Animal Bodies, Technobodies: New Directions in Cultural Studies, Feminism, and Posthumanism


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INTRODUCTION

As do most areas of critical literature, cultural studies usually takes the human subject as a given. Recently, however, calls to enrich the field through non-anthropocentric inquiry that extends beyond humanist parameters have

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become more frequent.¹ These calls find a robust response in two recent anthologies: *Animal Subjects: An Ethical Reader in a Posthuman World*, edited by Jodey Castricano;² and *Bits of Life: Feminism at the Intersections of Media, Bioscience, and Technology*, edited by Anneke Smelik and Nina Lykke.³ Both texts take cultural studies as their primary organizing anchor, taking care to highlight and appreciate the interdisciplinarity of the field and its relationship to feminist studies in excavating ideas and valuations of difference, alterity, and abject status.⁴ As if to embody this connection between cultural studies, feminism, and posthumanism, both texts emphasize the influence of the writings of Donna Haraway in the genealogy of the questions they seek to map, especially her famous cyborg figure; this figure acts as a signifier of the technologically mediated nature of human and animal bodies and thus as a reminder of the fallacy of biological determinism—a stark boundary between human, animal, and machine—as well as other scientific metanarratives.⁵ *Animal Subjects*, true to its name, focuses on the animalized dimensions of the cyborg and posthuman studies, highlighting the precariousness of the human-animal and nature-culture binaries by showcasing "the question of the animal" in an array of cultural and legal practices.⁶ *Bits of Life* concentrates more on the human-machine side of the cyborg phenomenon, devoting itself to unearthing current imaginings of the "bits of life" of human "technobodies"—human bodies molded by technological matrices of various sorts—such as genes, cells, eggs, and sperm. It is also more focused on representations of these "bits of life" in the media.

In what follows, I introduce both texts through their reliance on Haraway's work as a theoretical departure point. I then discuss individual contributions in both *Animal Subjects* and *Bits of Life*, commending both for their commitment to the analysis of cultural practices and the charting of new directions in posthumanist theory. Within these discussions, I provide my view of the collections' individual shortcomings, and also include a section noting the limits of their posthumanist analysis from a feminist intersectional perspective. Finally, I close with a discussion of the collective possibilities that arise from *Animal Subjects* and *Bits of Life* for developing feminist posthumanist studies.

² *Animal Subjects: An Ethical Reader in a Posthuman World* (Jodey Castricano ed., 2008) [hereinafter *Animal Subjects*].
³ *Bits of Life: Feminism at the Intersections of Media, Bioscience, and Technology* (Anneke Smelik & Nina Lykke eds., 2008) [hereinafter *Bits of Life*].
⁵ Castricano, supra note 4, at 12.
⁶ Id. at 2.
I. HARAWAY’S POSTHUMANIST INFLUENCE

Despite these volumes’ different trajectories in posthuman studies—one aimed at undoing the human-animal binary and the other at undoing the human-machine binary—both volumes give prominence to Haraway’s work, which addresses both binaries. Castricano introduces her revolutionary “cyborg manifesto” very early in Animal Subjects, and credits it for highlighting the “critical lag” in cultural studies arising from the absence of deconstructions of the animal-human boundary. A new essay by Haraway, Chicken, leads off the essays after Castricano’s introduction. Through Haraway’s hallmark use of irony, the short piece gives a snapshot into the heavily technologically mediated and abused body of today’s factory farmed chicken and its unacknowledged presence in the media stories and cultural iconography of our time, from avian flu to Chicken McNuggets to Abu Ghraib and political “pecking orders.” In spite of Haraway’s reputation for high theory, Chicken stays lucidly grounded, giving shape and scope to the brutality that is the human treatment of chickens.

At the same time, the piece invites readers to consider the culturally-laden character of the attributes we assign to different animals, noting the particular cultural symbolism and work that chickens have been made to bear and their current situatedness in racist and sexist circuits of global power. Although this essay does not focus on outlining the relationship between feminism and animal-friendly posthumanist critique, readers unaware of the arguments in this area can still glean insights regarding this relationship. For example, Haraway questions the nature-culture binary. This binary, as ecofeminists and others have shown, is a formidable obstacle in creating egalitarian relations not just between humans and animals, but also for racialized peoples, white women, and other marginalized human beings who have all been posited on the stigmatized “nature” side of this dichotomy along with animals. Another example of the connection between feminist concerns and posthumanist ones is the use of language to disparage women and animals. As Chicken points out, the term “chick” easily illustrates this point.

7. Id. at 7.
8. Donna Haraway, Chicken, in Animal Subjects, supra note 2, at 33.
9. Id. at 34-37.
10. Haraway provides statistics documenting the number of chickens killed worldwide for food and slaughtered as prophylaxis against avian flu and also discusses the genetic engineering and exploitative conditions on factory farms. See id. at 34-36.
11. Id. at 34 (describing “the naturalcultural contractual arrangements that domesticated both bipedal hominids and winged gallinaceous avians”).
13. Haraway, supra note 8, at 34.
Haraway's early placement in the volume not only signals the theoretical and practical dimensions provided by different essays in the collection but also highlights Castricano's contention “that social and cultural analyses are more often than not the site of multiple contradictions.”\textsuperscript{14} Theoretically-oriented offerings include arguments refashioning the complex concepts of personhood, moral space, representation, and deconstruction to be more inclusive of animals. Contributions that address more discrete topics cover the controversies of animal experimentation, animals in entertainment, and the configurations of animal advocacy and anti-cruelty prosecution. Leading with Haraway's essay, however short, nicely intimates the diversity of contributions to come and their uncovering of the contradictions in our treatment of animals. Chicken also facilitates understanding of the contradictory attitudes we hold toward animals in Western culture where, for example, we might treat a particular animal as a member of our families, but think nothing of consuming the flesh of another animal in this family member's presence.\textsuperscript{15} Introducing Haraway's essay, Castricano notes that the Chicken Little figure Haraway harnesses for subversive ends is no longer the rascal bearer of implausible forecasts about imminent doom ("the sky is falling"), but the passionate advocate/victim of the dangers of technoscientific assaults in agriculture to human health and, of course, the unspeakable suffering that is visited daily on the bodies of chickens in factory farms.\textsuperscript{16} Haraway's deployment of the figure contradicts our standard cultural narrative and thus accentuates her critique through irony. As Castricano states, Haraway's ironic intervention is just one method of illuminating the paradoxes we encounter once we engage in cultural critique in general.

\textit{Bits of Life} centers Haraway's work through \textit{There Are Always More Things Going on than You Thought!: Methodologies as Thinking Technologies: Interview with Donna Haraway}, an interview Nina Lykke, Randi Markussen, and Finn Olesen conducted with Haraway in 1999 that was first published in 2000 in Denmark. For those who did not encounter the Danish version or the English translation in the \textit{Haraway Reader},\textsuperscript{17} the interview offers Haraway's views on her writing style (worthy of note: she means to be clear!) as well as perennial questions that trouble feminists who aim to model deconstructive commitments in their writing but also desire a cohesive piece of scholarship. Haraway speaks from her experience on handling the paradox of reifying categories one means to deconstruct through the writing process, thus appreciating standpoint feminism while dissociating from it. She also describes

\begin{itemize}
\item \textsuperscript{14} Castricano, \textit{supra} note 4, at 12.
\item \textsuperscript{15} See \textit{ERICA FUDGE, ANIMAL} 164-65 (2002).
\item \textsuperscript{16} Castricano, \textit{supra} note 4, at 12.
\end{itemize}
how she locates herself within science studies, especially given the influence of Bruno Latour on the field, as gendered analysis has been minimal in his work. ¹⁸ While somewhat older now, the interview is productive in facilitating the editors’ hope to lay out for the reader “frameworks and approaches that have been a major inspiration for the development of feminist cultural studies of technoscience.”¹⁹

The choice on the part of both collections to center on Haraway’s work is revealing of her well-deserved prominence in matters of gender, technology, species, and posthumanism. It should be noted, however, that Haraway herself declines the posthuman and posthumanist label: “I never wanted to be posthuman, or posthumanist, any more than I wanted to be postfeminist.”²⁰ For Haraway, the “post” in these terms intimates the fallacy that humanism achieved its objectives of equality and dignity for all humans. More importantly, Haraway states that “it is the patterns of relationality and, in Karen Barad’s terms, intra-actions at many scales of space-time that need rethinking, not getting beyond one troubled category for a worse one even more likely to go postal.”²¹ In her focus on relationality, Haraway stresses the importance of understanding ourselves and our species as beings who come to be by the process of what she calls “becoming-with.”²² This refers to the ongoing constitution of humans through our “intra- and interaction” with other species such that “species of all kinds, living and not, are consequent on a subject- and object-shaping dance of encounters.”²³ For Haraway, species are not knowable, intact entities before these encounters, but take shape through them.

Haraway wants to focus our attention on relationality rather than labels. Although she herself rejects the category of “posthuman” and “posthumanist” she does accept the term “posthumanities” as a “useful notion for tracking scholarly conversations” in this area.²⁴ It appears to be in this sense that the collections use the terms, that is, not to suggest that human injustices have been well-managed and are no longer at issue, but to signal a commitment to go beyond an anthropocentric focus and question the stability of the human boundary. Karen Barad, whose proposal for relationality Haraway endorses, uses the “posthumanist” term this way herself and even features it in the title of

¹⁹. Id. at 32.
²⁰. DONNA J. HARAWAY, WHEN SPECIES MEET 17 (2008).
²¹. Id.
²². This is a term she borrows from Vinciane Despret, The Body We Care For: Figures of Anthopo-zoo-genesis, BODY & SOCIETY, June 2004, at 111, 122. See HARAWAY, supra note 20, at 17 n.19.
²³. HARAWAY, supra note 20, at 4.
²⁴. Id. at 17 n.21.
her contribution—Living in a Posthumanist Material World: Lessons from Schrödinger’s Cat. Barad writes further:

I use the terms “posthumanist” and “posthumanism” to mark a commitment to accounting for the boundary practices through which the “human” and its others are differentially constituted. Posthumanist performativity is not a celebration of difference for difference’s sake; rather, it is about accountability to and for differences that matter. It is in this sense of boundary-blurring that I also use the term in this Review.

II. POSTHUMANIST TRAJECTORY I: NONHUMAN ANIMALS

In addition to the Haraway contributions, there are multiple essays in both volumes that provide cogent critical cultural analyses of current encounters between humans and animals on the one hand and between humans and bioscience and technology on the other. Ironically, given the influence of her writings on feminism and cultural studies—both theories that critically evaluate cultural norms—Haraway herself becomes a feminist cultural reference point for the work both volumes wish to perform. What Castricano intends for Animal Subjects is a collection that thinks seriously about animals in critical discourses typically smothered by human-oriented questions and identities. It is a wide-ranging volume, diverse in its subject matter as well as in the professional orientations of its contributors. Castricano has assembled not only academics, but also legal practitioners and activists, many of whom are recognized as experts in their fields.

A. Animals in Cultural Practices

Lesli Bisgould, one legal practitioner to whom readers are treated, employs her analysis of the notorious cat torture case in Toronto as an heuristic device to understand our “inter-species moral schizophrenia,” a term she explicitly borrows from legal scholar Gary Francione. Bisgould, arguably Canada’s leading animal law practitioner and advocate, immerses us in the facts of the case as if reading a legal factum and then uses those facts to deliver a nutshell critique of Canadian anti-cruelty law that readers new to this area will find useful. The case she discusses is one in which a postsecondary fine arts student and his friends filmed themselves brutally torturing a cat, Kensington. As Bisgould tells us, Kensington received her name posthumously and was named “after the neighbourhood in which she was killed.”

26. Id. at 172-73.
27. Castricano, supra note 4, at 2-3.
29. As Bisgould tells us, Kensington received her name posthumously and was named “after the neighbourhood in which she was killed.” Id. at 260.
were caught and charged with cruelty to animals under the Canadian Criminal Code. As a defense, the student argued that he believed in animal rights and tortured Kensington to make the political point that torture of all animals is wrong, whether it is the type of animal normally showered with love and affection as a companion (i.e., a cat or dog) or the type of animal routinely tortured in slaughterhouses (i.e., those labeled as "meat"). As Bisgould notes, most torture and exploitation of animals, such as that which takes place in the slaughterhouse, does not come under the purview of anti-cruelty offenses because, as human-purposed industries, the killing is not seen to constitute "unnecessary" suffering under the typical definition of this offense. 30

In addition to dismissing the student’s explanation for his brutal actions, Bisgould showcases the irony in a prosecution that had to charge the student with something other than animal cruelty—mischief, in this case—in order to proceed with an indictable offence. Bisgould’s point here is that offences against another’s property are treated more seriously than offences against an animal in and of itself. While this is an important point to make, it should be noted that her view that the "[t]he animal cruelty offence is an offence against the animal herself" is questionable. 31 As Francione has argued with respect to U.S. jurisdictions, although anti-cruelty offences purport to be a singular area in the law where animal interests matter, the animus, purposes, and impact of these offenses are still human- and property-oriented. 32 Bisgould’s essay leaves the reader with a solid understanding of the pitfalls of anti-cruelty legislation and a memorable example of the difficulty of securing convictions and imposing substantial penalties.

In addition to legal analysis, a number of the essays provide close readings of certain normalized cultural uses of animals. John Sorenson’s essay on Marineland, a marine animal exhibition park in the city of Niagara Falls in Ontario, Canada, is one of the collection’s most engaging. Simply titled, Monsters: The Case of Marineland, the essay provides a devastating critique of

30. Id. at 263-65 (emphasis added).
31. Id. at 260.
32. See GARY L. FRANCIONE, ANIMALS, PROPERTY, AND THE LAW (1995). One of Francione’s main points in this influential text is the concept of legal welfarism. This is the idea that anti-cruelty laws, while purportedly meant to protect animal interests, actually protect the property interests of animal owners in their animals from interference and violation. This is because animals are property under a legal system that only recognizes the interests of persons, human and otherwise. Moreover, "legal welfarism" underscores the impotence of any law that might be established to protect animals when animals’ legal nothingness mandates that even their most serious interests are always already outweighed by even the most trivial human interest. This is because animals are property and human beings are rightsholders; the balancing act to assess what is "unnecessary" suffering under an anti-cruelty statute will always be heavily skewed toward the rightsholding human or corporate person. Thus, as against their human or corporate owners, anti-cruelty laws only protect the most sadistic or gratuitous use of animals and not the normalized uses we make of animals despite the fact that the suffering quotient may be the same. See also Bisgould, supra note 28, at 261 ("Even an animal cruelty charge—the one that is supposed to be about the animal herself—requires a court to determine whether the suffering inflicted on the animal was ‘unnecessary’—meaning some pain and suffering is ‘necessary’ and perfectly fine . . . ") (emphasis added).
the politics of the "edutainment" that cultural institutions such as Marineland claim to offer, arguing that its cultural spectacles serve as a contemporary example of monster-making akin to nineteenth century "freak show" displays of "monstrous human 'others'... playing on images of savagery and primitivism." Sorensen deftly filters Marineland's narratives and factual background through an almost ethnographic treatment of the institution, its actors, and the protesters in terms of the level of fascinating detail delivered.

A less detailed, but still very pragmatically oriented essay is Anne Innis Dagg's *Blame and Shame? How Can We Reduce Unproductive Animal Experimentation.* In it, Dagg discusses her novel studies regarding the scientific impact of animal experimentation research. Presuming research to be significant according to the number of citations an article receives once published, Dagg completed four studies analyzing citation statistics for articles published in various psychological, neurological, and cancer journals over a period of several years. She concluded that there are a "large number of animal-based experiments that science itself (by lack of citations) has indicated are worthless." While the methodology Dagg uses may be contested, in science departments this calibration is a familiar yardstick for measuring scholarly impact. While Dagg hoped that her results would shame scientists, universities, and hospitals into rethinking their reliance on animal experimentation when the research funded and conducted was infrequently cited, she instead chronicles the resistance that she encountered against publishing any of the studies. While distressing, the resistance reveals the still marginal status of posthumanist critique and the marginalization scholars in the area can encounter when challenging hegemonic understandings of animals. Dagg concludes with recommendations for researchers, animal care committees, funders, and research journals on how to reduce animal-based research. Dagg's sharing of her findings provides a new angle to the animal experimentation debate.

**B. New Theoretical Terrains**

Several essays in *Animal Subjects* also explore new theoretical terrains in posthumanist animal ethics. Of these, some pieces work with various philosophical traditions to offer new approaches to old questions and to markers of moral status used to separate animals from humans. In *Electric*
Sheep and the New Argument from Nature, Angus Taylor unpacks the "new argument from nature" that scientific narratives have generated to uphold and legitimate the boundary between humans and animals.38 The new argument from nature is different from the old one, which insisted that animals did not count because of some assumed biological defect and thereby defended drawing lines to demarcate their moral exclusion.39 In contrast, the new argument from nature does not engage in contestations about shared or not shared capacities or the specialness or uniqueness of humans. Rather, as Taylor explains:

What counts is not the capacity to suffer or even, in the last analysis, the capacity to reason, but rather the ecological niche of one’s species. It is right that we hunt, kill, eat, exploit and experiment on members of other species for the simple reason that that’s how nature works: it’s us against them, and luckily for us, in a world of predators and prey, we are the top predators.40

While Taylor addresses this new, naturalized, “intuitive” basis for exclusion, other essays theorize new reasons for inclusion. In Animals as Persons, David Sztybel plots a different path for the application of personhood to animals than the standard argumentation on this front.41 Instead of relying on understandable yet problematic arguments from sameness (i.e., to the extent an animal reasons or feels as a human does, it deserves moral consideration) proffered by other posthumanist scholars,42 Sztybel relies on the personal experience each animal has with pleasure and pain, explicitly harnessing the “person” in “personal” to make his point. While his paradigm for personhood is more responsive to the sameness critique and demotes reason from its usual cultural pedestal in the theorization of moral status, Sztybel does not fully escape the concerns of feminist animal advocates regarding the exclusion of creatures who do not share a particular trait.43 This is because having a “personal” experience for Sztybel still depends on having sentient ability.44

39. Id. at 182.
40. Id. at 181-82.
41. David Sztybel, Animals asPersons, in ANIMAL SUBJECTS, supra note 2, at 241.
42. See, for example, Tom Regan’s work, which Sztybel discusses: TOM REGAN, EMPTY CAGES: FACING THE CHALLENGE OF ANIMAL RIGHTS (2004).
43. Carol Adams and Josephine Donovan have been instrumental in introducing this critique within the literature. Their ecofeminist work has emphasized an ethic of care as an avenue to theorizing about animals instead of the classic deontological and utilitarian theories associated with masculinist modes of conceptualizing ethics and animals. Adams and Donovan prefer this route for several reasons. One criticism of the more classic approaches is that their reliance on rational arguments to make the case for animals is troubling. Rational arguments, by definition, use reason as their persuasive tool. Recall that the capacity for reason has been exceedingly privileged in Western thought as a marker of personhood and ethical status. Adams and Donovan find it defeating for animal theorists advancing a posthumanist critique to rely on the very capacity that has served as a critical factor to exclude animals from moral consideration. Arguments that would afford animals ethical consideration based on their sentience and the capacity to suffer are also problematic. While not privileging the capacity to reason, requiring that
Further, it is not clear that Sztybel's position avoids being categorized as a mere extensionist argument, i.e., one that operates by extending principles and rules to animals through logic and reason, as discussed in the joint work of two other co-contributors to the volume. In their essay, *Animals in Moral Space*, Michael Allen Fox and Lesley McLean, while acknowledging the need for extensionist arguments, argue for more perceptive awareness in human interaction with animals, one marked by empathy and compassion. They provide two moving narratives to illustrate the importance of this type of connection and the type of “moral space” we should cultivate. While this insight is not new, the examples used are productive in impressing its importance. Fox and McLean’s treatment of “space” is less clear and seems to move separately from the thesis about perception; while they are seeking to locate their work in critical geography studies, perhaps more needs to be said than the assertion that “[a]ll space in which human beings live and act . . . is moral space.” Still, along with Sztybel, it is a welcome addition to the literature rethinking personhood.

Continuing the compilation’s push against the boundaries of posthumanist ethics, Johanna Tito gives an interesting analysis of the possibility of animal immortality in *On Animal Immortality: An Argument for the Possibility of Animal Immortality in Light of the History of Philosophy*. Primarily discussing the phenomenological insights of Plato, Husserl, and Bataille for this question, Tito’s strands of discussion also coalesce around sentience, both

animals possess a certain trait, sentience or otherwise, is an argument from sameness giving rise to the inherent exclusion sameness arguments entail. Animals are included to the extent they are shown to be the same as humans, i.e., have the capacity to reason, suffer, use tools, and so on. Instead, ecofeminists such as Adams and Donovan seek to topple reason from its privileged cultural status and elevate affect/feeling/emotion in its place as a site to mine for ethical instruction and guidance. This aspect of ecofeminist critique thus reflects the tenets of intersectionality, which aim to respect difference in and of itself and attend to that difference in ethical deliberation, rather than argue that certain beings (animals) should be morally respected to the extent they are similar to normalized moral persons (humans). Their critique of reason-based arguments is closely related to the concerns they have regarding rights-based rather than relational models in general. See Josephine Donovan & Carol J. Adams, *Introduction to THE FEMINIST CARE TRADITION IN ANIMAL ETHICS: A READER* 1, 4-6 (Josephine Donovan & Carol Adams eds., 2007); *Introduction to BEYOND ANIMAL RIGHTS: A FEMINIST CARING ETHIC FOR THE TREATMENT OF ANIMALS* 14-16 (Josephine Donovan & Carol J. Adams eds., 2000). For further examples of ethic-of-care analysis linking feminism with animal issues, see generally *ANIMALS AND WOMEN: FEMINIST THEORETICAL EXPLORATIONS* (Carol J. Adams & Josephine Donovan eds., 1995).

44. Sztybel, *supra* note 41, at 248-49. This is problematic because moral consideration continues to depend on possessing a particular trait. While sentience may be more inclusive than reason, it still excludes the non-sentient. A new line is drawn. This is not to diminish the importance of sentience and of attending to pain and suffering, as sentience-based theories advocate, to eliminate these physical/mental states and improve well-being. But a theory that privileges sentience follows the logic that a being must share a particular trait, however important, to matter to the rest of us. Moreover, theories of sameness always risk being already anthropocentric despite our best intentions, since human beings are always the ones who define what sentience is and who has it.


46. *Id.* at 169.

animal and human, and around the need for humans to empathize, love, and "get a feel" for a singular animal's experience and suffering. Tito's account of immortality lies not in an abstract idea of the soul, but in the ongoing ability to love a particular animal in our life. As love for animals and humans in our lives persists, so do they, even after they have died. Both Sztybel and Tito take long-standing questions and ideas—whether animals are persons, the importance of a soul for moral recognition—and chart new directions.

Also theoretically edifying is Paola Cavalieri's *A Missed Opportunity: Humanism, Anti-humanism and the Animal Question*, which enriches the body of posthumanist animal ethics by asking why there is "such a persistent lack of interest in the animal question from French philosophical circles" given their penchant for deconstruction of metaphysical humanism and analyses of power. She considers the work of Foucault, Levinas, and Derrida to illustrate her argument and takes care to make her critique intelligible even to new readers of these comparatively abstract theorists. Cavalieri's discussion of Derrida is particularly illuminating in its challenge to his image as a theoretical friend to animal advocates and posthumanist scholars. Cavalieri reveals Derrida's privileging of "cognitive endowment" as a marker of moral status and dismantles his argument resisting the demands of the Great Ape Project, an initiative to extend rights to all great apes (not just humans), which Cavalieri, along with Peter Singer, has championed.

Derrida's concerns overlap with the problem of line-drawing discussed earlier in relation to Sztybel's contribution. The Great Ape Project proposes extending moral consideration to certain animals—Great Apes—based on their likeness to non-"marginal humans," i.e., those with full cognitive capacity. As Cavalieri tells us, Derrida is disturbed by the proposal's focus on a certain threshold of cognitive capacity not for its exclusion of other animals, but for its exclusion of marginal humans, i.e., those who fall below the threshold

48. *Id.* at 288-90.
49. *Id.* at 296.
51. *Id.* at 106-11.
53. Cavalieri, supra note 50, at 109-10. I use the term "marginal humans" rather than "marginalized humans" to signal the importance of the "argument from marginal cases" that structures Cavalieri's points about Derrida here. The argument from marginal cases is a prominent argument in animal ethics that is used to disarm the speciesist position that insists that humans are special and rightly superior because they can reason. Even if one were to accept reason as the singular ethical criterion, the argument from marginal cases points out that there are human beings who, because of age (infants) or biological/psychosocial make-up (individuals with mental disabilities), do not share this capacity. These are the "marginal cases," and these humans are the ones who present an obstacle against instantiating reason or any other supposed universal human criterion as the evidence of human distinctiveness and superiority to nonhumans. See CAVALIERI, supra note 52, at 76-77.
(typically infants and people with mental disabilities).\textsuperscript{54} Cavalieri, one of the Great Ape Project’s main proponents, does not defend this exclusion, but in her reply to Derrida, places it in context as an understandable step toward gaining some moral recognition for some animals.\textsuperscript{55} The line-drawing conundrum presented by the Great Ape Project in terms of its anti-egalitarian ramifications for marginal humans and non-Great Ape animals alike gives rise to just one of many interesting theoretical exchanges in which Cavalieri engages with Foucault, Levinas, and Derrida. Cavalieri’s excellent discussion of all three theorists is accessible and thus compelling, a feat which other essays in the collection navigating philosophical texts do not accomplish as easily.

C. Whither Cultural Studies?

The major shortcoming of \textit{Animal Subjects} is the inconsistency with which the essays engage its claimed departure point: cultural studies. Some pieces thus suffer from the reverse of what Cary Wolfe, in both his contribution to the volume and other scholarship, has repeatedly called for: the infusion of cultural studies with posthumanist insight.\textsuperscript{56} Many essays are written in a manner apparently divorced from this theoretical framework. While both collections note the difficulty in defining the field,\textsuperscript{57} they also denote that cultural studies’ typical foci are concepts of and relationships between difference, identity, power, and knowledge, as well as the processes and impact of cultural representation and enculturation in and through everyday popular cultural forms for marginalized humans.\textsuperscript{58} The absence of these themes (other than to question hegemonic thinking about animals) in most of the essays in \textit{Animal Subjects} is a point that Castricano acknowledges at the outset:

Not all of these essays fall easily under the rubric of cultural studies as the field has come to be known; but all of these essays serve as touchstones in a widening field of study that seeks to acknowledge diversity by demonstrating that thinking of “animals” or “animal ethics” is \textit{not} by any stretch a stable or even consistent endeavour.\textsuperscript{59}

This is an accurate statement and this reason alone makes the volume recommended reading for scholars. Yet, after an introduction that firmly situates the posthumanist questions within cultural studies, the reader is left

\textsuperscript{54} CAVALIERI, supra note 52, at 76-77.  
\textsuperscript{55} Cavalieri, supra note 50, at 109.  
\textsuperscript{56} Castricano, supra note 4, at 7 (discussing Cary Wolfe’s most recent intervention to advance the “recognition of this connection”); see Cary Wolfe, \textit{Thinking Other-Wise: Cognitive Science, Deconstruction and the (Non)Speaking (Non)fHuman Animal Subject}, in \textit{ANIMAL SUBJECTS}, supra note 2, at 125.  
\textsuperscript{58} Castricano, supra note 4, at 4; McNeil, supra note 57, at 16-17. I am indebted to my colleague Anurima Banerji for a conversation on this topic.  
\textsuperscript{59} Castricano, supra note 4, at 8.
dissatisfied by the more traditional philosophical or empirical nature of some of the essays in which references to culture, discourse, and concepts of difference are absent, thus making the arguments more mundane and rote for the reader situated within cultural studies and its interdisciplinary origins.

III. POSTHUMANIST TRAJECTORY 2: HUMAN TECHNOBODIES

This theoretical inconsistency is a feature *Bits of Life* avoids. The volume is steeped in cultural studies and feminist frameworks and, similar to *Animal Subjects*, leaves the impression of charting novel directions. Yet, whereas *Animal Subjects* takes the quotidian cultural use of animal bodies as its landscape for investigation and critique, *Bits of Life* exposes us to seemingly obscure technophilic practices and reveals their increasing impact on our (gendered) lives. For example, the third part of the volume, entitled "Remediated Bodies," introduces the reader to computer software meant to archive memories like the human brain, \(^{60}\) the machinations of a hypertext fiction application, \(^{61}\) and the prominence of tunnel imagery in Hollywood films and medical documentaries to portray virtual space. \(^{62}\) In these three essays, the authors successfully demonstrate the cultural ramifications of projects that one might otherwise perceive as unimportant technological developments.

A. Technology and Gender in Everyday Life

In *MyLifeBits: The Computer as Memory Machine*, José Van Dijck explores the ways in which "[d]igitization is surreptitiously shaping our acts of cultural memory—the way we record, save, and retrieve our remembrances of life past." \(^{63}\) She offers an interesting discussion of MyLifeBits, a new software program that enables its users to record almost every single moment of their lives and later search and sort through them to create an endless variety of montages and narratives. Van Dijck wonders whether this "Googlization" of memory, in its quest to rectify the limited potential of our ability to remember, misses the mark of memory's meaning, noting that "mediated memories usually serve not as exact recordings but as evocative frames. People want a representation that triggers particular emotions or sensations, not one that reinvokes the experience as a whole." \(^{64}\) She also raises the issue of how

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63. Van Dijck, supra note 60, at 113.
64. *Id.* at 124-25.
digitization might alter, if at all, the gendered roles of traditional photo taking and storage, which delegate to men the handling of sophisticated equipment, like cameras, while women take charge of the organization and display of the printed images in shoeboxes and albums. Within this cultural studies analysis of everyday life, photography, as so many cultural practices, emerges as an activity divided by gender according to perceptions of who is more suited to handle machines and technology and who is more suited to create and maintain families, nurturing home environments, and relationships. Van Dijck presents what I would hazard most readers of the text hope to find—an analysis replete with interesting observations that link new technology to cultural studies’ preoccupation with embodiment, self-making, and gender.

B. Genes, Gender, and Cultural Representation

The Bits of Life reader is also rewarded with engaging examples of feminist film studies critique. Mette Bryld and Nina Lykke revisit the formative work of Swedish filmmaker Lennart Nilsson in constructing a narrative for the process of human fertilization in From Rambo Sperm to Egg Queens: Two Versions of Lennart Nilsson’s Film on Human Reproduction. They discuss how the film projected gendered roles and traits onto the sperm, egg, and female body to naturalize the image in our cultural imaginaries of sperm competing valiantly to fertilize the egg, who demurely and passively waits for the winning swimmer to find her. The authors contrast the revised contemporary versions of his work in Sweden and the United States, noting how the U.S. PBS version has responded to feminist criticism of the fallacy of the “Rambo sperm” narrative by replacing it with the more accurate, if nonetheless similarly culturally mediated and genetically deterministic, “Egg Queen” story. The PBS version now, through “grammar and plot structure,” reverses its gaze and tells the story from the female perspective, centering the female body as the action hero(ine) to which the hopeful sperm must be sensitive in order to be successful. While it is now “the matriarchally described egg that sets the agenda” in the documentary, the narrative remains problematic because it is invested in essentializing both male and female bodies and in ascribing DNA an omnipotent power to construct our bodily experiences.

Similarly, in the smartly named Screening the Gene: Hollywood Cinema and the Genetic Imaginary, Jackie Stacey analyzes the contributions the films

65. Id. at 122.
66. Mette Bryld and Nina Lykke, From Rambo Sperm to Egg Queens: Two Versions of Lennart Nilsson’s Film on Human Reproduction, in BITS OF LIFE, supra note 3, at 79.
67. Id. at 80-81.
68. Id. at 88-89.
69. Id.
70. Id. at 89.
*Gattaca*\(^{71}\) and *Species*\(^{72}\) make to our cultural anxieties regarding the transfiguration of human beings into “artificial bodies that disturb the conventional teleologies of gender, heterosexuality, and reproduction” through genetic engineering and other technologization.\(^{73}\) She refers to these anxieties as the “genetic imaginary,” a type of “fantasy landscape” where “posthuman life forms are invented... who threaten to exceed the controlling gaze of scientific technologies and thus continuously trouble their authority” in the name of respecting and restoring human individuality and authenticity.\(^{74}\) Part of Stacey’s distillation of how both films create this “fantasy landscape” and its attendant narratives is to examine their efforts in making visible that which cannot be seen: the gene.\(^{75}\) To do that, she provides a brief history of representations of the gene in the past century and highlights the current prominence of decoding as the tool attributed with the potential to render genetic bodies legible.\(^{76}\) Stacey then links this preoccupation with coding and decoding genes and technobodies with both films’ implicit acknowledgement of gender as a cultural code, especially as seen in gendered performances of masculine and feminine dress and appearance that are amenable to copying, imitation, and manipulation.\(^{77}\) Stacey’s discussion of genes, gender, and representation plunges the reader into the enjoyable depths of feminist film analysis and cultural studies.

C. Feminist Cultural Studies of Technoscience

The analysis in *Bits of Life* is neatly set up with two opening essays introducing the field of feminist cultural studies of technoscience by Nina Lykke and Maureen McNeil. Lykke’s *Feminist Cultural Studies of Technoscience: Portrait of an Implosion* lays out some interdisciplinary key dynamics of the field, to make things easier for readers of *Bits of Life* who are not familiar with the ways in which feminism, cultural studies, and technoscience studies—that is, the central components of feminist cultural studies of technoscience—have clashed as well as merged in recent decades.\(^{78}\) Lykke provides succinct descriptions of these areas and their insights, differences, and overlaps, which span such concepts as embodiment, identity production, attention to popular culture, culturally situated scientific narratives,

\(^{71}\) GATTACA (Columbia Pictures 1997).
\(^{72}\) SPECIES (MGM 1995).
\(^{74}\) Id.
\(^{75}\) Id.
\(^{76}\) Id. at 99.
\(^{77}\) Id. at 102.
\(^{78}\) Lykke, supra note 4, at 3.
and technology as cultural practice. These descriptions quickly and ably equip the new reader to navigate the more issue-specific discussions to come. For the sophisticated reader, they also serve as a useful roadmap documenting the emergence of the field. In the end, we gain the helpful understanding of feminist cultural studies of technoscience as "bring[ing] together the founding acts of deconstruction of all the other overlapping areas. Thus it connects the displacement of positivist notions of technoscience, the discarding of beliefs in technological determinism, and the explosion of elitist notions of culture."

Building on Lykke’s essay, McNeil’s piece concentrates on one of the areas Lykke maps by charting "the trails that have constituted the ‘cultural turn’ in science and technology studies" to consider "its contours, its orientations, and its political significance, particularly for feminism." McNeil immediately emphasizes the uncertainty surrounding the definition of cultural studies of technoscience, and directs the reader to the multiple ways in which the field has been defined. She nonetheless outlines five different disciplines which have combined to create the transdisciplinary field: cultural anthropology, literary studies of science, studies of visual culture, British cultural studies, and feminist science fiction studies. There is some redundancy with Lykke’s essay, but overall both authors deftly distill the theoretical heritage and confluences that have generated the area of feminist cultural studies of technoscience.

In contrast to Animal Subjects, which loses its focus on cultural studies, Bits of Life adheres to the departure point of feminist cultural studies of technoscience traced in its opening chapters. After reading the collection, one is left with a sense of immersion in this subfield of feminist studies, cultural studies, and science studies. None of the essays detracts from this impression. However, the liberal use, in several essays, of unfamiliar or undefined terms that leave one with a sense that the author is in conversation with a certain (narrow) circle of academic interlocutors does slightly impair the enjoyment and edification the reader receives from this type of immersion. Sometimes, it is a matter of jargon. At other times, it is a matter of the subject area; quantum physics, for example, needs more explanation for readers new to the field than perhaps a single chapter can provide, no matter how capable the author. And sometimes it is both:

By my agential realist account, concepts like “life state” or “alive-ness” are not merely ideational; rather, they are specific material configurations. And the semantic and ontological indeterminacy is

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79. Id. at 12.
81. Id.
82. Id. at 18.
83. See Barad, supra note 25, at 165. See the discussion of Newtonian and quantum physics, id. at 167-69.
resolvable only through the existence of a specific material arrangement that gives meaning to particular concepts to the exclusion of others, thereby effecting a cut between "object" and "subject," neither of which pre-exists their intra-action.\textsuperscript{84}

This linguistic tendency does not mar all of the theoretically rich pieces. Lykke's opening genealogical piece is an example of an essay that maps complex theoretical terrain with clear terms and signposts. Yet, the preference for this type of writing does create a sense of theoretical density rather than fluidity at more than one point, which may prevent many readers from accessing the importance of the insights provided.

IV. LIMITED CRITIQUES: DIFFERENCE, POWER, AND INTERSECTIONALITY

Conceptually speaking, a criticism that pertains to both collections is the absence of sustained intersectional analysis, which derives from each collection's focus on the recuperation of one type of marginalized subjectivity—nonhuman animals, in Animal Subjects, and "women," a category not problematized by race, class, or other identities, in Bits of Life. Animal Subjects renders a marvelous service in challenging cultural studies to make good "on its commitment to destabilizing essentialist notions of the subject that continue to rely on the hegemonic marginalization of the non-human."\textsuperscript{85} It rightly identifies "the nonhuman animal as the figure that sustains the margins of cultural studies to date."\textsuperscript{86} Yet, the subjectivising of this figure that each of the essays works to accomplish proceeds through discourses largely devoid of a gendered, racialized or otherwise difference-marked analysis. Barbara K. Seeber's discussion of Mary Wollstonecraft's writings in "I sympathize in their pains and pleasures ": Women and Animals in Mary Wollstonecraft is a notable exception to this problem.\textsuperscript{87} Sorenson also takes care to reference the imperial history of zoos and the continuities between present-day animal display and more historical spectacles of racialized bodies in his analysis of Marineland's monstrosities.\textsuperscript{88} I do not raise this criticism to put the focus back on humans, however marginal they may be due to such factors as their gendered, racialized, or classed positions. Rather, it is a request to receive more analyses that locate the human/animal boundary within other foundational Cartesian binaries so as to foster understanding of how ideas of animality and humanity are shaped by the classic foci of cultural studies such as gender, race, or ethnicity.\textsuperscript{89}

\textsuperscript{84} Id. at 170.
\textsuperscript{85} Castrican, supra note 4, at 2-3.
\textsuperscript{86} Id.
\textsuperscript{87} Barbara K. Seeber, "I sympathize in their pains and pleasures ": Women and Animals in Mary Wollstonecraft, in Animal Subjects, supra note 2, at 223.
\textsuperscript{88} Sorenson, supra note 33, at 197.
\textsuperscript{89} Glen Elder, Jennifer Wolch & Jody Emel, Le Pratique Sauvage: Race, Place, and the Human-Animal Divide, in Animal Geographies: Place, Politics, and Identity in the Nature-
In the same vein, *Bits of Life* foregrounds feminist analysis, but it features a version which gives primacy (probably inadvertently) to gender differentiation; other grounds of difference important to mainstream feminism, after its contemporary reworking through critiques of intersectionality, are only briefly mentioned. Heteronormativity, racism, and ethnocentrism are infrequently-mentioned concepts when *Bits of Life* is compared to other contemporary feminist collections despite "the political commitment to cultures and subjectivities of 'inappropriate/d others' and marginalized groups" that inform both feminist studies and cultural studies.\(^9\) Moreover, for a collection concentrating on posthuman analysis, particularly one with Haraway's interventions in the foreground, it stays firmly wed to technocultural mediations of humans; rarely are animals mentioned in the context of "inappropriate/d others" or otherwise. *Parenthood and Kinship in IVF for Humans and Animals* by Amade M'Charek and Grietje Keller is an important exception.\(^9\) To be fair, *Bits of Life* sets for itself the ambitious project of dissecting the intersections of multiple disciplines, and by and large it achieves its goal. Yet, for the reader who takes the editors at face value when they state that the collection "is grounded in questions about today's biocultures, which pertain neither to humanist bodily integrity nor to the anthropological assumption that human bodies are the only ones that matter," as highlighted on the collection's back cover, disappointment may ensue.\(^9\)

Interestingly, the closing piece in *Bits of Life* escapes this disconnect. In "The Politics of Life as Bios/Zoe," Rosi Braidotti develops what she calls "sustainable nomad ethics." These ethics focus not only on the concept of sustainability as endurance over time, but also on cultivating affectivity, or the capacity for feeling and emotion, particularly joy and desire, as a being endures so that the "subject’s *potentia*—the capacity to express her or his freedom*—is promoted.\(^9\) For Braidotti, then, promoting *potentia* is what it would mean to be ethical, and it is an "approach [that] cannot be dissociated from considerations of power."\(^9\) Braidotti is clear that such considerations include dismantling the biased bios/zoe binary where "[t]he relationship to animal life," which "constitutes one of those qualitative distinctions upon which Western reason erected its empire," is questioned.\(^9\) She notes more fully:

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90. Lykke, supra note 4, at 8.
92. BITS OF LIFE, supra note 3 (text quoted from back cover).
94. Id. at 183.
95. Id. at 177.

*CULTURE BORDERLANDS* 72, 72-73, 80-85 (Jennifer Wolch & Jody Emel eds., 1998), is an example of scholarship that approaches questions of race and the human-animal divide through a cultural studies lens.
Life is half animal, or zoe (zoology, zoophilic, zoo), and half discursive, or bios (biology). Zoe, of course, is the poor half of a couple that foregrounds bios, defined as intelligent life. Centuries of Christian indoctrination have left a deep mark here. The relationship to animal life, to zoe rather than bios, constitutes one of those qualitative distinctions upon which Western reason erected its empire.... One of the most persistent and helpful fictions told about human life is that of its alleged self-evidence, its implicit worth. Zoe is always second best, and persistence of life independently of rational control, even regardless of it and at times in spite of it, is a dubious privilege attributed to nonhumans....

Braidotti is keen to reverse this stigma, revitalize zoe, and "introduce an ecophilosophy of belonging that includes both species equality and posthumanist ethics." In a sense, reading Animal Subjects and Bits of Life as supplements of each other answers most of the concerns raised here. However, even when read separately, both collections are worth the attention of scholars in Canada, Europe, the United States, and beyond. Indeed, an element to appreciate in both texts is their comparative dimension. Posthumanist theory is comparatively rare and Western contributions to this area emanating from outside the United States are rarer still. While engagements with influential U.S. theorists are evident in and important to both collections, the Canadian and European foci for many of the essays internationalizes and thus enriches an emerging area. Castricano was deliberate in this endeavour, intending the collection "to serve as a challenge to cultural studies scholars—particularly in Canada—where there is less reference to nonhuman animals in the curriculum than there is in the news." For their part, Smelik and Lykke note that their collection arises from a more European context, and thus "choose[s] different cultural metaphors" and stronger commitments to "the materialism of continental philosophy" than those found in North America. They note the added texture that "engag(ing) with U.S. Scholarship and U.S. popular culture as partial outsiders" can bring in illuminating feminist concerns with technoscience.

V. THE POSTHUMANIST LEAP

Overall, Animal Subjects and Bits of Life offer eye-opening accounts of cultural critique to readers new to the fields of critical animal studies and critiques of technoscience. Readers familiar with one or both literatures will still find essays here that ask new questions, refine their theoretical knowledge

96. Id.
97. Id. at 183.
98. Castricano, supra note 4, at 7.
100. Id. at xv.
base, and provide compelling, illustrative case studies in the process. Reading them together, one senses an unprecedented momentum in the development of posthuman analysis within cultural studies. The texts accomplish what Rosi Braidotti advocates in her ethic of the sustainable nomadic ethic to subvert the bios/zoe binary. “Instead of falling back on sedimented habits of thought, [these texts] have proposed a leap forward into the complexities and paradoxes of our time.” It remains to be seen whether cultural studies and other areas of theoretical inquiry will take this posthumanist leap and leave the unexamined fictions of what it means to be human far, far behind.

Feminism informed by intersectionality can and should be at the forefront of the theoretical pack preparing to take this leap. As Carol Adams, Josephine Donovan, and other ecofeminists have shown, continuities between the exploitation of women and exploitation of animals abound. As a theoretical vantage point explicitly committed to deconstructing difference and attending to marginalized subjectivities, feminism needs to center “the human” as a social construction that must be investigated rather than place the human subject at the center of its investigations. Creating this type of feminist posthumanist studies will take time and an epocchal shift in our sensibilities about humanness. Confronting the paradoxes in how we treat beings we perceive as either not fully human or non-human requires an openness most of us are not ready to extend.

The question of whether open minds or open hearts are the answer to this paradox engages the debate in animal ethics, prompted by ecofeminists, regarding the animus for this type of monumental change. Does it come from convincing people through rational arguments or from moving people through their emotions and relationships with non-humans? It is difficult to resolve this debate. We see examples of both routes in the collection, often in the same contribution. My own sense is that both open hearts and minds are needed, coupled with the widespread recognition that faculties for reason and emotion are integrated rather than dichotomous concepts exhibited by both human and nonhuman animals. Laws, too, should change. Here again, various proposals have been proffered in animal law literature. Scholars have grappled with how to rework or dismantle the current property paradigm for animals. Some insist

101. Braidotti, supra note 93, at 191.
103. See supra note 43 and accompanying text.
104. Articles in ANIMAL SUBJECTS that rely mainly on logical argumentation include, for example, Cavalieri, supra note 50; Rod Preece, Selfish Genes, Sociobiology and Animal Respect, in ANIMAL SUBJECTS, supra note 2, at 39; and Sztybel, supra note 41. Those whose argumentation underscores a more affective response include Fox & McLean, supra note 45; and Bisgould, supra note 28.
that a property status is incompatible with a legal respect for animals. Other scholars, doubtful that the current reverence for property will abate anytime soon, argue that the property category can be rehabilitated to be more respectful and protective of animals. More recently, the capabilities approach, widely discussed in human development circles as a barometer of well-being and guide for legal and policy change in the global South, has been applied to animals.

While such a widespread reordering of rights, entitlements, and capabilities is certainly rare, there has been some recent movement in the international arena for reforming the status of posthuman entities. Spain, for example, recently became the first country to endorse the Great Ape Project. This follows and expands New Zealand's move in 1999 to stop experimentation on nonhuman Great Apes for human (Great Ape) benefit. Ecuador, at the time of this writing, has voted in favor of a new constitution that would accord rights to forests, rivers, air, and islands. Both these proposals elevate posthuman entities from being the objects of property rights to the subjects who possess rights. Given the current anthropocentric legal landscape and the attendant propertied legal paradigm for nonhumans that facilitates their instrumental use, these are remarkable initiatives.

This is not to say that they are not beset by their own set of tensions and paradoxes. Adding to the debate Cavalieri outlines in her essay, it is arguable that the Great Ape Project is not much removed from an anthropocentric order since the rationale given for extending human rights to them is their similarity to humans. Moreover, it may be that a discourse analysis of the debates in Ecuador over the need for constitutional protection of the environment would reveal a heavy undercurrent of the romanticized view of Nature, strictly cut-off from an equally essentialist concept of Culture. This is the precise binary that


109. See Great Ape Project News & Information, supra note 52.

110. For a description and critique of the limits of this law, see Peter Sankoff, Five Years of the "New" Animal Welfare Regime: Lessons Learned from New Zealand's Decision to Modernize its Animal Welfare Legislation, 11 ANIMAL L. 7 (2005).


112. I would still categorize the Great Ape Project as non-anthropocentric if: 1) we understand that term to mean giving attention and respect to nonhuman beings; and/or 2) we accept that in the context of the abysmal treatment of nonhumans (such as animals) that any legal reform measure that extends positive legal recognition (rights or otherwise) to them is a welcome development irrespective of the measure's strategic reliance on the logic of sameness to humans. See Cavalieri, supra note 50.

113. Id.
both collections have identified as harmful to our understandings of both animals and humans. But at least the objections to these legal initiatives are non-anthropocentric and do not stem from human anxiety and fear over uncharted disturbances to a romanticized and naturalized order that leaves us securely at the top. It is precisely Great Apes and other primates, as well as technoscientific interventions mixing humans with animals and machines, that cause us to confront the precariousness of the "human" category and our imagined human identities. 114

While the complexity of these and other questions about what a posthumanist legal order would look like and the magnitude of a posthumanist leap seems overwhelming, the two collections provide enough critical analysis to convince us of the posthumanist character of everyday life and the fragility of the "human" as an intact identity. They further motivate us to at least consider partaking in a more posthumanist and compassionate path in our own lives, ever skeptical of the metanarratives that invite categorical separations between species, bodies, and technoculture. So moved, we can then begin to contemplate the precise type of legislative reform that will reflect a posthumanist vision of justice in the many facets of life—food, fashion, families, entertainment, leisure, research, medical treatment—where we encounter the posthuman. This will be difficult yet important work. To return to Haraway's articulation of species meeting and becoming—with one another:

A great deal is at stake in such meetings, and outcomes are not guaranteed. There is no teleological warrant here, no assured happy or unhappy ending, socially, ecologically, or scientifically. There is only the chance for getting on together with some grace. The great Divides of animal/human, nature/culture, organic/technical, and wild/domestic flatten into mundane differences—the kinds that have consequences and demand respect and response—rather than rising to sublime and final ends. 115

115. HARAWAY, supra note 20, at 15.