Wondering Animals: Reflections on Human Exceptionality

Abstract: Both historically and in common human practices, attitudes, and beliefs, a sense of human exceptionality in comparison with other animals undergirds normative anthropocentrism, i.e. prioritization of human interests. The question I wish to address in this article is whether we can use a particular element of the cognitive apparatus or toolkit that supposedly makes us special, namely our sense of wonder, to decenter us. Several authors have argued that when we view other beings or the natural world with wonder, we are inclined to care for and wish to protect them. But here I am interested in what happens when we turn our sense of wonder onto ourselves as the peculiar animal, the strange evolutionary experiment that we are. Not, as has historically been done, in an admiring way, but in an evaluatively more neutral way, characterized by puzzlement, an attunement to mystery, and a sense of unlikeliness and contingency. In particular, how might our thinking about ourselves change when we think from a wonder that revolves around our embodiment, around that which roots us most firmly in the world, in “nature,” and reminds us most clearly of our membership of a community of earthly life? Wondering at and about ourselves as an animal species may remind us of our material embeddedness in the world, but what could its ethical import be? More specifically, the paper explores whether there is an escape from the ethical quandaries of human exceptionality, which relate to the impossibility of doing with or without that exceptionality. I argue that there is not, but that in wonder we can hold together incompatible possibilities.

Keywords: Wonder, human exceptionality, anthropocentrism, anthropology, ecology, evolution
“Who does not wonder at this chameleon which we are? [...] Who is there that does not wonder at man? [...] [M]an fashions, fabricates, transforms himself into the shape of all flesh, into the character of every creature.”

Pico della Mirandola

1. Introduction: Human Exceptionality and Its Consequences

In their history of the philosophy of biology, Marjorie Grene and David Depew observe that “much of the interest that human beings have in other living beings reflects our unquenchable interest in ourselves.”² The claim surely overgeneralizes, because it does not seem plausible that all human populations, everywhere and at all times, have had an “unquenchable interest” in themselves. Such an interest, and perhaps “unquenchability” in general, seems to describe the “Western” cultural tradition—say, from Aristotle via Aquinas to current (palaeo-)anthropology—best, and particularly the period from the Middle Ages to the present, in which “science” came into its own and diversified into countless realms of curiosity. That said, as far as we can tell, no other animal species is or can be so preoccupied with its own exceptionality as these (in evolutionary or geological terms) recent exponents of Homo sapiens are; in that sense, the preoccupation with exceptionality is self-confirming.³

In a speech composed in 1486 that he never delivered because Pope Innocentius VIII prevented it, Giovanni Pico della Mirandola claimed to have discovered “why man is the animal that is most happy, and is therefore worthy of all wonder,” and he thought the answer “wonderful and beyond belief.”⁴ The source of “man’s” dignity, according to Pico, lay in the fact that God gave us “no fixed seat, no form of thy very own, no gift peculiarly thine.” Unlike other creatures with their limited nature, human beings “are confined by no bounds,” and God told “man”:

thou wilt fix limits of nature for thyself. I have placed thee at the center of the world, that from there thou mayest more conveniently look around and see whatsoever is in the world. Neither heavenly nor earthly, neither mortal nor immortal have We made thee. Thou, like a judge appointed for being


3. Viewing human beings as exceptional (as different from other beings in a different way than those other beings differ among each other) is, of course, not unique to the “Western” philosophical tradition. To offer just one example. Richard K. Nelson wrote of the Koyukon of central Alaska: “For the Koyukon, humans and animals are clearly and qualitatively separated. Only the human possesses a soul (*nukk’ubidza*, ‘eye flutterer’), which people say is different from animals’ spirits.” Yet, with the Koyukon, “[t]he distinction between animals and people is less sharply drawn than in Western thought—the human organism, after all, was created by an animal’s power”; cited in R.M. Torrance, *Encompassing Nature: A Sourcebook: Nature and Culture From Ancient Times to the Modern World*, Washington, D.C. 1999, p. 42.

honorable, art the molder and maker of thyself; thou mayest scuplt thyself into whatever shape thou
dost prefer. Thou canst grow downward into the lower natures which are brutes. Thou canst grow up-
ward from thy soul’s reason into the higher natures which are divine.5

“Man’s” greatness, therefore, lay in the fact that “he makes himself what he
chooses”—that is, it is up to him whether he becomes a more or less virtuous crea-
ture, closer to the beasts or to the angels.6 And this was closely tied to the fact
that “man” includes the whole of nature in himself in two senses: in uniting the
heavenly and earthly, the immaterial and the material in himself, and in knowing
the world in its entirety.7

Though set in an entirely different metaphysical and theological framework, Pi-
có’s work anticipated later anthropological thought by highlighting two interrelat-
ed aspects of human nature: our biological openness or indeterminateness and our
special relationship to the world. Arnold Gehlen poignantly expressed the former,
with a term borrowed from Herder, by saying that human beings are biologically
Mängelwesen, deficient creatures, entirely dependent on creating a second na-
ture, an Ersatzwelt (replacement world), in order to survive.8 And he articulated
the second borrowing Scheler’s notion of Weltoffenheit, world-openness: human be-
ings, because they are not bound by instincts, are not immersed in their world but
can distance themselves from the world so that it becomes an object for them. As
Gehlen writes, an entire suite of human traits, which at first sight appear merely
physical—the duration of human pregnancies, the helplessness of babies, our (rela-
tive) hairlessness, our skull shape—can only be understood in connection with our
“world-open” mode of being in the world.9 At the same time, as Helmut Plessner
observed, the human mode of being, which he characterized as “eccentric,” has to
do with the fact that we are closed from the world in a way that other animals
are not. We are not just bodies immersed in the world, but we are aware of being
delimited by our skins. We do not fully coincide with our bodies but are in a (to
some extent) conflictual relationship with the physical existence to which we are
bound. As an interpreter writes, “[s]truggling with this conflict is something that
makes man [sic] completely different from other animals, as they cannot experience
their interiority, and are not aware of their closure from the world” [...] It is not pos-
sible for [animals] to perform something for which the instincts are not equipped
and that could place them in a difficult situation.”10

While knowledge of and thinking about (other) animal capacities has since be-
come much more refined, it has not really shaken the idea of human exceptional-
ity—that we are fundamentally different from other animals, i.e. different from

5 Ibidem, p. 5.
7 Ibidem, p. xv.
8 A. Gehlen, Anthropologische Forschung: Zur Selbstbegegnung und Selbstentdeckung des Mensch-
9 Ibidem, p. 57.
10 O. Tolone, “Plessner’s Theory of Eccentricity: A Contribution to the Philosophy of Medicine,”
[in:] Helmuth Plessner’s Philosophical Anthropology: Perspectives and Prospects, J. de Mul (ed.), Am-
sterdam 2014, pp. 163–175, i.e. p. 164.
them in an importantly different way than they differ among each other.11 It is now common to see this as an evolved uniqueness,12 and it tends to be expressed by anthropologists—largely mirroring “common sense”—in terms of a combination of abilities for complex language, abstract thought, empathy, theory of mind, social cooperation, and so on, leading to unique human features and achievements like art, religion, symbolic representation, and control over the natural world.13

It is increasingly clear that our uniqueness is not necessarily a good thing. The exceptionality resulting from (some) humans’ use of their exceptional suite of capacities is eloquently expressed in the term “Anthropocene,” a proposed name for the (arguably) new geological epoch we have entered, in which Homo sapiens exerts an undeniable and undeniably destructive influence on planetary ecosystems, with long-lasting effects. “For the first time in Earth’s 4.5 billion year history, a single species is increasingly dictating its future.”14

In the genesis of this situation, the interplay between (arguable) actual human exceptionality and a certain human self-perception, involving, so many have argued, an exaggerated sense of exceptionality seems to have played an important role. Hence, among the responses to the ecological crises of the Anthropocene—anthropogenic climate change, species extinction, biodiversity loss, among others15—are calls for a rethinking of “our place in nature,” as it is traditionally called, of how we view our relation to other animal species and our role in planetary ecosystems.16 The key problem identified by many is that of anthropocentrism, a worldview as well as a political and ethical orientation, in a nutshell, that affords a central place to—i.e. prioritizes—human interests over those of other beings or ecosystems.17

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11 J. Gregg, If Nietzsche Were a Narwhal: What Animal Intelligence Reveals about Human Stupidity, London 2022.
16 Individual references make little sense here. Work in environmental ethics and animal ethics as well as in environmental education and human-animal studies abounds with such proposals.
17 I use the term “anthropocentrism” here in the sense described by Ben Mylius as “actively normative anthropocentrism” (as distinct from perceptual, descriptive, and passively normative anthropocentrism). As Mylius writes, actively normative anthropocentrism “manifests in paradigms that either a. contain
Now, the question I wish to address in this article is whether we can use a particular element of the cognitive apparatus or toolkit that supposedly makes us special, namely our sense of wonder (which may be seen as a particular form of our “world-openness”), to decenter us. Several authors have argued that when we view other beings or the natural world with wonder, we are inclined to care for them and wish to protect them. But here I am interested in what happens when we turn our sense of wonder onto ourselves as the peculiar animal, the strange evolutionary experiment, that we are. Not, though, in Pico’s admiring way, but in an evaluatively more neutral way, characterized by puzzlement, an attunement to mystery, and a sense of unlikeliness and contingency. In particular, how might our thinking about ourselves change when we think from a wonder that revolves around our embodiment, around that which roots us most firmly in the world, in “nature,” and reminds us most clearly of our membership of a community of earthly life? Wondering at and about ourselves as an animal species may remind us of our material embeddedness in the world, but what could its ethical import be? This is the central question of this paper, to be addressed in section 4. To set the stage for it, I will, in section 3, explain what I see as two ethical quandaries of human exceptionality: it seems to be something we can neither live with nor without, something that is both good and evil. But before we go there, we have to ask: what does “wondering at ourselves as an animal species” mean, and what could it look like? This question is addressed in the following section.

Answering the above questions requires engaging in a special kind of empirically informed philosophy, traversing the fields of anthropology, evolutionary biology, paleontology, and ecology not just to gather “facts” to inform philosophical and ethical reasoning but also to provoke different ways of seeing—just as happens in wonder.

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assertions or assumptions about the superiority of *Homo sapiens*, its capacities, the primacy of its values, its position in the universe, etc.; and/or b. attempt to make ethical or legal prescriptions (shoulds/oughts) based on these assertions or assumptions”; B. Mylius, “Three Types of Anthropocentrism,” *Environmental Philosophy* 15 [2] (2018), pp. 159–194, doi: 10.5840/envirophil20184564, i.c. p. 184.


2. Ways of Wondering at Ourselves as an Animal Species

“We are not separate from the rest of the living world; we are part of it down to our bones [...].”
Neil Shubin

“We are metabolic prisoners of our large and expensive brains.”
Paul Pettit

2.1. What Does It Mean to Wonder at Ourselves as an Animal Species?

Wondering—to attend to something in wonder—at its core involves perceiving it as remarkable in being both puzzling, strange, counter to expectations, or mysterious, and at the same time worthy of remark, worth attending to for its own sake. As often as not, we wonder at or about something that was already (in some sense) familiar to us and not particularly noticeable but which suddenly—though sometimes also through our own effort—appears to us as strange and remarkable. It is stripped of its previously obvious meaning and can no longer be taken for granted. So related to the other two is a third key element to wonder, namely that we perceive things under the sign of the possible; that is, as contingent possibilities and realities that could have been and could be otherwise.

So, wondering at ourselves (at human beings) involves seeing ourselves as remarkable in the sense of puzzling and worth attending to and as contingent possibilities—we might not have been (this way). To wonder at ourselves as an animal species, however, involves something more and more specific. Here, the starting point for our wonder and the context in which we choose to dwell is our knowledge that we, Homo sapiens, are a species of animal, an “outcome” (though without any sense of finality) of evolution, and more specifically one of around 6400 extant mammal species. It means that we emphasize something that many social orders, practices and languages seem designed to make us “forget,” namely our commonality with all those other species we habitually lump together in the category of “animals” as distinct from (not to say opposed to) humans. A primary aspect of this commonality is our embodiedness with all that this implies about our entanglement with “the...
world,” how it impacts us, informs us, how we respond to it physically, emotionally, and so forth. Animals and plants embody the rhythm of day and night that stems from the earth’s rotation around its axis: when it grows dark, most birds fall silent and find a protected place to sleep; many flowers close for the night, and so we close our eyes and sleep. Being earth-bound, we are heavy, subject to gravity; therefore, as a horse’s spine sags with age, so ours does, and we shrink. Our bodies tell us when we need food, and when we go hungry for a long time, we (like other animals) become stressed and depressed. Our “animal nature” is undeniable.

Moreover, instead of observing ourselves from a standpoint within the human world (the “introspective” self-reflection which makes up the bulk of research in the humanities and social and behavioral sciences), we observe ourselves from a standpoint “outside” the human world, a biological, ecological, paleontological or geological perspective, which always takes in more than “us,” because we appear in a context of “other” life—or rather, a living context in which we are no less and no more “other” than other manifestations of life. We observe ourselves, also, not from within a particular standpoint in time and space, but as appearances in time and space, or, as Wittgenstein put it, “together with space and time” (emphasis in original).25

Wondering at ourselves in this way serves to defamiliarize what it means to be human—it brackets taken-for-granted understandings of this that remain immersed in “the normal”—but may also serve to highlight what a peculiar species of animal we are, quite possibly an exceptional animal, for better or worse.

### 2.2. Ways of Wondering at the Animals We Are

There are many avenues of entry into wonder(ing) at and about ourselves as an animal species. Evolutionary biology offers a number of them. One is by making us aware of the origins of our bodies. Though no one may have planned them, human bodies have a plan, and this body plan is not fundamentally different from that of other animals. We have a front and a back, a top and a bottom, a mouth and an anus, and we have limbs sticking out. All this is true of flies as well. What is more, the genes that determine the structure of the body in flies (or mice, or fish, or any other bilaterally symmetrical animal) are essentially the same—and, wonderfully, the order of these *Hox* genes corresponds to the order of the body regions in which they are active; they are ordered from head to toe.26 In the ways we fall ill, too, are clues to our embeddedness in the evolution of life; for instance, some metabolic diseases are caused by malfunctioning mitochondria, and mitochondria, scientists believe, were originally free-living microbes that became incorporated more than a billion years ago in the bodies of our very distant ancestors. Or, to give a perhaps more vivid example, “[m]en’s tendency to develop hernias is a trade-off between our

25 L. Wittgenstein, *Notebooks 1914–1916*, New York 1961, 83e. Wittgenstein writes: “[T]he good life is the world seen *sub specie aeternitatis* [...]. The usual way of looking at things sees objects as it were from the midst of them, the view *sub specie aeternitatis* from outside. In such a way that they have the whole world as background. Is this it perhaps—in this view the object is seen together with space and time instead of in space and time?” (emphasis in original).

26 N. Shubin, *Our Inner Fish*, pp. 89–110 and 182.
fish ancestry and our mammal present.” In this case, the full story is one about go-

nads in male Homo sapiens (and many other mammals) descending, during embry-

onal development, from the liver to their free-dangling position.\(^\text{27}\)

Our senses provide a related avenue toward wonder. In her book, *A Natural His-
tory of the Senses*, Diane Ackerman writes:

We like to think that we are finely evolved creatures, in suit-and-tie or pantyhose-and-chemise,

who live many millennia and mental detours away from the cave, but that’s not something our bodies

are convinced of. [...] To begin to understand the gorgeous fever that is consciousness, we must try to

understand the senses [...]\(^\text{28}\)

She points out that “[s]mell was the first of our senses, and it was so successful

that in time the small lump of olfactory tissue atop the nerve cord grew into a brain.

Our cerebral hemispheres were originally buds from the olfactory stalks. We think

because we smelled.”\(^\text{29}\) (Emphasis in original.) And she observes:

Our sense of smell, like so many of our other body functions, is a throwback to that time, early in

evolution, when we thrived in the oceans. [...] We carry the ocean within us [...] [...] Our blood is mainly

salt water, we still require a saline solution (salt water) to wash our eyes or put in contact lenses, and

through the ages women’s vaginas have been described as smelling “fishy.” [...] Not only do we owe our

sense of smell and taste to the ocean, but we smell and taste of the ocean.\(^\text{30}\) (Emphasis in original.)

Yet another way to secure us firmly in the tangled bush of the evolution of earth-

dy life—a way that at the same time highlights the fragility of the human experi-

ment—is to show the dependence of our origins on pure chance. As Stephen Jay

Gould writes in his marvelous book *Wonderful Life*, “if you wish to ask the ques-
tion of the ages—why do humans exist?—a major part of the answer must be [...] because Pikaia survived the Burgess decimation” about half a billion years ago.\(^\text{31}\)

In Gould’s view, there is no necessity whatsoever to our existence; evolution did not

work toward us, nor does it end with us. “Homo sapiens, I fear, is [...] a wildly improbable evolutionary event well within the realm of contingency.”\(^\text{32}\)

At this point, it is worth pausing to ask why accounts of the origins of (aspects

of) our bodies would evoke wonder—especially since they are not guaranteed to
do so in everyone at all times. To my mind, they do have a strong wonder-evoking

power, though always provided that the “listener” lets them sink in, and this power

may be explained in terms of a number of factors that come together in these ex-

amples.\(^\text{33}\) One is that they highlight the virtually infinite complexity of (the evolu-
tion of) life, a complexity that—amazingly—we can intellectually probe to some

extent, but that also comes with a sense of extreme serendipity and contingency.

Another is that these accounts “force” us to keep together in our minds extreme

contrasts—between “simple” life forms and our own, between the physical and the

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29 Ibidem, p. 20.
30 Ibidem, p. 20–21.
33 For this, I draw on R.W. Hepburn, *The Inaugural Address: Wonder*, pp. 7–12.
mental—while spanning vast distances in time. That we can philosophize now because eons ago some small creature’s olfactory sense served that creature well is an appropriate object of wonder, regardless of our ability to prove that link through scientific research; in part this is because the emergence of consciousness from organic matter remains mysterious, in part because, as Hepburn notes, “explanation runs towards the totality [of laws and entities], but there absolutely ends.” Finally, there is an aesthetic element to the above examples, too, that is also likely to evoke wonder: there is a kind of beauty in the way the present remains linked to an unimaginably distant past; and beyond that, they direct our attention to the “miracle,” as Wittgenstein put it, “that the world exists. That what exists does exist.”

2.3. Ecology: Having a Niche and Being at Home in the World

In ecology, the concept of a “niche” is that of “a place in an ecosystem which a species has adapted to occupy.” Or, in a more elaborate definition: “A summary of the conditions and resources that must be available in order for a species to maintain a population in the long term. A niche therefore is not a place but a conceptual volume with numerous dimensions (an n-dimensional hypervolume), such as temperature, humidity, and food supply, each defined by the tolerable range for that particular species.” While these two definitions emphasize the conditions required for the survival and flourishing of species, other definitions stress the ecological role played by species: “The functional position of an organism in its environment, comprising the habitat in which the organism lives, the periods of time during which it occurs and is active there, and the resources it obtains there. In other words, its niche is the role that a species plays in a community.” These are two sides of the same coin, of course, because a species cannot be part of an ecosystem without playing some role in it. It is impossible only to be acted upon; a species or rather individuals and populations belonging to a species always also act upon their “environment.” Within the concept of an ecological niche, it is important to distinguish the fundamental niche, “an abstraction of the conditions of survival for the organism when it is not competing with others,” from the realized niche, “the conditions of survival for the organism competing with others in the real world.”

The concept of a niche provides a fruitful avenue toward wondering at and about ourselves as an animal species because it throws a spotlight on the exceptionality of Homo sapiens—or at least of many historical and contemporary populations of our species. Whereas (populations of) other species tend to occupy clearly defined and relatively stable—though always dynamic—niches, the same cannot be said for Homo sapiens since the Late Pleistocene. Our species is certainly not the only

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34 Ibidem, p. 9.
species that has “culture,” but it is the only one with cumulative culture, allowing us (or perhaps in a way forcing us) to develop increasingly complex technologies and social arrangements.\textsuperscript{40} This is also known as the “ratchet(ing) effect.”\textsuperscript{41} As a result, human niches (and the plural is absolutely necessary here) have been extraordinarily dynamic,\textsuperscript{42} and in the course of the Holocene, we see an enormous expansion of our realized niche, which, compared to other animal species, is much closer to our fundamental niche.\textsuperscript{43} Moreover, in the case of much of contemporary humanity, the notion of an ecological function that is part of the concept of an ecological niche seems to have become divorced from any sense of playing a part in maintaining the ecosystem in which a niche is occupied. In fact, the role that humanity plays in the wider ecological community is now largely a destructive one, undermining the conditions for the survival and flourishing of countless animals, plants, and other species, including our own—though, of course, this also opens up niches for other species, such as extremophilic bacteria adapting so as to be able to break down plastics.\textsuperscript{44}

This unusual development in the human species is linked to a suite of capacities that set human beings at a distance from the world that allowed us an unprecedented measure of control over our environment, but at the same time, arguably produced an enduring sense of “homesickness” or alienation from the world. As I have argued elsewhere, “the metaphor of ‘homesickness’ does not diagnose a pathology but expresses an inescapable aspect of the human condition, namely that as human beings we are not ‘naturally’ at home in the world, but need to make sense of the world and our place in it.”\textsuperscript{45} But when we wonder at ourselves as an animal species, we cannot stop at this peculiar feature of our species and can hardly fail to observe another way in which we are exceptional, namely the incredible diversity of ways of life exhibited by human populations (and even individuals). Moreover, we must acknowledge that “our” state of homelessness can become and, in the case of modern industrial societies, has become a pathology. While for a long time human populations have been able to find a home for themselves within the natural world, current industrialized societies offer a “home” that is entirely at odds with our and others’ ecological needs.

In sum, when we wonder at ourselves from an ecological perspective, we appear as liminal creatures, both animal and in some ways “beyond” animal, part of the natural world and outside of it. Wonder stems from that liminal position, but it also reveals how problematic that “we” is: part of human exceptionality is that

\begin{thebibliography}{99}
\bibitem{43} T. Wayward, “Ecological Space,” p. 312.
\bibitem{45} A. Schinkel, “Wonder, Mystery, and Meaning,” p. 303.
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species-level generalizations are rarely possible, meaning that the term “human exceptionality,” when used descriptively rather than merely to refer to a conceptual construct, is one to be handled with protective gloves.

3. Ethical Quandaries of Human Exceptionality

Historically, if we survey the history of “Western” philosophy, we can see that two different functions of or reasons for stressing human exceptionality dominate: a self-serving one, justifying (ab)use of animals, and one that is at first sight much nobler: reminding us of our ethical potential (see Pico della Mirandola above, for instance). The latter may be self-serving, too, however, if it stems from an exclusive concern with interhuman moral obligations. Quite often, we find the two functions combined; Aristotle and Kant (to offer just two examples) are cases in point.

In his *Politics* and *Ethics*, Aristotle argued that “men”—and by this, he did mean men in particular, though only free men, not slaves—are fundamentally different from brute animals.46 “[T]he real difference between man and other animals is that humans alone have perception of good and evil, right and wrong, just and unjust.”47 In other words, only human beings are (potentially, if they do not happen to be slaves, women, or children) moral and political beings. Only they (or “we”) are capable of virtue and thus of eudaimonia, the good life, the life of happiness or human flourishing. The reason why only human beings are capable of a virtuous life is that they are endowed with reason and speech (for which, in Greek, one and the same word can be used: logos). “Nature, as we say, does nothing without some purpose; and for the purpose of making man a political animal she has endowed him alone among the animals with the power of reasoned speech.”48 This is not something we are born with, of course; at first, we are like the other animals: “for both children and animals have a share in voluntary action, but not in choice,” which requires deliberation.49 Importantly, this fundamental difference Aristotle perceived between “men” and other animals had practical, moral and political implications: just as the soul should rule the body, man should rule woman, and rational masters should rule irrational slaves, so human beings should rule other animals—this is better for them. Tame animals, Aristotle argues, are better (off) than wild because they are kept safe.50 But clearly, it is also better for us: “[W]e must believe, first, that plants exist for the sake of animals [a category which presumably includes human beings], second, that all other animals exist for the sake of man. [...] If [...] we are right in believing that nature makes nothing without some end in view, nothing to no purpose, it must be that nature has made all things specifically for the sake

of man.”51 And this, for Aristotle, justified both the use of domesticated animals and hunting wild animals for food, clothing, or whatever other use.52

Whereas Aristotle placed human beings and other animals—and he did say “other animals,” after all53—on a continuum, though with a crucial qualitative difference between them, Kant chose to picture human beings as inhabitants, simultaneously, of two worlds, the natural world that is subject to laws of causality and the rational world of freedom, of rational beings that act according to reasons. Rational beings act according to self-imposed laws that all rational beings (as such) must accept, and acting in accordance with laws that all rational beings cannot but accept is the way to respect them as ends in themselves.54 As (potentially) rational beings—and the only ones we know of—Kant held human beings to have a special dignity and to be worthy of a corresponding respect. Human beings have an intrinsic worth, whereas all other creatures only have a derivative value, depending on their value or use to us. In an essay on “duties towards animals and spirits,” or (with reference to Baumgarten) duties toward “beings which are beneath us and beings which are above us,” Kant asserts:

[S]o far as animals are concerned, we have no direct duties. Animals are not self-conscious and are there merely as a means to an end. That end is man. We can ask, “Why do animals exist?” But to ask, “Why does man exist?” is a meaningless question. Our duties towards animals are merely indirect duties towards humanity.55

Kant is, of course, completely aware that human beings often do not act in accordance with their rational nature, i.e. with the moral law, and thus his emphasis on human exceptionality also serves the dual function of reminding us of what we can be and how we ought to be on the one hand and justifying a special moral treatment of human beings and the exploitation of animals on the other.

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51 Ibidem, Book 1, ch. 8, p. 40. Jean Kazez rightly notes the self-serving inconsistency in Aristotle’s argumentation: “[t]he two grounds [Aristotle offers] for placing humans atop the double pedestal [i.e. on top of other animals, on top of plants] don’t sit very well with each other. You can think we’re above animals because they exist for our sake, to meet our needs or that we’re above animals in the sense that living under our rational command is good for them.” (J. Kazez, Animalkind: What We Owe to Animals, Chichester 2010, p. 20).

52 In fact, Aristotle wrote that it justified the use of war not only against wild animals, but also against “such men as are by nature intended to be ruled over but refuse”; see the reference in footnote 9. Thus, though Aristotle himself chose not to see it, his work also contains elements of a view that stresses the continuity and commonalities between humans and other animals. Moreover, his wonder at the natural world in all its forms can be and has been taken as inspiration for an ethics of human-animal relations that significantly reduces the emphasis on human exceptionality. See (among others) M. Nussbaum, Frontiers of Justice; M. Nussbaum, Justice for Animals; J. Bendik-Keymer, “The Other Species Capability & The Power of Wonder.” Still, these interpretations and elaborations of his work take us far beyond Aristotle’s own explicit views on human-animal relations.

53 Given his biological interests it is not entirely surprising that Aristotle included us in the category “animals”; he wrote works on (other) animals as well; see D. Balme, Aristotle’s ‘De Partibus Animalium I’ and ‘De Generatione Animalium I’ (with passages from II.1–3), Oxford 1972.


55 I. Kant, Lectures on Ethics, transl. L. Infield, New York 1963, p. 239.
Apart from these two functions we can distinguish a third, related to the function of bolstering interhuman morality but informed by a broader view of the category of moral patients. The utilitarian philosopher Peter Singer, for instance, recognized that the categories of moral agents and patients should not be conflated and that there are good reasons to consider the latter as considerably broader than the former. Famously, Singer argued against speciesism and, more concretely, against the use of animals for food, clothes, and animal experimentation. In countering the common objection to vegetarianism that other animals kill for food, and therefore so may we, Singer argues:

> The point, of course, is that nonhuman animals are not capable of considering the alternatives, or of reflecting morally on the rights and wrongs of killing for food; they just do it. [...] Every reader of this book, on the other hand, is capable of making a moral choice on the matter. We cannot evade our responsibility for our choice by imitating the actions of beings who are incapable of making this kind of choice.\(^{56}\)

In Singer’s work then—as in most other work in animal ethics—a crucial difference between human beings and other animals is recognized and emphasized in order to remind us of our moral obligations toward other animals, obligations that are uniquely ours.

Now, the first ethical quandary of human exceptionality may be described as follows: we have good reasons to want to be rid of human exceptionality as a justification for exploitative relations with other animals, but can we get rid of that without undermining the basis for caring and respectful moral relations with other species? Can we deny or downplay human exceptionality without undermining all the roles played by emphasizing our exceptionality?

This ethical quandary of human exceptionality is perhaps the central theoretical problem in animal ethics and certainly one of its core problems. Many arguments by animal advocates rely strongly on the premise of sameness or commonality between human beings and other animals, either because this commonality means that other animals share features with us that constitute grounds for moral considerability and/or for moral-motivational reasons. But those same arguments also rely on the premise of human exceptionality: unlike all other animals, we are moral beings and can choose not to eat meat, etc. If our commonality with other animals is stressed too much, it becomes hard to defend stringent moral duties toward other animals because our morality (our moral capability) is relativized or downplayed. (Equally, though less relevant to the argument of this paper, if our exceptionality is stressed too much, it may become difficult to deny humans a special moral status. But further exploration of this issue would require attention to underlying value theories.)

It is important to note that the quandary described here is real, not the result of an error in reasoning. Following the quote presented above, Singer anticipates the objection that by admitting that there is a significant difference between humans and other animals, he has revealed the flaw in his case for the equality of all animals. He replies by invoking the difference between moral patients and moral agents. One does not have to be a moral agent, i.e. be capable of making moral choices, to

be a member of the class of moral patients; the latter only requires having interests that can be frustrated or harmed, being capable of experiencing forms of pleasure and pain, and the like. Now, Singer is obviously right that one should not conflate the categories of moral patients and moral agents. But that does not mean it is perfectly easy to uphold both human exceptionality and strong moral obligations toward other animals. The problem has both a psychological and a philosophical dimension. Psychologically, for many people, a sense of human exceptionality will be accompanied by a sense of superiority or moral priority. And philosophically, if we engage deeply in wondering about human beings as animals, it becomes difficult to resist, from a supposedly universal standpoint, the implications of recognizing the crucial role played in morality by contingent moral sentiments. Moreover, such wondering is likely to give rise to the need for an empirical correction to the anthropology implied in much ethical theory: human beings appear, in actual fact, to be far less capable of what they are supposed to be capable of, if we accept that “ought implies can”—we are far more like other animals than we like to think, far less “rational,” far less capable of considering long-term consequences, and so on.

But in fact, in a final twist, we must recognize that we are also far less like other animals than would be good for this world because we are uniquely capable of influencing the world in ways that have destructive consequences that we seem to be unable or unwilling (which may stem from another kind of inability) to consider. This is the point made by philosopher John Gray when he speaks of *Homo rapienis*, by paleontologists Jordi Agustí and Mauricio Antón when they say that “*Homo sapiens* appears unique because of its ability to exterminate other species,” and by anthropologist Pat Shipman when she writes: “I maintain that humans are the most invasive species that has ever lived.”57

Acknowledging this forces us to recognize a second ethical quandary related to human exceptionality, namely that from an ethical point of view our exceptionality is, as Justin Gregg points out, a double-edged sword.58 Our much-lauded exceptional capacities and qualities, which have allowed us to create art, cumulative culture, civilizations, science, and so on, are equally responsible for the (mass) extinctions we have caused and are causing, and for the perverse ideologies, extreme violence and extraordinary cruelty by which we make each other suffer.59 If we wonder honestly about ourselves as the animal species we are, we cannot skip over the fact


58 J. Gregg, *If Nietzsche Were a Narwhal: What Animal Intelligence Reveals about Human Stupidity*, London 2022, p. 255: “Because we are indeed exceptional if not necessarily ‘good,’ we have generated more death and destruction for life on this planet than any other animal, past and present.”

59 In light of this it is striking how many anthropological statements about the exceptionality of *Homo sapiens* are overall positive in tone, highlighting the appearance of more complex tools, art, and symbolism. But for a view that highlights the unique evolutionary path of human beings also in terms of our problematic traits, such as our distinctive capacity for warfare, see A. Fuentes, “*Human Niche, Human Behaviour, Human Nature.*"
that the exceptional qualities that make us—in a sense—moral beings also make us a deeply troubled and troubling species.

4. Can Wonder at Ourselves as an Animal Species Decenter Us?

Facing this question, we are once more confronted with a paradox. On the one hand, wonder at ourselves as an animal species decenters us by definition because it requires us to take up a standpoint outside the human world. This means, firstly, that we do not look outwards from ourselves as the center of our circle of vision and, secondly, that the view we get instead is not one in which we can assign centrality to any species but one of evolutionary and ecological interconnectedness. In Mylius’ terms, to wonder at ourselves as a species of animal implies that we overcome descriptive anthropocentrism, which at least paves the way for normative decentering.60 On the other hand, the question itself foregrounds an aspect of human exceptionality: the capacity for wonder. Although affirming human exceptionality is by no means synonymous with affirming normative anthropocentrism, it does—as argued in the previous section—create difficulties for non-anthropocentric ethics that rely on a strong downplaying of human exceptionality. So we need to take a closer look at the potential ethical import of what happens when we wonder at ourselves as an animal species. I will do so under three headings, following the key themes identified in section 2: commonality, contingency, and exceptionality.

4.1. Commonality

Wondering at ourselves as a species of animal is clearly not the same as biocentric wonder.61 It does not necessarily involve admiration for the intricate complexity or elegance of other kinds of animals or for the “solutions” evolution has found for the problems species encountered, and it does not place nature or other animals at the center of wondering attention. Still, there are affinities between these ways of wondering and the moral tendencies they are likely to inspire. As said, one “effect” of wondering at ourselves as a species of animal (or rather one thing implied by it) is that instead of our differences, our commonalities with other species are foregrounded. This involves both shared ancestry and common traits. Raimond Gaita argued that perceiving, in a way that includes feeling, our common humanity with other people is crucial to being susceptible to our moral obligations toward them and much more powerful than merely observing that they have all the traits that we generally consider necessary for moral considerability and being bearers of human rights.62 Similarly, perceiving and feeling our commonality with other animal species is morally powerful; it can displace a sense of moral priority and sensitize us to our moral obligations toward (individuals of) other species.

61 See references in footnote 18 for advocates of biocentric wonder.
Secondly, foregrounding commonality is likely to come with a nuancing and critical questioning of beliefs regarding human exceptionality. We are rational animals, but are we really that rational? We are capable of complex feelings, but is the same not true for many other species? We have language, but is that actually as unique as we thought? And should it necessarily be seen as a sign of superiority, or is it just a result of different ecological needs, an adaptation we happen to have evolved because it benefited us?

Furthermore, as wonder heightens our awareness of our “animality,” it shakes our moral confidence—not because animality implies “brutishness,” but because it foregrounds the overwhelming extent to which human behavior is not the result of the exercise of an extraordinary autonomy, but determined by the (social) environment. Equally, it shows our sympathies to be limited in much the same way that those of other social animals are.63 Gazing upon ourselves in wonder, we may well appear as a flawed, hopeless species suffering from an exceptional distance between potential and actuality. As a result, while it may sensitize us toward our moral responsibility towards other species, wondering at ourselves as an animal species may equally undermine our moral resolve.

4.2. Contingency

Wondering at ourselves as an animal species comes with a strong sense of contingency. As Stephen Jay Gould powerfully argued, we are not the crown of creation, nor the culmination of evolution, and if in the distant past things had been only a tiny bit different, we would not have been here to ponder our exceptionality—we are in that sense lucky to be here. This realization works powerfully against a sense of superiority or priority—the sense present, for example, in both Aristotelian philosophy and traditional Christian doctrine that other species were created for us.

There is a future-oriented side to this, too: just like other species, *Homo sapiens* will not be around forever. It is hard to predict what the lifespan of our species will be, whether it will be a couple of million years as is average for mammals, or much more or much less; our unusually strong influence on the conditions of our own evolution makes both possibilities equally likely.64 At any rate, the realization that we will at some point be gone, and most likely before the death of our star, is likely to have a humbling effect and to relativize the importance of human projects such as the building of empires or the striving for technological progress. Even at a smaller scale, I find it diminishes the urgency of our day-to-day business and deadlines—a psychological effect that is not logically necessitated by wonder at ourselves as an animal species but that harmonizes well with it. However, the urgency

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63 G.J. Warnock’s description of the human predicament in terms of limited resources, limited information, limited intelligence, limited rationality, and limited sympathies still seems quite apt; he considered limited sympathies to be the most important one “in the inherent liability to badness of the human predicament”: G.J. Warnock, *The Object of Morality*, London 1973, p. 26.

64 As Pettitt notes, “[i]n evolutionary terms we are a crazy experiment” (P. Pettitt, “*Homo sapiens* Rediscovered”, p. 10). And if we are honest, the jury is still out—see J. Gregg, *If Nietzsche Were a Narwhal*. 
of moral projects may also be diminished by the view sub specie aeternitatis—how important are our moral efforts, in the grand scheme of things?

4.3. Exceptionality

Even in the act of wondering itself, wondering at ourselves as a species of animal also foregrounds “our” exceptionality (but remember my cautionary remark on “human exceptionality”). Not only in this act, however, but also in realizing how far “we” have run away from the meaning of an ecological niche or home that applies to other species. We are an unusually unusual animal, exceptional for better and worse—and from an ecological perspective perhaps mostly for worse, since the “better” (under which heading may come our abilities to create art and poetry, exhibit altruism, fight for justice, and so on) does not really benefit any species except our own. Human moral efforts in the field of nature conservation and animal advocacy merely counteract human-inflicted damage, after all. As Beth Shapiro writes, “[w]e are […] unlike other species. […] We outcompete all other species by killing them or taming them. We adapt to changing climates by engineering solutions outside of biology and, now, by engineering biology.” As noted in section 2, human exceptionality is a double-edged sword. That means that becoming more aware, through wonder, of that exceptionality may at the same time reinforce our sense of moral responsibility (resulting from our extraordinary mental and emotional capacities) and a sense of despair about our moral capabilities (not to say moral incapability).

5. Conclusion

At this point, it may feel odd to arrive at a conclusion. In fact, I believe that wondering about ourselves as an animal species inevitably comes with a certain inconclusiveness because our wondering starts from and highlights our liminal position in the world. That liminality was expressed by Pico della Mirandola half a millennium ago as that we are “neither heavenly nor earthly, neither mortal nor immortal.” But in Pico’s work this was immediately preceded by God’s declaration to “man” that “I have placed thee at the center of the world”—something that a contemporary wonderer, informed by biology, ecology, and related disciplines, could hardly maintain. Still, wonder at ourselves as an animal species does not impose one particular narrative: it may completely (descriptively) decenter us in stories about life on earth, but equally the narrative may come to center upon us as objects and subjects (and therefore special objects) of wonder—the latter does not presuppose a flawed conception of evolution as culminating in us. Even a narrative that highlights human

65 B. Shapiro, Life as We Made It: How 50,000 Years of Human Innovation Refined—and Redefined—Nature, London 2022, p. 260. Curiously, while admitting that bison almost went extinct twice because of “us” (i.e. Homo sapiens), she still manages to say that “[t]hanks to us, more than 500,000 bison live today in herds across North America,” completely ignoring the fact that this conservation success merely compensates somewhat for our earlier destructive influence.
exceptionality does not justify normative anthropocentrism, however; as noted in section 3, it underlines our moral responsibility as much as our special status.

Is there an escape from the ethical quandaries of human exceptionality? I do not think there is. I believe we cannot avoid holding within our minds at the same time our commonality with other animals and our exceptionality, and within the latter, both our potential for moral responsiveness and sensitivity and our extraordinary capacity for cruelty and destruction. If this seems impossible, I would argue that wonder is like a quantum state, capable of holding mutually exclusive possibilities within itself. At the very least, then, to act from a state of wonder at ourselves as a species of animal implies an openness to the possibilities we exclude when we act.

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