Megan H. Glick

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SCIENCE, CULTURE, AND THE MAKING OF MODERN NON/PERSONHOOD

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For Laura,
who taught me the meaning of personhood;
and in memory of Little, B., and Snugs,
who showed me its utter irrelevance

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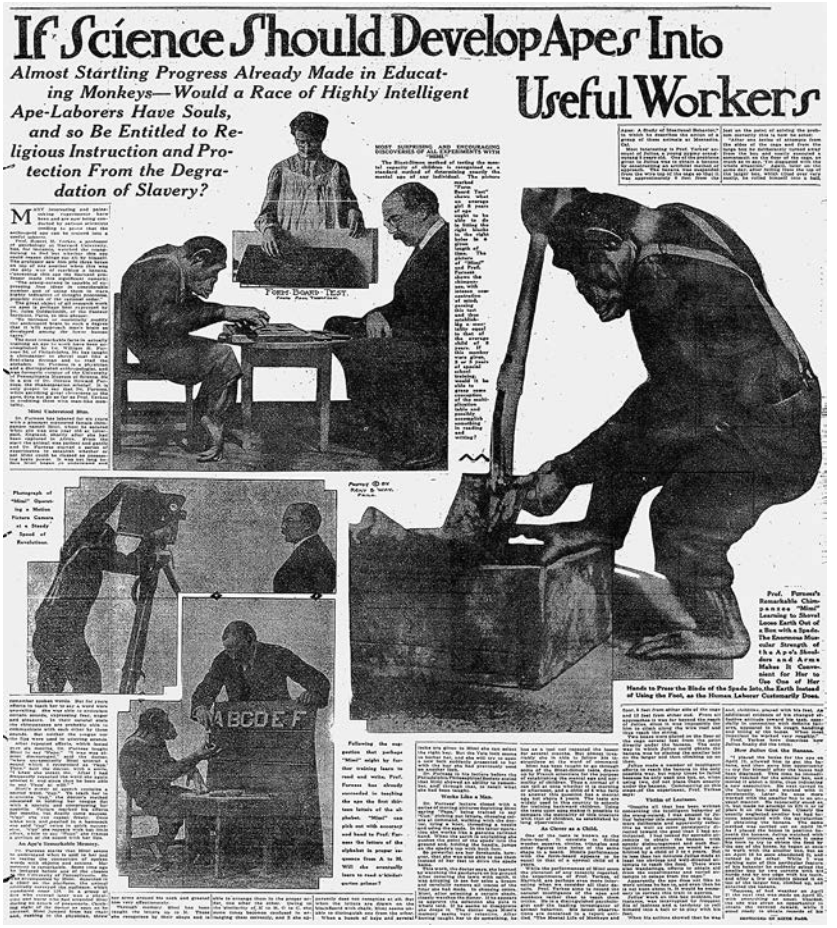
INTRODUCTION

Toward a Theory of Infrahumanity

On May 14, 1916, an article appeared in the *Washington Post*, bearing the title, "If Science Should Develop Apes into Useful Workers . . . Would a Race of Highly Intelligent Ape-Laborers Have Souls, and so Be Entitled to Religious Instruction and Protection from the Degradation of Slavery?" (figure 1.1). Covering recent developments in primate behavior studies, the piece described the work of two researchers: Robert Mearns Yerkes, a psychobiologist now remembered as the founding father of modern primatology, and William H. Furness III, an anthropologist specializing in animal behavior. Although ultimately destined for very different fates in the annals of history—one celebrated, one forgotten—Yerkes and Furness shared an interest that had begun to spread throughout the scientific community, namely, the use value of nonhuman primates for human research purposes. While Yerkes became known for his work with chimpanzees, gorillas, and orangutans as models for human intelligence experiments, Furness spent his career training chimpanzees in forms of human mimicry, from the production of oral "speech" to the performance of manual labor.[1]

It was this latter point that the *Post* article marveled over, explaining how Furness's work with the "Remarkable Chimpanzee 'Mimi'" might offer a solution to "one of the most difficult problems of civilized society": how to "get men to do the rough and dirty work requiring little intelligence and much muscular effort . . . absolutely necessary to the existence of society."[2] Although these ruminations hardly live up to the article's sensationalized title


If Science Should Develop Apes Into Useful Workers

Almost Startling Progress Already Made in Educating Monkeys—Would a Race of Highly Intelligent Ape-Laborers Have Souls, and so Be Entitled to Religious Instruction and Protection From the Degradation of Slavery?

FIGURE 1.1. "If Science Should Develop Apes into Useful Workers" (1916).

(sadly, there is no mention of nonhuman souls, religious instruction, or slavery throughout the text), they nonetheless provide an unusual variance on the common fears of human "degradation" and degeneration that are known to have haunted the United States at the turn of the twentieth century.

From responses to the end of slavery, to the growing secularization of the American populace, to the production of empiricized racial hierarchies in both legal and scientific arenas, questions continually arose as to whether and how such a diverse society could survive the onset of modernity. While the instability of this era is a story already well told in the registers of history,

it is typically not a tale that begins with a coal-shoveling chimpanzee, though perhaps it should be.

In 1916—the same year of Furness and Mimi's brief fame—Yerkes published a paper formally endorsing the widespread integration of primates into human psychological research, where he imagined that they would serve as models of the "natural" human mind, unrefracted by the prisms of technology and culture.[3] Like many scientists of his moment, Yerkes was consumed with questions of evolution, ideas of innate versus learned difference, and, more generally, humankind's relation to the animal kingdom. His interest in nonhuman primates stemmed from a commonly held belief that they were "living" missing links in the search for human ancestors, capable of offering insight into the nature of human behavior and development. Toward this end, Yerkes focused on what he called the "infrahuman" primates, due to their presumed proximity to mankind.

Though by modern standards, this group would include the "great apes," or the taxonomic family *Hominidae* (composed of chimpanzees, bonobos, gorillas, and orangutans), it is important to note that these terms are not equivalent.[4] Rather, unlike contemporary classifications that definitively link these species together according to established evolutionary histories, their relationality during Yerkes's era was murky at best. It was this ambiguity that grounded his interest in infrahuman primates—which he alternately referred to as "almost" or "near" human. In many ways, the seeming interchangeability of the concept of the infrahuman in Yerkes's work is a fitting instability, signaling a grasping for knowledge not yet defined or understood.

While the term *infrahuman* itself dropped out of usage fairly quickly as taxonomic forms grew and diversified, the liminality implied by the concept itself, as well as the contexts in which it arose, should not be overlooked. This book reimagines the term *infrahuman* by using it as a framework from which to consider how the management of the human/nonhuman boundary has impacted a wide array of biopolitical phenomena. Indeed, the liminal biological and cultural states of humanity implied by the concept illuminate far more than a gesture toward zoological nomenclature. Rather, as this book demonstrates, the infrahuman speaks to a vast network of thought surrounding the politics of race, nation, and embodiment that had already begun to rise within U.S. public culture by the late nineteenth century.

I therefore reappropriate and rehabilitate the infrahuman in a way that pays homage both to its historical moment and to its lasting impact on hierarchies of evolution, hybrid speciation, dehumanization, and conditions of inequality. By exploring the term's modern root in evolutionary frameworks,

I call attention to the coproduction of human and nonhuman difference in both scientific and cultural spheres. *In blunt terms, this work imagines the infrahuman as a position of liminal human speciation created within an anthropocentric frame.* While such a characterization is not at odds with Yerkes's original usage, I reconceptualize the term in new form as ideology and practice—or, *infrahumanism/s.* Articulating conventions of liminal speciation that exist in proximity to anthropomorphic being, infrahumanist ontologies mobilize ambiguities surrounding the boundaries of the human itself to engage forms of biologically determined difference that maintain broader hierarchies of speciation. In this context, the phrase "hierarchies of speciation" includes practices of human differentiation (via race, sex, and so on), which remain deeply bound to non/human evolutionary frames. In doing so, I foreground the discourse of species in the production of human biopolitical management and inequality.

The Infrahuman

At its heart, this book is about the unsettled relationship between ideas of biological difference among human groups and practices of anthropomorphic speciation that cross the animal-human boundary. It is a story about how we have come to view certain lives as valuable and others as not through the lens of speciation, and how the terms of humanity itself have become understood as at once universal and particular, broadly encompassing and narrowly exclusionary. I argue that it is, in fact, through the very mobilization of the "human"—as scientific classification, as rights-bearing subject position, as discursive ontology—that the promise of universal personhood and the reality of marginalized non/personhood are dually forged.

This premise stands against more commonly held understandings of humanity as a desirable endpoint, the culmination of processes of political humanization, juridical enfranchisement, and liberal social progress. These positivist conceptualizations can be seen across discourses of human rights, academic theorizations of racism and antiracism, and multiculturalist rhetorics of diversity and inclusion. In these frameworks, humanity is used as a benchmark for standards of universal care and protection, where it is thought that simply "being human" should be enough to warrant equal consideration.

Yet what does "being human" actually mean? Unlike most categorizations of corporeal and psychic difference, the human remains deeply tied to a sense of biological essentialism that is perceived to be historically stable and

universally comprehended; in other words, to be human is often simply to belong to the "human species." This book interrogates these assumptions from a historical perspective to better understand how processes of human speciation are contingent on prevailing cultural and scientific discourses. By unearthing debates about the nature of humanity across a wide variety of scientific disciplines—including primatology, astrobiology, and biomedicine (pediatrics, infectious disease management, and organ transplantation)—I demonstrate the importance of discourses of speciation to the historical construction of other categories of human difference.

Beginning at the turn of the twentieth century, when massive shifts were underway in the culture of scientific research due to the concurrent expansion of US imperialism, technological innovation, and urban industrialism, this narrative demonstrates how new theorizations of the human and its "others" were critical to the fracturing of knowledge into disciplinary practices and modalities. Indeed, while hierarchies of speciation and the privileging of Western empiricism can be dated centuries earlier to the European scientific revolution, it was not until the late 1800s, when anxieties over profound demographic changes in American cities found articulation through the burgeoning sciences of eugenic hereditarianism. And while neither the scientific community nor the lay public agreed upon a dominant theorization of evolution—whether from within the animal kingdom or between the human "races"—issues surrounding biological difference and its possible meanings were increasingly at the forefront of national consciousness. Through the development of more refined animal and human research protocols, classificatory lines began to be redrawn with greater precision on and between bodies of difference. From the late 1800s onward, categorizations of life according to spiritual and religious meanings increasingly gave way to ideas about species survival and environmental sustainability as quantifiable, limited resources.

At the same time, changes in biological understandings of speciation and human life unfolded alongside iterations of the human as cultural and juridical form. In particular, concerns about two vulnerable populations—children and animals—became fodder for public debates surrounding the necessity of "humane treatment" in "modern" life.[5] Led largely by women's social organizations involved in broader progressivist coalitions, and bolstered by anti-slavery rhetoric dating prior to the Civil War, these movements articulated an understanding of the "human" and "humane" as deeply interrelated. In this context, child abuse and animal abuse became understood as signifiers not only of individual moral failing, but also of a lack

of self-restraint incongruous with the cool-headed rationalism of scientific understandings of difference and hierarchy.

Importantly, then, the inseparable moral and intellectual imperatives of humane care articulated by progressivist thought on the one hand, and debates surrounding the meaning of species difference and biological hierarchy on the other, unfolded at the same moment. It was in this era that the terms of biopolitical engagement were first stated through an interlocution of expert knowledge and civic participation, through the rise of "public health" as an institution and way of life. As scholars such as Warwick Anderson and Nayan Shah have demonstrated, the emergence and routinization of public health regulations—indeed, the very notion of health as manageable in the public realm—are inseparable from trajectories of U.S. empire-building and racial formation.[6]

Less well understood is the role of discourses of nonhuman speciation and the management of nonhuman beings in the rapid transformation of scientific and popular attitudes toward human bodily management and care. This book addresses these influences to illustrate how the categories of the human, nonhuman, and infrahuman profoundly shaped understandings of embodied difference. I argue that this moment is marked by the arrival of a technics of the "infrahuman"—not in the sense that Yerkes imagined it, but rather, as a liminal subjectivity bound through practices of speciation, where lines drawn between and within the human and nonhuman realms provide critical vectors in the determination of matterable life. To chronicle the infrahuman is therefore to make manifest specific practices of humanization and dehumanization, anthropomorphization and deanthropomorphization, in a way that bridges the gap between sociocultural-juridical definitions of humanity as a rights-based category and scientific definitions of humanity as a marker of empirical speciation.

Here, it is important to pause and acknowledge the distinction between de/humanization and de/anthropomorphization—while the former is typically understood in relation to questions of human in/dignity, the latter often connotes a privileging of human speciation characteristics in the assessment of nonhuman beings. Yet, as this project demonstrates, this separation of meaning often serves to occlude rather than clarify. Similarly, the term *non/personhood*—referenced in the book's title—speaks to specific understandings of the legal category of (the) "person/hood"—which in theory has been synonymous with "human/ity," but which in practice has been reserved for individuals that inhabit dominant sex/race/class positions. Again, however, I do not use the terms of "person/hood" and "human/ity" in op-

position to each other, nor do I imagine that either can be separated from discourses of biological essentialism.

The history offered in what follows thus incorporates the symbolic realm of political ideologies and the seemingly concrete, although ultimately figurative, realm of scientific classification, in order to understand their coproduction. I demonstrate how the concept of the human has been used as a rhetorical veil for parity and inclusion, in spite of its practical usage for purposes of exclusion, and how this denigration is often mobilized through infrahumanist ontologies. Unlike concepts such as the "inhuman" or the "subhuman," which, in spite of the latter's indefinite prefix, typically denote a binary relation with the human, I intend the infrahuman to suggest an ongoing process of differentiation that hierarchizes human life through a shifting discourse of speciation. At times, this discourse draws strength from contemporary projects of racialization and sexualization, moral and political economies of non/personhood, and/or standards of normative able-bodiment.

My deployment of the term *infrahuman* therefore differs from other scholarly uses, where it typically stands as a synonym for subhumanity. For example, sociologist Paul Gilroy uses the term in his work on Enlightenment philosophy and racial genealogy, employing it in contexts dealing with dehumanization and disenfranchisement; at turns, it stands in for the subaltern, the slave, black non/personhood, and a type of "bare life" (in the tradition of Giorgio Agamben, addressed shortly).[7] Nonetheless, Gilroy's work bears mentioning here for two reasons: first, he is one of the only contemporary academic writers to make use of the word itself; second, his work speaks to an important theme in critical race theory, namely, the plea that we must strive to work toward a "common humanity," or the possibility of a radically antiracist humanism. By contrast, this book considers the "human" itself as a central problem in rights frameworks and in relation to expectations of liberal Western personhood.

Importantly, this laudatory formulation manages to coexist alongside critiques of humanist ideology that continually demonstrate how Enlightenment hierarchies of life enable processes of exclusion and disenfranchisement. We must ask, then, why the condemnation of Enlightenment humanism has not extended to the figure of the human itself, or how and why it has become possible to think of the human outside and apart from the terms of humanism. In his work on what he calls the "government of species," Neel Ahuja offers insight into this paradox, asserting that it is likely an effect of the unexplored "colonial genealogies of the posthumanist turn" in contemporary scholarship. Referring to the rise of new work across the humanities and social sciences

that engages with nonhuman positionalities and anthropocentric frameworks, "the posthumanist turn" is at once "post-humanist"—in the sense of reevaluating humanist ontologies—and "post-human"—in the sense of being beyond the human. According to Ahuja, however, "posthuman knowledge projects" are haunted by undercurrents of racialization and imperialism, a fact that becomes "particularly evident when environments or animals are rendered through tropes of wilderness external to the human or when turns to animals, environments, and things rely on a figure of unmarked whiteness in the form of the universal human."[8]

In this same vein, *Infrahumanisms* suggests that post/humanist discourses frequently rely on problematic iconographies of the human. For example, on the one hand, optimism surrounding the potentially restorative universality of the human pushes back against histories of racist and xenophobic thought, which served to parse and hierarchize diverse bodies and subjectivities. Yet on the other hand, the desirability of this shift—from vertical to horizontal conceptualizations of matterable life—fails to recognize the human itself as a term that is already deeply imbricated within, and productive of, states of non/personhood. That is to say, rather than arguing for the ethical expansion of the parameters of the human (in which historically marginalized groups' fundamental humanity is recognized and codified in law), it is imperative to look to the terms of humanity itself as the very site of ongoing conditions of inequality.

Here we might cite scholarship on the shortcomings of human rights projects as an example of why the positivist language surrounding the human must be reconsidered. Take, for instance: Carole Pateman's and Charles Mills's theorizations of the "sexual contract" and "racial contract," respectively, wherein it is demonstrated that sexual and racial inequalities are constitutive rather than aberrant features of U.S. political history; or, the long-standing refusal to recognize sexual violence as a "human" rather than "women's" rights issue, as illustrated by Miriam Ticktin; or, the development of new military techniques of "enhanced interrogation" in an era characterized by a distaste for more familiar human rights violations, as demonstrated by Darius Rejali.[9]

In the Western juridical arena, the human is typically defined in negative relation, against forms of violence deemed "inhumane." The circularity of this definition—in which the terms of protectionism and enfranchisement are guided by ambiguous conceptualizations of degradation—is often left unquestioned. To do so, it seems, is itself an inhumane act. And so, the "human" of human rights discourse, and of the law in the Western tradition more broadly, appears to speak less through concrete channels of legal

subjecthood and more through vague modalities of species membership. Evidence of this formulation can be seen in the recent movement for nonhuman personhood rights, where animal rights activists have used the purportedly inalienable attributes of humanity (intelligence, rationality, and so on) to argue for the liberation of certain nonhuman species.[10] In doing so, symbolic characteristics associated with the human are mobilized to enable the boundaries of legal personhood to extend across species lines.

Yet these symbolic characteristics are not only created from a legal or philosophical standpoint. In addition, they rely on an ambiguous application of scientific theory that first and foremost consolidates the human as a species, and secondarily marks it as a unit defined by measurable attributes. In both legal and scientific frameworks, the species divide trumps all other forms of differentiation. While many members of the human race do not meet anthropomorphic thresholds of normative cognition, they remain, for all intents and purposes, "human beings," even if their treatment by society is frequently dehumanizing or in violation of the very tenants of the sanctity of human life. Similarly, animal rights activists pursuing nonhuman personhood status for certain species have used scientific evidence, ranging from brain scans to behavioral studies, to assert that legal personhood should not be demarcated by species membership. Still others, in the tradition of scholars such as Peter Singer and Martha Nussbaum, have placed these arguments in conversation with one another, asking how and why it is that anthropocentric systems of thought include certain human individuals who do not meet established standards of intellectual capacity, while excluding other nonhuman subjects who do.[11] At the same time, even as the use value of human species difference is frequently queried (how and in what way humanness matters to conversations about the right to life and self-determination, among other issues), the actual terms of the human *as a quantifiable, biological species* are not usually interrogated.

By contrast, *Infrahumanisms* examines the legacy of the human as a historical production that shifts according to time and place. *Infrahumanisms* holds no faith in the "human" as a reservoir of potential social change. Rather, it is a history of both human and nonhuman subjectivity, as told through the lenses of U.S. science and culture, in which the discourse of universal humanity is demonstrated to produce axes of inequality, violence, and biological essentialism. Such a history necessarily moves beyond the literal human boundary into the realm of animality, which scholars have only just begun to unpack as a site where unequal states of humanity are brokered. In the chapters that follow, I use the term *infrahuman* to begin to bring these

discourses together in a way that demonstrates the interlocking significance of practices of speciation, de/humanization, and de/anthropomorphization. The infrahuman is therefore not synonymous with other categorizations. It is not the subaltern or the invisible subject position of the global under caste; it is not the slave or the figuration of social or political death; it is not blackness nor nonwhiteness, because it serves as a symbolically deracinated placeholder in both technical and popular realms; and finally, it is not "bare life" (although it does find interlocution with this term in chapter 4's treatment of the post-Holocaust moment).[12]

Thus, at certain times and places, specific subject positions or broader categories of difference may fall within contours that are encompassed by the infrahuman, but I want to be clear that my use of the term stands apart through a critical refracting of both human and nonhuman biopolitics. Ultimately, I argue that unmasking this ideology is crucial to better understanding the persistence of human social inequality, laying bare the rhetorics of being "beyond" or "post" race, gender, and other forms of social difference thought now to be on the precipice of mere social construction. At the same time, I argue that the infrahumanist episteme is also critical in the configuration of species difference and species hierarchy, in relation to both animal rights and nonhuman personhood. I explore how human and nonhuman oppression are ultimately reciprocally fortifying and mystifying.

The title of this book thus founds a new idiom to encompass rituals of infrahuman speciation: infrahumanism/s. Infrahumanist ideology can be imagined as humanism's shadow Other, the very thing that bolsters the strategic use of the human as a positivist category. It is about the utilization of discourses of species difference, the practice of speciation, and the maintenance of human and nonhuman hierarchies that serve broader biopolitical aims. For example, what did it mean that the eugenics movement gained strength alongside the expansion of nonhuman speciation projects, particularly the symbolic racialization of higher order primates? Or, how can we rethink the birth of genetic research at midcentury as a field that once included the search for "alien" life in outer space—a project that took shape in the age of "Three Worlds," when the decolonization of the Global South gave way to yet another extra/terrestrial frontier? Or, more broadly, how has the breaching of the species boundary in biomedical experimentation and concerns surrounding zoonotic (cross-species) contagion been informed by contemporary ideologies of race, kinship, and nation? In all these instances and more, I demonstrate how infrahumanist frameworks mobilize the liminally human subject as a comparative point for the justi-

fication of biological essentialism and the naturalization of social hierarchy. As such, infrahumanist ideologies further biopolitical austerity narratives of survival and extinction, in which the needs of literal and symbolic human groups, and literal and symbolic nonhuman groups, are often pitted against each other.

Contexts

This project draws on, seeks to contribute to, and yet departs from four primary interrelated fields of inquiry that have received considerable attention within the past two decades of humanities scholarship: (1) biopolitical inquiries into "human rights," (2) historical treatments of the afterlife of eugenic science, (3) biomedicalization and critical bioethics, and (4) animal studies' theorizations about the hierarchization of human and nonhuman life.[13] In this brief section, I will situate the book in relation to a series of ongoing issues and debates, while reserving a more detailed exploration of each for the chapters that follow.

Within recent years, the question of human rights has been addressed primarily from a juridico-political perspective, while also drawing heavily from Michel Foucault's theorization of biopower, or, "the set of mechanisms through which the basic biological features of the human species became the object of a political strategy, of a general strategy of power, or, in other words, how starting from the 18th century, modern Western societies took on board the fundamental biological fact that human beings are a species."[14] (Of interest to this project, certainly, is the use of "species" here—even though it is not typically interrogated as such in treatments of Foucault's work.) Motivated in part by the mounting war on terror and its attendant forms of torture and dehumanization, as well as renewed interest in the history of the Nazi Holocaust, recent scholarly treatments of biopower have further crystallized around Agamben's concepts of "bare life" (defined as a form of life regulable by the state yet devoid of all political rights) and the "state of exception" (defined as a signpost of sovereign power, asserted through the suspension, rather than the enactment, of state laws). For Agamben, it is the state of exception that enables the condition of bare life, and he uses the example of political prisoners as a way to think through how a subject might experience a form of national inclusion vis-à-vis the premise of political exclusion.[15] Relatedly, Judith Butler's concept of "grievability" has become pivotable in considerations about the nature of disposable versus meaningful life. As Butler notes, "specific lives cannot be

apprehended as injured or lost if they are not first apprehended as living" through particular affective modes, "ethical dispositions," and "a selective and differential framing of violence."[16]

Similarly, scholars of culture, law, and literature, such as Lisa Marie Cacho, Colin Dayan, and Alexander Weheylie, have begun to reformulate the concept of "social death" called forth by sociologist Orlando Patterson's earlier work on the history of international slavery. While Cacho has illuminated the profound criminalization of marginal populations as a form of modern social death, Dayan uses the concept of "civil death" to explore how the law is used to socially disable particular populations, in which the subject is "drained of self-identity, forever anomalous, condemned as extraneous to civil society, excluded from belonging."[17] In his assessment of biopolitical philosophy's crude circumvention of black feminist theory, Weheylie critiques the centrality of Foucault and Agamben in dominant scholarly iterations of biopower, noting how the reliance upon these late twentieth-century thinkers often works to erase earlier histories of colonial violence and racialized slavery (and in this respect, his critique of biopolitical theory dovetails with Ahuja's assessment of posthumanism's racial amnesia). Weheylie's work addresses "racializing assemblages of subjection" through an idiom that he calls "habeas viscus"—"you shall have the flesh"—to begin to unpack the historical dehumanization of nonwhite persons at and beyond the site of the body.[18]

Infrahumanisms builds upon these works, while also contrasting with them, by addressing states of personhood that are often not formally stripped of political rights or inclusivity but nonetheless experience forms of de facto cultural and political exclusion based on differential conditions of embodiment and identity, including race, gender, sexuality, disability, and disease status. Toward this end, the history of eugenic thought becomes an important backdrop for conversations about the nature of human evolution, progress, and changeability. Existing scholarship on eugenic science has addressed these concepts in both transparent and opaque ways. Eugenic theory has been shown to be profoundly important in the production of early twentieth-century nationalist sentiment and corporeal classifications. At the same time, the ubiquitous dispersal of eugenic principles throughout the course of the mid- to late twentieth and early twenty-first centuries has become a pivot point in conversations about state power and the nature of embodied life.

Scholars such as Alexandra Minna Stern, Nancy Ordover, Troy Duster, and Dorothy Roberts have all identified the ways in which post-Holocaust eugenic science began to appear under other names and disciplinary

frameworks. Stern has demonstrated the legacy of eugenic thinking in reproductive research and clinical practice. Ordover has contextualized eugenic theories of sexuality within a larger chronology of thought surrounding the pathologization of queer bodies and sex acts, from early sexological studies, to the decline of the formal eugenics movement, and finally, into the era of queer liberation. Duster has shown that the very enterprise of genetic science is bound by inherently racist principles that will inevitably lead toward new forms of oppression and exclusion (quoting from Russian playwright Anton Chekhov, he notes, "if in the first act, you hang a gun upon the wall, by the third act, you must use it").[19] Finally, Roberts has identified the significance of racial science in posteugenic visions of women's health, reproductive politics, and genetic engineering, suggesting the ways in which these fields have operated according to particular racial codes and categorizations.[20]

Stern, Ordover, Duster, and Roberts represent an important new generation of thought surrounding the omnipresence and slipperiness of eugenic ideology. Their work speaks to the changing nature of medical science and practice in the late twentieth and early twenty-first centuries, a transformation described by Adele E. Clarke, Janet K. Shim, Laura Mamo, Jennifer Ruth Fosket, and Jennifer R. Fishman as a movement from processes of "medicalization to biomedicalization." Clarke and her coauthors identify this progression as a shift from "control over biomedical phenomena to transformations of them," achieved through risk assessment and surveillance procedures, the growth of the global bioeconomy, the emergence of new genetic technologies, the intensification of medical information management, and the emergence of new "individual and collective technoscientific identities."[21]

Recent literature treating processes of biomedicalization has largely emphasized new forms of bodily commodification occasioned by technological innovation and existing conditions of socioeconomic and geopolitical inequality. Ideas of "genomic capital" (Kaushik Sunder Rajan), "clinical labor" (Melinda Cooper and Catherine Waldby), "life as surplus" (Cooper), and "biological citizenship" (Nikolas Rose and Carlos Novas) articulate an austerity politics of the body, where biomedical innovation under late capitalism is understood to ascend in direct proportion to the fracturing and desanctification of human life. These scholars demonstrate how the proliferation and commercialization of genetic knowledge, the rise of the pharmaceutical industrial complex, and the role of scientific advancement in the spiral of transnational conditions of privation are often overlooked in the name of "universal" progress.[22]

Importantly, scholarship that addresses processes of biomedicalization has come to fruition at the same moment as the emergence of the field of animal studies. But the connections between these fields—that is, the question of neoeugenics and the question of the animal-human boundary, or what we might call bioethics writ large—are important and remain largely underexplored. Recent works by scholars such as Ahuja and Mel Y. Chen have just begun to illuminate the connections between the human sciences, biopower, and species difference. Ahuja has called attention to issues of scale and geography, where the biomedical use of animals is imagined to signify the terms of postcoloniality and racial alterity. Examining the history of disease management as a technique of imperialism, Ahuja proposes the concept of "dread life" to describe the "racialized channeling of the fear of infectious disease into optimism regarding the remaking of life through technical intervention."[23] In doing so, he demonstrates how governmental concerns over the spread of contagious illnesses have often sought to manage human life through the manipulation, regulation, and decimation of nonhuman life. Chen has further broadened configurations of the human-animal boundary by thinking through the politics of "animacy"—or "qualit(ies) of agency, awareness, mobility, and liveness"—in relation to questions of health and debility, queer sexuality, and political identification.[24]

These works offer important complications to more traditional narratives of animality that have undergirded the foundations of the field of animal studies, itself less than a couple of decades old. Cary Wolfe—whose *Animal Rites: American Culture, the Discourse of Species, and Posthumanist Theory* (2003) is widely cited as a field-originating text—has been both hailed for almost single-handedly introducing animal studies to the main ways of academic legitimacy and simultaneously criticized for divorcing representational meanings from the lived realities of his subjects. For instance, Greta Gaard notes that we must consider whether the "growth of animal studies has been good for animals," interrogating Wolfe's oft-repeated phrase that "we need to understand that the ethical and philosophical urgency of confronting the institution of speciesism and crafting a posthumanist theory of the subject has *nothing to do with whether you like animals*."[25] Gaard argues that statements like these demonstrate a broader problematic within the aims of the field, which has in turn failed to acknowledge the long legacy of eco/feminist thought surrounding symbolic discourses of non/human oppression and actual forms of violence and exploitation. Referring to Wolfe's work alongside Jacques Derrida's famous essay on his cat (in "The Animal That Therefore I Am," 1997), as well as Donna Haraway's perplexing engage-

ment with canine agility competitions (in *When Species Meet*, 2008), Gaard laments that "no one should have been surprised, then, when the confluence of Derrida's discovery of himself as an animal, Wolfe's coinage of the term 'posthumanism,' and Haraway's exploration of dog training together catapulted the field of animal studies into academic respectability."[26]

Thus while Wolfe, Derrida, and Haraway are often credited with cracking open the question of the animal to a broader audience by demonstrating its representational value, they also stand in complicated relation to scholars such as Gaard and Ahuja, who remain skeptical about the possibilities of posthumanist animal studies. Those whose work aligns with the latter group call for a clearer comparison between the stakes of animal studies and more well-established fields known for their interrogation of power, subjectivity, and embodiment, including feminist studies, critical race studies, queer studies, and disability studies. Making these connections reveals the impossibility of simply bypassing the subject at stake—the animal—in order to produce a usable ontological framework. As Vasile Stanescu has argued, following Carol Adams's earlier work, "feminism should not simply end at the species divide. Nor, for that matter, should gay, lesbian, or queer rights."[27]

Yet for other scholars still, eschewing the potential radicalism of animal studies has become a popular strategic move to solicit a wider audience. Robert C. Jones, for instance, delineates between what he calls "vegan 1" and "vegan 2": two competing trajectories of animal activism and related scholarship. While Jones describes the vegan 1 position as a type of "self-righteous zealot[ry]" that "preaches veganism as the only way to go, and judges non-vegans as inauthentic and shirking their responsibility to 'the cause'" (further noting that he wishes to "avoid" this group), he suggests that the vegan 2 position is "not a lifestyle, but an 'aspiration' . . . an endless work-in-progress, a process of doing the best one can to minimize damage—violence, exploitation, domination, objectification—whenever and wherever we can."[28] And yet the same arguments would never occur in other related fields. To divorce real life forms of oppression from those that are representational or philosophical—in the cases of race, sexuality, gender, class, nationality, religion, or disability, and beyond—would immediately be understood as myopic at best, immoral at worst. And so animal studies struggles for legitimacy even as the tools of that legitimacy work to undo the very aims of the field for so many of us.

To be clear, this book is interested in the welfare and rights of all living beings. It treats questions of (infra)human social and political difference and inclusion, and, as such, it acknowledges the deep and abiding connections

between human and nonhuman suffering. Indeed, its central aim is to reveal this interrelationality, to illuminate its history, its vocabulary, and its psyche. And yet even so, I am not unsympathetic to questions of disciplinary mattering—after all, if scholarship is the representational realm of the academy, it is also made more or less possible by the "real world" consequences of funding, opportunity, and employment. I see this book as contributing to the vast and difficult conversation about the place of nonhuman animals in the humanist academy. How and where animals should enter; how and in what way their lives reflect on and mold conditions of human life—these are questions that I seek to address, while acknowledging their impossible complexity.

Moreover, although this book directly queries the social, political, and scientific place of animals for their own sake, it is most centrally concerned with identifying the critical roles that discourses of infrahumanity have played in leveraging certain nonhuman beings and devaluing certain human beings. *Infrahumanisms* is therefore about the production of the dehumanizing impulse, while also acknowledging that the underbelly of this impulse is the *humanization* of particular animal species. This is not to say that the hierarchization of species is only problematic in light of human disenfranchisement; rather, infrahumanist epistemologies unfold precisely because we are dealing with a zero-sum game. When thresholds of survivability all depend on the same economy of resources, rights, and spaces of inhabitance, there will always be sliding scales of enfranchisement and dispossession. Much like the impossibility of questioning the sanctity of "human rights" without somehow devaluing them, the reality that radical theorizations of nonhuman rights and/or personhood may be irreconcilable with idealized human rights and/or personhood is an issue that has yet to be fully grappled with.

Addressing the interrelationality of racism, sexism, and speciesism, Claire Jean Kim proposes a "multi-optic vision" that

> encourages a reorientation toward an *ethics of mutual avowal*, or open and active acknowledgment of connection with other struggles. . . . If disavowal is a closing off, a repudiation, a turning away from, avowal is an opening, a recognition, a turning toward. . . . If we develop an ethics of mutual avowal in relation to other justice struggles, we not only reduce the chance we will reinscribe other forms of oppression . . . but also open ourselves to new ways of imagining ourselves in relation to others. . . . If single-optic vision generates a Manichean opposition of oppressor and victim, multi-optic begins with and in turn reinforces

> a sense that positionality is a very complicated thing indeed. In a dense web of relationships structured by multiple forms of difference, simple oppositions such as powerful/powerless, good/bad, over/under have limited purchase. Positionality is better imagined as fractured, contingent, and continually disputed.[29]

While Kim identifies a series of recent critical events that demonstrate the importance of her call to a multi-optic approach—from the controversy over San Francisco's Chinatown live animal markets, to the management of nonnative amphibian species across the state of California—we are nonetheless left with the question of remaining structural hierarchies. Arguing against simplistic comparisons that prioritize different forms of suffering and against intersectional approaches that can potentially obscure the specificities of different groups' experiences, Kim proposes a more fluid conceptualization of positionality and "avowal." In doing so, she articulates how existing analytic frameworks appear to suffer from narrow and static perspectives.

Yet what if the types of friction Kim argues against—racism versus speciesism, sexism versus racism, and so on—are not always the result of reductive thinking? Rather, what if these comparisons are in fact necessary to both historical and contemporary conceptualizations of oppression? In other words, if we consider that the disavowal of speciesism has frequently relied on the avowal of racism, and vice versa, it is not enough to suggest a more pluralistic positionality. Rather, we must interrogate how and why these categorizations have come to be mutually exclusive, and how and why maintaining them—even if for the singular reason of appreciating diverse standpoints—does not fully answer the question of how we might begin to think beyond existing conditions of inequality.

In this book, the intersections between diverse forms of oppression are understood as ontologically necessary. These compulsory intersections often reproduce states of human inequality in the name of nonhuman rights. Moreover, when we see instances of violence toward animals being compared with violence toward marginalized human populations, we must acknowledge that unless we are willing to take a completely universalist perspective on all living forms (and even then, we would be confronted with beings that inhabit liminal states of vitality)—we cannot ethically argue for the direct comparison of people and animals. One haunting example of this resides in the appropriation of a slogan that was originally linked to the Black Lives Matter Movement by animal rights activists, which stated, "I am

Trayvon." Initially coined in 2012 to mourn the vigilante murder of a young African American boy named Trayvon Martin in Sanford, Florida, and further used to call attention to broader patterns of state-endorsed violence against African Americans, the phrase soon became picked up and reframed by various animal rights organizations. Two of the most well-known examples include the usage of "I am Lennox" in 2012 in Belfast, Northern Ireland, and "I am Cecil" in 2015 across the U.S. In the first case, activists adopted the phrase to protest Breed Specific Legislation (BSL) policies that resulted in the euthanization of a pitbull named Lennox; in the second case, activists used the phrase to rally against the slaughter of a lion named Cecil by an American tourist on safari at the Hwange National Park in Matabeleland North, Zimbabwe.[30]

While these campaigns received a wide variety of reactions, those in favor generally noted that by definition, violence justified by a victim's identity, whether human or nonhuman, was the very definition of prejudice. By contrast, those who opposed the comparison argued that it dehumanized Martin and made light of his death, a critique that animal rights' activists deemed speciesist. In a sense, neither group was exactly wrong, but the controversy illuminated the difficulty of trying to extricate racism from speciesism and vice versa. Perhaps more to the point, however, is the way in which the appropriation of Martin's death ignored the larger reality of juridical constructions of enfranchisement. While Western societies are hardly settled on the question of animal rights (such that even those in favor of animal advocacy often do not approach all species with equal concern), modern human rights frameworks have officially been codified since the middle of the twentietha century. The reality that these frameworks have not been sufficient to ameliorate the exploitation and abuse of many populations within even the wealthiest nations cannot be understood as accidental; to raise the question of animal rights as a minority rights issue—and vice versa—disavows the imbrication of the law in tautologies of suffering.

Infrahumanisms therefore examines narratives of speciation and the production of the animal-human boundary in the interest of unearthing critical connections between other forms of social, cultural, and biological difference. I argue that nonhuman subjectivities and positionalities are important to a wide variety of intellectual projects precisely because they demand that we rethink so many long-held truths. They force us to rethink biological meaning and difference. They are a social construction insofar as everything is—but at the same time, the primary discourse that we use to articulate who "they" are comes from biology. Here, differences between life forms are articulated

through scientific taxonomies, without much regard for their subjective or intersectional natures. An equivalent form of reasoning would be to use biological theories of heredity in order to understand race without regard for other influential factors, or without offering a stern critique of hereditarianism. In this post/multicultural moment, such a claim would seem ridiculous; however, the story of animals tells us that we need to look again. Embedded within the discourses of nonhuman speciation—including conceptualizations of survival, instinct, and behavior—are the vestiges of deeply and profoundly held theories of biological essentialism that still provide the critical basis for so many invisible and problematic understandings of human difference.

And yet animals cannot and should not be imagined as simply another marginalized group. As theorists of intersectionality have demonstrated, comparing groups always elides points of commonality and coproduction; there are also significant material differences at stake in considering nonhuman ontologies. Animals do not have any kind of power of mobilization or retrenchment. They cannot speak for themselves. They cannot be asked what they want, though we can make educated assumptions about their desires. It is indeed hard to think of any kind of ethic aside from nonintervention that might be conscientiously held. It is not the intention of this book to answer this question. But it is also not unimportant that the thresholds of the human and nonhuman worlds are in a constant state of mutually produced flux.

Sites

The chapters that follow offer a history and theorization of how we have come to think about the human and its spectral others as critical positions in cultural configurations, rights-based frameworks, and scientific research projects. I argue that the categorical imperative of the human is not incidental or contrary to conditions of disenfranchisement and marginalization but rather is central to the ways in which spheres of belonging and alienation become mapped and executed. I contend that the infrahuman is a terrain on which science and popular culture work out the details of biocultural difference. At different times and places, the infrahuman is a category that comes to be occupied by different populations. Although there are no doubt many other spaces in which one could locate the infrahuman, I chose the following sites for their significant presence within both scientific and popular cultures. Moreover, I have addressed them at the moments in which they rose to national consciousness, instead of the moments in which they became fully institutionalized.

Organizationally, the book is divided into three chronological sections of two chapters each: (1) "Bioexpansionism, 1900s–1930s," (2) "Extraterrestriality, 1940s–1970s," and (3) "Interiority, 1980s–2010s." The first section, "Bioexpansionism, 1900s–1930s," demonstrates how the concept of the infrahuman took shape at precisely the moment in which the hegemony of modern, empirical, scientific discourse became established, persisting as the remainder of a more ambiguous past. This was the moment in which Furness and Yerkes embarked upon their respective projects with anthropoid apes, and in which scientists and the lay public alike became increasingly curious about non/human primate speciation. This interest was linked to broader concerns about the futurity of (white) humanity in the wake of massive demographic transformations resulting from urbanization, industrialization, and domestic and international migration patterns. I use the term *bioexpansionism* to connote the widespread dissemination of new scientific ideologies and practices regarding biological meaning and difference on the one hand, and the rising tide of biopolitical tactics of governance on the other.

Indeed, the turn of the twentieth century can aptly be characterized as a period of both small- and large-scale scientific revolutions, when fields that addressed issues of evolution, heredity, and the nature/culture divide became sites of technical debate, increased governmental funding, and public conversation. At the same time, the embeddedness of racism and xenophobia within these fields—even when official language spoke in neutral terms—suggests how public enthusiasm for scientific progress was guided by a hunger for politically usable formulations of biological essentialism. This was the moment that witnessed the full instantiation of Foucauldian biopower, marking the growth of population management techniques that relied on both private and civic forms of participation. I argue that these techniques were further imbricated with various intellectual projects concerning both human and nonhuman speciation.

Situating the project within three cultural-scientific narratives—the popularization of eugenics, the history of primatology, and the "invention" of modern childhood—part I examines the centrality of evolutionary discourse and racial science within early twentieth-century U.S. public culture. Chapter 1, "Brief Histories of Time: Nature, Culture, and the Making of Modern Childhood," examines the language of childhood in the parks and recreation movement, the rise of pediatric psychology and physiology, and the creation of a distinct form of children's outdoorsmanship. Chapter 2, "Ocular Anthropomorphisms: Eugenics and Primatology at the Threshold of the

'Almost Human,'" illustrates how the racialization of higher order primates in scientific and popular discourse worked to abet scientific racism in the years of its "official" decline. Part I thus demonstrates the significance of seemingly unrelated phenomena—from the symbolic role of the "child" in definitions of infrahumanity to the mapping of biological race on and through the bodies of nonhuman creatures.

Moving from early twentieth-century considerations of the primitive, the second section, "Extraterrestriality, 1940s–1970s," looks in the opposite direction, to the utopian and futuristic fantasies offered by the nation's initial forays into outer space. To this end, this section of the book traces the nation's increased interest in extraterrestrial life at midcentury and reads the cultural fascination with the "alien" body as a symptom of postwar racial melancholia. Unlike part I, in which the infrahuman is understood to be a liminal evolutionary subject, the infrahuman of part II is located within a politics of alienation. That is, rather than considering prehistories of human existence, part II treats imagined posthistories of human life that posit their own theories of human degeneration.

Chapter 3, "On Alien Ground: Extraterrestrial Sightings, Atomic Warfare, and the Undoing of the Human Body," considers the devastating effects of atomic and biological weaponry, alongside the anticipated arrival of alien beings that were predicted to incite a re-hierarchization of species, nations, and races. Chapter 4, "Inner and Outer Spaces: Exobiology, Human Genetics, and the Disembodiment of Corporeal Difference," recovers lost histories of space science that reveal the close connections between the histories of the search for extraterrestrial life and the rise of genetic engineering. In doing so, part II offers a genealogy of the "posthuman," a term that has come to suggest a dual meaning of ontological removal from humanist frameworks on the one hand and, on the other, a positivist understanding of technological progress and cyborgian posterity.

At first glance, this latter type of posthumanism might appear to stand in opposition to the pre- or transitory states of humanity suggested by the conceptual framework of the infrahuman. To be sure, the notion of the techno-scientifically produced cyborg is generally understood to advance "beyond" the human, whether in terms of physical or cognitive ability; therefore, the figure of the cyborg is often imagined as a type of super, or supra, human. By contrast, I demonstrate how narratives of the posthuman, whether in the form of actual scientific innovation or in the form of the science fiction imaginary, are largely guided by anxieties about the persistence of the infrahuman form, and ultimately how particular forms of

technological advancement—including eugenics and industrial warfare—are perceived to threaten a reversal of anthropoid evolution.

The last section of the book, "Interiority, 1980s–2010s," shifts to another form of bodily alterity: disease. By treating the emergence and cultural resonance of modern zoonotic (cross-species) diseases, focusing on HIV/AIDS, as well as the return of "eugenic" rhetoric in medical, legal, and cultural constructions of obesity and xenotransplantation (cross-species transplantation), this section reflects on the increasingly public nature of health records and knowledge systems. In so doing, part III demonstrates how expanding knowledge of corporeal interiority has generated new categories of embodiment and social difference that have begun to reformulate older conceptualizations of racial and national identity. Chapter 5, "Of Sodomy and Cannibalism: Disgust, Dehumanization, and the Rhetorics of Same-Sex and Cross-Species Contagion," loops back to discourses of the primitive, which increasingly haunt configurations of "foreign" dietary and sexual cultures in an age of heightened global proximities. Using the recent history of animal rights and wildlife conservationist discourse concerning the uses and consumption of animal bodies, this chapter considers how issues of species hierarchy are reproduced through racial, sexual, and national tropes. Chapter 6, "Everything except the Squeal: Porcine Hybridity in the Obesity 'Epidemic' and Xenotransplantation Research," examines the use of pigs in the manufacture of artificial human organs, as well as in symbolic conceptualizations of the current panic over obesity. In both cases, I demonstrate how pigs are deployed as a hybridized "spare part" species for bioeconomic ends, necessitating a standardization of the human body untainted by material difference. Finally, the conclusion, "The Plurality Is Near: Techniques of Symbiotic Re-speciation," addresses nascent advances in entomological weaponization and the mapping of the microbiome to contemplate possible futures of the infrahuman.

In brief, then, part I traces the engagement with "primitive" forms of life; part II examines the use of "posthuman" models of life; and part III illuminates the uncomfortable desire for release from both ends of the spectrum. Although the range of materials presented across these sections may initially appear broad, I argue that the infrahuman can only be seen through a wide lens, in which it becomes possible to fully witness the trajectory of overlapping histories of scientific advancement and cultural production. The scope of this book is therefore necessarily expansive, and seeks to redress a blind spot in existing scholarly conversations. Discourses treating the biological, social, political, and cultural construction of the human rarely, if ever, meet. This is a fact largely determined by their oppositional casts; while

the "human" of the sociopolitical realm is configured as a move away from the animal self—that is, to achieve human rights is precisely *not* to be an animal—the "human" of the biological realm is understood to signal a return to physical essentialism and reductionism.

Indeed, late twentieth-century liberation philosophies and movements—including feminism, civil rights, postcolonialism, and multiculturalism—have often firmed up the species boundary in their quests for equal "human rights" and a "common humanity." In this formulation, the human is established as axiomatic; it is the basis on which the rights of the individual must be claimed. Thus while it is commonplace to imagine other categories of difference as culturally constructed (race, gender, sexuality, and so on), it is rare to imagine species difference, or the "human," as a concept relevant to the formulation of differential subjectivities. Rather, "humanness" is still often understood as an essential biological truth, even as other modes of identity have been rescued from biologically deterministic frameworks. This problem is further compounded by postmodern theorizations of embodiment, which call on the subject to detach meaningful forms of identification from notions of essentializing corporeality. Yet as feminist theorists such as Nancy Hartsock and Christine di Stefano have argued, this detachment effectively works to devalue minoritized positions that are grounded in real world experiences of oppression. Hartsock writes:

> Somehow it seems highly suspicious that it is at the precise moment when so many groups have been engaged in "nationalisms" which involve redefinitions of the marginalized Others that suspicions emerge about the nature of the "subject," about the possibilities for a general theory which can describe the world, about historical "progress." Why is it that just at the moment when so many of us who have been silenced begin to demand the right to name ourselves, to act as subjects rather than objects of history, that just then the concept of subjecthood becomes problematic? Just when we are forming our own theories about the world, uncertainty emerges about whether the world can be theorized. Just when we are talking about the changes we want, ideas of progress and the possibility of systematically and rationally organizing human society become dubious and suspect. Why is it only now that critiques are made of the will to power inherent in the effort to create theory?[31]

Thus, just as feminist theorizations of power have called for a rearticulation of the subject from specific positionalities, *Infrahumanisms* calls attention

to the universalizing impulse behind the discourse of the human, particularly with regard to the emergence of posthumanist discourse at midcentury. In other words, is it not "highly suspicious" that at the very moment in which activists from minoritized groups gained footholds in the struggle for "human rights," the broader scientific-industrial complex began to deconstruct and devalue the human itself as a meaningful idiom?

This book addresses these complex phenomena by exploring the construction of the "human" within cultural and scientific thought in two primary ways. First, it considers the literal production and invocation of humanness, by historicizing critical markers in the evolution and maintenance of the boundaries between the animal, human, and technological worlds. Second, it addresses the symbolic production of humanness, by reflecting on instances in which particular groups of people are not treated as fully "human" in the sociopolitical sense, demonstrating how figurative practices of dehumanization are nonetheless dependent on a transparent biocultural rendering of the human itself.

By locating these twin discourses within spaces of infrahumanity, this book seeks to create a new language for imagining forms of alterity that are produced through interlocking structures of human and nonhuman difference. In doing so, I imagine the infrahuman as a shifting socio-psychic space between the conditions of animality, humanity, and technology. As will be explored, this space is profoundly marked by a visualizing impulse, in which the infrahuman is fashioned through and by visual texts and/or its discursive presence is concerned with forms of physicality that rely upon the production of knowledge through practices of sight and embodiment. At the same time, the concept of the infrahuman offers a unique framework for thinking about conditions of otherness that fall under the rubric of what might be called "hyperalterity." Whereas "alterity" is understood as a condition of symbolic dehumanization achieved through metaphorical practices of othering, "hyperalterity" connotes a literal state of dehumanization or posthumanization created by a breach of the species boundary, when the human body is literally thought to become animal, alien, or machine. Most importantly, the infrahuman is a concept that illuminates critical points of intersectionality in the production of human difference. By defamiliarizing a discourse on which so many others rely—the human itself—and by giving this defamiliarization a theoretical basis, a historiographical location, and a language from which to speak, this book offers insight into the construction of modern biopolitical identity through the eye of the infrahuman.

NOTES

INTRODUCTION. TOWARD A THEORY OF INFRAHUMANITY

1. "If Science Should Develop Apes into Useful Workers," *Washington Post*, May 14, 1916, 15.

2. "If Science Should Develop Apes into Useful Workers," 15.

3. Robert M. Yerkes, "Provision for the Study of Monkeys and Apes," *Science* 43, no. 1103 (1916); Robert M. Yerkes, "The Study of Nonhuman Primates," *Science* 467 (January 15, 1916): 564.

4. In Yerkes's era, bonobos were known as "pygmy chimpanzees," and they were not clearly designated as a taxonomic subfamily. On the etymology of "infrahuman," see *Oxford English Dictionary*, s.v. "Infra-, prefix," http://dictionary.oed.com.

5. See, for example, Susan J. Pearson, *The Rights of the Defenseless: Protecting Animals and Children in Gilded Age America* (Chicago: University of Chicago Press, 2011).

6. See Warwick Anderson, *Colonial Pathologies: American Tropical Medicine, Race, and Hygiene in the Philippines* (Durham, NC: Duke University Press, 2006); Nayan Shah, *Contagious Divides: Epidemics and Race in San Francisco's Chinatown* (Berkeley: University of California Press, 2001).

7. Paul Gilroy, *Against Race: Imagining Political Culture beyond the Color Line* (Cambridge, MA: Belknap Press of Harvard University Press, 2002), 26, 32, 44, 45, 88, 203, 348.

8. Neel Ahuja, *Bioinsecurities: Disease Interventions, Empire, and the Government of Species* (Durham, NC: Duke University Press, 2016), xiv.

9. See Carole Pateman, *The Sexual Contract* (Cambridge: Polity Press, 1988); Charles Mills, *The Racial Contract* (Ithaca, NY: Cornell University Press, 1997); Miriam Ticktin, "The Gendered Human of Humanitarianism: Medicalizing and Politicizing Sexual Violence," *Gender and History* 23, no. 2 (2011); Darius Rejali, "Torture as a Civic Marker: Solving a Global Anxiety with a New Political Technology," *Journal of Human Rights* 2, no. 2 (2003); Darius Rejali, "Electric Torture: A Global History of a Torture Technique," *Connect* (June 2001).

10. See the Nonhuman Rights Project website for a detailed explanation of how these attributes are used to advocate for certain species of animals: www.nonhumanrightsproject.org.

11. See Peter Singer, *Practical Ethics*, 2nd ed. (New York: Cambridge University Press, 1993), 175–217; Martha C. Nussbaum, *Frontiers of Justice: Disability, Nationality, Species Membership* (Cambridge, MA: Belknap Press of Harvard University Press, 2007).

12. Lisa Marie Cacho, *Social Death: Racialized Rightlessness and the Criminalization of the Unprotected* (New York: New York University Press, 2012); Orlando Patterson, *Slavery and Social Death: A Comparative Study* (Cambridge, MA: Harvard University Press, 1982).

13. In this book, I use the term *animal studies* to incorporate a wide variety of interdisciplinary work that treats questions regarding nonhuman animal life. At turns, this literature has come to be known as animality studies, human-animal studies, animal-human studies, and critical species studies. While it is not fully within the scope of this book to deconstruct the arguments at stake in each, they will be addressed when directly relevant.

14. Michel Foucault, *Security, Territory, Population: Lectures at the Collège de France 1977–1978*, trans. Graham Burchell (New York: Picador, 2004).

15. Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life*, trans. Daniel Heller-Roazen (Princeton, NJ: Princeton University Press, 1998); Giorgio Agamben, *State of Exception*, trans. Kevin Attell (Chicago: University of Chicago Press, 2005). Agamben's intervention has also risen to significance alongside rejuvenated interest in the concept of biopower proposed by Michel Foucault in the first volume of *The History of Sexuality: An Introduction*, trans. Robert Hurley (New York: Vintage Books, 1988), which he defined as "an explosion of numerous and diverse techniques for achieving the subjugations of bodies and the control of populations" (58).

16. Judith Butler, *Frames of War: When Is Life Grievable?* (London: Verso, 2009), 1.

17. Cacho, *Social Death*; Colin Dayan, *The Law Is a White Dog: How Legal Rituals Make and Unmake Persons* (Princeton, NJ: Princeton University Press, 2011), 32. See also Patterson, *Slavery and Social Death*.

18. Alexander Weheylie, *Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human* (Durham, NC: Duke University Press, 2014), 2.

19. Chekhov quoted in Duster, *Backdoor to Eugenics*, 114.

20. See Alexandra Minna Stern, *Eugenic Nation: Faults and Frontiers of Better Breeding in Modern America* (Berkeley: University of California Press, 2005); Nancy Ordover, *American Eugenics: Race, Queer Anatomy, and the Science of Nationalism* (Minneapolis: University of Minnesota Press, 2003); Troy Duster, *Backdoor to Eugenics* (New York: Routledge, 2003); Dorothy Roberts, *Killing the Black Body: Race, Reproduction, and the Meaning of Liberty* (New York: Pantheon, 1997); and Dorothy Roberts, *Fatal Invention: How Science, Politics, and Big Business Re-create Race in the Twenty-First Century* (New York: New Press, 2012). On the history and afterlife of eugenics, see also Wendy Kline, *Building a Better Race: Gender, Sexuality, and Eugenics from the Turn of the Century to the Baby Boom* (Berkeley: University of California Press, 2001).

21. Adele E. Clarke, Janet K. Shim, Laura Mamo, Jennifer Ruth Fosket, and Jennifer R. Fishman, "Biomedicalization: Technoscientific Transformations of Health, Illness, and U.S. Biomedicine," *American Sociological Review* 68, no. 2 (2003): 161.

22. Kaushik Sunder Rajan, *Biocapital: The Constitution of Postgenomic Life* (Durham, NC: Duke University Press, 2006); Melinda Cooper and Catherine Waldby, *Clinical Labor: Tissue Donors and Research Subjects in the Global Bioeconomy* (Durham, NC: Duke University Press, 2014); Melinda Cooper, *Life as Surplus: Biotechnology and Capitalism in the Neoliberal Era* (Seattle: University of Washington Press, 2008); Nikolas Rose and Carlos Novas, "Genetic Risk and the Birth of the Somatic Individual," *Economy and Society* 29, no. 4 (2000): 485–513.

23. Neel Ahuja, "Postcolonial Critique in a Multispecies World," *PMLA* 124, no. 2 (2009); Ahuja, *Bioinsecurities*, 6. Ahuja's concept of "dread life" is further addressed in chapter 5.

24. Mel Y. Chen, *Animacies: Biopolitics, Racial Mattering, and Queer Affect* (Durham, NC: Duke University Press, 2012), 20.

25. Greta Gaard, "Speaking of Animal Bodies," *Hypatia* 27, no. 3 (2012): 522; Cary Wolfe, *Animal Rites: American Culture, the Discourse of Species, and Posthumanist Theory* (Chicago: University of Chicago Press, 2003), 14.

26. Gaard, "Speaking of Animal Bodies," 522. Wolfe did not coin the term *posthumanism*, but from the context of this article, I read Gaard's point to refer to Wolfe's role in popularizing it as a descriptor of the transformation of animal-human relations.

27. Vasile Stanescu, "Why 'Loving' Animals Is Not Enough: A Response to Kathy Rudy, Locavorism, and the Marketing of 'Humane' Meat," *Journal of American Culture* 36, no. 2 (2013): 105. See also Carol Adams's originary work on the consumption of meat and feminist ethics, *The Sexual Politics of Meat: A Feminist-Vegetarian Critical Theory*, 20th Anniversary Edition (Boston: Bloomsbury Academic, 2010).

28. Robert C. Jones, "Eating Animals: A 'Funny' Kind of Love" (paper presented at the Center for Science, Technology, Medicine, and Society, University of California, Berkeley, May 10, 2013). In using the word *aspiration* in relation to his categorization of vegan 2, Jones references the work of Lori Gruen.

29. Claire Jean Kim, *Dangerous Crossings: Race, Species, and Nature in a Multicultural Age* (New York: Cambridge University Press, 2015), 20.

30. Kevin Powell, "Trayvon Martin and the Fatal History of American Racism," *The Guardian*, March 20, 2012, https://www.theguardian.com/commentisfree/cifamerica/2012/mar/20/trayvon-martin-fatal-history-american-racism; Julie Leroy, "Pit Bulls Give Amazing Reason Not to Call Them 'Monsters,'" *The Dodo,* August 13, 2015, https://www.thedodo.com/pit-bulls-give-amazing-reason-not-to-call-them-monsters-1294337469.html; David Bailey, "Minnesota Dentist Who Killed Zimbabwe's Cecil the Lion Draws Threats, Protests," *Reuters,* July 29, 2015.

31. Nancy Hartsock, "Foucault on Power: A Theory for Women?," in *Feminism/Postmodernism*, ed. Linda Nicholson (New York: Routledge, 1990), 163–64. See also Christine di Stefano, "Dilemmas of Difference: Feminism, Modernity, and Postmodernism," in Nicholson, *Feminism/Postmodernism*, 63–82. A big thank you to Alexandre Barille for reminding me of these important texts in relation to my own arguments.