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## Animal Relatives, Difficult Relations

*T*he title of this essay points to two sets of interrelated difficulties.<sup>1</sup> Those in the first set arise chronically from our individual psychologically complex and often ambivalent relations to animals. The second set reflects the intellectually and ideologically crisscrossed connections among the various discourses currently concerned with those relations, including the movement for animal rights, ecological ethics, posthumanist theory, and such fields as primatology and evolutionary psychology. I begin with some general observations on kin and kinds—that is, relations and classifications—and then turn to the increasingly complex play of claims and counterclaims regarding the so-called species barrier.

The problem of our kinship to other animals mirrors that of our relation to other problematic beings: for example, the unborn, the mentally disabled, the drunk, or the terminally comatose—beings, that is, who are recognizably our own kind but not yet, not quite, not just now, or no longer what we readily think of as *what we ourselves are*. In all these cases, there are difficulties handling both sameness and difference, difficulties framing

the claims—either conceptual or ethical—of kinship, and, for formal philosophy, difficulties above all acknowledging just these difficulties.

*Of course* we are animals, it is said; or, to quote philosopher of ethics Bernard Williams, “The claim that we are animals is straightforwardly true”(15), the straightforwardness of the truth here deriving, it appears, from the current scheme of biological classification.<sup>2</sup> It is not always clear, however, that the classifications and distinctions of natural science—or, for that matter, vernacular ones either—should be awarded such unproblematic ontological authority.<sup>3</sup> When the issue is our responsibility to others, questions about limits are inevitably complicated by questions about *sorts*, and the relation between them broaches a domain we might call ethical taxonomy. Should we, for example, have care for dogs, cats, cows, and horses but not birds, snakes, or butterflies? For leopards and walruses but not lobsters or oysters? For all these, but not wasps, ticks, or lice? Or for these, too, but not microbes or viruses?<sup>4</sup> Once the straightforward truth of our human distinctiveness is unsettled by the straightforward truth of our animal identity, there is no point, or at least no more obviously *natural* point, beyond which the claims of our kinship with other creatures—or, indeed, beings of any kind—could not be extended; nor, by the same token, is there any grouping of creatures, at least no more obviously *rational* grouping, to which such claims might not be confined.

My brief rehearsal, just above, of the chain of animate being was meant to evoke not only the variety of zoological kinds but also the disparateness of the domains in which we encounter them—on the streets and in our homes, on the farm and in the wild, at race tracks and circuses, in natural history museums and restaurants, beneath microscopes and in petri dishes. These juxtapositions are somewhat jarring, but this is to be expected. Each of these domains is likely to mark, for each of us, a specific history of experiential relations to the animal kinds involved (as provisioners of, among other things, food, clothing, transportation, energy, company, creative inspiration, and moral example; but also as parasites, predators, and pathogens) and, with each such history, a repertoire of more or less specific attitudes and impulses. The impulses in question are deeply corporeal and, accordingly, when disturbed by sudden or dramatic domain crossings (as in the juxtapositions above), likely to elicit that complex—jointly psychic and bodily—set of responses we call *cognitive dissonance*: that is, the sense of serious disorder or wrongness—and, with it, sensations of alarm, vertigo, or revulsion—that we experience when deeply

ingrained cognitive norms are unexpectedly violated. These responses are sometimes invoked by ethical theorists as our intuitive sense of outrage at what is thereby supposedly revealed as inherently improper or unjust: for example, the production of human embryos by cloning,<sup>5</sup> eating the flesh of dead animals, cutting open frogs, dogs, or human beings for medical instruction, or the spectacle of two grown men in erotic embrace. This series is, of course, also somewhat jarring and, it might be objected, flagrantly indiscriminate. But I don't think so. For my point is not that these possibilities are all equally benign and acceptable or equally monstrous and unacceptable (I certainly don't see them that way myself), but that, with regard to the normative classification and treatment of other beings, it is hard to say where our individual judgments of impropriety and injustice start and stop being what we call rational or, put the other way around, where they start and stop reflecting the features of our individual histories and perhaps individual temperaments.

It is clear, I think, that all current conceptions and discourses of animals are marked by what one historian of taxonomy calls, in a slightly different connection, a "polyphony" of classifications.<sup>6</sup> Problems arise because, in this domain of experience as elsewhere, categories are not abstract, neutral, inert containers, but shifting tendencies to perceive and respond in some ways rather than others. Thus, in distinguishing a being as "wild beast," "domestic pet," "livestock," or "fellow creature," we tap into a set of attitudes and expectations that are also bodily inclinations: for example, to approach or flee, capture or rescue, eat or feed it. These inclinations, complex enough in themselves, are also involved in our individual categorical norms: that is, in our sense of what, given a being of some kind, is the proper (natural, fitting) or improper (absurd, morally repulsive) way to feel about and deal with it. The significant variability of such norms is reflected in the cultural diversity of animal classifications and related practices.<sup>7</sup> As anthropologists never tire of reminding us, what one group eats, another worships (or worships *and* eats), and so forth. It is also reflected in the continuous possibility of the *reclassification* of organisms and other beings and, accordingly, the transformation of related norms, attitudes, and practices—a possibility that may serve as either (assuming we speak here of two things) strategy of indoctrination or instrument of enlightenment. Thus, fetuses may be cast as children, children as vermin, vermin as food sources, and food sources as fellow beings.

This last point can be spelled out a bit further. Just as opponents of abortion see, and strive to make others see, fetuses as babies and

abortion, accordingly, as infanticide, so animal rights advocates see, and strive to make others see, cows, rabbits, mice, monkeys, rats, and seals as suffering fellow-creatures and, thereby, the hunting, caging, killing, selling, wearing, riding, or eating of them as oppression, murder, enslavement, exploitation, or sacrifice. At the polemical center of both movements are efforts to realign familiar classifications or effect analogous new ones and to draw, thereby, on previously established intuitions of propriety, rightness, and wrongness. In both cases, these efforts depend as well on widely affirmed or assumed principles of ethical parity: for example, *treat likes alike* (thus, protect infants from harm, whether born or unborn, human- or fin-footed). Conversely, the counterpolemics of feminists, animal farmers, and scientists defending, respectively, abortion, meat-eating, or the use of mice and rabbits in research, consist largely of efforts to restore familiar distinctions (or reinforce alternative classifications) and to evoke, accordingly, more favorable repertoires of intuitions—supplemented once again by what appear to be relevant principles of ethical parity: for example, *differences make a difference; do not treat as equal what is unequal*.

How the relevant cognitive/ethical norms and intuitions are formed, stabilized, and transformed is a matter of some interest here, though also a matter of contention among contemporary anthropologists, psychologists, and philosophers of mind.<sup>8</sup> Individual histories of interaction and particular cultural practices, including linguistic ones, are, of course, involved, but so also, it appears, are certain evolved, endemic tendencies: for example, a tendency to respond differentially to creatures with frontal versus dorsal eye-placement or to creatures that move bipedally rather than slither, scurry, swim, or fly. Insofar as such tendencies reflect the evolutionary history of our own species, including the sorts of creatures with which our animal ancestors interacted (for better or worse, practically measured), some of our most profoundly intuitive responses to other animals, in this regard as others, reflect (for better or worse, ethically measured) our own animality.

Given the multiplicity and variability of the repertoires of responses we build up with respect to the relevant categories (animal, human, mammal, primate, beast, brute, living being, and so forth), it seems inevitable that there will be clashes and conflicts within and between us in our ideas of propriety, naturalness, fitness, and justice and, conversely, of what constitutes absurdity, cruelty, inhumanity, or injustice

in our attitudes toward and treatment of other animals. The question is whether efforts to resolve such conflicts by appeals to putatively objective categories, rational distinctions, or universal norms can avoid perpetuating, in *their* operations, the sorts of conceptual and social violence familiar from comparable axiological efforts in other spheres.<sup>9</sup>

Two further, related points may be added here. First, among the most extensively documented sites of continuity between humans and other animal species is that of *sociality* itself, including the ability to distinguish family members from non-kin and members of one's own social group from strangers, newcomers, and outsiders. In responding strongly to members of certain animal species (for example, mammals) as kin or kind and, conversely, to members of other species (for example, snakes, insects, and other invertebrates) as alien or remote, we exhibit capacities and rehearse impulses that are, in some of their origins and operations, extremely primitive.

Second, the imaginative intimacy of human with animal in myth, totem, fable, and fantasy is no less profound in origin or, I think, significant in effect than the forms of kinship indicated by the observations of ethology or deductions of moral theory. Certainly, the sources of our concepts of and responses to animals are not confined to what we might think of as our actual, empirical encounters with them. Thus, phoenix and unicorn no less than parrot or impala find quarter in the psychic bestiary, which has also been furnished, especially since Darwin and Freud, by an extensive literary phenomenology of animals. One thinks here of the vivid animal evocations of Hopkins and Rilke, Lawrence and Hemingway, Faulkner and Moore.<sup>10</sup> A recurrent topos among these and other (largely modernist) writers is what could be called *the ontological thrill* of the animal: that is, the sense of a sudden intensification—quickening or thickening—of Being, as experienced, for example, at the sighting of a large bird or animal (hawk, deer, bear, or snake) in the wild. Comparable sensations attend the hunting and indeed (or especially) killing of animals, as well as riding them, wearing their skins, or consuming them as food, and are also involved in fantasies of coupling with, being, or becoming them.<sup>11</sup> It would not be a simple matter, I think, to disentangle these primitive sensations and animistic identifications from the impulses that constitute our most intellectually subtle and ethically potent intuitions of animals or, thereby, our most reflective and respectful relations with them.

I turn now to the intellectual terrain on which these psychologically complex and often emotionally and ethically ambivalent relations to animals are currently played out, focusing here on the issue of the continuity or discontinuity between humans and other species.

To begin at a relatively simple entry point, there is, of course, the argument for continuity from shared DNA—98.5 percent, by the latest count, in the case of humans and chimpanzees—and also from recent fieldwork in primatology: Jane Goodall's observations of tool-use among apes, Sue Savage-Rumbaugh's accounts of the evidently spontaneous acquisition of language by bonobo chimps, Frans de Waal's studies of social and arguably protoethical behavior (food sharing, peacemaking, and so forth) in various primates, and reports by these and other ethologists of the nongenetic and arguably protocultural transmission of skills and information among members of other species (see also Cheney and Seyfarth). The tendency of all these studies—and of others that examine the complexity of the emergence of many so-called instinctive behaviors in birds and other animals (birdsong, migration patterns, and so forth) (Bateson)—is to challenge or at least complicate classic humanistic accounts of the crucial difference between humans and other species.

It must be added, however, that weighty as the DNA figure is, the species barrier, as biologically defined, appears to hold.<sup>12</sup> That is, bestiality in the sexual sense, however fertile in myth or dream, has no documented issue. To be sure, the possibility, now as ever, haunts the imagination, at least the *human* imagination (who knows the dreams of dogs or sheep?): for example, in Greek myth, where access to godhead is mediated by union with animals (or perhaps it is the other way around),<sup>15</sup> or in the recent film of H. G. Wells's story, *The Island of Dr. Moreau*, where a union of moralized Darwinian fantasy and late-twentieth-century visual technology issues in some highly engaging, though ultimately melancholy, progeny.<sup>14</sup> Nevertheless, it seems to be the case that man-beast relations are not literally reproductive.

Moreover, work by other primatologists and ethologists—or, indeed, the same ones—casts doubt on a number of familiar assumptions regarding the identity, continuity, or even just comparability of various human and animal capacities. For example, Terrence Deacon, a biological anthropologist and brain researcher with no apparent professional or ideological investments in an insuperable species barrier, makes a good case for the reciprocally selective co-evolution of key features of (a) human sociality and communication and (b) the increasingly distinctive

size, structure, and operations of the human brain and, accordingly, for the claim that symbolic communication (duly defined and explained) and related social and cognitive skills emerge reliably only in human communities—human *communities*, not human *beings*, which honors the bonobos' achievements even as it helps account for their rarity.<sup>15</sup> Similarly, Michael Tomasello, a developmental psychologist who has collaborated with Savage-Rumbaugh, documents subtle but developmentally crucial differences in certain types of behavior in apes and human children that are generally taken to be the same in both (for example, so-called imitative behavior) and that have led other psychologists to the dubious attribution of human-like capacities (for example, intentional deception) to apes.<sup>16</sup>

These studies do not, of course, cancel each other out—not, that is, unless one is keeping very crude tallies (“here’s one for the chimps, there’s one for the humans,” and so on). They do indicate, however, that, with respect to the sorts of capacities commonly invoked in these debates (language, culture, social learning, a moral sense, rationality, deception, and so forth), the question of the continuity of humans and other species cannot be posed as a simple alternative or even as a simple matter of degree. In some ways, by some calculations, with regard to some traits, the permeability of the species barrier seems increasingly manifest; in other ways, by other measures, with regard to other tendencies and capacities, significant disjunctions between humans and other animals are being documented and incorporated into biological and behavioral theory. Nor, for the same reasons, can the ethical issues raised by animal rights advocates or posthumanist theory be decided by current findings in genetics or ethology. There are too many dimensions of potential identity and/or distinctiveness and, of more fundamental significance, there is no way of assessing their relative importance that does not risk begging the very questions that such empirical findings are supposed to resolve.

An issue of particular interest here is which species do and do not possess (or exhibit) “culture,” controversies over which illustrate and exacerbate the chronically perplexed relations between empirical science and rationalist/humanist moral theory. Thus, posthumanist Cary Wolfe, though cautioning against “naturalism in ethics,” cites Goodall’s observations of chimpanzee tool-use to challenge the claim by humanist Luc Ferry of a uniquely human capacity for culture (C. Wolfe, *Animal* 21–43),<sup>17</sup> while humanist Alan Wolfe challenges naturalist J. T. Bonner’s claim that culture emerged with prehuman primates by noting that the argument depends

on a dubiously ad hoc and otherwise irrelevant definition of culture as any nongenetic transmission of behavior (A. Wolfe 36–40). At the same time, evolutionary psychologists Leda Cosmides and John Tooby deny the existence of culture so defined (that is, as the non-genetic transmission of behavior) among humans or any other species because, they maintain, *all* significant transmission of behavior is genetically based.<sup>18</sup> I return below to the problematic claims of evolutionary psychology and the difficult relations indicated here between classic humanism and various post-, anti-, and nonhumanisms. First, however, we should take note of the perplexed issue of animal minds.

Since the beginning of the twentieth century and especially with the ascendance of positivism in psychology and behaviorism in the study of animals, claims that animals can think, have consciousness, or are self-aware have elicited routine charges of “anthropomorphism,” meaning, in these instances, the gratuitous attribution to members of other species of so-called higher mental processes (reasoning, deliberation, calculation, and so forth) to account for behaviors that could be explained (or so the charge implies) by simpler mechanisms: for example, by instincts, conditioned reflexes, rote or trial-and-error learning, unconscious prompting by trainers, or the physical effects of chemical traces.<sup>19</sup> In recent years, however, claims about the capacities of animals for thinking and for relatively complex forms of feeling and intentionality (guilt, blame, remorse, self-sacrifice, deception, revenge, and so forth; the nice technical term here is “anthropopathism”) have had a more receptive hearing, especially in fields such as cognitive psychology that have developed in close association with traditional rationalist/intentionalist/representationalist philosophy of mind.<sup>20</sup> Thus, a recent article argues for the propriety of ascribing higher mental processes, specifically as described by such philosophers of mind as John Searle and Roger Scruton, to at least the sorts of animals with which (or, perhaps, with *whom*) we live and work (Cox and Ashford).

Such arguments, however, can backfire in curious ways; for, in lowering the species barrier, we open a two-way street. Thus, the claim of a continuity between animals and humans with regard to higher mental processes makes it possible to ask whether comparable charges of “anthropomorphism” (in the sense given above) could not be leveled against traditional rationalist interpretations of *human* actions—which is, of course, what behaviorism always maintained. The plausibility of such reverse charges (that is, that explanations of human behavior in terms



of deliberations, interior representations, and so forth, introduce gratuitously rational processes and mentalistic concepts) is strengthened by recent work in robotics, where relatively simple mobile machines “learn” to negotiate their environments successfully without preprogramming, calculations, or interior representations of any kind and, in so doing, exhibit what appear to be purposive and quite human- or animal- (or at least bug-) like behaviors (see Brooks). There appears, in other words, no clear tendency in contemporary cognitive research to validate the claims of one side over the other in the debate between continuists and discontinuists with regard to “higher mental process,” and a victory via one demonstration may be overturned in another or turned into a defeat from another perspective.

Contrary to some animal rights advocates, I do not believe that parity of reasoning forbids any difference in the ways we interpret the behavior of humans and that of other animals, just as I do not believe that ethical parity requires uniformity in our practical treatment of each. I would suggest, however, that once we admit the propriety of anthropomorphizing animals at least some of the time, it becomes harder to see why we should not accept the propriety of naturalizing humans *at least some of the time*. The latter possibility, as reflected in the thought of, among others, Machiavelli, la Mettrie, Spinoza, Nietzsche, Freud, and Skinner, has been recurrently denounced as atheistic, materialistic, reductive, cynical, and/or sinister, and strenuous resistance to it continues not only to be pressed in humanistic thought, literary and philosophical as well as explicitly theological, but virtually to define it. Such reactions recur in current responses by philosophers and other academics and intellectuals, explicitly humanistic and otherwise, to the claims of evolutionary psychology (that is, updated sociobiology), but often, as shall be seen below, in quite ideologically tangled ways.

In his book, *How the Mind Works*, evolutionary psychologist Steven Pinker introduces a resolutely naturalistic account of human sexual relations with a double negative that sharpens and secures his wanted emphasis: “The human mating system is not like any other animal’s. But that does not mean it escapes the laws governing mating systems, which have been documented in hundreds of species.” Reinforcing the emphasis through a determined fusion of idioms, Pinker continues: “Any gene predisposing a male to be cuckolded, or a female to receive less paternal

help than her neighbors, would quickly be tossed from the gene pool. Any gene that allowed a male to impregnate all the females, or a female to bear the most indulged offspring of the best male, would quickly take over" (467). Here as elsewhere in the popular sociobiological literature, dubious subsumptions of the human by the pan-zoological are mediated by the casual conjunction of, on the one hand, technical and ostensibly generic (that is, non-species-specific) terms such as "male," "female," and "gene pool" with, on the other hand, vernacular terms such as "cuckolded," "neighbors," and "indulged offspring" that evoke familiar human situations and attitudes. Thus Pinker's account continues:

*What kind of animal is Homo sapiens? We are mammals, so a woman's minimal parental investment is much larger than a man's. She contributes nine months of pregnancy and (in a natural [sic] environment) two to four years of nursing. He contributes a few minutes of sex and a teaspoon [poignant human detail] of semen [ . . . ]. These facts of life have never changed [ . . . ]. A part of the male mind [ . . . ] should want a variety of sexual partners [ . . . ]. Any bartender or grandmother you ask would say [ . . . ]. (468–69)*

and so forth.

It is, of course, just such accounts that evoke from traditional humanists the most energetic affirmations of a crucial difference between humans and other animals. I will turn to these shortly but would note, first, a significant element in the theoretical framework of evolutionary psychology that complicates its intellectual profile and distinguishes it from first-generation sociobiology, namely, its supplementing the latter's familiar adaptationist accounts of human behavior with the more recently developed computational model of mind. The central idea here is that the human mind, like an artifactual computer, is an information-processing device "engineered" (in this case by natural selection, represented as a quasi-purposive quasi agent) to solve environmentally posed problems by performing operations on symbols in accord with "hardwired" (in this case innate, species-wide, genetically transmitted) rules. Like the narrowly adaptationist accounts of human behavior of sociobiology, the computational model of mind and its specific appropriations in evolutionary psychology are seen as problematic by many theorists in the relevant fields: that is, evolutionary biology, genetics, neuroscience, computational theory, and artificial intelligence.<sup>21</sup> What makes that model of mind signifi-

cant in the present context, however, is that, in invoking and promoting it, evolutionary psychologists are led to stress the *distinctiveness* of human cognitive capacities in contrast to those of other animals.

Thus we find the following in Pinker:

*Some authors are militant that humans are barely different from chimpanzees and that any focus on specifically human talents is arrogant chauvinism and tantamount to creationism [ . . . ].<sup>22</sup> We are naked [ . . . ] apes that speak, but we also have minds that differ considerably from those of apes. The outside brain of Homo sapiens sapiens is, by any standard, an extraordinary adaptation. It has allowed us to inhabit every ecosystem on earth, reshape the planet, walk on the moon, and discover the secrets of the physical universe. Chimpanzees, for all their vaunted intelligence, are a threatened species clinging to a few patches of forest and living as they did millions of years ago [ . . . ]. We should not be surprised to discover impressive new cognitive abilities in humans, language being just the most obvious one. (40–41)<sup>23</sup>*

Pinker's catalog of distinctive human achievements, which omits mention of any artistic, philosophical, or—aside from technology—other cultural accomplishments, will strike many readers as distinctly lopsided as well as otherwise objectionable.<sup>24</sup> The idea that the highest reaches of primate intelligence are exhibited in feats of ecological expansion and technology (“inhabit every ecosystem [ . . . ] reshape the planet, walk on the moon,” and so forth) is altogether consistent, however, with a conception of the human mind as a computational mechanism designed to solve environmentally posed problems *and* a conception of art, philosophy, and other cultural activities as, at best, secondary and superficial elements of the conduct and conditions of human life. What is especially notable here is that the definitive conjunction of these two ideas in evolutionary psychology yields a view of human beings as *absolutely continuous* with other animals with respect to social and sexual behavior and *absolutely discontinuous* from them with respect to cognition. To judge from the current vogue of evolutionary psychology among members of the educated public and the ever increasing number of popular publications applying its analyses to an ever widening range of human practices, from rape and infanticide to landscape painting and Romantic poetry,<sup>25</sup> this is a settlement of the question of our kinship with other animals (and characterization of humanity: that is, as

beasts in our social and sexual behavior and computers in how we think) that currently appeals to a great many people.

But, of course, it does not appeal to everyone. On the contrary, explanations of human actions, motives, emotions, and mental life in terms of mammalian reproductive strategies and mechanical computations appear absurdly shallow, callow, oversimplified, or irrelevant to audiences of many sorts and elicit from traditional humanists renewed affirmations of a crucial difference between humans and both animals and machines: for example, Alan Wolfe's *The Human Difference*. Significantly, however, Wolfe's strenuous defense of a uniquely human domain of being—and, with it, a special domain of knowledge—is directed not only against the naturalizing, mechanizing claims of sociobiology and artificial intelligence *and* the species-egalitarian arguments of animal rights advocates, but also against what he sees as the “nihilistic” antihumanism of “postmodern” thought. “Postmodernism,” along with Deep Ecology, ecofeminism, and the movement for animal rights, is also the featured target of French philosopher Luc Ferry, who argues that all these developments are regressive repudiations of the classic humanistic principles and related emancipatory ideals of the French Enlightenment. “Postmodernists” are also central objects of scorn in the work of sociobiologists themselves, but here in company with “humanists” per se (along with feminists and emancipatory-minded persons of any sort) and in contrast to what are represented as duly fact-knowing, fact-facing scientists.<sup>26</sup>

Clearly, the issue of our kinship with animals produces strange bedfellows, joining those commonly and otherwise adversaries, setting at odds those commonly and otherwise allies, and revealing intellectual commitments, tastes, and aversions that are evidently powerful but otherwise obscured. An especially bemusing reconfiguration of this kind appears in the conceptual connections and, in some cases, shared political orientation between, on the one hand, *ecological ethicism*, as embodied in the animal rights movement, ecofeminism, radical environmentalism, and ecology-minded moral theory, and, on the other hand, *scientific and philosophical naturalism*, as embodied in, among other projects, sociobiology. What both positions have in common is the idea of a single natural order, which, in the case of ecological ethics, joins human beings with all other forms of life and ultimately “all of nature” and, in the case of philosophical or scientific naturalism, unites us with all other organisms, ultimately all physical phenomena, and thus again, but in a different sense or from a different perspective, “all of nature.”

For ecological ethics, this ontological unity implies a *moral* imperative to extend our regard for the welfare of fellow human beings to other animals, other living beings, and, in some arguments, to all other *beings*, living and sentient or otherwise. Thus John Llewelyn argues, by way of Martin Heidegger and Emanuel Levinas, that we have moral responsibilities to all things that “have need of us” (245–77). The major concrete examples of such things offered by Llewelyn are trees cut down for paper used in pulp magazines of questionable intellectual value, mountains about to be turned into ski slopes by enterprising developers, and large rocks outside Edinburgh (where he is professor of philosophy) defaced by, it appears, local vandals. Llewelyn acknowledges, but does not address, the piquant problems presented by any attempt to work out this moral imperative in terms of specific actions or policies, including policies with regard to human beings of apparently different classes and tastes.

Correspondingly for scientific and philosophical naturalism, the posited fundamental unity of nature implies an *epistemic* imperative to integrate accounts of human behavior with current scientific understandings of all other *natural phenomena*, from the behavior of animals to that of quantum particles. If, as just suggested, the moral imperatives of ecological ethics can appear logically, practically, or (indeed) ethically dubious, the epistemic imperatives of naturalism can certainly translate, as in Pinker’s case, into a vulgar eagerness to transfer explanations as rawly as possible from barnyard and jungle to contemporary human societies. The difficulties indicated here are not, in my view, intrinsic either to a strong concern for the natural environment (and/or respect for life) or to a conviction of the intellectual interest of naturalized accounts of human behavior. They may be intrinsic, however, to any ethical or epistemic project insofar as it conceives itself in all-trumping—exclusivist, supremacist, and/or universalist—terms.

Some of the ideological and political perplexities that emerge when the affinities and divergences indicated above are played out institutionally are reflected in John Dupré’s *The Disorder of Things*. Dupré, himself a philosopher of biology, laments what he sees in his field as a “baleful [. . .] reverence for the products of science verging often on the obsequious” (13), as exemplified by “the current move to ‘naturalize’ epistemology by appeals to so-called cognitive science; the project of replacing philosophy of mind and apparently the mental with neurobiology; and in ethics, the idea that the speculations of sociobiologists might tell us something about how we should live” (268n12). Dupré’s defense, accord-

ingly, of a crucial distinction between science and philosophy echoes the defense by Alan Wolfe of a crucial difference and proper disciplinary barrier between the natural and the social (or “human”) sciences; and both defenses echo, assume, and appeal to the species barrier, that is, to the classic humanistic idea of an essential distinction between humans and other animals. Conversely, but also quite consistently, Edward O. Wilson, founder of sociobiology (though also, as it happens, a strenuous environmental activist [see Wilson, *Biodiversity* and *Diversity of Life*]), invokes the idea of a single natural order to argue for a dissolution of all disciplinary barriers and an integration of existing fields of knowledge along lines that would put Dupré, Alan Wolfe, Cary Wolfe, John Llewelyn, Bernard Williams, and many readers of this article out of business: that is, as the subsumption and absorption of philosophy, the social sciences, and the humanities disciplines by a single *super* natural science<sup>27</sup> and, thereby, a determined repudiation of the obsolete and, Wilson maintains, essentially theological distinction between humans and other animals.<sup>28</sup>

Well . . . where does that leave us? Who is friend, who enemy here? Which distinctions do we wish to preserve and which to see dissolved? And are we sure, in all this, that we know—or agree—who “we” are?

Such questions cannot be answered simply or finally and, in a sense, cannot be answered at all. Rather, they restate the fundamental difficulties involved in any attempt to determine in a formally principled or univocal way—whether scientific or philosophical, naturalistic or humanistic—our relations to other creatures. This is not, in my view, a despairing observation. On the contrary, what it indicates is the necessary openness of these questions to ongoing address. When all the arithmetic is a priori and the conclusions all foregone, there is no intellectual or ethical activity at all, just the animation (so to speak) of a set of mechanical (so to speak) procedures.<sup>29</sup> In operating without fixed or formal principles, one is confronted, of course, with the need for continuous attention and responsiveness: for investigating and registering, remembering and imagining, comparing and assessing, and deciding under conditions of essential uncertainty and, in a sense, incoherence.<sup>30</sup> These requirements, however, could be seen to constitute the very activity of responsible reflection, to define the very conditions of what we—some of us, anyway—call ethical judgment and action.

A final word, accordingly, on animal ethics. Because of the types of sociality that human beings share with most other primates, our attitudes and behavior toward members of our own and other species—including our intuitive sense of what (or who) can and cannot be sold, beaten, killed, or eaten—are shaped and sustained by, among other things, the example and approval or disapproval of other people, at least those we see as our own kind. The distaste that some of us (myself included) have come to feel for such once well-established practices as eating meat or casually destroying animals in scientific experimentation is, I believe, as much the product of social example and sanctions of these kinds as of critical reflection per se. But so also was our previous taste or tolerance for such now rejected practices. In other words, our specifically ethical impulses and attitudes toward animals seem to draw force, for better or for worse, from aspects of our specific hominid nature, just as our more general impulses, attitudes, and practices seem to draw force—again, for better or for worse—from aspects of our more general animal nature.

*For better or for worse:* that necessarily ambivalent, contingent assessment has been a key point all along. It is clear, I think, that our biological kinship with other animals shapes and shadows some of our most compelling appetites and anxieties, exalting and destructive impulses. The recognition of and response to our own animality in these respects is an old story, told many times over in fable and sermon and still being told in discourses from neuroanatomy to psychoanalysis. We have certainly not, as a species, society, or civilization, transcended or determined that we want to or *could* transcend our psychic and corporeal kinship to other creatures. Nor have we resolved the conceptual and ethical problems presented by that complex, ambivalent connection: neither in the established traditions of Western philosophy nor, it appears, in even the most pertinent and elaborated reflections of non-Western traditions. It may be that the most distinctive contribution of contemporary (or “postmodern”) thought in this regard has been to allow the inevitability and power of these ambivalences to be acknowledged as such and also to allow—or to insist on—their entry into whatever ethics we devise. As “posthumanists,” we have begun to chart the costs and limits of the classic effort to maintain an essential species barrier and have sought to diminish those costs and to press against those limits in our own conceptual and other practices. The *telos*—aim or endpoint—of these developments is conceived here, however, not as the universal recognition of a single, comprehensive order of Nature or Being but, rather, as an increasingly rich and operative appreciation

of our irreducibly multiple and variable, complexly valenced, infinitely reconfigurable relations with other animals, including each other.

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## Notes

- 1 This article is an expanded version of a paper initially presented at the 1998 convention of the Modern Language Association at a session arranged by the Division on Philosophical Approaches to Literature.
- 2 Williams observes: “We are a kind of animal in the same way that any other species is a kind of animal—we are, for instance, a kind of primate” (15).
- 3 On the problematic status of the species concept in contemporary biology, see Ereshefsky and Mayr 315–34. Williams’s central concern in the essay is not to establish the ontology of human beings as such but, having acknowledged the biological classification, to affirm the values of a cultivated humanism and the associated projects of analytic/rationalist philosophy in the face of such arguably rival enterprises as cognitive science, cultural studies, and posthumanist ethics. The essay concludes with a defense of “a humanistic account of the human species,” distrust of which Williams identifies with “a distrust of [. . .], despair at [. . .] or hatred of” the “quality” of “humanity” (22).
- 4 Philosopher and animal rights advocate Tom Regan cites evolutionary theory as his authority for drawing an ethically freighted line between “mammalian animals” and all other beings (405n1). Given, however, his explicit criterion for moral status, namely, being “the-subject-of-a-life,” it is hard to see what warrant he could find in contemporary evolutionary theory for drawing the line at just that point.
- 5 Current public opposition to such a procedure is described by Gilbert C. Meilaender, professor of Christian ethics at Valparaiso University and member of a national panel of bioethical advisors, as “a natural repulsion” (qtd. in Stolberg).
- 6 See Ritvo. One recalls that Borges’s parody of systematic knowledge features an animal taxonomy—“On those remote pages it is written that animals are divided into (a) those that belong to the Emperor, (b) embalmed ones, (c) those that are trained, (d) suckling pigs, (e) mermaids, (f) fabulous ones, (g) stray dogs,” and so forth (108)—and that the list was rehearsed to comparable ends by Foucault at the beginning of *The Order of Things*.
- 7 For examples and discussion of vernacular animal classifications in various cultures, see Lakoff 46–52.
- 8 See Lakoff. The notion of “prototypes,” originally developed by psychologist Eleanor Rosch and



- elaborated in Lakoff, is especially pertinent here. Subjects report that certain members of a given category appear to be more representative of it than others. Thus, lions are seen as more typical of “animals” than vampire bats, robins as more truly “birds” than ostriches, and so forth. Lakoff observes that the internal structure of such basic-level categories as *chair*, *animal*, and *bird* apparently “depend[s] not on objects themselves [. . .] but on the way people interact with objects: the way they perceive them, image them, organize information about them, and behave toward them with their bodies” (50–51).
- 9 See Smith, *Contingencies and Belief*, for the problematic operations of formal axiology in, respectively, aesthetics and epistemology.
- 10 See, for example, William Faulkner, “The Bear,” G. M. Hopkins, “The Windhover,” D. H. Lawrence, “Snake” and “The Fox,” Marianne Moore, “The Elephants,” and R. M. Rilke, “The Panther.” One might also note here the multiple animal evocations of popular culture, from children’s cartoons to corporate logos.
- 11 See Cixous and Deleuze and Guattari. For some striking images in contemporary visual art, see Baker, “What Does Becoming-Animal Look Like?”
- 12 Reproductive isolation, along with shared physiological features and presumed common phylogenetic descent, remains a major criterion for identifying and distinguishing biological species, though contemporary taxonomists acknowledge that the groupings yielded by these characteristics do not always coincide (see Ereshefsky).
- 13 For a sophisticated contemporary interpretation, see Calasso.
- 14 For other recent examples of imagined man-beast unions, see Baker, “Sloughing” and “What Does Becoming-Animal,” and Høeg.
- 15 For an up-to-date account of the perennial idea of language as distinguishing the human from the animal, see C. Wolfe, *Animal* 44–94. For a strong critique of the idea and its legacy in contemporary linguistics, see Savage-Rumbaugh et al. 75–138.
- 16 See Tomasello et al. 1688–705. On the idea of dissimulation as the mark of the human, see Derrida, “And Say.”
- 17 C. Wolfe seeks to formulate an explicitly nonhumanist but also emphatically nonnaturalist and nonempiricist principle for the treatment of animals. “Taking account of the ethical relevance of ethologists like Goodall,” he writes, “*does not mean committing ourselves to naturalism in ethics*” (*Animals* 42, emphasis in text); nor, he continues, need we “cling to any empiricist notion about what Goodall or anyone else has discovered about non-human animals to insist that when our generally agreed-upon markers for ethical consideration are observed in species other than *Homo sapiens*, we are obliged to take them into account equally and to respect them accordingly.” Wolfe explains his argument here as “amount[ing] to nothing more than taking the humanist conceptualization of the problem at its word [that is, the idea that humans are uniquely ethical subjects because they possess certain presumptively distinctive features] and being rigorous about it,” his aim being to show that humanism “must

- generate its own deconstruction” when thus rigorously pursued (42). It could be suggested, however, that “being rigorous about it” is precisely what creates the greatest conceptual and ethical difficulties, whether “it” (the subject of that rigor) is Ferry’s humanism, Singer’s utilitarianism (also examined by Wolfe, *Animal* 33–36), or any other formal doctrine—including Wolfe’s own posthumanism insofar as it frames itself as an absolute principle.
- 18 The term *culture*, they argue, is obsolete, being properly replaced (along with the idea of learning) by the “inferential reconstruction” of “information” and “rules” by the individual mind, based on innate computational mechanisms and hardwired a priori knowledge (Cosmides and Tooby 117–25).
- 19 An early proponent of such claims—and object of such charges—was George Romanes. For a good account, see Leahey 251–53. The classic statement of principled anti-anthropomorphism was formulated in 1894 by comparative psychologist C. Lloyd Morgan. For discussion, see Sober.
- 20 See esp. Griffin. For an overview of more recent developments, see Ristau. For a biologically well-informed analysis of the general issue, including a critique of the tendency among cognitive scientists and philosophers of mind to affirm a rigorous biological naturalism while maintaining a sharp distinction between the cognitive operations of humans and those of other organisms, see Sheets-Johnstone.
- 21 The classic critique of the limits of adaptationist scenarios is Gould and Lewontin. For more recent critiques, see Griffiths,
- “From Adaptive,” and Richardson. For critiques of the computational model of mind, see van Gelder and the introduction and articles in van Gelder and Port. For related discussion, see Smith, “Sewing Up the Mind.”
- 22 Pinker’s allusion here (he gives no citations) is most obviously to animal rights advocates but, as the context makes clear, also to scientists and philosophers who would dispute the (arguably neo-creationist) idea of human mental exceptionalism (see, for example, Ristau, Savage-Rumbaugh et al., and Sheets-Johnstone).
- 25 Aspects of this statement may recall Deacon’s theory (mentioned above) of the co-evolution of human communication, cognitive social skills, and brain structure. There is, however, a crucial difference. Whereas Pinker sees these skills as prewired and innate, Deacon stresses that their emergence and development require structured social interactions in human communities. For discussion of the difference, see Deacon 140–42, 328–33.
- 24 The terms of Pinker’s contrast between humans and chimpanzees duplicate fairly conspicuously the sorts of racial, sexual, and/or ethnic self-glorifications used to justify various forms of political and social discrimination among humans, for example, by men against women or by Europeans against Asians and Africans. The similarities between the two are routinely invoked by animal rights advocates (see esp. Jamieson) and posthumanists (e.g., C. Wolfe, *Animal* 7) as evidence of an ethically significant slide between speciesism and both racism and sexism and also as an argument for the historical inevitability of a general acknowledgment of the rights of animals. Since Pinker is

- scornful of what he calls “fashionable ‘liberation’ ideologies” (48), his duplication of the terms of those tendentious self-glorifications here may be intentionally abrasive.
- 25 See, for example, Barkow, Buss, Easterlin, Thornhill and Palmer, A. Richardson and Steen, Wright.
- 26 See, for example, Pinker 48, 57, 492–93 and Wilson, *Consilience* 40–44.
- 27 Wilson, *Consilience* 181–265. It is not surprising that the title of Wilson’s book reverses almost exactly that of Dupré’s: the conflict between their views could hardly be starker. For Dupré’s elaboration of his objections to sociobiology (and evolutionary psychology), see his *Human Nature*. For another—related and equally problematic—call for the integration of the natural sciences and other disciplines, see the introduction to Barkow, Cosmides, and Tooby.
- 28 The insistent (and indeed born-again) antitheological element of Wilson’s scientism (science, he tells readers, replaced his native Southern Baptism [*Consilience* 6]) is worth noting. Like a number of other environmental activists, he maintains that the natural world can be protected from the present mindless forces of depredation and depletion only through a powerful counterforce of enlightenment and, with it, a revolutionary transformation of social, cultural, and political priorities and practices. There is, however, a crucial divergence of vision here. For Wilson, the required enlightenment would be a return to and fulfillment of Enlightenment ideals, notably (as he sees them) the authority of reason and science in opposition to irrationalism and religious superstition, and would issue in, among other things, a thorough *naturalization* of the universe. For many other environmental activists, however (e.g., Berry and Abram), the required enlightenment would be a repudiation of just those Enlightenment ideals (seen here as leading to and justifying the exploitation and destruction of nature) and would issue in a thorough *sacralization* of the universe.
- 29 In connection with the question of justice toward animals (among other issues), Jacques Derrida remarks our sense that  
*each case is other, each decision is different and requires an absolutely unique interpretation, which no existing, coded rule can or ought to guarantee absolutely. At least, if the rule guarantees it in no uncertain terms, so that the judge is a calculating machine—which happens—we will not say that he is just, free and responsible. (“Force of Law” 961)* He remarks, similarly, our sense that “a decision that didn’t go through the ordeal of the undecidable would not be a free decision, it would only be the programmable application or unfolding of a calculable process” (965). With an eye, however, on the aporias of common intuitions and conceptions of justice, he goes on to observe that “we also won’t say [the decision is just] [. . .] if [the judge] improvises and leaves aside all rules, all principles” (961) and that any decision, once made, can be seen to have followed, invented, reinvented, or reaffirmed some rule (965). For related reflections on the ethics of animal-human relations, see Derrida, “Eating Well.”
- 30 On what could be seen as the irreducible incoherence of our individual actions and practices of conceptualization and judgment, see Smith, *Contingencies* 147–49.

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