Necroeconomics:

Power, ethics, and the political economy of human-animal relations

By

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Abstract:

This paper is an innovative addition to the ongoing debate about human-animal relations. It approaches the topic from the perspective of political economy rather than moral philosophy and seeks to provide an explanatory framework combining commodification of animals and death in the global economy. While acknowledging the importance of the ongoing debate about animal rights, it seeks to shift the focus of analysis of industries which create value through the killing of animals toward one based on the Foucauldian notions of power as biopolitics and governance. In order to reconceptualise the relations of power which exist between human business interests and animal life, it introduces the notion that animals killed for meat, by-products, or research purposes are treated as necrocommodities; that is, commodities whose value is created as a direct result of death. By challenging the prevalent notions of speciesist hierarchisation and property rights, it seeks to cast a new light on the tangible power relations which exist between humans and animal species which are hunted or fished for profit. In doing so, this paper challenges the notion that the economy is amoral. Instead, it presents a preliminary picture of an economy rooted in inter-species power relations which is necessarily subject to a moral critique. The case study of the International Whaling Commission (IWC) and ongoing “scientific” whaling is used to elucidate and introduce the concept of necroeconomics, but the main goal is to present an analytical framework that has a bearing on wider moral and structural issues in the international animal and animal product industry. Moreover, it situates animal-human relations within broader problems of modernity, thereby broadening its scope and calling for more academic focus on the place of animals in the modern political economy and its attendant circuits of power.
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“The greatness of a nation and its moral progress can be judged by the way its animals are treated.”

- Mohandas Gandhi
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Introduction

“The three harpoon boats had spread out over the night in an arc of fifteen miles. One of them returned to the Nisshin Maru with a whale in tow and quickly transferred it to the flensing deck. Within minutes, thick red blood could be seen pouring from the scupper holes on both sides of the ship into the sea.”

This brief, almost clinical blurb appeared in a news release from the Sea Shepherd Society on February 2, 2010. It describes the physical process of the hunt, harpooning and subsequent processing of a minke whale by the Japanese “scientific” whaling fleet. But this action, its causes, and its implications, are the centre of intense controversy among world governments and civil society groups (both within the debate about whaling and, more broadly, in the debate about wildlife conservation). Moreover, as this paper will argue, it speaks to a broader inter-species power relationship wherein animals\(^2\) are deprived of life – physical, moral, and political – in the name of anthropocentric economic and scientific interests. Indeed, the end of animal life in many instances in the moment in which a commodity – defined as anything of value, be it commercial value or scientific knowledge – is created.

The whale will undergo scientific tests – perhaps about its diet or general health – and then be cut into meat which will be sold in the Japanese market. Under

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2 The terms “animal,” “nonhuman,” “nonhuman animal,” “fauna,” and “nonhuman fauna” will be used interchangeably throughout this paper to refer to all sentient beings other than human beings. I recognize that this vernacular is itself the subject of some debate and that for some scholars these various words connote different and sometimes conflicting meanings. I also recognize that lumping all animals which are not human into one group, which is specifically distinct from the human species, is to some degree problematic. However, for the purposes of this paper, I feel that all of these terms are apt and their meaning throughout is intended to be non-normative and fully interchangeable.
the auspices of the International Whaling Commission’s (IWC) Convention, this is a legal activity. Indeed, from a strictly economic viewpoint, it is inherently ordinary: a natural resource is being used to create value. The same could be said of the scientific perspective: a sample is being tested to deepen a body of knowledge. And yet, this action, this death, is not only highly controversial but highly problematic and, as will be argued, representative of ills that lie at the very heart of modernity. This paper will tell a story of culture, morality, property, and power. In doing so, it will show that there is no framework in existence which sufficiently answers the simple question of why animals die so that people can make money.

The broadest intellectual battlefield with regards to animals, their use by humans, and the notions of conservation, preservation, and sustainability, is an area that might be termed for simplicity’s sake the animal rights debate. This is certainly an important debate, and this paper will acknowledge its contribution to the struggle to improve the lot of animals. However, I will argue that this approach is insufficient in that it overlooks the structural aspects of modern political economy which enshrine speciesism and provide the impetus for most mistreatment and murder of animals by humans. This line of inquiry, in turn, helps embed the animal rights question within bigger questions about politics, science, and modern society.

This paper will begin with a brief genealogy of the religious, social, and philosophical underpinnings of the human-animal relationship. It will then move on to an overview of the prevalent Western notions of private ownership and the “right” to property, rooted in John Locke’s work on jurisprudence, and Karl Polanyi’s notion of “fictitious commodities.” Having established this foundation, the paper will examine in detail the animal rights debate, including its points of consensus and divergence, as well as the position taken by its critics. At this juncture, however, my trajectory will
diverge from the established narrative. I will argue that the animal rights debate is limited as an analytical tool of the animal-commodity industry because its ontology misses the structural and socially-propagated reasons for much mistreatment and killing of animals. This paper seeks instead to develop a new analytical model based on Michel Foucault’s work on (bio)power, sovereignty, and racism, and Achille Mbembe’s notion of “necropolitics.” I will argue that a Foucauldian framework which considers the human-animal relationship as one rooted in complex and dynamic, socially constructed power relations is necessary to expand both the animal rights debate and the broader critique of modernity.

I will contend that human-nonhuman relations are based on the “racist” hierarchization of species (I will seek here to expand the concept of “speciesism”) and the deployment of a system akin to Mbembe’s “necropower” on animal populations. This will show that rather than animals simply being denied “rights,” they are transformed by specific processes into what I dub *necrocommodities*, that is commodities created out of the negation of an animal’s very being within the everyday functions of the animal product and animal science industries. This provides me a new avenue for looking at human-animal relations from a power-political-economy perspective. The culmination of this analysis is the introduction of what I term “necroeconomics,” or the transmogrification of life into commodity through an economically-motivated, speciesist war against otherwise economically valueless animal life. This framework will then be applied to the case of the IWC’s moratorium on commercial whaling and the ongoing Japanese “scientific” whaling campaign.

There are three principal implications of the necroeconomic analysis that this paper will attempt to bear out. The first is that the roots of speciesism - and the attendant mistreatment of animals and use of animals as products in the market – are
not solely moral or social constructs, but are rather aspects of the broader, modern political economy. This suggests they must be tackled not only at the level of individual morality, but at the level of the economic system itself. The second implication is that a necroeconomic analysis challenges the implied amorality and impartiality of economics and science and reveals the degree of anthropocentric politics tied up within both of these. Finally, it presents a new framework for analyzing human-animal relations that animals form an integral part of political, economic and scientific power matrices.

1. Setting the Stage

This paper aims to sketch the various aspects of the human-animal relationship with a view of explaining how it is that these combine within the political-economic system. But before delving into the moral argument about animal rights of the details of economic relations with non-humans, let us start by examining the roots of the human-animal relationship in modern Western civilization and how this relationship was carried over into the founding maxims of the modern capitalist economy.

1.1. A brief genealogy of speciesism

There is a long tradition in what might broadly be termed Western thought which situates animals in the doubly unfortunate position of being inferior to humans.

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3 Defined by Peter Singer as “a prejudice or attitude of bias in favour of the interests of one’s own species and against those of members of other species.” Singer. Animal Liberation. Avon Books, 1990. p.6 This paper will go on to offer an expanded and arguably a more complete definition of this term, but Singer’s definition is perfectly apt for the moment.
and – because of this or for other reasons which will be discussed below – at humans’ disposal. Tracing the genealogy of the human relationship with nonhuman fauna is a monolithic task and I am not suggesting that I will undertake such a task. It is, however, useful to briefly outline the Judeo-Christian and Aristotelian ideas about this relationship – and about the nature of humanity - as these have gone on to directly influence the prevalent moral, philosophical, economic, and scientific notions about the role of animals in society. This may seem like a generalization, but it is these notions which have shaped the bulk of human practice in terms of animal hunting, rearing, and consumption; implied the right to use animals for economic ends; and set the stage for the exclusion of the consideration of animals as political – and in most cases moral – subjects.

I do not mean to discount various civilizational, geographical, or temporal necessities that led and continue to lead various peoples to use and kill animals for their own purposes, but I do agree with the moral philosopher Peter Singer that such treatment is often justified or socially embedded through “ideological camouflages” and “myth[s] to make human beings feel their supremacy and their power.”

Looking at Aristotelian philosophy and the Judeo-Christian tradition, as Singer does, gives us a very incomplete view of the global human-animal relationship and the myriad permutations it takes, but given the influence of these two world-views on modern science and economics, such a limited scope is sufficient for our purposes.

The Bible is explicit about the human-animal relationship. The Book of Genesis urges humans to “replenish the earth, and subdue it.” Indeed, the Bible’s god tells humanity that “the fear of you and the dread of you shall be upon every beast of the earth ... Every moving thing that liveth shall be meat for you ...” There are two aspects

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of this religious codex which stand out and continue to this day: the supposed sanctity and supremacy of human life over other forms of life, and the social entrenchment of the unquestioned right to kill animals. Thomas Aquinas introduced the notion of hierarchization of species which will be discussed in this paper with his ideal of perfection, namely that “more perfect” beings like humans had the natural right to kill those less so. He also made the now ubiquitous argument that cruelty to animals should be avoided only because it might be indicative of a capacity to mistreat humans.

A very similar conclusion was arrived at through the application of deductive reasoning. Aristotle concluded that “[s]ince nature makes nothing purposeless or in vain, it is undeniably true that she has made all animals for the sake of man.” Animals were resources and, as Locke would later argue, it is a human duty to not waste resources.

It is indicative of the degree to which the notion of human supremacy over other animal species is entrenched in our society that the Enlightenment did little but reinforce – and in some important ways exacerbate – the lot of nonhuman animals. With its focus on discovering natural truths and moving away from theocentreism and mythology, it might have been expected – perhaps naively - that the role of nature and nonhumans, as they came to be better understood, might come to play a more central role in social and political consideration. But instead the Enlightenment drove a wedge between man and nature in theory and practice by introducing a specific and anthropocentric approach to understanding the world.

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5 Ritual slaughter is also an intrinsic part of the Judeo-Christian tradition. Take halal and kosher meat, which is simply ritualistic killing enshrined in religious doctrine.

6 Tellingly, Aristotle – just as Descartes would argue about animals almost two millennia later – considered slaves to be “living instruments” rather than people per se.
As explained by Shanin, the movement away from traditional or theocentric forms of understanding the world led to one based on a faith in universal, linear progress rooted in rationality, “the highest expression of which is science.”

As Geuss notes, there are three central and interconnected properties of Enlightenment knowledge: that the objects of knowledge are interchangeable and can be integrated into a greater concept of knowledge project; that knowledge is instrumental; and that meaning must be related to this instrumental nature of the object of knowledge. This knowledge as a tool and therefore as an input of the productive process. This instrumental knowledge is, as will be reiterated later, a commodity whose value lies in the fact that it includes “explicit instructions as to who its beneficiaries are.”

Moreover, this knowledge must necessarily be accepted as the totality of definite knowledge about nature and humanity. As Schick explains, a “key tenet of Enlightenment thinking is its rejection of that beyond what we can see and control.”

Adorno and Horkheimer condemn this epistemology, asserting that the “Enlightenment behaves toward things as a dictator toward men.” This places nature and the nonhuman realm in a precarious situation. On the one hand, humanity separates itself from nature, by, as Latour explains, disavowing ties with it and making Nature and Society into two separate spheres. But behind this separation is a constant drive to understand this new, separate nature with a view to controlling it and harnessing it for human use. It also sets up Nature as an Other to human society, making it the twin object of inquest and mistrust as “whatever does not conform to

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10 Schick, 2009. p.145
the rule of computation and utility is suspect.”¹² Nature is given but two options, and the possibility of being part of human society or somehow crossing the boundary between its sphere and the human one becomes an ontological impossibility. As Latour argues, “if nature is not made by of for human beings, then it remains foreign, forever remote and hostile, Nature’s very transcendence overwhelms us, or renders it inaccessible.”¹³ Nature must therefore always play a part, remain the recipient of projections of social categories, doomed forever to be “ahuman, sometimes inhuman, always extrahuman.”¹⁴

A prime example of this belief, and the frequent target of the animal rights critique of modern science’s approach to animals, is René Descartes. In a bizarre logic chain linking reason, theology, and a mechanistic view of life, Descartes believed that although humans and animals were both possessed of machine-like bodies and brains, which meant they could feel pain, humans were unique in their ability to think and therefore experience God and therefore have a soul and therefore actually experience pain.¹⁵ Sentience is here separated from cognition, the only proof of which Descartes was willing to accept being the uniquely human capacity for reasoned verbal communication. This means that, for practical purposes, animals could be treated as automata and subjected to practices including poisoning, asphyxiation, and vivisection in the name of scientific experimentation.¹⁶

¹² Ibid. p.6
¹⁴ Ibid. p.80
¹⁶ Descartes apologists like Guerrini seek to exonerate him through the bizarre tactic of arguing that he never denied animals the capacity to feel pain (one of the central lines of argumentation in favour of animal right) but that he simply did not think they could experience it and therefore that it was a moot point. Guerrini is also quick to point out that Descartes himself only performed a limited number of vivisections. And that, besides, for most scientists who performed vivisection, “the Cartesian question doesn’t come up” because they reject all philosophical arguments outright from the scientific arena. See Guerrini, Anita. “The Rhetorics of Animal Rights.” In Applied Ethics in Animal Research: Philosophy, Regulation, and Laboratory. Ed. Gluck et al.
This brief genealogy shows that speciesism is deeply socially entrenched and that the Enlightenment, if anything, exacerbated it by making animals subject to any use that could be deemed to further knowledge. And it was precisely this attitude that was prevalent at the inception of modern capitalism, which adopted it unquestioningly. The following section briefly sketches out the philosophical foundation of market capitalism and explains how animals were implicated in it.

1.2. Property, commodities, and animals

If a worldview based on the principles of the Enlightenment is the philosophical foundation of modernity, then the primary social foundation must lie in economic interaction. The economic realm, rooted in the ideas of private property and of commodities whose value is governed by market value, is not only inherently unable to give any special consideration to animals, it cannot differentiate them from humans, natural resources, or capital. Animals are a product to be used and consumed by the market. Let us briefly examine how such a situation came about.

John Locke, in his seminal Second Treatise on Government, linked traditional notions of divine right to the “natural right” to private property. He argued that all that is in Nature is Man’s, and that if man uses his own labour to “remove”, “appropriate”, or “adulterate” anything that is otherwise part of the commons, that thing becomes his private property, giving him exclusive right to its use. He suggests that anything in Nature which can be improved “for the benefit of life” should be so used, suggesting that those potential resources left untapped are wasted by not being

put to human use. Shanin links this mindset to the pre-eminence of rationality in the drive to eliminate those things which would be “wasteful of human energies and economic resource.” In this world view, nothing in nature has an inherent value outside the value placed upon it by human actions and needs, and it cannot have such value unless it first becomes an individual’s private property.

Locke is also one of the first modern Western philosophers to make a direct link between human superiority over animals and the right to property. In three brief passages he lays out the basis for continued human exploitation of animals on land and sea, and makes the seminal leap of logic that because animals are natural resources, they can be claimed as property. “Natural reason,” he writes, “[...] tells us that men, being once born, have a right to their preservation, and consequently to meat and drink and such other things as nature affords for their subsistence.” This inherently includes animals, but how does one allocate creatures which, unlike land or trees or coal, are not static? Locke reasons that “though the earth and all inferior creatures be common to all men, yet every man has a property in his own person.”

It is not the animal that matters in this relationship, but the human labour that goes into taming, domesticating, or killing it. Locke is explicit on this point, writing that “…what fish any one catches in the ocean, that great and still remaining common of mankind ... made his property who takes that pains about it ... whoever has employed so much labour about any of that kind as to find and pursue her has thereby removed her from the state of Nature wherein she was common, and hath begun a property.”

The example of fish is telling as, unlike for instance cows or oxen, fish and other

17 Shanin. p.65
19 Ibid. Chapter V; passage 26.
20 Ibid. Chapter V; passage 29.
oceans dwellers cannot be used for labour or by-products like milk. Their utility to mankind is strictly as food or products made from their carcasses.\textsuperscript{21} Locke, therefore, enshrines in natural law the notion that in death an animal can become property and that the justification for this ownership lies strictly in the “labour” involved in removing the creature from the “state of Nature.” In this inescapable, strictly amoral logic circuit, killing justifies property, which justifies killing.

Coinciding with the maturation of Enlightenment thought and the emergence of disciplinary and biopower in the Foucauldian narrative (see Section 3), the nineteenth century saw the emergence in Britain of a distinctly new form of the capitalist mode of production.

This development is discussed most clearly in the work of Karl Polanyi.\textsuperscript{22} The crux of Polanyi’s argument is that the Industrial Revolution in Britain and the various socio-political factors surrounding its emergence set into motion a process whereby social relationships became predicated upon the dictates of the market.\textsuperscript{23} The basis for Polanyi’s analysis is his assertion that “for industrial society to work, all factors of production must be for sale in needed quantities for anyone able to pay.”\textsuperscript{24} This implies the emergence of what Polanyi terms the three “fictitious commodities”: land, labour, and capital. These are fictitious because rather than being commodities in the

\textsuperscript{21} With the obvious exception of animals captured for zoos, performance, etc.

\textsuperscript{22} It is beyond the scope of this work to trace Polanyi’s genealogy of the emergence of the market system. But it bears noting that Polanyi’s assertions about historical market and social relations have been heavily scrutinized from certain quarters (See, for instance, Hejeebu, Santhi and McCloskey, Deirdre. “The Reproving of Karl Polanyi.” Critical Review, Vol. 13, No. 3/4, Summer 1999. pp. 285-314.)

\textsuperscript{23} This notion, and especially the focus on Britain, has also been the focus of vigorous and inter-disciplinary academic debate, but a relative consensus seems to have emerged that the specific form of purely market-based capitalism described by Polanyi was indeed a historically and geographically specific event. As noted by Comminel, “the evidence would suggest that capitalism is truly extraordinary - a unique development of English society. Yet ... its internal relationships allowed it to - after, and as a result of, the Industrial Revolution - take root in any society that had private property, contract, trade, and other so-called ‘bourgeois’ social relationships.” Comminel, George C. ‘English Feudalism and the Origins of Capitalism’, Journal of Peasant Studies, Vol. 27, No. 4, 2000. p.43.

\textsuperscript{24} Polanyi, Karl. The Great Transformation. p.43
strict sense of being goods produced for sale, they are instead the very inputs necessary for production to occur.\textsuperscript{25} They are also the foundations of society, as they make up populace, the totality of natural resources, and the means of exchange. This leads to a social transformation whereby instead of the economy being embedded in social relations, social relations are embedded in the economic system.\textsuperscript{26} This transformation was great indeed:

“Henceforth, as Adam Smith was later able to explain, the needs of social existence could be met through production that responded solely to the market. It would not, however, be the same production, the same needs, or the same social existence. Capitalism was the full systematization of these new social relations of production.”\textsuperscript{27}

In other words, society – including interpersonal relationship and relationships between humans and their natural surroundings – are shaped in such a way as to allow the market system to function according to its own laws. In a perverse expansion of Enlightenment ideals, everything becomes instrumental to the creation of value. Adorno and Horkheimer observe that the emergence of the market was paradoxically “both the actual form of reason and the power which destroyed reason.”\textsuperscript{28} As Schick notes, after Marx, in such a system, “categories such as beauty and social worth become null and void, and things in themselves, including human

\textsuperscript{25} Polanyi’s thesis goes beyond – and to some extent challenges – Marx’s notion of exchange value, whereby commodities in the capitalist system are stripped of intrinsic value in favour of market value in that it introduces the concept of fictitious commodities and, through Polanyi’s theory of the double movement, suggests the possibility of opposition to commodification and its devaluation of intrinsic value within the capitalist system. See Marx (1990) and Polanyi (2001).

\textsuperscript{26} Polanyi. p.60

\textsuperscript{27} Comninel. p.47

\textsuperscript{28} Adorno and Horkheimer. p.90
beings and the natural world, lose their inherent value.”\textsuperscript{29} The value-based relationship between humans and the environment is especially problematic because “the economic function is but one of many vital functions of land.”\textsuperscript{30} The implication here, albeit not one directly stated by Polanyi, is that the capitalist economic arrangement is inherently anthropocentric in that, in the tradition of Locke, it sees natural resources’ sole role as that of property or potential property for human exploitation.

While Polanyi does not discuss animals directly, we can make two guesses as to where they would be situated: either they would be included in the same rubric as land, being a part of nature and yet not a commodity in the traditional sense, or they would indeed be considered an actual commodity. The former seems simplistic and inadequate while the latter seems unlikely and indeed impossible considering Polanyi’s specific assault on the “fictitious” nature of the other commodities he discusses. It is, of course, entirely possible that Polanyi did not consider this question at all. I would suggest that animals must be disambiguated from land and be considered as an especially problematic, fourth fictitious commodity. By more problematic I do not mean more important but rather more complex. This is because, in simplest terms, an animal is not a rock. There are numerous characteristics which distinguish animals from static natural resources, including mobility, sentiency (and related notions like interests which will be discussed throughout Section 2) and their own, non-economic relations with the land. This distinction is an important one in that animals tend to be conflated with other natural resources in terms of use and

\textsuperscript{29} Schick. P.143
\textsuperscript{30} Polanyi. p.187
possession within the economic sphere, which in turn presents a great challenge to the debate about animal rights.

The disambiguation being completed, however, paints an even grimmer picture of the effects of modern economic relations than that posited by Polanyi. The “self-adjusting market implied a stark utopia,” he wrote, “such an institution could not exist for any length of time without annihilating the human and natural substance of society.”31 If we consider the breadth of nonhuman life directly impacted, however, we recognize that the market entails not only human society in its various imbrications, but indeed the subjugation of the entire nonhuman biosphere to the laws of the market. Such an expansion, however, seems to confirm Latour’s conclusion that by “seeking to reorient man’s exploitation of man toward an exploitation of nature by man, capitalism magnified both beyond measure.”32

This section has shown that the animal-human relationship established in traditional thought and continued through the Enlightenment’s focus on rationality was carried on the establishment of an economic system where animals were considered to be simply another commodity. Through this process, animals became entirely instrumentalised: deemed inferior to humans and in fact insurmountably Other to them, they became legitimate victims for individual use, scientific exploration, and economic gain. But this position did not go unchallenged.

1.3. An enlightened defense?

The subservient and disposable role of animals vis-a-vis humans within the modern triumvirate of traditional beliefs, Enlightenment thinking, and capitalism

31 Ibid. p.3
32 Latour (1993). p.8
seems inescapable. This is especially true if considered along the lines of reasoning offered by any of the three individually.

An animal cannot deserve preferential treatment if it is ordained by a higher power that it is to be used by man at his leisure and to suit his own needs. But what if there is no God, no natural law? An animal is a part of nature, which serves as an Other to humans and human society. It is there to be understood and used to further human knowledge and the needs of human society. But how can it be used in the market if it has no inherent value? As a natural resource it does have inherent value dictated by the forces of supply and demand and must be available to be used and disposed of based on these dictates.

How can one argue against animals’ inferiority in the face of their relegation to a subject of instrumental knowledge deployed in using them for the market and maximizing their value therein? The best effort to so in the tradition of the Enlightenment has been the effort to suggest either that animals have inherent rights and are therefore due specific treatment or that, rights aside, they have properties which warrant more consideration than they currently receive. Indeed, most of the efforts to improve the lot of animals for the past two centuries has revolved around this rational-moral mode of argument. This debate is explored in the next section.

2. The animal rights debate

Peter Singer encapsulates the relationship between the world’s species as the “tyranny of human over nonhuman animals.” 33 At the heart of the voluminous animal rights literature is the belief that humans treat nonhuman animals in an unacceptable

manner and, for the most part, that this treatment should be ameliorated. To address this, the literature seeks to ascertain - in myriad ways - what characteristics animals possess that would make them deserving of this better treatment and, to a lesser extent, what flaws or inconsistencies in human thought or social construction need to be altered so that animals are treated more justly.

The purpose of advocates of animal rights is to establish that at some level animals have some inherent properties than mean they merit a certain treatment. The notion of what this treatment is varies between authors and between different approaches, but the common belief that animal rights are directly subjugated to human interests. In other words, humans, because of either notions of human rights to treat animals in certain ways or due to economic, scientific or cultural concerns, subject animals to treatment – including death – which violates their rights. The basis for this treatment is speciesism.

This section will delve into the various philosophical approaches to the animal rights question, including critiques of each from both within and outside the animal rights movement, and will also address the criticism that the very notion of animal possessing rights is a philosophically untenable one.

The first part of this discussion is divided into similar categories to those used by Robert Garner (principally 2005, but also in his other work), but in most cases uses different or complimentary sources to those used by Garner. This section will also

34 As many others have pointed out, applying the term “animal rights” to this far broader debate, many of whose principal players reject the notion of rights per se, is misleading if not disingenuous. It is only in part a debate about whether or not animals possess rights in a universal sense, and much more a debate about how animals should be treated and why. It is also increasingly, as will be discussed later in this paper, a debate about how animals might be included within political theory or represented or even brought into actual politics. The terms “animal politics” or “nonhuman political theory”, though far from optimal, are perhaps more apt (although even these might exclude certain notions about immanence and human-nonhuman politics). Due to the potential for making a bigger mess out of a familiar one, I will use the term “animal rights debate” to designate the totality of this field of inquiry. But I do so recognizing all its shortcomings and adding my voice to those calling for a better label(s).
argue that this debate is indispensable for understanding the human-animal relationship and suggest which aspects of this debate are applicable to an analysis of the role of animals from a political economy perspective. It will also reject a number of criticisms of animal rights as philosophically or empirically untenable. But I will conclude that ultimately this debate is inadequate to address the systemically entrenched nature of the modern human-animal relationship.

2.1. What is an animal? Interests, personhood, value, equality

Why do humans hold a monopoly over personhood? Why is it that the word “person” is an identity and a concept which applies exclusively – and, in theory, equally - to members of the human race? This line of inquiry is at the heart of the pro-animal rights argument. Its proponents hold that if the definition of personhood was to be expanded to nonhuman animals, then at least some of the duties and rights associated with human personhood would have to apply to them as well.

If we move past the untenable Cartesian theory that animals are little more than automata, where might we set a minimal baseline quality which would require some modicum of consideration for their interests? Many argue that this should be predicated on the ability to feel pain (and that by extension sentiency should be the defining the criterion for morally sound treatment). This position is frequently traced back to the early utilitarian thinker Jeremy Bentham. His opinion, often cited in fragments, bears being quoted in full. Besides introducing the capacity to feel pain as the principal moral criterion for animal treatment, it prefigures many ongoing aspects of the animal rights debate. In his 1789 work *Introduction to the Principles of Morals and Legislation*, Bentham wrote:
“Under the Gentoo and Mahometan religions, the interests of the rest of the animal creation seem to have met with some attention. Why have they not universally, with as much as those of human creatures, allowance made for the difference in point of sensibility? Because the laws that are have been the work of mutual fear; a sentiment which the less rational animals have not had the same means as man has of turning to account. Why ought they not? No reason can be given. If the being eaten were all, there is very good reason why we should be suffered to eat such of them as we like to eat: we are the better for it, and they are never the worse. They have none of those long-protracted anticipations of future misery which we have. The death they suffer in our hands commonly is, and always may be, a speedier, and by that means a less painful one, than that which would await them in the inevitable course of nature. If the being killed were all, there is very good reason why we should be suffered to kill such as molest us: we should be the worse for their living, and they are never the worse for being dead. But is there any reason why we should be suffered to torment them? Not any that I can see. Are there any why we should not be suffered to torment them? Yes, several. … The day has been, I grieve to say in many places it is not yet past, in which the greater part of the species, under the denomination of slaves, have been treated by the law exactly upon the same footing as, in England for example, the inferior races of animals are still. The day may come, when the rest of the animal creation may acquire those rights
which never could have been withheld from them but by the hand of tyranny. The French have already discovered that the blackness of the skin is no reason why a human being should be abandoned without redress to the caprice of a tormentor. It may come one day to be recognized, that the number of the legs, the villosity of the skin, or the termination of the os sacrum, are reasons equally insufficient for abandoning a sensitive being to the same fate. What else is it that should trace the insuperable line? Is it the faculty of reason, or, perhaps, the faculty of discourse? But a full-grown horse or dog is beyond comparison a more rational, as well as a more conversable animal, than an infant of a day, or a week, or even a month, old. But suppose the case were otherwise, what would it avail? the question is not, Can they reason? nor, Can they talk? but, Can they suffer?\textsuperscript{35}

This argument, however, did not result in a universal injunction against causing suffering to animals either in Bentham’s broader school of thought or in that of the many scholars who have grappled with this problem since. Some do argue that we should strive to cause animals no pain whatsoever; this seemingly simple argument, however, raises many new questions about what exactly constitutes pain.\textsuperscript{36} This paper cannot delve too deep into this question, but two related points bear noting. The first is that, as noted by Ralph Mitchell, within the evolution of animal life, the role of pain is to evoke reactions to alleviate the pain and its causes and develop pain avoidance

\begin{footnotesize}
\textsuperscript{35} Bentham, Jeremy. An Introduction to the Principles of Morals and Legislation. 1789 "Limits between Private Ethics and the Art of Legislation," §1, ¶4 Footnote. My emphasis.

\textsuperscript{36} Various authors suggest that the definitions of “pain” and “suffering” should move beyond physical pain and the threat of imminent death to events and actions as diverse as isolation, forced mating, shearing, milking, ecosystem pollution and destruction, introduction of non-native species into existing biospheres, etc.
\end{footnotesize}
strategies. As such, considering the difference in lifestyle between animals and most modern humans, it is very plausible that the pain (and especially the immediate physical pain) experienced by animals, being central to the survival mechanism, is more acute in animals than it is in humans.\textsuperscript{37} Moreover, as pertains to the notion of animal cruelty, Midgley argues that “the only plausible account of why cruelty is a vice acknowledges the moral status of its victim.”\textsuperscript{38} In other words, if one acknowledges that cruelty is the cause of pain, then one must recognize that the ability to feel pain is sufficient to establish moral consideration.

Others, however, either reject this view outright or suggest that if suffering defined as physical pain is the only litmus test for sound moral treatment, then practices like “humane killing” should suffice to keep humans in the moral clear. This remains in many cases the mainstream view, propagated even by “pro-animal” groups like the SPCA and various governmental Animal Ethics committees.

The debate becomes even more contentious and convoluted when it comes to the debate between those who seek to dismiss suffering as insufficient for moral agency and those who seek to grant nonhumans more of the characteristics of personhood. Sunstein and Nussbaum, for instance, contend that using the ability to suffer as the only criterion for being privy to rights is not entirely sound because animals are not "moral agents" in the same sense as humans in that they are incapable of following moral dictates themselves. In other words, do humans owe something to animals that animals are incapable of understanding or reciprocating?\textsuperscript{39}

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{38}Midgley, Mary. “Persons and Non-Persons.” In Peter Singer (ed), In Defense of Animals. Basil Blackwell, 1985, p.42
\end{enumerate}
\end{footnotesize}
For others, the criterion of suffering is insufficient to establish personhood. Kant, for instance, suggested that personhood required the ability to understand and compose signs (although modern semiotics and concepts of communication via semiospheres – see Section 3.8 below – might prove that many animals safely satisfy this criterion). Other posit the notion of being able to develop a long-term life plan that exceeds basic short-term survival consideration (but this too is being challenged by work with primates). DeGrazia does not deny that animals suffer, but suggests that personhood requires the ability for a higher order (as opposed, presumably, to severity) of suffering. He suggests that humans have specific attributes based on our intelligence and self-awareness that can create forms of suffering distinct from that of animals. This “existential” suffering includes feelings such as anguish or concern about one’s own or others’ potential futures, which might be made impossible through death.41

In a perfect example of modern, objective classification, Evelyn Pluhar has created a hierarchy of types of persons, ranging from “full-fledged persons” through “persons lower on the autonomy scale” to “natural objects or systems.”42 As the basis for the creation of the various categories is inescapably based on human cognitive and social processes, the categories themselves cannot help but be anthropocentric. As such, Pluhar’s conclusion comes as no surprise: that since no animals can match human mental complexity, only humans are full-fledged persons.

On the other end of the spectrum, many in the animal rights camp argue that hierarchization based on some set of criteria has no bearing on moral standing and

that sentiency is in and of itself a sufficient condition for moral standing.\textsuperscript{43} Midgley goes further in putting forward the notion that not only does the ability to suffer per se qualify animals as persons but that animals should be entitled to specific consideration due to their “emotional fellowship” with humans.\textsuperscript{44}

As this summary has shown, the animal rights debate is a rich and contentious one. However, in and of itself, the various arguments fail to provide either an analytical framework or a guide for action (note that even Bentham stops short of prohibiting causing suffering to animals). The debate itself is a massive step forward toward ameliorating the lot of animals, but thus far it is inadequate. There are, however, two more complex arguments which seek to simultaneously situate moral standing within a rational framework and bring the moral standing (or at least consideration for it) of humans and nonhumans onto the same logical plane. These are the so-called argument from marginal cases and the case for equal consideration of interests.

\textbf{2.1.1. The argument from marginal cases}

The back-and-forth in the personhood debate has led some to suggest that rather than limiting itself solely to animals, criteria for personhood should be set for all beings including humans. The obvious outcome is that some humans – most notably young children and the mentally handicapped – are unable meet certain, even basic, criteria for “personhood.” This critique, which complicates both the animal

\textsuperscript{44} Midgley. p.58
rights debate and broader notions of the sanctity of human life is known as the argument from marginal cases.

This argument can be approached from different angles, be it from requirements for ability to suffer, to plan, to communicate, or from the ability to uphold moral duties or contracts. These are among the factors combined in John Rawls’ seminal notion of “justice as fairness.” Rawls’ argument that a universal theory of justice can be arrived at by actors in the “original position” behind a “veil of ignorance” – unaware of their position in society or their share of the distribution of wealth, yet wholly capable of making rational decisions about fair treatment – is very influential in social theory. Without delving deeper into this theory or the body of general criticisms which addresses it, let us focus on the problem of who can form, and by extension be privy to, a theory of justice, and who is excluded from participation and benefits.

Robert Garner, as part of his larger body of work attempting to consider the place of animals and animal rights in existing social and political theory, argues for the inclusion of the considerations of the interest of animals within Rawls' original position. Rawls argues that an individual in the original position needed to have some sense of justice. This position seemed to discount the rights of "marginal humans," such as for instance young children or mentally disabled adults who would be unable to form such a concept independently or grasp it. Rawls does recognize this counterargument and argues that "capacity for a sense of justice" is not necessary for an actor to be "owed the duties of justice." While Garner acknowledges that children might have the potential to develop a sense of justice, this type of future

consideration is beyond the scope of the original position; moreover, the mentally
disabled have no such potential. According to Rawls, animals themselves are not
necessarily covered by his principles of justice and can be to some extent exploited
(eaten, experimented upon, etc.). As such, Garner poses the question whether we
should not therefore have the right to exploit "marginal humans" who do not have a
developed sense of justice. Two options present themselves, both absolute: yes
(meaning marginal adults are not privy to justice and can be exploited, experimented
upon, eaten, and so on) or no (meaning animals have the same rights as marginal
humans, who have the same right as other humans, and all are therefore privy to
justice to the extent that it applies to them; animals obviously can't hold political
office, for example, but their right to life and so on should be respected). Garner's
primary argument, then, is that "full-personhood" should not be a prerequisite for
moral consideration.\footnote{Garner (2005). This argument echoes the claim by Singer that “If possessing a higher degree of intelligence does not entitle one human to use another for his or her own ends, how can it entitle humans to exploit nonhumans for the same purpose.” (Singer 1990 p.6)}

The importance of this argument for our purposes is that it undermines
anthropocentric rationality by applying the same rational-moral considerations to
both humans and non-humans. This, in turn, opens the door for both to be examined
through other, similar analytical frameworks. Now let us move on to a theory which
suggests how applying similar principles to animals and humans can lead to a common
basis for treatment regardless of species.
2.1.2. Equal consideration of interests

Peter Singer accepts the notion of animal pain as the basis for consideration, but goes on to seek to dispel the idea that moral considerations are tantamount to emotional ones or that they necessarily need to be based in abstract theories. While acknowledging that “equality is a moral idea, not an assertion of fact,” he argues that the application of equal moral principles to humans and nonhumans is called for by reason, not emotion.\(^{47}\) Once arrived at by rational reasoning, he sees equality of moral consideration as a normative guide for action. He is also quick to point out that suggesting equal treatment for all animals and humans is not tenable due to difference in interests, life requirements, mental and physical capacity, and so on. As such, he bases his notion of equality not on identical treatment but on what he terms “equal consideration” of interests.\(^{48}\) This position holds that if a human and animal have comparable interests, these interests should be seen as having equal moral importance, with no automatic discount just because one of the beings is not human.\(^{49,50}\) The proponents of this—broadly speaking—universalist approach suggest that once interests rather than belonging to a particular species become the focus, what emerges is the potential for “moral equality across the species boundary.”\(^{51}\)

There is, however, a group within the animal rights camp which takes a radically different approach. They suggest that it is possible to simultaneously accept

\(^{47}\) Singer (1990). p.4

\(^{48}\) Ibid p.2. Singer also challenges an acceptance of equality among humans as either fact or starting point for approaching the inter-species equality he advocates. He writes that the “principle of the equality of human beings is not a description of an alleged actual equality among humans: it is a prescription of how we should treat human beings.”


\(^{50}\) Garner (2005) and DeGrazia (2003)

that animals have no moral standing, but that this “does not mean they have no value” and “is distinct from the question whether animals matter.” Sapontzis expands on this idea by arguing that overcoming speciesism “requires recognizing not only that the origin of value does not lie in anything that is peculiarly human; it also requires recognizing that the origin of value does not lie in anything that is human-like or that humans may be assured they have the most of.” Interestingly, a similar argument is made by DeGrazia, an opponent of notions of animal equality. He contends that if we are to attempt to make cross-species comparisons of rights and duties to individuals who differ drastically, such a comparison “probably requires the attribution of objective, intrinsic value to them.”

It could be argued, however, that these two are not so different after all in that they both suggest that there should be a basis for a cross-species consideration of duties. I will return to this point, but it is important to bear in mind that any theories which suggest such an approach – and especially Singer’s which suggests that humans and animals can share interests which merit identical consideration – provide a potential bridge across the human-nonhuman divide whose permanence is otherwise enshrined in modern social and economic theory and practice.

For now, however, let us examine how, given this disparity in the philosophical foundations for potential changes in human treatment of animals, different animal rights advocates suggest nonhumans be treated.

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52 Ibid. P.37
2.2. How should animals be treated?

It is slightly ironic that the deontological theory of according set rights to animals is in fact not the primary focus of the animal rights debate. The first obvious critique of some universal set of rights granted to animals is that any such list would necessarily be anthropocentric in that it would be based on human notions of rights and humans upholding those rights in animals’ names. Much of the critique of the notion of animal rights follows the same structure and arguments as the broader debate over human rights, so I will not delve into it here (see Garner 2005 for a detailed outline of this debate). The notion of rights itself being highly contentious and problematic, it does not seem like a plausible basis on which to base tangible treatment of animals. That being said, a related notion with a relatively commonsensical solution bears noting.

Tom Regan argues that equality is based on the inherent value each living being has, which is independent of any specific traits or capabilities other than sentience. By virtue of being “the experiencing subject of a life” with “an individual welfare” humans and nonhumans alike have equal inherent value. Death, then, regardless of the reason why it was caused, forecloses the ability, central to being a subject-of-a-life, of pursuing the possibility of finding satisfaction in life. From this definition, we might suggest that humans and nonhumans alike have the right to life and, by extension, the right to not be killed and thereby denied satisfaction.

55 See footnote 29.
57 Such satisfaction, to avoid anthropomorphism, is considered to be inherent and without any specific criteria for gauging its existence or validity. Some, like Bruno Latour, might argue that rather than satisfaction, the criterion might be simply the ability to procreate.
To sidestep or discount rights as a basis for the treatment of animals is by no means to deny animals moral consideration. Indeed, one of the best known theories which seek to incorporate consideration for nonhumans into individual human practice is based specifically on the theory that animals are due equal moral consideration to humans. That theory is utilitarianism, often traced back to Jeremy Bentham, and today most vocally advocated in the realm of animal politics by Peter Singer. Singer, as noted above, argues that we are to consider animal and human interests – where they are comparable – equally. Primarily this comes down to suggesting that animals, like humans, have an inherent interest in not suffering or dying and therefore should not be caused to suffer or killed.

There are, however, a number of criticisms of utilitarianism which challenge just how equal is the consideration it actually provides to animals. Utilitarianism is a teleological theory based upon the goal of achieving the greatest aggregate good for the majority of stakeholders. As such, it requires attributing specific value to different actors and their interests to, for all intents and purposes, mathematically arrive at an optimal solution. This approach has two implications: it allows for the sacrifice of individuals’ interests (and in this case of individual animals) in the name of aggregate benefit and requires that such a sacrifice be depoliticized (as it is a natural part of the system).

Considering that it is humans who set the value and theoretically make up the moral majority in this relationship, utilitarianism also opens itself to potential charges of anthropocentrism. As Garner notes, “the pain suffered by animals ... is disregarded if humans can benefit from it, and yet the idea of inflicting pain on humans for the
benefit of animals is never entertained."\textsuperscript{58} It should be noted that the latter is especially the case within the working of modern science and the market system, which naturally call for animal suffering and death in the “natural” process of value creation while – arguably – not requiring such sacrifice from humans.

A slightly different argument is sketched out by the libertarian philosopher Robert Nozick, who questions on what grounds humans deem it worthy to use animals for their own ends. He argues, for instance, that if eating animals is not necessary to a complete or healthy diet and if non-animal alternatives can be used without sacrificing health, then there should be no reason to continue to eat animals. The fact that people do, then, means that the sole gain they have is a gustatory one: people eat animals not because they have to but because doing so gives them pleasure. In other words, they implicitly acknowledge that the marginal enjoyment they gain by eating meat outweighs animals' lives and suffering. In other words, in another critique of the utilitarian calculus, pleasure outweighs moral weight. The animal, or more precisely the flesh of a dead animal, is simply instrumental in the attainment of human pleasure.

And yet, because humans acknowledge that animals are not mere objects (i.e. there is some limited moral consideration due them), what emerges is what Nozick terms "utilitarianism for animals, Kantianism for people". This means that of animals, nonhuman animals may be sacrificed to serve some notion of a greater – not necessarily human - good, but humans cannot be sacrificed. As noted by Sunstein and Nussbaum, Nozick's position is not a “plea for moral parity” in that it acknowledges implicit differences between humans and animals.\textsuperscript{59} Nozick overcomes the seeming

\textsuperscript{58} Garner (2005). p.72
\textsuperscript{59} Sunstein and Nussbaum.
contradiction between his two approaches by stressing that there would have to be a valid argument (i.e. not simply wanting to eat animals or randomly test products on them) that would constitute a logically consistent action, rather than simply a mathematically sound one providing the greatest good for the greatest number. He suggests that it is difficult to prove that animals have any specific value, but notes also that “It is also difficult to prove that people count for something.” Francione suggests, however, that since one of the central aspects of Nozick’s broader theory is the right to private property, "it is difficult to see how Nozick's principle can lead to the humane treatment of animals as long as animals are viewed as private property and private property rights are viewed as central to our moral and legal structure.”

Let us return briefly to the contractarian notion of social interaction and justice espoused by thinker like Rawls. While Rawls’ actual notion of the veil of ignorance and moral agency has been discussed above and proven to be incompatible with animals (in that they are excluded from decision making in the original position and therefore from being considered for just treatment), there are those who suggest that contractarianism should not be altogether discounted as a basis for human-animal interaction. As Garner suggests, “[a]ll that is required for this to be possible is a ‘thickening’ of the veil of ignorance so that the participants do not know whether they are going to be marginal humans or even whether they are going to be members of the human species at all.”

These philosophical arguments, however, remain generally in the realm of philosophy as the actual treatment of animals differs dramatically between countries,

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organizations, species, and across myriad other divides. The thrust of this paper is an analysis of the scientific-economic treatment of animals as commodities, but some broader areas of human-animal interaction (and their rationale) bear mentioning.

2.3. Addressing animal rights in practice

Considering the divergences in the rationale for and approaches to the treatment of animals in the debate discussed above, it is not surprising that there is no consensus in favour of a single “animal rights” agenda. This section briefly examines the various proposed solutions. It is also important to note that many advocates of the various solutions described above tie them to broader human concerns or to overall human moral progress.⁶³

One of the primary arguments against animal cruelty – both historically and among many modern proponents of animal rights – is that mistreatment of animals can be either a conduit to or be representative of the propensity to abuse humans.⁶⁴ There is also a prevalent argument among feminist-animal-rights theorists that mistreatment and consumption of animals can be equated with propensity for the abuse and/or subjectification of women.⁶⁵ As such, animal cruelty should be mitigated socially and legally and much animal use should be diminished or carried out in a “humane” manner. This moral-cum-anthropocentric view is extended, insufficiently in my view, by a few authors from tangible abuse to broader socio-economic

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⁶³ Peter Singer (1985) writes that the animal liberation struggle “marks an expansion of our moral horizons beyond our own species and is thus a significant stage in the development of human ethics.” Regan (“The case for...” 1985) underscores that “the animal rights movement is a part of, not antagonistic to, the human rights movement.”

⁶⁴ Garner (2005) explains that the general notion is “that those who are cruel to animals are likely to be inclined to treat humans in the same way,” p.39 This echoes those, like Kant, who while never shunning the use of animals or consumption of meat, famously write that that “We can judge the heart of a man by his treatment of animals.”

relationships. Rowlands, for instance, suggests that it “is impossible to view the world and everything in it primarily as a resource without this infecting the way we view each other.”66 The question, though, is whether the particular relationship of commodification is indeed transferred from human-animal to human-human relations or vice versa or, indeed, whether from an economic perspective it is simultaneous and indistinguishable.

The second argument presented throughout the animal rights literature revolves around the oft-quoted rallying cry that “Meat is murder.” The crux of the argument is that depriving any creature, human or nonhuman, of the right to live is the gravest violation of their rights. Vegetarianism and/or veganism are presented as ways in which individuals, by regulating their own behaviour, can impact behaviour which is harmful to animals. Indeed, dietary choice is the crux of the arguments of thinkers as diverse as Singer, Francione, and Schleifer. Schleifer also argues that vegetarianism would help the world’s most needy human population by freeing up resources from livestock to grain and vegetable cultivation.67 She also takes issue with those who argue the merits of humane slaughter and other “animal-friendly” methods of meat rearing and consumption. She argues that such lines of argumentation “sugges[t] that the taking of life is not the problem [and] to make matters worse …

The third solution - and attendant debate – involves conservation or preservation or individual animals, species, or ecosystems. The central dichotomy here is between proponents of conservation (protection for future human use or enjoyment) or preservation (in effect protection for nature’s own sake). There is further tension introduced between those who support the conservation or preservation of specific species (which itself draws criticism of anthropocentrism or intellegencism) and holistic preservationists who take the ecocentric view and call for protection of entire ecosystems rather than protection which is fauna- or species-specific.

Here we see in practice the difference between a utilitarian approach, evidenced in the conservation notion of human benefit, and an inherent-value-based approach which excludes direct human benefit (aside from “feeling good” about protecting ecosystems or species). The dominant paradigm is conservation, with the attendant problem that it is “macro” in nature. As Garner notes, this means that the goal is “protection of species or ecosystems and not the protection and well-being of individual animals. It is therefore permissible in the case of a holistic conservation ethic to sacrifice the interests of individual animals if by doing so the integrity of a species or ecosystem is maintained.” This brings up the question of whether it is, for instance, valid to kill a certain number of animals to sell in order to fund further conservation or to study them to ascertain how many can be “sustainably killed.” The alternative viewpoint, espoused by Regan, is that “[b]eing neither the accountants nor

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68 Schleifer. p.70
69 Garner. Animal Ethics. p.143
managers of felicity in nature, wildlife managers should be principally concerned with letting animals be, keeping human predators out of their affairs, allowing these ‘other nations’ to carve out their own destiny.” This is because animals are subjects-of-a-life whose value should not be, on an individual or species level, be entered into a calculus to determine aggregate utility.

Again, within the proposed solutions to the ongoing undesirable treatment of animals, we see vast divergence in opinion and rationale, and a large degree of – perhaps inevitable – anthropocentrism. And the entire body of pro-animal rights theory has its own critics who seek to discredit either its philosophical bases or the actions it suggests.

### 2.4. The critics

The positions taken by the critics are as varied as those raised by the various proponents of animal rights. These range from challenges to the philosophical foundations of the various ideas discussed above, through restatements of the traditional anthropocentric positions critiqued by the animal rights movement, to criticisms of the proposed solutions to animal rights abuses and speciesism. This section cannot claim to do justice to either the breadth or depth of this large body of critical comment, but it will seek to address the principal points of contention and, where possible, present the rebuttals from the animal rights camp.

The primary philosophical challenge to the animal rights argument is the broader, ongoing debate about the validity of moral arguments. Representative of this

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70 Regan. The Case for Animal Rights. 1984 See also Aldo Leopold’s oft-quoted viewpoint that “A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise.”
critique are statements such as Thomas’ that moral statements are “nothing but expressions and attempted elicitations of emotion” which are “incapable of truth and cannot embody knowledge.” Others, like Garner, note that there is also an inherent problem with relying on notions of natural rights or rights-based obligations. He argues that it is difficult to defend an ontology based on inherent universal absolutes like rights in a world – and on an intellectual landscape – where the theocentric view carries less force. Benton takes a similar stance but directly critiques the application of right to animals. He argues that “given the diversity of moral dilemmas posed by our relations to animals, it seems … unlikely that the single philosophical strategy of assigning universal rights of a very abstract kind to them would be a sufficient response.”

Another body of thought challenges the philosophical basis for arguments that would seek to undermine the primacy of the human race in the biological hierarchy. Most of this addresses the various aspects of the personhood debate and seek to highlight defining aspects of humanity which disqualify nonhumans from qualification for full personhood and therefore from increased consideration vis-a-vis humans. A central argument of this contingent is that rationality is a necessary attribute for the development of thoughts and feelings (which in turn are central to full personhood) but that rationality can only be evaluated on the basis of the ability to form rational arguments in speech. Some, like Frey, go so far as to argue that the inability to

71 Garner (2005). p.10
72 Garner (2005) traces the human rights debate back to notions of divine right and the sanctity of human life, and bases this commentary on the debate about human rights rather than specifically on the notion of animal rights.
73 Quoted in Garner (2005).
74 Garner (2005) p.28
articulate desires through language discounts the possibility of the existence of desires.\textsuperscript{75}

Carruthers takes a slightly different tack and argues, echoing Rawls, that moral agency is based on the agent’s ability to be part of a social contract allocating explicitly stated rights and duties.\textsuperscript{76} This discounts the possibility that animal social organization and cultural development is valid as it cannot be proven that these involve a rational distribution or even acknowledgement of rights and duties. Another vaguely related strain of argument rehashes the quality-of-life argument and suggests that humans, by virtue of being able to formulate not only plans but the very notion of a future, with attached desires, expectations, and so on, live life on a higher plane than animals who are incapable of such formulation or planning. In other words, human primacy lies in the fact that humans live life in a “biographical” sense while animals do so only in a biological one.\textsuperscript{77}

A specific critique of the animal rights narrative seeks to challenge the reasoning behind the animal rights debate, primarily as it pertains to those animals “closest” to humans. Proponents of this school argue that hierarchization of species within some of the animal rights literature (See Pluhar 1995), and primarily the preference given to large mammals like cetaceans and elephants in theory and practice like conservation and dietary exclusion, is itself anthropocentric. The – paradoxically flattering – term “charismatic megafauna” has been used to describe creatures which “many people in developed states think of as ‘special creatures’ due

\textsuperscript{75} Ibid. p.34  
\textsuperscript{76} Ibid. p.33  
\textsuperscript{77} Ibid. p.77
to size, intelligence, and other human-like attributes.” Epstein argues that the predominant notion of endangered species protection might be an “exclusive and reductionist paradigm ... [n]ot least because not all species qualify.”

The argument here is that humans should be less empathetic toward specific animals and instead follow one of two paths: a more holistic one based on consideration of entire ecological systems or biospheres or, more commonly, a more rational and instrumental one based on economic dictates that treat all nonhumans equally, namely as resources (Jacobson 2001, Edwards 1994, etc.). A staunch advocate of the latter approach, Robert Friedheim suggests that conservation of cetaceans can only be explained by an irrational, politically motivated “fear” on the part of Western elected officials that “bucking the messages of Free Willy and Flipper will cost them votes.”

The fourth branch of the critique of the animal rights movement is aimed at their recommendations for incorporating their philosophy into practice. The first such argument echoes both Descartes and Locke in suggesting that animals have no value in and of themselves and indeed that if they are not exploited they are wasted. This idea has frequently been articulated as protest against preservation initiatives and has been especially salient in the whaling debate.

A similar but more complex debate surrounds the justification for animal experiments. At the intersection of utilitarianism and the broader moral orthodoxy,

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80 Friedheim. p.25
81 See, for instance, the notion, articulated by Arnoldus Schytte Blix, director of the department of arctic biology at the University of Tromsø. – “Any resource which can be harvested on a sustainable basis – and as a scientist I believe that this applies to whales - should be harvested. Not doing that is a waste of resources.” In “Alternative View on Whaling.” Nature. Vol. 360, 10 December, 1992. p.523
there is the assumption that even if animals can suffer, that suffering is justifiable if it produces human benefit. Implicit here is the notion that animal rights, even if they exist, are secondary to human rights and, moreover, that it is a human right to exploit animals for human benefit. This argument, however, when presented as a rights issue, runs into the same problems as the animal rights argument itself (see above) and, moreover, impinges on other iterations of the universal view of human rights held by others. Bogle, for instance, argues that “[u]sing human rights as a defense of such an industry [animal experimentation] soils the purity of the claim of universal dignity.”

Another line of criticisms, taken by scholars like Kathryn Paxton George, while skirting the arguments in favour of animal rights or the improved treatment of animals themselves, attack the proposed solutions, such as Singer and Schleifer’s emphasis on individual action through vegetarianism/veganism. Paxton George argues, for instance, that vegetarianism, rather than being a universal ideal, is culturally specific and a “norm that is biased against many people living in ethnic, cultural, economic, and environmental circumstances unlike those in which the vegan ideal can be successfully rationalized.” Barsh takes a similar approach in critiquing universal conservation initiatives like the IWC moratorium on whaling. He argues that some human populations must eat certain animals to survive – a point that itself is debatable on both factual grounds and because it implies the primacy of humans by defending their right to kill other animals – and that universal restrictions are akin to imperialism. Barsh calls this Western “food hegemony” and implies that it sets the standard for ecologically and culturally destructive practices while setting norms as to the

82 Bogle. p.55-56.
acceptability of various farming, hunting, and culinary practices and even the very “aesthetics of food.”

Lumping these criticisms together does not mean they deserve equal consideration or that they are all equally convincingly argued. It is beyond the scope of this paper to address or rebut each of these in detail. However, for the further arguments contained herein to be valid, certain aspects of the critique must be rejected outright. Principally, the notion that animals cannot suffer or experience said suffering is, as has been proven by the preceding sections, neither philosophically nor empirically tenable. Animals feel pain and they feel it as individual subjects of their own life and their own experience. Second, the debate about levels of personhood can be avoided by using Bentham’s notion of suffering as a baseline for consideration – the word “person” need not be used, nor is it important per se – and agreeing with Singer that the interests that animals do share with humans should have equal consideration regardless of species. Both of the above must hold regardless of the circumstances – be they economic, scientific, political, or cultural.

2.5. The importance and inadequacy of the animal rights debate

As the previous sections have shown, the animal rights debate is a rich one which profoundly challenges the status quo of human-animal treatment. It also influences policy and social opinion about issues as diverse as vegetarianism, animal vivisection, and wildlife preservation. However, it is also a moral argument which appeals to universal notions of natural rights, to relatively pure rationality, or to the

existence of a tangible morality – at the individuals and social level - to which such an
argument would speak. We may for instance accept, as Rick Bogle claims, that
“[c]laims that rights are reserved for humans alone is requiring ever more strained
and artificial argument.” But if the very notions of rights or moral duty or even the
possibility of suggesting that there is a philosophical basis for thinking of animals as
persons are challenged or outright rejected, it ceases to be valid as a universal model
for the analysis of human-animal interaction. At most, those who reject them might
argue against excessive cruelty on the grounds that it might spill over into abuse of
humans. More importantly, however, even if its claims – be it of rights or of specific
treatment rooted in utilitarianism or contractarianism – are accepted, the solutions
are based specifically on individual humans’ duties toward individual animals (with the
exception of conservation, which will be addressed later in Sections 3.3, 3.8, 4, and 5).

I am not seeking to downplay the contribution of this school of thought to
alleviating - or at least shedding light on – the plight of nonhumans. Indeed, this work
is important in allowing individuals a broad range of opinions on which to draw in
making a personal choice about how to view nonhumans and how to alter (or not)
one’s lifestyle accordingly. This in itself is an immense step toward challenging what is
undoubtedly a speciesist status quo. But this is also the limit of the debate.

It should be noted that there is a contingent within the animal rights debate
which moves beyond the issue of basic rights and obligations to the conditions within
which the debate takes place. Regan, for instance, argues that “...what is wrong isn’t
the pain, isn’t the suffering, isn’t the deprivation. ... The fundamental wrong is the
system that allows us to view animals as our resources, here for us.” As Francione

85 Bogle. p.61
has argued throughout his work, one of the central aspects of this system is property law which allows nonhumans to be seen as human property. This relationship, he posits, means that “trivial” human interests such as gustatory pleasure win out over “fundamental” animal interests like not being enslaved, caused pain or killed. This argument is a major step forward, but Francione does not pursue this argument to its logical conclusion.

But this relationship goes far deeper than the interaction between individual humans and individual animals. Moreover, much animal abuse and killing takes place not due to or as a rejection of notions of animal rights. Rather it takes place in the sheltered, amoral sphere of the market. If one accepts that animals are commodities whose lives and value are governed by the market, one can sidestep the moral debate without rejecting it outright, thereby both perpetuating the status quo and precluding the possibility for debate. The problem, then, runs deeper than rights or individual duties. Our treatment of animals is tied to deep problems situated at the centre of modernity and at the heart of the machinery of the capitalist system.

The animal rights debate is incomplete not only because it largely misses the structural context, but because it is not equipped to address it. This context, being both structural and deeply political, must be analysed and taken into account, however, as it directly affects how humans interact with – or use – animals. This is not to say that the animal rights camp does not challenge the political status quo, because it certainly does, but it does not sufficiently challenge the foundations of the system that shapes politics. And, in doing so, it misses the crucial point that animal treatment is not unique but rather one facet of a much bigger problem.

87 Francione, p. 107. Francione suggests that the reason why it is so difficult to intervene in the way people treat animals is that we - as a society and specifically our legal institutions – are “reluctant to impose sanctions … on a human whose only offense is against her own property.”
A different approach, one that avoids purely moral arguments and focuses instead on the tangible power relations between humans and nonhumans, is better suited to analyzing the treatment of nonhuman animals, particularly those which are executed on the guillotine of economic forces.

3. Humans, nonhumans, and power

If problems of animal-human relations go beyond simple moral considerations, a new framework is needed to examine its structural roots. Here Michel Foucault’s seminal work on power relations and the governance of populations can help provide a basis for a systemic analysis that goes beyond rights and wrongs and penetrates to the foundations of modern society.

3.1. The Foucauldian Genealogy of Power

Moving the discussion away from a debate about moral absolutes to one about the tangible aspects of human-nonhuman interaction is best approached, I believe, by framing this relationship in terms of the Foucauldian notion of power. Here, his seminal assertion that “Power is not a substance. ... Power is only a certain type of relation” seems like a useful starting point. 88 The human-nonhuman interaction, if viewed as a dynamic relationship of power, can be examined as a social construct rooted in broader aspects of modernity rather than individual relationships and moral duties.

Obviously, Foucault’s own analysis and the genealogy of the development of different forms of power pertain strictly to the governance of populations (within, as has been pointed out by, among others, Robert Young (1995) and Edward Said (1993 among others, a specific European government and socio-cultural setting).\(^8^9\) However, his ideas about power can be applied effectively to human interaction with animal populations. Nonetheless, it is worthwhile to very briefly sketch the Foucauldian genealogy.

In Foucault’s account, the modern totality of power is achieved through a transition from overt sovereign power to what he terms pastoral power. As the name suggests, this is a power relationship of the state with its population whereby the state tends to its survival and needs (both as a whole and of each individual) while, implicitly, drawing benefit from it. This occurs in the Foucauldian genealogy through the introduction of disciplinary methods of power in the 17\(^{th}\) and 18\(^{th}\) centuries and what he terms biopower in the 18\(^{th}\) and 19\(^{th}\) centuries.\(^9^0\)

Disciplinary power marks a move beyond the simple enforcement of laws to a collection of “techniques of power centered on the body.” Applied primarily through institutions like prisons, schools, factories, hospitals, and so on, disciplinary power aims to create “docile bodies” from the individual members of a society through the establishment of specific norms of socially acceptable and useful behaviour, which are supported by specific training and subjected to observation, evaluation, and punishments and rewards for conformity of lack thereof. Later developments, dubbed “panopticism,” saw the creation of ever more complex systems of surveillance, examination, and “experimentation” at the level of the individual both in institutions

\(^{89}\) Young has gone so far as to suggest that “Foucault’s work appears to be so scrupulously Eurocentric that you begin to wonder whether there isn’t a deliberate strategy involved.” Young. p.57

such as hospitals and workhouses and through society in general through increased hierarchy, the expansion of the police, and the creation of professional bureaucracy to manage state and social affairs.  

While not applicable to our case – even if animals have individual traits, they are generally approached in theory and practice at the level of the population - it is important to note that for Foucault biopower is impossible without the step of disciplinary power. Yet with animals, the discounting of individual socio-political identity allows for a direct leap from sovereign to biopower. But first it is important to consider the notion of sovereignty itself.

### 3.2. Sovereignty and the right to kill

Essential to the Foucauldian conception of power is the central role of death – or, more precisely, the legitimate potential thereof - in governance. As noted by Mbembe, for Foucault, “the ultimate expression of sovereignty resides … in the power and the capacity to dictate who may live and who must die.” This is not to say that death or killing are central or even desirable for effective sovereign governance. They are, in fact, literally counter-productive, representing “the very principle of excess - an anti-economy.” Death, however, is a central, defining characteristic of sovereign power. Agamben defines it as “the sphere in which one can kill without committing murder and without celebrating a sacrifice;” Schmitt sees it as “the power to decide...
on the state of exception.” Mbembe builds on this notion and joins it with the concept of hierarchization, positing that “sovereignty means the capacity to define who matters and who does not, who is disposable and who is not.” But to dispose of something one must govern it or, in the case of commodities, own them. Here hierarchization gives “rational objectives to the very act of killing,” which in the sphere or animal consumption might include economic gain, gustatory pleasure, or scientific knowledge.

But such a conclusion would be simplistic. At best, it might apply to the individual human who keeps animals enclosed or chooses to kill them. But the treatment of animals in modern society, and especially non-proprietary animals like fish and cetaceans, involves broad networks of power.

Sovereignty is a relationship between power and the individual. Even when it is exercised over a population, the targets of actions – the potential victims – are individuals. Certainly the moment an animal is killed, sovereign power is being deployed. But how is power – including the power to kill - extended to the population? This is especially important for our purposes because animals are generally treated not as individuals but as members of a species. Namely, as interchangeable parts of a biological whole. The answer lies in Michel Foucault’s theory of biopower.

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95 Ibid. p.2-3
96 Mbembe. p.27
97 Ibid. p.23
3.3. Biopolitics and the productive population

For the purpose of this paper, we can bypass any discussion of disciplinary power other than the brief description above and move onto the notion of biopower. Foucault argued that for a state to actually exert power – as opposed to violence - domestically it needed to supplement discipline with knowledge about its population. This meant gathering aggregate data about “men in their relations, their links, their imbrication with those things that are wealth, resources, means of subsistence, the territory . . . [and] in their relation to those still other things that might be accidents and misfortunes such as famine, epidemics, death.”

In shifting its focus from the level of the individual to that of the entire population, governance was now concerned with gathering “knowledge of the state, in all its different elements, dimensions, and factors of power.” This included gathering statistical knowledge such as birth rates, death rates, information about diseases, and other processes affecting the body of society over time. This could serve as the basis for the establishment of norms pertaining to the social body. The population hereby becomes “a biological problem and ... power’s problem.”

The goal of biopolitics is regularizing the life of the population as a whole by intervening at the level of “man-as-species” (“massifying” rather than “individualizing”). This is achieved through both regulatory and institutional means, with a view to increasing the population’s welfare – what Mbembe terms “the good life” as defined by the state - allowing it, in turn, to benefit the state. Foucault noted

100 Ibid. p.243
101 Ibid. p.245
that this focus on life and welfare marked the transition to state “power to make live and let die.””

The field of biopolitics today has broadened significantly and it is the broadened definitions – and suggested scope – of biopower are more useful in approaching my topic. Rabinow and Rose suggest that biopower is composed of various elements, these being “one or more truth discourses about the ‘vital’ character of living human beings, and an array of authorities considered competent to speak that truth.” Out of these discourses arise “strategies for intervention upon collective existence in the name of life and health.”

Such actions, however, are not an “evolution” of other forms of power but rather new additions to existing matrices of power. Michael Dillon astutely argues that the notion of sovereignty has evolved in response to different power relations and, moreover, that a strict delineation of the notions of sovereign and bio-governance is invalid because

“...any power over death, such as that which classically characterized sovereign power, must nonetheless also be deeply implicated simultaneously in the specification of the life whose death it is that it ultimately desires to command. Bio and sovereign power have never been dissociated. They have always been correlated.”

This collusion, however, means that authority over the good life – and indeed aspects of sovereign power - including the capacity to formulate strategies and

102 Ibid. p.241
104 Ibid.
implement them are “no longer confined to those who are explicitly agents of the State – it apparently extends to all those who have authority over aspects of human vital existence.” Biopower, then, becomes “that domain of life over which power has taken control.”

It should be noted that - with a few important differences which will be discussed later – biopower’s focus on a biological body rather than on individuals means that in many respects in reduces the difference between humans and animals. The human disciplined, individualized entity disappears within the workings of biopower; the animal was never considered to be an individual. So biopower, in massifying both human and animal cannot help but treat them equally.

3.4. Racism and the legitimation of death

If the role of the state – and its various agents – has shifted to that of a shepherd of the good life, of life in general, how can death be justified? For Foucault, the answer is racism at the state level, defined as the introduction of “a break into the domain of life that is under power’s control: the break between what must live and who must die.” Without such delineation, killing cannot be legitimated as it is antithetical to the fostering of good, productive life. The primary role of racism, therefore, is “to fragment, to create caesuras within the biological continuum addressed by biopower.” This creates a relationship of war, whereby killing is not only justified but required. This is achieved by “appealing to the principle that the

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106 Mbembe. p.12
107 Foucault (2003). p.254
108 Ibid. p.255
death of others makes one biologically stronger insofar as one is a member of a race
or a population, insofar as one is an element in a unitary living plurality.”109

Mbembe offers the colony as an example of the rationale for racist division. He
argues that a state of war and practices of exclusion by colonizers were perpetuated
based on the idea that peace with savages or denizens of colonies was made
impossible because these people had not “created a human world.”110 They had not
created a schism between themselves and nature.

Peter Singer offers the following definition of speciesism: “a prejudice or
attitude of bias in favour of the interests of one’s own species and against those of
members of other species.”111 He goes on to argue that the belief in the sacrosanct
nature of only human life is itself a form of speciesism. This is similar to the basic
common-sense definition of racism: that one group is superior to another or to all
others. But, as noted by Rabinow and Rose, the racism function need not be binary,
creating a simple Us-Them divide, but rather that it “allows power to subdivide a
population into subspecies, to designate these in terms of a biological substrate, and
to initiate and sustain an array of dynamic relations in which the exclusion ... or death
of those who are inferior can be seen as something that will make life in general
healthier and purer.”112 This, in fact, is the predominant role of science. Namely,
understanding and qualifying life, be it human or non-human. As noted by Foucault,
this is “indispensable to the ordering of natural beings.”113

In the case of animals, biopower is sufficient to account for maintaining them
alive for use (for instance in the case of dairy animals) or for future killing. But killing

109 Ibid. p.257
110 Mbembe. p.23
111 Singer (1990). p.6
112 Rabinow and Rose. P.201
within the circuits of biopower is an exception. How, then, can this narrative account for the regular necessity of killing in the animal meat product and scientific inquiry industries?

### 3.5. Necropolitics and the shortcomings of biopower

The seemingly all-encompassing notion of biopower is limited in that it assumes a governance system indeed interested in defining, promoting and maintaining a given population in both good and productive life. The action of killing becomes either a passive one ("making die") or one based on exclusion which legitimizes a relationship of war ("violence"). It is an economy which "operates according to logics of vitality, not mortality" wherein "letting die is not making die."\(^{114}\)

Underlying the seemingly inherent universality – and finality – of biopower, however, is a breadth of social, political, economic, and geographical relations which seem to defy explanation.

Achille Mbembe has risen to the challenge of accounting for biopower’s insufficiency and expanding the Foucauldian analysis of governance to its next logical level; namely, to the analysis of "contemporary forms of subjugation of life to the power of death."\(^{115}\) We will now turn to a brief exegesis of his notion of necropolitics, which is central to the development of this paper’s argument. Mbembe’s focus is, broadly and symbolically, the colony. He seeks to answer the question of the political role of life which is excluded from political participation but which is not condemned to death through this exclusion.

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114 Rabinow and Rose. p.211
115 Mbembe. p.40
In other words, how does one account for the colonial subject within the circuits of biopower? This is life as “an instrument of labour” or as “property,” one based not on a good life per se but on the creation of value. It is a life “kept alive but in a state of injury,” answers Mbembe. It constitutes “a form of death-in-life.” This relationship, however, cannot be contained by a biopolitical state whose goal is precisely the avoidance of injury. What is necessary is a change of location to the colony, defined by Mbembe as “the site where sovereignty consists fundamentally in the exercise of power outside the law (ab legibus solutus) and where ‘peace’ is more likely to take on the face of a ‘war without end.’” In these regions, however, even the creation of value, the productivity central to the economy of biopower, can be excluded. Within the spatial and political exclusion of the colony, there emerges a relationship of necropolitics, manifested in the “creation of death-worlds, new and unique forms of social existence in which vast populations are subjected to conditions of life conferring upon them the status of living dead.”

I will seek to expand the notions discussed above to the power relationship of humans with nonhuman animals, specifically in the economic realm. But first let us consider the causes and rationale for the expansion of necropower onto nonhumans. What forces combine to legitimize the expansion of bio-cum-necropower which, in turn, allow for a speciesist-racist segregation and allows for the sovereign claim to property and accompanying right to kill? To answer this question we must return to the internal logic of the system that makes science the arbiter of truth and considers animals to be commodities.

116 Ibid., p.21
117 Ibid. p.40
118 Ibid. p.40
3.6. Biopower, capitalism, and reductionist science as commodification

As we have seen, science played a major part in the development of a specific form of modern thought marked by a separation of nature from society and the development of a market system which treats all that which is known as a potential commodity. But science is also complicit – directly and indirectly - in the mistreatment of animals and plays a central role as a source of information both in favour and against various policies involving animals (conservation, habitat use, hunting quotas, etc.).

A first question which must be asked is why does science call for violence and death? Why are laboratories and oceans alike a forum for lethal research? Why is it that mortal sacrifice is expected from nonhumans in the name of highly debateable gains for either human welfare or human knowledge? Might there not be a parallel between the amoral commodification and its concomitant violence (toward both humans and nonhumans) of the economic sphere and amoral inquiry and its concomitant calls for sacrifice in the name of the scientific method? As Ashis Nandy pointedly inquires, “May the source of violence not lie partly in the nature of science itself?” As Nandy and others have argued, modern science acts as its own “justificatory principle,” and thereby becomes an end in itself. Within this closed system which lays claim to a monopoly on legitimate knowledge, Shiva argues, science gives birth to a four-fold violence: “violence against the subject of knowledge, the object of knowledge, the beneficiary of knowledge, and against knowledge itself.”

Aran and Peixoto contend that the problem lies at the heart of modernity. Modern science has broken down the barrier between theoretical

knowledge and applied knowledge, theoretical hypotheses and technical application. Hereby, the “development of the experimental method has necessarily implied the transformation of objects under investigation into experimental subjects.” But these subjects cannot have value outside the experiment and knowledge quest. Rollin argues that modern science, by adopting the mantra of being “value-free” in its pursuit of truth can ideologically protect itself from the moral consequences of or debates surrounding its action – including treatment of animals – because it “can make no moral claims and take no moral positions, since moral judgments, too, are unverifiable.” Hereby anecdotal or other evidence not verifiable by laboratory experiments suggesting mentation or emotions among animals can be deemed illegitimate and therefore discounted.

Shiva posits that by limiting understanding of living organisms to a totality or experimentally provable truths, reductionist science fails to provide a holistic understanding of reality and thereby cannot represent the truth about nature or even humanity. But while understanding is not total, it is precisely sufficient to understand what can be treated as a commodity.

Shiva notes the explicit the link between modern science and the modern capitalist system. One requires all things to be treated as commodities, understood in terms of their potential value; the other calls for instrumental knowledge of reified objects, valuable as units of understanding which somehow lead to a productive goal. The aim of the market is to extract value from its component factors; similarly, the role of science is to dissect nature into its component parts, to understand by fragmenting. The match is uncanny: “As a system of knowledge about nature,
reductionist science is weak and inadequate; as a system of knowledge for the market, it is powerful and profitable.\textsuperscript{123} This leads to what she sees as a “predatory treatment of nature” whereby the exclusive focus on maximization of gains is legitimized by reductionism: those aspects of a system which can generate profit must be understood and exploited, while those which serve natural functions like ecological stabilization but are not commercially viable become superfluous and therefore disposable. Moreover, the profit motive leads to specific mode of looking at nature, which then reinforces the profit motive, and so on. Shiva argues that there are no “neutral facts” about nature but rather that all facts are shaped by human cognition and economic interests.

This argument holds for various sides of the debate, including the arguments posed by conservationists. As noted by Nordquist, “framing the environment in terms of value, intrinsic or otherwise, opens environmental politics up to cooptation through cost-benefit analyses and quantification of this intrinsic value.”\textsuperscript{124} Youatt introduces the idea that conservation and knowledge-gathering initiatives expand the reach of ecological biopower by bringing nonhumans under various forms of human-managed governance, which is inherently political, and can lead to the management coming under the dictates of capitalism. This (bio)politics-science-market matrix is visible throughout human interaction with nature in the pervasive knowledge that items must be studied for the sake of their potential use. Youatt gives the example of E.O.

\textsuperscript{123} Shiva.

Wilson pushing for the Global Biodiversity Consensus specifically so that humans do not “overlook so many golden opportunities in the living world around us.”

This line of criticism aligns with the broader argument from many camps that the separation of science from not only value but all of politics is not only untenable but actually spurious. Just as economics and science are mutually perpetuating, so are politics and science. Nordquist points out that this occurs through “sciences using social people to support and propagate its claims, and politics using natural entities to support its programs.” This is the case on both sides of the animal rights divide, as both use aspects of science to support their stance, and both criticize the other for skewing scientific truths for their own purposes.

Peter Singer, for example, argues that reasons for denying moral agency to animals are eroding with scientific discoveries. In other words, he expands his notion that “membership of the human race is not morally relevant” by suggesting that this moral irrelevancy can be arrived at through rational, scientific means. Science does appear to be bearing out the notion that animals are far more intelligent and complex – individually and socially – than was previously held which, in turn, is challenging norms of how animals should be treated. Recent studies on whales and cetaceans, for example, suggest the existence of complex communication and social learning systems. The implication of some of the findings, like the ability among some dolphins to “use abstract representations of objects, actions and concepts to guide

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126 Nordquist p.16
127 Singer (1985) p.4
128 Rendell and Whitehead discuss, among other examples, whale songs which vary, adapt and “evolve structurally over time”; diverse “dialects” in different pods of killer whales; and matrilineal teaching of specific inter-species symbiotic hunting relationships.; all of which meet the criteria for human culture spread and cultural learning. (Rendell and Whitehead p.153)
their behaviour,”¹²⁹ not only challenges out view of their intelligence, but also suggest that the notion of inter-species communication via a semiosphere not all that far removed from human communication might be possible. It also makes clear that the shortcoming in attempts to communicate with cetaceans – and by extension other nonhumans – is a human one based on socially entrenched misconceptions propagated by modern science and by the capitalist economic system. Moreover, it challenges the very basis of anthropocentric hierarchization and the primacy of human mental-social-political capabilities because it might “represent and independent evolution [to and from humans] of social learning and cultural transmission.”¹³⁰

The more we know about nonhuman socialization and intra-species politics, the more we can show that human interference with animals (be it through killing, isolation, etc.) can impinge on social development, giving a new dimension to the notion of possibility of suffering. Indeed, it suggests that human and animal suffering – and by extension interests concerned with avoidance of suffering – are extremely similar.

On the other hand, the politics of science can be self-contained and totalitarian. Along with the claim to a monopoly on knowledge come claims to self-governance to protect said monopoly and, ostensibly, the purity of knowledge. Nandy sees within modern science the inherent capacity to follow a path of governance incompatible with democracy or the “democratic rights of those who are turned into subjects of modern science and technology.”¹³¹ It is a propensity for the development of bodies

¹³¹ Nandy.
like the IWC, and the various national whaling research institutes, with their conflicting claims to legitimate knowledge, which in turn is the basis for political and economic claims to sovereignty or stewardship over a specific biomass of nonhuman subjects-cum-commodities.

The embeddedness of the notion of animals as property and indeed the complete commodification of entire species spreads throughout industry and science and has spawned specialized fields of academia. A brief look at these will help shed light at how the economic-science-academic matrix tends to approach the use of nonhumans.

3.7. Problematic resources: Nonhumans in the economic literature

The academic economic literature pertaining to animals, and specifically those inhabiting the ocean, takes the Lockian stance as its starting point, precluding any discussion of the validity of or justification for treating animals as commodities. This is evident even from the titles of the publications themselves, such as *Marine Resource Economics* and *Journal of Environmental Economics and Management*. The articles in such publications treat animal populations as commodities in the strictest sense, without any discussion of the right to take animal life or, for that matter, of the existence of that life outside economic consideration. Animal life occurs, after all, in the state of Nature, which lies outside value, and therefore outside the scope of discussion.

A cursory sample of such discussion reveals a few recurring trends. The notion that humans have a right to ownership is implicit here; property is defined as “a benefit or income stream” and fish are equated with other natural resources like
“forests, grazing lands, and water supplies.” The debate centers on “how property rights institutions are likely to affect economic efficiency” and market solutions are applied to “management problems” like overfishing. For instance, Matulich et al write that “An important benefit from privatizing open access fisheries, especially in fisheries managed by a total allowable catch (TAC), arises out of gains from free trade in which more efficient users of the resource are able to purchase rights from less efficient users. Such trade fully compensates the sellers.”

The prevalence of biopower and competing claims for sovereignty are especially prevalent – and transparent – in the fisheries literature and political discourse. Various groups lobby, for instance, for the right to “specialize in a particular species.” Arguments encompass both the maintenance and exploitation of population. Anthony, for example, argues that “a catch quota regime has the potential to be developed into a regime where the owners not only harvest but also manage the fishstock or biomass.” This is the linguistic bridge which joins biopower with necropolitics. Entire populations are maintained alive but constantly vulnerable for the sake of future exploitation-value-creation in a Lockian system where

134 Note the following statement from Canadian Minister of Fisheries and Oceans Loyola Hearn concerning the annual seal hunt: “The Government of Canada is committed to sustainable management of these renewable resources and to ensuring a well managed and well regulated hunt. With more than 5.5-million harp seals along our eastern and northern coastlines, clearly Canada sets appropriate annual quotas to keep seal populations healthy. … Canada’s approach to seal hunts is based on facts, internationally recognized science and respect for centuries-old cultural traditions, instead of moral objections… The Government of Canada will continue to inform this discussion with integrity and to defend the rights of Canadian sealers to take part in our lawful, sustainable and humane hunt.” Here notions of legal right to kill, necroeconomic conservation, and the humane killing argument come together to bolster the annual murder of seals in the name of economic gain. Source: Hearn, Loyola. “Canada Committed to a Humane Seal Hunt.” Fisheries and Oceans Canada. Dec. 20, 2007. http://www.dfo-mpo.gc.ca/media/statement-declarations/2007/20071220-eng.htm. Accessed on Feb. 18, 2010.
136 Ibid. p.298
management justifies harvesting. Naturally, the interests of the animal populations are not considered. Not only are the potential interests or moral/life claims of the fish to be exploited not considered. Questions as to “whether a regime of individual fishery rights is attractive to fishermen and governments” assume a priori the right to resource exploitation.¹³⁷ The term “regime” is especially telling: it is an imposed system of sovereignty over a property-population not at the level of a group of individuals but at the level of profit-generating biomass.

Indeed, bureaucratic or impersonal language is applied throughout. The fish being hunted are referred to as “stocks,” “assets,” and resources”; the fishermen as “harvesters”; whales and dolphins killed in the process of hunting other sea-creatures are termed “by-catch” with a militaristic tone that cannot help connote euphemisms like “collateral damage”; and states of extinction of species are hierarchized as, for instance, “fully-utilized resources [becoming] overutilized.” Whaling boats, tellingly, are dubbed “factory ships.” Moreover, even admissions of the obvious shortcomings of applying notions of property to a biomass are subverted. Anthony, for instance, admits that historically in property regimes in the fisheries, “most of the characteristic elements of real-world fishing were omitted, such as long-distance migration, anadromous escapement, predator-prey ratios, and schooling.”¹³⁸ But the solution to this problem is one based in a science-economics-technocratic matrix which does not address the principal implication of the problem: namely that fish are not simply another natural resource. Here the life which is made into a commodity becomes an absent referent. Just as in Adams’ discussion of the animal which is killed being simultaneously supplanted and obfuscated by the language used to describe its meat,

¹³⁷ Ibid. p.301
¹³⁸ Ibid. p.294
so the animal life in the state of Nature disappears behind economic references, becoming a resource.¹³⁹ Moreover, in line with Scarry’s analysis of the language used to describe war, the action of killing and “injuring disappears is the active redescription of the event: the act of injuring, or the tissue that is to be injured, or the weapon that is to accomplish the injury is renamed.”¹⁴⁰ The very potential to think in terms of injury – or suffering, thereby bringing in aspects of the animal rights debate – is made impossible by looking at the species-as-a-whole. As Scarry notes, for pain to be understood in must be individualized as pain, like all forms of sentience, is experienced within, happens “within” the body of the individual.”¹⁴¹ A stock cannot feel pain, so notions of injury are excluded entirely from the dialogue, and with them the entire moral debate. To borrow a phrase from Carol Cohn and apply them to this context, it is a language replete with “imagery that … make[s] it alright to ignore sentient … bodies [and] lives.”¹⁴² The language of animal exploitation inherently suggests a (bio)power relationship and a claim to the sovereign right to kill while excluding the possibility to debate this very topic. Not only that, it excludes the notion that divergent ideas and values exist by creating a linguistic system wherein “what counts is the internal logic of the system.”¹⁴³ The amorality and indeed objectivity of the economic approach to animal life is maintained in its language and terms of reference.

This section is not intended to demonize all academic treatment of animals. Although much academia – the animal rights literature notwithstanding - is

¹⁴¹ Ibid. p.65
¹⁴³ Ibid. p.710
representative of the embeddedness of speciesism in the broader modern system, in recent years attempts have been made to expand political theory to include nonhumans.

3.8. Towards the integration of nonhumans into politics

In recent years there has been a movement, albeit an unfortunately small one, to extend political theory to include the nonhuman sphere, including applying various iterations of the Foucauldian concepts discussed above. This section will provide a sketch of the direction in which this movement seeks to take not only human-animal relations per se but also political theory in general.

Let us begin this discussion with Rafi Youatt’s assertion that “...there is ... no political formation that accepts the participation of nonhumans within its confines. The nation-state ... is based around a community of humans who in turn decide what is right or good for themselves and [the] environment. Its reasoning is decidedly and openly anthropocentric.”¹⁴⁴ What are the ramifications, in terms of political participation and power relations, of such a governance structure? To answer this question, it helps to, in following Nordquist, consider that the “nature-politics relationship itself is not a natural condition, but a separation reproduced and naturalized for centuries through much of modern political, scientific, and social thought and practice.”¹⁴⁵ Through this construction, humanity and nature (including animals) are separated, with nature being forced into the role of Other for humanity. Humanity, placed outside nature, can be explained – proved - to be outside and

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¹⁴⁴ Youatt (2008 a). p.20
¹⁴⁵ Nordquist. p.5
superior to nature, with nature playing specific roles to serve humanity, including that of “an object to be known and dominated.”\textsuperscript{146}

It goes without saying then that within such a system, “politics is not understood to be something that humans ever engage in ‘with’ nonhumans.”\textsuperscript{147} Not only that, but this very possibility is precluded. A simple yet important critique of this view is offered by Bruno Latour, who states that:

“Non humans have not been emerging for eons just to serve as so many props to show the mastery, intelligence, and design capacities of humans or their divine creations. They have their own intelligence, their own cunning, their own design, and plenty of transcendence to go on, that is, to reproduce.”\textsuperscript{148}

Superficially, this is simply the preservationist argument: humans should leave animals alone. But it also explicitly states that animals have various properties – never mind that their attribution might be a tad anthropocentric – which lead to an overarching goal (reproduction) and to interaction to attain that goal (politics). The notion that animals engage in intra-species politics itself is not that contentious. Rather, it is the possibility that we should attempt to engage in inter-species politics which is problematic. Youatt and Latour also reference the work of Jakob von Uexküll

\textsuperscript{146} Ibid. p.5 Youatt references Elliott Sober and notion of “anthropodenial” whereby “commonalities between humans and other biological entities are systematically underestimated.” He argues that this phrasing is awkward, however, and suggests his own alternative: “biodenial.”

\textsuperscript{147} Youatt, Rafi. “Rethinking Anthropocentric Politics.” Presentation at Political Theory Workshop, Ohio State University, May 2008. p.1 Politics is here defined by Youatt as “the processes by which shared meanings that pertain to problems of collective well-being are generated, interpreted, and/or destabilized.” p.20

about umwelts\textsuperscript{149} – and more recent expansions of his work in the field of biosemiotics - and suggest that if human and nonhuman umwelts could be combined to create an inter-species semiosphere, we could move toward an interspecies politics based on shared meanings.\textsuperscript{150}

Other than the obvious practical hindrances to such an approach, Youatt argues that there is an underlying notion that accepting inter-species political interaction “might create new and unwanted obligations, or be seen to undermine the contrast of modern human politics as a realm of freedom and reason, set against nature as a realm of necessity and unthinking.”\textsuperscript{151} He suggests that overcoming this requires thinking of the entire political domain as an interspecies one, relying on capacities and methods of communication (in human-nonhuman interaction) which are not human specific

Calling for a politics – both in definition and practice – which are ecological rather anthropocentric in scope, he suggests that the definition of political participation must be drastically altered. Indeed, simplified from exclusively the “politics of idea” to a “politics of presence [which] must be seen as taking place in forums other than human political ones.”\textsuperscript{152} He argues that actions like the biodiversity census and indeed science in general can be seen as a form of interspecies politics.\textsuperscript{153} If one accepts this thesis, it might be suggested that the

\textsuperscript{149} This theory suggests that different beings sharing the same environment can nonetheless experience different “surrounding worlds” based on different modes of understanding, communicating, and interacting with that environment. See Kull, Kalevi. “On semiosis, Umwelt, and semiosphere.” Semiotica. 120 (3/4), 1998. pp.299-310.

\textsuperscript{150} For a primer on this idea and on recent work in semiotics, see Kull, Kalevi. “On semiosis, Umwelt, and semiosphere.”

\textsuperscript{151} Youatt, Rafi (2008 b). p.7

\textsuperscript{152} Youatt (2005 a.) p.30

\textsuperscript{153} Even this contention immediately runs into the challenge that even if science can be considered to be political interaction, it may be hollow – or at best a human-centric empty signifier – rather than a meaningful exchange. Nordquist argues, for instance, that “rather than providing a foundation for environmental politics through the truth it discovers about the nonhuman, natural
predominant modes of human-animal interaction, namely enclosure, killing, hunting, and habitat destruction would also have to be recognized as political actions. One might venture so far as to suggest, as a logical extension of this argument, that the predominant political interaction between humans and nonhumans is one of war (in both the Foucauldian and lay sense).

Michael Nordquist takes a different approach, one critical of Youatt’s suggestion of different-yet-equal interspecies politics. He argues that a focus on semiotics gives nonhumans an “essentially passive role ... outside of ‘signalling’ to humans about what might be out-of-balance in an ecosystem.” Indeed, Nordquist is critical of what he sees as the two extremes of human-natural world relations. On the one hand, he posits that “framing the environment in terms of value, intrinsic or otherwise, opens environmental politics up to cooptation”; but on the other he argues that “a constant state of reverence often leads to unthinking praise, uncritical acceptance of the status quo, and a depolitization of political questions.” Like Youatt, he seeks to expand political theory, but unlike Youatt’s approach, Nordquist suggests instead focusing on an opening of politics which moves beyond the “impenetrable boundary between human and nonhuman.” He looks to Bruno Latour’s work on immanence and finds that it “allows the possibility of humans and nonhumans occupying the same world on the same plane,” presumably as opposed to communication via the semiosphere as a gateway to political interaction. He writes

world, the sciences can only serve as contestable guideposts to the variety of associations that constitute the world...” Nordquist. p.22

154 Nordquist. p.13
155 Nordquist. p.8; the implication here is that economic concerns, which work in terms of cost-benefit analyses, function of a theoretically apolitical basis; but Nordquist is also quick to criticize “ecoauthoritarians” for shutting down politics completely and, tellingly, singles out for particular criticism that fact that this group (presumably preservationists, etc.) base their opinions on scientific argument.
156 Ibid. p.13
that: “Instead of looking at nonhumans for signals, truth, an ethical imperative, or intrinsic value, Latour finds a seemingly amoral analytic of the world – both ‘natural’ and ‘social’ now – that forces a decision about what sorts of associations and environments a collective wants to have and to allow.” He suggests, rather than broadening notions of communication or political inclusion or extension of notions of rights or personhood per se, that we should think of humans and nature as “ontologically of the same (and only) order and always already tied up with one another,” thereby avoiding debates based on and structured around this dichotomy. This, he argues, allows for a rapprochement of environmental and democratic politics. Nordquist and Latour’s work points the way forward to considering the various ways in which animals, ecology, and nonhumans are connected and interact. Moreover, it is potentially a first step toward a less instrumental approach to nature. In Latour’s terms, it is both proof of the impossibility - and a step toward affirming this impossibility – of the Enlightenment ideal of an “absolute dichotomy between the order of Nature and that of Society.”

Nordquist’s explicit link between democratic politics and environmental ones is, however, limiting. This is especially the case when it comes to considerations of the economic aspects of human-animal interaction, which (as was pointed out in Section 3.6) often fall outside democratic fora/forums. Moreover, the critique of this entire argument might be raised that politization, seen as desirable, is itself an anthropocentric concept which cannot help but give primacy to human interests.

Youatt, in a different work, takes yet another alternative approach to the reconceptualization of animals’ place in politics by suggesting that current efforts at

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157 Ibid. p.20
158 Ibid. p.14
159 Latour (1993) p.36
developing the global biodiversity census involve nonhumans in circuits of biopower. He suggests that although nonhumans “lack the capacity” for self-regulation (in the sense of being part of a system of governmentality), “like human subjects, [they] are regulated and rationalized in matrices of knowledge.” What this approach demands is the recognition of a process of hybridization due to the intrusion of human scientific, regulatory, and nonhuman techniques into the nonhuman realm, resulting in the emergence of human-nonhuman “ecosystemic communities.” Once they are enveloped in such communities and the power relations they entail, nonhumans, by virtue of being participants, also become sites of resistance to biopower. This, unlike Latour and Nordquist’s suggestion, is another attempt expand political theory to nonhuman and acknowledge their active involvement in the power relationships in which they are involved. Youatt goes on to argue, in a very important extension of his line of reasoning, that this resistance is due in part to the “fact that [nonhumans] not not live like human subjects” but also that they can escape the full reach of human-based biopower simply by virtue of living their own lives. Youatt’s focus on the biodiversity consensus as ecological biopower, however, is but one aspect of the myriad other forms biopower takes. It is also a relatively “pure” version of biopower in that, while potentially instrumental, it does not involve direct sovereign intervention with animals or animal life. As will be discussed later, ecological biopower is often linked directly to exploitation of animal species in forms such as catch quotas and habitat maintenance schemes.

The practical and theoretical implications of Youatt’s work are far reaching and it is worth examining them in greater depth. The first is that the expansion – and

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160 Youatt (2005 a.). p.3
161 Ibid. p.22
recognition of the expansion – of power to the nonhuman realm demands a different approach to animals based on the internal necessities of biopower rather than any specific moral compulsion. He writes that “if biopower (in contrast with sovereign power) complicated the state killing its own citizens, then so too should ecological biopower be seen to complicate the domination of nonhumans (in modern relations with nature).”¹⁶² This is not to say Youatt is naïve about the implications of ecological biopower; while it complicates traditional (sovereign) exploitation and has the potential to “subver[t] the resource-driven agenda of modern capital,” ecological biopower not only legitimates but also “enables and rationalizes an entirely new form of intervention in life itself.”¹⁶³ This opens up entirely new field of analysis and investigation and, as Youatt himself argues, means that the “bio” in biopower should be seen to involve all life rather than simply (some) human life.

3.9. Why are human-animal power relations different?
This section has explained the Foucauldian notion of power and demonstrated how the human-animal relationship can be conceptualized along similar lines to those Foucauldian scholars apply to human populations. This includes subjectification, the use of sovereign power to legitimize killing, the expansion of biopower to study and intervene at the level of populations (or species), and the deployment of racism (speciesism) to determine which biologically defined groups may be killed in the interest of other races (species). But at the apex of power, in the act of killing, the human-human relationship differs drastically from the human-animal one. The purpose of power when dealing with humans is to keep them alive and kill only those

¹⁶² Ibid. p.19
¹⁶³ Ibid. p.13
who are eminently undesirable or somehow un- or counter-productive in the economy of biopower. But for meat animals, death is necessary, it is literally the culmination of all of power’s efforts because it is the moment in which a commodity is created and value emerges out of the human labour invested in the animal life. Rather than being an extreme measure, death here is not only necessary but normal, desirable, and above all profitable. The aim of the next section is to introduce a concept which will allow the power-relation narrative to explain this drastic divergence.

4. Necroeconomics

Let us look once more at the simple process whereby animals, already viewed by the economic system as commodities, actually become commodities. Demand for a product, be it meat or scientific data, demands that an animal be killed. A certain value chain, employing rational human actors, is put into effect. An animal is selected and killed. It might be a cow in a paddock or a duck in flight, but let us use the example of a whale. Its genus is categorized, its population is estimated, its breeding grounds, migration patterns, and dietary habits are logged and analyzed. It exists by virtue of being understood. But it also exists as a member of a species. By itself, it is meaningless in that it has not been given an individual meaning. It is tracked by a harpoon boat, which eventually, finding its target, spears the whale with an exploding harpoon. This “humane method” means that, when it has been towed, slowly bleeding to death, back to the factory ship, the whale is probably still alive and conscious. It will then be dragged aboard, where it might still live until suffocating to death. And only when it has breathed its last breath will it become a commodity. If it
is a minke whale, when it is no longer alive, no longer a whale, but rather “meat,” it will be a product worth roughly $30,000. It will also be a potential repository of knowledge, to be gleaned within its cells or stomach contents. It will be cut up, analyzed, processed, sold and eaten, moving through the same economic cycles as lumber or produce or oil. Its price will fluctuate with demand which, ironically, may be based on how many of its species are estimated to be alive by the same scientific endeavour which led to its death.

What is central here is that the life of the whale comes to an end and it is at that precise moment that the whale becomes a commodity, that value is created. It is through a very peculiar economic alchemy that life is valueless until it ends. From an economic point of view, this is not problematic. It is natural. And yet let us attempt to suggest that there is indeed a problem here. A proponent of animal rights might at this point raise any number of arguments like the ones we have examined, and a critic might retort along similar lines. But instead of approaching this event from the point of view of the rights debate, which we have proven to be insufficient, let us bring to bear on it a critique rooted in the tangible relations of power which led to the taking of this whale’s life.

But how is it that humans came to kill that whale? What sort of relationship was established and how is it maintained?

In order to legitimate the killing of the whale, the hunters needed to claim sovereign power over it, to establish ownership. Let us recall Mbembe’s definition of sovereignty, namely that it is the “capacity to define who matters and who does not, who is disposable and who is not.”\(^{164}\) It is a definition in which racism is implicit as the mechanism which permits killing. The whale is defined as a species with certain

\(^{164}\) Mbembe. p.27. Italics in original.
characteristics which allow us to understand it and track it, it is also understood as a source of meat and further knowledge, both of which have value and both of which require that the whale be sacrificed.

The notions of both racism and speciesism need to be expanded when considered through the lens of necroeconomics. The first is the speciesism entails the creation by humans and for humans of a biological-cum-natural right to rule. Supported by various bodies of belief and science (including those with the animal rights debate) which suggest that there is indeed a “hierarchy of races,” the racist-speciesist function allows for the exploitation and killing of any nonhuman because it first grants the right to legitimately claim sovereignty over animals by allowing the a priori exclusion of animals from political or moral consideration. Second, unlike in the Foucauldian sense – or even within Mbembe’s “colony” – the death function of racism moves beyond the purview and indeed beyond the sovereignty of the state. Indeed, both the introduction of “caesuras within the biological continuum” and the actual killing take place within the self-avowedly apolitical and amoral – and closely related – spheres of science and commerce. Even more problematically, speciesism and death are an integral part of these spheres. As such, it might be possible that the notion that human life is sacrosanct might not be the starting point for speciesism. Nor might it be the anthropocentric nature of these disciplines. Rather, within the sphere of necroeconomics, it is science and commerce which have become sui generis sacrosanct.

The whale had to be made a subject and only then defined as a being which could be killed. But surely the whale could not have acquiesced to becoming such a subject and to its subsequent treatment. The answer is that the whale was subjectified through a relationship of war, defined by Mbembe as “a means of
achieving sovereignty [and] a way of exercising the right to kill.” It is an economic relationship of war aimed at achieving sovereignty over life in nature.

But this is not a process repeated with each individual whale. Indeed, the whale as an individual cannot be made a subject as power cannot recognize it as such. This is a relationship of war which is waged against all animals in various forms and relies on circuits of biopower and necropolitics to establish its dominion at the level of the species. The first step is the understanding of and creation of possible modes of engagement with the whale at the level of the species via networks of ecological biopower. As Youatt tells us, “like human subjects, nonhumans are regulated and rationalized in matrices of knowledge ... through which they are readied as productive resources for capitalism and mined as repositories of genetic information.” Such knowledge, specifically in this case understanding of migration patters and habitat allows humans to lay claim to life within a given biosphere and geographical area, in effect creating what Mbembe might term “occupation” of the commons through the creation of a “colony.” The state of nature which falls outside economic circuits of value is here brought under its dictates as a site of potential value. Within this relationship, animals become politically recognized, imbricated in networks of power, but also remain de facto powerless. Their death is here legitimated but they are maintained (for future use) in what Aran and Peixote term an “indeterminate zone” (a state of “bare life”) through mechanisms like catch quotas and temporary whaling moratoriums. They are maintained as living dead at the whim of economic demands.

There is, however, a specific point at which biopower - and even necropolitics - in the sense applied to humans ceases to be of value in analyzing human-animal

165 Ibid. p.12
166 Youatt (2005 a.). p.3
relations. This is the moment of death. In contrast to the power to kill as pertains to humans, in the case of animals killed within the context of the capitalist system or of modern science, the decision to kill is not the decision about the point at which a life becomes without value. It is indeed, in its internal circuits of logic, not the termination of a life. Rather, it is specifically the creation of value, the extraction of worth from an otherwise valueless life. It is a process wherein death is just the first part of the value chain. And it precisely here that the biopower-necropolitics account ceases to apply to nonhumans. Rather than death epitomising the “anti-economy” by removing potentially productive subjects from within power’s grasp, here power culminates in the extraction of value. Within the necroeconomic system, death is the economy.

The state of exception must be perpetual because animals must be available for sale in the market economy – their life must always be fair game; they are allowed to be objects-of-a-life, and maintained as such, with the proviso that that life can be ended to create a necro-commodity. The necro-commodity, then, is one extracted from life. It is the result of “beingness” being transformed in product through killing. But it is more than that. It is a negation of that life. Carol Adams’ work can help us conceptualize this event and her work bears citing at length. She writes that:

“Through butchering, animals become absent referents. Animals in name and body are made absent as animals for meat to exist. Animals’ lives precede and enable the existence of meat. If animals are alive they cannot be meat. Thus a dead body replaces the living animal. ... Live animals are thus the absent referents in the concept of meat. The absent referent permits us to forget about the animal
as an independent entity; it also enables us to resist efforts to make animals present."\(^{167}\)

Live animals, both as a species and as individual creatures, become through the process of necroeconomics absent referents for the concept of commodity and for the notion of market value or scientific knowledge. But even more is happening here. As animals cease to be beings in their own right, as they fade into absentia, the totality of them fades as well, including their suffering and any vestiges of notions like rights and duties (and the attendant debate).

As an Other, the totality of nonhumans’ experience of suffering is marginalized and obfuscated behind the amorality of rational processes. As Schick argues (albeit in a different context), animals might be said to be “passed over in pursuit of universal guidelines for living” and therefore, by being deprived any voice or political standing, be forced to “suffe[r] in silence.”\(^ {168}\) But this is not a denial brought about necessarily by the denial of individual animals’ interests or rights by individual humans or through some sort of inclusive political process. It is a denial entrenched in a modern system which acts upon animals at the level of species and which, in the name of value, not only takes life, but, in turning it into value, makes it disappear.

The approach I am suggesting shows that for analytical purposes that there is no difference between killing of animals for science or the market as they both impose anthropocentric power relations, culminating in the legitimization of killing in a state of perpetual speciesist war, onto nonhuman populations. The necroeconomics account also shows that speciesism and the attendant mistreatment of animals is not simply a

\(^{167}\) Adams, p.40 Adams’ purpose in her own analysis is to draw a parallel between consumption of meat and male-female violence. This of course is not the point here, but the concept cited, I believe, fits my purposes without deviating from Adams’ basic line of critique.

\(^ {168}\) Schick, p.147
failure of ethics at the individual or social level, but rather that it is entrenched in political, social, and economics structures central to modernity itself.

Let us apply this analytical framework to the highly contentious issue of whaling by focusing on the International Whaling Commission, its moratorium on commercial whaling, and the ongoing Japanese “scientific” whaling program. This case will serve as an “illustration” and not as a full application of the theory behind this paper.

5. The IWC and “scientific whaling”: A short example

Charlotte Epstein, in tracing the genealogy of environmental protection, notes that while the earliest official environmental protection initiatives (like the establishment of Yellowstone Park in the US state of Wyoming in 1872) were preservationist in nature, utilitarianism quickly became the predominant theory of engagement with the wild. This shift was buoyed largely by the interest in preserving wildlife populations for use in hunting (including quickly diminishing “big game” populations in colonial Africa), with the double effect of making preservation focused on fauna rather than the totality of the ecosphere and of marrying “the ideal of preserving nature to the notion of using it.” By 1948, when the International Union for the Protection of Nature (IUPN) was established, the conservation ideal had taken root within policy-making circles and the duty for determining how (and how many) animals were to be protected fell to “scientific expertise.”

169 Epstein. p. 36
170 Ibid. p. 38
The history of whaling is a classic case of greed and short-sightedness. While historically numerous societies engaged in subsistence whaling, modern whaling revolved around the quest not only for meat but for whale oil for use in numerous products for the European market. In keeping with Locke’s maxim, whales were seen as wasted if they were not slaughtered and converted into products. As Papastravou explains, whalers “moved from species to species and population to population in an approach that has been compared to mining.”¹⁷¹ The actual estimates of how badly whale populations were reduced are a matter of debate (see below), but it is beyond argument that the damage to numerous species of whales was immense if not irreversible. Recognizing that a valuable resource was on the brink of depletion, the world’s whaling nations established the International Whaling Commission (IWC). The IWC’s policies are based on the *International Convention for the Regulation of Whaling*, signed by fifteen whaling nations in Washington, D.C. on the second of December, 1946. Considering that it is the document which drives much of the global commercial and political engagement with whales and is the centre of heated debate in political circles, civil society, and academia, it bears citing at length to demonstrate what ideology underpins it.

The rationale the document offers for its existence is as follows: “Recognizing the interest of the nations of the world in safeguarding for future generations the great natural resources represented by the whale stocks ... it is essential to protect all species of whales from further over-fishing.” The long-term aim here is to effectuate, through conservation and self-imposed limits, “increases in the size of whale stocks [that] will permit increases in the number of whales which may be captured.” This will

be carried out so as to “achieve the optimum level of whale stocks as rapidly as possible without causing widespread economic and nutritional distress” and thereby “make possible the orderly development of the whaling industry.”\textsuperscript{172} It is blatantly clear here that the Convention has nothing to do with protecting whales at all. It is about allowing a “renewable resource” to renew itself to permit further extraction of profit. The power relations created by the IWC are laid out in the Convention’s various articles. First it claims a monopoly on all engagement with whales. Article 3, Section 4 states that “The Commission may set up, from among its own members and experts or advisers, such committees as it considers desirable to perform such functions as it may authorize.”\textsuperscript{173} The right to claim sovereignty is hereby established, allowing for the deployment of a web of necropolitics whereby whale species are catalogued and studied, with the full weight of scientific inquiry brought to bear on allowing them to reproduce solely for the purpose of further killing-cum-value creation.

The role of scientific expertise is enshrined in the Convention. Article IV states that “The Commission may ... (a) encourage, recommend, or if necessary, organize studies and investigations relating to whales and whaling; (b) collect and analyze statistical information concerning the current condition and trend of the whale stocks and the effects of whaling activities thereon; (c) study, appraise, and disseminate information concerning methods of maintaining and increasing the populations of whale stocks.”\textsuperscript{174}

And, if commercial whaling is ever deemed unsustainable, science is given as an alternative. Article V gives signatories a formal loophole: “Notwithstanding anything contained in this Convention any Contracting Government may grant to any

\textsuperscript{172} International Convention for the Regulation of Whaling. 1946
\textsuperscript{173} Ibid.
\textsuperscript{174} Ibid.
of its nationals a special permit authorizing that national to kill, take and treat whales for purposes of scientific research subject to such restrictions as to number and subject to such other conditions as the Contracting Government thinks fit, and the killing, taking, and treating of whales in accordance with the provisions of this Article shall be exempt from the operation of this Convention.” It is telling that science here is ostensibly the justifying principle for killing, and yet the obvious goal of the science is to, in keeping with the overarching goals of the IWC, determine the health of stock to ascertain when it is ripe for commercial killing. But what to do with the whale when it’s dead and studied? It cannot, after all, be wasted. So, to close the loop: “Any whales taken under these special permits shall so far as practicable be processed and the proceeds shall be dealt with in accordance with directions issued by the Government by which the permit was granted.”

The instrumentality of the IWC’s policies is transparent, as is the inherently political nature of its activities. Whaling, especially under scientific pretences, is in and of itself political and concerns pre-mediation of profit via cultivation and harvesting of necrocommodities. As Shiva has argued, “[p]icking one group of people (the specialists), who adopt one way of knowing the physical world (the reductionist), to find one set of properties in nature (the reductionist/mechanistic), is a political, not a scientific, act. [And yet it] is this act that is claimed to be the 'scientific method.'” Epstein puts it succinctly when she states that the IWC was established using a “Weberian rationalization of nature use” based on a model of scientific rationality

175 Ibid.
176 Shiva.
founded in a Cartesian domination of nature.” To use a clichéd but in this case apt metaphor, this is akin to putting a commission of wolves in charge of the henhouse.

This system is the epitome of the necroeconomic interspecies relationship. A species is selected as being of value and therefore the legitimate target for killing. This is accompanied by the realisation that said species is a finite resource and as such must be protected in a system that combines biopower and necropolitics in that the species must be to some degree – based on scientific data and estimations – kept alive, but it is kept alive solely for the purpose of reproducing and therefore naturally creating more potential commodities which can then be plucked from nature. The focus is on the total population rather than its individual members and therefore the suffering and death of individual animals is precluded from consideration. Questions of morality are supplanted and assuaged through claims of sustainability, backed by scientific testimony (which outwardly preaches concern for animal welfare but internally is the barometer of how much death can be meted out to ensure profitability). This system is perpetuated through the scientific-commercial combination, both within the IWC and within the various non-member whaling governments. Most criticism within this system is levelled precisely at any politics entering the system and disrupting it within notions of public interest in animal welfare or of animal rights, which the system is designed to exclude.

In 1982, the majority of members of the IWC voted to implement by 1986 a moratorium on commercial whaling and the establishment of whale sanctuaries wherein any commercial whaling would be illegal. The moratorium has been in place for the past 26 years and is the source of fierce debate, which has brought the whaling issue to the forefront of social consciousness. While a number of countries abide by

177 Epstein. p.40
the moratorium, reactions have been mixed. Norway withdrew from the IWC and has resumed limited commercial whaling in 1994 (which is bolstered by scientific “lethal research” on whale stocks). Japan, while remaining in the IWC, has continued whaling under the “scientific whaling” clause, setting its own catch quotas. Although Norwegian comment is noted, the focus in this section is on Japan, who, by staying under IWC regime, employs a seemingly sophisticated rationale for its continued whaling and sale of the “scientifically” caught whale meat. Many commentators refer to this as simply a guise for commercial whaling, but if it is a guise, it is one whose rationale goes deeper than simple politics.

Garner posits that most forms of conservation have two interrelated tenets: they work at the level of the species rather than individual animals (whose suffering can be ignored by focusing on the welfare or size of the population as a whole) and focus on those species which can benefit humans over those which cannot. He also argues that conservation of animals like whales, which are no longer necessary per se in that they are not an essential food source or commodity, is problematic because in these cases it is in the commercial best interest of the businesses involved to exploit quickly and move on to invest money in other resources. It is once most of the damage has been done that conservation or preservation initiatives are launched. He points out that in the case of the IWC, “species are protected only once stocks ... are virtually exhausted and it is not commercially viable to continue taking them.” How then, is whaling of the scientific variety justified in the face of overwhelming evidence of severe depletion of whale stocks? Why do whales need to die to prove something that is already known?

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179 Ibid. p.156
Before examining the Japanese case, let us first suggest that there is little consensus regarding the science of conservation. There is a serious debate under way within scientific circles about the usefulness and accuracy of estimations of populations and moreover on the correct approach to “sustainable” exploitation of resources. Ludwig et al posit that “we shall never attain scientific consensus concerning the systems that are being exploited.”

Consider that the current moratorium – and supposedly scientific whaling programs – are based on population estimates which vary dramatically between studies depending on methodology or timing. For example, Clarke and Knight note that the IWC’s estimate of the total humpback population before any whaling started is 20,000. The current population is estimated at about 10,000, leading some to suggest that a limited hunt is possible in the near future. Other studies, however, have placed the pre-whaling population at 240,000. Similar discrepancies occur in the reporting of whale catch, especially in the politically sensitive area of bycatch.

Considering this discrepancy, setting a “target for managed recovery” seems like a purely political exercise. Garner suggests that the basis for the IWC catch quote system is “guesswork” and that decisions regarding whales “are more to do with political expediency and economic self-interest.” Moreover, quotas or catch levels based on notions of maximum sustained yield (MSY) set at the population level – a necropolitical occupation – do not in practice translate into sound conservation (or sound biopower) as techniques and distribution of catch is often difficult to control.

Palumbi notes that whale populations include small, locally isolated populations which “cannot support a loss rate that may seem minor on a whole-ocean scale.” Here scientific data can in fact act as a faulty guide for necroeconomic interests which do require that a population be maintained in a state of living death rather than actually be wiped out.

It bears noting that science in this case seems hardwired to link its findings to commercial action while disavowing a political or moral motivation, even when the latter is evident. Let us examine the criticism of any opposition to whaling presented by Butterworth. He argues that the whaling issue “is not really a conservation, but rather an ‘animal rights’ issue” backed by groups opposed to the killing of “special” animals. Here we see the deployment of the “charismatic megafauna” argument in conjunction with the explicit belief that consideration of animal interests or any politics on behalf of animals do not belong in the conservation calculus (as it cannot be allowed to be debate). This extends into a criticism of the entire IWC’s – admittedly flawed – decision-making process, which he argued is conducted in a scientific guise, but that it comes down to an impasse between those wanting to protect animals (unscientifically) and those “wishing to preserve industries, employment, and a food source based on whales” by adhering to scientific conservation and catch quota models. Here it becomes clear that supposedly neutral science is being cast as actually being on the side of good and of economic welfare, which is inherently supposed to outweigh any animal interests. He suggests such “hidden agendas” might undermine science, but he himself suggests that science can give an answer without being posed a question. Namely, how many whales can be killed. The embeddedness

184 Palumbi. p.269
186 Ibid.
of instrumentality in modern science’s epistemology is so severe that even legitimate scientific findings are criticized for suggesting the need for inaction. Butterworth writes that current risk estimations for whales are too strict and that the “general application of equally risk-averse criteria to all marine fisheries would necessitate immediate closure of the overwhelming majority.” 187 So science is only right when it leads to tangible action, which leads to commercial gain.

Also consider the explanation for the study of whales’ stomach contents given by a professor of physiology at the University of Oslo. He states that because whales can compete with human fishermen for fish at certain times of the year, studying their diet “is not perhaps a major scientific goal in itself; but from the fishing industry’s point of view it is fairly important.” 188

The Japanese official position, examined through the necroeconomic framework, lays bare the workings of the scientific whaling regime and its internal contradictions. Take the comments of Hiroshi Hatanaka of Japan’s Institute for Cetacean Research defending the Japanese whaling program.

Hatanaka writes that “[r]esearch on whales is conducted according to provisions of the International Convention for the Regulation of Whaling (ICRW) and is fundamentally different from commercial whaling.” 189 This is only a fact within the framework of the IWC’s claimed monopoly on whales and, moreover, considering the necroeconomics argument, we see that the whale as a commodity for science is no different than the whale as a commercial commodity, making Hatanaka’s point not only invalid as a defence but altogether untrue.

187 Ibid. p.533
Hatanaka goes on to suggest that scientific whaling is carefully planned so as to “achieve statistically valid results while also safeguarding population.” Here we see the biopower aspect clearly as the good of the population, represented by a scientific estimate of population health, is held up as proof that killing in the name of science is not only justified, but does not harm the population, sidestepping the death and suffering of individual animals. Moreover, because the whales are sold, this scientific break-even point is also sui generis an economic one as well, proving again that scientific whaling is commercial (necroeconomical) in all but name.

Hatanaka goes on to contend the “lethal method used for sampling is required to achieve our research objectives.” Here science is offered by as a justification for killing, again not allowing for consideration of either the suffering caused or even of death per se. Note the term “lethal research” rather than the more truthful – since the research itself is not the cause of death – “murder by harpoon.” Moreover, critics cast doubt on the usefulness of the scientific data obtained through such research, either for management purposes or even at all (Papastravou 2005).

The actual site of the killings – what Mbembe refers to as “zones of exception” - is also justified. Hatanaka argues, using truly perverse logic, that the sanctuary does not apply to scientific whaling and was intended solely to prevent commercial whaling. So not only is science and the purported extraction of knowledge given again as a justification for death, but there is a claim laid to the ability to deal death in a specific geographic area in a necropolitical relationship. Moreover, this claim is legitimated in the internal logical of Hatanaka’s argument by a scientific procedure which exists solely for the purpose of determining whether the commercial motive for

190 Hatanaka.
191 Hatanaka.
192 Mbembe. p.34
the same death can be replaced as the justificatory principle. He is differentiating between two identical situations.

Ironically, Hatanaka lays it all out in the open at the end of his letter, when he writes that “[r]esearch of [this] magnitude … is costly. Funds may be obtained by selling the by-products of the whale research.” But here the by-product he is referring to is the whale meat, which is the commercial product. While the terminology and the internal logic might differ, the two are one and the same. The by-product is the product! Science, then, is commerce, with both targeting whales as a commodity. Both are politically and financially motivated and both deploy political means when these serve them. But when they do not, they hide behind claims of amorality, the pursuit of truth, or anthropocentric appeals to economic welfare. It is not that whales are denied rights or a treatment they deserve; it is that the system does not allow for these to be considered in pursuing its goals.

Ludwig et al capture the essence of the anthropocentric nature of the necropolitical arrangement when they argue that “[it] is more appropriate to think of resources as managing humans than the converse” in that “resource problems are not really environmental problems: they are human problems that we have created at many time and in many places, under a variety of political, social, and economic systems.”

Conclusion

This paper has traced the genealogy of the modern human-animal relationship and its implications for the political economy of animal products. While

193 Ludwig et al.
acknowledging the importance of the contribution of the animal rights debate in improving the treatment of animals through the use of moral-rational reasoning, it has shown that this debate is insufficient in that it largely ignores the root causes of speciesism and animal mistreatment. Having traced these to the central facets of modern capitalism (and its corollary, modern science), this paper contended that a different analytical framework was necessary to address these.

This new framework is rooted in the work of Michel Foucault and Achille Mbembe and demonstrates that animals are in fact imbricated in complex power relationships which allow human economic interests to claim them as property and legitimize their death. In death, animals killed for meat, scientific knowledge, or other sources of value, become necrocommodities. In other words, their death simultaneously marks the end of their being and the creation of value for market. A corollary of this process is that the suffering and death of the animal, indeed the animal itself, becomes an absent referent for the wealth into which it is transformed. This closes the circuit whereby the animal can be treated as a commodity in a system which is avowedly amoral. I have hereby introduced the notion of necroeconomics. An application of this framework to the case of the IWC and ongoing scientific whaling regimes shows that the root of the problem lies not in a lack of respect for animal rights but rather within a system which does not allow for these to even be considered.

The necroeconomics account is by no means intended to replace the animal rights dialogue, but neither is it merely an extension thereof. It could be seen to complement certain arguments within that debate, but it also provides its own narrative of the human-nonhuman relationship.
There a number of implications of this approach. First, it connects the abuse and killing of animals to broader problems of modernity, including reductionist science and modern capitalism. What is required, then, is not simply a change of attitudes toward animals, but a reshaping of political economy. It also shows that the human-animal relationship is not simply the result of a failure of ethics, but rather part of deeper structures. As such, the necroecomics account challenges the constructed notion of amorality in commerce and in the sciences and their obvious anthropocentricity.

Considering the degree to which this narrative shows animals to be implicated in power relations with humans, it also suggests that far greater academic efforts should be dedicated to examining the implications of human politics for animals and the potential for animal involvement in these processes. It also suggests that perhaps a shift toward approaching animals as both individuals and members of a species might force us to acknowledge their death and suffering in a more profound way. Rather than neglecting, as Schick suggests is the case, the “concrete suffering of particular individuals,” we should see animals more as we see ourselves. If in death they have a name, then perhaps further deaths can be avoided. Finally, this analytical could theoretically have implications for bioethics and the treatment of genetically created organisms and for the debate about ecosystem depletion.
Bibliography


pp.532-534.


Ludwig, Donald; Hilborn, Ray; and Walters, Carl. “Uncertainty, resource exploitation, and conservation: lessons from history.” *Science.* 260(5104), 1993. p.17


