



From Anthropocentrism to a Cosmopolitan Biocentrism: Reflections on Animal Ethics

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Abstract

The reasoning about the right and wrong ways to consider, use and treat animals is the focus of animal ethics. For a long time, animal rights have largely escaped anthropological attention. Only recently, however, thanks to new perspectives its assignment is to go beyond the human. This is because we must change the inner assumptions of our basic concepts on human and non-human ethics if we want to deconstruct the human/animal dichotomy. The author reflects on the different theories currently found in literature and the fact that none of them expressed so far are completely accepted, probably due to the different dispositions towards the term ethics. Some of the various theoretical alternatives recently proposed by Authors belonging to different disciplines are discussed in the paper.

Keywords: Animal Ethics; Normative Views; Anthropomorphism

Introduction

De facto, anyone who wishes to deepen her or his knowledge on the slippery “animal ethics” topic is surprised by the certitude that none of the theories expressed so far are completely accepted, probably due to the different dispositions towards the term ethics. This syntagm usually refers to systems of customs and values of a particular human group, and this appears to be one of the tasks of anthropology. One of these systems is morality, that includes aspects such as rightness or wrongness, blameworthiness, and abashment and so on. For philosophers it is an area permitting to investigate ethics in its other senses, as the answers to many of the ethical interrogatives depend on answers to metaphysical questions, and this is not independent of other areas of philosophy. A set of issues connected to animal ethics is that giving a being a moral status. Not a simple problem, as we’ll see. Anyway, and concisely, animal ethics

not only scrutinizes how animals are considered and morally contemplated, but how they should be treated. This implies that the subject matter covers a wide set of topics ranging in scientists (whose scientific ideology allowed researchers to turn a blind eye to animal suffering in their laboratories, according to Rollin [1]), from animal cognition to wildlife conservation; in philosophers from animal moral status to personhood; in lawmakers from animal rights and welfare to animal law [2]. Since the 1980s, interest in the study of human-animal relationships has grown steadily and regarding the human and nonhuman animal interactions and relationships a new discipline was created: anthrozoology, whose aim is a systematic study of the ways that humans think about and are related to our zoo-comrades living on our planet. In 1987 the academic journal “Anthrozoös” was established, followed by “Society & Animals” in 1993. During time other websites and blogs were added and sometimes debates were raging. The main problem is how to surf in the

different normative views. For example, the website “Animal Ethics” [Animal Ethics (animal-ethics.org)] offers a wide list

of normative views with inherent publications, sketched in Table 1.

Normative views	Sketchy definitions
Speciesism (the most common and important)	The human-held belief that all other animal species are inferior. Its detractors affirm that giving human beings greater rights than non-human animals is as arbitrary (and as morally wrong) as giving white people greater rights than non-white people.
Egalitarianism	Rejects speciesism, and in practice it prescribes ceasing to exploit nonhuman animals as well as assisting them.
Prioritarianism	It is the common assumption affirming that human beings should be given preferential moral consideration, if not absolute priority, over the members of other species.
Utilitarianism	Focused on <i>sentientism</i> , stating that all and only sentient beings who can consciously experience positive states like happiness or negative states like suffering – have moral status). In this case the <i>principle of equal consideration of interests</i> is accepted*.
(Sentience: <i>the capacity of non-human animals to experience feelings</i>)	
Suffering-focused ethics	It is clearly focused on the reduction of suffering in animals**.
Negative consequentialism	Its main aim is to protect those who are defenseless and exploited.
Rights theories	Are focused on the moral worth of all animals, independently from their utility for humans.
Contractarianism (or Social Contract Theory)	This theory affects both ethics and political theory. It started as a general ethical theory, assuming that individuals make the right choices inside a hypothetical social contract***.
Virtue ethics	Discusses the rights and wrongs of our treatment of nonhuman animals in terms of virtues and vices rather than in terms of consequences, or rights and duties****.
Care ethics	It is focused on the way we actually treat animals that are dependent upon us.
Wild animal suffering and animal exploitation	Its main aim is how to cope with them.

Table 1: Sketchy normative views definitions currently found in animal ethics.

Sebo [3] “...according to which we morally ought to consider all interests equally when deciding what to do. In short, if someone is sentient, then they have interests. And if someone has interests, then we must extend equal consideration to their interests, no matter who they are, or which social or biological categories they happen to occupy”.

** For details see: Vinding, 2020 [4].

*** The updated version of this ethical theory argues that, when adopted to animal ethics, it is incompatible with speciesism and the moral exclusion of non-human animals [5].

**** For details see: Hursthouse, 2012: 1 [6].

The exploration of the progressive thought about animals permitted Fraser & McRae’s [7] to formulate the following synthesis according to which four types of activity are affecting animals by humans: “(1) people keep companion, farm, laboratory and captive wild animals, often while using them for some purpose; (2) people cause deliberate harm

to animals through activities such as slaughter, pest control, hunting, and toxicology testing; (3) people cause direct but unintended harm to animals through crop production, transportation, night-time lighting, and many other human activities; and (4) people harm animals indirectly by disturbing ecological systems and the processes of nature, for example by destroying habitat, introducing foreign species, and causing pollution and climate change” (page 581). As suggested by Regan [8], it is not the case to be “too cerebral” in this viscous topic as we could get lost in the maze of the various theories formulated by scholars. An important aspect, in my opinion, is to deeply analyze topics such as the gender differences towards animals [9]. This, in fact, is an important aspect shaping human predispositions, biases and inclinations regarding animals. Gender differences emerge in elementary schools [10], while moral concern for animals becomes evident in later adolescence [11]. Thirty years ago, results belonging to different surveys permitted the Authors to state that among sexes the differences were very

large, suggesting that the cognitive and emotional gender differences toward animals were very high [12]. Updated studies are widening the horizon, as they try to understand why women show more humanistic and moralistic attitudes, while men are more prone to utilitarianism [13]. I suspect that this culturally mediated divarication has its roots in biology. Women, in fact, because they can give life, they show a natural propension for transcendence (what lies before, after and beyond our living experience), while men are more prone to immanence, or the reality we inhabit. Anyway, thanks to the contribution of female thinkers and scientists, the broader aspect of environment concern was introduced in many studies [14], and other territories were considered, such as the prevalence of interpersonal aggression and the socio-economic status in determining predispositions [15]. However, as a matter of fact, men continue today to be more disposed to harm nonhuman (and human) animals than women [16,17]. With exceptions, if in lab animal workers compassion fatigue (an underestimated psychological syndrome, comprised of secondary trauma and burnout, which can adversely affect those who work in caring professions), without age and gender differences affects up to 86% of lab animal workers during their careers [18].

Myriads of Worlds

At this point, the main problem is the big caesura existing between how each of us experiences the world and how other animals do it. A problem raised since the seventies by Nagel [19], as he stated that some aspects of physical reality must be experienced to be grasped. This reminds Jackson's through observation [20] on a girl, that he imagined living in a monochrome black and white world. She, after having opened a door, suddenly saw the palettes of the world as we usually see. So, she discovered something new about color. The story suggests that there are types of knowledge that are learnt by direct experience only. An extreme example is Thwaites' "crazy" experiment [21]. He tried to live as a goat, so he built not only a goat-type exoskeleton, but also an external device imitating a stomach useful to digest grass (!). Both Nagel's and Thwaites' works have implications for animal ethics, as the species are so many and many times very different from us. In fact, if we consider their "cognitive systems" only (that were forged by different environmental pressures, requiring different adaptive styles), their "worlds" differ even dramatically from ours. Only recently, in fact, we discovered that the ground beneath our feet is full of noise, as it is teeming with life. Life forms living underground, from bacteria to insects and others, produced a lot of noise [22]. At this point, ethical judgements about the animals are difficult to formulate, even those regarding our Primate "cousins", that we consider very similar to us. Because we cannot linguistically communicate with them, their myriad of "worlds" is neglected to us,

even when we try to understand moves, vocalizations, and postures, that usually are interpreted anthropomorphically (regarding this aspect, called critical anthropomorphism, see: Burghardt [23]). There are a lot of problems connected to this communicative gap, as mentioned by the Author, who stated that the study of "behavioral mechanisms in animals should include natural history, our perceptions, intuitions, feelings, careful behavioral descriptions, identifying with the animal, optimization models, previous studies and so forth in order to generate ideas that may prove useful in gaining understanding and the ability to predict outcomes of planned (experimental) and unplanned interventions" (page 72). We consider some of the animals as being "smart" because they show similarities with human aspects that we consider "cognitively high". Like, for example, the chimpanzees that appear to have a "theory of mind" [24] or crows showing a great ability in problems solving (some species behave optimistically after using tools [25]), or elephants whose self-awareness is high because their decision-making skills are really complicated [26]. This is because the brains of these animals seem to work curiously like our own and scientists started tests to tackle the question of animal intelligence trying to compare it with that of humans, usually considered to be remarkable in problem solving and innovative across many different domains because of its flexibility. Amazingly, rodents' IQ revealed a bell-shaped curve, practically the same distribution found in human IQ [27]. Recently, it has been suggested that individual behavior patterns may skew studies. According to Preston [28], in fact: "Scientists are increasingly realizing that animals, like people, are individuals, so they have a "personality". They have distinct tendencies, habits and life experiences that may affect how they perform in an experiment. That means, some researchers argue, that much published research on animal behavior may be biased". This should not be disconcerting, as it has already happened in many psychological studies. In fact, around 90% of the published papers (till ten years ago) found in relevant literature belonged to Western, Educated, Industrialized, Rich and Democratic Societies, aka WEIRD [29], with several repercussions [30]. However, there is a problem: For what is known, the most intelligent animal species do not have the ability of complex symbolic thinking. This is because decades of experiments have shown that some animal species can learn hundreds of arbitrary signs of signifier-meaning relationships. For example, chimpanzees that can learn numbers, shapes, colors, and symbols [31-34]. But no reversibility is possible, as the symbol will always remain the same and will never refer to a meaning other than that arbitrarily imposed.

Anthropologists and Animals

Regarding animals, the anthropologists of the past perpetuated the nefarious distinction between socio-cultural

and biological anthropologists, being the former investigating social and cultural phenomena as if they were “humans” and well distinct from those of animals. On the one hand animals were investigated as a human resource, on the other on their meaning in our conceptual and symbolic world. This is because animals are archetypes representing the deep layers of instincts and unconscious [35]. They symbolize the cosmic forces and principles, both material and spiritual. Undoubtedly, animal symbols are diachronically found in all human cultures, suggesting not only the importance of their symbolic value, but also the need to integrate the main animals’ symbolic content – instinct - in our existence. Physical or biological anthropologists tried to understand human distinctiveness bearing well in mind that humans are animals, so they devoted their interests first to anatomy, then to physiology, genetics, and lately to cognition to understand how they influence behaviors, considering animals as a sort of “primitive” plot outline (for an exhaustive overview of historical writings see Regan and Singer [36], while for a wonderful revision of the evolutionary ideas see Ingold [37]). Recently, the idea that humans are well distinct from animals (because of their possibility to communicate in a complex way thanks to language and symbols) has been picked on multiple times, and this is conducive to new paradigms [38-42]. Only recently, in fact, emerged the idea that animals (and plants) are not only useful to man, but together with other living beings they are actively engaged in the complex mechanisms of our planet [43] even at microscopic level [44]. Then, the same word “parasites” appear to be controversial, as they are incredibly sensitive to environmental changes, so they could be used to alert us in case of climate changes and habitat loss, or simply to become a sort of indicator of a healthy ecosystem [45,46]. Another important aspect, emerged in the last decades, is the importance given to the practices devised to cope with the environment enacted by the so-called indigenous people [47], whose literature is at present remarkable. For some syntheses, [48-53]. A big blow, in cultural anthropology, was in fact provoked by the introduction of perspectivism [47,54-56]. This has caused the overthrow of the Western anthropological-philosophical situation, as according to perspectivism the world is inhabited by subjects or people (who can be human and non-human), each of whom grasping the world from different points of view. The various components of the material world (e.g., a table, a chair, a hill) have their own deep essence that is the same for everyone, but they are represented in different ways. For many Amerindian cosmologies there is a bodily filter which differentiates their spiritual unity. This is because for them there is not a continuous and inseparable succession that forms the basis of reality. For many Amerindian conceptions, in its essence, everything (table, chair, hill) is a person, and they are differentiated because of the bodily garment covering them. Regarding animals, Viveiros de

Castro [47], states that according to these cosmologies the animals are persons and see themselves as being persons. In a nutshell, for them, the manifest morphology of each animal species is a sort of “dress” that conceals a human form, which can be seen by beings, such as shamans, who can make the transition of gender or species. Perspectivism is a radically divergent cosmological perspective, very different from that of the usual Western thought. Every “thing” is in fact a “person”, and all things are. For Westerners culture is a mere human prerogative, while for Amerindians every living or non-living being, being a person, participates to culture. This is, in short, a multi-naturalistic perspective. For Viveiros de Castro, then, the only point of view is that of the “person” and its perspective is the one generated by its body. Therefore, there is not a single reality seen from different perspectives, but different realities observed from the person’s perspective. This, somehow, recalls – with the necessary sidereal distances - the lively debates about the nature of the world going on in many philosophy and physics departments. This is because quantum physics, an attempt to describe the world in its tiniest details, is altering our understanding of physical reality, and makes Rovelli [57] (page 36) state the following: “Nothing truly exists – except in relation to other things”. And adds: “We think about a world of things with absolute properties because this is what we experience”. More (page 40): “Our old metaphysical prejudice was that physical reality is made by some fundamental substance with absolute properties. Quantum theory questions this”. Of course, the distances between the quantum physics’ conceptions and the Amerindian ones differ dramatically, as for the former a chair is not a “person” and cannot project its deep essence to be differently interpreted by other “persons”. In the quantic world a chair has no properties that are exclusive to itself, while for the anthropomorphic Amerindian *Weltanschauung* it has them. Another aspect that perspectivism recalls is the current debate on perception, as according to some theorists, perception is a sort of “controlled hallucination” [58-61], because for them sensory information is continuous feedback on our expectations, that could be constantly corrected and refined. If so, domestication of wild social and hierarchical animals like the wolf, permitted them to somehow participate in the human “controlled hallucination”, as it happens with pet dogs. A question remains unresolved: will we be able, one day, to be able to enter inside the canine “controlled hallucination”? [62].

Morality and Non-Human Animals

A question is pervading the Western scene: is the respect of the lives and interests of non-human animals requested by morality? In the West very important was the influence of the Abrahamic religions, whose humanitarianism shaped the different attitudes towards

animals. We cannot in fact forget the Genesis' imperative (1:26-28): "Then God said: Let us make mankind in our image, in our likeness, so that they may rule over the fish in the sea and the birds in the sky, over the livestock and all the wild animals, and over all the creatures that move along the ground". This human centralism is not found in the East, where a more biological egalitarian ethics is found [63], probably because all the great eastern "religious systems", in some form, believe in reincarnation, or the belief that following death, some aspects of the soul or the self can be reborn in another human or animal body. For example, because of the samsara (the birth, death, and rebirth cycle), in Hinduism a person may or may not always come into the world in human form. For Jainists all life is sacred, drawing no sharp distinction between human and non-human life, whereas Buddhists' sacred writings forbid all needless killing. Taoism holds a kind of gentle bio-egalitarianism. We can agree with the above-cited Authors when they state: "Through the comparative study of Eastern and Western religions in animal ethics, we can clarify the differences and integration of animal ethics in the Eastern and Western religious systems, and actively seek the coexistence and development of modern science and technology and religious animal ethics in theory and practice, which has a very important positive value in promoting the harmonious development of human and nature and improving the ecological environment" (page 38). Traditionally, in the West the ethical theory maintaining that one ought always to act as so to maximize welfare (utilitarianism), probably has its roots in Aristotle's view ("nature does everything for a purpose" - in *Physics* 2.1, 192b20-23). So, the idea that just as plants exist to provide sustenance to animals, the latter exist not only to furnish food for humans, but also other aids. Traditionally, this cosmology with a moral point influenced later thinkers, such as Aquinas who, in his *Summa contra gentiles*, explicitly stated that God created animals for human use, as "charity does not extend to irrational creatures". We cannot forget that according to Aristotle's view (only humans are rational) the religious thinker added the idea that humans only were made in the image of God. Later, Kant in his *Lecture on Ethics* asserted that "He who is cruel to animals becomes hard also in his dealings with men". Clearly, here men are protected, not animals. We must wait until 1859 when Darwin with his "On the Origin of Species", not only clearly demonstrated that humans are not differing from other animals but considered slavery and cruelty towards animals two great human failings. However, it will be necessary to wait again, until the seventies of the last century, for the debate on the moral status of animals to ignite, thanks to Singer's "Animal liberation" book [64] that triggered a social movement. At this point, it's the case to mention an important thinker, like Agamben [65], who introduced the concept of "production of bare life" or the

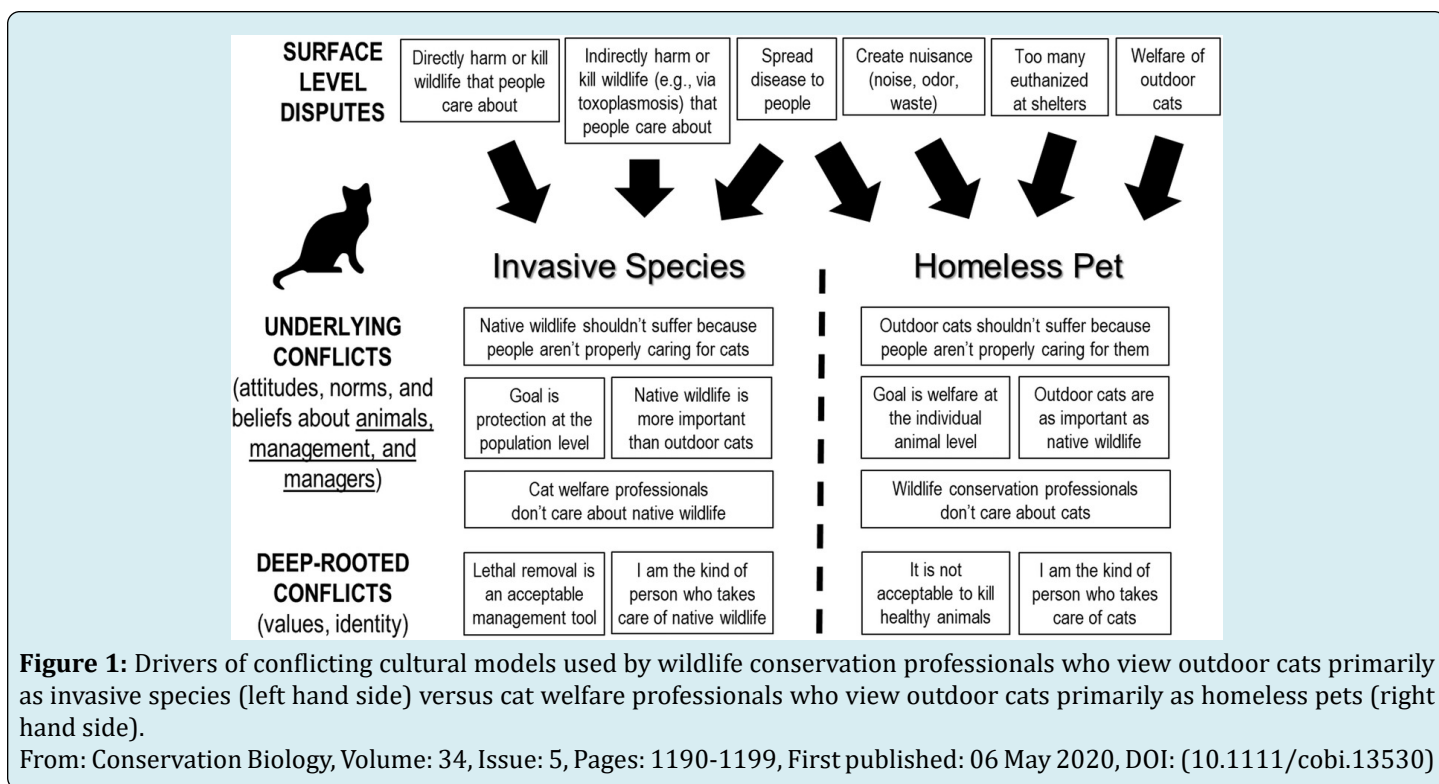
decisions regarding which bodies can be killed (without distinctions between homicide or sacrifice), that explains why we are so emotionally indifferent in routine animal and human killings. For him, in fact, killability is linked to sovereignty and is the original activity of sovereign power. Today debates are raging, mostly on animal rights (also called deontology), and between "utilitarianists" and "contractarians" (this because contractarianism is considered as being the least likely theory able to support the idea that nonhuman animals have a direct moral status). At present, in the idea that suffering cannot be caused without acceptable justifications, many debates spin around the conception that the most common moral principles will permit to reach more cogent ethical conclusions. However, as I am not a philosopher, for the readers aiming to reach more useful insights, I suggest referring to the Oxford Handbook of Animal Ethics [66].

Conclusion

There is a problem at this point: animals cannot participate in our disputes. Therefore, in the contemporary debates discussing whether they can come within the sphere of moral protection or not, we find lines of thought affirming that when, and only when, morally relevant differences between human and nonhuman animals exist we could treat the latter differently from us. Other lines of thought were based on observations on people with profound mental retardation [67], whose mental capacities were close to those of some animals. They suggested that the concept that all human life is of equal value should be substituted by a more graded view that also includes animals. But, as morality is for some philosophers a human institution created to defend human interests and rights, the debate between opponents of human rights and philosophical supporters lingers in the air. Therefore, I can only conclude that the debates on whether animals can have rights or not (and how) are raging in the same form that are the debates on fetuses' rights. Probably, what is needed is an adequate account of the functions of rights, and this claim is widely seen in all discussions, as nobody can imagine a world without rights for humans. So, a lot of imagination is needed if we want to include animals in the basic moral guaranties that humans share worldwide. There are problems. People are inherently teleological creatures [68]. In short, for them an action is right on the basis of the good consequences that it produces and the theory of teleological ethics reflects this vision, as it derives duty from what is valuable as an end, totally differing from deontological ethics, according to which an action's morality could be right or wrong under a series of rules, and not based on the consequences caused by the action itself. Another problem is our tendency to view all changes

as progressive [69]. Plato's essentialism (emphasizing perfect vs imperfect forms) and Aristotle's scala naturae (Great Chain of Being or a hierarchical system of animal classification) are evidently still seductive, especially for biologists and are the glue of the Western anthropomorphic vision of the world. At this point we cannot forget Descola's warnings [41]: the so-called animism cannot be ascribed to a primitive mentality but must be seen as being in opposition to the Western naturalism. In fact, the former recognizes a sort of soul to all things, while a soul or similar is denied to non-human beings by the latter. There is more: we must dismiss the idea that mankind is so strong and different from other living beings to be able, at the same time, to destroy and to save nature, the most deleterious cardinal sin because it is cloaked in the darkness of anthropomorphism. Since Franz Boas, anthropologists have investigated the nature/culture relationships. New twists are emerging from new scholars such as the so-called "multispecies ethnographers" [70] who are investigating not only science and technology studies on living beings, but also those environmental- and animal-connected. They started from useful plants and mesmerizing animals, then they turned their attention to other uncommonly studied creatures such as microbes, fungi, and insects. Adding artifacts, collections, and anthropological observations, they started a "multispecies intersectionality" thanks to the addition of feminist anthropology studies (intersectionality is an analytical framework introduced in 1991 by Crenshaw [71]). Together they widened the horizon, and Petitt [72] in her conclusions, affirms: "The multispecies intersectionality theory put forth here has shown the importance of acknowledging the intersectionality of five sets of relations: (1) species as a power relation beyond biology; (2) intersecting power relations of humans; (3) humans' organization of nonhumans into intraspecies categories; (4) nonhumans' own intraspecies power relations; and (5) how nonhumans make intraspecies distinctions between individuals of other species". Finally, animals and other living beings assumed the status of marginalized groups and entered the hell of discrimination, as happens for humans affected by sexism, racism, and classism. Of course, how the different forms of discrimination combine and overlap in this extended territory that till now has been investigated as being isolated and distinct and not mutually constitutive, will require an enormous effort and great care. This is because intersectionality per se is not a methodology, nor a theory of the power of oppression [73] but tries to identify the multiple advantageous and disadvantageous factors producing privilege and discrimination. Probably, a change in our ethical perspectives is necessary. We must first pass from an anthropocentric ethics (that conceives man as master of the world) to another ethic, planetary, which allows the Earth to be habitable for man

[74]. This bearing in mind E.O. Wilson's [75] "scientific humanism" assumed that humanity, with its destructive power, is the first species in the history of life to become a geophysical force. In fact, by introducing incalculable quantities of chemical compounds and toxic waste into the environment and polluting the oceans and lands, the threat to the terrestrial ecosystem is enormous as it could be irreversible. Therefore, the anthropocentric paradigm that has so far governed the man/nature relationship must change into biocentrism (also called "ecocentrism" or "biospheric view"), or the recognition that man is just one of the living beings on Earth, without a supremacy. Not an easy task. The movement to grant legal rights to nature probably started with Stone in 1972 [76] and his vision was probably realized much later, if Ecuador in 2008 became the first national jurisdiction to recognize the rights of nature in its Constitution ("since then, Bolivia, New Zealand, Bangladesh, Brazil, Colombia, Mexico, Uganda and Panama passed laws or amended their constitutions to recognize the rights of nature") [77] (page 26). Another ethical change could be the creation of a cosmopolitan ethics, that requires the idea of a cosmopolitan solidarity. Another difficult task, as it requires overcoming the concept of state. The cosmopolitan ethics, in fact, requires that what the Earth offers be available to all humans without discrimination, while that of the state limits its ownership within its borders. In these troubled times this goal is probably only a hope. Interesting appears to be Cynthia Willett's book [78] on interspecies ethics. She proposes a theoretical alternative called "biosocial communitarianism". This is because in the last forty years it became clear that we must find ways to live with animals and not only recriminate on the sins that we caused them. We became aware that we must rethink how transspecies cohabitation and nonhuman flourishing should work together. So, she emphasized community, looking for cues inside the structures created by animals. In particular, she considered affects, interactions like play, the background permitting the formation of networks aiming to make animals (and humans) "to be at home". Finally, Willett directed her attention to the human and nonhuman generosity that sometimes they manifest (she calls it "sublime compassion"). Therefore, biosocial communitarianism challenges the conventional approaches and offers to thinkers and practitioners an alternative ethical structure. Finally, we must try to identify and overcome the conflicting cultural models permeating conservation professionals [79]. As shown by Leong, et al. [80], conflicting cultural models and not biological data may affect how we can consider animals interacting with us, like for example hogs (*Sus scrofa*) found in some Italian cities, but also cats. I report the picture below as an exemplification.



Clearly, we are facing very complex problems and there is a wide prairie between those for and against. Assertive thinking carried out by yes or no advocates pollutes the debate. When dealing with a controversial topic, sometimes we try to win at all costs, animatedly, dividing into tribes. But this tendency is deleterious because, starting from the assumption of winning by defeating the opposing camp, instead of listening and learning, a style of discourse is used that changes the understanding of the problem. If, in fact, we enter a discussion with the propensity to listen to learn, we do not just choose how to interact with someone who has opposing ideas. We are also refining the way in which we think about whether an adequate - if not correct - answer can be given to the question itself. Unfortunately, we are living in a cultural milieu requiring rapid answers and fixes [81]. Probably another effort is necessary, or to be engaged in complex system analysis. Not an easy task, as it has to do with overcoming methodological and theoretical barriers. This will require more and more creative frames and to look for plausible pathways, without falling inside rapid fixes, as they are superficial and can derail us from the trajectory. In this slippery area interdisciplinary connections are needed, and philosophers, ethicists, anthropologists, sociologists, psychologists, zoologists, and ethologists, together with practitioners and experts in governance should engage in early discussions permitting to better manage conflicting cultural models. Without forgetting the contribution of Westernized native people, like the Author of the following poem that, in my opinion, fits perfectly with the Amerindian

cosmologies mentioned above.

Speak in the Age of Season

In a chance of season, natural & unheard voices shutter, millions have gone about wavering false phallic order, bound in endless sets of survival habits and good aim, like the *Sarracenia purpurea*, they just cannot help it—

Speak through skins of trees and endure the shapes of men,
 speak through granules inside mountains which define
 cement lines for skyscrapers,
 speak through flow of shallow rivers and extend arches of
 cradles,
 speak through eyes and watch leaves sway about a docile
 breeze,
 speak through fire which destroys mountainsides and gives
 birth to stars,
 speak through continental reaches which mimic conduit
 spines of a billion oppress backbones,
 speak through mantle of spirits in perpetual flight, flying
 together with their diminishing teeth exposed,
 speak through each bod which mimics moonlight and
 sunlight stealing measure of fraying memories in existence,
 speak through hair as it is set to flame and releases a flight of
 clouds for nourishment,
 speak through palms facing upward toward the sky, shaking
 the faces behind white picket fences,
 speak through sunken boats which build ancient mausoleum

as windows where mounds cease to exist,
 speak through bluish puss which pools near smooth and
 tighten skins of settling history and tilting sacred toils,
 speak through souls of deer cries in darkening darkness as
 voices of dynasties shatter rainstorms,
 speak through droplets which pour down on hallow surfaces
 and on perfect porches of HUD homes,
 speak through the hour which carves paths into stone feet
 and cracks ankles through small rumbling canyons,
 speak through safe hands which lead out the screaming
 caverns of blind oxidizing memories,
 speak through constellation which guide but are now gone as
 dead eighteenth century soldiers,
 speak through a need to live through pages hidden over
 frozen bodies of untold stories,
 speak again, through bodies which are now empty vessels
 and remain as webs, in the ebb of morning mist [82].

References

1. Rollin BE (2016) *A New Basis for Animal Ethics: Telos and Common Sense*. Columbia: University of Missouri Press.
2. Satish K (2002) *You Are, Therefore I Am: A Declaration of Dependence*. Cambridge: Green Books.
3. Sebo J (2022) *Utilitarianism and Nonhuman Animals*. In: Chappell RY, et al (Eds.), *An Introduction to Utilitarianism*.
4. Vinding M (2020) *Suffering-focused ethics*. Copenhagen: Radio Ethica.
5. Rowland M (2002) *Animals Like Us*. New York: Versobooks.
6. Hursthouse R (2012) *Virtue Ethics and the Treatment of Animals*. In: Beauchamp TL & Frey RG (Eds.), *The Oxford Handbook of Animal Ethics*.
7. Fraser D, MacRae AM (2011) Four types of activities that affect animals: Implications for animal welfare science and animal ethics philosophy. *Animal Welfare* 20(4): 581-590.
8. Regan T, Singer P (1989) *Human Rights and Human Obligations*. Cambridge: Cambridge: University Press.
9. Herzog HA, Betchart NS, Pittman RB (1991) Gender, sex role orientation, and attitudes toward animals. *Anthrozoös* 4(3): 184-191.
10. Kidd A, Kidd RM (1990) Factors in children's attitudes toward pets. *Psychol Rep* 66(3): 775-786.
11. Kellert SR, Berry JK (1987) Attitudes, knowledge, and behaviors toward wildlife as affected by gender. *Wildlife Society Bulletin* 15(3): 363-371.
12. Peterson D, Wrangham R (1997) *Demonic Males Apes and the Origins of Human Violence*. Mariner Books.
13. Magli I (2007) *Il Mulino di Ofelia. Uomini e dei*. Milan: BUR, RCS Libri.
14. Graça J, Calheiros MM, Oliveira A, Milfont TL (2018) Why are women less likely to support animal exploitation than men? The mediating roles of social dominance orientation and empathy. *Personality and Individual Differences* 129: 66-69.
15. Figueredo AJ, Steklis NG, Aguirre MP, Fernandes HBF, de Baca TC, et al. (2022) The influence of individual differences and local ecological conditions on empathy and harm avoidance towards nonhuman animals. *Human-Animal Interactions*.
16. Gómez JM, Verdú M, González Megías A, Méndez M (2016) The phylogenetic roots of human lethal violence. *Nature* 538: 237-242.
17. Rutherford D (2021) Toward an Anthropological Understanding of Masculinities, Maleness, and Violence. *Current Anthropology* 62(23).
18. Thurston SE, Chan G, Burlingame LA, Jones JA, Lester PA, et al. (2021) Compassion Fatigue in Laboratory Animal Personnel during the COVID-19 Pandemic. *J Am Assoc Lab Anim Sci* 60(6): 646-654.
19. Nagel T (1974) What Is It Like to Be a Bat? *The Philosophical Review* 83(4): 435-450.
20. Jackson F (1982) Epiphenomenal Qualia. *The Philosophical Quarterly* 32(127): 127-136.
21. Thwaites T (2016) *GoatMan: How I took a holiday from being human*. Princeton: Princeton Architectural Press.
22. Görres CM, Chesmore D (2019) Active sound production of scarab beetle larvae opens up new possibilities for species-specific pest monitoring in soils. *Science Report* 9: 10115.
23. Burghardt GM (1985) Animal awareness: Current and historical perspective. *Am Psychol* 40(8): 905-919.
24. Kano F, Krupenye C, Horata S (2019) Great apes use self-experience to anticipate an agent's action in a false-belief test. *Psychological and Cognitive Sciences* 116(42): 20904-20909.
25. McCoy DE, Schiestl M, Neilands P, Hassall R, Gray RD, et

- al. (2019) New Caledonian Crows Behave Optimistically after Using Tools. *Current Biology* 29: 2737-2742.
26. Dale L, Plotnik JM (2017) Elephants know when their bodies are obstacles to success in a novel transfer task. *Scientific Reports* 7: 46309.
 27. Robson D (2021) Clever Creatures. *New Scientist* 3329: 36-40.
 28. Preston E (2023) Animal personalities can trip up science, but there's a solution. *Knowable Magazine*.
 29. Arnett JJ (2016) The neglected 95%: Why American psychology needs to become less American. In: Kazdin AE (Eds.), *Methodological issues and strategies in clinical research*. American Psychological Association pp: 115-132.
 30. Viviani F (2020) The WEIRDness of Scientific Associations. Boardroom.
 31. Matsuzawa T (1985) Use of numbers by a chimpanzee. *Nature* 351(6014): 57-59.
 32. Matsuzawa T (2009) Symbolic representation of number in chimpanzees. *Current Opinion in Neurobiology* 19(1): 92-98.
 33. Gardner RA, Gardner BT (1969) Teaching sign language to a chimpanzee. *Science* 165(3894): 664-672.
 34. Stanford C (2018) *The New Chimpanzee, A Twenty-First-Century Portrait of Our Closest Kin*. Harvard University Press.
 35. Chevalier J, Gheerbrant A (1969) *Dictionnaire des symboles*. Paris: Laffont & Jupiter.
 36. Regan T, Singer P (1989) *Human Rights and Human Obligations*. Cambridge: Cambridge: University Press.
 37. Ingold T (2022) Evolution without Inheritance. *Current Anthropology* 63(S25): S1-S147.
 38. Best S, Nocella II AJ, Kahn R, Gigliotti C, Kemmerer R (2007) Introducing critical animal studies. *Animal Liberation Philosophy and Policy Journal* 5(1): 4-5.
 39. Danowski D, Viveiros de Castro E (2016) *The ends of the world*. Cambridge: Polity Press.
 40. Descola P (1992) Societies of nature and the nature of society. *Conceptualizing society* In: Kuper A (Eds.), London: Routledge, pp: 107-126.
 41. Descola P (2013) *Beyond Nature and Culture*. Chicago: University of Chicago Press.
 42. Avelar I (2013) Amerindian perspectivism and non-human rights. *Alter/nativas: Latin American Cultural Studies* 1: 1-21.
 43. Kirksey E, Helmreich S (2010) The emergence of multispecies ethnography. *Cultural Anthropology* 25(4): 545-576.
 44. Viviani F (2021) A Letter From COVID-19.
 45. Carlson CJ (2020) What would it take to describe the global diversity of parasites? *Proceedings of the Royal Society B* 287(1939): 1-12.
 46. Driscoll EV (2023) Inside the Scientific Quest to Save (Most) of the World's Parasites. *Scientific American*. March 2023, in press.
 47. Viveiros de Castro E (1998) Cosmological deixis and Amerindian perspectivism. *Journal of the Royal Anthropological Institute* 4(3): 469-488.
 48. FAO (2021) *The White/Wiphala Paper on Indigenous Peoples' food systems*. Rome.
 49. Swiderska K, Argumedo A, Wekesa C, Ndalilo L, Song, Y, et al. (2022) Indigenous Peoples' Food Systems and Biocultural Heritage: Addressing Indigenous Priorities Using Decolonial and Interdisciplinary Research Approaches. *Sustainability* 14(18):11311.
 50. Kapelari S, Alexopoulos G, Moussouri T, Sagmeister KJ, Stampfer F (2020) Food heritage makes a difference: The importance of cultural knowledge for improving education for sustainable food choices. *Sustainability* 12(4):1509.
 51. Lemke S, Delormier T (2018) Indigenous Peoples' food systems, nutrition, and gender: Conceptual and methodological considerations. *Maternal Child Nutrition Suppl* 3(Suppl 3): e12499.
 52. Hinzo AM (2016) *Indigenous Knowledges and Gender*.
 53. Antonelli A (2023) Indigenous knowledge is key to sustainable food systems. *Nature* 613(7943): 239-242.
 54. Lima TS (1996) O dois e seu múltiplo: reflexões sobre o perspectivismo em uma cosmologia tupi. *Mana* 2(2): 21-47.
 55. Viveiros de Castro E (1996) Os pronomes cosmológicos e o perspectivismo ameríndio. *Mana* 2(2): 115-144.
 56. Viveiros de Castro E (2012) *Cosmological perspectivism in Amazonia and elsewhere*. HAU: Masterclass Series 1: 45-168.

57. Rovelli C (2021) Why quantum is relative. *New Scientist*: 36-40.
58. Clark A (2013) Whatever next? Predictive brains, situated agents, and the future of cognitive science. *Behavioral Brain Science* 36(3): 181-204.
59. Open Mind Project (2015).
60. Seth AK, Tsakiris M (2018) Being a Best Machine: The Somatic Basis of Selfhood. *Trends in Cognitive Sciences* 22(11): 969-981.
61. Blanke O, Metzinger T (2019) Full-body illusions and minimal phenomenal selfhood. *Trends in Cognitive Sciences* 13(1): 7-13.
62. Peñaherrera-Aguirre M, Figueredo AJ, Steklis NG, Salmon C (2023) The role of cross-species relative brain size variation and time since domestication in explaining human empathy towards domesticated mammals. *Personality and Individual Differences* pp: 200.
63. Zhang Y, Fu T, Yang W (2020) The Animal Ethic Thoughts in the Eastern and Western Religions and Their Resource Significance. *International Journal of Philosophy* 8(2): 38-42.
64. Singer P (1975) Animal liberation. A new ethics for our treatment of animals. *New York Review* 192(4240): 302.
65. Agamben G (1998) *Homo Sacer: Sovereign Power and Bare Life*. Stanford University Press, California, pp: 1-103.
66. Beauchamp TL, Frey RG (2011) *The Oxford Handbook of Animal Ethics*. Oxford University Press, UK.
67. Singer P (2009) Speciesism and moral status. *Metaphilosophy* 40(3/4): 567-581.
68. Keleman D, Rosset E (2009) The human function compunction: teleological explanation in adults. *Cognition* 111: 138-143.
69. Gregory TR (2009) *Understanding Natural Selection: Essential Concepts and Common Misconceptions*. Evolution: Education and Outreach 2: 156-175.
70. Kirksey E, Helmreich S (2010) The emergence of multispecies ethnography. *Cultural Anthropology* 25(4): 545-576.
71. Crenshaw K (1991) Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color. *Stanford Law Review* 43(6): 1241-1299.
72. Pettit A (2022) Conceptualizing the multispecies triad: Toward a multispecies intersectionality. *Feminist Anthropology*, Sweden.
73. Garry A (2011) Intersectionality, Metaphors, and the Multiplicity of Gender. *Hypatia* 26(4): 826-850.
74. Galimberti U (2021) *The age of technology and the end of history*. Orthotes (Edn.), Lower Nocera, Italy.
75. Wilson EO (2006) *The Creation: An Appeal to save life on Earth*. Chesterton House, New York.
76. Stone C (1972) *Should trees have standing?* Oxford University Press, UK.
77. Lawton G (2023) *Natural Justice*: *New Scientist* 257(3425): 26.
78. Willett C (2014) *Interspecies Ethics: Critical Perspectives on Animals*. Theory, Culture, Science, and Law. Columbia University Press, New York.
79. Brookshire B (2022) *Pests: How Humans Create Animal Villains*. HarperCollins, New York, pp: 348.
80. Leong KM, Gramza AR, Lepczyk CA (2020) Understanding conflicting cultural models of outdoor cats to overcome conservation impasse. *Conserv Biol* 34(5): 1190-1199.
81. Zellner M, Campbell S (2015) Planning for deep-rooted problems: What can we learn from aligning complex systems and wicked problems? *Planning Theory and Practice* 16(4): 457-478.
82. Apache C (2018) *Genesis*. New York: Lost Alphabet Ed.

