

IGNORING NATURE NO MORE

The Case for

COMPASSIONATE CONSERVATION

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3

Ecocide and the Extinction of Animal Minds

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IN THE LAST FEW DECADES two momentous realizations have presented themselves to humanity. One, we are in the midst of an anthropogenic crisis of life—an extinction spasm and ecological unraveling that is heading the biosphere into an impoverished biogeological era. And two, in the course of history, especially the history of domination-driven Western culture,¹ humanity has tended to deny or underestimate the mental life of animals. Besides the coincidence of their timing, the coming into knowledge of biodiversity's collapse and of the hitherto-unrecognized richness of animal minds appear entirely unrelated events. Yet there is an urgent connection between the contraction of life's diversity and the dawning appreciation of animal minds: just as we are beginning to recognize that we share the Earth with beings of extraordinary physical and mental complexity, we are losing that shared world.

In this chapter I explore conceptual and historical links between the unraveling of life and the denigration of animal minds—links that have foreshadowed the present historical moment of grave loss. The exploitation of the biosphere and the deprecation of animals stem from the same source: the separatist regime humanity has created in which we have entitled ourselves to unlimited access to the planet on the (tacit or declared) grounds of self-ascribed superiority over other species in general, and animals in particular. But the connection between the destruction of biological wealth and the belittlement of animals goes deeper than the obvious resonance of colonizing the natural world while denigrating its nonhuman indigenes. I argue that the long-standing denial or disparagement of animal minds is *causally* implicated in the devastation of the biosphere. Through the portrayal

of animals as inferior beings, and eventually even as mechanical entities, the objectification of the natural world and its transformation into a domain of resources was vastly facilitated. As animals became successfully represented in dominant discourses as devoid of agency and experiential perspective—thereby becoming construable as means for human ends—a fortiori the (apparently) nonsentient domains of forests, rivers, meadows, oceans, deserts, and mountains (in fact, of any landscape or seascape) were made accessible to the human race without accountability or restriction.

In our time, the interface between ecocide and animal minds is tragic and ironic. Just as humanity is beginning to acknowledge and document a largely unknown world—the inner world of animals—that very world, in its diversity of forms of awareness, is coming undone. Even as human beings are becoming more receptive to the viewpoint of human-animal evolutionary continuity (not just of physical plan but of mental structure as well), we are collapsing the biosphere whose plenum of beings we might appreciate and experience through this newfound understanding. We are in danger of physically constructing a world that is as indigent in minds as René Descartes conceptually constructed it to be. But the reality and significance of this event—of losing not only physical manifestations of diversity but diverse manifestations of mind as well—eludes most of humanity. We live in a time tipping us into a planetary physical-cum-consciousness monoculture, yet most people continue to ignore Nature, failing to recognize this event horizon and remaining endlessly distracted by the noise of personal, cultural, economic, and political dramas.

I

In the late 1970s life scientists embarked on the systematic investigation of the effects of our colonization of the biosphere (understatedly known as “our ecological footprint”). An odd forty years later, the amassed knowledge is considerable and the picture it presents is grim. Extinction of species is occurring at a rate that exceeds background (nonanthropogenic) extinction by orders of magnitude: in the absence of the human impact, a handful of species would be vanishing each year; by contrast to this rate, thousands of species are driven to extinction yearly. The biosphere, moreover, is not only losing kinds of life (species and subspecies), it is also losing its abundance of wild places and creatures. The once enormous flocks, schools, and herds of animals are vanishing, and so are their migrations and the dynamic communities their migrations supported. Populations of top predators—tigers, lions, jaguars, wolves, bears, sharks, and others—are a fraction of what they were even a century or a few decades ago. Species and populations of fish (freshwater and ocean) are plum-

meting. On land, the once-abundant boreal, temperate, and tropical forests of the Holocene are vanishing or being displaced by biologically diminished second (third, fourth, etc.) growth or by tree plantations (which are not forests). Half of the world's biologically fabulous wetlands were lost in the twentieth century alone. Both on land and sea these losses signify the unraveling of complexity—of the interactions and cycles that connect life forms in intricate relationships. Ecological impoverishment is intensified by alien (mostly generalist) species invasions, occurring via the globalized trade and travel of a growing, consumer-oriented population that is bihomogenizing the Earth. Agricultural, chemical, and emission pollutants are exacerbating the crisis of life immensely—through the direct killing of chemical runoff, the (in)direct killing of climate change, and the not-yet-fully-understood perils of ocean acidification. The unique qualities of Earth's places are disappearing. The diverse tree of life is being turned into a stump.

The collapse of biological wealth is escalating because human population increase, economic growth, consumption patterns, and reckless technologies are impacting a finite planet that cannot resist the scale of this onslaught. The underlying driver of these trends is the human supremacist mindset that has enshrined a no-limitation way of life—including no limitation on reproduction, no limitation on consumption and economic growth, and no limitation on the kind of technologies unleashed in the world. The sheer cumulative weight of a no-limitation civilization is ruining whatever it touches. Wherever we turn we find the living world coming undone. No sooner do we process news of the amphibian crisis, but we learn that turtles, lizards, butterflies, and birds are also in jeopardy. As we struggle to come to grips with honeybee collapse, we hear that bats are dying off. Bushmeat subsistence and trade are obliterating the animals in Africa and elsewhere. Our assault on the oceans—with the depredations of industrial fishing, fish factory farming, slaughter of marine mammals, dead zones, trash, and adverse consequences of atmospheric and climatic change—is beyond the ken of conscience. Forests are being chewed up to be replaced by tree plantations, agro-industrial monocultures (of soybeans, palm oil, and so on), and ranching and pasture ventures. The most fecund places everywhere have long come under the plow.

As tragic as each Earth news item is, the devastation lies in the whole picture. We are dismantling the very qualities that constitute the biosphere: diversity of life forms, complexity of life's interrelationships, and abundance of indigenous beings and unique places on Earth. These interconnected attributes form the cauldron of Earth's life-generating creativity: they are the foundation of life's evolutionary power, fecundity, and resilience. As a unity, I have referred to the

qualities of diversity, complexity, and abundance as *the flame of life* (Crist 2004). In the wake of the havoc humanity has unleashed, life will almost certainly persist, but the flame of life is being extinguished.

Biological collapse is the historical reckoning of human exemptionalism and its refusal to even countenance the idea of a limited habitat niche for humanity within the biosphere. On the other hand, the denial of the richness of animals' lives goes hand in hand with human *exceptionalism*—the elevation of our species' consciousness as a unique and superior kind. Exemptionalism and exceptionalism are two sides of one coin: humanity has exempted itself from many of the biophysical limits that regulate and check animals, on the conviction that our ingenuity and technological savvy can (and should) successfully negotiate virtually any challenge. And over the course of history, colonizing the Earth and disparaging animal life have reinforced each other: the belief in human supremacy has legitimated the exercise of power over, and limitless access to, the natural world (including animals), while the seemingly triumphant domination of Nature has cast an aura of truth over the belief of human supremacy.

The colonization of the biosphere and the legislation of human-animal apartheid are thus historically and culturally intertwined. The hierarchical divide between humans and animals has been erected, in large part, through the erasure of animal minds. By the erasure of animal minds (or animal subjectivity), I refer to the historically dominant, discursively elaborated (see below), attenuated regard of animals as merely existing and reacting, as opposed to acting meaningfully and experiencing being-in-the-world. With concepts like "mind," "awareness," "subjectivity," "luminous," and "inner life," in this paper I am invoking a phenomenological understanding of mind associated with lived qualities of agency, experience, and meaning (see Abram 1996; Crist 1999). In philosophy this conception of mind is called "phenomenal consciousness" (see Hurley and Nudds 2006; Allen 2010). Novelist John (J. M.) Coetzee's regard of animals as "filled with being" and animal rights philosopher Tom Regan's plea for the animal as "subject-of-a-life" allude to phenomenal consciousness in more evocative and down-to-earth ways (Coetzee 1999; Regan 2001). Western canonical representations have suppressed or vitiated these rich dimensions of animals' lives: this is the target of my critique.

While it is dawning on more and more people that we are irrevocably losing biological diversity, complexity, and abundance of free beings and native nature, we still fail to recognize that these losses implicate the contraction of "species of mind" (see Allen and Bekoff 1997). Along with the obliteration of biological wealth in the sense of loss of species, subspecies, populations, ecosystems, and gene pools, the destruction of the diversity of animal minds (of modalities of aware perceiving, being, and experiencing) is impoverishing the

Earth (and ourselves) in ways we do not even begin to comprehend and can barely imagine. Such a comprehension is blocked by a history of disparaging animals that continues to cast its long shadow on the human mind.

Western intellectual traditions have shored up the belief in an essential divide between humans and animals, lending it philosophical, theological, scriptural, and (natural- and social-) scientific elaborations (Rodman 1980; Steiner 2005; Cavalieri 2006). Indeed, the dominant view of Western thought, from antiquity to the present, has been that human cognitive, character, and emotional virtues distinguish us from animals and that animals are *lacking*. Animals have been deemed as lacking (depending on historical and intellectual context) in the possession of reason, language, free will, religion, culture, morality, history, perfectibility, technology, complex emotions, self-consciousness, being, metacognition, and/or personhood. Representations of human nature, and of human-animal comparisons, have almost invariably been framed in terms of "difference." From the classical era forward, Western thought has repeatedly rehearsed the refrain of human superiority by consolidating and elaborating discourses of difference. Environmental thinker John Rodman put it memorably: there has been an "almost universal tendency," in the moral and political philosophical canon, "to assume the Differential Imperative as self-evident" (1980, 54).

Why have discourses of human-animal difference ruled Western traditions? What way of life has "the Differential Imperative" served? One obvious response to these questions is that positioning animals beneath the human realm produced a conceptual scheme that legitimated their exploitation. As Stuart Elden writes, establishing "a distinction from animals becomes a way of ordering, regulating, controlling, and exploiting them" (2006, 284). Such reasoning is cogent: by representing animals as inferior beings—as "subhuman," to cite a weird concept—they could be used, without negative sanction, for food, work, clothing, sport, amusement, experiment, and so forth, and they could be killed or displaced, without reservation, if they happened to foil human interests or be in the way. And yet when contemplated in the context of the broader relationship between human beings and the natural world, the denigration of animals has even more profound import than buttressing the use and killing of animals alone: corralling animals into a (separate-from-the-human) lower realm has arguably been critical in enabling an instrumental relation with the natural world in toto—a relationship that eventually degenerated into Nature's full-blown constitution, since the dawn of the industrial era, as a domain of "resources." Establishing a distinction from animals became a key way to stabilize the instrumentalization of the entire natural world. For if animal life had been placed on an existential par with human life—or animals

been recognized as subjects of their lives—then their ruthless exploitation and that of their homelands would have been rendered morally unfeasible. Conversely, the representational subordination of animals vastly facilitated the total liquidation of Nature.

In other words, while it seems unambiguous that the disparagement of animals enabled their subsequent exploitation, the historical connection may well have been, more fundamentally, the other way around: the relentless drive to dominate the natural world (including animals)—a drive reaching back into the earliest histories of empire—may have required that animals be categorically (in both senses of the word) demoted. But how, given that animals bear the signs of owning agency, experience, individuality, and meaningful perspective? How could they be (completely or substantially) shorn of such qualities and attributes, when the human pretheoretical understanding of animals often concedes (and at times has honored) their mindful lives?

The categorical demotion of animals was a tricky feat: it has been accomplished by the historical creation and solidification of discourses of human-animal difference, and especially through the refutation or downgrading of animals' mental lives—a central mission of such discourses. The discursive constitution of animals that excluded them from the realm of subjectivity had to trump a nontheorized, open-ended, and relationship-bound understanding of animal being. The frameworks that were elaborated served to overlay, blindside, intellectually best, and/or deride the natural human ability to discern and to intuit the inner life of animals. In the next section I discuss a seminal discourse of difference—the one that inducted, and has profoundly shaped, the modern view of animal being: the Cartesian version of the Differential Imperative. Descartes succeeded in sharply demarcating the domains of human and animal, in rendering implausible the existence of animal minds, in exulting the human as the sole terrestrial incorporator of (the rational) soul, and in promoting these ideas as authoritative representations of the natural order.

II

In the cosmology of the great chain of being, which dominated Western thought for nearly two millennia, Creation was mapped as a grand and scaled existential order manifesting God's power, goodness, intelligence, and love. Plenitude and continuity constituted its essential ingredients: the diversity of living and nonliving entities were portrayed as separated but also linked within an infinitesimal gradation. This plenitude and continuum—brimming with variety and abundance of living beings—was a hierarchical model, originating with God and his retinue of angelic beings, descending through humans, animals, plants, and minerals, and sinking all the way down to "the last dreags of things"

(quoted in Lovejoy 1976, 63). A unified model of the Creation, it was spun out of the fundamental polarity of spirit and matter: the entire cosmos stretched between these poles. The human realm was conceived as liminal: straddling spirit and matter, composed of and torn between antithetical yet also somehow fusible qualities. As Arthur Lovejoy put it in his classic work, in the great chain of being Man was "the horizon and boundary line of things corporeal and incorporeal" (1976, 79).

Within this cosmos all things putatively higher were valorized over all things putatively lower. Man flanked the realm of spirit but was also partly trapped in matter, and animals were wedged between the human and plant realms. Every level in the scale was authorized to use the entities below it: animals could use plants, plants could use minerals, and humans could use everything. Animals were especially singled out as "intended [by the divine providence] for man's use according to the order of nature" (quoted in Steiner 2005, 130). Human beings were distinguished from animals in possessing reason and language, which animals ostensibly lacked; animals were distinguished from plants in having sensory abilities and experiences. Perceptual consciousness thus separated animals from life forms below them, while they themselves were placed beneath humans in lacking reason and its affiliated states of consciousness such as self-determination and free will (Lovejoy 1976; Steiner 2005).

Descartes inherited this scheme, including its hierarchical inflexion, dualism of spirit versus matter, and predilection for the (human-animal) Differential Imperative. But Descartes renovated the metaphysics of the great chain of being in a way that further depressed the inferior lot of animals it had propounded. The great chain displayed the qualities of plenitude, continuity, and hierarchy, but Descartes chose to magnify the hierarchical aspect of Creation that served to glorify the human. The polarity between spirit and matter (across which the plenum of Creation yawned in continuous gradation) was transmuted by Descartes into the dualistic *salvus* of soul (or mind) and body—the eternal versus the perishing. This dualism was mapped specifically onto the human and animal worlds, and it diverged significantly from the preceding spirit-matter polarity in offering a discontinuous worldview in lieu of a graded scheme. Descartes's dualism exalted man for owning a "rational soul," which while well integrated into the human perishable body was also separate from it and immortal. Animals, on the other side of the divide, possessed a "corporeal soul," which was not a soul in any theological sense but a dimension of physiology that animated movement and organic function. Animals, on Descartes's innovations, became qualitatively distinct from humans, in being, like plants and other lower organisms, merely transient mortal entities. On the other hand, the possession of an everlasting soul situated the human in the ontological company of angels.

In a nutshell, Descartes reshaped but significantly reified the view that “man is godlike, animals thinglike” (Coetzee 1999, 23).

In allegiance with a legacy reaching back to classical and Neoplatonic philosophy, as well as Judeo-Christian doctrine, Descartes distinguished man by his possession of “reason.” Reason—an attribute of soul (or mind) and affiliated with language in Descartes’s thought—could not be mapped on a continuum as it might (in principle) be within a graded-chain cosmology or later from a Darwinian perspective. Being the manifest aspect of the rational soul, reason was either possessed or absent, and thought-articulating language was the criterion of its presence. Given their ostensible lack of language, animals, according to Descartes, do not act “through understanding but only from the disposition of their organs,” and thus “beasts do not have less reason than men, but no reason at all” (Descartes 1989a, 140).

Having been dispossessed of even a rudimentary rational soul, Descartes exiled animals from the realm of spirit. Their perceptual organs, which previously served to flank them beneath humans on the great chain continuum, were downgraded by Descartes as mere corporeal analogues to human perceptual organs, but implying no similarity between animals and humans in experience or awareness. Having “no reason at all,” animals could not cognitively process or interpret their perceptions and sensations, and were therefore construed as not conscious of what reaches them through their senses. Being devoid of thought, animals were deemed unable to experience their perceptions and sensations as such: their percepts were not meaningful and their various sensations did not coalesce as experiences—for example, as pain, hunger, pleasure, and so forth. “Pain,” Descartes professed, “exists only in the understanding.” There are, he added, “external movements which accompany this feeling in us; in animals it is these movements alone which occur, and not the pain in the strict sense” (Descartes 1991, 148).

Descartes delivered an unprecedented portrayal of animal existence as a sleepwalking modality. Once this picture was fabricated, similarities between human and animal behaviors—such as writhing in pain or fleeing at the sight of a predator—could be revamped through a Cartesian lens as only *apparent* similarities. Whereas human behavior was informed by and expressive of the reasoning capacity of the soul, the behavior of animals was orchestrated through corporeal mechanisms without the mediation of understanding or the experience of meaning. “The light reflected from the body of a wolf onto the eyes of a sheep moves[s] the minute fibers of the optic nerves,” Descartes ingeniously conjectured. “On reaching the brain,” he continued, this motion spreads “the animal spirits throughout the nerves in the manner necessary to precipitate the sheep’s flight” (Descartes 1989b, 144). As this passage and others in his oeuvre

reveal, Descartes’s representation of animals can be understood as a gestalt—it conveyed a theory-laden image of the animal as a wound-up living automaton: a memorable image that could lodge itself like a splinter into the human mind.

Descartes elaborated the theory of mind as an interior, invisible, and unavailable domain. To be consistent with his own reasoning, therefore, Descartes could not actually say *for sure* that animals have no inner life—he could only wager as much. “Though I regard it as established that we cannot prove there is any thought in animals, I do not think it can be proved that there is none,” he vacillated, “since the human mind does not reach into their hearts” (1991, 365). This passage has been cited as indicating that Descartes did not definitively believe that animals do not think (see Steiner 2005, chapter 6, on revisionist readings of Descartes’s views of animals). But such an interpretation fails to notice that Descartes’s equivocation (“the human mind does not reach into their hearts”) was far more insidious in its consequences, than a self-assured avowal of animals’ automaton-nature. Indeed, Descartes’s most damaging legacy about animals is not that he turned them into organic machines—which few thinkers subsequently wholly conceded and which a commonplace understanding of animals mostly declines—but that he insinuated *doubt* about the existence of their minds and, of course, about the richness of their minds. In the wake of Descartes’s full-blown privatization of the mind, one could perennially doubt one’s judgment about the minds of others and most especially of animals. In addition to implanting skepticism, that could always sabotage one’s lucid witnessing of animal subjectivity, the Cartesian gestalt of the animal-automaton might be superimposed on animal being to give rise to the uncanny sense that things in the world are, perhaps, radically different than they appear. In other words, the perennial demurral of the skeptical mindset, in conjunction with the fabricated image of the sleepwalking, merely corporeal animal, insinuated the possibility that the representation of the animal-as-automaton *might be true*. Insinuations go a longer way than brazen assertions, as indeed did Descartes’s suggestion of the possible reality of the animal-machine, which, to this day, enjoys credibility.

Descartes’s portrayal of animal being is not simply of historical interest. His thought inaugurated modern reductionist traditions regarding animal being, and his legacy of skepticism continues to hold sway. Nor is focus on Descartes intended to scapegoat a thinker who happened to hold an extremely disparaging view of animals. In fact, Descartes was not exceptional: he built his ideas on a long ancestry of narrativizing human superiority, expounding human-animal difference, and underlining animal lack. But Descartes’s singular importance concerning the modern view of animals—and therefore concerning how we treat them and their homes—lies in the fact that he was the main conduit of

a metaphysical and religious Zeitgeist of human supremacy into its modern materialist guise. By retaining the concept of "soul," Descartes remained congruous with Neoplatonic and Judeo-Christian traditions, but by producing a systematic slippage between the concepts of "soul" and "mind," and between the ideas of "rational soul" and "reason," he channeled (an even more virulent version of) the Differential Imperative into modern thought—including natural and social scientific conceptions.

Once the conceptual-pictorial meme of the animal automaton was instilled into the thought collective—the image of mechanical being lacking a conscious inner mediator and overseer—then epistemological possibilities of explaining behavior without reference to mental states became possible. Behavior could be conceptualized as either induced to occur from without or programmed to arise from within. (Or it could be the deterministic output of outer-stimulus meeting inner-program). Descartes's innovations thus prepared the conceptual territory for the frameworks of behaviorist "stimulus-response," classical ethological "fixed action patterns," behavioral-ecological "genetic programs," and mechanistically conceptualized "cognitive programs" and "neural nets." All have been aspects of explanatory theories for behavior, which, however different or even conflicting, possess in common the excision of consciousness from animal action-in-the-world.

By developing the idea that animal behavior can be understood strictly in terms of "corporeal processes," Descartes created a discursive placeholder for the development of concepts and theories of animal behavior that could actively eschew or tactfully avoid mind, while appearing to account for the production of behavior without residue. Behaviorism, which emerged over 250 years after Descartes's death (and which is still an influential school of thought), is comprehensively Cartesian—an operationalization of Descartes's premises and ideas and a disciplinary purveyor (openly or implicitly) of the animal-automaton image. Donald Griffin (2001) aptly described the majority of animal behavior scientists of the twentieth century as "inclusive behaviorists," because even those not working under its auspices acquiesced to the strictures of behaviorism in avoiding reference to mental attributes and conceding the view that mind is interior and invisible. Tellingly, the ways in which allusion to animal minds was frowned upon in the past century's behavioral sciences echoed Descartes's superciliousness: it was deemed an immature, sentimental, or merely folk inclination to see mind in animals—but serious, educated grown-ups should know better and cultivate a healthy dose of skepticism. ("There is not a preconceived opinion to which we are all more accustomed from our earliest years than the belief that dumb animals think," Descartes opined [1991, 365].)

One cannot overstate the damage that Descartes's gestalt wrought, not only

for animals who were rendered usable and killable with impunity, but for the integrity of our understanding of animal life and for a dignified human presence on Earth. Through his ideas our kin came under perennial suspicion of being vacant—devoid of agency, experiential perspective, and meaningful lives; animals became entities without intrinsically valuable existence and with scarcely a claim for consideration of their lives and homes. The modern era in which the killing and exploitation of all animals has reached staggering proportions, and the imminent collapse of biological diversity has become reality, carried forward the Cartesian legacy of refuting and doubting animal minds. The concurrence was hardly a coincidence.

III

Ever since the invention of empire, human beings have appropriated the natural world into the world of, and for, people. Over the course of centuries, and accelerating in the last 250 years, humans have continually seized the natural world for amalgamation into our ostensibly separate, all-important realm. The path of the Earth's humanization has been forged via the conceptual, enacted, and technologically mediated transfiguration of the natural world into "resources"—an industrial-age concept that, nonetheless, had been prefigured in the classical and Judeo-Christian worldviews that everything on Earth has been sanctioned or created for human use. The totalitarian scope of planetary takeover called for (and was strengthened by) the discursive dismantling of nonhuman Nature's being-for-itself in order to be turned into being-for-people. Put differently, the ontological self-integrity of the nonhuman domain had to be silenced, so that its ways-to-be-used and people's rights-to-access could stand unrivaled by immanent existential validity claims. Discursive erasure has gone hand in hand with physical destruction.

The domains of subject and object have been archetypically tied with humans and nonliving things respectively. Animals initially appeared to fall within a gray zone: neither subjects (since that would put them on a par with exulted humanity), nor nonsentient life forms or inanimate objects. But over the historical course of the escalating transformation of animals and their places into resources, in the post-Cartesian era the gray zone was abandoned in favor of a sharper demarcation between subject (human) and object (nonhuman nature). To convert, for example, fish into fisheries, forests and trees into timber, animals into livestock, wildlife into game, mountains into coal, seashores into beachfronts, rivers into hydroelectric factories, and so forth, it has been helpful, probably necessary, to represent (and subsequently experience) living beings and their homes as object-like. Transmuting the living world into a domain of resources supervenes after pushing nonhumans and their dwellings into the on-

tological space of “nothing but mere objectivity,” as Max Horkheimer and Theodor Adorno described Western culture’s schematization of Nature (1972, 9).

Among all Nature’s so-called resources, the most versatile and invaluable have been animals. If the resources of air, water, and soil appear to trump animals in importance, it is only because animals require them. In the words of The Animal Studies Group: “Almost all areas of human life are at some point or other involved in or directly dependent on killing animals” (2006, 3; see also Emel and Wolch 1998; Bekoff 2010.) But if schematizing something as a resource is achieved through its objectification, then animals present a thorny problem: because of all living beings, second only to other humans, animals most strongly resist our objectifying maneuvers. Animals are very difficult to force into the object box. “Holding their gaze,” as Barry Lopez has written, we “sense the intensity and clarity associated with the presence of a soul” (2002, 297). The numinous life of animals has always been available to nonrapacious peoples and to receptive human beings—and always been a discomfiting suspicion of the rest. Animals do not simply grace landscapes and seascapes with their stunning beauty: they electrify the world with—and, indeed, display the world as—species of mind. Nor do animals simply inhabit our houses, fields, and farms as animated bodies; they charge human dwellings with their forms of awareness. To turn animals into resources has required the kind of discursive work that suppresses their subjectivity or succeeds in casting it into doubt. Such work has been furnished in spades by Western discourses. It achieved its apogee in the Cartesian gestalt.

On this line of reasoning, then, it is far from incidental that “the question of animal mind” has been a marginalized idea, proscribed area of inquiry, and belittled plane of experience. The suppression of animal mind has been the *sine qua non* of objectifying animals and paving the modern highway to their resourceification. At pains of cognitive dissonance, the experience of animals as numinous cannot coexist with their callous slaughter and exploitation. Animals’ mode of existence thus has been, and had to be, represented in such a way that its rich dimensions could be blocked from perception. To make the point with a vivid example, most human beings cannot vivisect an animal and simultaneously allow themselves to feel into the animal’s response; something has to give. But if an animal can be seen as subhuman or suspected of being, maybe, sort-of-an-automaton, then its response to being cut open can be not-seen or shrugged off. The same applies to factory farming, industrial fishing, deforestation—to the myriad ways of killing animals and destroying their habitats. Such things can be done to animals after their subjectivity has been dismantled and their being has been reconstituted, cognitively and perceptually, as “mere objectivity.”

The recognition of animal mind subverts the project of amalgamating the natural world by introducing an insoluble quandary into the world’s resourceification. Thus the suppression of animal mind has been a key ingredient in the benighted mission of dominant civilization to colonize and tame the biosphere. If animal minds had not been erased, but animals were deferred to as beings with experiential perspectives, then turning their homes into resources—the Earth’s rivers, wetlands, soils, rocks, forests, prairies, meadows, mountains, seas, and so on—would raise insuperable dilemmas. If animals had been esteemed as tribes, then the places they live would be regarded as integral to them: for, to invoke a similar example, how can one claim to respect a people, and at the same time burn down their village? Conversely, if animals could be successfully objectified (the path taken), then objectifying the rest of the living world would be a cakewalk (as it has been). The objectification of animals has been primarily accomplished through the erasure of their mental lives. And the erasure of animal minds has produced an auspicious climate, and reinforced a deluded humanistic worldview, for the indiscriminant use of everything on Earth as a means to human ends.

What is incredible is how little we actually know about the lives of animals, yet how much people have presumed, over the course of centuries, to know about their limited or nonexistent mental abilities. The discursive frameworks that have disparaged animals, and the Differential Imperative that has informed these frameworks and infected common sense, have kept us from such knowledge. Human arrogance toward animals—gilded in cosmological, philosophical, religious, and scientific systems—has fueled human ignorance about them.

IV

Even as life scientists in the 1970s initiated the methodical documentation of the collapse of biodiversity, a shift was instigated in the study of animal behavior that would eventually pry open scientific inquiry into animal minds. In 1976, Griffin, who had already distinguished himself in the field of animal behavior, published a short book titled *The Question of Animal Awareness: Evolutionary Continuity of Mental Experience*. Up until that time—a mere thirty-five years ago—the topic of animal awareness was all but unmentionable in science, and students of animal behavior in both laboratory and field were pointedly discouraged from raising questions about mental experiences. Despite Charles Darwin’s nineteenth-century pioneering work in the field (see Darwin 1871, 1872), during most of the twentieth century the study of animal mind was effectively banned: regarded as an alleged phenomenon, and variously characterized as epistemologically unavailable, empirically nonexistent, scientifically naive, folk psychology, or wishful thinking. Given the proscriptive on the study

of animal mind, Griffin's broaching of the topic was courageous. He devoted himself to the field of cognitive ethology that he inaugurated—writing, lecturing, and mentoring many scientists for the next thirty years of his life (Crist 2008). Griffin's landmark book *Animal Minds* (2001 [first published in 1992]) is the culmination of his life's written work.

While the scientific community was markedly ambivalent about Griffin's ideas, and has only slowly extended a welcome to the study of animal minds, Griffin's 1976 book (*Question of Animal Awareness*) encouraged an overdue confrontation with the Cartesian legacy: that only *Homo sapiens* is consciously aware, while all other animals probably lead a sleepwalking existence, or are at best dimly conscious. Work in the growing field of cognitive ethology, alongside (and in alliance with) equally significant developments in environmental ethics and animal rights, are challenging the received view of an unbridgeable divide separating human and animal mental experience.² Through their cumulative pull these endeavors may eventually have the power to lift the iron curtain on the inner lives of animals, opening space for the cultivation of a new understanding—and perhaps for a radical transformation of our way of life. In the meantime, while the historical proclivity for underestimating or denying animal minds is finally being punctured, we are also finding ourselves near planet-locked in a humanized world, which looms as the ultimate materialization of the same human arrogance that has long disparaged the numinous side of animals.

Conventional worries about the present ecological predicament deplore the loss of nature's services, the depletion of natural resources, or the forfeiting of ecotourist revenues in the wake of human-caused environmental catastrophes. These concerns, however, merely echo the same human-centered mindset that has driven the destruction of the biosphere in the first place. In fact, the turning of Nature into a human asset-domain *defines* the core catastrophe: by allowing ourselves to be seduced by the instrumental framing of the world as a resource domain, we have sponsored the demolition of animals and their homes (see Foreman 2011). We are not in danger of losing, to cite a platitude, "natural capital" for present and future generations, but on the contrary, having conceptually and physically constituted the world as natural capital, we have nearly lost a living, numinous world.

What is trampled out of existence by a no-limitation civilization is a world of diverse subjectivities—a world that manifests as, and is partly created through, innumerable aware collective and individual sentient actions. In its place, we are erecting a world carved strictly by the brutal knife of human arrogance. By assuming the world is lacking in diverse forms of consciousness, human supremacy is making it so. But the animal songs, calls, trails, burrows, dens, nests,

haunts, engineering, landmarks, peregrinations, and migrations that once filled the Earth were shimmering mindscapes, not organism-molded matter. And so, alongside destroying biological kinds, natural habitats, and populations of animals, we are deleting the Earth's noumenal dimensions, elaborated through emotion, intention, understanding, perception, experience—in other words, through varieties of aware beings shaping and adorning the world-as-home. Animals are not "world-poor,"³ but both the world and our own being are rendered poor without them.

What in social theory is called "the disenchantment of the world" describes a real event well underway: it is the sociopsychological reckoning of the consciousness monoculture that humanity is unwittingly and dimly birthing. The destruction of diverse animal minds de-animates the world, making it spiritually empty—just as the forests, prairies, steppes, savannahs, freshwaters, and seas are rendered literally empty of animals. The humanized world emerging is not only depleted of ecosystems, species and subspecies, nonhuman populations, genetic diversity, and wilderness, it is the Cartesian imaginary realized. The disenchantment of the world, which Max Weber diagnosed as "the fate of our times" (1946), signifies the human soul's experience of the world made soul poor.

Our separatist regime has long been catapulting the biosphere toward the present predicament. Humanity's Earth-colonizing venture, however, was neither a necessary nor inexorable consequence of "who we are": it has been a sociocultural and historical outcome—albeit an outcome that humanity became increasingly unable to escape as people got locked into revamping the world in a way that *appeared* to reflect and reward human supremacy. Human beings treated the world as though the regime of human-animal apartheid were based on ontologically sound principles, and ended up, over time, creating a human-made ontology that appears to display just how "different" and "separate" we are.

But humanity might have chosen a different way of being: to embody the flowering of human consciousness as arising from and residing within an entangled bank of diverse life forms, and splendors of awareness, unique in the cosmos.

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Notes

1. I here echo a common critical perspective that Mary Midgley, for example, articulates as follows: "Western culture differs from most others in the breadth of destructive license which it

allows itself, and, since the seventeenth century, that license has been greatly extended" (1995, 95). I would qualify this critical focus, however, in two ways. Firstly, divisions between Western and non-Western cultures hold little if any meaning within today's globalizing world, and with respect to the West-East divide there has been substantial (material and ideational) cultural exchange between them for millennia. Secondly, my critical focus is not on Western culture as a whole, but rather on Western culture as a culture of empire, which has manifested (and can potentially manifest) among other peoples. I am indebted to Jack Forbes's insightful analysis of the rapaciousness of empire as rooted in a form of mental disease (which he calls cannibalism or the "Wetiko syndrome") that is highly contagious. In concordance with his landmark analysis, I regard the erasure and destruction of animal minds (the subject matter of this chapter) as the work of the toxic and highly contagious meme of human supremacy.

2. The relevant literature is enormous. For a small sample, in addition to literature already cited, see Singer (1985); Mitchell, Thompson, and Miles (1997); Clark (1997); McKay (1999); Smuts (2001); Kidner (2001); Bekoff, Allen, and Burghardt (2002); de Waal and Tyack (2003); Jamieson (2003); Torres (2007); Bekoff (2007); Haraway (2008); Pedersen (2010); and Balcombe (2010). 3. Martin Heidegger characterized animal being with this term. It was one of Heidegger's great blunders to have thus added his "two-cents" to the canon's human-animal Differential Imperative. I call it a blunder because his essays "The Question concerning Technology" and "The Age of the World Picture" are withering and seminal critiques of the human (especially modern) subjugation of Nature and (relatedly) of Cartesian humanism. See Elden (2006); Heidegger (1977a, 1977b).

References

- Abram, David. 1996. *The Spell of the Senses: Perception and Language in a More-Than-Human World*. New York: Pantheon Books.
- Allen, Colin. 2010. "Animal Consciousness." *Stanford Encyclopedia of Philosophy*, <http://plato.stanford.edu/archives/win2011/entries/consciousness-animal>.
- Allen, Colin, and M. Bekoff. 1997. *Species of Mind: The Philosophy and Biology of Cognitive Ethology*. Cambridge, MA: MIT Press.
- Balcombe, Jonathan. 2010. *Second Nature: The Inner Lives of Animals*. New York: Palgrave Macmillan.
- Bekoff, Marc. 2007. *The Emotional Lives of Animals*. Novato, CA: New World Library.
- . 2010. *The Animal Manifesto: Six Reasons for Expanding our Compassion Footprint*. Novato, CA: New World Library.
- Bekoff, Marc, C. Allen, and G. M. Burghardt. 2002. *The Cognitive Animal: Empirical and Theoretical Perspectives on Animal Cognition*. Cambridge, MA: MIT Press.
- Cavalieri, Paola. 2006. "The Animal Debate: A Reexamination." In *In Defense of Animals: The Second Wave*, edited by Peter Singer, 54–68. Oxford: Blackwell.
- Clark, Stephen R. L. 1997. *Animals and Their Moral Standing*. London: Routledge.
- Coetzee, J. M. 1999. *The Lives of Animals*. Princeton, NJ: Princeton University Press.
- Crist, Eileen. 1999. *Images of Animals: Anthropomorphism and Animal Mind*. Philadelphia: Temple University Press.
- . 2004. "Against the Social Construction of Nature and Wilderness." *Environmental Ethics* 26 (1): 5–24.
- . 2008. "Donald Redfield Griffin." In *New Dictionary of Scientific Biography*, Noretta Koertge, editor-in-chief, vol. 3.
- Darwin, Charles [1871] 1981. *The Descent of Man, and Selection in Relation to Sex*. Princeton, NJ: Princeton University Press.
- . [1872] 1998. *The Expression of Emotion in Man and Animals*. Oxford: Oxford University Press.
- Descartes, René. 1899a. "Discourse on the Method." In *The Philosophical Writings of Descartes*, vol. 1, translated by J. Cottingham et al. Cambridge: Cambridge University Press. First published in 1637.
- . 1998b. "Objections and Replies." In *The Philosophical Writings of Descartes*, vol. 2, translated by J. Cottingham et al. Cambridge: Cambridge University Press.
- . 1991. *The Philosophical Writings of Descartes*, vol. 3. *The Correspondence*, translated by J. Cottingham et al. Cambridge: Cambridge University Press.
- Elden, Stuart. 2006. "Heidegger's Animals." *Continental Philosophy Review* 39 (3): 273–91.
- Emel, Jody, and J. Wolch. 1998. "Witnessing the Animal Moment." In *Animal Geographies: Place, Politics, and Identity in the Nature-Culture Borderlands*, edited by J. Wolch and J. Emel, 1–24. London: Verso.
- Forbes, Jack. 2008. *Columbus and Other Cannibals: The Wetiko Disease of Exploitation, Imperialism, and Terrorism*. New York: Seven Stories Press. First published in 1978.
- Foreman, Dave. 2011. "The Arrogance of Resourceism." In *Conservation vs. Conservation*. Durango, CO: The Rewilding Institute and Ravens Eye Press.
- Griffin, Donald. 2001. *Animal Minds*. Chicago: University of Chicago Press. First published in 1992.
- Haraway, Donna. 2008. *When Species Meet*. Minneapolis: University of Minnesota Press.
- Heidegger, Martin. 1977a. "The Age of the World Picture." In *The Question Concerning Technology and Other Essays*, 115–54. New York: Harper Torchbooks. First published in 1938.
- . 1977b. "The Question concerning Technology." In *The Question concerning Technology and Other Essays*, 3–35. New York: Harper Torchbooks. First published in 1955.
- Horkheimer, Max, and T. Adorno. 1972. "The Concept of Enlightenment." In *Dialectic of Enlightenment*, 3–42. New York: Continuum. First published in 1944.
- Hurley, Susan, and M. Nudds. 2006. "The Questions of Animal Rationality: Theory and Evidence." In *Rational Animals?*, edited by S. Hurley and M. Nudds, 1–83. Oxford: Oxford University Press.
- Jamieson, Dale. 2003. *Morality's Progress: Essays on Humans, Other Animals, and the Rest of Nature*. Oxford: Oxford University Press.
- Kidner, David. 2001. *Nature and Psyche: Radical Environmentalism and the Politics of Subjectivity*. Albany: State University of New York Press.
- Lovejoy, Arthur. 1976. *The Great Chain of Being: A Study of the History of an Idea*. Cambridge, MA: Harvard University Press. First published in 1936.
- Lopez, Barry. 2002. "The Language of Animals." In *Wild Earth: Wild Ideas for a World out of Balance*, edited by T. Butler, 296–305. Minneapolis: Milkweed Editions. First published in 1998.
- McKay, Robert. 1999. "Veg(etar)animal." Unpublished conference paper. Animals in History and Culture, Bath Spa University, UK, July.
- Midgley, Mary. 1995. "Duties concerning Islands." In *Environmental Ethics*, edited by R. Elliot, 89–103. Oxford: Oxford University Press.
- Mitchell, Robert, N. Thompson, and L. Miles. 1997. *Anthropomorphism, Anecdotes, and Animals*. Albany: State University of New York Press.
- Pedersen, Helena. 2010. *Animals in Schools: Processes and Strategies in Human-Animal Education*. West Lafayette, IN: Purdue University Press.
- Regan, Tom. 2001. *Defending Animal Rights*. Urbana: University of Illinois Press.
- Rodman, John. 1980. "Paradigm Change in Political Science: An Ecological Perspective." *American Behavioral Scientist* 24 (1): 49–78.
- Sandler, Ronald, and P. Cafaro. 2005. *Environmental Virtue Ethics*. Lanham, MD: Rowman and Littlefield.
- Singer, Peter. ed. 1985. *In Defense of Animals*. New York: Perennial Library.
- Smuts, Barbara. 2001. "Encounters with Animal Minds." *Journal of Consciousness Studies* 8 (5–7): 293–309.
- Steiner, Gary. 2005. *Anthropocentrism and Its Discontents: The Moral Status of Animals in the History of Western Philosophy*. Pittsburgh: University of Pittsburgh Press.
- The Animal Studies Group. 2006. *Killing Animals*. Urbana: University of Illinois Press.
- Torres, Bob. 2007. *Making a Killing: The Political Economy of Animal Rights*. Oakland: AK Press.
- de Waal, Frans, and P. Tyack. 2003. *Animal Social Complexity: Intelligence, Culture, and Individualized Societies*. Cambridge, MA: Harvard University Press.
- Weber, Max. 1946. "Science as a Vocation." In *From Max Weber: Essays in Sociology*, edited by H. H. Gerth and C. W. Mills, 129–56. New York: Oxford University Press.