

Recent Scholarship

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Foreword

Benedict Rattigan

Director, the Schweitzer Institute

Albert Schweitzer was an extraordinary polymath who continues to inspire us through his legacy. As a philosopher, theologian, musician, physician, and humanitarian, he addressed a vast array of societal challenges, including post-industrial alienation and environmental degradation. In this context, the word 'environment' includes non-human animals and the wider circle of life.

Central to Schweitzer's philosophy is '*Ehrfurcht vor dem Leben*', or 'reverence for life', which he proposed as a means to restore civilisation. His commitment to actualising these ideals through his medical mission at Lambaréné in Gabon established him as a global inspiration in the post-World War II era.

Inspired by this visionary thinker, the Schweitzer Institute examines the interplay between ecological values and humanity's impact on nature. Through initiatives including conferences, a peer-reviewed journal and our Research Fellowship, we strive to bridge the gap between Schweitzer's era and our own, applying his principles to contemporary challenges.

But whilst we're primarily an academic institution, we acknowledge that research alone is insufficient. We must translate our findings into tangible actions and policies, and this issue of *The Schweitzer Institute Journal* aims to present practical solutions for the ethical challenges in our relationship with the environment and the wider circle of life.

The papers were all delivered at a one-day seminar at Cambridge University in November 2024. The conference, entitled 'Ecocentric Ethics: Exploring Our Responsibilities to Non-Human Animals and the Environment', saw a range of renowned speakers present their expertise regarding the social and political reforms that are essential to help fulfil humanity's moral responsibilities to other animals and nature in general.

The main sponsor of this event, the Centre for Animals and Social Justice, has been at the forefront of advancing the social and political status of nonhuman animals since its inception in 2011. As the pioneering think-tank dedicated exclusively to animal issues, the CASJ conducts groundbreaking research aimed at overcoming obstacles to animal protection. Their work is particularly notable for exploring ways to offer political representation to nonhuman animals as vulnerable individuals.

A significant milestone in the CASJ's efforts came in 2014 when they successfully rallied support from 16 animal protection organisations for the establishment of a Governmental Animal Protection Commission. This proposal continues to be a cornerstone of their mission to embed animal protection within public policy frameworks, and we'll be discovering more about the CASJ's important work from its CEO and research director, Dr Dan Lyons, in the first paper.

Benedict Rattigan

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The Political Representation of Non-Human Animals

Dr Dan Lyons

Centre for Animals and Social Justice (CASJ)

Unless other animals' vital interests are institutionally represented within government, they will normally lose political and public policy battles to commercial and associated professional interests, even if they enjoy significant support from public opinion.

It is essential to entrench any social and cultural advances for animals and promote conditions for future progress by achieving structural changes in political systems that create nonhuman animal representation.

Understanding policy outcomes

I'll use my experience to give an initial summary of the rationale behind the charity I lead, the *Centre for Animals and Social Justice (CASJ)*.

I began, many years ago, as a student and campaigner with a deep interest in politics, but focussed on the ethical arguments around cruelty to animals, and animal rights. While I was working at the animal protection campaign group *Uncaged* in the mid-1990's, I was trying to do a part-time PhD looking at the relationship between animal rights ethics and environmental political theory.

However, the more you try to lobby MPs and Government, the more you appreciate that moral arguments, although they are a necessity, are normally far from sufficient as a means of achieving real change for animals. And there is often a large gap between the letter of the law and real-world implementation.

That growing awareness culminated in the leaks of documents we received back in 2000 relating to the Imutran pig-to-primate organ transplant experiments and subsequent court battle we had to fight to publish them. The most eye-opening aspect of the whole affair was the cynical dishonesty

on the part of the Home Office as they tried to cover-up the various breaches of welfare regulations.

In other words, the animals were not even given the partial level of consideration and protection one might imagine from reading the law and regulations.

When you see how the illegitimate and brutal exercise of power can have such a dramatically negative impact on animals, then you can't avoid addressing these more empirical questions about why this situation has come to pass, because only then can we know what the effective remedies might be.

So, I switched the focus of my PhD to trying to understand and explain UK animal research policy, now with the assistance of unique primary data relating to actual policy outcomes and some of the interactions between researchers and Govt Inspectors.

I wrote my thesis and the book, and the creation of the CASJ emerged from the lessons gained from developing that expertise in politics and public policy. The key lesson being that deeper, or structural changes in government are required if most specific animal protection campaign objectives are to have a reasonable chance of success, especially in the major industrial areas of animal use.

I will explain this in more detail in the rest of this article.

Typology of animal-related political paradigms

One factor that is critical to understanding the evolution of any policy area is an understanding of the interest groups and their policy belief systems. To give you an idea of the social and political landscape we're in, I've found this typology based on one by bioethicist Barbara Orlans to correspond remarkably well to the reality of this debate in the UK over the past 130 years. There are *two* political positions or ideologies that are *practically* relevant:

1) '*Animal Use*' – adopted by animal use interests in farming, experimentation. Generally animal welfare heavily subordinate to commercial or professional interests. Wide definition of tolerated or 'necessary' cruelty. The policy aims are therefore to promote self-regulation and prevent animal welfare considerations restricting their activities.

2) '*Animal welfare*' – animal welfare should be given considerable weight in a utilitarian calculus. Position of most general public, and policy position adopted by most animal protection organisations. Policy aims are tighter public regulation to introduce some ethical/democratic considerations into our treatment of animals.

There is of course also a third philosophical position - ‘*Animal rights*’ (non-human animal welfare as important, essentially, as human – rights not to be harmed etc.). In policy terms, however, groups with this core philosophical position tend to argue along animal welfare lines in order to have some positive impact, because dominant political and cultural systems marginalise and denigrate this view.

In reality, the frontline in this struggle is between ‘animal use’ and ‘animal welfare’. In the UK at least, the predominant government approach is ‘animal use’, which is in tension with the public’s more progressive ‘animal welfare’ position.

So I will briefly explain why this is the case, which will point to solutions.

Symbolic reassurance & exclusion

This policy area is a classic example of how government and animal use interests resist public opinion and animal welfare through *the politics of symbolic reassurance* combined with *institutionalised exclusion of animal welfare*.

1986 was a critical juncture in the evolution of this policy area, with new legislation that, at first sight, seemed to introduce an ideological change from ‘Animal Use’ to ‘Animal Welfare’ through the introduction of a cost-benefit assessment (CBA) of research projects. In other words, regulators and animal researchers could now say that animal harm was assessed and considered before a project could be authorised. However, there were – and still are – critical gaps in the regulations that have the potential to erode the impact of animal welfare considerations:

- Relative weights to be given to animal pain and suffering versus research outcomes in the CBA was not defined in law – allowing government huge discretion in how it was implemented
- there were no changes to the implementing body – an Inspectorate largely drawn from the animal research profession, or at least sharing professional links
- A clause in legislation – Section 24 - prevents disclosure of information about regulation and research outcomes – allows research interests to influence public understanding of animal research and its regulation

Xenotransplantation research cost-benefit assessment

This case study shows the likely results of this policy area's structural flaws. Most of Imutran's experiments were given a 'moderate' severity categorisations – experiments not supposed to cause serious systemic adverse effects, especially not to the point of death. The 'benefit' calculation was based on initial predictions of developing clinically-viable pig kidneys and hearts for transplantation within a year, which itself was based on a deeply flawed scientific case that hugely underestimated the immunological and physiological barriers to pig-to-human organ transplants.

Actual policy outcomes

The documents revealed primary data showing breaches of moderate severity limit that the Home Office allowed to go unpunished. These represented enormous costs that go beyond biased exercise of discretion in the operation of the CBA to outright illegality:

- “Uncoordinated limb spasms” and “stroke”
- “in a collapsed state” and (17 animals) “found dead”
- “Gastro-intestinal toxicity, resulting in severe diarrhoea”
- “very distressed”
- “body and limb tremors”
- “grinding teeth, eyes rolling...”

In terms of supposed benefits, despite *five years* of experimentation, xenograft rejection wasn't even understood, never mind controlled. The fact that Imutran's research was permitted and then, *even worse*, allowed to continue, despite its ongoing failure to realise its stated objectives, illustrates the reality of the UK Government's 'animal use' approach, behind an 'animal welfare' veneer.

This is what is known in political science as a 'critical' case study, which means it is highly likely to be representative of the wider pattern of regulation. This is because it is a case least likely to support the hypothesis being explored regarding regulation biased against animal welfare protection: due to the very rare use of wild-caught primates and relatively high levels of scrutiny from the advisory committee, the Animal Procedures Committee (APC).

A crucial methodological approach to understanding policy areas is to take a longitudinal approach and see how the policy process evolves over time. In animal research policy there have been no major or paradigm level changes since the Imutran scandal – the secrecy clause Section 24 is still in place despite regular pressure for its repeal. The legislation transposing the 2010 EU

Directive appeared to weaken the legal requirement to conform to the severity stipulated in the project licence, with the then Chief Inspector telling me that the Home Office believed that applying the severity categorisations as limits was not a legal requirement of the Directive, there was merely a notification requirement. It seems that the lesson learned by government from the Imutran affair was not to apply limits to animal suffering more diligently, but rather to abolish the limits to avoid any legal and political embarrassment in future.

I mentioned the APC previously, and the establishment of this body with some guaranteed animal welfare representation was another aspect of the 1986 Act that appeared to shift the balance towards a more animal welfare approach. Now, as far as I can see, there is no animal welfare protection representation on its successor the Animals in Science Committee (ASC).

And in 2017 the ASC published a report of the harm-benefit assessment in 2017. The Government took two and a half years to respond, claiming that they accepted all the recommendations. But on what I think is the key one, the need to incorporate societal concerns, the government response was vague and non-committal, along the lines of ‘we already do that’.

So, all in all, there have been no major changes yet in this sector.

Farm animal welfare policy failures

Now, let’s take a quick look at the farm animal welfare policy area. Firstly, to give you an idea of the scale of political failure here, the suffering of factory-farmed animals was identified and criticised over 50 years ago in the historic Brambell Report which was commissioned by the UK Government.

However, as the Farm Animal Welfare Council (2009) report observed, severe welfare problems remain unresolved because, in effect, economic and business interests are still being allowed to inflict gratuitous levels of suffering to hundreds of millions of animals.

To illustrate this huge policy failure I want to talk about a court case brought against the UK Government by Compassion in World Farming (CIWF) in 2003, which challenged the use of fast-growing genotypes that inevitably cause chronic hunger in breeding birds. They grow so quickly that if permitted to feed freely, they struggle to survive until sexual maturity, which takes 3-4 times longer than to reach slaughter weight. To deal with this, breeder broilers are fed one half or less of what meat broilers are given to eat (sometimes as little as 20%) for much of their lives, which causes a serious welfare problems in itself.

The relevant clauses in EU law include (Council Directive 98/58/EC):

- EU: Must be fed a wholesome, healthy diet to maintain good health and satisfy their nutritional needs
- EU: No genotype with detrimental effects on health or welfare

The UK's implementing regulations said that farmers must 'take all reasonable steps to ensure that the conditions under which the animals are bred or kept comply with the requirements' and that animals be fed sufficient food "to promote a positive state of wellbeing"(para 22).

Therefore, the farming of fast-growing types of chicken appears to breach EU and UK laws which, on the face of it, seem to ban 'unnecessary suffering' – and hence give the public the impression that there at least some meaningful controls on cruelty.

CIWF's case was that the only way to comply with the law is to avoid rearing fast-growing types of birds, and to instead use slower-growing chickens so that the breeding birds were not chronically hungry.

This as an example of where the English courts have had to consider the government-created 'yawning gap between the consensus that animals should not be caused to suffer for trivial economic reasons, and the continued existence of systems that are guilty of precisely that'. (Bates, 2005)

Institutionalised welfare law evasion

However, the judiciary sided with the government and rejected CIWF's case. Because the use of fast-growing genotypes was standard industry practice, the courts refused to even consider whether they were unlawful. From this position, they inevitably went on to find that the restricted feeding regime was not illegal, as a balance had to be arrived at between mutually incompatible welfare concerns.

In other words, the rule of law, in this instance, is fundamentally undermined because its implementation becomes entirely conditional on institutionalised business practices. The ideology of maximising productivity and profits is hegemonic.

The lesson here is that if animal advocates focus on particular policy areas, without structural changes that embed animal welfare as a major government value, then even when they appear to have made some progress by achieving more protective laws, in practice those efforts are often pretty futile.

Why the implementation gap?

In both cases, the law gives the impression of an animal welfare approach, while implementation results in an 'animal use' paradigm. The question is, why has this situation evolved as it has?

I've found that a useful explanatory concept from the policy analysis literature is the notion that policy evolves from the way interest groups and government deploy and exchange their political 'resources'. 'Resources' here has a broad meaning – not just financial wealth to spend on lobbying campaigns, but includes qualitative and structural factors such as:

- helpful laws
- supportive public opinion
- knowledge and information
- alignment with dominant elite values and governmental power distributions
- perceived contribution to national economic prosperity

Impact of group resources

The perceived value of a group's resources in a particular policy area will depend on whether those resources contribute to that policy area's goals. Animal-related policy areas have come to be dominated by animal use interests and ideology. Therefore, animal advocates' resources such as supportive public opinion and ethical arguments for animal protection have little purchase in these policy areas because public accountability and animal welfare are seen more as hindrances than a help by these policy-making communities. Hence why animal advocates in the UK, for example, generally lack significant influence, and excessively harmful policy-making continues.

These UK policy areas are very unlikely to reform of their own accord, so it requires a powerful external shock to change their structure from animal use to animal welfare. A change in governing party is obviously one potential external shock, but one of the features of these closed policy systems is their relative resistance to outside pressure, and there were no paradigm-level policy shifts in animal research or farming after 1997, 2010 or 2015. We will have to wait and see what impact last year's election will have. It's fair to say that we will probably always lack economic muscle relative to animal use industries, which in turn allows them to dominate related scientific professions, research and technology activity, media relations etc.

The overarching cause that links all these policy systems is the lack of structural, institutionalised representation for animal interests within govt which means animal protection has little in the way of effective resources to counteract animal harm interests.

Representing animal interests

But there are a couple of resources that could be utilised to change these policy processes by counterbalancing the power of animal harm interests.

First, *public opinion* could be brought to bear by *democratising* policy processes. Ideally, this would involve the incorporation of deliberative democratic decision-making into animal policy spheres. Case studies show that these produce decisions more sympathetic to animals' interests than traditional government policy-making. One example would be South Australia's State Government's Dog and Cat Citizens' Jury.

The other is *wider governmental support*. The current structure of UK government – both legally and institutionally - prioritises 'competitiveness' and deregulation over all else, and various agencies and departments sponsor the commercial interests of industries such as big pharma and industrial agriculture. Conversely, there have been no laws or institutions with establish animal welfare protection as a meaningful consideration. However, the Animal Sentience Act and the Committee it created could amount to a 'foot in the door' for animal protection within the wider government machine, and so it will be very interesting to see how that evolves. The reform we have been suggesting is a larger body with an expanded remit - a Government APC acting as a voice for animals and setting an animal protection agenda across the whole of Government.

The absence of *overarching laws* that guarantee significant consideration for animal welfare means that animal welfare is almost always sacrificed when it conflicts with animal harm interests. So, animals need to be granted some overarching legal/political status in order for public policy to be less dominated by money and raw power rather than ethics and democratic accountability.

Another vital policy instrument for representing animals and their essential interests would be mandatory *Animal Welfare Policy Impact Assessments*, similar types of assessments are currently used to facilitate consideration of environmental and equalities factors.

Strategies and Targets are another important tool. There is no explicit strategy with targets to improve animal welfare within any part of Government, and this is both a symptom and a cause of the lack of regard for animal welfare in public policy.

Significant policy changes at the structural level that would involve a paradigm shift from animal use to animal welfare are of course difficult to achieve. I don't think any one group is capable of achieving this on their own so this is an area where collaboration really is key.

Potential gains

- The EU Welfare Quality study involving in-depth focus groups in several EU countries found that 50% of EU farms fail to comply with the public's position on minimum animal welfare standards
- Approximately half of UK animal experiments fail the public's approach to cost-benefit assessment

These examples provide an insight into why animal harm industries prefer self-regulation and the exclusion of public accountability.

This recent statement from a Luxembourg Government official describes the essential political change we can and need to achieve: 'the animal's dignity must prevail over the profitability of the industrial activity'.

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Expounding The Ethics of the Climate Crisis

Professor Robin Attfield

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This paper explores the ethical stance of biocentrism, as championed by Albert Schweitzer, and its relevance to contemporary environmental crises. It contrasts biocentrism with ecocentrism, emphasising the moral standing of individual living beings rather than ecosystems or species as entities. The discussion critiques anthropocentrism and highlights the importance of non-anthropocentric ethics in addressing the interconnected crises of climate change, biodiversity loss, and air pollution. Drawing on Schweitzer's philosophy and recent scientific findings, the paper examines tipping points in regional systems, the ethical implications of biodiversity loss, and the role of non-human moral patients in climate justice. Practical policy recommendations are presented, including sustainable forestry, regional system preservation, and the inclusion of ecocide as an international crime under the Statute of Rome. The paper concludes by advocating for hope and mobilisation as essential responses to environmental challenges, grounded in rational optimism and collective action.

I would first like to express my thanks to the Schweitzer Institute and to Benedict Rattigan for inviting me to address this conference. Like Schweitzer, I am a biocentrist, recognising the independent value of the flourishing of all living creatures. I would not necessarily defend this stance as Schweitzer would have done, in terms of respecting the will to live of all the organisms that we human beings live among (Schweitzer 1923), as I am reluctant to ascribe to beings other than animals and other than God properties such as having a will. Yet maybe Schweitzer had in mind not so much the purposiveness celebrated by Schopenhauer (Schopenhauer 2010), but rather the 'conatus' or drive to develop in accordance with the inherited nature of one's species, a central

theme of Spinoza (Spinoza 1870); and if so, I would be happy to align myself with this ground for concern for all living beings, whether human or non-human, animal or non-animal.

Benedict clarified during our correspondence that by ‘Eco-Centric Ethics’ (a phrase that appeared in the title of the Cambridge conference), what was meant was ‘non-anthropocentric ethics’, rather than ‘ecocentric ethics’ in the technical sense, which ascribes intrinsic value either to ecosystems or to species or to both. Like Schweitzer, the range of entities that I take to have moral standing extends to all living beings (present and foreseeable), but not to their assemblages (ecosystems), nor to their lineages (that is, species). The term ‘ecosystem’ was not coined until 1935 by Sir Arthur Tansley (Attfield 2021, 108), by which time Schweitzer had completed some of his main works. Tansley’s aim was to avoid the organismic (and almost animistic) overtones of the approach to plant and animal communities harboured by the American ecologist Frederic Clements, and to present these groupings instead as loose associations with fluctuating boundaries (Tansley 1935). Clements’ tendencies are by now been often read back into Tansley’s concept, with the result that some people regard ecosystems themselves as bearers of moral standing, and this makes these same people ecocentrists (in the technical sense) But if Schweitzer had been aware of Tansley’s concept, he would probably not have taken this step, and would have distanced himself from ecocentrism, at least of this kind.

There is a parallel debate about species, but once again what matters is surely the particular creatures, rather than their kind or sort, despite the important difference that is made by belonging to one natural kind rather than another. Hence my choice of ‘biocentric’ to describe my ethical stance, rather than ‘ecocentric’. What is important, however, is that we take seriously the flourishing of non-human living creatures, as well as that of human beings, and therefore that we adopt a non-anthropocentric stance, rather than an anthropocentric (or humans-only) stance. And that allows me to align myself with the real thrust of this conference, as opposed to the technical meaning of the term ‘ecocentric’, namely that we should be concerned about all living beings, and not just about those that are human.

It is not as if ecosystems or species were unimportant. For making the lives of future creatures possible involves defending certainly their species and usually their ecosystems. But saying this does not mean that either ecosystems or species have moral standing as such. Later I will draw attention to some policy differences that biocentrism makes in practice, but that cannot be done until I have outlined the crises that we are confronting.

Schweitzer would have been aghast at the recent deforestation of the ‘Primeval Forest’ that he wrote about, which has mostly taken place in the period since his death in 1965. He would probably

have reacted in the same way to the greenhouse gas emissions that were found, some decades after his death, to be causing global heating, and among its outcomes, the destruction of many forests; and also at the air pollution that is making the roads of our great cities unsafe to breath, as a result of emissions from vehicles, boilers and factories. The book that I have recently published, *The Ethics of the Climate Crisis*, is about the three crises of climate change, biodiversity loss and air pollution (Attfield, 2024), and in line with Benedict's invitation I will be describing it here, with particular reference to its biocentric aspects, and related policies and remedies.

The early chapters concern these three crises. I am an ethicist rather than a scientist, and, like John Broome, the author of *Climate Matters* (2012), rely on the findings of scientists such as those of Intergovernmental Panel on Climate Change, including their former chair Sir John Houghton, whose book *Global Warming: The Complete Briefing* attained its fifth edition in 2015 (Houghton 2015), and such as the recent explorers of the implications of this research, Renée Cho (2021), Tim Lenton (2011 and 2019), and Julian Caldecott (2022a, 2022b). A large part of what these scientists attest is that since the industrial revolution, human activity has generated various greenhouse gases (and particularly carbon dioxide) that have increased average levels of carbon dioxide from 280 parts per million to well over 400, with consequent melting of ice-caps, rises in sea levels, inundations of coastlines and small islands, increases in the intensity and the frequency of extreme weather events such as storms, hurricanes, floods, droughts and wildfires, species migrations (including migrations of the vectors of diseases such as malaria and dengue fever), and migrations of millions of climate refugees from lands that are no longer able to support them and their families. The figures cited are misleadingly mild, because the impacts of emissions of other greenhouse gases such as methane, nitrous oxide,, CFCs, HCFCs and HFCs need to be added, such that the carbon dioxide equivalent figure is well over 450 parts per million.

However, another part of their findings is that regional systems, such as the rainforests of the Amazon, central Africa and Indonesia, the boreal forests of Canada, Scandinavia and Siberia and the ice-caps of Greenland, of the Arctic Ocean and of the West Antarctic are in danger of reaching their 'tipping-points', where systems are in danger of reaching 'a critical threshold beyond which a system reorganises, often abruptly and/or irreversibly' (IPCC 2021, cited in Caldecott 2022a). Thus the Amazon rainforest could morph into a savannah; and there is even a danger that any one regional system reaching its tipping-point could trigger a domino-effect, with other such systems being driven to tipping-points of their own, and within decades at that. As Lenton argues, there is too great a risk of tipping points being triggered not to take this risk seriously. Accordingly this is an important part of the context in which climate action, and action to preserve forests, should be

considered. (I should add that the systems in question are not ecosystems, such as particular rivers or plains or mountains, but regional systems, such as the entire rainforest of the Amazon region, which includes the forests of the Orinoco River and the Guyana Highlands, as well as the many rivers that flow into the Amazon River.)

The endangered character of many regional systems forms the background of a section later in the book, where the ethics of people off-setting the carbon emissions of their flights is in question. Against the view that it is indifferent where trees whose photosynthesis would capture the carbon emitted are planted, it is there argued that policies should be adopted of planting them to restore and sustain regional systems, such as the rainforest of Borneo. Corridors of riverine forest replanted there can restore the truncated range of forest creatures, and thus the sustainability of the forest. Similarly judicious planting to restore the boreal forests of Canada could help postpone or prevent those forests reaching their tipping-point. Here I have been jumping ahead, but in a way that explains how systems theory can be relevant to ethical decisions, including decisions capable of benefitting individual animals and their descendants.

The chapter following the ones on global heating and its impacts concerns the crisis of biodiversity loss, and also another associated global crisis, that of air pollution. Air pollution might well have troubled Schweitzer, because of its impacts on the health of both humans and non-human animals; for most of the world's major cities and the highways that radiate from them have air of a quality that falls below international standards, and that endanger the health of many of their residents and travellers. But perhaps an even greater crisis is that of biodiversity loss, with rates of species extinction having risen to between 1000 and 10,000 times the natural rates of the pre-industrial past, and also with an average decline of 68 percent on the populations of mammals, birds, fish, reptiles and amphibians, and an even steeper decline in the populations of insect species (WWF 2022), which obviously include the pollinator species on which we all depend. As Elizabeth Kolbert argues in *The Sixth Extinction: an Unnatural History*, the current mass-extinction compares with the five of the geological past (Kolbert 2014), and, as Rupert Read comments in *Why Climate Breakdown Matters*, it is putting at risk the biosphere, or, in his language, Gaia (Read 2022).

The crisis encompassing species extinctions and population declines is serious even if we adopt a human-centred or anthropocentric value-stance, because we are at risk of losing pollinators like honey-bees, plus many resources with potentials for the nutrition of humanity and for the healing of human ailments and injuries. But if, as is argued later in the book, we adopt a broader value-theory and recognise the moral standing of other living creatures, then this crisis is more directly alarming and disastrous. The chapter on the biodiversity crisis does not argue that simply through calling this

crisis a crisis we are implicitly accepting a non-anthropocentric ethic; but perhaps that could have been argued. In fact the need for a non-anthropocentric ethic is argued in later chapters in connection with the question of which beings are to be regarded as moral patients, and thus among the victims of climate injustice. What is argued at this stage is that the three crises of global heating, biodiversity loss and air pollution have overlapping causes (including greenhouse-gas emissions and certain agricultural and technological processes), and are thus facets of a single emergency, which involves us in adopting some kind of moral stance as we approach how to tackle these crises. And this takes us at once to ethics and to moral reasoning.

Many people seem to think that there is no such thing as moral reasoning, having swallowed accounts of ethical language that represent it as not stating facts but rather expressing emotions (and nothing more). Against such views, I explain that its apparent vagueness, and our apparent inability to appraise the truth or falsity of claims involving ‘ought’ or ‘should’, is due rather to which kind of ‘ought’ or ‘should’ is in question being left unspecified; for once we know that a particular ‘ought’ is a legal ‘ought’, a prudential ‘ought’ or a technological ‘ought’ (about the right way to tackle a particular technological problem) it becomes easy to distinguish ‘oughts’ that are well-grounded and probably true from others. Thus ‘you legally ought to do this’ means ‘you have reason to do this to obey the law’; while ‘you technically ought to do this’ conveys that ‘you have reason to do this to solve your technical task/problem’; and ‘you aesthetically ought’ means something like ‘you have reason to do this to produce a good composition/song/photograph (etc.)’. Similarly much the same applies to moral ‘oughts’, which are ‘oughts’ that have a bearing on courses of action or policy and their bearing on well-being; thus ‘you morally ought to do this’ conveys that ‘you have reason to do this to make a difference (directly or indirectly) to the well-being of someone or something capable of being benefited’. The field of well-being in question is widely agreed to include that of current human beings; but I go on to argue that it also includes that of future human generations, whose quality of life we can affect. There are some technical philosophical issues discussed in the book at this stage about duties to future people, but we can side-step them here; for it is increasingly recognised that we ought to adopt policies that would make a positive foreseeable difference to future generations. Once this is accepted, an even greater scope becomes apparent about how to reason in ethical matters.

This scope is further enlarged when it becomes recognised that the well-being of non-human living beings is a further relevant consideration in ethics. To express this another way, non-human living beings have moral standing, and their well-being has moral significance. This biocentric stance, affirmed in different words by Schweitzer, is here defended along the lines presented in

1978 by Kenneth E. Goodpaster; morality is centrally concerned with benefiting, and so it is reasonable to recognise the moral standing of whatever can be benefited, which includes, for example, plants as well as animals. Goodpaster carefully distinguishes the moral standing of a creature from its moral significance, and is not claiming that all creatures are to be given equal consideration. His view is consistent with different degrees of consideration being given to species with different ranges of capacities, and he does a good job of replying to a spectrum of possible objections about all this, too extensive to be related here (Goodpaster 1978).

It is more relevant here to remark that there are some forms of policy that allow provision to be made for current people and future people as well, and in many cases for current and for future members of other species too. These are policies that bring in and then uphold sustainability, such as sustainable forestry and sustainable energy generation, policies that are much better supported by their impact on the well-being of the relevant creatures than alternative policies. And that gets us back to the need to abandon energy policies based on fossil fuels, and to resort to sustainable energy generation instead. It is also at this stage that the importance of preserving regional systems including tropical, temperate and boreal forests is brought in again, in connection with the issue of the best locations for tree-planting; but that was covered earlier.

The next ethics chapter concerns the victims of climate injustice and the character of climate justice. The belief is defended for which, jointly with Rebekah Humphreys, I have argued elsewhere, that non-humans can be treated justly or unjustly (Attfield and Humphreys, 2016 and 2017). Accordingly the victims of climate injustice are presented as including the inhabitants of developing countries (both present and future), who suffer most of the impacts of climate change despite in many cases contributing comparably little thereto; the millions of climate refugees, who mostly have no standing in international law (MacKinnon 2022); and also the billions of non-human creatures whose habitats are being endangered or undermined.

At this stage, the policy differences indicated by a biocentric stance are emphasised. That there are such differences becomes clear as soon as we reflect on space exploration. For it is intuitively clear that investigations of planets or moons capable of bearing life, and thus living organisms, requires much greater care than the study of other cosmic bodies, however elementary the life-forms present may be; indeed people's ready recognition of this suggests that the same people are implicitly biocentrists already. But of course there are more policy differences with respect to our home planet, where much greater care is called for of the interior of forests and of mountain ranges that are sparsely inhabited or uninhabited by human beings than an anthropocentric ethics requires. There again, the creatures of the deep oceans need to be taken into careful consideration when

proposals are made to dredge them for valuable minerals; and the creatures of coral reefs, vulnerable as they are to bleaching, need to be considered in all projects likely to raise ocean temperatures. There are also living creatures, it has been discovered, resident in lakes two miles beneath the Antarctic ice-shield; and one of the implications of biocentrism is that care should be shown to avoid exposing these lakes to the waters of the oceans, as could happen if the melting of ice-shields continues. These policy implications go well beyond those of sentientism, the view that moral standing extends to sentient creatures only; sentientism has difficulty explaining, for example, the ethical limitations on space exploration that have been mentioned, because the likelihood of sentient creatures being found on other moons or planets is extremely slight, and yet most people recognise that these ethical limitations are applicable even if plants or animals of much simpler kinds could exist there and are thus in need of protection.

In matters of the shape of climate justice, the book argues that while there is a strong case for polluting countries, corporations and individuals being asked to pay for climate mitigation and adaptation, and in particular for climate reparations, this is not always possible, because many polluters have died, and many polluting countries and empires no longer exist, such as Yugoslavia, the Soviet Union, and the empires of Britain, France, Belgium, Spain, Portugal and the Netherlands. In view of the universality of climate change and its impacts, it is rather all the countries with the ability to pay that should underwrite the costs of mitigation and adaptation, assisting the countries affected by climate calamities, which should themselves contribute, if able, and which should determine the forms that mitigation and adaptation should adopt locally, because it is their own future that is at stake. And with regard to matters of governance, it is also suggested that some form of representation should be found for the future inhabitants of each country in that country's legislature, to avoid the prevalent short-termism of government policies.

There follows a chapter on the political implications of all this. One question here addressed is what countries should do when others default on commitments that they have made, since ours is an imperfect world. The conclusion is that, where the intensification of climate change is at issue, countries able to make additional contributions should sometimes do so, without foisting on their tax-payers the burden of everyone else's derelictions. Also changes are advocated such as withdrawing from treaties that allow corporations to take to law countries whose climate policies could reduce the profits of those corporations. In fact, the United Kingdom had already withdrawn from such a treaty (the European Energy Charter) during the interlude between the manuscript of this book being sent to the publishers and actual publication taking place.

Another implication brought forward here is the implementation of the agreement made at the

Kunming/Montreal Biodiversity Conference of 2022. The agreement was to preserve species by making thirty percent of the planet's land surface and thirty percent of its oceans into protected areas, immune from extractive activities, to adopt targets for species preservation, and to establish a fund for these purposes, due to reach £30 billion by 2030 (Greenfield and Weston 2022a, 2022b). These aims, however, will not be easy to achieve, since many countries are liable to suggest that the protected areas, at least of land, should be located not on their territory but elsewhere, and also because of reluctance to fund biodiversity overseas. Thus the implementation of this agreement, much-needed as it is if species-loss is to be curtailed, is now needed as a goal, alongside action on climate change. In particular the maritime protected areas should allow many species to recover their numbers and thrive as they did before the days of industrialised fishing. The Kunming/Montreal Conference was one of a series of international conferences on biodiversity, and so there is reason to hope that progress towards implementation of its agreement will be made at the coming conferences of this sequence, if campaigners campaign for this to happen.

But perhaps the most important political measure defended in the book is the proposal to amend the Statute of Rome to include ecocide as an international crime, alongside genocide, aggression, war crimes and human rights abuses. Ecocide is defined as knowingly causing significant environmental damage that is either long-lasting or widespread; the detailed wording proposed by the campaigning organisation Stop Ecocide International carefully avoids mention of intentions, which are extremely difficult to prove, resorting instead to a definition involving acting with knowledge of large likely environmental impacts, something that large corporations and countries, with their access to relevant experts, could be expected to avoid. At the same time the scope of the definition means that small and medium-sized enterprises are in any case exempt. If this amendment were to be adopted, vast amounts of environmental destruction might well be avoided, particularly as fear of reputational damage would be likely to deter companies and countries from embarking on ecocidal actions. Agreement about such an amendment is far from being out-of-the-question, since no more than a two-thirds majority of the 123 signatories of the Treaty of Rome would be required, and no country has a veto. Besides, some of the signatory countries (like Vanuatu) are poised to lose their entire territory through inundation; in fact, Vanuatu has now proposed an amendment to the Statute of Rome, with the support of Samoa and Fiji, along the lines recommended by Stop Ecocide International, and has already received the support of the Democratic Republic of Congo.

The final chapter concerns obstacles to action in matters of climate, biodiversity and pollution. Some of the main obstacles are emotions or attitudes that undermine motivation to campaign or to

secure appropriate solutions. These include apathy and despair, where what is needed is belief and hope. I will return to these matters shortly, but first want to mention another obstacle, the belief that all the other parties are fundamentally self-interested and therefore untrustworthy, and unreliable as allies. This stance can be found embedded in Garrett Hardin's model of 'the Tragedy of the Commons', which maintains that common or shared resources are always going to be exploited because of the self-interest of participants, and that open systems of shared resources should therefore be replaced by 'mutual coercion, mutually agreed upon'. Before I go on, I should emphasise that I am not rejecting this conclusion across the board, as the regulation of some shared resources, such as clean air, is often a good plan, and often, as in this case, there is no way of coping with kinds of pollution such as air pollution other than through national and/or international regulation.

What is objectionable is the model of 'the Tragedy of the Commons'. Harding envisages a community whose members share common land to graze their flocks. He argues that it will always pay participants to increase the size of their flocks, and that this is what they are invariably motivated to do, and so the shared resources become overgrazed, to the detriment of all parties. This sounds like a plausible narrative, but is in fact in conflict with the facts that in many communities (both in Switzerland and in Africa) the participants in systems of shared grazing observe restraint and have sustained their system over decades or even centuries, without the overgrazing that Hardin predicts to be inevitable (Dietz, Ostrom and Stern 2003; Ostrom 2015; Ostrom et al. 1999). The flaw in Hardin's reasoning is the theory that all participants in this (and in all other) system(s) are invariably motivated by self-interest. But this means that no one whatever can be trusted to abide by agreements, however important, since they will always make exceptions in their own favour when opportunity offers.

If this were true, it would follow that international agreements, for example over carbon emissions, or about funding to assist developing countries adversely affected by climate change, would be bound to fail as soon as some situation arose where one party or another found it advantageous to default on the agreement. In consequence, few if any agreements about climate change would be reached, or, if reached, would remain effective. There is, in fact, a school of thought about international politics, whose adherents call their stance 'realism', which upholds just such a view. Yet such stances conflict with the facts. For example, they conflict with what was agreed at the Kunming/Montreal Conference about maritime reserves, since many of the parties would lose resources if this agreement came into effect, and they also conflict with the successful agreement to establish a Loss and Damage Fund to assist developing countries with the adverse

impacts of climate change, the launching of this fund, and its receiving quite a considerable amount of funding.

It emerges that the Tragedy of the Commons model, while it happens to encourage systems of agreed regulation, conflicts with many of the phenomena of international relations, and that countries do not invariably behave as it predicts. However, belief that it is the best model to understand other parties in international negotiations could easily prevent such negotiations succeeding, since it also predicts that all parties are untrustworthy and likely to break their word whenever it suits them. And while such beliefs could serve to explain the comparative failure of historical climate negotiations, there are other explanations, such as the lobbying of multinational oil and gas companies, which can also explain such comparative failures. What is needed is a different model, which allows for the possibility of voluntary collaboration; some such model would come far closer to the events and negotiations modelled, because, as we have seen, there are and have been successful agreements, both in climate matters and in matters of biodiversity.

We can now return to the even more basic theme of emotions and attitudes. What I argued in the book is that hope need not be wild and ungrounded, but can be reasonable, as was once maintained by John Dewey (1935), and that in the case of the crises that we are confronting, there are adequate grounds for adhering to hope, rather than abandoning it. Some of them can be found in the same examples as have just been mentioned, that is, the Kunming/Montreal Agreement and the Loss and Damage Fund. Such hope can be held alongside recognition of multiple problems and adverse pressures, and can lead to continuing to campaign despite them.

It is sometimes suggested that increases to the global human population (often wrongly described as ‘exponential growth’) undermine all prospects of addressing the problems under discussion. However, the rate of increase is itself falling, and makes population levels likely to stabilise within decades (Rosling and Rosling, 2018). So, as is argued in *The Ethics of the Climate Crisis*, population growth should not be regarded as depriving us of all reasonable hope of these problems being overcome.

But I now want to add some themes about hope, supplied by Darrel Möllendorf, partly in his 2022 book *Mobilizing Hope: Climate Change and Global Poverty*, and partly in a defence of that book and a reply to critics in ‘Replying to Comments on Mobilizing Hope’ in the Summer number of *Environmental Ethics* of 2024. Before coming to Möllendorf’s comments on hope, I should stress that his various stances are not all ones with which I am in sympathy. In particular his view that nonhuman animals cannot figure in accounts of justice is what led Rebekah Humphreys and me to argue to contrary effect in our two-part article of 2016 and 2017 (mentioned earlier). I should also

explain that news of his 2022 book did not reach me in time to refer to it in my 2024 book, as the manuscript of that book needed to be supplied to the publishers in the late spring of 2023.

However, on the theme of hope, Möllendorf has something important to draw to attention. The standard account of hope was put forward in 1963 by R.S. Downie; to hope for X is both to desire X and to believe that X is possible (Downie 1963). About this account, Möllendorf comments that it fails to distinguish hope from despair, as in his example in which a prisoner who despairs of escaping still desires this, and believes it possible, but also believes that the odds are so heavily against success that it is not worth attempting to escape. So something else is needed to mark off hope.

What Möllendorf adds is that readiness to contribute to X, when it is possible to do so, is constitutive of hoping for X (but not of despairing about X). Besides (or so we should go on to hold), whatever is constitutive of something is among its necessary conditions, and so Möllendorf is saying that hoping for X involves both desiring X, believing X to be possible, and being ready to contribute to X where it is possible to do so. Being ready to act is thus implicit in the hope that Dewey and others advocate, and that is needed to combat climate change, biodiversity loss and air pollution.

Möllendorf, however, has a further supplement to accounts of hope, which is that hope is much more likely to be harboured, and is better grounded, where there are hope-makers, which are either grounds for believing X to be achievable, or people who act as if this is the case. And it is hope-makers that make hoping rational. In the closing remarks of his recent article, he comments that ‘When what we hope for depends upon the actions of many people, our hopeful actions can serve as hope-makers for others’, adding that ‘Credence in achieving the outcome is strengthened as people act intelligently to pursue it.’ As he goes on to say, ‘The fossil fuel industry has acted to preserve its interest in extracting, refining, and selling fossil fuels. Mass mobilization is important in countering that influence. A hopeful political message serves the effort to build such mobilization. Our contributions to disseminating such a message and our participation in mobilization serve as hope-makers to others. These are among the activities of mobilizing hope’ (Möllendorf 2024, 216).

On this occasion I have no hesitation in subscribing to what Möllendorf has to say, and wish that I had come across his remarks about mobilizing hope in time to include them in my own book *The Ethics of the Climate Crisis*. But as I did not include them, I am glad to be able to supplement what I maintained in that book by endorsing them here.

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Animal Ethics in Environmental Law

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This paper critically examines the intersection between animal law and environmental law in the UK, exploring how the Animal Welfare (Sentience) Act 2022 challenges anthropocentric assumptions and introduces new perspectives on environmental governance. It argues that the Act's recognition of animal sentience has the potential to reshape environmental law by highlighting its ethical blind spots, particularly its treatment of animals as collectives rather than individuals. The paper traces the separate development of these sub-disciplines, emphasising their shared goals and potential for co-evolution through integrated legal frameworks.

Key discussions include the role of animals in biodiversity conservation, the impacts of climate change on individual animals, and the ethical implications of intensive agricultural practices. The paper also critiques the Climate and Nature (CAN) Bill for its failure to address animals as subjects with intrinsic value, despite its ambitious provisions for biodiversity and climate governance. By advocating for a multi-species approach to conservation and emphasising individual animal welfare within environmental law, this paper seeks to reconcile these fields and advance a more holistic vision of justice for both humans and non-human animals.

Introduction

The passage of the Animal Welfare (Sentience) Act 2022 offers an important and timely opportunity to reflect on the state of legal advances towards animal justice. This short and deceptively simple

¹ With thanks to Joanna Smallwood, University of Sussex, Benedict Rattigan, and fellow participants at the Schweitzer Institute Annual Conference, November 2024.

Act establishes a procedure by which expert information about the adverse effect of any government policy on ‘the welfare of animals as sentient beings’ is to be laid before Parliament by an Animal Sentience Committee (ASC)² and the government’s response laid before Parliament.³ The practical implementation of the 2022 Act forms the subject of the insightful paper by Penny Hawkins on the implementation of the Act from an animal welfare perspective.⁴ Beyond this volume, the Act has further been analysed as a pluralist foundation for animal rights,⁵ and a potentially far-reaching and disruptive element of constitutional law, capable of fundamentally shifting the status of animals from ‘things’ to legal persons.⁶

In this paper, I critically analyse the implications of the Act for the legal characterisation of animals within environmental law, using this focus as the basis for a broader discussion about how animal law and environmental law currently relate as sub-disciplines, and may further co-evolve, such as through the sharing and borrowing of legal principles and processes. I start from the position that the Animal Welfare (Sentience) Act 2022 offers radically new perspectives on environmental law, highlighting the latter’s limitations and blind spots, arising from, broadly, an ethical failure to recognise individual animals. In particular, the inclusion of wild animals within the scope of the 2022 Act,⁷ with its recognition of the sentience of certain animals, challenges the perception and legal characterisation of animals within environmental law as a collective (species level) contribution to ‘biodiversity’.

This environmental law context is vitally important because of the close material connection of animals with foundational matters of environmental protection – controlling pollution, safeguarding habitats, securing biodiversity, and mitigating (and adapting to) the climate crisis. As Jane Goodall argues, drastic loss of biodiversity in the UK, and beyond, can best be halted and reversed by focussing upon individual animals and their communities, and ensuring security and flourishing of their lives in particular places.⁸ Such an emphasis on the essential place and role of

² S. 1. Animal Welfare (Sentience) Act 2022.

³ S. 2(2).

⁴ C.f. this volume: ‘Institutionalising Animal Welfare Protection’, Dr Penny Hawkins

⁵ J. Kotzmann, ‘Sentience and Intrinsic Worth as a Pluralist Foundation for Fundamental Animal Rights’ (2023) 43(2) *Oxford Journal of Legal Studies*, 405.

⁶ E. Bernet Kempers, ‘Neither Persons nor Things: The Changing Status of Animals in Private Law’ (2021) 1 *European Review of Private Law*, 39.

⁷ S.5(1) interprets ‘animal’ - without reference to domesticity, liminality or wildness - as: (a) any vertebrate other than home sapiens; (b) any cephalopod mollusc; and (c) any decapod crustacean.

⁸ J. Goodall, *Hope for Animals and Their World: How Endangered Species are Being Rescued from the Brink* (Grand Central, 2009).

individual animals within ecological systems, with their contributions to creating states of decay, recycling and rejuvenation, contributes to valuing animals, including those not currently deemed to be sentient, such as insects. Such thinking also helps locate animals at the ecological frontline of climate change. This positioning highlights the largely overlooked and catastrophic impacts on animals of wildfires, floods, forced migration, and the spread of viruses, pathogens and pests to new areas. Also overlooked is the profound role of industrial-style intensive agricultural practices (factory farming of animals, and monocropping) and global transportation systems in creating these conditions.⁹

In exploring the interconnections and intersections between animal law and environmental law I will first trace the largely separate development of these sub-disciplines and outline their relative ethical premises. Second, I will consider the potential impact of the 2022 Act on the place and conception of animals in environmental law, in the context of scrutinising the Climate and Nature (CAN) Bill which is working its way through Parliament. My main conclusion is that the constitutional character of animals is currently evolving outside the boundaries of environmental law. However, in the UK, the legal recognition of sentience in the 2022 Act has the potential to impact upon both the doctrinal interpretation and practice of environmental law, with the prospect of some beneficial co-evolution and integration of the two areas of law.

Prospects of Co-evolution of Animal Law and Environmental Law

The Immaturity of Environmental Law

UK environmental law is now broadly recognised as having relatively settled boundaries and content, even if environmental law scholarship has not yet reached its evolutionary apogee.¹⁰ Acknowledging the vitality of debate about the (still limited) intellectual status and methodological progress of environmental law scholarship, the existence of environmental law still provides a striking example of rapid legal evolution. This body of law is the culmination of diverse legal provisions and regulatory regimes (including planning, pollution controls and nature conservation) being drawn together over the last fifty years, with guiding principles providing (at least until

⁹ See C.E. Blattner and E. Maijer, 'Animals and Climate Change' in H. Schübel and I. Walliman-Helmed (eds) *Justice and Food Security in a Changing Climate* (2021, Wageningen).

¹⁰ E. Fisher, B. Lange and E. Scotford 'Maturity and Methodology: Starting a Debate about Environmental Law Scholarship' (2009) 21(2) *JEL* 213.

recently) coherence with EU and international norms, and a framework for legislative action and judicial review.¹¹

These consolidating features make the recent withdrawal of the UK from the expansive and established corpus of EU environmental law and policy more dramatic and uncertain, especially in the case of areas of settled policy areas such as environmental impact assessment and nature conservation. However, even under these conditions of extreme legislative uncertainty, UK environmental law has retained a sense of disciplinary identity, sustaining professional networks and alliances between environmental law academics, practitioners, and policy makers,¹² as well as maintaining a foothold in many legal education programmes.¹³

Environmental law may have undergone a process of mainstreaming, so that key areas of policy- and decision making include consideration of environmental law principles such as sustainable development,¹⁴ but for Gavin Little this area of law has long resided at the margins of the legal space.¹⁵ This assessment is based on Richard Macrory's interpretation of a distinction between the 'old' (classic) environmental agenda made up of the issues tackled by first generation environmental lawyers such as water and air pollution, waste, and species protection, and the 'new' environmental law agenda of climate change, energy and resource use, food production and biodiversity, key aspects of which are highly relevant for animal protection and welfare.¹⁶ In addressing the classic issues, environmental law scholarship was derived intellectually from other legal specialist subjects at or near the core of legal space, with environmental media (air, water, land) providing the material context for the application of these areas of doctrine.¹⁷ In contrast, the new environmental law agenda rests on more contested and expansive intellectual ground, further

¹¹ Here, I question Little's argument that '[t]here are comparatively few justiciable legal principles and limited involvement by courts, judges and lawyers (at 73), by referring to the sustained purposive judicial project of the EU courts in this area, arguably creating a constitutional status for environmental protection, through the elevation of principle (most notably originating in such cases as Case 302/86 *Commission v Denmark* [1988] ECR 4607 and developed in Case C-72/95 *Kraaijeveld* [1996] ECR I-05403 and Case C-127/02 *Waddenzee* [2004]) ECR I-7405.

¹² Most notably the United Kingdom Environmental Law Association (UKELA).

¹³ S. Vaughan et al, 'Of Density and Decline: State of the Nation Reflections on the Teaching of Environmental Law in the UK' (May 1, 2019). Faculty of Laws UCL Research Paper No. 5/2019, Available at SSRN: <https://ssrn.com/abstract=3395220>

¹⁴ S. 17 Environment Act 2021.

¹⁵ G. Little, 'Developing Environmental Law Scholarship: Going Beyond the Legal Space' (2016) 36(1) *Legal Studies*, 48.

¹⁶ R. Macrory, 'Maturity and Methodology' (2009) 21(2) *JEL* 251, 254.

¹⁷ Little, 'Developing Environmental Law Scholarship', n. 14, 56-57.

distanced from the legal core, and thereby generating diverse and experimental methodologies.¹⁸ It is in this expanded space of environmental law, that opportunities exist to make animal justice a central part of the aims and objectives of environmental law, with potential benefits for the protection of habitats and radical restructuring of intensive farming to restore genetic diversity as well as banning practices and conditions harmful to animals.

One valid response to this ‘real intellectual hurdle’¹⁹ of new environmental agendas facing environmental lawyers is to urge engagement with other disciplines such as environmental humanities and environmental science with an expectation of gaining a more holistic and critical understanding about the place of law in upholding anthropocentrism and human exceptionalism.²⁰ This foreshadows important intellectual advances in environmental law, encouraged by thinking deeply about the relationship between humans and nature as seen in the emergence of Wild Law arguments in favour of recognising rights of nature.²¹ An important aspect of this development includes also examining the place of animals in law, and, consequently, how law might reflect, or even lead, a societal turn towards animal justice. This latter project, however, remains broadly unexplored within UK environmental law, with the lag in recognition of the sentience and legal status of individual animals suggesting the maturing of environmental law remains incomplete.

The Emergence of Animal Law

When compared with environmental law, UK animal law is less well established within mainstream legal practice and scholarship. One view is that it does not present as a distinct legal doctrine per se, but rather as a ‘subject-specific lens’²² through which to focus and apply traditional substantive areas: criminal law, property law, administrative law, constitutional law, tort, contract, and family law.²³ This permeating of animal law throughout legal subdisciplines has been explained as the product of the pervasiveness of the use and exploitation of animals in societies, raising ‘legal issues

¹⁸ Macrory, ‘Maturity and Methodology’, n. 15, 251.

¹⁹ Macrory, ‘Maturity and Methodology’, n. 15, 254.

²⁰ Little, ‘Developing Environmental Law Scholarship’, n. 14, 74.

²¹ C. Cullinan, *Wild Law: A Manifesto for Earth Justice* (2002, Bloomsbury).

²² Harvard Law School, Animal Law and Policy Program, available at <https://animal.law.harvard.edu/resources/>

²³ R. Dunn et al, ‘Teaching Animal Law in UK Universities: The Benefits, Challenges and Opportunities for Growth’ (2023) 57(1) *The Law Teacher* 15.

in all realms of the law'.²⁴ It also suggests that animal law in the UK may be set to develop along a similar trajectory to environmental law, with a gradual gathering together of laws from diverse areas, connected by procedures and principles to create some internal coherence and an identifiable body of law.

Notwithstanding its emergent status, UK animal law has a long timeline, punctuated with oft-cited pieces of legislation, the earliest examples of which are remarkable for their simplicity, and sponsorship by individuals.²⁵ Later enactments govern the worlds in which animals live and die – farms, zoos, laboratories, and domestic settings,²⁶ as well as responding to political and ideological debates, and social concerns.²⁷ Many of the key provisions on the welfare of farmed animals (including their transportation) and animals used in scientific experiments were generated and shaped, until recently, by EU law.²⁸

In the United States, by contrast, animal law has evolved at pace, achieving a distinct legal identity.²⁹ This legal evolution has been described as exponential, as indicated by the recent expansion of courses, programmes, and university law clinics on animal law,³⁰ publication of

²⁴ P. Frasci and J. Tischler, 'Animal Law: the Next Generation' (2019) 25 *Animal Law* 303, 312, cited in Dunn et al, 'Teaching Animal Law', n. 22, 23.

²⁵ Martin's Act 1822 forbade cruel and improper treatment of cattle (this was predated in Ireland by the 1635 Act Against Plowing by the Tayle and Pulling the Wooll off Living Sheep [None shall plow or work horses by the tail] - 'Thomas Wentworth' Act). 'Pease's Act' 1835 consolidated the 1822 Act, extending it to dogs and other domestic animals, and banned the keeping of premises for staging the baiting of bulls, dogs, bears, and badgers, and banned dog fighting and cockfighting. This was replaced by the Cruelty to Animals Act 1849.

²⁶ The Animal Health Act 1981 (welfare of livestock and horses intended for export); Zoo Licensing Act 1981; Animals (Scientific Procedures) Act 1986; the (still) highly topical Dangerous Dogs Act 1991 (under which the Dangerous Dogs (Designated Types) (England and Wales) Order 2023 brings XL Bully dogs within the scope of the 1991 Act; Fur Farming (Prohibition) Act 2000 which prohibits the keeping of animals solely or primarily for slaughter for the value of their fur in England and Wales; Animal Welfare Act 2006; Animal Welfare (Electronic Collars) (Wales) Regulations 2010; Welfare of Animals at the Time of Killing (England) Regulations 2015 (2015, No. 1782), which includes provisions in Sch. 3 on killing animals in accordance with religious rites.

²⁷ E.g. Hunting Act 2004. A recent example is the Animals (Low-Welfare Activities Abroad) Act 2023 which bans the advertising and sale of unethical activities involving animals in tourism.

²⁸ Notably, Directive 2010/63/EU on the protection of animals used for scientific purposes; Regulation (EU) No 576/2013 on the non-commercial movement of pet animals.

²⁹ See Symposium on Animal Law (2010) 60 *J of Leg Ed* 193-295, which details this impressive growth in practice and law schools.

³⁰ Bradshaw, *Wildlife as Property Owners* (Chicago UP, 2020) details that in 2001, fewer than one dozen law schools in the United States offered an animal law course, whereas in 2020 the figure was 150. Harvard Law School reviews this expansion in the US and further afield: Canada, Australia, and New Zealand, as well as the worldwide growth (to 200) of the Student Animal Legal Defense Fund <https://animal.law.harvard.edu/>

specialist journals,³¹ annual international conferences, textbooks,³² and online repositories and networks.³³ Much of the groundwork establishing animal law has been driven by high profile legal campaigns run by such organisations as the Animal Legal Defense Fund, and the Non-Human Rights Project. The latter has brought many cases on behalf of their animal clients, including Happy (an elephant, held in a grossly inadequate enclosure at Bronx Zoo for fifty years and the subject of an unsuccessful attempt to assert her legal personhood), Hercules and Leo (chimpanzees who were used as research subjects and became the first animals to have a habeas corpus hearing) and, in memoriam, Tommy, a chimpanzee, whose birth and death was in captivity.³⁴

An important further element in this development of animal law is the vitality of scholarship in this area, led by philosophers,³⁵ and legal scholars,³⁶ many of whom have allied themselves to legal activism in this area by submitting amicus curiae briefs and engaging in campaigning work.³⁷ Scholarly arguments in favour of the legal personhood of animals have provided a radical dimension to animal law as a broadly conventional and liberal legal paradigm centred on animal welfare issues. In opposition to this liberalism, and as in other areas of law, the development of critical animal studies has helped to align issues of animal exploitation with injustice experienced

³¹ The oldest is Lewis and Clark Law School's *Animal Law Review* (established 1994); others include the *Journal of Animal Law and Ethics*, *Journal of Animal and Natural Resources Law*, *Journal of Animal and Environmental Law*, *Journal of Animal Law and Policy* (all based in US Universities). See also the *Global Journal of Animal Law* (based in Åbo Akademi University, Finland).

³² For example, B. Wagman, S. Waisman and P. Frisch, *Animal Law: Cases and Materials* (6th ed, Carolina Academic Press, 2019).

³³ Animal Law and Historical Center (Michigan State University), <https://www.animallaw.info/> This includes an *Animal Law Toolkit* (2nd ed, 2015), developed by Voiceless, a think tank aimed at raising awareness and alleviating suffering of Australian animals.

³⁴ Nonhuman Rights Project (NHRtP) <https://www.nonhumanrights.org/>

³⁵ Nussbaum, *Justice for Animals: Our Collective Responsibility* (2022, Simon and Schuster).

³⁶ C. Sunstein and M. Nussbaum (eds), *Animal Rights: Current Debates and New Directions* (OUP, 2005); D. Favre, *The Future of Animal Law* (Edward Elgar, 2021); R. Posner, 'Animal Rights: Legal, Philosophical and Pragmatic Perspectives' in Sunstein and Nussbaum (eds) *Animal Rights*; C. Korsgaard, *Fellow Creatures: Our Obligations to Other Animals* (OUP, 2018).

³⁷ For e.g. in *NHRtP (on behalf of Happy) v Wildlife Conservation Society (Bronx Zoo)* <https://www.nycourts.gov/ctapps/Decisions/2022/Jun22/52opn22-Decision.pdf> amicus briefs were filed by Martha Nussbaum, Laurence Tribe, Michael Dorf, Sherry F. Colb, Maneesha Deckha and Christine Korsgaard.

by humans,³⁸ and to explain the social construction of difference, including speciesism,³⁹ thereby forming part of the broader intellectual domain of posthumanism.

In the US, the rapid growth and consolidation of animal law has been accompanied by in-depth reflections on the connections and synergies between this and environmental law, with a view to identifying areas of mutual concern such as intensive agriculture and climate change.⁴⁰ There is a strong sense that environmental law faced similar challenges to those now confronting animal law, and that there are therefore important lessons to be learned. A key argument is that the development of an identifiable, singular body of animal law, rather than an amalgam of disparate areas of law relating to animals, is being hastened by the promulgation of legal provisions which treat the interests of individual animals as matters of intrinsic constitutional concern.⁴¹ This constitutional project is capable of encouraging revision of foundational environmental law concepts and principles, such as sustainable development, in favour of a stronger orientation towards care and compassion for individual animals,⁴² as well as the protection and survival of certain species as a whole. In summary, the space between animal law and environmental law is fertile with opportunities for exchange and co-development, revealing and acting upon relations between humans and non-humans.⁴³

These sketches of animal law and environmental law highlight some key commonalities, particularly how social movements and campaigns have helped instigate and shape both these legal fields from the grassroots. The role of EU legislation is also a significant feature in the (parallel) development of both these sub-disciplines in the UK, helping to determine and consolidate these areas, in part by conferring constitutional status on these policy areas, but also by providing a supranational framework for the exchange of expert information and development of shared

³⁸ A. Ko and S. Ko, *Essays in Pop-culture, Feminism and Black Veganism* (Lantern, 2017).

³⁹ M. Deckha, 'Critical Animal Studies and Animal Law', 212; S. Best, 'The Rise of Critical Animal Studies: Putting Theory into Action and Animal Liberation into Higher Education' (2009) 7 *J for Critical Animal Studies* 9. On the intersection of animal ethics and ecofeminism, see C. J. Adams (ed) *Ecofeminism: Feminist Intersections with Other Animals* (Bloomsbury, 2021).

⁴⁰ R. Abate (ed) *What Can Animal Law Learn from Environmental Law?* (Environmental Law Institute, 2020) and R. Abate et al, 'Animal Law and Environmental Law: Exploring the Connections and Synergies' (2016) 46 *ELR* 10177-10189.

⁴¹ J. Eisen, 'Animals in the Constitutional State' (2017) 15(4) *Int J of Constitutional Law*, 909.

⁴² In line with ecofeminist approaches, such as that taken by C. J. Adams (ed) *Ecofeminism: Feminist Intersections with Other Animals* (Bloomsbury, 2021); see also C. J. Adams, 'Ecofeminism and the Eating of Animals' (1991) *Hypatia* (Special Issue: Ecological Ecofeminism) 125.

⁴³ L. Kotzé and S. Adelman, 'Environmental Law and the Unsustainability of Sustainable Development: A Tale of Disenchantment and Hope' (2023) 34 *Law and Critique* 227, at 239.

standards, reinforced by the development and implementation of doctrine by the European courts.⁴⁴ There are also important points of separation, with different historical and philosophical roots, developmental paths and legal frameworks which have at their foundation very different aims and objectives, most notably the welfare of sentient animals (animal law) and securing biodiversity and environmental protection (environmental law). This state of legal and ethical asymmetry between animal law and environmental law is most apparent in cases in which wild animals suffer harm directly because of nature conservation programmes and projects, the core dilemma of which involves an argument in favour of the legal recognition of sentience.

Characterisation of Animals ‘as Biodiversity’

The legal status of animals as property – ‘or things’ - betrays a long-held perception of animals as subordinate ‘objects’,⁴⁵ incapable of feeling, suffering and experiencing harm. Such a perception rejects animals as ‘subjects-of-a-life’.⁴⁶ This ethically impoverished approach is now being challenged in the context of family law cases concerning custody of companion animals, and *Visa Kurkis*,⁴⁷ amongst others, has very comprehensively surveyed the precepts and likely consequences of this changing legal status, as a matter of private law, as well as constitutional standing, including expressions of fundamental rights.⁴⁸

In marked contrast, the current legal characterisation of animals within UK environmental law is rooted firmly within instrumental approaches to the use of animals by humans, albeit for environmental protection purposes, coupled with their treatment as collectives (species) and with an overriding concern for nativism. Specifically, within conservation law, the presence, diversity, and range of animal species are considered markers of ecosystem health and functioning, contributing to biodiversity, the pursuance of which has long occupied a central position within environmental law at all levels of governance. More recently, provisions in the Environment Act 2021 are designed to affirm and strengthen the place of biodiversity, post-Brexit. For example, the Secretary of State

⁴⁴ E.g. Case C-336/19 *Centraal Israëlitisch Consistorie van België and Others* [stunning of animals in the production of halal and kosher meat] ECLI:EU:C:2020:1031.

⁴⁵ G. Francione, ‘Animals – Property or Persons?’ In C. Sunstein and M. Nussbaum, *Animal Rights: Current Debates and New Directions* (2005, OUP).

⁴⁶ T. Regan, ‘Animals as Subjects-of-a-Life’ in D. Keller (ed), *Environmental Ethics: The Big Questions* (Wiley, 2010), p. 161.

⁴⁷ V. Kurkis, ‘A Bird’s-Eye View of Animals in the Law’ (2024) 87(6) *Modern Law Review* 1452.

⁴⁸ T. Sparks, V. Kurki, and S. Stucki, ‘Animal Rights: Interconnections with Human Rights and the Environment’ (2020) 11 *Journal of Human Rights and the Environment*, 149.

must set a long-term target on biodiversity,⁴⁹ and in the shorter term (to be achieved by 2030) a ‘species abundance target’, to halt a decline in this.⁵⁰ The 2021 Act seeks to secure ‘biodiversity gain’ as a condition of planning permission and large-scale infrastructure projects.⁵¹ This is to be realised through a register of biodiversity gain sites and detailed sets of regulations governing works on the land, and its biodiversity value, underpinned by a system of credits to be purchased from the Secretary of State.⁵² Public authorities must conserve and enhance biodiversity (the biodiversity objective) through exercising functions and revising policies, as well as have regard to any relevant species conservation strategy.⁵³ Such strategies, drawn up by Natural England set out the needs of certain species, in terms of the creation or enhancement of habitats and measures that it would be appropriate to avoid, mitigate or compensate for any adverse impact on the conservation status of the species arising from a plan, project or other activity.⁵⁴ This is likely to involve the translocation of animals to new sites. The common emphasis in this set of provisions is how species of animal can contribute to biodiversity and the abundance of species as objectives of nature conservation policy. The key point arising from this survey of the significant role of animals in enhancing biodiversity is that animals do not feature as individuals but rather as part of a collective – as species, or, at a greater level of generality, as ‘wildlife’. Working within the detail of specific management plans, concern may be expressed about the survival and flourishing of smaller groups or communities of animals, but rarely about an animal as a ‘subject-of-a-life’. Looking beyond existing law for recognition of the place of animals as subjects and rights bearers, as constituent parts of an animal justice approach, involves considering the prospect of law reform. Nussbaum refers to such attempts as reflecting an ‘evolving consciousness of humanity to generate solutions,’⁵⁵ whilst also democratising the effort of change by provocatively entitling her analysis of prospects for law reform as ‘Law is All of Us’.

⁴⁹ S. 1 Environment Act 2021.

⁵⁰ S. 3 Environment Act 2021.

⁵¹ Ss. 98 and 99 Environment Act 2021.

⁵² Ss. 100 and 101 Environment Act 2021.

⁵³ S. 102 Environment Act 2021.

⁵⁴ S. 102 (2A) and s. 109 Environment Act 2021.

⁵⁵ Nussbaum, n. [**], p. 309.

Looking forward: the Climate and Nature (CAN) Bill

The slow and intermittent passage of the Climate and Nature (CAN) Bill (formerly Climate and Ecology Bill) offers such an exercise in forward thinking through an optimistic search for an ethically sensitive approach to animals in a piece of proposed legislation. The Bill is a product of radical legislative activism. First promulgated by Extinction Rebellion and other environmental and social justice organisations,⁵⁶ and promoted as a series of (cross-party) Private Members' Bills,⁵⁷ the Bill connects explicitly the problem of climate change with the loss of biodiversity. The core legal work is to force the government to take full account of both the climate emergency and the loss of biodiversity by imposing a duty on the Secretary of State to establish a strategy to achieve 'climate and nature targets'.⁵⁸ This is recognition of the need for ecological features and systems (bogs and peatlands, forests, heaths, agricultural land and waters) to absorb carbon, and, equally, that biologically diverse ecosystems are more resilient to the shocks and stresses of temperature rises and attendant extreme 'weather' events than those with a narrow range of fauna and flora. The central aim of the Bill is to be achieved with a raft of measures having positive effects on the state of nature in the UK - and elsewhere – as well as mechanisms for public and expert involvement and contributions to policy making.

Since first advanced in 2019, the Bill has been tempered, for example, by dropping its titular reference to 'emergency'. However, even the most recent version retains a radical edge with provisions establishing a public assembly,⁵⁹ and requirements relating to protections in the rapid transition to a just and low carbon economy for employees, as well as local communities with high deprivation rates, young people, and people with protected characteristics under the Equality Act 2010.⁶⁰ A further significant feature is the requirement that the Secretary of State's strategy must reduce emissions of carbon dioxide in respect of imports to the UK, at the same percentage as the annual reduction of these emissions within the UK and to ensure the end of 'exploration, extraction,

⁵⁶ Greenpeace, Friends of the Earth, Amnesty International (as part of the CEE Bill Alliance).

⁵⁷ Sponsors of this Bill include MPs Caroline Lucas (Green), Alex Sobel (Labour) and Ros Savage (Lib Dem). The first version of this Bill was dubbed 'Caroline's Bill'.

⁵⁸ Cls 1 and 2 Climate and Nature Bill (Bill 192) 2023-24.

⁵⁹ Cl. 3.

⁶⁰ Cl. 2(5)

export and import of fossil fuels...as rapidly as possible’,⁶¹ thereby introducing an extra-territorial element to the working of the Bill.

The activists, scientists and lawyers responsible for drafting the Bill seem to have shifted the agenda for climate change governance, by explicitly highlighting a complex picture of temporal and spatial connections – as between natural systems, as well as between law and policy making frameworks. Each of these shifts is both practical and conceptual, bringing together the governance infrastructure, objectives, measures and policy for both climate change and biodiversity and creating opportunities for integrating decision-making. As such, the Bill can move progressive environmental policy, with some radical elements, to ‘the centre’ – of politics, legal governance, and societal debate. As a result, the Bill has been lauded as making ‘the prospect of radical action eminently imaginable’.⁶²

The foundations laid by the Bill for far-reaching change makes the absence of specific provisions relating to animals more striking. For example, the ‘nature target’ seeks to increase the health, abundance, diversity and resilience of ‘species, populations, habitats and ecosystems’ so that by 2030, nature is ‘visibly and measurably on the path to recovery’.⁶³ Further, the Secretary of State’s strategy should ensure steps are taken to ‘restore and expand natural ecosystems...in the United Kingdom and overseas, to protect and enhance biodiversity, ecological processes and ecosystem service provision’. The targets and strategy are clearly intended to have significant and positive impacts on habitats and ecosystems, with a favourable impact on some individual animals. It may also be that the catchall provision ‘that all activities in the UK which affect the health, abundance, diversity and resilience of species, populations and ecosystems prioritise avoidance of the loss of nature’,⁶⁴ uses ‘nature’ as a proxy for animals. However, the ‘Conservation and Mitigation Hierarchy’ which frames this provision, providing a conceptual framework to manage impacts on biodiversity, offers an abstract and decontextualised approach which adheres to the perception of animals as no more than their sum, valued primarily for making up ‘biodiversity’ gains. More fundamentally the absence of any reference to animals as subjects and individuals in the Bill reinforces rather than subverts approaches to nature responsible for widespread harm and ecological collapse. It also suggests a lost opportunity to broaden the appreciation of animal

⁶¹ Cl. 2(b) and (d).

⁶² J. Harris, ‘If democracy looks doomed, Extinction Rebellion may have an answer’, *The Guardian*, 30.9.2020.

⁶³ Cl. 1(2)(b)(i).

⁶⁴ Cl. 2(3)(g).

citizenship,⁶⁵ and the related inclusion of animals in democratic fora, using such methods developed by those advocating for animal rights and animal representation.⁶⁶

Summary

In this paper I have explored some of the difficult issues raised by seeking legal and ethical symmetry between animal law and environmental law in the UK. I have also identified a lack of specific attention paid to the lives of wild animals affected adversely by both climate change and loss of habitat, in the context of the proposed CAN Bill, which otherwise proposes a range of radical actions to address in an integrated way both the climate emergency and ecological collapse.

The aim of focusing on the individual animal within environmental law is to stimulate ethical and critical thinking about the anthropocentric assumptions and priorities of the sub-discipline, whilst also underlining the essential protective function of this area of law - to secure the survival of species and their habitats. Within the growing intersection between animal law and environmental law there exists some scope for reconciliation, most completely through the evolution of multi-species approaches to conservation, which look beyond sentience as a test for securing legal protection. For now, though, the work of implementing the Animal Welfare (Sentience) Act in the context of conservation law and practice would provide an important starting point towards what Favre optimistically sees as animal law and environmental law weaving together, 'to recognise animals both as deserving of respect and as essential parts of ecosystems.'⁶⁷

⁶⁵ S. Donaldson and W. Kymlicka, *Zoopolis* (2013, OUP).

⁶⁶ See Animals in the Room, <https://animalsintheroom.org/>

⁶⁷ D. Favre, Foreword, in R. Abate (ed) *What Can Animal Law Learn from Environmental Law?* (Environmental Law Institute, 2020). See further, R. Abate et al, 'Animal Law and Environmental Law: Exploring the Connections and Synergies' (2016) 46 ELR 10177-10189.

Institutionalising Animal Welfare Protection

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This paper explores the institutionalisation of animal welfare protection within government frameworks, focusing on the development of dedicated governance bodies and policy instruments such as welfare surveillance and impact assessments. Drawing on personal experiences with statutory advisory bodies and advocacy work surrounding the Animal Welfare (Sentience) Act 2022, the paper examines how animal welfare can be integrated into broader environmental governance.

Key themes include disparities in welfare standards across different categories of animals (wild, farmed, companion, and laboratory), the role of surveillance in identifying and addressing welfare challenges, and the importance of "levelling up" protections to ensure all animals experience a good life. The paper highlights the need for a centralised approach to surveillance and governance that prioritises animal-centric policies while addressing public concerns and practical constraints.

The discussion extends to the implementation of the Animal Sentience Act, particularly through the work of the Animal Sentience Committee (ASC), which acts to furnish accountability to Parliament for consideration of the welfare of sentient animals in ministerial decision making. The paper concludes by emphasising transparency, stakeholder engagement, and interdisciplinary collaboration as essential components for advancing animal welfare protection within government systems.

Thank you so much for inviting me to this fascinating meeting, which certainly presented me with some food for thought when I was putting my talk together! My brief was to speak about how animal welfare protection can be institutionalised within government through the development of dedicated governance bodies, or policy instruments such as welfare surveillance and impact

assessments. I'm going to share my experiences with you, which I hope will be helpful. Here's a summary.

I have been a member of two statutory advisory bodies, which unhelpfully have the same acronym; the Animals in Science Committee (formerly the Animal Procedures Committee) and now the Animal Sentience Committee. I represented the (then) APC in the production of a paper on 'animal welfare surveillance', published in 2010, which was written by the Liaison Group of Animal Welfare Advisory Bodies. This comprised the APC, Companion Animal Welfare Council (CAWC), the Farm Animal Welfare Council (FAWC) and the Zoos Forum.

In between my membership of the original ASC and the new ASC, I was also involved in the RSPCA's campaigning and advocacy around the Sentience Bill and the potential for a UK Animal Protection Commission. This included appearing before EFRA and also helping to convene a joint RSPCA/University of Oxford meeting in 2019 on Animal Sentience: science, welfare and 'real world' application. The primary aim was to try and cultivate some fertile ground for the Sentience Act, and I know many of us worked very hard to try and achieve a meaningful piece of legislation.

I'm going to begin with my RSPCA hat on. My day job is concerned with helping animals in science, by working to achieve the RSPCA's primary objective of achieving a global commitment to replacing animal experiments and, in the meantime, maximum implementation of the 3Rs - Replacement, Reduction and Refinement - and robust ethical review of animal use. However, there are three other science and policy departments in the RSPCA, who work to help wild, farmed and companion animals. We often discuss the many discrepancies between the ways in which animals who have been born into these different groups are viewed and treated, and the legal protections they have - or not.

For example, if we think of a rabbit born in the wild, in a laboratory, as a companion animal or in a meat or fur farm, it's obvious that for the kept individuals standards for housing, husbandry and care can vary widely, as can standards of welfare assessment. The Animal Welfare Act does not currently include free-living wild animals and permitted methods of killing vary for all four. And as we know, an individual rabbit will have the same basic welfare needs, regardless of where they happen to be born. Or sometimes as a group we'll consider how welfare assessment, or killing, are practised across different human-animal interactions. Again, as we know, a wild fish can legally be killed by suffocation, but this would be illegal in a home or a laboratory.

From the animal's perspective then, in an ideal world we would be able to 'level up' and implement standards that meet animals' needs and enable them all to have a good life. 'What about

wild animals?’ is a common refrain, and this is addressed neatly in the vision statement of the Universities Federation for Animal Welfare, which is of a ‘world where the welfare of every animal affected by humans is maximised through a scientific understanding of their needs and how to meet them’.

Of course, the RSPCA is not the only organisation to reflect on the disparity between different groups of animals, and use that to help inform and drive its advocacy and campaigning work. Lots of us do that, as the many injustices are so very striking. This is where the Liaison Group of Animal Welfare Advisory Bodies came in. The liaison group’s functions were to consider any matter relating to animal welfare, to share information on and discuss matters relevant to all sectors and, where appropriate, to organise meetings on these subjects and or provide reviews, opinion and or advice on them. So it would select overarching animal welfare issues of importance, then nominate members drawn from the constituent bodies to review these. I was involved in the group that looked at animal welfare surveillance in 2010.

Our aims were to review current welfare surveillance interests and initiatives for farmed, lab, companion and wild animals, and to identify issues and problems, similarities and differences, and to draw learnings from this that could be used to develop sound and practical animal welfare surveillance. By ‘surveillance’ we meant the systematic observation and assessment of the welfare of an individual animal or a group of animals. This could be at an establishment or at a national or central level.

We took an overarching view, as befitted the purpose of the group, which included thinking about the purposes of surveillance. At national level, these are mainly to identify the nature and scale of welfare problems, to track changes in these over time and to prioritise remedial actions. There is also a strong public interest in animal welfare, and we viewed surveillance as a ‘guardianship’ duty of the Government, acting for society. Effective surveillance is also essential to inform Government policy and to ensure compliance with regulations, particularly minimum standards of welfare. At establishment level, it will enable animal management and, in the case of farmed animals, can enable assurances to the consumer.

The group compared its own ongoing initiatives relating to animal welfare surveillance and suggested a risk-based approach, based on the number of animals affected; the severity of potential welfare challenges based on their level, frequency and duration, and the feasibility of being able to solve or ameliorate the problem. I personally found it to be a useful and interesting exercise to compare and contrast the issue across our different areas. Each sector differs with respect to animal numbers, settings, processes and infrastructure, and of course there are attitudinal and economic

factors that come to bear. I am sure that public opinions would differ as to the amount of weighting that should be afforded to these, but we did our best to be objective and animal-centric whilst making real-world recommendations.

The group noted that all the constituent bodies were concerned with kept animals, which we found unsatisfactory given the many conflicts between humans and wild animals. We recommended a body for wild animals, comparable to APC, CAWC, FAWC and ZF - and now of course there is a Wild Animal Welfare Committee. We also noted that, although many companion animals are born at breeding establishments, most live in people's homes where they are kept by amateurs with no routine inspections, which can obviously present problems.

To conclude, the group set out the components of an ideal surveillance system that could be broadly applicable and potentially form the basis of a national system. We acknowledged that approaches would continue to differ between sectors, and we called for a central body to set an appropriate framework and to give advice and guidance about surveillance methods that would be applicable to all. And what happened next? Well, I don't remember hearing anything after that. It's very difficult to find any trace of the Group's work now; you can access the 2013 discussion paper on UK law relating to animal welfare, which also makes some good points - but I wasn't involved in that one and again, I don't know about any impact. My overall conclusion is that it can be a useful and thought-provoking exercise to compare any welfare-related issue across different sectors and identify ways to 'level up' and take a centralised approach to addressing these - but the output can easily disappear into a black hole if there are no drivers to achieving impact.

Fast forward now to the run-up to the Sentience Act. I'm sure many of you know the background to the introduction of the Act, but briefly, the original Animal Welfare (Sentencing and Recognition of Sentience) Bill was hurriedly drafted in 2017, in response to public outcry over a misunderstanding of the content of the European Union Withdrawal Bill. The first version was extremely vague and was redrafted in order to set out which animals were in scope and provide more detail on how it would be administered. As I mentioned before, many individuals and organisations were dedicated to ensuring that a vital opportunity to raise the consideration given to animals, and their welfare, would not be squandered.

The RSPCA and University of Oxford jointly convened a conference entitled 'Animal Sentience: science, welfare and 'real world' application' in May 2019, and you can still view the presentations and workshop outcomes online. We, and many others, were hoping that there will soon be legislation enshrining the concept of animal sentience in law, and that an expert,

independent animal welfare advisory committee would be formed to help ensure that the government receives well-informed guidance in its application of that law.

We invited a wide range of stakeholders to the conference, including law and policymakers, trade and industry, academics, animal care professionals and religious groups. Care was taken to include those with a range of views, rather than just inviting people within our own ‘bubble’. The day included eight workshops on Behaviour change; Harm-benefit assessment; Policy makers and businesses; Animal owners and carers; Representation in government systems; Sentience in the real world; All areas of industry; and Criteria and process. There are links to the reports of each of these on the web page too.

Interestingly, the workshop on *Representation in government systems* (chaired by Dr Dan Lyons) concluded that the major challenges to achieving representation of animal sentience are (i) lack of resource and (ii) current lack of consensus as to ‘what is wrong’ and what benefits the Bill would bring, and that allocating more resources to local governments would enable quick animal welfare wins, including better implementation of the Animal Welfare Act. This was a useful outcome and a benefit of inviting people holding a range of views, because it helped to inform us as to the evidence we would need to accumulate and the arguments we would need to make, both to support the Bill and to achieve a national committee.

At the time, we were referencing other national committees in countries such as New Zealand and the Netherlands. The New Zealand National Animal Welfare Advisory Committee (NAWAC) advises the Minister on any matter relating to the welfare of animals in New Zealand, including areas where research into the welfare of animals is required; and legislative proposals concerning the welfare of animals. It also has some quite specific tasks around hunting and trapping animals. The Netherlands Council on Animal Affairs deals with issues across the spectrum of public policy on animals, including farmed, wild, companion and laboratory animals (although there is also a separate national committee that corresponds to the UK Animals in Science Committee). Although it is useful to see what other countries are doing, I felt that the UK needed its own, tailored legislation and I was also uneasy about referring to bodies whose impact was unknown. For example, I personally think that the New Zealand Committee may look good on paper, but there are some practices in that country that leave a great deal to be desired. I think it’s essential that the UK ASC can demonstrate impact.

On the topic of impact, I also had various appearances before bodies such as EFRA and the Lords around this time. These were noteworthy because they often generated the standard knee-jerk reaction that a Sentience Act that required ‘all due regard to be given to the welfare of animals as

sentient beings' would stop people from doing things that they wanted to do, which is a Bad Thing, and be implemented to ridiculous extremes. For example, an MP at EFRA thought he wouldn't be able to eat crabs any more, to which I responded that people ate sentient animals all the time, and if crabs were ever included in the Animal Welfare Act he would still be able to eat crabs who'd been humanely caught, handled and killed. That also shows a lack of understanding of the proposed legislation; in fact it was a common misconception that decapods and cephalopods would be included in the Animal Welfare Act itself. The then chair of EFRA was suggesting that he wouldn't be able to build an extension to his house because there was a rabbit warren behind it, which was also a deliberate misrepresentation of the reach of the Act. We were having to talk down these misinformed and misleading arguments and also steer a careful course between explaining how the Act would have a positive impact for animals on the one hand, but not mis-stepping and feeding the perception that it would devastate UK PLC and life as we know it.

And of course, we now have the Animal Sentience Act, which requires an Animal Sentience Committee to question whether, or to what extent, the government is having, or has had, all due regard to the ways in which the policy might have an adverse effect on the welfare of animals as sentient beings, when any government policy is being or has been formulated or implemented. It includes free-living wild animals within its scope, and also decapod crustaceans and cephalopod molluscs, on the basis of a report on the evidence for sentience in these invertebrates which was commissioned by Defra and produced by a group at the London School of Economics, headed by Jonathan Birch. I was greatly encouraged by the inclusion of these animals.

So now I am going to put my Animal Sentience Committee hat on.

You can find the text of the Act, and the ASC's terms of reference, on the internet, so I won't go into either of these here.

Its role is to consider whether, or to what extent, the government is having, or has had, all due regard to the ways in which the policy might have an adverse effect on the welfare of animals as sentient beings. We think about it a bit differently though in practice, as we also think about whether there might be positive implications for animal welfare. This is important and in the spirit of the legislation, and public concerns.

The ASC enables Parliament to hold the government to account with respect to its policies and their impacts on animal welfare, so in effect it's acting like a kind of animal welfare watchdog. Our name unfortunately can lead to misunderstandings about our purpose, as stakeholders sometimes ask us whether particular animals are sentient, or think we sit around defining sentience,

which is definitely not what we do. We have our scope set out: any vertebrate animal (other than *Homo sapiens*), any cephalopod mollusc and any decapod crustacean. There is scope to add other invertebrates by amendment, and it will be interesting to see how this develops as evidence accrues.

And this is the membership; as you can see we have a reasonably broad spread of interests; a fair amount of farm animal expertise but also expertise around wild animals, welfare science and welfare assessment. We've been working together for over a year now and I think we work really well together.

And before I go any further, I'll give you an idea as to our criteria when we are judging whether 'due regard' has been paid. This is pivotal to the implementation of the Act, so it was important to clarify our thinking around it. These are some of the broad factors that we look for.

First is whether the policy makers supplied some form of Animal Welfare Impact Assessment, including at least the elements below. This is not an exhaustive list, as the criteria, and their detail, will obviously vary between different policies, but here are some examples. Did the policy makers conduct, or commission, research into the scientific literature and current practices relating to animal welfare issues that may arise within the policy? This should be adequately robust, e.g. using systematic review techniques for the literature, if applicable.

Did the policy makers consult with a wide range of stakeholders, including the public? The consultations should be easy to find and understand, easily shared, open for long enough and directly ask for welfare concerns to be identified and described. Respondents should be asked to provide evidence for any impacts on animal welfare, and practical or economic considerations.

Whether the deliberation process around defining the policy was fair, and balanced, regarding the interests of humans and other, sentient animals; including a harm-benefit analysis of the specific case. Whether both direct and indirect impacts on animal welfare were considered, including on free-living wild animals, decapods and cephalopods.

Importantly, whether due consideration was given to avoiding or reducing harms to animals and minimising the number of sentient animals affected. For example, this could include analysing alternative approaches to achieving the objectives of the policy, e.g. reviewing policies in other jurisdictions. As well as being a component of many Animal Welfare Impact Assessments, this criterion also helps to deal with the assumptions that the Act will 'just stop everything'. It's a common-sense approach to minimising harms to animals when implementing policies that are deemed to be in the interests of the public, animals or the environment.

If appropriate and necessary, the Committee would look at whether a policy includes effective animal monitoring/surveillance within its implementation. There should also be provision

for unforeseen welfare impacts to be detected and addressed. And there should of course be adequate resource to implement any protections, safeguards or harm-minimisers for animals.

The Committee can look at any policy it chooses, regardless of whether the impact on animal welfare is direct or indirect. For example, the Online Safety Act primarily aims to protect adults and children from illegal content, but illegal content includes offences under the Animal Welfare Act, so the OSA will reduce the risk that users encounter live-streaming of unnecessary animal suffering. Here's the definition of a policy: 'a decision made or implemented by a Minister which affects the activities of government, business, charities or members of the public. This includes, but is not limited to, the processes of making regulations, legislating, allocating resources or promoting a course of action'. This includes existing policies or those at any stage of development, plus subsequent policy implementation decisions. This is really important, because the Committee should have a genuine impact, which is best achieved by reviewing policies before they are finalised, not after.

This is what we don't do. The ASC cannot recommend 'new policy' which is unrelated to an existing policy decision - we are not a lobbying group. The ASC should also not duplicate the work of other committees. The Chair of the ASC liaises with the Chairs of the Animal Welfare Committee (AWC), the Welfare at Killing Committee (WAK), the Zoos Expert Committee (ZEC) and the Animals in Science Committee. Policies falling within the competence of devolved administrations are not within the remit of ASC. The Committee also has the proviso that was in the original EU Treaty of Lisbon, which requires it respect for the legislative or administrative provisions and customs relating in particular to religious rites or customs, cultural traditions and regional heritage.

So that's the structure and approach; this is how the Committee works.

This is the basic work flow for each policy that the Committee considers, which looks a bit obvious set out like this! We identify current or upcoming policy decisions and commission evidence from the relevant policy teams. We allocate tasks around drafting and publishing reports, and review Government responses to these.

So this is our structure; as set out earlier there are five of us members in addition to the Chair, with a Defra-sponsored secretariat to support us. Because we are small, we can also be quite agile and draw on external expertise, from stakeholders or subject experts, wherever this is needed. The Committee has built up an extensive network of stakeholders drawn from farming organisations, veterinary professional societies, NGOs including animal welfare and protection groups, executive agencies, industry and retail. Each member liaises with a specific group of these.

We also cultivate a positive working relationship with the policy teams, with good two-way engagement.

The Committee meets every six weeks, either online or in person. A typical agenda includes a review of current issues and any new policies we may want to look at, which will be assigned to members for triage - I'll explain this process shortly. We review our progress with active policies and create new groups to work on policies we have decided to look at, ensuring the Secretariat communicate with policy teams about these, plus we discuss ongoing drafts of Committee output in the form of draft reports or letters.

We will also discuss our communications strategy with stakeholder, parliament and policy teams. At present we produce a newsletter for our stakeholders after every face to face meeting, as well as contacting them directly in relation to specific issues, or sometimes they request meetings with the Committee. Raising awareness in Parliament is an ongoing topic, and our stakeholders have recently been a very useful source of ideas around this.

Sometimes the Committee invites external speakers for teach-ins, for example we have had speakers on in-depth Parliamentary procedures and Defra Directors and Policy Team Leads.

Because we are a small Committee, it's easy for all members to be consulted and input into opinions and reports. Our discussions generally lead to consensus, but if they do not then it's down to the Chair's discretion. We are also keen to reflect on our work, and progress, so we regularly discuss how we are all doing with the Chair and Secretariat.

And this is how policies come to us. Inputs include direct media briefings and calls for evidence, plus the Secretariat monitors bill lists and potential policies may be reported in the media. There is a direct route for stakeholders to suggest policies they would like us to review, and the policy teams themselves may come to us for advice.

Once a policy has been triaged and a decision has been made to review it, the Committee will commission evidence from policy teams, which could take the form of in-person teach-ins. A brief proforma has also been developed which captures relevant details of the policy including how it's believed that 'due regard' has been paid.

Committee members review the proforma and do further background research, to help identify direct and indirect effects on animal welfare. This opens up further dialogue and information sharing with the policy team, which the working group reviews, with help from external experts if needed.

And this is how the Committee delivers its work.

So we have the statutory ability to produce the aforementioned reports and the relevant Secretary of State has the statutory duty to lay a response to any report before Parliament, within three months of the report's publication. As well as official reports, we can also provide policy teams with ad hoc advice if we have capacity.

Each report has one lead drafter, who is supported by at least one other member. When they have produced an agreed first draft, it is run by the other members and chair, with a meeting if necessary. As I mentioned before, if members are not unanimous the Chair will make a decision and the lack of consensus is noted in the report.

Once the first draft report has been produced, the Secretariat notifies the policy lead that their policy will be reported on, sharing the draft with them and asking for feedback. There will then be a follow up discussion between the policy team and the drafters, which may lead to amendments to the report. The aim is very much to develop and maintain constructive, positive relationships with policy teams. Ideally, this would help to enable the construction of policies that do pay due regard to animal welfare when first drafted. This would be a great impact for the Committee, albeit a very difficult one to assess and demonstrate.

After the final report has been signed-off, it will be published on the Committee's GOV.UK page and the policy team will be notified. They will have three months of Parliamentary time to support their Minister in responding to the report before Parliament. The Chair also shares the report with the EFRA Select Committee Chair (if it is relevant to Defra policy) and the All-Party Parliamentary Group for Animal Welfare.

The Minister's response is typically laid before Parliament as an Unnumbered Act paper, and the ASC Secretariat is informed. They then tell the Committee, EFRA (if relevant) and APGAW, and the response is added to the ASC GOV.UK page. Policy teams are not legally obliged to act on the Committee's recommendations, but if they don't, their Secretary of State may be asked to explain why.

Figure 1 (overleaf) is from the Committee's website - what you'll find on it at the moment; some of the reports have Government responses. The response on the Online Safety Act is from the Secretary of State for Science, Innovation and Technology; those to the Animal (Low Welfare Activities Abroad) Act and Assessment of Veterinary Medicines Regulations are from Defra.

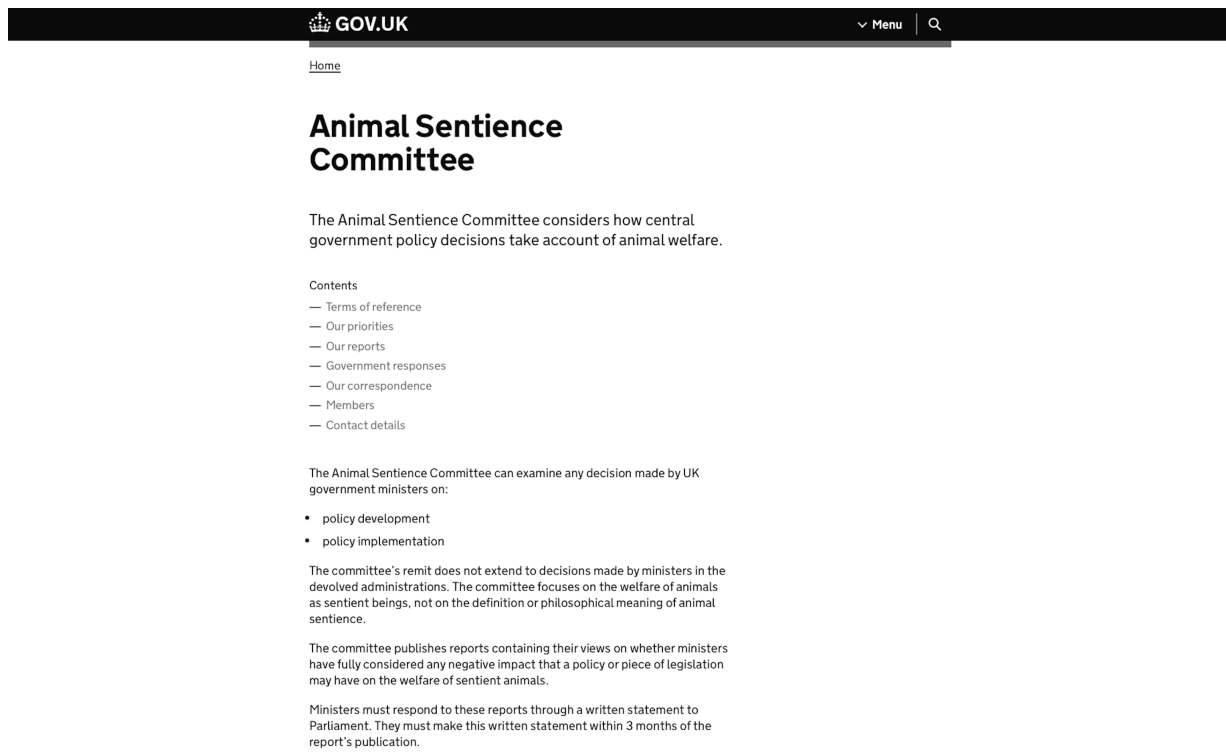


Figure 1

Our other current methods of communication are the newsletters I mentioned earlier, and the other means of stakeholder engagement including speaking at meetings like this and convening stakeholder engagement events - we held one of these recently and it was really successful. Participants were very supportive of the Committee's way of working and we really appreciated the opportunity to engage in person.

Now to backtrack slightly. I'll tell you how the Committee triages potential policies.

We have a system for this; once a policy has been selected for triage, it goes to one or two members for detailed triage and analysis, for discussion and agreement by the rest of the ASC. If a policy is to be analysed, this is formally logged.

And the pool of policies we have to choose from mostly comes from these sources: policy commitments, pronouncements and time frames, calls for evidence from any Government department, green and white papers, Defra intranet and input from stakeholders.

Figure 2 (below) demonstrates how we narrow things down. If you take a look at this example longlist, you can see examples of primary legislation and consultations etc in a range of policy areas, including farming, animal keeping and the environment.

<u>Primary legislation</u>	<u>Consultations, calls for evidence, statements, petitions</u>
<ul style="list-style-type: none"> • Genetic Technology (Precision Breeding) Act • Animals (Penalty Notices) Act • Kew Gardens (leases) Act • Online Safety Act 	<ul style="list-style-type: none"> • Registration requirements for bird keepers in GB • CFE – gear feature interactions in marine protected areas • Consultation on enriched cages for hens • Petition – ban use of dogs in science • Plan for Water

Figure 2

An early decision was made not to take these forward for triage; Kew Gardens because there may have been indirect effects on animal welfare but this was a bit tenuous, and dog use because this did not relate to any ongoing changes to policy.

The Committee considers the following primary factors when triaging policies: the number of animals, level, nature and duration of harms to them, and the potential for the policy to lead to animal welfare benefits. Quite similar to the animal welfare surveillance recommendations back in 2010, apart from welfare benefits. Obviously, if a policy is wholly beneficial, this likely wouldn't require in depth analysis; a letter of recognition would probably do.

We think about other factors, too. We include the potential for animal mortality, although it needn't be an animal welfare issue, we recognise that this is a public concern. Some of us, me included, believe that directly or indirectly causing the death of an animal experiencing a good life is a harm. We also think about whether the issue is otherwise of public interest and whether the policy relates to a novel area for scrutiny, regarding animal welfare. For example, the welfare of free-living wild animals has rarely been considered until now, unless they are endangered. Consideration is also given to the likelihood of impact and the issue's overall level of priority for the ASC.

On that basis, we also rejected registration requirements for bird keepers and the plan for water.

I'll give you a brief explanation of this, using the plan for water. When we triage a policy, we use a spreadsheet that we've devised using the criteria I just outlined. The next few slides set out a brief, simplified version.

Overview	Positive elements include restoring natural processes, spaces for nature, restoring chalk streams, restricting 'forever' chemicals and microplastics. Animal welfare is not mentioned (fish health is the closest)
Harms to animals	Eradicating invasive species of sentient animal could cause harms. UK REACH is mentioned regarding chemicals and there are concerns around duplicate animal tests post-Brexit. Wild animals may be disturbed or harmed during restoration processes
Welfare benefits	Very high, for indigenous aquatic animals who will no longer experience physiological and psychological stress due to pollution, habitat loss etc. Regenerative farming techniques and extensive grazing could benefit farm animals.

Figure 3

Figure 3 gives a brief overview of the policy. In this case, it relates to restoring natural water bodies. Animal welfare is not directly mentioned (the closest it comes is fish health). Next, we look at harms to animals. Eradicating invasive species is a particular dilemma where harms to animals are concerned, as in all cases where you have two groups of animals with conflicting needs. Individuals of the invasive species will almost certainly be harmed, and indigenous animals could also be harmed during restoration processes. There are also potential animal testing issues. On the other hand, welfare benefits will be high for indigenous animals once the process is over. I think this involves a tricky harm-benefit analysis in some ways, because we are including (and weighting) the welfare of animals who would not otherwise exist without the restoration.

Numbers of animals	This would take a lot of research, plus it would be very difficult to estimate how many animals would benefit by being able to exist when habitats are restored. Very high numbers though, directly and indirectly
Public interest	Very high – water quality is highly topical
Novel area?	Yes – like most environmental policies, it is almost entirely concerned with the population level. The welfare/suffering of individual wild animals is generally not considered.

Figure 4

The number of animals is very difficult here - it's very different from a situation where the animals are kept, like a farm. It's of public interest though, and a novel area because it involves free living wild animals and maybe decapods if freshwater crayfish are included.

But all things considered, the Committee afforded it low priority. The impact on animal welfare would be very positive if the policy were to be properly implemented, so we could not justify working on this when there are other, more pressing, priorities.

Primary legislation

- Genetic Technology (Precision Breeding) Act
- Online Safety Act

Consultations, calls for evidence, statements, petitions

- CFE – gear feature interactions in marine protected areas
- Consultation on enriched cages for hens

Figure 5

Figure 5 is what's remaining from that example list. We're keeping a watching brief on Genetic Technology (Precision Breeding) Act, CFE - gear feature interactions in marine protected areas, and Consultation on enriched cages for hens, and we're waiting for a response on the Online Safety Act. We're working on other issues of course, including animal welfare enforcement - a massive and critically important issue - and now that the Committee is better established we are keen to engage with much larger cross-cutting issues, like food security and conservation.

I'm switching back and putting my RSPCA hat on again now.

Thinking about the original topic for this presentation, on institutionalising animal welfare protection within government, here are some concluding thoughts.

My leading thought is that this is obviously huge! We all know this - we have to deal with a plethora of primary and secondary legislations and guidance, covering a multitude of species and situations. Every animal who is kept by humans, or directly or indirectly affected by human activities, should have a good life, but again we all know that widely different standards and practices become normalised due to people's attitudes and beliefs, and economic factors. It would be quite an exercise to research and collate welfare standards across all sectors, let alone implement and enforce comprehensive standards - but of course this would still be an important goal.

Many people (I won't say 'the public', as of course there is no such thing) may not necessarily support equal consideration for all animals. And people's feelings about animal welfare are not always borne out by their behaviour. For example, the RSPCA's Kindness Index survey has found that 72% believe that chickens are sentient, but only 38% think that 'a food strategy that moves away from intensive agricultural methods' is an important issue to address and just 21% state that they purchase higher welfare products. Many factors contribute to people's choices on food, including price, taste, health, habit and convenience - animal welfare is not top of the list.

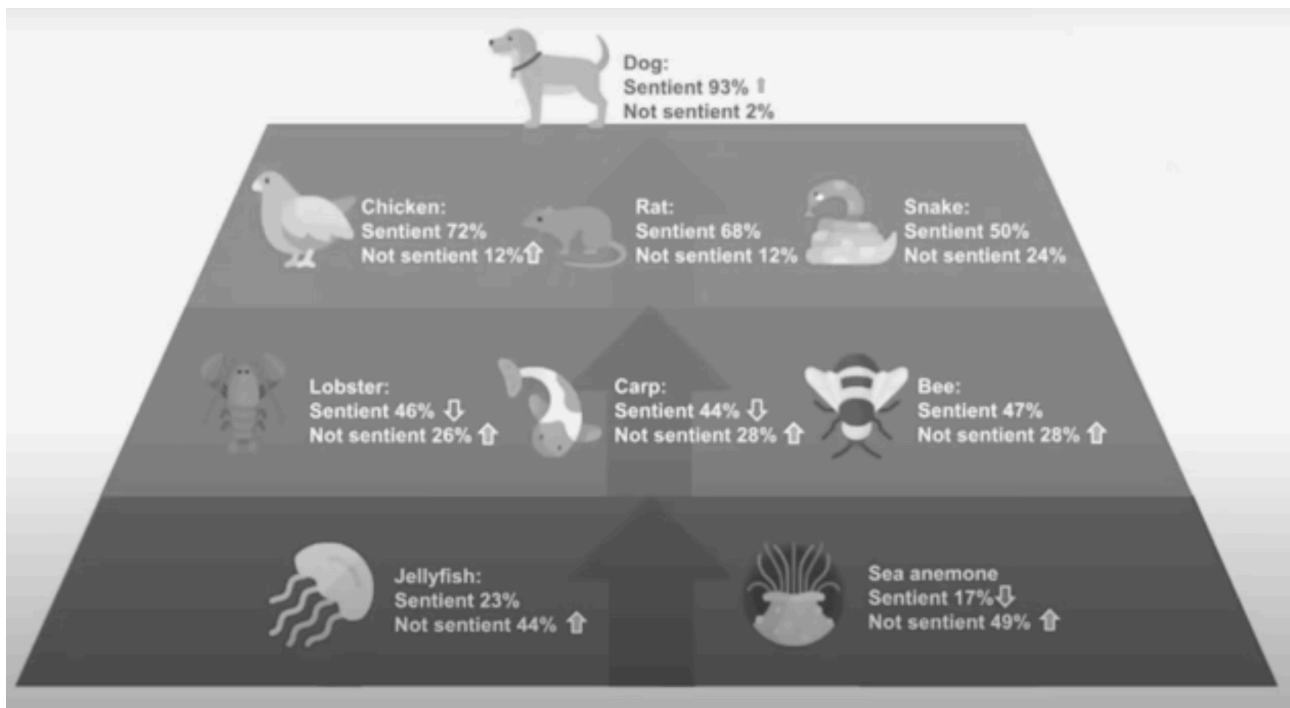


Figure 6

Figure 6 shows you people's beliefs around which animals are sentient. Note the different scores for dogs, chickens and carp. And there are glaring inconsistencies within people's attitudes to companion animals; I will never forget a neighbour of mine who had a rabbit and a cat, and fed the cat food with rabbit in it! So I think achieving consistency, and levelling up, for different species and 'types' of animal will require some thought leadership as well as reflecting overall public concerns.

So yes, we can safely say that maximising animal welfare is important to many people, as well as of course essential in its own right. But in practice it will be important to make sure that any processes towards further institutionalisation of animal protection will be transparent, engage all stakeholders, and emphasise the environmental, economic and human welfare benefits as well as animal welfare. I hope that doesn't sound too cynical, I'm just trying to anticipate the real world situation that many of us have encountered. However ...

I will leave you with this statistic from the Kindness Index survey report: 84% of people expect that animal welfare should be protected through legislation and 64% believe that the national government is responsible for animal welfare. So although people may be confused and inconsistent at times, the expectations are still clear.

Democratic Inclusion of Equals - Representing Sentient Animals

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Many decisions governments make affect the lives and well-being of animals. Arguably, there is too little weight given to the perspectives and interests of animals in such decisions. In response, a growing number of proposals have been formulated to represent animals in policy processes. However, the design of the institutions proposed for the representation of animals varies greatly. It ranges from suggestions to establish environmental defender's offices to representing animals through collaborators who know specific individual animals. As I will show, what is meant by representing animals differs widely and I will argue that most arguments for the representation of animals are ill-founded.

This paper analyses different claims for the representation of animals and asks whether the conclusions, namely, specific types of institutional arrangements are indeed indicated on the basis of the arguments presented in their favour. This is an endeavour in ideal theory. Thus, this paper is not concerned with what a feasible or effective way of getting the interests of animals into politics would look like. Instead, I am concerned with what we owe animals as members of a multi-species society under the assumption that society is well-ordered, meaning that institutions generally work in ways that are just, and people typically follow the rules. This is important because it can tell us what we should aim for when making proposals for other institutional set-ups and allows us to criticize the status quo.

The paper argues that the claim to representation of animals is justified but that the institutional arrangements proposed by authors such as Andrew Dobson (1998), Robyn Eckersley (2004), Alasdair Cochrane (2018) or Sue Donaldson and Will Kymlicka (2011), are wanting for a number of reasons. They undermine the claim to inclusive, equal, or proportionate representation.

⁶⁸ The author would like to thank the participants of the Schweitzer Institute Conference 2024 and Philipp von Gall for comments and discussion.

With regard to inclusiveness and equality, I show that more elaboration and empirical insight is needed, while I argue that proportionality has been largely overlooked in the discourse. It follows from the discussion that animals are owed representation in accordance with their number.

The paper proceeds in five parts. Part I specifies the concept of representation and democratic inclusion and establishes the intricate normative relationship between the two.

Part II presents arguments by Eckersley, Dobson, Cochrane, as well as Donaldson and Kymlicka who all propose some type of institutional arrangement for the representation of animals. In part III, I show that the claims made under the umbrella term of ‘representation’ are diverging enormously and that the suggested institutions are not honouring the ideals of inclusive, equal, or proportionate representation.

Part IV considers various arguments to justify the divergence to the claim of equal and proportionate representation on the basis that a) representation of animals cannot comply with the typical standards of legitimacy, b) animals would ideally not be affected by humans, c) this would undermine social stability, d) this is not feasible, and e) animals have not the capacity to be co-creators of policy. I show that only d) can make good to the claim that animals are owed non-equal representation but argue that the claim to proportionate representation stands untouched. Part IV concludes and suggests next steps towards the democratic inclusion of animals.

Part I - The components of arguments for democratic inclusion

When considering arguments for the democratic inclusion of some group, we first want to define and specify the relevant elements of such arguments. There are two basic components: relationship claims and procedural entitlements. Understanding how these components work and are linked is important for assessing the legitimacy of relations between those represented and their representatives, as I will show below.

First, such approaches start by defining, what I will call, following Caney (2012) a ‘*relationship claim*’ or, as it is more widely called, demos.⁶⁹ A relationship claim specifies those who should be included in the democratic process with reference to some criterion, such as a specific kind of relation to one another. For example, some might say that those who are subject to a state’s laws should be included in the democratic process of that state. Call this the subject to the

⁶⁹ As noted above, I use the more abstract term ‘relationship claim,’ because a relationship claim is not dependent on characteristics that are often thought to be relevant in order to belong to the same demos, such as shared nationality, culture, language or else. As I will elaborate, the relevant criterion is solely some specific form of being affected by a decision.

law view. In this view, the relevant relationship, then, is ‘being subject to a state’s laws.’ Another common argument is that those *affected* by a political process should be included in the relationship claim. Call this the causal view. Drawing on such principles and criteria, we can then identify the relevant relationship claim. Thus, one may argue for example, based on the causal view, that all those who would be affected by a power plant being built in Norway have a say on whether the power plant may be built because they would be affected by the plant once it is built. This may not only include Norwegian citizens in the decisions but presumably also other people and animals from other places that would be affected by the plant’s emissions. In contrast, on the subject to the law view, only Norwegian citizens would be participating in the decision (e.g. through their representatives).

Secondly, having identified the relationship claim, the next step specifies which entitlements those within the relationship claim have in virtue of being part of the relationship claim – what I will call their procedural entitlements. A procedural entitlement can come in many forms, such as (among others) a right to be informed, a right to be consulted, a right to take part in the decision-making process or a right to be represented. Different procedural entitlements may seem appropriate in response to different relationship claims.

To illustrate, consider the following example from the great theorist of democracy Robert Dahl: ‘[E]veryone who is affected by the decisions of a government should have the right to participate in that government’ (Dahl, 1970: 49). Dahl first specifies who is included in the relationship claim (‘all those affected by the decisions of a government’) and secondly points out what procedural entitlements those have (‘the right to participate in that government’).

To be able to analyse the legitimacy of arguments for the inclusion of animals in democratic decisions, we will need a more differentiated toolbox, and I will thus elaborate on how relationship claims work in the next section.

Relationship Claims

A threefold specification can be made concerning the relationship claim. We can distinguish the dimensions of object, magnitude, and mode (Caney, 2012). First, the *object* of the relationship claim can be identified by asking: ‘what is affected?’ Held (2004, p. 99) helpfully distinguishes between three kinds of features that might be affected, namely: i) ‘vital needs or interests’, ii) capacities to take part in social life, and iii) lifestyle and consumer choices. Held suggests that the stakes one has should be reflected in the influence one has on a decision.

Secondly, the object of the relationship claim can be affected differently. We can ask, ‘how is one affected?’ The magnitude captures this. So, a dog’s vital interests can be *significantly* affected by a government’s decision, and a human’s lifestyle can be *weakly* affected by someone else’s personal decision.

Thirdly, the *mode* of affectedness can vary. We can ask, ‘why is one affected?’ For example, one can be affected by a voluntary business decision that turns out badly, and one may have been coerced to perform an act that one did not want to perform. Many theorists use what has come to be known as the all-affected-interests principle, which holds that those causally affected are entitled to be included in the political process (e.g. Goodin, 2007). Others limit the relationship claim to all subject to some form of coercion. This is called the all-subjected principle (Fraser, 2009, ch. 4). In this view, being causally affected is insufficient. Instead, what is required is being coerced (or ‘coercively affected’) to be included politically. A third principle that is proposed is the subject to the law principle. Here, only those bound by the law of a particular state are part of the relationship claim (Beckman, 2013; Miller, 2009; Thompson, 2005, 2010).

To illustrate the relevance of specifying the *object*, *magnitude*, and *mode*, let us consider the formulation of the all-affected principle given by Ekeli (2005) in his argument for representing future generations. He writes:

In a number of cases, future generations are among the parties who are significantly affected by present democratic decisions. This seems to imply that at least democratic decisions that significantly bear upon the lives of posterity cannot be regarded as legitimate unless future people have been given a voice in the decision making process.

Ekeli, 2005, p. 443

Ekeli’s application of the all-affected principle is very nuanced. The object, magnitude and mode of the relationship claim are clearly defined, and the appropriate procedural entitlement is stated. As the lives of future generations (object) are ‘significantly affected’ (magnitude) through ‘democratic decisions’ (mode), future generations should have a ‘voice in the decision making process’ (procedural entitlement). Ekeli also explains how this procedural entitlement could be fulfilled, namely by giving future people ‘a voice.’ His proposal will be discussed in more detail in chapter 7. of this thesis.

A final point deserves consideration. There are some cases of great affectedness where one may still think that the affected people do not hold any procedural entitlement. One may think that a

person has a right to certain decisions, albeit they may significantly affect other people's lives. An example of such a decision is given by Nozick (1974, p. 269):

If four men propose to a woman, her decision about whom, if any of them, to marry importantly affects each of the lives of those four persons, her own life, and the lives of any other person wishing to marry one of these four men, and so on. Would anyone propose, even limiting the group to include only the primary parties, that all five persons vote to decide whom she shall marry?

Nozick shows that while others may well be significantly affected by our choices, this does not necessarily result in them being entitled to a say, for certain decisions are within the rights of the affecter. Thus, one may hold that the right to be involved in a decision is only triggered by decisions not covered by an individual's (or a group's) prerogative.

Procedural Entitlements

As noted above, different procedural entitlements seem appropriate in response to certain relationship claims. Thus, we may think of a continuum that begins with direct democratic participation (e.g., through referenda), moves over to indirect democracy (e.g., through elected representatives), accountability (e.g., performance measurement), transparency (e.g., public government meetings and minutes), public justification (e.g., government statements), consultation (e.g., public consultation), and lastly, merely consideration.

When arguing for democratic inclusion, one needs to give an account of how a relationship claim relates to a procedural entitlement. Three criteria are worth considering when assessing the legitimacy of the connection of relationship claim and procedural entitlement: a) inclusiveness, b) equality and c) proportionality. A decision is considered inclusive if all relevantly affected hold a procedural entitlement. If, however, some relevantly affected beings would be considered beyond the relationship claim, this would render the relationship claim discriminatorily exclusive.

Secondly, equality matters. Those who are affected to an equal extent should also hold the same procedural entitlements. Pro tanto, there should be no other difference between those within the relationship claim regarding which procedural entitlement one holds other than those based on proportionality. Thus, those within the relationship claim do not necessarily all hold the same procedural entitlement. However, which entitlement they hold is subject to the requirement of

proportionality, and the same principle of proportionality should hold for everyone within the relationship claim.

Lastly, proportionality concerns the relationship between, on the one hand, what interests are affected (object) and by how much (magnitude) and why (mode) and, on the other hand, the specific procedural entitlement granted to them. Brighthouse and Fleurbaey (2010, p. 138) argue that ‘power in any decision-making process should be proportional to individual stakes.’ In such a view, an extensive procedural entitlement, such as the right to participate and to vote in a decision process, is appropriate when there is a robust relationship claim, such as that vital needs are strongly and involuntarily affected. We would, for example, consider it appropriate that one is represented or has a right to vote in the decision whether income taxes are increased or not since this may affect their capacity to take part in social life or might even affect their vital needs and interests. Then again, we may not expect to be highly involved in a decision that only mildly affects (magnitude) our lifestyle opportunities (object) in a voluntary consumer-producer relation (mode).

Part II - Divergent arguments for the inclusion of non-human animals

By now a substantial number of arguments for the democratic inclusion of non-human animals, often through some form of representation have been developed. However, the proposals for the democratic inclusion of animals differ widely. Some have proposed to assign special representatives to non-human animals in parliament, while others would merely assign an ombudsperson to the task of representing animals. It is the task of this paper to dissect the reasoning culminating in these proposals for the inclusion of animals and especially to problematize the different types of proposals that have been argued for based on the claim that animals are owed representation. Thus, this is not a review of the expanding discourse on the representation of animals, but only a discussion of a few select examples,⁷⁰ focusing specifically on the proposed procedural entitlements and how these relate to the respective relationship claims.

Consider, for example, Andrew Dobson’s (1998, p. 135) argument that ‘[i]f environmental policy affects transboundary populations and future generations, it also affects other species ... One right granted to humans is the “right to democracy” enshrined in Article 21 of the 1947 UN Declaration of Human Rights ... It is not perhaps as far fetched to claim a similar right on behalf of at least some species of animals.’

⁷⁰ For recent reviews of the discourse on the representation of animals see Ahlhaus (2022) and Magaña (2022).

Note the caution in Dobson's argument. There is considerable worry that the inclusion of animals or future people may open Pandora's box (Köhler, 2017).⁷¹ I will return to this and other challenges in part III of the paper, but will for now stick with proposals for the representation of non-human animals and the arguments provided in their favour.

Based on the argument cited above, Dobson suggests installing some 'proxy representatives' in parliament to be elected by the members of the sustainability lobby (who thereby forgo their right to a normal vote). Dobson does not propose a specific number of representatives, but it is evident from the context that it should not be as many, as there should be representatives of humans.⁷²

Robyn Eckersley's definition of the relationship claim is somewhat similar to Dobson's, but the suggested procedural entitlement differs: '[A]ll those potentially affected by ecological risks should have some meaningful opportunity to participate or *otherwise be represented* in the making of the policies or decisions which generate such risks' (Eckersley 2011, p. 251, italics in the original). On the basis of this argument, Eckersley (2011, p. 253-4) suggests installing an 'independent, statutory Environmental Defenders Office to bring legal actions on behalf of threatened species and habitats and to engage in advocacy work in the public sphere.' Let us consider the proposal by Donaldson and Kymlicka next.

In *Zoopolis* Donaldson and Kymlicka suggest that the relationship claim that animals belong to depends on their relation to human beings. They differentiate between domesticated, wild, and liminal animals. Liminal animals are those who live among humans without being domesticated, such as rats (that is if they are not in a lab, I suppose). Donaldson and Kymlicka suggest that domesticated animals should hold citizen status and be full members of the community, while humans owe wild animals' sovereignty and a duty of assistance. For liminal animals, they suggest 'denizen status' which includes secure residency and fair terms of reciprocity. Their argument is based on the premise that the object and magnitude of being affected are generally considerably lower for wild animals than for liminal animals than for domesticated animals, which is their justification for proposing different procedural entitlements for each group.

Donaldson and Kymlicka importantly stress that if we did not include all sentient beings and

⁷¹ I will not consider in this paper arguments or proposals for the inclusion of future sentient beings, albeit this is a most important challenge to democratic theory. For my thoughts on this see Hoffmann (2022).

⁷² With regard to proxy representatives of future generations, Dobson writes in an earlier section '[a] system of proportional representation would give them rather too many [representatives]!' (1998, p. 134). Later on, Dobson suggests that at least some species are owed 'direct representation', but that the amount of representation may depend on a hierarchy of moral considerability (1998, p 137f.)

instead fall back to a more restrictive demarcator such as rationality this would result in excluding not only many animals capable of cooperation and having preferences but also many young, old and disabled humans, lacking the ability for rational discourse (Donaldson & Kymlicka 2011, p. 105ff).

What does democratic inclusion look like for a domesticated animal with citizen status? Donaldson and Kymlicka (2011) argue that many domesticated animals can express their individual preferences in one way or the other, especially if they have the support of a collaborator, who knows them well and who ‘ha[s] learned how to interpret their expressions or preferences (p. 153):

we can elicit a range of expressions of preference to construct scripts of domesticated animals’ interests, and can bring those into the political process to help determine ongoing fair terms of interaction. Domesticated animals, we argue, should be seen as co-citizens in this sense, with the right to be represented through forms of dependent agency in our political decision-making.

Donaldson and Kymlicka, 2011, p. 60-61

Yet another argument for the inclusion of animals has been offered by Alasdair Cochrane in *Sentientist Politics* who also applies some form of the ‘all-affected’ principle to determine the boundaries of the relationship claim. Thus, every (sentient) animal that is affected by a decision has a procedural entitlement, which he suggests to be representation. Those animal representatives ought to represent as trustees all animals living in their constituency.

The job of those representatives should be to act as trustees of the interests of ‘animal members’ of the political community. In other words, their job should be to translate the interests of animals with whom we share a ‘community of fate’ into their deliberations with other representatives over what is in the public good.

Cochrane, 2018, p. 36-37

While Dobson suggested that representatives of animals and future generations should be elected by the sustainability lobby, Cochrane suggests installing mini-publics for this purpose. These are a type of citizen assembly, representative of the human population (through stratified sortition). Cochrane suggests that there should be one animal representative per constituency. They would represent all animal interests from their (geographical) constituency in parliament. However, he does not specify how many constituencies or representatives there would be.

To sum up. All arguments for the inclusion of animals presented thus far argue for some

kind of representation. Eckersley's proposal is arguably the least demanding in terms of the suggested procedural entitlement, an environmental defender's office, which can bring legal issues to court on behalf of animals. Note that Eckersley is not concerned with individual animals though, her focus is on species and ecosystems and her argument does not specify any entitlements for individual sentient beings. This may explain at least to some extent, why her proposal is less far-reaching than the arguments by Donaldson, Kymlicka and Cochrane who explicitly argue that all sentient beings are part of the relationship claim as individuals and not due to being of a specific species.

Part III - Assessing the arguments

Let us now consider the arguments for the democratic inclusion underlying the presented proposals in more depth, and the reasoning justifying the various takes on procedural entitlements. All arguments for the inclusion of animals in democracy discussed here start from the premise that all relevantly affected animals ought to be included. As noted above, there is a normative connection between relationship claims and procedural entitlements. There are noticeable differences in terms of inclusiveness, depending on the author's views of what counts as being relevantly affected, but what is more striking is the divergence between the suggested procedural entitlements for animals.

As shown above, relationship claims and procedural entitlements are intricately connected. In the following, I will assess the proposals based on the connection of relationship claim and procedural entitlement based on the criteria – inclusiveness, proportionality, and equality – specified in part I, beginning with inclusiveness.

It seems that the proposals for democratic inclusion discussed above all fulfil the inclusiveness criterion. They do not argue that some animals that are relevantly affected ought not to be included. The only exception may be the argument by Donaldson and Kymlicka (2011), as they argue against the full inclusion of wild and liminal animals as these are not affected by political decisions to a relevant extent. However, Cochrane argues that even wild animals suffer from many political decisions and their consequences, arguing that a strong demarcation between wild and domesticated animals is unjustified:

Animals are affected directly by decisions to 'develop' areas of wilderness, 'manage' wild populations, dam rivers, harvest fish from the ocean, and more. And wild animals are affected indirectly, but still profoundly, by decisions to burn fossil fuels, employ intensive agricultural methods, pursue economic growth, and more. In other words, wild animals

‘depend’ upon our policy choices in fundamental ways.

Cochrane, 2018, p. 52-3

Now consider equality. As Eckersley’s argument is not so much focused on individual beings, but rather on ecosystems, her argument is explicitly not egalitarian towards individual beings. Dobson does not state a clear demarcation criterion but also notes that at least some animals are owed ‘direct representation.’ However, as both arguments do not expressly state on what basis one is to be considered relevantly affected or which qualities one needs to possess, their accounts cannot be judged on the basis of equality straight forward.

Cochrane as well as Donaldson and Kymlicka (2011) explicitly demarcate sentient from non-sentient beings and take this to be the relevant quality that all beings share that ought to be included.⁷³ So, too, do Martha Nussbaum (2022) and Bernhard Ladwig (2020) in their recent contributions to the political philosophy of animals. As Cochrane notes, ‘sentience is the capacity for subjective experience’ (2018, p. 15). And we may ask, in Donaldson and Kymlicka’s words, whether ‘there is someone home’ (Donaldson & Kymlicka 2011, p. 30) to establish whether an animal is part of the relationship claim. As they do not differentiate between sentient beings, their approaches fulfil the equality criterion.

Lastly, consider proportionality: The suggested procedural entitlement should be in proportion to the reasons for being part of the relationship claim. The works of Donaldson and Kymlicka as well as Cochrane are not explicit when it comes to the number of representatives or collaborators. On a charitable reading we may thus assume that they would suggest proportionate representation or collaboration. Pro tanto this would mean that *all* sentient beings hold the same procedural entitlements. Let us spell out the consequences for Cochrane’s view. It would follow that the number of sentient animals per constituency ought to be at least roughly equal to that of each human constituency. Given the relatively large number of sentient animals this would result in large number of geographically small constituencies for animals. In parliament, representatives of humans would be outnumbered by animal representatives as a consequence.

Let us recapitulate. Donaldson and Kymlicka argue that all sentient *domesticated* animals are part of the relationship claim, while Cochrane argues that all sentient animals are part of the relevant relationship claim. As shown above, they argue for institutional set-ups and arrangements

⁷³ Sentience, in their arguments, is a quality that only certain animals – including humans – possess. However, sentience may not be as sharp a demarcator as one may have hoped for. For recent findings and discussions in plant biology suggest that plants may be sentient, too (Calvo & Lawrence 2022; Reber, Baluška, Miller 2023, Hanssen 2024). For the following argument it is, however, not necessary to know with definite precision who is included in the relationship claim and who is not.

that would give animals a lot more influence and recognition in the political process than in the status quo. The suggested proposals would make decisions more inclusive and the strong bias towards human needs and interests would certainly be mitigated to a considerable extent by both proposals.

Closely examining their arguments on the inclusion of animals we may wonder whether this is the straightforward conclusion from their premises. Their arguments rest on the claim that *all* sentient beings, whether human or non-human, have the same claim to being included. We have seen above that they do not differentiate between human and non-human animals based on inclusion, equality, or proportionality. Having seen that they do not assign a lower standing to any particular animal or group of animals what would follow is that all animals, *including human animals*, hold the same procedural entitlement. Accordingly, humans would not be represented in another way than any other sentient being. However, as shown above, this is not the conclusion they reach.

If human and non-human sentient beings all hold the same procedural entitlement this would mean that all are owed equal indirect representation in parliament. There could thus be no special representatives for humans. For, this would assign a special value to human interests which seems unjustified given that we are talking about a group of equals: all sentient beings. Further authorisation, accountability and responsiveness of representatives also should be established in such a way that equality is honoured.

These conclusions may seem undesirable or even repugnant. The eminent philosopher Martha Nussbaum openly states this: ‘With animals, I think the solution need not and should not involve a proxy vote for every animal in every election. This would quickly become absurd’ (2022, p. 98). In the following, I will consider five arguments that could be raised to mitigate the procedural entitlement of animals to equal and proportionate representation.

Part IV - The equal and proportionate democratic inclusion of animals

Now, I will consider five arguments that may be brought up to justify differences in the ways that human and non-human animals are represented. I begin with an argument on the limited legitimacy of animal representation.

Limited Legitimacy

When the inclusion of animals is proposed as a procedural entitlement, what is usually suggested, is

to represent them. However, ordinary means of legitimising representation, such as authorisation, accountability and responsiveness are no feasible ways to render the representation of animals legitimate as suggested by Eckersley:

If I want to speak on behalf of orange-bellied parrots whose habitat will be destroyed by a proposed development, in what sense can I act as their political representative? I have no basis upon which to claim I am their delegate because I have no mandate or authorisation from parrots to speak on their behalf and I cannot justify my arguments or actions to them. I have no expertise in ornithology and I do not (I hope) resemble a parrot or share or understand a parrot's view of the world to claim authority to speak on the basis of a common parrot identity. ... All I can claim is that I care about the fate of the parrots.

Eckersley, 2011, p. 236

O'Neill (2004, p. 496), in contrast, suggests that the source of legitimacy that can be tapped in the absence of authorisation, accountability and responsiveness is 'epistemic. Those who claim to speak on behalf of those without voice do so by appealing to their having knowledge of the objective interests of those groups, often combined with special care for them.' In another passage, Eckersley agrees that knowledge may be another source of legitimacy, but stresses that knowledge may not only derive from traditional Western forms of expertise:

authority to represent nature might also derive from traditional, local or vernacular knowledge (such as indigenous peoples or local fishers) or from other forms of knowledge or 'moral capital'. For example, particular environmental non-government organisations (NGOs, such as Greenpeace or Friends of the Earth) or environmental advocates (such as Al Gore) might acquire 'moral authority' to speak for nature on the basis of a reputation acquired through a long history of research and campaigning.

Eckersley, 2011, p. 252

The arguments by O'Neill and Eckersley are in line with a broader development in political theory, the representational turn. This stresses that many forms of advocacy and civil engagement can be read as types of representation, putting emphasis on the audience recognising or rejecting a representative based on their actions (e.g. Saward 2010, Urbinati and Warren 2008). Thus, one could argue that the representation of animals may not satisfy the highest standards of representation that we are readily applying towards democratic representation of humans, but that

carefully designed processes and institutions would allow for a *decently* legitimate form of representation.

Consider for example Cochrane's proposal to elect representatives through citizen assemblies. This qualifies the authorisation and accountability mechanism to ensure that the representative relationship between animals and their respective representative is not easily exploited by the designated animal representative. Consider too, Donaldson and Kymlicka's argument taken from the collaboration with disabled members of our society. We commonly consider it an advantage that collaborators knowing those challenged individuals well can speak up for them and so have their perspectives be part of the policy-making process. Lastly, consider that indirect representation necessarily has a level of imperfection with regard to legitimacy. In mass societies, some level of disconnect between represented and representative is not to be avoided.

What's on the line? Democratic legitimacy is an important value that should not (and may be cannot) easily be traded off. Authorisation, accountability, and responsiveness all matter because this ensures that the interests of the represented get the recognition they deserve. These mechanisms are set-up to avoid abuse of power and corruption. Furthermore, these institutions are designed in such a way to not allow vested interests to undermine politics.

There is an undeniable difference with regard to the legitimacy of the relationship between representatives and the represented in the case of non-human sentient beings. I have offered reasons for why we may consider this a gradual rather than a substantive difference. The lack of authorisation, accountability, and responsiveness may provide some ground to argue that it justifies not including non-human sentient beings as equal. However, this has to be considered carefully, for the reason here is not that non-human sentient beings have less standing, but *despite them having the same standing*, we cannot find the appropriate and legitimate means for having their interest included in the policy process. However, we have seen that Cochrane as well as Donaldson and Kymlicka propose institutional set-ups that can arguably ensure a sufficient level of legitimacy. In conclusion, the concern for legitimate representation does not reduce the claim of animals to equal and proportionate representation.

Reducing the circle of inclusion

Here's a second argument that can be raised against the representation of animals in politics. This strategy, albeit not devised for this scenario, can be attributed to Robert Goodin. Goodin is concerned, as we are, that a causal reading of the all-affected principle, may turn out to be very

inclusive and considers a way to limit the extent of inclusiveness:

The “all affected interests” standard can thus be satisfied in either of two ways. One is by expanding the franchise, giving a say to all those who would be affected. Another is by restricting the power of the demos, so it is only allowed to make decisions that affect only those who do have a say.

Goodin, 2007, p. 63

What would ‘restricting the power of the demos’ look like in the case of animals? By strictly limiting the human footprint on the natural world, for example through veganism, radically reducing the usage and exploitation of land and sea, mitigating climate change aggressively and ‘giving back’ large extents of land to nature, the number of non-human animals relevantly affected by human conduct would be reduced drastically. Indeed, in such a scenario, Donaldson and Kymlicka’s ‘wild animals’ would indeed not be relevantly affected and their argument that we ‘only’ have to honour their sovereignty, and comply with our duty of assistance seems justified. Nonetheless, what they call liminal and domesticated animals would still be relevantly affected as they live among or with us and to a significant extent depend on human conduct. As such, this strategy would not result in a state where there would be no non-human sentient beings with a legitimate claim to be represented, it is only the number of those animals that would be drastically reduced.

However, Goodin is sceptical that this strategy of restriction would be feasible.

a demos would be empowered to make only decisions that affect its own members, and no one else. Notice, however, that on the expansive analysis of what interests might be “possibly affected,” any given decision is highly likely to affect a great many interests, at least some of which are likely not to be included in any relatively restricted demos.

Goodin, 2007, p. 63

Even if we limit our footprint on the natural environment as described in the scenario above, our decisions will significantly affect many animals, wild, liminal, and domesticated. Indeed, it seems that as long as we share planet Earth with other species, there is no way not to affect animals. Even trying to keep animals out would interfere with them as it would block e.g. their nomadic routes of travel or exclude them from parts of their natural habitat. Consequently, reducing human exploitation of and interference with our physical world may drastically reduce the number of

animals that hold a claim to representation, but it cannot overcome the problem.

Furthermore, this strategy does not seem more feasible than implementing an equal and proportionate system of representation for sentient animals in the first place. Consider the loss we would incur from losing animals as pollinators of our crops and of no birds singing around us. Nonetheless, reducing the effects of our decisions on animals may be part of a strategy to come to fair terms of conduct among all members of our multi-species societies. But to be clear, this is not an easy fix for a hard problem and as long as animals are relevantly affected, they have a claim to take part in decisions that affect them. Thus, the strategy of drawing a closer circle of inclusion does not undermine the procedural entitlement of relevantly affected animals to equal and proportionate representation.

The stability concern

A third argument that may be raised concerns the stability of institutions and society. To maintain a political process able to decide on relevant questions, only so much change can be made at a time. A quick transition may demand too much of established processes and institutions and may potentially overwhelm the political system, as such risking its stability. In consequence, more harm than good could be done. For, even if the political system is not protecting animals sufficiently and does not sufficiently consider their interests, it is nonetheless the societal system ensuring at least a minimal level of protection for some. Without that stability, living conditions for many non-human and human animals could be worse, still. As such, the equal representation of animals is not to be considered feasible any time soon.

This argument can be accepted by those arguing in favour of the representation of animals. For, their arguments are arguments about what an ideal political system should look like or may in certain cases also suggest some institutional reforms on the way towards this goal. Thus, this argument for stability does not counter the claim to representation of animals at all. It may only point towards the fact that the transition towards such a democratic system honouring the claim of all affected interests equally and proportionally is far away and that it may take considerable effort and time to reach it. Consequently, the concern for stability does not undermine the claim of animals to be represented equally and proportionately.

The concern for democratic quality

Furthermore, one may worry that representing animals as Cochrane as well as Donaldson and

Kymlicka suggest may diminish the quality of democratic deliberation and discourse. The reasoning may be that as representatives of animals would be added to parliament, the ability to find consensus or compromise is reduced. This worry is based upon the reasoning that the representatives of animals may be considered more delegates than trustees and that they are here ‘only’ to feed in the interests of animals vis-a-vis ‘normal’ representatives who ought to represent ‘everyone.’

Indeed, the proposals we have been discussing all argue for additional representatives for animals. However, this is because ordinary representatives are not considered to be representing animals within their constituencies. We could imagine a system where every representative has to represent all sentient members of their constituency. However, how would non-human animals authorise or hold accountable their representative? Such ‘combined’ representatives of human and non-human animals would likely be biased towards their human constituency. As such, it may be more appropriate that non-human animals are represented by distinguished representatives who either only represent those animals they know well – as suggested by Donaldson and Kymlicka – or who represent all animals within their constituency, chosen by an independent mini-public or another process conferring an appropriate level of legitimacy, as suggested by Cochrane. Thus, the concern for democratic quality does not undermine the procedural entitlement of animals to equal and proportionate representation.

Animals as co-creators of policy

Lastly, let us consider the argument that animals may not want to or may not be able to be co-creators of policy. They may not be able to consider rules and principles prospectively, weighing cost and benefits, or considering trade-offs between different goals or values adequately. Cochrane argues that non-human animals may not be able to co-create policies and Donaldson and Kymlicka also suggest that non-human animals are dependent agents requiring collaborators, while maintaining that animals may be able to cooperate and be ‘prepared to assert their own preferences, and to (re)negotiate terms of cooperation—in short, to exercise a form of citizenship involving both rights and responsibilities’ (Donaldson and Kymlicka, 2011, p. 120).

There are non-human sentient animals that are relevantly affected by today’s decisions, but on Cochrane’s view they are arguably not able to participate in making those decisions in an appropriately reasonable fashion. This is not to say that they don’t have goals, needs or interests that should be taken into account when any such decision is being made. But democratic decision-

making requires at least some extent of understanding for other beings' interests and needs as well as a general understanding of how politics and society can and should be organised. On Donaldson and Kymlicka's view, however, they can be co-creators of policy with the assistance of collaborators. They maintain that many animals could be capable of negotiating the terms of cooperation, once 'their human companions are prepared to enable the development of these capacities' (2011, p. 120). It remains an open question whether indeed this would be possible, as this has not been tried to a sufficient extent, and I will for now remain agnostic with regard to this question.

What are the consequences of these views? What we encounter here is a situation where non-human animals may be as or even more affected than humans by a decision, but on most views, they may nonetheless be less apt to take the decision. Indeed, this would allow justifying the difference in procedural entitlements between human and non-human sentient beings suggested in the various proposals discussed. Humans get to authorise and hold accountable their representatives because they can, while animals need another form of authority, such as a mini-public, to authorise and hold accountable representatives for them.

On Donaldson and Kymlicka's view, however, animals ought, as co-creators of policy, be assisted in making policies by collaborators. They do not grant this entitlement to all affected animals and in such instances where non-domesticated animals are relevantly affected, the criterion of inclusiveness may be infringed, depending on whether you accept the claim – discussed above – that wild and liminal animals are not owed the same procedural entitlements as domesticated animals.

In response, one may be worried that the principle of equality should be honoured with regard to the procedural entitlements of animals and not be diminished, because they may be less or unable to co-create policies. In response, some may be inclined to argue that if animals cannot have full representation, we better make everyone equal by giving no one – including humans – full representation. In other contexts, this is called a levelling down argument. No one would be made better off but some would be made worse off for the sake of equality.

I think that the argument has merit, but that a full analysis of the loss and gain in various values involved will suggest to not level down. Let me explain. My worry would be that while this may mean more democratic equality, it would lessen democratic legitimacy, as representatives that could be authorised and held accountable by humans would instead e.g. only be authorised by a mini-public. More responsiveness between those represented and representatives I consider to be an advantage that may also benefit others as it may result in substantively better policy outcomes, too.

As such, a gain in democratic equality would be paid by a loss of democratic legitimacy and a loss in the quality of democratic output. For those who consider democratic equality only one value amongst others, albeit probably an important one, they will have to carefully consider whether the gain in equality justifies the loss in input as well as output legitimacy.

Note that the argument regarding the ability to co-create policies only concerns the *equality* of democratic inclusion. It does not provide grounds to differentiate between human and non-human animals in terms of *proportionality*. Sentient animals are owed *proportionate* representation. There cannot be one representative of all non-human animals of a constituency and one for all humans of a constituency if the number of human and non-human animals is not (roughly) equal. And there would have to be as many collaborators for non-human animals assisting them in taking part in the policy process as there are sentient (domesticated) animals relevantly affected by the policy process. To state this positively: honouring the claims of non-human animals requires representing them according to their number.

To sum up. We have seen that the previous arguments did not result in a mitigation of the procedural entitlement of animals to proportionate representation. However, the limited ability of animals to co-create policies may be a reason to reduce their claim to equal representation vis-a-vis humans. This is a question deserving further discussion. However, the discussed arguments do not provide grounds to question the claim of representation *in proportion* to the number of affected animals. Donaldson and Kymlicka and Cochrane do not explicitly endorse proportionality, but they also do not deny it. On a charitable reading of their accounts, the number of representatives or collaborators ought to be proportionate to the number of animals and to the number of human representatives. In consequence, the number of animal representatives ought presumably to be much larger than that of representatives of humans. On a more general note, I have shown that it will require more sophistication to design institutions for the representation of animals and an explicit discussion of proportionality and equality and its potential consequences.

Part V - Where do we go from here?

This paper is concerned with what is owed to all sentient beings affected by political decisions. Various proposals for the inclusion of animals in policy processes have been made. I have exemplarily discussed four prominent proposals for the representation of animals. As exhibited by those proposals, what is understood as representation of animals varies widely: While Eckersley proposed to install an environmental defender's office to represent animals, Dobson suggested a

low number of designated animal representatives in parliament, while Cochrane suggests representatives for all animals from each constituency. Lastly, Donaldson and Kymlicka propose the representation of animals through collaborators, a concept already applied in the representation of disabled people. Thus, we can observe that even among the small group of discussed examples a potpourri of institutional set-ups is proposed under the umbrella concept of representation of animals.

This is striking. It is as if it would not matter whether you had a ticket for tonight's concert in the first row or a standing place with an obstructed view, just as long as you got entry to the concert. The question of inclusion deserves further differentiation concerning the tickets that are handed to those who get to join the concert.⁷⁴ Indeed in the democratic concert, there need to be very good reasons for handing out tickets for the second row – ideally there would only be one. There will be ongoing discussions about whether animals should be sitting in the first row depending on whether they can co-create policies. Further arguments and empirical insights are needed here. However, another issue has been largely overlooked: The number of tickets handed to animals. I maintain that the number of tickets animals get needs to be in proportion to the number of individuals. Thus, even if humans get tickets for first row, the number of tickets they get needs to reflect the number of humans in relation to the number of animals. The number of tickets for animals is supposedly *much* larger.

I have not argued for any specific institutional set-up that would honour the procedural entitlements of relevantly affected animals. However, it has become clear that any such set-up is required to represent all sentient beings in proportion to their number. On the basis of the considered arguments, there is no reason to differentiate between human and non-human animals.

With this paper, I have added some thoughts on crucial components of the ideal set-up of democratic institutions. Given the disastrous status-quo, such thoughts may seem relevant only for day-dreaming, but I believe it is important to know what political institutions should ideally look like, even if this not attainable any time soon: Knowing what democratic institutions should ideally look like is important to guide decisions about our political system and how we should tackle the transformation of it. Furthermore, knowing what institutions should ideally look like is also relevant because it gives us a yard stick for criticising the status-quo. It allows us not only to say that we are off track, but it allows us to say how far off we are.

Having largely ignored any concerns on how to get to the ideal state, let me conclude with a

⁷⁴ Another question is, of course, how to best set-up the show so that it is ideally enjoyed by everyone. But that's beyond the scope of this paper.

few sentences on where to go from here. In times where there are many diverging opinions on which steps should be taken next, I think more in-depth deliberation may be crucial. Philipp von Gall and I (2023) have recently suggested that we should take mini-publics one step further and use them to decide on what would be appropriate next steps in including non-human animals in the democratic decision process. This would be a body, representative of the general (human) public charged with the task of recommending such steps forward. Perspective change is a common element in mini-publics, but we suggest taking this one step further: The participants would be asked to take on the role of a specific animal individual at least for some time during the deliberation, suggesting that they should speak from the perspective of that specific individual. If this mini-public is appropriately connected to politics, for example through resulting in a duty of consideration of the parliament of the recommendations, as in Ireland regarding mini-publics on abortion and climate change policy (Farrell, Suiter, & Harris, 2018), this may allow us to move on.

There is a long way to go until we will live in a democracy giving each and every one the opportunity to enjoy their full right to participate in decisions in ways appropriate to them. This could be one step in that direction.

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Caring about Global Health Implies Committing to Qualified Moral Veganism

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This article explores whether veganism is required to protect global health. I start from the theory that we should always aim to promote the greatest positive 'Global Health Impact' ('GHI'). I then outline that diets that include animal products generally fail to optimise positive GHI. The first reason is that the consumption of animal products is frequently preceded by the human infliction of death upon the animals whose products are being consumed. The second reason is that animals frequently suffer significant pain in the process of being reared or caught for human consumption. My third concern is that the consumption of animal products frequently impacts negatively upon our physical health. I provide recent evidence to support these reasons before turning to a neglected fourth reason the consumption of animal products is frequently problematic: its impact on our mental health. While reasons one to three do not provide persuasive arguments against the consumption of animal products given that such consumption is possible without impacting negatively either upon nonhuman animals or upon our physical health, giving due consideration to the fourth reason is, in most situations, devastating for the human consumption of animal products. The conclusion is that caring about global health implies committing to qualified moral veganism.

Key words: animals, cannibalism, ethics, veganism

Introduction

The aim of this article is to explore whether veganism is required to protect global health. I define veganism as the practice of avoiding the consumption of animals and of products derived from animals' bodies. The number of people who adopt vegan diets is growing in some countries, including the United Kingdom. Most people who adopt veganism do so for moral reasons. Moral

veganism is the theory that one ought to avoid the consumption of animals and of products derived from animals' bodies.⁷⁵

I approach the question whether veganism is required to protect global health by starting from the moral theory, defended elsewhere, that we should always aim to promote the greatest positive 'Global Health Impact', or 'GHI' – a mnemonic device.⁷⁶ If we adopt such a theory, the question must therefore be asked what doing so might entail for the consumption of animal products. Specifically, we must address whether there are situations where consuming particular animal products promotes the greatest positive GHI and whether there are situations where it fails to do so.

The following example illustrates why I believe that there are situations where consuming animal products promotes the greatest positive GHI. Imagine an Inuit eating fish whom they have caught (see figure 1). Fish can provide omega-3 fatty acids and many vitamins, including vitamin D and B2 (riboflavin), as well as calcium, phosphorus, iron, zinc, iodine, magnesium, and potassium. If a particular Inuk would not be able to obtain these nutrients from other sources, it might be concluded that eating fish promotes the greatest positive GHI. One might counter that a practice that kills a fish could never be considered to promote the greatest positive GHI. Accordingly, it might be argued that the Inuk in question should forgo killing the fish in order to eat them on the basis of the view that it is better for global health to save both the life of the human being and the life of the fish, regardless of whether or not this might compromise the Inuk's health.



Figure 1: Av Kjell Søgård/Anno Norsk skogmuseum, *Grindalsfluefiske*; CC BY NC ND 4.0; <https://snl.no/grindalsflue>; accessed 12 March 2025.

⁷⁵ Jan Deckers, *Animal (De)liberation: Should the Consumption of Animal Products be Banned?* (London: Ubiquity Press, 2016), <https://doi.org/10.5334/bay>

⁷⁶ See Jan Deckers, 'Negative "GHIs", the Right to Health Protection, and Future Generations', *Journal of Bioethical Inquiry*, 8.2 (2011), 165–176, <https://doi.org/10.1007/s11673-011-9295-1>

Someone who adopts biocentric egalitarianism, which maintains that all living beings should be granted equal moral significance, might adopt such a position.⁷⁷ In such a perspective, it would be as problematic to kill a human being as to kill a fish, or even a plant. Accordingly, if it would be wrong to kill a human being in this scenario, it would also be wrong to kill a fish. Some writings of Albert Schweitzer (figure 2), whose writings I engaged with in my first dissertation on ecological ethics,⁷⁸ suggest that this is the position he adopted, for example where he writes that ‘ethics consist ... in my experiencing the compulsion to show all will-to-live the same reverence as I do to my own’.⁷⁹

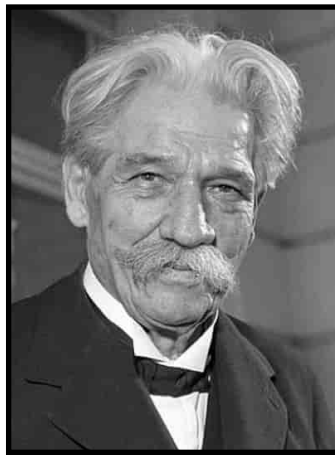


Figure 2: Rolf Unterberg/Bundesarchiv, *Albert Schweitzer*; CC BY SA 3.0; https://snl.no/Albert_Schweitzer; accessed 12 March 2025.

In practice, however, Schweitzer did not show the same reverence for all living beings. Rather, he was a human speciesist (someone who gives moral priority to human beings over members of other species), without denying the importance of valuing all life. I agree with such a position, which is why I do not advocate biocentric egalitarianism. The example of the Inuk illustrates, in my view, that there are situations where eating animal products can maximise positive GHI, even if doing so may undermine the health of some, for example that of a fish.

It is undeniably the case that animal products in general can provide positive GHIs. Many animal products tend to have a wider range and a greater quantity of amino acids compared to many other foods, as well as some substances that are not present in many other foods, for example

⁷⁷ See for example Paul Taylor, *Respect for Nature: A Theory of Environmental Ethics* (Princeton: Princeton University Press, 1986).

⁷⁸ Jan Deckers, *De joods-christelijke traditie, schuldig aan of bevrijdend uit de milieucrisis?*, Dissertation MA Religious Studies (Leuven: K.U. Leuven, 1992).

⁷⁹ Albert Schweitzer, *The Philosophy of Civilization*, (Amherst, NY: Prometheus Books, 1987), p. 309.

vitamin B12. The production and consumption of animal products can increase resilience in the local food system as animals can provide food in situations where plants and other foods that people could eat may be hard to find or to obtain. A further example of how the consumption of animal products can provide positive GHIs is by reducing the moral costs associated with importing fruit and vegetables. While I believe that the importation of some foods from distant locations can be justified, I also adopt the view that transporting non-animal source foods over large distances should sometimes be avoided where local animal products could be produced or used.

The key question here is to determine when it might be acceptable to sacrifice the health of some to promote the health of others. My concern is that many people fail to answer this question appropriately, for example, when they decide to kill and eat a fish in situations where it is easy for them to obtain the same nutrients from eating products derived from plants. Indeed, there are many situations where consuming animal products fails to promote the greatest positive GHI. In what follows, I will outline three serious moral concerns that we should consider.

Negative GHIs of consuming animal products on nonhuman animals through the human infliction of death

The first is that the consumption of animal products is frequently preceded by the human infliction of death upon the animals who are being consumed. While philosophers have debated for a long time whether inflicting death upon an animal is a legitimate moral concern, I adopt the view that it is.⁸⁰ A dead animal is not a healthy animal. Admittedly, I believe that there are some situations where it may be better for an animal to be dead than to be alive, for example, where animals suffer such intense and protracted pain that they are no longer able to enjoy their lives. However, in the vast majority of situations, it is better for an animal to be alive than to be dead. Although some animals may not be able to reflect on the value of their lives, there is good reason to think that just about all animals seek to engage in behaviours that promote their lives and to avoid behaviours that undermine them, which is shown by the fact that they avoid negative and seek positive stimuli. A biocentric egalitarian might object that the same (will-to-live, as Schweitzer put it) applies to plants and that killing an animal in order to eat them is just as problematic as killing a plant in order to eat it. I agree with the ontological perspective that plants also seek out situations that promote their lives. However, I also adopt the view that inflicting death upon an animal is more problematic than

⁸⁰ See for example Jeff McMahan, *The Ethics of Killing: Problems at the Margins of Life* (Oxford: Oxford University Press, 2002).

inflicting death upon a plant where the killing is not being done to promote the best interest of the animal in question.

It might be countered that this is not a good reason to question the consumption of animal products as such, given that many such products can be consumed without inflicting death. This is true. However, it is worth mentioning that the consumption of animal products can inflict not only direct death upon some animals, but that it can also do so indirectly. One example is from the dairy industry (see figure 3), where many calves are killed at birth due to the fact that male calves are not needed for the production of milk and are not as useful in the production of beef compared to beef cattle. The same fate awaits many female calves due to the fact that they are surplus to requirements. Cows typically give birth to a calf every year from the age of 2 onwards. As they are usually replaced after 3 to 5 lactations, only about 40 to 66% of all female calves who are born in any given year will be needed to replace the cows who are slaughtered. The figure is probably closer to the lower estimate, given that the British Cattle Breeders Club write that ‘about 7% of farms reached averages of 5 lactations or more’, adding that ‘the natural lifespan of cattle is said to be approximately 20 years ... but very few dairy cattle reach that age.’⁸¹



Figure 3: Farm Watch, *Dead Calf*; CC BY 2.0; <https://www.flickr.com/photos/93911830@N06/25518025984/>; accessed 12 March 2025.

⁸¹ <https://www.cattlebreeders.org.uk/digests/76/papers/3236/>; accessed 18 November 2024.

Another example is from the egg industry. Farmers specialised in breeding laying hens typically kill roosters when they hatch. As they are less useful than chickens bred for their meat due to the lower efficiency by which they convert feed into body products that people eat, they are killed at birth. Hens are allowed to live as their eggs are useful, and egg-laying hens or ‘layers’ could live for about 15 years. However, they are typically killed at quite a young age. The Humane League UK, for example, states that ‘layer hens ... live to be about 18 to 24 months old before being sent for slaughter.’⁸²

Negative GHIs of consuming animal products on nonhuman animals through the human infliction of pain

My second moral concern is that animals frequently suffer significant pain that is inflicted upon them in the process of being reared or caught for human consumption. Farmed animals are frequently kept in high densities, increasing risks of stress and disease. The reason they are kept in these ways is that it is frequently cheaper to keep them like that compared to the alternatives. Economic calculations usually favour rearing systems that inflict more pain and suffering on animals compared to other systems. In some situations, human actions that occur before animals are conceived ensure that they will suffer significant pain once they are alive. An example is the Belgian Blue breed of cattle (see figure 4), who have a double-muscling genetic trait. Although the trait caters for the development of bigger muscles, these animals can suffer many health problems due to their genetic make-up, including difficulties in giving birth (as many births rely on caesarean sections), in walking and swallowing (due to congenital muscular dystonia, or hyperekplexia), and in increased risks of fractures and neurological problems associated with pathological bones compressing cranial nerves (due to osteopetrosis), as well as Weak Calf Syndrome.⁸³

⁸² <https://thehumaneleague.org.uk/article/how-long-do-chickens-live>; accessed 3 March 2025.

⁸³ Aleksandra Cieplach, Karolina Rutkowska, Jolanta Oprządek, et al., ‘Genetic Disorders in Beef Cattle: A Review’, *Genes & genomics* 39.5 (2017), 461-471, <https://doi.org/10.1007/s13258-017-0525-8>; Mathilde Pas, Jade Bokma, Thomas Lowie, et al., ‘Sepsis and Survival in Critically Ill Calves: Risk Factors and Antimicrobial Use’, *Journal of veterinary internal medicine*, 37.1 (2023), 374-389, <https://doi.org/10.1111/jvim.16607>; Michael Miller, Arthur Otter, ‘Diagnosing Neuromuscular Diseases of Calves and Young Cattle’, *In Practice* 46.3 (2024), 130-138, <https://doi.org/10.1002/inpr.417>



Figure 4: Peter Van den Bossche, *Belgian Blue Bull*; CC-BY-SA-2.0; https://commons.wikimedia.org/wiki/File:Belgian_Blue_Bull.jpg; accessed 12 March 2025.

Another example is the dominant breed of chickens used in the laying industry. These chickens have been bred to produce heavier and bigger, as well as a much larger number of eggs. The fact that they have been selected to be like that causes many problems, including greater incidences of cloacal prolapse, egg yolk peritonitis, egg binding, impacted oviduct, neoplasia (uncontrolled growth of cells), ovarian cancers, stress, as well as aggressive behaviour related to stress.⁸⁴

Many animals who are caught for human consumption also suffer pain in the process. Whereas there is significant philosophical debate about which animals might be able to feel pain, and how much, many people believe that many animals feel pain when they are caught. Fish, for example, include animals from several taxonomic groups, with the more than 32,000 species that have been identified constituting more than half of all vertebrate species.⁸⁵ In the days when I

⁸⁴ For a good discussion of the issues raised by these, see: Yamini Narayanan, 'An Ecofeminist Politics of Chicken Ovulation: A Socio-Capitalist Model of Ability as Farmed Animal Impairment', *Hypatia* 39.3 (2024), 568-588, <https://doi.org/10.1017/hyp.2023.98>

⁸⁵ Incidentally, in relation to this diversity, see: Colin Allen, 'Fish cognition and consciousness', *Journal of Agricultural and Environmental Ethics* 26 (2013), 25-39, <https://doi.org/10.1007/s10806-011-9364-9>. Allen mentions that the coelacanth is more closely related to us than to the tuna, who is more closely related to us than to the shark.

engaged in recreational fishing, we used hooked fly maggots or worms to lure fish, and sometimes we impaled other fish on hooks in our attempts to catch pike. Many in the fishing industry also use these methods, even if I have no doubt that it is painful for fish to be hooked or impaled.

Most fish, however, are caught in nets, which can also injure many other animals (see figure 5). Fish who are caught by deep-sea trawlers are dragged from the bottom of the sea. The colocation of large numbers of fish is bound to stress the animals. Many die before they are hauled on board by being crushed under the weight of other fish, resulting in death by injury and suffocation. Those who are still alive when they are on board either die from being cut open when they are being ‘cleaned’ or are left to die while being stored in ice water, resulting in anoxia. Some species lose consciousness only after several hours of being immersed in ice. Other stunning and slaughtering methods include clubbing, spiking, gassing, bleeding, and electrocution. These methods to engage with fish are bound to inflict pain on them.⁸⁶



Figure 5: Reuters. *Scots Take Hard Line on Brexit Fishing Rights*; CC BY 4.0; <https://www.freemalaysiatoday.com/category/world/2018/03/20/scots-take-hard-line-on-brexit-fishing-rights/>; accessed 12 March 2025.

Negative GHIs of consuming animal products on our physical health

My third concern with the consumption of animal products is that it frequently results in negative impacts upon our physical health. People are more likely to obtain a number of physical illnesses

⁸⁶ See for example Lynne U. Sneddon and Jonathan A.C. Roques, ‘Pain recognition in fish’, *Veterinary Clinics: Exotic Animal Practice*, 26.1 (2023), 1-10, <https://doi.org/10.1016/j.cvex.2022.07.002>

through consuming some animal products. For example, some animal products contain antibiotic-resistant strains of *Salmonella*, the main pathogen involved in food-related deaths in humans, as well as of *E. coli* and *Campylobacter*.⁸⁷ Some have also been associated with increasing risks of diverticular disease,⁸⁸ as well as of cardio-vascular disease and cancer.⁸⁹

However, while the consumption of animal products can cause ill health for those who consume such products, it can also impact negatively upon the health of others. Many human diseases stem from nonhuman animals. Such diseases where pathogens jump from nonhuman to human animals are known as zoonoses. In 2011, I published an article to encourage debate on whether, in light of the fact that the farmed animal sector contributed to the emergence of H1N1 flu, and that the sector in general contributes significantly to the burden of human disease, a range of systems used in the farmed animal sector survive moral scrutiny.⁹⁰ In spite of the fact that the article was published in one of the leading journals in health care ethics, it failed to encourage such debate. One marker of this lack of debate is that, up to this day, it has not been cited by anyone else. This may be related to the quality of the article, but it would seem odd that much of my other work is cited regularly whereas this paper is not. I suspect that it is more plausible to think that most scholars who deal with health care ethics lack enthusiasm to scrutinise this area.

This is of some concern as the pandemic caused by SARS-COV-2 (COVID-19) highlights the link between the consumption of animal products and human disease again, at least if this zoonosis ‘originated in wildlife’,⁹¹ if some of this wildlife was sold in the Huanan Seafood Wholesale Market in Wuhan, and if the epidemic which turned into a (larger) pandemic started off at this market.⁹² While the jury may still be out on the proximate causes of the pandemic, the World

⁸⁷ See for example Bonnie M. Marshall and Stuart B. Levy, ‘Food Animals and Antimicrobials: Impacts on Human Health’, *Clinical Microbiology Reviews* 24.4 (2011), 718-733, <https://doi.org/10.1128/cmr.00002-11>

⁸⁸ Francesca L. Crowe, Paul N. Appleby, Naomi E. Allen, et al., ‘Diet and Risk of Diverticular Disease in Oxford Cohort of European Prospective Investigation into Cancer and Nutrition (EPIC): Prospective Study of British Vegetarians and Non-vegetarians’, *BMJ* 343 (2011), <https://doi.org/10.1136/bmj.d4131>

⁸⁹ See for example: Juliana C. Vinagre, Carmen G. Vinagre, Fernanda S. Pozzi, et al. ‘Metabolism of Triglyceride-rich Lipoproteins and Transfer of Lipids to High-density Lipoproteins (HDL) in Vegan and Omnivore Subjects’, *Nutrition, Metabolism and Cardiovascular Diseases* 23.1 (2013), 61-67, <https://doi.org/10.1016/j.numecd.2011.02.011>; Jack Norris and Virginia Messina, *Vegan for Life: Everything You Need to Know to Be Healthy and Fit on a Plant-Based Diet* (Cambridge, MA: Da Capo Lifelong Books, 2011).

⁹⁰ Jan Deckers, ‘Could Some People Be Wronged by Contracting Swine Flu? A Case Discussion on the Links between the Farmed Animals’ Sector and Human Disease’, *Journal of Medical Ethics* 37 (2011), 354–356, <http://dx.doi.org/10.1136/jme.2010.040089>

⁹¹ Charles Calisher, Dennis Carroll, Rita Colwell, et al., ‘Statement in Support of the Scientists, Public Health Professionals, and Medical Professionals of China Combatting COVID-19’, *The Lancet* 395.10226 (2020), E42-E43. [https://doi.org/10.1016/S0140-6736\(20\)30418-9](https://doi.org/10.1016/S0140-6736(20)30418-9)

⁹² Jon Cohen, ‘COVID 5 Years Later: Learning from a Pandemic Many Are Forgetting’, *Science* 387.6729 (2025), 10-11, <https://doi.org/10.1126/science.zl5ut0y>

Health Organization emphasised in a recent report that many ‘high-threat pathogens’ bear a connection with the human consumption of animal products, including ‘live animal markets, ... increased human-animal contact, ... global travel and/or international trade of animals, ... increasing human incursion into animal habitats, increasing interactions with animals (in particular, wildlife), ... intensive animal production and a rise in the number of animal markets and consumption of animal foods’.⁹³

Apart from the zoonotic potential of diets that include animal products, such diets affect human health in many other ways. Take for example the use of glyphosate, the most widely used pesticide in the world. Glyphosate is a herbicide used both on crops for direct human consumption and for animal feed. However, since much animal feed is not converted (efficiently) into products that are eaten by humans, diets that include animal products from animals who have mainly been fed things other than grass generally account for a greater use of this weed killer. Glyphosate can now be applied directly on some crops as some plants have been engineered to be resistant to it. Crops that are not resistant to it may also be sprayed to kill the crop so that it dries off before being harvested. Wheat, for example, may not need to be dried in a kiln to preserve it if it is killed by glyphosate before being harvested. The health effects of glyphosate have been the subject of significant debate recently. In what follows, I recount some of the controversy, summarised in a brilliant book by Goulson, who writes that the use of glyphosate causes direct negative health impacts on some insects and affects many indirectly by altering the ecosystem.⁹⁴ In 2015, the International Agency for Research on Cancer (IARC) concluded that it was ‘probably carcinogenic to humans’, based on the view that it causes oxidative stress (reducing antioxidants) and genetic mutations.⁹⁵ The European Food Standards Agency then published a report in the same year that claims that it is not carcinogenic, a conclusion supported by the Environmental Protection Agency (EPA) of the USA in 2016, whereas a paper published by 94 scientists is very critical of the report

⁹³ World Health Organization, *Global Framework to Define and Guide Studies into the Origins of Emerging and Re-emerging Pathogens with Epidemic and Pandemic Potential* (Geneva: World Health Organization, 2024), p. 2. The same factors are identified in this article (which discusses their moral relevance): Jan Deckers, ‘What Should We Do to Prevent Zoonoses with Pandemic Potential?’, *Journal of Applied Animal Ethics Research* 5.2 (2023), 147-169. <https://doi.org/10.1163/25889567-bja10043>

⁹⁴ Dave Goulson, *Silent Earth: Averting the Insect Apocalypse* (Dublin: Vintage 2022).

⁹⁵ World Health Organization, International Agency for Research on Cancer, *IARC Monographs Volume 112: evaluation of five organophosphate insecticides and herbicides* (Geneva: World Health Organization, 2015). <https://www.iarc.who.int/wp-content/uploads/2018/07/MonographVolume112-1.pdf>; accessed 10 March 2025.

by the former, writing that it is a ‘probable human carcinogenic’.⁹⁶ While the jury is still out on whether or not it causes human disease, it is worth noting that the agricultural scientist Benbrook observed that many studies used by the EPA assessment are not peer-reviewed, that some are authored by those with links to the company producing it, and that IARC includes studies where glyphosate had been combined with other chemicals in its review.⁹⁷ This last fact is relevant because glyphosate is never applied purely, but always in combination with other chemicals. In relation to this point, the 94 scientists mentioned above add that ‘glyphosate formulations should also be considered likely human carcinogens’.⁹⁸ The controversy rages on, in the courts as well as in scientific circles, with a recent study concluding that ‘the link between glyphosate and cancer remains inconclusive’.⁹⁹

Although glyphosate may or may not impact on human health directly, there is no doubt that it impacts on human health indirectly by altering the ecosystem’s make-up as it allows some plants to grow at the expense of others. These ecological impacts reduce biodiversity, thereby reducing humanity’s ability to develop new medicines and foods from plants and reducing pollination through the associated eradications of insects and other animals. More generally, the human consumption of animal products impacts indirectly upon human health in many ways through our use and abuse of resources. For analytical purposes, I separate between impacts on land, water, and air areas, even if – in reality – all are intertwined. Before providing some examples of some significantly negative impacts in relation to these areas, however, I would like to highlight that the moral concerns related to all of them are magnified by the scale at which people consume animal products. While average per capita consumption of meat alone roughly doubled in the last 60 years, the global production of meat (measured in tonnes) increased by more than sixfold in the same

⁹⁶ European Food Standards Agency, Conclusion on the Peer Review of the Pesticide Risk Assessment of the Active Substance Glyphosate. *EFSA J* 13:4302 (2015), <https://doi.org/10.2903/j.efsa.2015.4302>; Environmental Protection Agency’s Office of Pesticide Programs, *Glyphosate Issue Paper: Evaluation of Carcinogenic Potential*. https://www.epa.gov/sites/production/files/2016-09/documents/glyphosate_issue_paper_evaluation_of_carcinogenic_potential.pdf; accessed 10 March 2025; Christopher J. Portier, Bruce K. Armstrong, and Bruce C. Baguley, ‘Differences in the Carcinogenic Evaluation of Glyphosate between the International Agency for Research on Cancer (IARC) and the European Food Safety Authority (EFSA)’, *J Epidemiol Community Health* 70.8 (2016), 741-745, p. 743, <https://doi.org/10.1136/jech-2015-207005>

⁹⁷ Charles Benbrook, ‘How did the US EPA and IARC reach diametrically opposed conclusions on the genotoxicity of glyphosate-based herbicides?’, *Environmental Sciences Europe* 31.1 (2019), 1-16, <https://doi.org/10.1186/s12302-018-0184-7>

⁹⁸ Portier et al., *Differences*, p. 743.

⁹⁹ Alberto Boretta, ‘Comprehensive Risk-Benefit Assessment of Chemicals: A Case Study on Glyphosate’, *Toxicology Reports* 13 (2024), <https://doi.org/10.1016/j.toxrep.2024.101803>

period due to the increasing population, where much of this increase is due to the rise in the number of chickens who are killed and eaten (see figure 6).¹⁰⁰

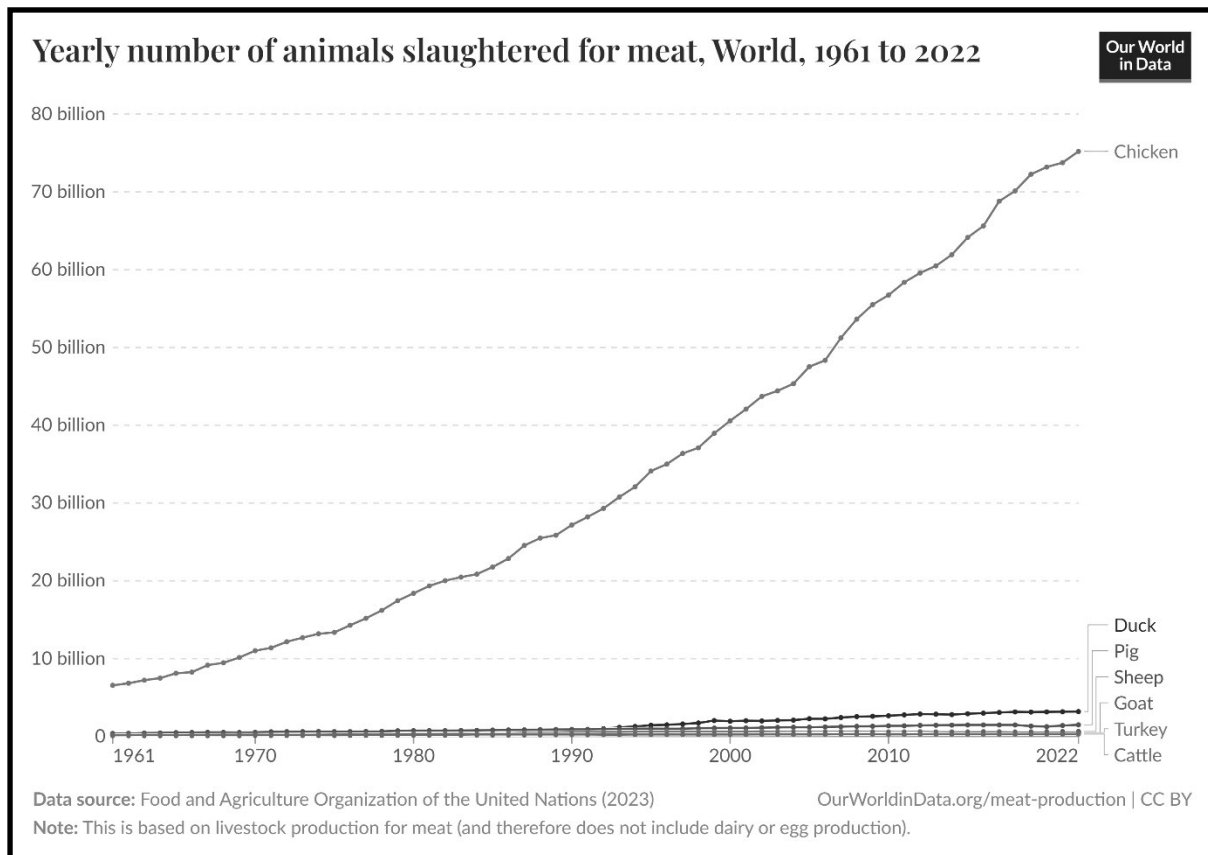


Figure 6: Hannah Ritchie, Pablo Rosado and Max Roser. *Meat and Dairy Production*, 2017, last revised in 2023; CC BY 4.0; <https://ourworldindata.org/meat-production>; accessed 12 March 2025.

With regard to impacts related to the use of the land, it has been estimated that about 75% to 80% of all agricultural land is being used to produce animal products.¹⁰¹ Land use to feed people could be reduced significantly if all people adopted vegan diets. Monbiot, for example, claims that the universal adoption of a vegan diet could reduce the amount of land used for farming by 76%.¹⁰² Ritchie provides a similar figure, producing the following chart based on a study by Poore and Nemecek (figure 7).¹⁰³ The top bar depicts land use for the human diet in 2010: nearly three-

¹⁰⁰ <https://ourworldindata.org/meat-production>; accessed 3 July 2024.

¹⁰¹ Richard King, Tim G. Benton, Antony Froggatt, et al, *The Emerging Global Crisis of Land Use* (London: Chatham House, The Environment and Society Centre, 2023). Available at: <https://www.chathamhouse.org/2023/11/emerging-global-crisis-land-use>; accessed 24 June 2024.

¹⁰² George Monbiot, *Regenesi: Feeding the World Without Devouring the Planet* (Dublin: Penguin Books, 2023).

¹⁰³ Hannah Ritchie, *If the world adopted a plant-based diet, we would reduce global agricultural land use from 4 to 1 billion hectares*. 2021, <https://ourworldindata.org/land-use-diets>; accessed 15 March 2025; Joseph Poore and Thomas Nemecek, 'Reducing food's environmental impacts through producers and consumers', *Science* 360.6392 (2018), 987-992, <https://doi.org/10.1126/science.aag0216>

quarters of the land was used as pasture for grazing and the remaining quarter was used as cropland. If the land used to feed people directly is taken off the total area of cropland, it shows that around 83% of all agricultural land was used for animal products. The chart also shows that the land used for human consumption could be reduced significantly under different dietary scenarios, with the bottom bar showing how much land would be needed for a vegan diet.

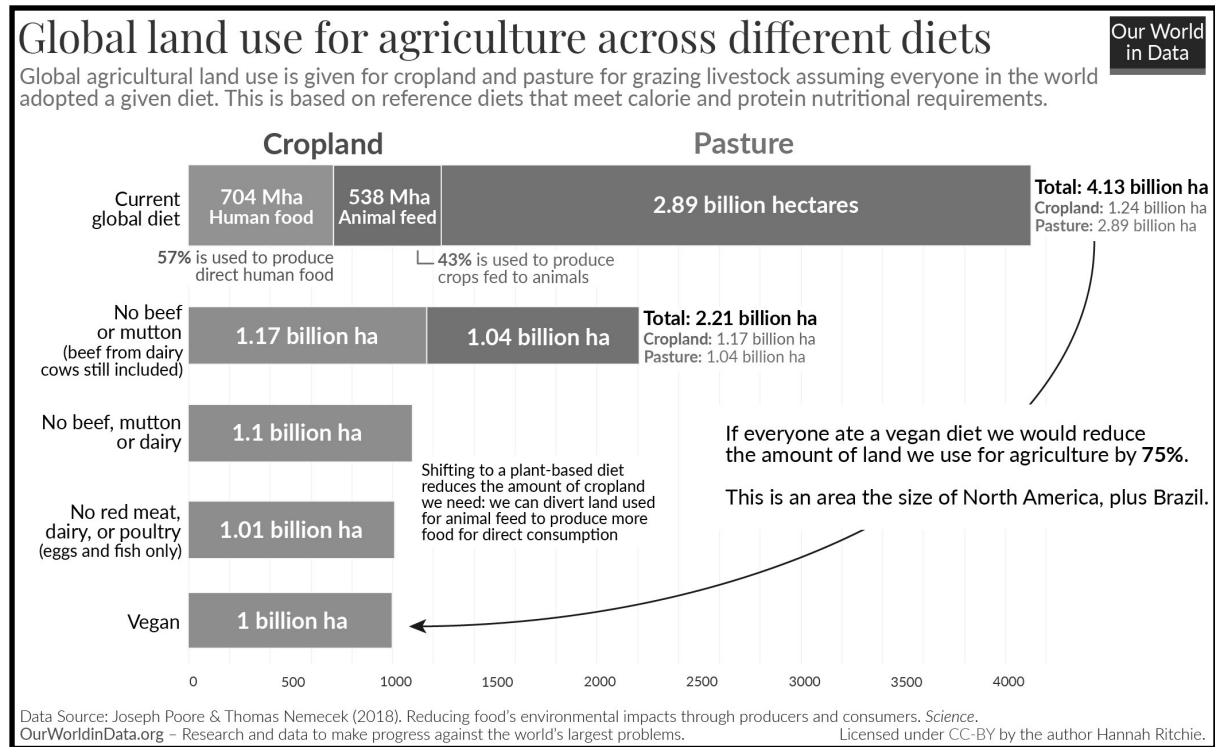


Figure 7: Hannah Ritchie, *If the World Adopted a Plant-based Diet, We Would Reduce Global Agricultural Land Use from 4 to 1 Billion Hectares*, 2021, CC BY 4.0; <https://ourworldindata.org/land-use-diets>; accessed 12 March 2025.

The fact that so much land is used to produce human food poses significant health concerns because much agricultural land is degraded, which implies that productivity declines over time at a fixed level of input. Fertility on much agricultural land can only be maintained through the application of phosphorus that is mined from phosphate rock, a dwindling resource that washes into our streams and seas through erosion. The decline in biodiversity associated with land degradation is likely to undermine resilience and diversity in the food system, as well as the ability to experience the otherness of nonhuman nature. Even if many people may think of landscapes such as those in the Lake District (a national park in northwest England) as iconic instances of nonhuman ‘naturalness’, our baselines of what counts as such a thing have shifted so far due to the steady

increase in human impacts that we do not know what nonhuman nature might look like when it bears no or few marks of human influence.¹⁰⁴ Monbiot is right to refer to these vast grass monocultures as ‘sheep-wrecked’ land.¹⁰⁵ The ‘green and pleasant land’ – described by William Blake in the poem ‘Milton: A Poem in Two Books’ – may not be so pleasant after all.

Many diets that include animal products also use slightly more water compared to other diets.¹⁰⁶ This does not seem so bad if we ignore the impacts of human diets on water sources. Here, the picture looks quite different. Many diets that include animal products account for much more water pollution compared to other diets. Water is polluted in many ways. The use of fertilisers and pesticides is not unique to the farm animal sector, but the sector accounts for more pollution from these sources due to the inefficient land use we described above. Water is also polluted by manure, as well as by the use of antibiotics, detergents, disinfectants, antiparasitic agents, and slaughterhouse waste. Aquatic ecosystems are also impacted negatively by the impacts of fishing, for example from bottom trawling, a method of fishing that catches around a quarter of all fish. Human health is impacted negatively in many ways by this practice, for example through the associated reductions in biodiversity and the destruction of reefs and seagrasses. As reefs and seagrasses absorb large quantities of carbon, bottom trawling removes significant opportunities to mitigate the climate crisis.¹⁰⁷

This takes us to the impacts on the air. Local air pollution is a significant problem, particularly in places where animals are kept in high densities. However, climate change is perhaps the most significant global issue of concern. Agriculture may account for almost a quarter of anthropogenic greenhouse gas emissions, with the majority coming from animal products.¹⁰⁸ Large amounts of carbon dioxide are produced by the fossil fuels that are burned to generate the energy required for the Haber–Bosch process, the process that fixes the nitrogen used in fertilisers. Carbon dioxide is also produced by many other sources, for example by heating and cooling systems, and by the use of farm and slaughterhouse machinery and transportation. Methane is produced by ruminants who digest plant foods through enteric fermentation. The production of fertilisers and

¹⁰⁴ For discussions of ‘naturalness’, see: Sam Zahn, ‘Kingdom within a Kingdom: A Solution to the End of Nature Problem’, *Environmental Values*, online first, <https://doi.org/10.1177/0963271924130403>; Jan Deckers, ‘On (Un)naturalness’, *Environmental Values* 30.3 (2021), 297–318, <https://doi.org/10.3197/096327120X16033868459494>

¹⁰⁵ Monbiot, *Regenesi*s.

¹⁰⁶ Donald W. Bruckner, ‘Water Footprints and Veganism’. *The Journal of Value Inquiry*, online first, <https://doi.org/10.1007/s10790-023-09974-1>

¹⁰⁷ Deckers, *Animal (De)liberation*.

¹⁰⁸ King et al., *The Emerging*.

manure also contributes to emissions of nitrous oxide, a very powerful greenhouse gas. A recent study by Willett and colleagues estimates that the universal adoption of vegan diets could reduce agricultural emissions of greenhouse gases by 80%.¹⁰⁹

Negative GHIs of consuming animal products on our mental health

Finally, people's mental health may be undermined by the consumption of animal products. Many people associate negative health experiences with slaughterhouse work. While such work is physically demanding for those who work in abattoirs, it is also mentally challenging for them and for those who are complicit in the slaughtering of animals, i.e. consumers.¹¹⁰ Killing is rarely a practice that is conducive to good mental health. It is an interesting question whether people's mental health is also undermined by the consumption of products from animals who have not been killed intentionally in order to be eaten. I am thinking here of products, for example eggs and milk, from some chickens and some cows who are allowed to die natural deaths or who are euthanised when it is in their best interests. Even though this does not apply to most chickens and cows, it does apply to some. A mental health concern might be raised here by the question whether continuing to breed animals whose bodies have been shaped to produce much larger quantities of eggs and milk compared to their recent ancestors is appropriate. This includes concerns with the thought that these animals may suffer negative health impacts and through the fact that breeding such animals perpetuates the human domestication of animals. Here, the significant human control of animals' lives through domestication poses a moral concern, regardless of how well the animals may be kept.¹¹¹

However, I am also thinking here of the human consumption of free (non-domesticated) animals who are being consumed after their natural or accidental deaths, for example those who die through being hit by road traffic. Many moral philosophers have no qualms about eating such animals. Singer, for example, has focused his ethics of eating so far entirely on whether or not

¹⁰⁹ Walter Willett, Johan Rockström, Brent Loken, et al., 'Food in the Anthropocene: the EAT–Lancet Commission on Healthy Diets from Sustainable Food Systems', *The Lancet*, 393.10170 (2019), 447–492, [https://doi.org/10.1016/S0140-6736\(18\)31788-4](https://doi.org/10.1016/S0140-6736(18)31788-4)

¹¹⁰ See chapter 4 of Deckers, *Animal (De)liberation*, <https://dx.doi.org/10.5334/bay.e>: This chapter contains a discussion of the work of some slaughterhouse workers in the UK. For a discussion of the views of some slaughterhouse workers in Germany, see Marcel Sebastian, 'Professional Emotional Neutrality and the Role of Background Emotion Work in the Slaughterhouse', *Agric Hum Values* (2025), Online first, <https://doi.org/10.1007/s10460-025-10713-4>

¹¹¹ For a discussion of domestication, see Jan Deckers and Silvina Pezzetta, 'The Ethics of Pigeon Racing', *Sport, Ethics & Philosophy* 17.4 (2023), 465–476, <https://doi.org/10.1080/17511321.2023.2204243>

eating animal products inflicts pain, suffering, or death on nonhuman animals.¹¹² Similarly, Regan, in discussing the practice of turning animals into food, questions only ‘injuring the bodies, limiting the freedom, or taking the lives of animals’.¹¹³ This raises the question whether to refrain from eating an animal who died in a road accident, for example, would – to use the word Wilcox uses – merely be ‘squeamish’.¹¹⁴ I grant that acting or refusing to act on one’s feelings of squeamishness, disgust, or revulsion – which I consider to be similar feelings – may not always be wise. Think of a doctor, for example, who refrains from operating on a patient as they find it revolting to see blood or to open up the human body. However, this does not imply that it would always be wrong (not) to act on the basis of one’s squeamishness, disgust, or revulsion. I highlighted the moral relevance of such feelings before.¹¹⁵ Others have done so too, for example Wilcox, who writes that refusing to eat an animal killed by road traffic ‘is more than mere squeamishness’.¹¹⁶

To approach the question whether the human consumption of nonhuman animals poses problems even where it inflicts neither pain, suffering, or death on the animals in question, I would like to start here with a discussion of cannibalism. Many people associate negative feelings with the thought of consuming other people, even if many may also appreciate that these feelings should be trumped by other feelings in some extreme situations, for example the feeling of hunger. Discounting situations where no alternative foods are available (‘survival cannibalism’), I would like to ponder whether, in normal situations, these negative feelings should trump any positive feelings, for example the feeling of satiety, that may be associated with the consumption of human bodies.

Would such negative feelings perhaps merely be the outcome of culture, or would they be embedded deeply in human nature? If they are the latter, there would be more reason to think that cannibalism might impact negatively upon human health as no cultural perspectives would stand a chance of suppressing our feelings successfully. To explore this issue, I have looked at the practice of cannibalism in some cultures. It is good to distinguish here between the practices of exocannibalism (eating those from another group) and of endocannibalism (eating those from one’s own group). The former may stem from the human tendency to other those who do not belong to

¹¹² Peter Singer, *Animal Liberation* (London: Jonathan Cape, second edition, 1990); Peter Singer, *Rethinking Life and Death. The Collapse of Our Traditional Ethics* (Oxford: Oxford University Press, 1995).

¹¹³ Tom Regan, *Empty Cages. Facing the Challenge of Animal Rights* (Lanham: Rowman & Littlefield, 2004), p. 106.

¹¹⁴ Marc G. Wilcox. ‘An Argument Against Treating Non-Human Animal Bodies as Commodities’. *The Journal of Value Inquiry* 58.3 (2024), 535-547: p. 536. <https://doi.org/10.1007/s10790-022-09910-9>

¹¹⁵ Deckers, *Animal (De)liberation*.

¹¹⁶ Wilcox, *An Argument*.

one's own group and the desire to exercise some control over them. The act of eating another human being may fulfil this desire if the eater thinks that they exert control over another person by eating their body.

This interpretation is supported by Fausto, at least in relation to the Tupinambá (one of the various Tupi ethnic groups that inhabit present-day Brazil): 'Tupinambá warfare anthropophagy was expressed in the language of ... revenge. Human meat was consumed because everyone ... was expected to ... take revenge on the enemy. Eating produced an alliance among those who ate together and separated those who were, potentially, food.'¹¹⁷ Mancini et al. support this interpretation, writing that the Tupinambá 'use it to demonstrate their superiority over the defeated group'.¹¹⁸ Similarly, Bello writes that exocannibalism is often associated with 'ritualistic aggressive cannibalism', which she defines as 'the act of eating human tissues of dead bodies of individuals that are perceived as enemies' and associates with warfare and the desire to maintain social or political control.¹¹⁹

While these motives are morally questionable, and one might add that the control is illusory, as the other person can no longer be controlled once they are dead, perhaps there are other reasons that provide greater support for cannibalism. I shall therefore turn my attention to endocannibalism, which Bello claims to be associated frequently with 'ritualistic funerary cannibalism' or 'the act of eating human tissues of dead bodies by members of the same group, culture, or tribe of the deceased, as a form of funerary behaviour'.¹²⁰ Although endocannibalism could also be associated with survival cannibalism, I will focus on it here in the context of ritualistic funerary cannibalism, which was practised, for example, by the Wari' (Pakaa Nova) of western Brazil until the 1960s, when they were forced to give it up. In the following account I rely mainly on Conklin, whose 'primary sources are the testimonies of numerous older Wari' during 'two years of medical anthropological field work in 1985-87 ... in the communities of Santo André, Ribeirao, Lage, Tanajura, and Rio Negro-Ocaia'.¹²¹

¹¹⁷ Carlos Fausto, 'Feasting on People: Eating Animals and Humans in Amazonia'. *Current Anthropology* 48.4 (2007), 497-530, p. 508.

¹¹⁸ Milena Mancini, Valentina Urso, and Giovanni Stanghellini, 'Identity Cannibalism in Narcissistic Persons: Lessons from Anthropology'. *Psychopathology*, Online first, <https://doi.org/10.1159/000542331>

¹¹⁹ Silvia M. Bello, 'The Archaeology of Cannibalism: a Review of the Taphonomic Traits Associated with Survival and Ritualistic Cannibalism'. *Journal of Archaeological Method and Theory*, 32.1 (2025), 1-33, p. 10, <https://doi.org/10.1007/s10816-024-09676-3>

¹²⁰ Ibid.

¹²¹ Beth A. Conklin, "'Thus Are Our Bodies, thus Was Our Custom": Mortuary Cannibalism in an Amazonian Society', *American Ethnologist* 22.1 (1995), 75-101, p. 79, <https://doi.org/10.1525/ae.1995.22.1.02a00040>

Conklin describes that this form of cannibalism must be understood against the worldview of the Wari', who were involved in hunting peccaries. These animals were held to be the embodiments of the deceased, and the eating of the deceased was interpreted as the first act of their giving that they hoped would continue with the peccaries who might be hunted and eaten in the future. Conklin writes: 'Cannibalism initiated and facilitated the construction of a new relationship between the living and the dead by evoking images of the dead person's regeneration in animal form, and human-animal reciprocity, in which endocannibalism was the mythic balance to human hunting.'¹²² This balance would be missing unless people agreed to becoming food themselves upon dying. Without such an agreement, hunting would be problematic. Conklin sums up: 'For Wari' ... the magic of existence lies in the commonality of human and animal identities, in the movements between the human and nonhuman worlds embodied in the recognition through cannibalism of human participation in both poles of the dynamic of eating and being eaten.'¹²³

While endocannibalism may have different mythological functions for different cultures, the example of the Wari' shows that it would be simplistic to understand cannibalism as resulting merely from the human desire to eat meat. I believe that acting on this desire is justified in extreme cases where no alternative foods are available to provide for an adequate diet. However, the example of the Wari' shows that the practice of cannibalism does not necessarily imply that there are no grounds to believe that all moral agents, regardless of whether they are aware of this, may also have a natural inclination to avoid eating meat. The desire to avoid eating other human beings was clearly present in the Wari'. The Wari' associated uncomfortable feelings with dismembering the body, a necessary step preceding its consumption. In relation to the actual eating, it is worth noting that consanguines had to abstain, perhaps because they were supposed to have negative feelings about eating their relatives.¹²⁴ By only allowing adult bodies to be consumed after some time, when they had undergone a significant amount of decomposition, the Wari' may also have tried to counter seeing the consumption of human beings as a gastronomic delight. Conklin reports: 'When asked why it was the affines who ate the corpse, Wari' elders invariably replied that the affines ate it because somebody had to eat it', suggesting that they did not really enjoy doing so, and that 'for dying individuals, the idea of being incorporated into fellow tribes members' bodies apparently had considerably more appeal than the alternative of being left to rot in the ground

¹²² Ibid., p. 88.

¹²³ Ibid., p. 95.

¹²⁴ Ibid.

alone'.¹²⁵ However, the Wari' not only seemed to have qualms about their practice of eating human bodies. They may also have questioned the eating of other animals. For example, they may have considered their hunting to be less than ideal as Conklin describes Wari' visions of the afterlife where 'life is easy and crops grow abundantly' and 'all food is vegetarian'.¹²⁶

This raises the question whether people who are not obliged to engage in survival cannibalism should follow the Wari' in adopting endocannibalism. I assume that many of us will not follow the Wari' in thinking that we need to condone the human consumption of other humans in order to justify hunting (peccaries). Neither do I think that we need to adopt the view that it would be better to be eaten than to be left in the cold ground. While I believe strongly that we should allow the Wari' to revert back to endocannibalism if they wish to do so in light of the fact that they were forced to abandon the practice by outsiders, I also believe that those who do not adopt the Wari' ontology, unless they adopt other worldviews that demand endocannibalism, should not engage in cannibalism where their survival does not depend on it. Rather, they should be mindful about any negative feelings they may have about consuming human beings, and allow them to prevail. Some might object that those who do not have any such feelings should be allowed to eat human beings. In my view, this would be problematic as I think that all moral agents have a morally significant natural inclination to avoid consuming human beings, even if they may not be aware of this inclination. In the eyes of Wilcox, the relevant inclination here should be understood as one to avoid commodification (where one treats something as a mere resource), rather than one to avoid consuming human bodies, adding that consumption may be possible without commodification as one could use the body 'as part of a ceremony that honors the deceased'.¹²⁷ I agree that there are disrespectful and respectful ways to consume human bodies, but I also think that morality tracks the feeling that there is something wrong with the consumption of such bodies per se. The commodification of human bodies is clearly more problematic than the commodification of plants. It matters whether or not the thing that is commodified is a human body.

The question should therefore be asked whether we might also have a morally significant natural inclination to abstain from the consumption of nonhuman animals. In earlier work I wrote that we should generalise 'the feeling of moral revulsion that one ought to have towards eating one's pet to a moral interest in the avoidance of consuming all animals'.¹²⁸ I would like to explore

¹²⁵ Ibid., p. 84.

¹²⁶ Ibid., p. 89.

¹²⁷ Wilcox, *An Argument*, p. 544.

¹²⁸ Deckers, *Animal (De)liberation*, p. 86.

this feeling here. Anthropological research might be relevant here as well. It reveals that many cultures adopt taboos on the consumption of particular animals, for example of animals kept for companionship. Indigenous populations of the Caribbean and of lowland South America, for example, adopt a taboo for those individuals within particular species who are kept as ‘*iegue*’—a Carib term that can denote both an adopted child and a tamed animal.¹²⁹ Some might argue that the moral work is done here by the companion animal bond, rather than by the animal bond. I have engaged with this topic before.¹³⁰ While I do not question the view of those who claim that eating one’s companion animal poses a greater moral problem than eating one of their species, my theory generalises the feeling of moral revulsion that moral agents ought to have towards eating their companion animals to a moral interest in the avoidance of consuming all animals. It supports the view that speciesists might adopt, namely that it is normally inappropriate to consume the bodies of dead human beings because it conflicts with our interest in a ‘species bond’ that can be maintained only if we regard all members of the human species as not to be eaten, except in exceptional circumstances. However, it expands this principle to a concern with consuming the bodies of all animals, based on an ‘animal bond’, and particularly to a concern with consuming the bodies of animals who are closely related to us evolutionarily. While this concern may be less strong when we consider the consumption of animal products that do not require the animals to die or to be killed, for example the consumption of unfertilised eggs, milk, and blood, I do not consider it to be absent.

Our mental health, therefore, is safeguarded optimally if we abstain from consuming animal products in most situations, particularly where we can obtain varied vegan diets (see figure 8). The production of such diets would ideally be done organically as well, avoiding the problems related to the use of pesticides and the use of artificial fertilisers that we described above, even if organic production systems may not be optimal in all situations. Tolhurst Organic is a splendid example of how, in spite of considerable perverse incentives that favour alternative food production systems, a vegan-organic food production system can operate in contemporary England.¹³¹

¹²⁹ Marcy Norton, ‘The Chicken or the Iegue: Human-Animal Relationships and the Columbian Exchange’, *The American Historical Review* 120 (2025), 28–60, <https://doi.org/10.1093/ahr/120.1.28>

¹³⁰ Deckers, *Animal (De)liberation*.

¹³¹ <https://www.tolhurstorganic.co.uk/>; accessed 10 March 2025.



Figure 8: *VEGAN Written in Grains, Surrounded by Vegan Food: Forth with Life*; CC BY 2.0; <https://www.flickr.com/photos/forthwithlife/47227305012/>; accessed 12 March 2025.

Conclusion

I have argued that the consumption of animal products poses significant global health concerns and that we therefore have good moral reason to avoid consuming such products in many situations. Moral veganism should be qualified as vegan diets are not ideal in all situations. However, it maximises positive GHI in many situations. Caring about global health, therefore, implies committing to qualified moral veganism. I appreciate that many people may disagree with this view and that many people consume some animal products in situations where their survival or health does not depend on doing so. In spite of the fact that I have questioned the consumption of many animal products for over three decades now, together with many others who have done so, the human consumption of animal products continues to increase, aggravating the problems that I have sketched in this article. One might wonder what hope there is for the many other lives that we share this planet with if we cannot even care about our closest relatives, other animals.

However, the question whether we ought to move away from the consumption of many animal products ought not to be settled by the moral arguments of a small minority. I value

democracy, which is why I believe that we need broad democratic support to justify a qualified ban on the consumption of animal products. The price that we pay for valuing democracy, however, is considerable. It is highly likely that the negative global health impacts associated with the consumption of animal products will increase significantly in the near future. However, I believe that it is a price that is worth paying. Given that many people prefer ‘carnism’ or moral vegetarianism and are unwilling to adopt qualified moral veganism at the moment,¹³² the question might be asked what else we might and should do to curtail some of these negative GHIs. In the absence of broad democratic support for a qualified ban, I believe that we should try to encourage the consumption of animal products with reduced negative impacts, for example products derived from in-vitro meat if it could be produced sustainably and without any animal inputs other than the few animal cells used for cultivation.

I would like to end this article by stating that I agree with Schweitzer that it is sometimes hard to come to terms with the realities of nature as living beings cannot live without denying others’ lives. Schweitzer wrote: ‘The chicken who walks in the furrow of the field, the swallow who soars back and forth in the air, the ant who seeks their way in the grass, the spider who prepares their web: all try to preserve their own lives by destroying other lives. With refined cruelty, which they inherit from their instincts, insects lay their eggs in particular living beings, which later provide food for their offspring. One horror among countless others. Thus, nothing can be discovered in the history of the world that corresponds to our will to act to preserve other life. ... Only in the beings closest to us does something of the brightness of concern for other life, which we find in our own lives, begin to shine.’¹³³ In spite of our struggles to understand this contrast, I am also at one with Schweitzer in adopting the view that there is no limit to the amount of good we should try to achieve, and that an important part of this good consists in promoting the lives of others, particularly those of animals.

¹³² The concept of ‘carnism’ was coined by: Melanie Joy, *Why We Love Dogs, Eat Pigs, and Wear Cows: An Introduction to Carnism* (Conari Press, 2009). Joy uses it to refer to the philosophy that supports the human consumption of animal products, particularly of meat.

¹³³ Albert Schweitzer, *Die Weltanschauung der Ehrfurcht vor dem Leben. Kulturphilosophie III: Erster und zweiter Teil*, eds. Claus Günzler and Johann Zürcher (München: C.H. Beck, 1999), p. 446: ‘Das Huhn, das in der Furche des Ackers geht, die Schwalbe, die in der Luft hin- und hersegelt, die Ameise, die in dem Grase ihren Weg sucht, die Spinne, die ihr Netz bereitet: Alle betreiben sie das Werk der Erhaltung des eigenen Lebens durch Vernichtung anderen Lebens. Mit raffinierter Grausamkeit, die sie als Erbgut in ihrem Instinkte vorfinden, legen Insekten ihre Eier in bestimmte Lebewesen ab, die nachher ihrer Brut als Nahrung zu dienen haben. Ein Greuel unter zahllosen anderen. In dem Weltgeschehen ist also nichts zu entdecken, das unserem Willen des Wirkens zur Erhaltung von anderem Leben entspricht. ... Nur in den uns nahestehenden Wesen beginnt etwas von der Helligkeit des Besorgtheins um anderes Leben aufzuleuchten, die wir in unserem Leben vorfinden.’ (translation mine)

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