoke this history too, drawing in particular on the concepts and claims of Baruch Spinoza, Friedrich Nietzsche, Henry David Thoreau, Charles Darwin, Theodor Adorno, Gilles Deleuze, and the early twentieth-century

vitalisms of Bergson and Hans Driesch.”<sup>105</sup> Circumscribed by the seemingly sealed epistemological borders of the West, even when this history is stretched back to ancient cultures, the catalog of names can only, tautologically, remain Eurocentric: “I pursue a materialism in the tradition of Democritus-Epicurus-Spinoza-Diderot-Deleuze more than Hegel-Marx-Adorno. It is important to follow the trail of human power to expose social hegemonies (as historical materialists do).”<sup>106</sup> A double logic is operative here. On the one hand, this autotelic genealogy is informed by an apparently impermeable concept of the West, as though this geopolitical configuration is uniquely capable of operating outside any of the structuring influences of the various lands and cultures it colonizes and imperially occupies. On the other hand, through the invocation of “human power,” a sleight of hand is performed in which the West is universalized as “the human,” as a seemingly racially unmarked subject that is inscribed by a denegated (because white), a priori raciality. In following this distinctly Eurocentric trail of “human power,” Bennett effectively reproduces one of the key “social hegemonies” of the very nation-state from within which she thinks and writes: settler colonialism and its ongoing erasure of the very Native American cosmo-epistemologies that are critically relevant to both her new materialism project and her desire to expose social hegemonies as such.

In her coruscating analysis of the way Western thinkers repeatedly “talk *around* themes shared in Indigenous thought without giving Indigenous people credit or a nod,” Zoe Todd, Indigenous feminist, Red River Métis, Otipemisiwak, asks: “So why does this all matter? Why am I so fired up at the realisation that (some) European thinkers are replicating Indigenous thought, seemingly with no awareness? Well, it’s this little matter of *colonialism*, see.”<sup>107</sup> Todd’s sardonic line on “this little matter of *colonialism*” profoundly resonates. In her work, she exposes how the erasure of Indigenous cosmo-epistemologies in much Western thought concerned with “animals, the climate, water, ‘atmospheres’ and non-human presences like ancestors and spirits are *sentient* and *possess agency*, that ‘nature’ and ‘culture,’ ‘human’ and ‘animal’ may not be so separate after all” reproduces forms of epistemic violence and injustice by “perpetuating the exploitation of Indigenous peoples.”<sup>108</sup>

Following Todd’s critical call for a decolonizing practice, in my reading of the fields of the new materialisms and critical animal and plant studies, I discern maneuvers that have clear colonial resonances. Much that is presented in these fields is largely oriented by Eurocentric frames and genealogies that work to represent any innovations in thought in terms of self-referential “discoveries”: it is thus, for example, that the new materialisms become “new.” In Bennett’s text, relevant Native American cosmo-epistemologies (that actually

antedate and would productively inform and amplify new materialist theories) remain as “absent referents,” to draw on an apposite term coined by Carol Adams.<sup>109</sup> It is the scripting of Indigenous peoples and their knowledges as absent referents in the colonized lands of the United States and Australia that enables both the reproduction and consolidation of the settler colonial project along all the key axes of economic, cultural, political, and academic activity.

Whereas Aboriginal people and Native Americans, for example, call for a decolonizing practice that is indissociable from an ecocentric worldview, many of the new materialists focus solely on the need to deanthropocentrize European thought, thereby leaving intact the originary and unfolding violence of settler colonialism that effectively works to reproduce racio-speciesist relations that themselves continue to impact Indigenous peoples, the more-than-human world, and its diverse entities. The liberatory and antihegemonic potential of a field such as the new materialisms cannot be fully realized without the nonnegotiable address of settler colonialism in the context of such states as Australia, the locus from which I write, and the United States. In my analysis, I insistently interlink a decolonizing methodology with a deanthropocentrizing one because, when viewed in the context of Indigenous cosmo-epistemologies, the two approaches are intertwined in their operations.

Even as I cast a critical eye on Bennett’s new materialist work, I want to affirm its generative poetics of matter and its call to reenvision the world otherwise. Furthermore, I inscribe myself within the same, if geographically and historically differentiated, settler configuration of power that transnationally binds our respective positions. My own personal and academic labor of decolonization is a strictly *unfinished* business. To rework Patrick Wolfe’s now-canonical formulation of settler colonialism, self-decolonization is a *process and not an event*.<sup>110</sup> Moreover, even as I draw on Indigenous knowledges, I do so with the critical qualification that my understanding is delimited by my own embodied positionality as a non-Indigenous subject. Todd, drawing on Vanessa Watts’s work, underscores the fact that “there is a very real risk to Indigenous thinking being used by non-Indigenous scholars who apply it to Actor Network Theory, cosmopolitics, ontological and posthumanist threads without contending with the embodied expressions of stories, laws, and songs bound within Indigenous-Place Thought.”<sup>111</sup> Thus, even as I celebrate Indigenous understandings of “attentive living” that enable me to catch a glimpse of the sentient world of the more-than-human and its ecology of relationality and negotiation, I respectfully mark the ethical and embodied circumscriptions that preclude me from the locus of Indigenous-Place Thought and its lived and generative matrix of stories, laws, and songs.

Bennett concludes her book on the new materialisms with what she calls “a kind of Nicene Creed” that leads her to “believe in one matter-energy, the maker of things seen and unseen. . . . I believe it is wrong to deny vitality to nonhuman bodies, forces, and forms.”<sup>112</sup> Absent from this animist creed is the very Native American referent that constitutes both the expropriated physical ground from which this creed can be enunciated and the Indigenous cosmo-epistemologies that antedate and contemporize this vitalist, new materialist epistemology. “In Native science,” Cajete explains, “there is an inclusive definition of ‘being alive.’ Everything is viewed as having energy and its own unique intelligence and creative process, not only obviously animate entities such as plants, animals, and microorganisms, but also rocks, mountains, rivers, and places large and small.”<sup>113</sup> “The conclusion,” writes Vine Deloria Jr., “reached by contemporary physicists, biologists, and near death scholars are a result of a long, tedious path from the Greek atomists and philosophers, through the European struggles with the false mind/body dichotomy, to the achievements in physics in the twentieth century.”<sup>114</sup> To this list, one can add the West’s new materialists, animal ethicists, and new ethologists.

“Perhaps,” Hogan ironically remarks, “as these fields come to understand that all matter has life, spirit, and even consciousness” and that “every particle of the universe is alive,” “ours will no longer be a ‘primitive’ way of looking at the world.”<sup>115</sup> Situated in this context, it is the West that has been “primitive” in its reductive way of looking at the world; it has thus, to invoke Latour’s titular phrase, “never been modern.”<sup>116</sup> The ramifications that follow from the spatiotemporal anteriority of the Indigenous cosmo-epistemologies discussed above are profound. On the one hand, they rupture, through their spatiotemporal anteriority, the driving telos of the colonial project, thereby exposing the delusional myths on which it has been predicated: if colonialism is characterized by the way it violently inscribes Indigenous nations within a Eurocentric teleology oriented toward the acquisition of civilizational culture, then the anteriority of these Indigenous knowledges works to destructure this teleological movement and to overtake it through its very anachronic status. The anachronic, in its definitional sense, is precisely that temporal vector that can topologically conjoin both flashbacks (analepsis) and flash-forwards (prolepsis). Indigenous knowledges remain, in this anachronic topology, at the vanguard, both epistemologically and civilizationally, both before and after the imposition of colonial regimes on Indigenous lands. What the colonizers had relegated to the “archaic,” “primitive,” and “pre-modern” is what always already constituted the futural horizon toward which the West laboriously slouched. It is the laggardness of the West that now comes into focus as it attempts to

play catch-up. Within this anachronic schema, the colonial project emerges as a violent interchronic phase, inscribed with an autoimmune expiry date, that is situated between the enduring past and protentive present of Indigenous peoples and their cultures.

Moreover, the enduring nature of these Indigenous knowledges evidences the failure of the obliterative process of settler colonialism: as they have continued to survive in the face of relentless regimes of destruction, they signal the nonsuccess of that other teleological movement—the process of settler colonial elimination and replacement. They are inscribed in what Shino Konishi terms “extra-colonial histories” that evidence, “most significantly,” that “Indigenous people have been agentic in evading and resisting the logic of elimination.”<sup>117</sup> The indissociable temporality of both before (precolonial) *and* after (the colonial present) marks the alterity of Indigenous cosmo-epistemologies that could not be vanquished by the imperialism of the Same.

Western scholars, writes Deloria, are slowly coming to the realization that we inhabit “a world in which everything [is] alive and related.”<sup>118</sup> And the ethical corollary of this view, he concludes, is that we are compelled to “take up responsibilities for all livings things.”<sup>119</sup> Deloria here offers an affirmative answer to the urgent question that Derrida raises and answers in the negative: “Do we have a responsibility to the living in general? The answer is still ‘no.’” With characteristic reflexivity, Derrida outlines why this is so, as he locates his negative answer within a Eurocentrically circumscribed religio-metaphysical domain: “The answer is still ‘no,’ and this may be because the question is formed, asked in such a way that the answer must necessarily be ‘no’ according to the whole canonized or hegemonic discourse of Western metaphysics or religions, including the most original forms that this discourse might assume today, for example, in Heidegger and Levinas.”<sup>120</sup>

### **Unrequited Ecological Justice**

The militarized zones of violence and occupation that I examine in the book might be best characterized as ecologies of unrequited justice: in the wake of militarized campaigns of killing and destruction, justice has not been served to either the victims or survivors of the crimes perpetrated in these locations. The militarized zones that I examine exemplify the operations of state military apparatuses in the targeted destruction of a number of different ecologies and the various entities that inhabit and constitute them. Writing in the context of the Anthropocene, which marks the global scale of human-induced changes to the environment, my concern is to contribute to the address of a lacuna in the

international debates on the potentially catastrophic effects of climate change. As Oliver Belcher, Patrick Bigger, Ben Neimark, and Cara Kennelly argue, what is consistently missing from these debates on the cumulative global forces that are generating global warming is the constitutive role of the military. The work of Belcher and colleagues and of Bigger and Benjamin Neimark sheds critical light on the role of the US military, in particular, in accelerating anthropogenic climate change precisely by situating military operations within the theoretical framework of *geopolitical ecology*. Geopolitical ecology is a “conceptual framework that combines the strengths of political ecology with those of geopolitics in order to account for, and gain a deeper understanding of, the role of large geopolitical institutions, like the U.S. military, in environmental change.”<sup>121</sup> Moreover, a geopolitical ecology approach brings to the fore “the hydrocarbon logistical infrastructure that makes U.S. imperialism possible.”<sup>122</sup>

The urgency of addressing this nexus of political ecology with critical geopolitics in the context of anthropogenic climate change is brought into sharp focus by the fact that, even as the Pentagon has begun to deploy a number of strategies that are designed to contribute to the “greening” of the military, in practice the US military remains the world’s largest institutional consumer of natural resources. It is “one of the largest climate polluters in history” and the world’s largest polluter in terms of its production of greenhouse gases and its ongoing destruction of global ecologies through its production and dumping of toxic wastes.<sup>123</sup> Through the ruse of “national security,” however, the US military, like the armed forces of many other sovereign states, is largely exempt from environmental protection legislation. “The armed forces of the world,” Jha underlines, “are both ‘normal’ and ‘special’ polluters producing toxic and radioactive wastes. They are also ‘protected’ polluters because there are no environmental legislations to control their activities. The overall and worldwide pollution by the armed forces could be as high as 30 percent.”<sup>124</sup>

Furthermore, I insistently intertwine ecological and social justice concerns because I see the two as entangled. The category of the Anthropocene, for example, must be seen as always already racialized, constitutively inscribed by European histories of empire and colonialism, and riven by asymmetrical axes of geopolitical and economic power. Two anthropogenic points illustrate this. First, the year 1492, as enunciating the “collision of the Old and New Worlds,” has been suggested as the historical marker, or “golden spike,” to determine the beginning of the Anthropocene. This is due to the seismic impact that the European colonization of the New World had on geohistory through the mass genocides of the Indigenous peoples of the Americas and the cluster of ecological flow-on effects that proceeded from this momentous date.<sup>125</sup> Second, the

bulk of carbon emissions are Anglocentric: “In cumulative terms from 1800 to 1950, 65 per cent of carbon emissions were emitted by Great Britain and the United States alone. Historically speaking, the Anthropocene could well be called the Anglocene.”<sup>126</sup>

Inscribed in this anthropocenic history are the racialized forces that constitute the lethal assemblage of imperialism, settler colonialism, and extractive capitalism. This toxic assemblage is responsible for Indigenous genocides; expropriation of Indigenous lands; ecocidal practices of land clearing; serial species extinction; the enslavement of people of color, including Aboriginals, Africans, and Native Americans; the slave plantations of North America, the Spanish Americas, and the Caribbean; the indentured labor of colonial Africa and Asia; the establishment of crop monocultures; and so on—that were instrumental in generating the Industrial Revolution. Reflecting on this violent history and its unfolding anthropocenic impacts, Tony Birch underscores how “within the Anthropocene narrative Indigenous nations are too often relegated to the state of non-existence, producing an intellectual equivalent of the *terra nullius* narrative of the late eighteenth and nineteenth centuries, a white mythology that continues to allow colonial powers to mask their histories of violence.”<sup>127</sup> Furthermore, as numerous scholars have noted, anthropogenic change, including extreme weather and rising sea levels, is reproducing yet another form of environmental racism, since it is largely Indigenous peoples and communities of color that are at the front line of climate change.<sup>128</sup>

As the sites that I examine are inscribed by the inextricable relation of human and other-than-human entities, the concept of ecological justice best captures how “the interplay between nature and humans is such that social justice is equally important and inextricably bound to issues of ecology.”<sup>129</sup> Rob White offers a succinct definition of the concept: “Ecological justice demands that how humans interact with their environment be evaluated in relation to potential harms and risks to specific creatures and specific locales as well as the biosphere generally.”<sup>130</sup> Ecological justice is what can be realized, in both international and domestic law, through the development of what Cormac Cullinan calls “Earth jurisprudence,” which ensures that legal systems are oriented by ecophilosophical values.<sup>131</sup> The centrality of law within these urgent debates resides in the fact that it not only serves a regulative function but also “plays an equally important role in constituting and forming society itself”<sup>132</sup> and, as a corollary, in determining a society’s impact on the ecological context within which that society is situated.

Drawing on Indigenous understandings of justice as encompassing “all our relations,”<sup>133</sup> including plants, animals, mountains, and so on, and interlacing

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this expansive view of justice with the concept of ecological justice, this book attempts to interrogate dominant Euro-anthropocentric conceptualizations of justice exemplified by this leading justice philosopher: “Taking Aristotle’s lead by seeking the distinctiveness of justice as a moral value, we should note that justice does not arise in our treatment of inanimate things, and possibly not in our treatment of animals.”<sup>134</sup> Encapsulated here, in the excising of our treatment of the more-than-human from the purview of justice, is the license to continue business as usual in the ongoing destruction of the earth. Outside existing Indigenous laws, with their long-established frameworks of ecological justice that have been consistently marginalized from the Western legal systems that have set the terms of reference for international law, an Earth jurisprudence can be seen to be in a *status nascendi*.<sup>135</sup> Three recent and significant examples of Earth jurisprudence include the constitution of Ecuador; the Universal Declaration of the Rights of Mother Earth/Pachamama; and the Aotearoa–New Zealand government’s legal recognition of the Te Urewera National Park as an entity with its own “legal personhood.”<sup>136</sup> The Aotearoa–New Zealand’s government’s recognition of the legal standing of Te Urewera was driven by the Māori people of the region, and it was their cosmo-epistemologies and language that enabled the process of legal recognition to take place: “[The act] uses the Māori language about [Te Urewera] having its own *mana*—its own authority, having its own *mauri*—its own life force, and that Te Urewera has an identity in and of itself. . . . It is its own person, it cannot be owned.”<sup>137</sup> The constitution of Ecuador has established a framework that “goes beyond issues of legal standing [of more-than-human entities] and includes mandates to public officials about how to interpret and apply them [the rights of nature].”<sup>138</sup> These jurisprudential breakthroughs are underpinned by Indigenous legal frameworks that at once challenge and reorient Eurocentric schemas that foreclose the possibility to envision other-than-human entities, such as mountains and rivers, as having ethical and jural status. Gary Steiner, for example, who articulates an impassioned case for the extension of rights to animals, appears to balk at extending ethical status to, in Western terms, “non-sentient” entities, marking, in the process, the clear limits of Eurocentric thinking: “But we do not know what it would mean to extend moral status to all life, whether sentient or nonsentient—unless, of course, we embrace biocentrism rather than zoocentrism, and even then it is extremely difficult if not impossible to articulate what it would mean to have a direct moral obligation to a nonsentient being.”<sup>139</sup>

A number of Indigenous cosmo-epistemologies articulate with compelling lucidity precisely what it means to have an ethical obligation to rocks, trees, rivers, mountains, and so on, predicating this understanding on a kincentric



vision in which both sentient and nonsentient entities are inscribed in an affective and ethical ecology. Understood in this expansive and relational context, ecological justice is what enables me to call attention to the multidimensional and interleaved levels of violence that armed conflict generates in the context of a forensic ecology. Ecological justice is what works to bring into focus different entities (soil, water, trees, animals) that, under existing forms of Euro-anthropocentric law, possess no jural life and thus remain outside the purview of justiciability.<sup>140</sup> Such entities are, in Cullinan's terms, "outlaws, and are treated as such. They are not part of the community or society that the legal systems concern themselves with, and have no inherent right to existence or to have a habitat in which to live."<sup>141</sup>

In the context of ecological justice, Deloria articulates what is essentially at stake: "The sole question is, who has standing to be heard?"<sup>142</sup> Deloria's question is, critically, directed at Western law and its entrenched anthropocentrism, in contrast to ecocentric Indigenous law. When Derrida, for example, decries that there is no "'crime against animality' nor crime of genocide against nonhuman living beings,"<sup>143</sup> this is so only in the anthropocentrically circumscribed, yet hegemonic, domain of Western law. By contrast, Indigenous laws name and condemn animal and tree genocides, such as "the great massacres" of the bison by settler colonial Americans, mass killings of what Winona LaDuke calls the "Buffalo Nations."<sup>144</sup> "The genocide of trees in Australia," write Gladys Idjirrimoonya Milroy and Jill Milroy, Palyku peoples, "leaves a bloodied landscape."<sup>145</sup>

Whereas in Western understandings law is seen to issue in a unidirectional vector from humans to animals, in Indigenous systems of law, animals are seen to possess their own law, and this in turn determines human actions and behavior. In the Yarralin people's law, for example, "all species have a Law and culture, free will; the burden of responsibility is shared among all living things."<sup>146</sup> In her writing on Aboriginal law, Irene Watson notes: "Our [Nunga] law embraces all things in the universe, a different idea to the states' concept of sovereignty. . . . As law holds no outer or inner place, it is in all things"; thus, in Nunga law, all other-than-human entities have jural life and standing.<sup>147</sup> Overturning Euro-anthropocentric understandings of law as what governs demarcated entities ordered along speciesist hierarchies, Aboriginal law pivots on maintaining and nurturing relational networks: "Law," Kwaymullina and Kwaymullina underscore, "extends beyond human beings to all life in country, *with the relationship—rather than the species—being the primary creator of legal categories.*"<sup>148</sup>

Indigenous biocultural understandings of law not only refuse the nature/culture binary, but they also overturn the Euro-anthropocentric locus from

which law is made, issued, and deployed. “Thus habitats and ecosystems are better understood,” Vanessa Watts explains, “as societies from an Indigenous point of view; meaning that they have ethical structures, inter-species treaties and agreements, and further their ability to interpret, understand and implement. Non-human beings are active members of society. Not only are they active, they also directly influence how humans organize themselves into that society.”<sup>149</sup> Animals, soil, water, and plants, in this Indigenous view, are coconstitutive of human subjectivities and cultures, rather than passive matter that is only ever acted on by humans. “The shape and pattern of this Law of Relationship,” writes C. F. Black, Aboriginal scholar of Indigenous jurisprudence, “creates a body of law which, in Australia’s case, ‘vibrates in song’ and is ‘woven across’ *Corpus Australis*.”<sup>150</sup>

In the chapters that follow, I trace the agentic role of more-than-human entities in the forensic ecologies of militarized zones. In the context of these lethal zones, more-than-human entities bear witness to the destruction they are compelled to endure, and they offer their own evidentiary testimony to the violence that has transpired.

## Chapters

Across all four chapters of the book, I delineate acts of violence produced by the forces of armed conflict and/or occupation—forces that are, tautologically and by definition, violent—and discuss the forensic ecologies left in the wake of these acts of violence. My concern in focusing on violent acts of armed conflict and/or occupation is to make visible the more-than-human entities that are either the targets of this violence or ensnared in violence largely directed at human subjects. I concentrate not on the violence per se but, rather, on its impact on a number of more-than-human entities (and their human relations) and the way they largely fail to register as material victims of armed conflict and/or occupation in traditional anthropocentric accounts of violence. In the face of the violence that either obliterates them or that they strive to survive, more-than-human entities emerge, in the context of a reenvisioning of forensic ecologies, as subjects that continue to assert their call for ethical consideration and jural standing.

Chapters 1 and 2 primarily address the forensic ecologies left in the wake of the Israeli Defense Forces’ Operation Protective Edge, July–August 2014, in Gaza. I focus on this military campaign in particular as it evidences the widespread impact of military violence on the more-than-human entities caught in its crossfire. As many Palestinian commentators have remarked, this particular

military operation was unprecedented in the scale of destruction, “target[ing] the whole . . . life of Gaza”: “The Israeli attacks deliberately and systematically targeted the trees, stones, people, and even animals and birds.”<sup>151</sup>

Chapter 1 begins with a scene of destruction in one of Gaza’s neighborhoods following a lethal strike by the Israeli Defense Forces during Operation Protective Edge. This scene of destruction establishes the conceptual coordinates that constitute my analysis of the impact of military violence on both human and more-than-human entities and the forensic ecologies that remain in the wake of this violence. The chapter is primarily concerned with the concept of zoopolitics. As I discussed above, the question of “the animal” is not, as Derrida underscores, merely one question among others, as it critically inflects a number of foundational categories, including law, justice, human and animal rights, and so on—all key concerns of the later chapters. The chapter focuses on, and develops in detail, the analytical dimensions of a specific modality of biopolitics, zoopolitics, as it inscribes the life of Gaza’s human and animal subjects—all effectively entrapped in the open-air prison, “the Cage,” that is Gaza. Zoopolitics shapes and determines the key spatial configurations and apparatuses, including the checkpoints and the casting of Gaza as a “zoo” and an “experimental laboratory,” that enable the biopolitical governance of the human and more-than-human entities of Gaza. I conclude the chapter by discussing the relations of zoopolitical power that are instantiated in a meme that circulated on social media of a Palestinian youth juxtaposed with a pig. The onto-epistemological rendering of Palestinian life in terms of nonhuman animal life is underpinned, I disclose, by a zoopolitical framework that enables and legitimates the racio-speciesist military-industrial-prison-surveillance complex and its regime of ongoing occupation.

After chapter 1’s expansive analysis of how one modality of biopolitics, zoopolitics, works to extend, consolidate, and reproduce the Israeli state’s settler occupation of Palestine, chapter 2 opens with a detailed discussion of how settler biopolitical practices of ecological destruction emerge as intersectionally linked with settler colonial ambitions of territorial expropriation and expansion. The chapter then enlarges the biopolitical aperture and brings into focus all the other biopolitical modalities that are deployed toward this same end. Elaborating my discussion of the Israeli Defense Forces’ military campaign in Gaza in July 2014, in this chapter I examine how Operation Protective Edge effectively destroyed orchards, aquifers, animals, and large swaths of agricultural fields. In my analysis of the ongoing environmental health effects of these forensic ecologies on both human and more-than-human entities, I deploy the concept of the “atomization of biopolitics” to demonstrate the distributed and

attenuated relations of toxic biopolitical power that operate in such sites. The atomization of biopolitics that is unfolding in Gaza in particular, following the ecocidal effects of Operation Protective Edge, are generating, I contend, a form of transboundary biopolitics of autoimmunity that is now asymmetrically ensnaring both Palestinians and Israelis. I also examine, in the context of the occupied Palestinian territories, the concept of *phytopolitics*, which is specifically concerned with the biopolitics of plant life. I deploy the concept of phytopolitics to examine the Israeli state's war on Palestinian trees and the complex and affective relations between Palestinians and trees.

In chapter 3, I transpose the zoopolitical question concerning "the animal" to Guantánamo Bay military prison to bring to light its lethal effects in the context of this gulag. The chapter begins with an analysis of the legal transmutation of Guantánamo's detainees into "nonpersons" and the consequent death of one of the detainees, Adnan Latif. By focusing on the official forensic report into his death and its footnoted documentation of Latif's relations with the animals in the camp, I discuss his attempt to survive the military prison's regime of torture and abuse through interspecies relations that were in fact prohibited under the standard operating procedures of the camp. Drawing on Heideggerian and Agambenian understandings of the Open, I proceed to resignify the term. In my reading, the Open in the cage establishes the heterotopic contours of a moment of intimate contact between one (the animal) and the other (the detainee), who has been legally categorized as a "nonperson." I track complex relations of acknowledgment, hospitality, and ethical engagement between the detainees and the camp's resident animals, including feral cats, iguanas, and banana rats. In chapter 3 I also examine the way various experimental torture practices first performed on nonhuman animals were effectively transposed to the torture of human subjects in Guantánamo. I then flesh out how the UN Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment tacitly codifies and enshrines the human/animal caesura in both the title and substance of its text. Animating the lexico-discursive logics of "inhuman" treatment, as outlined in the convention, is the speciesist knowledge of its absolute nonhuman animal other as an entity that can be tortured and killed with impunity. I coin the term *inanimal* as a way of identifying and naming this modality of zoopolitical violence.

The zoopolitical question as to who can be tortured or killed with impunity is further elaborated in chapter 4. There I discuss the United States' drone campaigns in Afghanistan, Pakistan, Somalia, and Yemen, and I examine how the destruction of civilians, more-than-human entities, and their respective ecologies is now being facilitated by semiautomated technologies of war that

generate “death by metadata,” that is, a telemediated form of extrajudicial killing-at-a-distance that entails targeted liquidation by drones. I situate my analysis in the context of the US military’s use of metadata to conduct drone kills and its reliance on advanced mathematical formulas to track drone targets on kill lists and to establish a calculus of probability of “hostile intent.” My interest is in examining the interlocking of the National Security Agency’s metadata with the algorithmic formulas that underpin the Department of Defense’s (DoD) drone program in order to conduct drone kills in which the identities of those killed often are not known. I situate what I term the *bioinformationalization* of life within the United States’ drone killing fields to disclose the transliteration of abstract metadata to flesh. In analyzing the bioinformationalization of life, I examine the ways in which the DoD’s increasing reliance on death by metadata is inscribed by a zoopolitics predicated on anthropocentric hierarchies of life. The harrowing human-animal detritus of US drone kills, I argue, throws into crisis categorical understandings of “the human” and “the animal” as delineated by anthropocentric law. I conclude by arguing that what is instantiated in these sites of drone-enabled military violence is the practice of *sparagmos*, the Greek term naming the ritualized dismemberment and dispersal of bodies. In ancient Greek culture, *sparagmos* identified the performative of ritualized murder in terms of an aesthetico-political art of the kill that dispersed and attenuated the role of any individual in the act of murder. *Sparagmos* names the militarized dismemberment of the targeted flesh of the lands of Afghanistan, Pakistan, Somalia, and Yemen and the attendant structural failure to hold accountable those culpable of the extrajudicial assassination of civilians and their more-than-human relations.

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**Introduction**

- 1 Saif Atef Abu, “Eight Days in Gaza: A Wartime Diary,” *New York Times*, July 27, 2014, [http://www.nytimes.com/2014/08/05/opinion/atef-abu-saif-life-and-death-in-gaza-strip-jabaliya-refugee-camp.html?\\_r=0](http://www.nytimes.com/2014/08/05/opinion/atef-abu-saif-life-and-death-in-gaza-strip-jabaliya-refugee-camp.html?_r=0).
- 2 Atef Abu, “Eight Days in Gaza.”
- 3 Atef Abu, “Eight Days in Gaza.”
- 4 Foucault, *The History of Sexuality*, 138.
- 5 I deploy the terms *articulate* and *relational visibility* as conceptualized by a number of Indigenous cultural theorists. In his work on Indigenous ecologies of relationality, Daniel Wildcat, Euchee member of the Muscogee Nation, emphasizes how other-than-human entities are coconstitutive, precisely as coproducers and agents, of knowledge about the world: “Indigenous knowledge systems extend the notion of knowledge construction to a cooperative activity involving the other-than-human life that surrounds us” (*Red Alert*, 17). This relational epistemology, he adds, is predicated on “the fundamental connectedness and relatedness of human communities and societies to the natural environment and the other than human relatives they interact with daily” (*Red Alert*, 20). The refrain that spans a broad spectrum of Indigenous cosmo-epistemologies is to be attentive to, and ethically responsible for, “all my relations,” including water, land, sky, plants, and animals; see Hogan, *Dwellings*, 41. To “know . . . reality requires respect for the relationships and relatives that constitute the complex web of life” and, Wildcat adds, to assume the “inalienable responsibilities” that attend this knowledge (*Red Alert*, 9).
- 6 Merleau-Ponty, *The Visible and the Invisible*, 248.
- 7 Foucault, *The History of Sexuality*, 138.
- 8 Dreyfus and Rabinow, *Michel Foucault*, 137.
- 9 Ahuja, *Bioinsecurities*, x.
- 10 See P. Wolfe, “Settler Colonialism and the Elimination of the Native”; Carlson, “‘Disposable People’ and Ongoing Colonial Violence.”

- 11 Foucault, “*Society Must Be Defended*,” 242–43.
- 12 Foucault, “*Society Must Be Defended*,” 243.
- 13 Foucault, “*Society Must Be Defended*,” 61.
- 14 Derrida, “*Eating Well*,” 283.
- 15 Derrida, “*Violence against Animals*,” 63.
- 16 See Derrida, *The Animal That Therefore I Am*, 40–41, and Cajete, *Native Science*, 152.
- 17 See Salaita, *Inter/Nationalism*, 1–70, for a discussion of these lines of solidarity.
- 18 Ali Abunimah, “Major Indigenous Studies Group Endorses Israeli Boycott,” *Electronic Intifada*, December 18, 2013, <https://electronicintifada.net/blogs/ali-abunimah/major-indigenous-studies-group-endorses-israel-boycott>. Uncle Ray Jackson, president of Australia’s Indigenous Social Justice Association, writes: “It is far too long that the genocidal attacks against the civilian population of gaza must stop. and stop immediately. it now appears that the netanyahu government is in an all-out war of extermination of the palestinian people. . . . israel must stop this overkill. that is just a fact that must be done. . . . what must be possible, no, certain, is that the ethnocide of the palestinians in gaza must cease once and for all” (quoted in Perera and Pugliese, “Dgadi-Dugarang,” 3; lowercase in the original). For a discussion of the long history of Aboriginal and Palestinian solidarity, see Foley, “Black Power Australia and Aboriginal-Palestinian Solidarity.” For an eloquent comparative analysis of settler colonialism in the context of Palestine and the Americas, see Mikdashi, “What Is Settler Colonialism?,” 30, where she writes: “We forget that American complicity in Israel’s crimes is not only built on tactical, strategic, and politically engendered alliances, but also on the affective registers of a shared settlement project.” See also the special issue, “Palestine Lives,” of *Decolonization* 6 (2017) devoted entirely to examining settler colonialism in the interrelated context of Palestine and the Americas; Krebs and Olwan, “From Jerusalem to the Grand River, Our Struggles Are One.”
- 19 Quoted in Andrew Kadi, “Palestinians Back Standing Rock Sioux in ‘Struggle for All Humanity,’” *Electronic Intifada*, September 10, 2016, <https://electronicintifada.net/blogs/andrew-kadi/palestinians-back-standing-rock-sioux-struggle-all-humanity>.
- 20 Kadi, “Palestinians Back Standing Rock Sioux.”
- 21 Grindle and Johansen, *Ecocide of Native America*, 278.
- 22 Shadowing modern Western law is a largely effaced history in which more-than-human entities, such as insects, pigs, or horses, could be brought to criminal trial as defendants who were invested with some of the same legal rights as their human subjects. This other Western jurisprudential history once envisaged more-than-human entities as subjects with jural standing. The advent of Western modernity effectively dismissed this form of more-than-human jurisprudence as nothing more than a “superstition of the age”: see, for example, Evans, *The Criminal Prosecution and Capital Punishment of Animals*, 12; Anderson, “A Proper Death.” For a history of what he terms “dissenting” voices that challenged Western anthropocentrism, see Steiner, *Anthropocentrism and Its Discontents*, 38–52. I also mark here the role of Western thinkers such as

Henry Thoreau, heavily influenced by Native American cosmo-epistemologies; Aldo Leopold; John Muir; and others who sowed the seeds for Western environmental movements. See Sayre, *Thoreau and the American Indians*; Hanson, *Thoreau's Indian of the Mind*; Leopold, *A Sand County Almanac*; Muir, *My First Summer in the Sierra*.

- 23 Bodansky, Brunnée, and Hey, "International Environmental Law," 15.
- 24 *Convention Designed to Ensure the Conservation of Various Species of Wild Animals in Africa, Which Are Useful to Man or Inoffensive (1900)*, International Environment Agreements (IEA) Database Project, accessed August 12, 2016, <https://iea.uoregon.edu/treaty-text/1900-preservationwildanimalsbirdsfishafafricaentxt>.
- 25 DiMento, *The Global Environment and International Law*, 14.
- 26 Miéville, *Between Equal Rights*, 86.
- 27 Francione, *Animals, Property, and the Law*, 261.
- 28 Francione, *Animals, Property, and the Law*, 36–42.
- 29 Derrida, "Discussion with Jacques Derrida," 49.
- 30 Shukin, *Animal Capital*, 6–7.
- 31 Miéville, *Between Equal Rights*, 178.
- 32 Coyle and Morrow, *The Philosophical Foundations of Environmental Law*, 4.
- 33 Despret, *What Would Animals Say If We Asked the Right Questions?*, 7–8.
- 34 Anghie, *Imperialism, Sovereignty and the Making of International Law*, 3.
- 35 Bruch, "Introduction," 15.
- 36 Falk, "The Environmental Law of War," 86.
- 37 For an analysis of the afterlife of both Hiroshima and Nagasaki in the wake of their destruction, see Parlati, "Memory in T/Rubble."
- 38 See Zierler, *The Invention of Ecocide*, for a detailed discussion of how the US military's use of Agent Orange in the Vietnam War provoked an international movement to ban a new crime: ecocide.
- 39 International Committee of the Red Cross, "Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), June 8, 1997."
- 40 Dupuy and Viñuales, *International Environmental Law*, 344.
- 41 Hulme, "Armed Conflict," 60.
- 42 Falk, "Environmental Law of War," 93–94; Schmitt, "War and the Environment." Significantly, the two states that I examine in the book, the United States and Israel, have not ratified Additional Protocol I. The United States, in fact, termed the protocol a "terrorist charter" for its provisions relaxing combatancy requirements" and dismissed as "revolutionary" a number of the articles "on protection of the environment" (Hulme, "Armed Conflict," 57).
- 43 Jha, *Armed Conflict and Environmental Damage*, 256.
- 44 UN International Law Commission, *Preliminary Report on the Protection of the Environment in Relation to Armed Conflict*.
- 45 UN International Law Commission, *Preliminary Report on the Protection of the Environment in Relation to Armed Conflict*, 15; emphasis added.
- 46 Bruch, "Introduction," 45; Drumbl, "Waging War against the World," 636–46.



- 47 McNeely, “War and Biodiversity,” 362. For a detailed discussion of ecocide as “the fifth crime against peace,” see Higgins, *Eradicating Ecocide*, 61–71.
- 48 Hulme, “Armed Conflict,” 71.
- 49 Miéville, *Between Equal Rights*, 142.
- 50 Hutchins, *Cognition in the Wild*, xii.
- 51 S. Bell, *Crime and Circumstance*, 2.
- 52 On the constitutive role of affect in our understanding of the world and its entities, and for a problematization of the distinction between affect and emotion, see Ahmed, *The Cultural Politics of Emotion*.
- 53 See Gross, *The Rhetoric of Science*, 15.
- 54 Cajete, *Native Science*, 2, 14. On Native science, see also Muecke, “Wolfe Creek Meteorite Crater.”
- 55 Houck and Siegel, *Fundamentals of Forensic Science*, 46.
- 56 Houck and Siegel, *Fundamentals of Forensic Science*, 46.
- 57 S. Bell, *Crime and Circumstance*, xi.
- 58 Weizman, *Forensic Architecture*, 53.
- 59 Weizman, *Forensic Architecture*, 64.
- 60 Quoted in Stauffer, “Haeckel, Darwin, and Ecology,” 140.
- 61 Quoted in Stauffer, “Haeckel, Darwin, and Ecology,” 141.
- 62 Grindle and Johansen, *Ecocide of Native America*, 107.
- 63 Kwaymullina and Kwaymullina, “Learning to Read the Signs,” 196.
- 64 Langton, “European Construction of Wilderness,” 16.
- 65 For a detailed discussion of the heterogeneity of Indigenous positions on these issues see, for example, Birch, ““On What Terms Can We Speak?””; Vincent and Timothy, *Unstable Relations*.
- 66 Wildcat, *Red Alert*, 15, 9.
- 67 Hogan, *Dwellings*, 49. Here Hogan is citing the work of Evelyn Fox Keller.
- 68 Hogan, *Dwellings*, 26.
- 69 Quoted in Kurland, *Irrefutable Evidence*, 148–49.
- 70 Latour, *Pandora’s Hope*, 303.
- 71 Latour, *Pandora’s Hope*, 142.
- 72 Latour, *Pandora’s Hope*, 143.
- 73 Latour, *Reassembling the Social*, 255n356.
- 74 Pugliese, “Identity in Question.”
- 75 Cajete, *Native Science*, 27.
- 76 Viveiros de Castro, *Cannibal Metaphysics*, 56.
- 77 See Reynolds, *With the White People*, 41.
- 78 Mowaljarlai and Malnic, *Yorro Yorro*, 53.
- 79 Mowaljarlai and Malnic, *Yorro Yorro*, 54.
- 80 Quoted in Reynolds, *With the White People*, 24.
- 81 *Pathfinders: The History of NSW Aboriginal Trackers*, accessed August 12, 2016, <http://pathfindersnsw.org.au/police-stations/>.
- 82 Creative Spirits, “Aboriginal History Timeline (1900–1969),” <https://www.creative-spirits.info/aboriginalculture/history/aboriginal-history-timeline-1900-1969>.

- 83 “Such terms,” write Kwaymullina and Kwaymullina, “are inevitably burdened by historical constructions of Indigenous societies as inferior and lacking in ‘real’ law” (“Learning to Read the Signs,” 198).
- 84 See Pugliese, *Biometrics*, 17.
- 85 See Pugliese, “‘Demonstrative Evidence.’”
- 86 James, Nordby, and Bell, “Justice and Science,” 10.
- 87 Netzel, Kiely, and Bell, “Evidence,” 31.
- 88 Cajete, *Native Science*, 23.
- 89 Merleau-Ponty, *Phenomenology of Perception*, 334.
- 90 Merleau-Ponty, *The Visible and the Invisible*, 127.
- 91 Quoted in Cajete, *Native Science*, 64.
- 92 See, for example, Márquez-Grant and Roberts, *Forensic Ecology Handbook*.
- 93 Cajete, *Native Science*, 55; Merleau-Ponty, *The Visible and the Invisible*, 248.
- 94 Hogan, “We Call It *Tradition*,” 25.
- 95 I use *actors* here in Latour’s extended sense: “Things might authorize, allow, afford, encourage, permit, suggest, influence, block, render possible, forbid and so on, in addition to ‘determining’ and serving as a backdrop to human action.” Complicating and attenuating reductive conceptualizations of cause and effect, Latour advocates for agency across the broad spectrum of other-than-human entities: “Anything that modifies a state of affairs by making a difference is an actor” (“Nonhumans,” 226). Actors are not, he underscores in his actor-network theory, “the hapless bearers of symbolic projection”; neither is the role of the theoretician to “teach actors what they are, or to add some reflexivity to their blind practice” (*Reassembling the Social*, 10, 12). Latour, in these reflections, productively works to materialize horizontal relations of distributed cognition and affect, relations that, critically, refuse the paternalism of ventriloquizing on behalf of other-than-human actors that are otherwise anthropocentrically positioned as speechless and insentient.
- 96 See Plumwood, *Environmental Culture*, 56–71.
- 97 Martínez, Salmón, and Nelson, “Restoring Indigenous History and Culture to Nature,” 89.
- 98 Bennett, “The Force of Things,” 359.
- 99 Hogan, *Dwellings*, 26, 28.
- 100 Bennett, *Vibrant Matter*, 117; Little Bear, “Foreword,” x.
- 101 Cajete, *Native Science*, 95.
- 102 Adamson, “First Nations Survival and the Future of the Earth,” 34.
- 103 Adamson, “First Nations Survival and the Future of the Earth,” 34.
- 104 See, for example, Bennett, *Vibrant Matter*; MacCormack, *The Animal Catalyst*; Dolphin and van der Tuin, *New Materialisms*; Coole and Frost, *New Materialisms*.
- 105 Bennett, *Vibrant Matter*, viii.
- 106 Bennett, *Vibrant Matter*, xiii.
- 107 Todd, “An Indigenous Feminist’s Take on the Ontological Turn,” 8, 14.
- 108 Todd, “An Indigenous Feminist’s Take on the Ontological Turn,” 16.
- 109 Adams, *The Sexual Politics of Meat*, 20–21.

- 110 Patrick Wolfe's formulation is that settler colonialism "is a structure not an event" (*Settler Colonialism*, 2).
- 111 Todd, "An Indigenous Feminist's Take on the Ontological Turn," 9. I discuss Vanessa Watt's work below. In the context of what he identifies as the "unfinished business of colonial history and its contemporary manifestations," Tony Birch ("On What Terms Can We Speak?," 10) suggests that "if there is cause for optimism, it may be located in the spirit of generosity offered by Indigenous people inviting others to join with them in valuing and caring for country through cultural practice and exchange."
- 112 Bennett, *Vibrant Matter*, 122.
- 113 Cajete, *Native Science*, 21.
- 114 Deloria, *The World We Used to Live In*, 197.
- 115 Hogan, "We Call It *Tradition*," 22.
- 116 Latour, *We Have Never Been Modern*.
- 117 Konishi, "First Nations Scholars, Settler Colonial Studies, and Indigenous History," 300.
- 118 Deloria, *The World We Used to Live In*, 195.
- 119 Deloria, *God Is Red*, 296.
- 120 Derrida, "Eating Well," 278.
- 121 Bigger and Neimark, "Weaponizing Nature," 14. See also Belcher et al., "Hidden Carbon Costs of the 'Everywhere War,'" 2.
- 122 Belcher et al., "Hidden Carbon Costs of the 'Everywhere War,'" 12.
- 123 Belcher et al., "Hidden Carbon Costs of the 'Everywhere War,'" 12; Crawford, "Pentagon Fuel Use, Climate Change, and the Costs of War," 1–2; LaDuke with Cruz, *The Militarization of Indian Country*, 31. See also Nuttall, Samaras, and Bazilian, "Energy and the Military," 3.
- 124 Jha, *Armed Conflict and Environmental Damage*, 161.
- 125 Lewis and Maslin, "Defining the Anthropocene," 174–75.
- 126 Fressoz, "Losing the Earth Knowingly," 70–71.
- 127 Birch, "The Lifting of the Sky," 197. See also Birch, "Afterword," 361, where he writes: "The relationship between colonialism, capitalism and environmental degradation and a consequent link to climate change is unambiguous."
- 128 See, for example, H. A. Smith, "Disrupting the Global Discourse of Climate Change," 206–12; Wilson et al., "Climate Change, Environmental Justice and Vulnerability"; Powys Whyte, "Is It Colonial Déjà Vu?"
- 129 White, *Crimes against Nature*, 20.
- 130 White, *Crimes against Nature*, 19.
- 131 Cullinan, *Wild Law*, 17.
- 132 Cullinan, *Wild Law*, 55.
- 133 See, for example, LaDuke, *All Our Relations*.
- 134 Campbell, *Justice*, 14.
- 135 Bosselmann, "Rule of Law in the Anthropocene," 44.
- 136 See Cullinan, *Wild Law*, 189; Melo, "How the Recognition of the Rights of Nature Became a Part of the Ecuadorian Constitution"; Kathleen Calderwood, "Why

- New Zealand Is Granting a River the Same Rights as a Citizen,” *ABC Radio National*, September 6, 2016, <http://www.abc.net.au/radionational/programs/sundayextra/new-zealand-granting-rivers-and-forests-same-rights-as-citizens/7816456>.
- 137 Jacinta Rau quoted in Calderwood, “Why New Zealand Is Granting a River.”
- 138 Colón-Ríos, “On the Theory and Practice of the Rights of Nature,” 120.
- 139 Steiner, *Animals and the Limits of Postmodernism*, 99.
- 140 Stone, *Should Trees Have Standing?*, 2. For a parallel critique on the issue of justiciability in the context of Indigenous sovereignty and colonial law, see Giannacopoulos, “Mabo, Tampa and the Non-justiciability of Sovereignty,” 59.
- 141 Cullinan, *Wild Law*, 64.
- 142 Deloria, *God Is Red*, 300.
- 143 Derrida, *The Beast and the Sovereign*, 110.
- 144 LaDuke, *All Our Relations*, 137–43. In reflecting on interlinked acts of settler genocide, Adrian Stimson, Siksika (Blackfoot) Nation, explains: “For me, the fate of the buffalo is analogous to the fate of my people, the Blackfoot. When I look at the slaughter of the bison, I see how it affected my people and our way of life. . . . The Indigenous peoples of the Plains and the buffalo have endured their own holocaust. The destruction we have faced was caused by the same thinking as any genocide or holocaust.” Quoted in L. Bell, *Adrian Stimson*, 6.
- 145 Milroy and Milroy, “Different Ways of Knowing,” 38.
- 146 Rose, *Dingo Makes Us Human*, 57.
- 147 Watson, “Buried Alive,” 269. Watson elaborates on what she terms Aboriginal “Raw Law,” in which “there is a ‘respect law’ for all things—not just humanity, but the whole environment: plants, birds and animals, the earth and the natural world in its entirety” (*Aboriginal Peoples, Colonialism and International Law*, 31).
- 148 Kwaymullina and Kwaymullina, “Learning to Read the Signs,” 203; emphasis added.
- 149 Watts, “Indigenous Place,” 23.
- 150 Black, *The Land Is the Source of the Law*, 15.
- 151 Lena Odgaard, “Gaza Farmers Struggle in War Aftermath,” *Al Jazeera*, October 7, 2014, <http://www.aljazeera.com/news/middleeast/2014/10/gaza-farmers-struggle-war-aftermath-20141075578186995.html>. See also Omer, *Shell-Shocked*, 209; Harriet Sherwood, “Gaza Counts Cost of War as More Than 360 Factories Destroyed or Damaged,” *Guardian*, August 22, 2014, <https://www.theguardian.com/world/2014/aug/22/gaza-economic-cost-war-factories-destroyed>; Dan Cohen, “In the Last Days of ‘Operation Protective Edge’ Israel Focused on Its Final Goal—the Destruction of Gaza’s Professional Class,” *Mondoweiss*, October 13, 2014, <http://mondoweiss.net/2014/10/protective-destruction-professional/>.

## Chapter 1: Zoopolitics of the Cage

- 1 For an account of these serial wars on Gaza, see Filiu, “The Twelve Wars on Gaza.” For a detailed analysis of Operation Protective Edge, see Finkelstein, *Gaza*, 200–356; Erakat and Radi, “Gaza in Context” and the rest of that special issue of *JADMag* (2016); Hasian, *Israel’s Military Operations in Gaza*, 120–43.