



Negotiating the necessity of biomedical animal use through relations with vulnerability

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Abstract

In the UK, claims are often made that public support for animal research is stronger when such use is categorised as for medical purposes. Drawing on a qualitative analysis of writing from the Mass Observation Project, a national writing project documenting everyday life in Britain, this paper suggests that the necessity of using animals for medical research is not a given but understood relationally through interactions with inherent vulnerability. This paper stresses the ubiquity of ambivalence towards uses of animals for medical research, complicating what is meant by claims that such use is ‘acceptable’, and suggests that science-society dialogues on animal research should accommodate different modes of thinking about health. In demonstrating how understandings of health are bound up with ethical obligations to care for both human and non-human others, this paper reinforces the importance of interspecies relations in health and illness and in the socio-ethical dimensions of biomedicine.

Keywords Vulnerability · Animal research · Mass Observation Project · Ethics · Care · Health

Introduction

In contemporary bioscience, animals play a key role as experimental models and although there is growing challenge of their validity (Shanks et al. 2009, Knight 2011, Bailey and Taylor 2016, Bailey and Balls 2019, and see Herrmann and Jayne 2019), animal models are claimed to remain essential to scientific advancement (Barré-Sinoussi and Montagutelli 2015; Phillips and Roth 2019). Common framings of animal models as integral to the “life-changing discoveries” made in the field of medicine and claims that “Millions of lives have been saved or improved” due to

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their use (UAR 2011a, p. 2) have lent to prominent arguments of our moral and citizenly duty to use animals in research in order to care for the health of others (Nicoll 1991; Harris 2005).

An example of such argumentation can be seen in neurologist and former head of the Medical Research Council Colin Blakemore's response to a 2011 campaign¹ by British animal rights organisation Animal Aid, which discouraged donations to medical charities that fund research using animals. Blakemore was quoted as contending that "These charities have a duty to use money given to them in the most effective way to support patients and to understand and treat disease" (UAR 2011b). Blakemore added further that "If Animal Aid were successful in discouraging donations to medical charities, they would be guilty of delaying progress towards treatments and cures for devastating conditions" (ibid). Echoing this sense of obligation, UK research advocacy organisation Understanding Animal Research (UAR) state that "If we stopped using animals, then it is difficult to see where the solutions to today's medical problems are going to come from", prompting the question, "Is it right to deny these treatments to the patients who are suffering now and in the future?" (UAR 2020b).

Related to this line of argument, the category of medical research has been critiqued as performing a self-justifying imperative (Callahan 2000), in which the production of new biomedical knowledge is "always good to pursue" (Wayne and Glass 2010, p. 375). Yet, in the case of animal use for medical research, Blattner (2019, p. 176) argues that "the societal objectives of curing diseases or producing new scientific knowledge typically operate as a *carte blanche* that legitimate every form of animal exploitation". Within this context of ethical obligations to patients as motivating the use of animals in medical research, this paper qualitatively explores the expectations that individuals might have of medical research and reasons why animal use for such purposes might be felt to be (or not be) exceptionally necessary.

Whilst animal research remains a controversial area of scientific practice in the UK, studies of societal views towards the issue have long claimed that public acceptance is strongest for medical research, a category which can include basic, clinical, and epidemiological research (Röhrig et al. 2009). For example, market research company Ipsos MORI, who have surveyed 'public opinion' on animal research since 1999 on behalf of bioscience organisations and the UK government (Ipsos MORI 2009), claim of their latest poll results that "Two thirds of the public can accept the use of animals for medical research where there is no alternative" (Ipsos MORI 2018, p. 17). Drawing on Ipsos MORI polling data, the Association for the British Pharmaceutical Industry (ABPI) state that the "majority of the UK public supports the use of animals in medical research" (ABPI 2015, p. 2). Similarly, UAR assert that "there is a relatively high level of public acceptance of research for medical benefit and we recognise that this is because many people trust us to carry out research using animals in a responsible way" (UAR 2014, p. 5).

¹ <https://www.animalaid.org.uk/the-issues/our-campaigns/animal-experiments/victims-charity-campaign/>.



However, such studies of ‘public opinion’ on animal research do not allow respondents to articulate what medical research means to them. Traditionally, research on views and attitudes towards animal research has favoured quantitative approaches and focused on investigating such phenomena in ‘representative’ ways which allow for monitoring and measurement across social demographics and populations (McGlacken 2021a). Hence, with limited qualitative research in this area, rich and contextual analyses of why such understandings of animal research are held and how they emerge remain lacking. Indeed, identifying the prevalence of “rating scales that do not allow for more qualitative reasoning” as a methodological issue in previous studies of attitudes towards animal research, Ormandy and Schuppli (2014, pp. 400–401) argue that “When restricted response options do not allow for consideration of what people’s concerns are (e.g., why they might be opposed to certain types of research), it is difficult for policy-makers to understand the nuance in attitudes in order to make progress in addressing societal concerns”.

In seeking to enrich social scientific understandings of views towards animal research beyond reductive spectrums of support or opposition, this paper uses a relational approach (Emirbayer 1997) examining the roles of vulnerability and care to consider how the societal necessity of bioscientific endeavours is constructed. In doing so, I discuss vulnerability largely in the ‘inherent’ sense, meaning, as Dodds (2007, p. 506) states, “that our material and social conditions directly and indirectly affect us and our relations with others open us each to risk and dependence”. Inherent vulnerability is therefore, as Morberg Jämterud (2022, p. 954) describes, a “shared life condition”, involving being “connected to embodiment and the fragility linked to being a biological being and hence vulnerable, for example to illness and death”. From this understanding, I analyse the way in which the use of animals in medical research is made sense of through relations with inherent vulnerability and can prompt reflection on our dependence on both human and non-human others.

Shildrick (2002, p. 71) argues that “in western modernity at least, vulnerability is figured as a shortcoming, an impending failure both of form and function” and within such a paradigm biomedicine presents itself as a producer of solutions to human vulnerability. As this suggests, the preventative and protective efforts that encounters with vulnerability may sanction are not merely self-interested but are also directed towards others. In exploring this, this paper considers how support for biomedicine and its liberatory potential can be seen as a way of caring for others as current or future patients. Indeed, the orientation of care towards mitigating vulnerabilities is emphasised by Engster (2019), who calls for a care ethics centred on the concept of vulnerability rather than dependency. In analysing relations with animal research through experiences with vulnerability and practices of care, this paper also complicates assumptions of widespread anthropocentrism on this issue. In doing so, this work queries claims that biomedicine’s partiality to human interests “undoubtedly extends [...] to the wider public” (Peggs 2011, pp. 51–53). As will be discussed, mitigation of human vulnerability through biomedical animal use can be simultaneously valued and lamented and also subject to challenge when the exploitation of animals is placed centre-stage.

With caring for others through biomedical research coming at the cost of non-human animal lives, this paper explores expressions of ambivalence towards animal



research. Finding that judgements of certain biomedical uses of animals as necessary are not always straightforward, this paper examines how personal use of or reliance on medical interventions can become fraught with troubling senses of complicity when brought together with the role that animals have played in their production. In such moments, lived experiences of health vulnerabilities and their mitigation through medical interventions imbue medical research with personal relevance yet also draw one nearer to the problematic exchange of animal life for human health at its centre. In considering challenges towards biomedical frameworks of health and their undergirding anthropocentrism, this analysis also examines moments in which some individuals point to the value in developing more accepting cultural relationships with our inherent vulnerabilities, moving to recognise rather than resist them.

More broadly, this analysis adds to the growing social scientific work on the role of non-human animals in co-producing and sustaining ‘healthy’ human bodies (Rock et al. 2009; Peggs 2011, 2018; Sharp 2013; Brown and Nading 2019; Kirk et al. 2019) and provides empirical insights into ethical reflections on these interspecies dependencies. In doing so, it shows how reflection on the ethical dimensions of human–animal relations can impact how we relate to our own vulnerability. Finally, recognising vulnerability as a mutual, yet diversely manifesting, condition of all animal life, this work follows that of Pick (2018, p. 411), in investigating “the ramifications, and tensions, of vulnerability as a focal point of pro-animal thought”.

Method: the Mass Observation Project

This paper is based on a qualitative analysis of writing from the Mass Observation Project (MOP), a longitudinal national life-writing project in the UK. Based in *The Keep*, an archive at the University of Sussex, the MOP maintains a nation-wide panel of voluntary correspondents. Panellists are referred to as ‘Mass Observers’ and are engaged with through ‘Directives’, a set of questions or prompts on a particular topic. The MOP sends out three or four Directives per year and most Directives feature two or sometimes three topics which are split into separate parts. Directives span a wide range of topics and the writings they solicit have informed academic work across various research areas, from the seemingly ordinary, such as library use (Black and Crann 2002) or gardening (Bhatti 2014), to the apparently *extraordinary*, such as forensic DNA technologies (Wilson-Kovacs 2014) and genetic modification (Haran and O’Riordan 2018). However, the overarching aim of the MOP can be understood as exploring ‘everyday life’.

Mass Observers can respond to Directives in multiple formats. In discussing the variety of genres employed in MOP writing (e.g., diary-keeping, letter writing, essays, poetry, etc.) former Mass Observation Director (1990–2008) Dorothy Sheridan (1993, p. 34) characterised those involved in Mass Observation as engaged in “the process of forging a new genre: the ‘Mass-Observation directive reply’”. In their writing, Mass Observers often work to situate their perspectives in local and broader contexts and incorporate those of others, employing a “dual vision” (Kramer 2014) and acting as both “Observer” and “the Observed”. Hence, given the



ways that MOP writing often deprivileges the singular voice and works to include a plurality of perspectives, they have been described as collectively reflecting “a kaleidoscope of experiences, mediated by a multitude of texts” (Sheridan 1993, p. 33).

The writings of Mass Observers are typically reflexive, and Directives often encourage correspondents to trace their thoughts and feelings over time, allowing space to contextualise current thinking. In detailing how their thoughts and opinions have developed and changed and might continue to do so in the future, Mass Observers can demonstrate the fluidity of identity and foreground the role of particular experiences in shaping perceptions of themselves and their worlds (McGlacken and Hobson-West 2022). This provides a methodological benefit of significance to this paper, with attention to the shifting and relational quality of opinion enabling better insight into how the necessity of medical research is constructed through experience.

Although certain demographic information for the panel of Mass Observers could be retrieved through the MOP database,² such information does not feature explicitly in my analysis of the data. A key reason for this is that much of the previous work around views towards animal research has focused on demographic categories to explain findings, working to expand findings out to ‘represent’ wider public bodies and, noting problems with this approach (McGlacken 2021a), I sought to use the MOP materials in a way that resists such generalisations.

This paper is based on an analysis of responses to a 2016 MOP Directive on ‘Using animals for research’ (Mass Observation Project 2016) commissioned by the University of Nottingham, which received a total of 159 responses (72 paper and 87 electronic). All accounts were initially read in their original state (as word-processed and hand-written responses which were photographed at the archive and converted into PDFs) and uploaded onto the qualitative data analysis software NVivo 12 to provide word search functionality and an easier handling of the dataset. In analysing the accounts, this study takes a constructionist thematic analytical approach, which, follows Braun and Clarke’s (2006, p. 87) steps of: (1) familiarising yourself with your data; (2) generating initial codes; (3) searching for themes; (4) reviewing themes; (5) defining and naming themes; and (6) producing the report. In doing so, I aimed to analyse themes across the MOP responses collectively and look for broader relational processes, such as care, which shape the writing on animal research.

In exploring how biomedical research using animals is made sense of through vulnerability, each section of this paper will discuss excerpts from the writings of Mass Observers. Mass Observers will be referred to by the anonymous identification numbers they are issued by the archive and, in the aim of preserving their style of writing and formatting, when reproducing their writing here I have tried to include grammatical and typographical errors and paragraphing. Only spelling and grammatical errors that might seriously obscure the coherence of the extracts have been amended. This paper is organised into three sections, exploring the role of animal research in *resisting* vulnerability, the performance of *regretting* the use

² <http://database.massobs.org.uk/>.



of animals in mitigating human vulnerabilities, and the value of *recognising* human vulnerability.

Resisting vulnerability through animal research

Many Mass Observers discussed how they had in the past been opposed to or critical of animal research, believing it unnecessary, a stance often framed as a product of youth and lack of experience. These Mass Observers described how growing older and experiencing illness themselves or witnessing the illness and death of close ones led to a re-evaluation of the need for animals in medical research. For instance, the following Mass Observer (W5881) wrote:

My own views I think have changed over time; I think I'm more moderate than I used to be. When I was a student, I was concerned about the animal experimentation that went on at the University I attended and I'm pretty sure I felt that it was just wrong, and shouldn't happen. As I suppose often happens, as I've gotten older I can see that things are more complex and, having had relatives benefit from medicines and changes in practices that have happened because of animal experimentation, I can see there are obviously benefits. (Mass Observer W5881)

For this Mass Observer (W5881), though animal research was at one point a source of concern and seemed unjustified, their views towards the practice have shifted. This shift in understanding is presented as an effect of getting older, a process here associated with learning to appreciate the complexity of life and the benefits that medical advancements can provide. Such learning is embedded in witnessing the healthcare treatments that relatives have received, imbuing the scientific use of animals with a newfound necessity.

In this way, the excerpt indicates how the importance of healthcare is perhaps most clear in moments of health vulnerability, whether physically experienced by the individual themselves or by those close to them. Indeed, as Morberg Jämterud (2022, pp. 954–955) claims “Different forms of affliction can remind us of our limitations regarding control of our bodies, and illness can starkly confront us with our inherent vulnerability”. Through such experiences of illness, then, the concept and value of health is re-established and the necessity of sustaining and improving healthcare provisions renewed.

Likewise, another Mass Observer (P5940) described how their views towards animal research have changed as they have grown older:

[...] When I was younger, I would have been quite militant in my strength of feeling [sic] about not using animals for drug testing, however, if drug testing on animals could support the creation of life-saving treatments nowadays, I would think that animal testing would be fine and acceptable. (Mass Observer P5940)

The conditionality of acceptable biomedical uses of animals, here predicated on the production of “life-saving treatments”, represents not only an *affectual* investment in



medical research but one with, as Novas (2006, p. 289) puts it, “a political and economic materiality that seeks to bring to fruition the many future possibilities inherent in the science of the present”. Here, Brown’s (1998, pp. 21–22) observations of hope discourses in biotechnological innovation are particularly salient, characterising hope as “capable of designating a vocabulary of survival in situations and environs of action where survival itself is at stake” and being bound up with “what counts as a meaningful response to death and dying”.

It is this emphasis on overcoming and, indeed, surviving the future and the threats to health it continues to pose that underlies much of the animal research community’s rhetoric on the medical necessity of using animal models (UAR 2012; UAR 2020a) and which, as illustrated above, also shapes how some Mass Observers understand medical research using animals as necessary. In other words, the construction of health as *survival* lends to the construction of medical advancements as necessary. At the same time, the embedded notion of such animals as ‘models’ for human illness and disease means that their own “life, suffering and death, fall away—even while the animal stands for our salvation from suffering” (Birke 2012, p. 170).

Although at first glance, such understandings might be read as demonstrating an anthropocentric weighting in the favour of “‘humans’ claim to lead healthy and longer lives over ‘animals’ claims to continued existence and the avoidance of suffering” (Martin 2021, p. 206), the role of human vulnerability in reaffirming the need for animal research also reflects the importance of care relations. In perceiving animal research as a way of generating healthcare and healthy futures, the practice may also constitute a way of caring for others near and far (McGlacken 2021b). In this case, opposition to the scientific use of animals might be perceived as undermining or jeopardising felt responsibilities to care for current and future patients. As such, the ethical problem posed by the (mis)treatment of animals in biomedical research is pitted against the (mis)treatment of loved ones if such research or the resources it generates for patients were to be disrupted, leaving them vulnerable to illness that might have been defended against.

Similar understandings of the learnt necessity of animal research are illustrated by another Mass Observer (H5845), who describes how their strong feelings against animal research have changed through aging and witnessing the impact of disease:

In my teenage years I was a big activist against testing on animals. [...] I have calmed down my views on the matter some what since then as I think maturity with age has made me evaluate the reasons behind animal experiments more, that being predominantly to enhance the life of human beings. As a teenager your apathy probably lies more with animals as you have pets and not much experience of people you love or know suffering or dying from diseases (which could be understood and prevented more with the help of animal research perhaps). However, as an adult with more worldly experience I know have more apathy with humans as have seen many people die from cancer and other diseases and witnessed the heartbreak which this can bring. (Mass Observer H5845)



Again, this Mass Observer (H5845) explains their changing feelings towards animal research through the aging process, which has shaped their understanding of the necessity of mitigating human suffering and death. Given the way in which it is used, we can assume that “apathy” is used here to mean *empathy* and these shifts in the strength of empathetic relations towards non-human animals through experiencing the illness and death of humans we care about reflects how lived understandings of vulnerability may reprioritise our care obligations. In this way, the use of animals to prevent human suffering and save human lives becomes necessary in that it represents not only a medical obligation but, as Harris (2005) puts it, a moral one.

Regretting the use of animals to mitigate vulnerability

Although medical research using animals was often described as necessary, with experiences of illness and death framed as confirming the need to use animals to develop healthcare treatments, some Mass Observers reflected on their personal medical interventions as a source of sadness or regret when considering the role of animals in producing them. As the following MOP excerpts demonstrate:

Unfortunately, I am having to take commercial medicines daily to stay alive. I need insulin twice a day besides other medications. I do know the story of how insulin came about. It breaks my heart having to take this medication as I often think as to how many dogs were sacrificed and in severe pain, in order that this medicine be created. (Mass Observer H1470)

If there was an injection we could have to prevent cancer and other very serious illnesses all the members of our family would have the injections. I still feel very sad for the animals that would have been used to produce the antibiotics etc. that saved my life this year – 2016. (Mass Observer S496)

As the above excerpts suggest, long-term or short-term dependency on medical interventions may be accompanied by feelings of sadness and regret when reflecting on the use of animals in their development. Although such treatments are acknowledged as having lifesaving and sustaining power, personal experiences of needing medical treatments not only make tangible their importance but may also draw one closer to their unpalatable production. This highlights that medical research and its outputs can be simultaneously valued and regretted when considering how animals are fatally implicated in such processes which might make us well at their expense. As the second Mass Observer (S496) writes, if a vaccination against “very serious illnesses” was available they would choose to receive it, yet the real-world usage of animals in medicine production remains troubling. In such moments, one’s receipt of medical treatments may be rendered as a material manifestation of their complicity in animal research and thus feelings on the topic vacillate between appreciation of medical benefits and remorse over the use of animals in generating them.

Similarly, another Mass Observer (C3210) expressed that although growing older and becoming “more aware of” the benefits of medical interventions contributed to an appreciation of medical research using animals, the need for animal research is still a “moral grey area”:



My attitudes have softened over the years. I used to be dead against all forms of animal testing. While I'm still against testing cosmetics on animals I'm not against testing medicines on animals. I'm not saying I think it's a really good thing, but I guess it's the best solution we have at this point in the evolution of science. I think my attitude has changed as I've got older because I have been more aware of how drugs can help the people I love. For example my great Aunt, who had Parkinsons, or my nan who had bad asthma. When I was younger I suppose I didn't have to think about disease much, but as I've got older I've been exposed to it more. I still think it's a moral grey area though and we're arrogant as human beings to assume our lives are more important than an animal's life. But I still take drugs, and if I got cancer I would want to use treatments all of which have been tested. (Mass Observer C3210)

That the need to use animals in medical research can be understood alongside feelings of ambivalence towards its moral justification demonstrates that arguments of necessity do not foreclose ethical concerns. Indeed, such an understanding of the strained necessity of animal research is affirmed by the Animal Procedures Committee's (APC) 2003 review of the ethical review process underpinning the scientific use of animals—the cost–benefit analysis (now 'harm-benefit analysis')—which insists that the bioscience sector must not rest on acceptance of the use of animals as a “regrettable necessity” (APC 2003, p. 1). As the APC indicated almost two decades ago, to avoid resting on the laurels that ‘necessity’ can seem to grant, it is important to recognise that judgments of certain scientific uses of animals as necessary may be made alongside feelings of regret and discomfort.

Such obligations to care for and about others complicate simple and absolute ideas of necessity, with tensions between care relations generating characterisations of animal research as a ‘necessary evil’ (Blakemore 2008; Masterton et al. 2014; Franco and Olsson 2016), a practice which may conflict with one's ethics of care towards certain members of their moral community but is at times felt to be necessary for the sake of others. That feelings of moral ambiguity may remain even when experiences of aging, illness, and death imbue biomedical uses of animals with necessity thus emphasises that concerns towards the issue cannot be explained away by gesturing to medical benefits.

Recognising vulnerability through animal research

For a few Mass Observers, gestures were made towards the value of openly recognising, rather than resisting, vulnerabilities to illness and mortality. As the following Mass Observers suggest:

The research is obviously advancing medicine in leaps and bounds and part of me thinks that we should get back to nature and just let survival of the fittest and natural selection take place. Saying that though if it were my child or family member with a disease that would benefit from these advances then I'm presuming I would probably feel a lot differently. (Mass Observer H5845)



[...] Valid research on medicines to reduce pain, kill viruses and bacteria are required to improve the survival rate of people around the world; although I would weight this for ‘real’ medicine and not just that to keep people hanging on to live into their 100’s. (Mass Observer F4873)

Both Mass Observers here indicate that there should be socio-ethical limits to medical interventions, the first Observer (H5845) conveying this, perhaps flippantly, as returning “back to nature” and letting “survival of the fittest and natural selection take place”, with the suggested assumption that medical prolonging of human life can be detrimental. However, this thought is then self-reflexively answered by their admission: “though if it were my child or family member with a disease that would benefit from these advances then I’m presuming I would probably feel a lot differently” (Mass Observer H5845). Again, such care obligations are crucial to thinking about animal research and complicate the enacting of broad ethical propositions such as the possibly glibly suggested return to a brutally competitive “nature”.

With a similar yet differently articulated focus on the longevity of human life, the second Mass Observer (F4873) distinguishes “Valid research” as that which produces “real” medicine and “not just that to keep people hanging on to live into their 100s”. Objections to biomedical research concerning the extension of human lifespans highlight that such areas of medical research do not always fit unproblematically within conceptions of healthcare. Indeed, the moral acceptability of research into human longevity has been subject to philosophical debate (Harris 2004; Caplan 2005, Pijnenburg and Leget 2007), and some scholars have sought to involve the views of publics within such discussions (Partridge et al. 2009).

Locating the struggle against mortality as central to the research imperative of modern medicine, Callahan (2000, p. 654) claims that contemporary medicine “has an almost sacred duty to combat all the known causes of death. Underlying this view is the assumption, usually tacit, that death is the principal evil of human life”. However, as implied in the above MOP writings, the prolongation of human life does not always qualify as a necessary medical endeavour and is made further ethically dubious when implicated in a process of killing other animals.

Such musings on the limits of medical advancement reveal anxieties around the future that such research may work to create and illustrate the importance of deliberation over what kinds of healthscapes should be brought into being. In both of the above MOP excerpts, these concerns touch on relationships with vulnerability and the role of medicine in delineating between important health problems to be reckoned with and expressions of human mortality (i.e., aging and lifespan).

Other Mass Observers were more critical of the fundamental human exceptionalism at the centre of animal research. For a few correspondents, rather than bolstering the need to use animals in medical research, lived experiences of illness and death further sensitised them to the problems of harming and killing laboratory animals. As the following Mass Observer (B5342) suggests:

[...] I know I’ve got much more sensitive to animal cruelty as I’ve got older, especially since my mum died in 2013. All animals are precious to me. Some, such as frogs, rodents, big scary dogs, I don’t like and I don’t want to be around, but I could never wish anything cruel on them. The more time passes,



the more I dislike the human race. I wish all these experiments could just stop.
[...] (Mass Observer B5342)

Unlike many of the Mass Observers discussed earlier in this paper, this correspondent (B5342) describes their feelings towards animal research and “animal cruelty” more widely as becoming increasingly sympathetic as they have gotten older, particularly after experiencing their mother’s death. As is hinted at, aging and the losses we experience along the way may contribute to a valuing of *all* life, even of creatures who are personally feared or disliked. In the context of waste management, Hird (2013, p. 115) writes that “An ethics of vulnerability draws our attention to the extended others—human and nonhuman—affected by our actions”. Hence, in laying bare our mortality, perhaps experiences of explicit vulnerability such as the deaths of those close to us might contribute to a recognition of the shared vulnerabilities or suffering (Haraway 2008) of living creatures, and the ways that human action can perpetuate them.

The above Observer’s (B5342) appreciation of the “precious” lives of animals is also reflected on as unsettling their relationship to other humans and their force as a species or “race”. As I have suggested elsewhere (McGlacken 2021b), such reflections on collective human behaviour are problematic, minimising the distinctly humanist paradigm within which human/animal distinctions are practiced (DeMello 2012). Such treatment of the ‘human’ as a natural category also overlooks its deliberate use to exclude and deny the personhood of certain peoples (Wolfe 1998, p. 43). Yet, these kinds of reflections on the problems of human exceptionalism in ‘our’ treatment of other animals suggests that the anthropocentric underpinnings of animal research are, for some, fracturing.

However, complicating their criticism of the instrumental use of animals as means for human health benefits, the same Mass Observer (B5342) later discusses how during their mother’s illness, they felt the harms inflicted upon animals in producing the treatments she received were justified:

When my mum was dying and she had to take chemotherapy tablets, that was the only time I’ve ever thought: the animals that died to make this drug don’t mean anything and if it works then I’m glad, whatever the cost. [...]
(Mass Observer B5342)

Rather than necessarily undermining the concerns raised earlier towards the privileging of human life at the expense of other animals, such a reflection illustrates how moments of health crisis draw us closer to the core vulnerabilities we share, foregrounding the urgency of supporting those we love. Periods when we are at the threshold of our own or our loved ones’ lives and deaths may force prioritisations of care and enactments of partiality that we might at other times disagree with. These complex understandings of the ‘necessity’ of animal research emphasise that relations with the practice are a far-cry from the binary of acceptance or opposition through which they are represented in national opinion polls which dominate science-society dialogue on the issue (Hobson-West 2010; McGlacken and Hobson-West 2022).



Considering the relations between humans, as individuals and a collective, and other animals, another Mass Observer (J5734) describes the value in non-medical modes for living and dying, embracing vulnerability and mortality, and challenging anthropocentrism:

[...] were we to end animal testing tomorrow, and so medicinal advancement, I would be fine with that, with the caveat that we spend the money on hospice care and social support. We live longer than we should, and we fetishise death. The fact we're prepared to harm animals to postpone our own passing shows only how unhealthy our attitude to mortality is. I suppose the challenge for me is that in most cases we're not talking about insta-death. I take blood pressure tablets which were most-likely tested on animals. If I stop, I guess I die at some point, but it's probably not for a while. It's not like a cancer treatment which gets me another 6 months NOW, this is a vague tablet-taking which gives me another 10 minutes for every day I take them. The benefit is more disparate, which in an odd way makes the refusal less salient. I'm thinking out loud, I'll need to come back to this. But I think, sensibly, I'm going to have to stop. (Mass Observer J5734)

Musing on different relations with dying, this Mass Observer (J5734) deliberates on the ethics of extending human lives at the expense of other animals and touches on their personal entanglement with the issue by taking medicines. Discussing ethical relationality with multispecies kin, Bird Rose (2013, p. 311) argues that to “understand one’s self as part of a community of life is to accept responsibilities, and also to accept vulnerability”. Similarly, Acampora (2006, p. 130) conceptualises awareness of vulnerability as an integral part of ethical relating and interspecies care. As they put it, “such minimal mutuality of common carnal nature suffices phenomenologically to establish compassionate concern for the other”. However, as this Observer (J5734) suggests, accepting one’s health vulnerabilities and mortality and resisting the remedies that biomedicine is seen to generate is easier said than done. Although, as living beings, mortality is an experience we share in common, death does not mean the same thing to each of us. Rather, death and dying are culturally and temporally situated (Kenny et al. 2017) and as this Observer (J5734) articulates, resisting medicine consumption at a point of stable health is both symbolically and pragmatically different to declining medical interventions when one’s health is deteriorating.

Such ambivalence towards the killing of animals to sustain or prolong human life is important to acknowledge and, as Mass Observer (J5734) highlights, provisions for adequate social and palliative care should also be considered alongside biomedical interventions when discussing ill health. Although biomedicine is seen as playing a key role in how people care about those with health conditions, with hopes invested in research aiming to advance medical knowledge and treatments, care practices which support patients in living with conditions are also important in assessing the ethical legitimacy of animal research.

In suggesting that an increased investment in “hospice and social care” might substitute biomedical advancement, this Mass Observer (J5734) highlights the social aspects of health and illness. This can lead us to consider here what social scientists



have called “structural vulnerability”, a concept which “includes the ways in which various institutions and practices designed to offer care and assistance can also, at times unintentionally, contribute to health risks and poor health outcomes” (Carruth et al. 2021, p. 2). Indeed, relevant here is Prince et al.’s (2022, p. 197) assertion that although “Hospice care, palliative care, and end of life (EOL) care are increasingly understood to be basic human rights [...] we still have a profound lack of equity across the world”.

Highlighting the importance of access to these forms of healthcare thus draws our attention to different modes of vulnerability and forms of care in discussions around the necessity of animal use for biomedical research, emphasising the ways in which social structures can impact on suffering and illness. Attending to the social aspects of vulnerability may thus reveal opportunities, in this case, opening up the construction of the ‘us’ versus ‘them’ binary that often frames discourse around the necessity of animal use in medical research to other possibilities.

In addition, acknowledging the role that social interventions can play in management of health and illness in a discussion of the ethical review of projects planning to use animals, the Royal Society for the Prevention of Cruelty to Animals (RSPCA) state that such processes are expected to consider “wider ethical issues” such as whether it is “always ‘right’ to seek new medicines for conditions that can be treated using non-medical interventions, such as social prescribing or social policy measures?” (RSPCA 2021b). However, the achievement of such ethical discussion by institutional ethical committees (known as Animal Welfare and Ethical Review Bodies or ‘AWERBs’) has been questioned (RSPCA 2021a).

More broadly, the discomfort expressed by the above Mass Observer (J5734) towards how “we fetishise death” serves to complicate the standard assumption that medical advancement is inherently positive and that medical research using animals is less problematic than other areas of scientific research. Such ambivalences remind us of the social construction of health and the importance of ensuring that ethical scrutiny of animal use in the name of medicine is consistently robust and careful not to uncritically pathologise death and dying. As Haraway (2008, pp. 81–82) contemplates, “I do not think we can nurture living until we get better at facing killing. But also get better at dying instead of killing. Sometimes a “cure” for whatever kills us is just not enough reason to keep the killing machines going at the scale to which we (who?) have become accustomed”. Therefore, in interrogating our relationships to our inherent vulnerabilities as living beings, we might reveal alternative paths for responding to them.

Implications and conclusions

To summarise, this analysis has shown how the inherent vulnerability of human life, being susceptible to illness and death and capable of being wounded as its Latin origin ‘vulnus’ or ‘wound’ implies, can be used as a lens to examine how judgments of the necessity of animal use in medical research are made.

As the first empirical section of this paper showed, judgments about the necessity of animal research can be seen as drawing on lived experiences of illness and



death which, for many Mass Observers, contributed to a realisation of the need for animal use in medical research. In this way, the necessity of biomedical animal use was framed as understood relationally, through growing older and experiencing the corporeal vulnerability that illness and disease can signify. Through such experiences, the use of animals in medical research becomes perceived as a way of resisting health vulnerabilities and caring for the health of others near and far, now and in the future, with hopes of prevention and cures.

Complicating this, the second section demonstrated how such judgments of necessity are not totalising or without concern and it was not uncommon for ambivalence about the morality of animal research to sit alongside claims of the necessity of animal use for medical advancements. Indeed, some Mass Observers expressed regret and remorse over the need to use animals in medical research. Going further, the last section discussed how a few Mass Observers articulated challenge towards biomedical frameworks of health and the anthropocentrism which underpins them, with their writings suggesting a need to develop more accepting cultural relationships with our inherent vulnerabilities, moving to recognise rather than resist them.

Overall, this paper argues that managing vulnerability to illness, disease, and death is an important basis for care ethics but, in the context of biomedicine, involves a problematic trade-off between animal and human lives. Perhaps key to this dilemma is how the dependence on animal bodies (and lives) to mitigate human health vulnerabilities complicates notions of vulnerability and care as products and relations of *interdependence*. Herring (2016, p. 28) argues that “it is simplistic to imagine we can identify in a caring relationship who is the caregiver and who is the cared-for; their relationship is marked by interdependency”. Yet, in this case, although the animals used for medical research are cared for in complex material and affective ways (Friese and Latimer 2019; Roe and Greenhough 2021), to an extent, such care can also be understood as enabling “the instrumentalization of life, in being used to gain knowledge about entities that can be exploited for the purpose of control” (Giraud and Hollin 2016, p. 31).

Given the coercive situation of animal lives in research facilities and the imposition of their dependency upon professional caregivers, care relationships here rarely strive to promote the relational autonomy of research animals, an obligation which is argued as central to ethically responding to vulnerability (Mackenzie 2013). In this sense, rather than being care-providers as well as receivers in relations of mutual care and dependency, the role of animals in such processes can be understood as ultimately instrumental, with their bodies ideally being used to *generate* healthcare treatments and interventions for unknown others. This imbalance of power and care thus unsettles comfortable narratives around laboratory animals as “symbolic saviours” (Birke 2014) and heroes (Sharp 2018) and, given the ways in which “nonhuman animal bodies are made ill and often are killed in an effort to assist human body projects of health” (Peggs 2018, p. 514), deserves serious recognition in discussion around the societal necessity of animal use for medical research.

For the study of views and opinion on animal research, this analysis therefore demonstrates the ubiquity of ambivalence, rather than polarised and definite positions. Instead of striving to downplay debate and dissensus around animal research by appeals to public acceptance of animal use for medical purposes,



science-society relations around the issue might, therefore, fare better with honest recognition of the concerns and discomfort which pervade all areas of scientific animal use. Such acknowledgment of concerns and ambivalence around animal research, which transcend fixed notions of support or opposition, could enable science-society conversations around the issue to collectively grapple with its socio-ethical complexity and thus aid the biomedical community in identifying societal priorities for the field going forward.

Indeed, this analysis emphasises the need for the harm-benefit analysis (HBA) which underpins the ethical review of animal research proposals in the UK to more deeply consider the societal necessity of the expected outcomes and benefits. As Blattner (2019, p. 176) stresses, in scientific terms, “to offer benefits, a research project must produce recognizable results of scientific value”, crucially, however, from a societal perspective, “only socially desirable objectives can be pursued in an experiment”. Given the social and ethical importance of defining what benefits are necessary to pursue for society, the role of publics and the ways in which they can contribute to decision-making processes in the animal research domain deserves greater attention.

This paper also illustrates that although biomedicine is often seen to play a key role in both structuring and mitigating health vulnerabilities, its role here is not unproblematic. In touching on anxieties towards futures that biomedical research might generate and how these may shape our relationships with inherent vulnerability, this analysis demonstrates how the category of ‘health’ is open to rearticulation in ways which might diverge from biomedical frameworks and seek to accommodate and re-naturalise processes such as aging and dying. Heeding the words of Shildrick (2002, p. 72) who argues that “the more we believe that we can control our bodies, the greater the anxiety that is generated by the evidence of vulnerability”, this paper therefore implies that discomfort towards the reach of biomedicine and its influence on our relationships with vulnerability warrants further exploration not only in the context of animal research but throughout the study of health and illness more widely.

Finally, providing empirical insights into the difficulty of responding to the vulnerability of others, particularly when the exploitation of another’s vulnerabilities may be caught up in the management of our own, this paper indicates that future work might fruitfully explore how the ethics of human–animal relations across domains shapes lived understandings of health and illness. Huth (2020, p. 1) suggests that attention to the particular relationships we share with animals can open new ways of ethically responding to their vulnerability, rendering “critique and change of current conditions possible”. Future work might, therefore, take an interspecies approach to explore how vulnerability is understood and experienced to examine *whose* vulnerability is placed at the centre of our ethics and ask how we might be well *together*.

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Declarations

Conflict of interest The Author declares that there is no conflict of interest.

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