Exploring everyday relations with animal research: A sociological analysis of writing from the Mass Observation Project

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Contents page

Contents

Abstract

This thesis explores how the topic of laboratory animal research is related to in everyday life in the UK, providing a sociological analysis of practices of knowing, caring, and constructing necessary biomedical uses of animals. In doing so, it develops the few qualitative studies of societal understandings of animal research, aiming to expand analyses in this area beyond measurement of polarised and static notions of acceptance or opposition. Instead, this thesis approaches understandings of animal research as relational and positional, emerging within particular yet shared social worlds which give the issue meaning in the everyday. Such a stance goes beyond efforts to observe *what* people think or know about animal research which dominate previous studies in this area and, instead, opens these categories up further to explore what animal research *means* to individuals and why. In this way, the thesis challenges assumptions of passive absorption of information on the issue and accusations of public ignorance or misunderstanding.

Diverging from the dominant emphasis in this area on examining the views of the 'general public', this thesis explores the contributions of a specifically situated sample, namely correspondents to the Mass Observation Project, a national life-writing project in the UK. The Project's embrace of plurality, reflexivity, and embodied knowledges provides an opportunity for a qualitative analysis of understandings of animal research which resists the pull to resolve concerns or debate in this area. In thematically analysing the 159 written responses to a 2016 Mass Observation Project Directive on the topic of '*Using animals in research*', this study focuses on processes through which correspondents to the Project, or 'Mass Observers' as they are known, relate to animal research.

Going beyond assessments of attitudinal positions on the issue, this thesis attends to the messy affective and material dimensions of relations with animal research, embracing the ubiquity of ambivalence and discomfort that surround the topic. In doing so, the analysis presented here reveals tensions that animal research can generate amongst care obligations, moral values, and identities. Dwelling on the socio-ethical concerns associated with animal research, this thesis argues that science-society relations around the issue should move away from seeking consensus and instead contend with the complexity of concern it evokes, engaging with such concerns not as problems, but as valid and important contributions to a collective discussion around how animals should or should not be used in science.

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1. Introduction

This thesis explores how the controversial and highly debated topic of animal research is related to in everyday life in the UK, looking at practices of knowing, caring, and constructing necessary biomedical uses of animals. To achieve this, it draws on an analysis of writing from the Mass Observation Project, a national writing project in the UK, and literature across the fields of Public Understanding of Science, Science and Technology Studies, Care Ethics, and the Sociology of Ignorance. In doing so, the thesis aims to move beyond the traditional polarisation of understandings of animal research into absolute positions of support or opposition, instead seeking complexity over consensus. In critiquing elements which currently limit science-society dialogue around animal research, this introductory chapter first provides an overview of the UK regulatory framework around animal research, gives context on the openness agenda and the societal debate around the issue, and introduces the method at the centre of this thesis. The chapter concludes with an outline of the research questions which have guided this project and the overall thesis structure.

1.1 The regulation of animal research

The use of non-human animals in scientific research is argued to be necessary to the advancement of science (Barré-Sinoussi and Montagutelli, 2015: 8) and in 2019, 3.40 million procedures involving the use of non-human animals were conducted in Great Britain. Animals can be used in 'basic' research which aims to gain a better understanding of a particular system or phenomenon, 'applied' research which investigates specific pre-defined hypotheses, 'regulatory testing' which involves testing the safety and efficacy of drugs and chemicals, environmental research, and in education and training. The majority (57%) of UK scientific procedures using animals undertaken in 2019 were for the purpose of basic research, with the three main areas focused on being the immune system, the nervous system and oncology (Home Office, 2020: 2). However, as well as experimental procedures which constituted 1.73 million of all procedures in 2019, 1.67 million procedures using animals concerned the creation and breeding of genetically altered (GA) animals (ibid).

The use of animals in the UK is regulated at the national level via the Home Office's Animals in Science Regulation Unit (ASRU) and the Animals in Scientific Procedures Act 1986, commonly referred to as 'A(SP)A', and at the European level through the EU Directive

(2010/63/EU). Embedded within both levels of regulation are the principles of *Replacement, Reduction,* and *Refinement*, referred to as the 3Rs. These principles were put forward in Russell and Burch's (1959) publication of *The Principles of Humane Experimental Technique* and emphasise the importance of experimental animal welfare. Replacement concerns the aim of replacing non-human animals in scientific procedures with NHA alternatives wherever possible. This could mean either full replacement (no animals are used) or partial replacement, which may include the 'use of some animals that, based on current scientific thinking, are not considered capable of experiencing suffering' (NC3Rs 2021). The principle of reduction aims to minimise the number of animals used in scientific procedures, aiming to obtain as much data as possible from each animal in order to decrease the overall number of animals used. This may include the 'microsampling of blood, where small volumes enable repeat sampling in the same animal' and data-sharing to avoid duplication (ibid). Finally, refinement concerns research design which ensures that the impact on any animals used is as minor as possible. Examples of refinement may cover the housing, pain relief, and training of animals used in scientific procedures.

In the UK, The National Centre for the 3Rs (NC3Rs) works to improve 3Rs implementation across bioscience institutions, providing information and training resources and funding research projects which further the 3Rs principles. The 3Rs framework also guides the ethical review process performed by localised ethics committees called Animal Welfare and Ethics Review Bodies (AWERBS) who decide whether to licence project proposals involving animal use or not. As well as the 3 Rs, another key ethical framework which informs the regulation of animal research is the Harm-Benefit Analysis (HBA), which weighs up the potential harms that a procedure is likely to inflict against the expected benefits of the research. This utilitarian model is intended to ensure that only projects able to demonstrate that the potential benefits outweigh the potential harms will be licenced.

In considering the potential harms that a given project using animals may inflict, assessments are not limited only to the expected impact on the non-human animals involved but also consider how the research might negatively affect the local and wider society. For instance, the use of particular species deemed as occupying special social status is seen as more societally contentious and harmful than using other species, and it is for this reason that dogs, cats, horses, and non-human primates are classified as 'specially protected' species and

afforded higher levels of protection under A(SP)A (Home Office, 2017). Hobson-West and Davies (2017) argue that such consideration of how animal research might perpetrate societal harm signifies a recognition of what they term 'societal sentience', with the regulation here intending to 'reduce societal pain, suffering, distress and lasting harm potentially caused by laboratory animal science' (Hobson-West and Davies, 2017: 15-16). Such work draws attention to the role that societal understandings of animal research play in shaping its regulation.

However, in order for the practice of animal research to function within acceptable societal parameters, areas of particular societal concern or priority must be continually monitored, identified, and addressed in regulatory processes. Raising this point, a 2017 report on the HBA by the Animals in Science Committee (ASC), a non-departmental public body created by the Home Office to provide independent advice to the Government on animal research, called for better identification of societal concerns and more consideration of such concerns if they are found. As the report states –

> 'At present, societal concerns relevant to harms and benefits (along with important ethical concerns and novel or contentious issues) are not well defined. In addition, there is no clear mechanism for ensuring that the diversity of relevant issues is identified and given due scrutiny within the project evaluation and HBA processes. If and when societal concerns are identified, they should clearly be placed in the 'harm' side of the HBA and given due weighting' (ASC 2017: 62).

As this excerpt emphasises, to maintain good practice in the scientific use of animals, the bioscience community must be considerate of societal understandings of the issue. Methodologically, this task would seem to demand the fostering of open and mutually meaningful dialogical processes which enable publics to articulate their views towards animal research practice and engage in ongoing discussions about how animals are used in science. Yet, most prevalent in shaping science-society dialogue on the topic, as we will now explore, is the bioscience community's turn to institutional openness on animal research.

1.2 The openness agenda

In the 1990s and early 2000s, the UK saw several high-profile undercover investigations, activist campaigns, and instances of extremism around animal research. For instance, in 1999,

Stop Huntingdon Animal Cruelty (SHAC) was founded in response to footage aired in a Channel 4 documentary showing staff at Huntingdon Life Sciences assaulting beagles whilst taking samples of their blood (Bright, 2001). In 2004, brothers running a guinea pig breeding facility for use in research suffered the desecration of their mother-in-law's grave by animal liberation activists (BBC, 2006). Also in 2004, SPEAK (originally Stop Primate Experimentation at Cambridge) was founded to campaign against the build of new animal research facilities at universities in Cambridge and Oxford. Though successful in their first endeavour, in their second campaign against the construction of a new biomedical research facility at the University of Oxford, SPEAK encountered the response of a *pro*-animal research campaign. In response to SPEAK's Oxford protests, in 2006 16-year-old Laurie Pycroft formed Pro-Test, a research advocacy group with the intention to 'dispel the irrational myths promoted by anti-vivisectionists and to encourage people to stand up for science and human progress' (Pro-Test, accessed 2018). Despite years of lobbying from animal rights groups, the animal research facility at Oxford was built.

Recognising the achievements gained in responding to anti-animal research groups and the negative impact of withdrawing from public discussions, the bioscientific community recently embraced an agenda of openness. This was formalised by the 2014 launch of the Concordat on Openness on Animal Research by the non-profit research advocacy organisation Understanding Animal Research (UAR). The Concordat has received 126 signatures to date from life science organisations who commit to improving transparency, openness, and data-sharing (UAR 2021). Demonstrating a shift from mitigating the risks of openness to the risks of secrecy, included in the Concordat's Objectives for 2017 to 2020 is to '[a]lert the research community to the risks of secrecy, and provide support for greater transparency, highlighting its benefits for science, animal welfare and communications' (Williams and Hobson, 2019: 8). Underlying this turn, however, is an assumption that an increase in providing scientific and regulatory information on animal research will resolve societal concerns towards the practice. Such an approach frames those with concerns as inherently hostile and as a problem to be solved rather than engaged with, as shown in the excerpt from UAR below –

> 'Within the life-science sector the Concordat has inspired collaborations between institutions, and challenged the fears associated with speaking about animal research, to reflect a society where the voices against using animals in science are becoming

> more reasoned and less aggressive. For wider-society, the Concordat has provided better access to information about animals in research. This has led to a greater understanding of the role of animal care staff, enabling interested public to see inside facilities, and more considered news stories on the use of animals in research' (UAR 2017).

This reflection on the work of the Concordat illustrates an important way in which publics are constructed through the openness agenda on animal research, being seen as a threat to scientific practice caused by mass ignorance, misinformation, and irrationality. Therefore, in constructing this public imaginary (Rommetveit and Wynne, 2017; Paper on the construction of public imaginaries in the UK animal research debate by McGlacken and Hobson-West is under review, see Appendix G), the task of the bioscientific community is set to neutralise and manage this threatening public entity (Welsh and Wynne, 2013), either through educating and informing the public on the scientific basis and necessity of animal models and the stringency of the regulatory framework or by displaying institutional transparency and challenging assertions of secrecy through release of data such as annual statistics. These approaches treat publics as students to be taught and as silent witnesses of data, substituting reciprocal engagement with the views and concerns of publics for one-way management and dismissal.

Indeed, the enactment of such openness on animal research has itself come under scrutiny, being characterised as 'selective' and chiefly 'a matter of controlling information' (Holmberg and Ideland, 2010: 365; see also Pound and Blaug, 2016). As will be explored in Chapter 5, the practice of openness on animal research largely treats this as an end in itself, with information sharing through release of annual statistics of national animal use, institutional webpages dedicated to explaining their animal use to lay audiences, non-technical summaries of project licences, virtual tours of certain laboratory facilities[1] and so on being presented as fulfilment of the bioscience community's contribution to public discourse around animal research. However, as a bioethical controversy and enduring moral dilemma, animal research is an issue which requires collective discussion which is inclusive of diverse perspectives and open to mutual learning. As Limoges (1993) contends, in a controversy 'the actors are not an audience,

[1] http://www.labanimaltour.org/

nor are they 'students' to be taught: 'the learning is open ended, and there is no "teacher" to set standards and design a learning process' (Limoges, 1993: 422). Rather, all actors involved create the controversy through what Limoges terms their 'worlds of relevance', in doing so redefining what is at stake and what matters through their interactions with one another. Nevertheless, as will be explored next, current efforts towards fostering science-society dialogue and public involvement in decision-making processes around animal research fall short of the reciprocity at the core of such an approach.

1.3 The role of publics in dialogues around animal research

Although I have argued that the enactment of openness around animal research fails to contribute to two-way dialogical processes involving publics, 'public opinion' represents a valuable resource to various stakeholders in the practice (Hobson-West, 2010). As Chapter 2 will discuss in detail, the manufacture of public opinion through national opinion polling and surveying plays a leading role in science-society discourse on the issue and is frequently gestured to by stakeholders with differing positions. Poll results are often referred to as evidencing what 'the public' *think* or *know* about animal research, with stakeholder organisations then able to use elements of this public mood to underscore their particular positions or aims with democratic legitimacy. In such cases, national polling can provide credibility to public education initiatives by interpreting such data as reflecting public ignorance or misinformation on the issue (UAR 2019: 2) or can be pointed at as evidencing public opposition to animal research and a desire for the replacement of animal models with alternatives (PeTA, 2019). Indeed, as insights from the field of Public Understanding of Science have shown, such mechanisms can work as technologies of 'elicitation' (Lezaun and Soneryd, 2007), acting as ways of strategically managing publics and their participation.

As well as this, such methods often overlook the affective ways in which individuals understand animal research. On this point, Michael (2001) argues that the survey as a method cannot capture the 'changeability' of opinion, claiming that '[c]ontradiction, ambivalence and so on are, rather, obscured in the production of reasonableness and balance, that is, in the performance of rationality and the self-presentation of self-possession' (Michael, 2001: 216). Indeed, in discourse on animal research emotion towards the topic is often construed as evidence of irrationality, as this excerpt from Yogeshwar, a science TV presenter in Germany, on the risks of public advocacy for animal research demonstrates –

> 'An audience presented with multiple opinions and viewpoints tends not to weigh the credentials and expertise of the speakers, but to decide on instinct who is more emotionally credible. Even if a television programme is convinced to not air graphic images of animals, an actress weeping about the fate of a puppy will carry more weight than a dry scientist with a logical defence' (Aziz et al., 2011: 459).

Therefore, in restricting how publics can relate to animal research, favouring clear-cut binary positions and the closure of tick-box responses, the dominance of opinion polls and surveys in this area ignores the complexity that emotional understandings of the issue can introduce. Attending to the role of affect in animal research, there is a growing body of social scientific research exploring the practices of multispecies care between actors in the laboratory (Holmberg, 2011; Greenhough and Roe, 2011; 2018b; a; Friese and Latimer, 2019). However, how wider publics might understand animal research through the lens of care has been overlooked in pursuance of their attitudes towards and knowledge on the issue.

Overall, instead of viewing poll results as a guide for further discursive investigations of views towards animal research, enabling them to be explored in more detail and breadth, such mechanisms can be seen as creating public opinion which can then be used to reinforce the pre-held positions and agendas of stakeholder organisations. Indeed, going further, such approaches of eliciting views towards animal research help to construct a homogenous public entity, allowing for the plurality, positionality, and relationality of views and feelings towards animal research to be ignored.

Again, this construction of 'the public' by stakeholders in the societal discourse around animal research is unpacked in the literature review in Chapter 2, however, it is pertinent to note here how this imagination of publics feeds into the restriction of science-society dialogues on the issue. As touched on in the earlier discussion of openness around animal research in subsection 1.2, the construction of publics as a homogenous collective makes possible claims of 'public' support or opposition to animal research, minimising the nuance that exists between these absolute positions and the contexts which shape such relations to the issue. Similarly, in utilising particular constructions of 'the public' to further their own position on animal research, stakeholder organisations are able to characterise this public as collectively threatening, irrational, emotional, supportive, ignorant, misled, outraged and so on when it is useful to do so.

As signified in the ways that openness around animal research has been implemented, current bioscientific interactions with publics on animal research often treat concerns towards the practice as problems to be solved. As MacArthur Clark et al. (2019) put it, '[i]t is likely there will always be a sector of society that actively opposes animal research. Therefore, responding to the concerns of that sector, and preventing activists from becoming radicalized, involves engaging today's public and educating them about the contributions that science has made to human and animal lives' (MacArthur Clark et al., 2019). Given this, science-society interactions are often conducted in ways which seek to close down concerns i.e. through educating or informing publics and dismissing their views as illegitimate. Such disengagement with societal concerns towards animal research undermines the social contract upon which science can be ethically and most valuably practiced. Indeed, rather than treating disagreement as a hindrance to productive public engagement, Irwin (2017) claims that 'concepts like dissensus, disclosure, conflictual consensus and agonism are valuable—but they should be seen as part of the consensual ideal rather than a contrast to it' (Irwin, 2017: 12).

To embrace societal concerns around the scientific use of animals is to recognise that such concerns should also be present throughout the bioscientific community, being part of a commitment to ethical reflexivity and motivating the implementation of the 3Rs. In valuing concern around animal research not as inherently antagonistic but as an important part of citizenly engagement with one aspect of how 'we' as a society treat animals, science-society dialogues on the issue may begin to move away from a paradigm based in conflict. Such a shift would encourage societal discourse to better address the nature of animal research as an issue of enduring bioscientific controversy and moral concern (Beauchamp et al., 2015a; Beauchamp et al., 2015b; Degrazia and Beauchamp, 2015) that is bound up with lived understandings of human-animal relations and expectations of the role of science and medicine. It is the contention of this thesis, then, that animal research remains problematic in the UK and rather than seeking to resolve concerns towards the practice, many of which I will suggest in the conclusion to this thesis are unresolvable without the full replacement of animal models, most important is that concerns are acknowledged and brought into the discussion.

Furthermore, involving publics in discussions on animal research means more than engaging with 'concerns', it means exploring the range of societal sensitivities and sentiment around how animal research is practiced and being guided by priorities that publics identify for its future. Therefore, to explore these areas in a way which embraces their plurality and nuance, this thesis uses the Mass Observation Project (MOP), a national life-writing project based in the UK which I will now introduce.

1.4 The Mass Observation Project

To explore understandings of animal research, this thesis is based on a qualitative analysis of writing from The Mass Observation Project (MOP), a national life-writing project which aims to document 'everyday life in Britain' (Mass Observation, 2015b). As accounted for in more detail in Chapter 3, the MOP maintains a panel of voluntary correspondents from across the UK, referred to as 'Mass Observers', who are engaged with through 'Directives', a set of questions or prompts on a particular topic. Directives span a varied range of topics but areas of interest can be brought together under the heading of 'everyday life'. In analysing the 159 responses to the 2016 '*Using animals in research*' MOP Directive, this thesis aims to offer an alternative mode of studying societal understandings of animal research which attends to the particular contexts that shape such understandings, seeking nuance instead of generality and being careful not to treat analyses as representative of 'the public'.

In situating the data upon which this study is based in the 'everyday', I am explicitly attempting to move away from concepts such as 'public' views or opinions. Instead, I use the notion of the 'everyday' to mark the location of this data within the MOP and its longstanding focus on everyday life in Britain. As an object of study, the everyday can be hard to define, being seemingly embedded in mundane and ordinary experiences yet equally all-encompassing and intangible (for a 'peripatetic' discussion of different conceptualisations of the 'everyday', see Chapter 2 in Michael, 2006). Understanding the everyday as signifying totality, Burkitt (2004) describes it as including the official and formalised as well as the interpersonal and intimate elements of social life. As they summarise, '[e]veryday life is profoundly related to *all* activities, and encompasses them with all their differences and their conflicts; it is their meeting place, their bond and their common ground. It is in everyday life that the sum total of relations that make the human – and every human being – a whole takes its shape and form' (Burkitt, 2004: 211).

As well as signalling the totality of social life, the concept of the everyday can attune us to its fluidity and relationality. As Back (2015) explains, 'the value of thinking about the everyday is that it signals the routine and unfolding aspects of social life. It makes sociologists think about society not as a set of structural arrangements but as a moving and dynamic entity that has a rhythm and a temporality' (Back, 2015: 820). Particularly important to this thesis is how the everyday 'makes us take the mundane seriously and ask what is at stake in our daily encounters' and 'also means we have to think about the wider spectrum of life experiences' (ibid, 821). Such an approach is important to provide legitimacy to the range of understandings of and relations to animal research, enabling a move beyond polarised positions of support and opposition and the hierarchisation of expert knowledges that is reflected in deficit-model (Millar and Wynne, 1988) approaches to exploring views towards animal research (more detail on which is provided in Chapter 2).

Discussing the Mass Observation Project's own conceptualisation of the everyday, Highmore (2002) describes how, from its beginning in 1937 as the social research organisation Mass Observation (MO), the Project did not delineate what counts as everyday life. Rather, in practicing an open interpretation of the category, MO constructed the everyday as an object of study with political potential, enabling recognition of marginalised voices (with a 'vast number' of early recruits to the national panel being women) and undervalued elements of social life (i.e. the 'domestic sphere') (Highmore, 2002: 109). In doing so, Mass Observation is seen to pursue a 'politics of everyday life' which embraces 'the non-rational, the affective and the oppositionally ritualistic' and 'has as its potential the purposeful destruction of the hard and fast distinction between specialist and amateur, between objectivity and subjectivity, between science and art' (ibid, 110-111).

In these ways, the MOP presents an alternative to the problems identified earlier in this chapter that limit dominant approaches to researching 'public' views. For instance, as will be explored in depth in Chapter 3, with its own strong commitment to the importance of embodied knowledges, documenting observations, feelings, and experiences which are lived and located in the everyday, the MOP complicates assumptions of public ignorance or misinformation. Rather, given the reflexivity typical of MOP writing, Mass Observers often critically consider the epistemic value of their own knowledge. As Kramer (2014) explains in describing how Mass Observers are encouraged to record both their own perspectives and

experiences and those of others, acting as both 'Observer' and the 'Observed', 'the strength and richness of Mass Observation here is not just that it is able to reflect the perspectives and experiences of a wide range of people, but also that Mass Observers carefully identify the limits of their knowledge' (Kramer, 2014: 5). In considering not only what they know and do not know about a topic and how their knowledge might compare to that of others, but also assessing what such knowledge *means* to them, Mass Observers are able to locate their views within their particular yet shared social worlds. In this way, MOP writing has the potential to challenge the authority of scientific knowledge by situating it amongst other ways of knowing that may have equal or more relevance. As such, use of the Mass Observation Project as a research method presents one possibility for moving beyond the restrictive ways in which understandings of animal research have tended to be explored.

1.5 Research questions

Grounding my initial inquiry in Public Understanding of Science literature and its focus on the ways that publics make sense of technoscientific issues beyond the deficit-model, this study is shaped by three predominant research questions. These consisted of looking into what kinds of understandings of institutional openness on animal research are represented in MOP writing on animal research, whose interests are considered and cared about in MOP writing on animal research, and how are judgments about the necessity of animal research made in MOP writing on animal research. These questions, their corresponding meta-themes, and the sub-questions they encompassed are detailed below:

1) What kinds of understandings of institutional openness on animal research are represented in MOP writing on animal research? [Meta-theme: Knowledge]
    - How is the topic of animal research engaged with in the everyday? How is knowledge or ignorance of animal research obtained/maintained?
    - What kinds of information do Mass Observers want to know about animal research?
    - What kinds of emotional understandings are represented in writing about animal research?
    - How do Mass Observers construct the role of 'the public' and in turn themselves in relating to animal research?

As knowledge capacity is a central aspect of the openness agenda around animal research, with deficit-model approaches informing assumptions about 'public knowledge' on the issue, I was motivated to consider what knowledges Mass Observers have of animal research *means* to them in everyday life and how the topic of animal research is actively engaged (or disengaged) with.

2) Whose interests are considered and cared about in MOP writing on animal research? [Meta-theme: Care]
   - How do Mass Observers relate to animals involved in scientific research?
   - How do species distinctions shape how Mass Observers understand animal research?
   - What role do discourses of health and illness play in relating to animal research?
   - Who is involved in harm-benefit frameworks of animal research?
   - How is personal responsibility constructed in relating to the issue of animal research?

The first research question's exploration of knowledge sparked my interest into the relation between knowing and caring and led me to consider the care dimensions within areas such as human-animal relations, sentience and suffering, and health and illness. Rather than exploring the mobilisation of absolute ethical principles, I aimed to explore everyday care practices in which animal research is implicated.

3) How are judgments about the necessity of animal research made in MOP writing on animal research? [Meta-theme: Medicine]
   - Which categories of animal research are deemed most important?
   - How is necessity in animal research understood by Mass Observers in the everyday?
   - How is the category of medical research understood?

Given the role that claims of necessity play in justifying and accepting scientific use of animals in the present (more detail on which is provided in Chapter 7 and Chapter 8), the construction and negotiation of this necessity was a key interest from early on in the project. This involved consideration of the frameworks that 'necessary' research endeavours are understood through, how the concept of necessity relates to ethical justification, as captured in the common phrase associated with animal research – 'necessary evil', and boundaries between 'necessary' and 'unnecessary' research. As will be illustrated in Chapter 7, my inquiry into the theme of necessity came to focus on medical research, due to an interest in critically

examining claims that acceptance of scientific animal use is greater for medical research (Ipsos MORI, 2018).

1.6 Thesis structure

In exploring everyday understandings of animal research and answering the three research areas I have identified, this thesis is structured as follows:

Table 1: Thesis chapter structure

CHAPTER 1	INTRODUCTION	P. 10
CHAPTER 2	EXPLORING UNDERSTANDINGS OF ANIMAL RESEARCH: PROBLEMS AND POSSIBILITIES This chapter is organised in two halves. The first will provide a review of previous empirical studies of views towards animal research across the UK and Europe. The second will discuss four key analytical lenses from Science and Technology Studies (STS) and Public Understanding of Science (PUS) literature, exploring the role of knowing, trust, hope and fear, and care in understandings of technoscientific issues and considering their application to animal research.	P. 24
CHAPTER 3	INTRODUCING THE MASS OBSERVATION PROJECT This chapter offers an overview to the method at the centre of this thesis – the Mass Observation Project, giving a brief insight into its history, explaining how the Project functions, detailing the kinds of research based on MOP materials, then discussing the particular positionality of Mass Observers and how their writing should be treated in research.	P. 53
CHAPTER 4	MY USE OF RESPONSES TO THE 2016 MASS OBSERVATION PROJECT DIRECTIVE ON 'USING ANIMALS IN RESEARCH' This chapter accounts for the specific ways that I have used the MOP as a research method, clarifying my methodological and analytical approach.	P.67

2. Exploring understandings of animal research: Problems and possibilities

2.1 Introduction

Animal research has been studied by scholars across the social sciences, being explored as a practice which transforms non-human animal bodies into scientific data (Lynch, 1985; Latour et al., 1986; Lynch, 1988), a scientific controversy (Nelkin, 1995), a space in which human and non-human actors intersect through the 'doing' of science (Arluke, 1988; Birke et al., 2007), and as discussed in the introduction to this thesis, a socio-political issue in which public opinion is enrolled as a form of currency (Hobson-West, 2010). Indeed, as Davies et al (2020) have commented, the plurality of reasons drawing those to the study of animal research reflect its 'material importance and imaginative pull […] as a space for studying the remaking of human-animal relations and ethical practices in an era of modern biomedical science' (Davies et al., 2020: 3).

Given the enduring controversy of scientific animal use, societal or 'public' views and attitudes towards animal research have also been studied widely across the social sciences. However, as this literature review will demonstrate, much of this research has been quantitative and focused on investigating views in 'representative' ways which allow for monitoring and measurement across social demographics and populations. Given that animal research remains a controversial area of scientific practice, the methodological approaches and methods used to explore views and feelings towards the issue are of both methodological and ethical importance. Because of this, this literature review is organised into two main sections. The first half explores previous studies of public or societal 'opinion', 'attitudes', or 'views' towards animal research and is structured into three subsections which discuss the methodological aspects of the research. With the method and approach intimately shaping the response and what is made of it, here, I navigate previous studies by the way in which they treat the views and feelings of publics towards animal research. In relation to the largely quantitative nature of work in this area, the first and second subsections respond to the focus on internal and external variables seen as influencing views towards animal research. Finally, the third subsection looks specifically at the use of opinion polls, a method which has been given privileged attention here due to the significance it holds across UK animal research

dialogues. In providing an overview to empirical work in this area, I draw on theoretical insights from Science and Technology Studies and Public Understandings of Science to provide a critique of methodological problems and gaps. Because animal research practice in the UK is currently regulated at the European level and studies in this area often look at views across Europe or purport to analyse the views of Europeans, this review concentrates on UK and European data and includes only those written in English.

In the second half of this literature review, I consider how the four analytical lenses of knowing, trust, hope and fear, and care have been employed in different degrees across Science and Technology Studies (STS) and Public Understandings of Science (PUS) to interpret how individuals make sense of technoscientific issues. Indeed, as will be discussed, such lenses have been employed in some of the qualitative studies on views towards animal research. However, given the dominance of quantitative approaches to studying views towards animal research which have focused on correlation with particular variables, attention to such relational processes has been marginal in this area. The focus on these particular lenses (that I refer to as *lived* lenses) is informed by my relational approach to understanding views towards animal research, looking at how individuals make sense of the issue as situated within social relations. Rather than interpreting views towards animal research by categorising and correlating internal and external variables which are treated as constant and stable, the lenses outlined here emphasise the ways in which animal research is made sense of within the affectual relations which give it meaning in the everyday and the structural constraints which shape these.

It is pertinent to acknowledge that this literature review could have been structured differently, concentrating instead on the internal and external variables that previous studies on views towards animal research have identified as having a significant role in shaping responses. However, in recognising the serious methodological pitfalls in an area dominated by macro-scale quantitative studies and the polarisation of answers into 'support' and 'opposition' that such work often lends itself to, a consequence of particular significance in a domain marked by controversy, I have taken a methodological focus in my review of the literature.

2.2 Previous studies of views towards animal research: the methodological problems

There have been many studies that indirectly touch on what publics think about animal research, for instance studies looking at how scientists frame the debate and construct 'the public' within it (Michael and Birke, 1994b) or media coverage of the debate (Birke and Michael, 1998). However, this review is focused upon studies that have sought to capture and interpret what publics *themselves* think about the issue of animal research. There exists a range of empirical studies exploring the views, attitudes, or opinion of publics, or, as they are often framed as belonging to, 'the public', on animal research. As a research topic, views towards animal research have been investigated within both Psychology and Sociology. Such studies largely employ quantitative approaches which tend towards the macro level, using surveys or opinion polls with nationally and internationally 'representative' samples through which overarching themes can be interpreted, demographic influences can be deduced, and, from which, longitudinal analyses can be conducted to monitor trends over time or across locations. In this way, previous studies in this area have aimed to determine the influence of demographic categories such as gender, age, socioeconomic group, education level, etc. on views towards the scientific use of animals, with a tendency to frame views in terms of acceptance or opposition. The few qualitative exceptions to these, however, are marked as such.

2.2.1 Looking inside: The 'public' and the internal influences

The imaginary of the UK 'general public' plays an important role in discourse around animal research, but claims about what this mass entity knows or feels about a topic are troubled by many well-documented problems. As will be explored in the second half of this chapter, decades of research from the fields of STS and PUS have shown that the notion of the 'public' is a construction which has particular consequence when invoked as a natural category. However, in the animal research domain, the construction of 'the public' as a singular and unified entity that can be said to collectively *think*, *feel*, *know*, or *want* things is prevalent in stakeholder dialogues as well as research investigating societal views towards the topic.

In previous studies of views towards animal research, participant samples are often intended to represent a nation-bound 'general public', an entity which can be collapsed into demographic groups. Indeed, much has been made of the links drawn between being female (Pifer et al., 1994; Crettaz von Roten, 2008; Ormandy and Schuppli, 2014; Pulcino and Henry,

2009; Bradley et al., 2020; Furnham and Heyes, 1993; Furnham and Pinder, 1990), being younger (Ormandy et al., 2013; Ormandy and Schuppli, 2014), or having a lower educational status (Gaskell et al., 2000) and opposition to the practice. Even when such variables do not paint a clear or rich picture of what publics think and feel about animal research, as in Pifer et al.'s (1994) cross-cultural analysis, the problem is associated with a *lack* of variables rather than an overreliance on them. For instance, Pifer et al.'s study found that '[o]nly gender shows a clear trend across all cultures studied, with women generally opposing animal research more than men' (Pifer et al., 1994: 108). However, rather than signalling a need for a more in-depth approach to better understand *why* this might be the case, they suggest that such a finding could indicate that 'there are variables that have not been identified or fully addressed' (ibid, 111), thus implying that future research should attend to other possible attitudinal variables.

This treatment of publics as constituted by demographic categories undermines the way that they emerge through their interrelation with social actors, fields, and issues. Indeed, Jasanoff (2014) argues that 'PUS research should promote a more robust conception of publics—not treating them as natural collectives (e.g., housewives or teenage women) but as dynamically constituted by changes in social contexts' (Jasanoff, 2014: 23). Instead, Jasanoff suggests that publics 'organise around 'matters of concern' and 'are not all alike but are guided by culturally conditioned "civic epistemologies"' (ibid). This argument for the relationality of publics reveals how constructions of publics as the sum of demographic categories, which act as variables influencing opinions or attitudes, ignores their performative constitution through interaction with issues.

Furthermore, complicating the strength of correlations drawn between demographics and support or opposition to animal research are findings from other studies which stress limited or no correlation between personal variables and opposition or support towards animal research (Schuppli and Weary, 2010) or demonstrate the considerable or greater significance of other variables, such as belief in 'animal mind' (Knight et al., 2004), vegetarianism or veganism (Bradley et al., 2020; Schuppli and Weary, 2010; Schuppli et al., 2015; Furnham and Heyes, 1993; Furnham and Pinder, 1990), or pet-keeping (Hagelin et al., 2002). Collectively such studies suggest that some variables can be said to matter sometimes, giving little overall explanation to contextualise *why* this is. Indeed, summarising their analysis, Hepper and Wells

(1997) contend that '[d]emographic factors alone will never provide full information on human-animal relations', with other factors such as 'previous experience and quality of relationships with animals' perhaps having more sway' (Hepper and Wells, 1997: 60). Similarly, in concluding their study of attitudes towards 'animal use' broadly, Knight et al. (2003) advise that '[f]urther investigation is needed that focuses on people's motivation to maintain an attitude or behavior and examines the underlying processing of factors relating to the animal and type of use, rather than trying to explain attitude variance in terms of personal variables such as gender and age' (Knight et al., 2003: 324).

There are a few notable exceptions to the prevalence of analyses based on variables and 'predictors'. Of the few qualitative studies in this area, Knight and Barnett (2008) used interviews to explore attitudes towards 'animal use' broadly, using a small, non-representative sample and aiming to increase 'the richness of data, rather than seeking data that are representative of a population' (ibid, 33). In their analysis, the authors identify three key themes, namely 'type of animal used', 'purpose of animal use', and 'knowledge of animal use' and, in discussing how these factors relate to each other, emphasise a break with previous studies which have 'analyzed and reported attitudes as uni-dimensional' (Knight and Barnett, 2008: 32). Instead, Knight and Barnett note that 'the relationship between these factors and attitudes is fluid; behavior is not always based on the rational consideration of relevant factors' (ibid, 41).

Another important qualitative study in this respect is Michael and Brown's (2004) analysis of laypeople's views on xenotransplantation. Again, rather than aiming for a sample that is 'representative' of the general public and which could thus be broken down into demographic groups, participants were 'selected for the range of views that they might bring to the discussion' and the sample included members of patient support organisations and local community organisations (ibid). In their analysis, Michael and Brown found that 'lay discussion of such arguments quickly goes beyond and beneath cost–benefit to encompass a series of concerns and views that eventually render those cost–benefit arguments highly spurious' (ibid, 394). Moving beyond the cost-benefit framework, the authors characterise lay discussion on xenotransplantation as mobilising three 'meta-arguments': 'trust (whose costs and benefits to believe), telos (futility in the face of technological inevitability) and trump (redundancy in the context of desperation)' (ibid, 388). Michael and Brown contend that the

use of these meta-arguments 'show how contingent this form of reasoning is' (ibid, 393). As well as this, their study emphasises the use of analogy in defining *what* is being discussed, which in this case centred on meat, and which reveals construction of the issue as 'a rather fluid and amorphous phenomenon' (ibid). The contingency of understandings of animal research practices revealed here thus pose a challenge to the use of methods which prevent participants from explaining how they are defining the issue, what it means to them, and how this is dependent on particular contexts.

In recognising the situation of understandings of animal research within particular social worlds and their relational nature, the idea that we can measure 'the public's' views or attitudes towards the issue becomes even more suspect. Moving away from references to the individualised mass entity of 'the public', Converse's (1964 [2006]) concept of 'issue publics' alludes to the ways that publics come into being through their interest in and engagement with specific issues. In describing the public identity as performative in this way, Converse's work can be seen as laying the groundwork for later categorisations of publics and their relationships with socio-political and technoscientific issues. For instance, the identification of 'attentive publics' coined by Almond (1950) and since expanded upon by Devine (1970) and Adler (1984) enables a similar specification of publics, distinguishing those who follow a topic the closest, are more aware of the details involved, and more likely to have a strong and informed opinion from the 'general public'.

More recently Michael's (2009) distinction between 'publics-in-general' (PiG), an 'undifferentiated whole' (Michael, 2009: 620), and 'publics-in-particular' (PiP) those with 'an unidentifiable stake' (ibid, 623) in an issue, can be seen as extending this work, emphasising how publics are constituted in relation to technoscientific issues as well as other public imaginaries. Such conceptualisations of publics emphasise the interaction between publics and technoscience, attending to the ways in which people are already actively engaged in processes of understanding and intervening in issues and controversies. Recognising the notion of publics as performative, arising through public performances in which one differentiates themselves from something, be it the state, science, or other public groups, thus reveals the limits of framing and analysing their views and contributions through personal variables. Hence, the focus on personal variables which privilege certain characteristics, such as gender and age, over experiences which may have more relevance

and meaning in relating to animal research, such as living with health conditions, reveals a lack of engagement with how animal research is made meaningful through everyday experience.

2.2.2 Looking outside: The method and its external influences

Other studies of how publics understand animal research have accounted for attitudinal 'variables' or 'predictors' related to *study-specific* characteristics and the instrument used as well as individual and societal factors (Hagelin et al., 2003; Crettaz von Roten, 2009; Ormandy and Schuppli, 2014; Pulcino and Henry, 2009). Such studies have looked at the effect of the type of research specified or whether the word 'pain' is mentioned (Hagelin et al., 2003) as well as characteristics related to the animals involved in research (Ormandy and Schuppli, 2014). Although such work recognises that the responses of participants are explicitly shaped by the method used to elicit them, instead of this acknowledgment leading to calls for qualitative work which is invested in the relationality of views, opinions, and feelings about animal research – the ways in which they *emerge through* cultural contexts and practices – the contingency of responses is often taken as an indication that more standardisation across survey design is needed.

For instance, in a secondary analysis of the Eurostat database and the Science and Technology Eurobarometer surveys, Crettaz von Roten (2012) concluded that given the data reviewed 'didn't include a wide collection of items to measure fully attitudes towards animal research', 'this important issue should be studied with a specific survey that would involve a well-established series of items on attitudes towards animal research' (Crettaz von Roten, 2012: 700). The implication here is that if enough variables are accounted for then attitudes can be 'fully' measured to produce a comprehensive insight into what certain groups think about animal research. Indeed, such a view is explicitly summarised in Furnham and Heyes' (1993) contention that despite the psychology students they surveyed demonstrating 'mixed' views towards animal research, 'beliefs about animal experimentation are not particularly complex and multi-dimensional' (Furnham and Heyes, 1993: 10).

Another instance in which the reproducibility of findings is privileged above the particularity of where and how such responses emerge is found in a study by Lund et al. (2012b). Following on from their qualitative study of Danish people's attitudes towards animal research in specific connection with the cost-benefit framework (Lund et al., 2012a), Lund et al. (2012b)

undertook a 'quantitative investigation' to evaluate its key findings (Lund et al., 2012b: 430). Commissioning an online questionnaire with a 'representative sample of the Danish public', the authors aimed to map the prevalence of the attitudinal categories found in the previous qualitative research, those of 'Approvers', 'Disapprovers', and 'Reserved', amongst the 'general public'. They found that the 'reproducibility of these stances appeared to be excellent' (ibid, 440) and that the majority (50%) of Danes sampled fell under the 'Reserved' category, not choosing 'a core value to subscribe to', instead deciding 'to approve or reject animal research on a case-by-case basis by weighing the animal costs and human interests' (ibid, 441). Although the three categories outlined above are used to indicate that judgements about animal research are made on a case-by-case basis, with participants weighing up the acceptability of experimental procedures individually, the authors suggest that they also pertain to underlying values which can be measured within populations. Hence, in categorising the views and feelings of participants into these overarching stances, the study compromises the richness and contextuality of discussion in favour of broad attitudinal positions which can then be measured across the 'general public'. In addition, although animal harms and human benefits are important considerations in discussions on animal research, the authors' contention that this is likely 'the decisive factor in people's decision to approve of such research' (ibid, 429) ultimately detracts from the plurality of factors at play in shaping views towards animal research.

An uncommon example of studies which account for the relationality inherent to socio-ethical thinking is offered in Macnaghten's (2004) qualitative study of public attitudes towards the genetic modification of animals. Using structured focus groups and a discussion guide 'designed to explore how people 'felt' about current and future applications of biotechnology to animals in the context of existing everyday social practices' (Macnaghten, 2004: 537), Macnaghten reported that people 'seem willing to make trade-offs in judging the boundaries between acceptable and unacceptable use' (ibid, 547). Hence, alike with Lund et al. (2012a; 2012b), Macnaghten's work supports the importance of cost-benefit frameworks in how publics judge scientific experiments using animals. However, unlike Lund et al., Macnaghten's study 'emphasizes that it is specific embodied social practices, rather than abstract ethical principles, that are most likely to shape and transform our relationships to animals' (ibid, 537). In embracing this, Macnaghten's research situates the acceptability of this use of animals and

the concerns that it may generate within 'wider cultural and political debates' (ibid, 540), thus reflecting how concerns can be reflective of anxieties that are not intrinsic to the GM issue, but are nevertheless key in its social practice, such as mistrust of government.

However, quantitative studies and their proclivity for anatomising views and feelings towards animal research into internal and external variables that can be analysed in isolation remain prevalent. In their restrictive response formats and focus on the macro, they provide little room for respondents to describe what animal research means to them and to situate the issue in practices and relationships with relevance to their everyday worlds. Indeed, although various studies purport to explore 'attitudes', what people *feel* about animal research is often left unattended to.

Indeed, in their review of relevant literature on attitudes towards animal research, Ormandy and Schuppli (2014) found methodological issues and identified three primary shortcomings of literature reviewed. These are the 'use of college students as participant samples, use of general questions about 'animal use' rather than specific questions about different types of animal use (or even different types of animal research), and use of Likert scales or rating scales that do not allow for more qualitative reasoning' (Ormandy and Schuppli, 2014: 400). On this last issue, the authors argue that '[w]hen 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' (ibid, 401). Despite this, as the next subsection will demonstrate, fixed response formats continue to dominate studies of views towards animal research.

2.2.3 The special status of opinion polls and surveys

Despite calls (Ormandy and Schuppli, 2014) for more open-ended studies on views towards animal research, those which provide more room for participants to articulate *why* they think or feel a certain way about the issue, opinion polls have become an authoritative method in exploring 'public' views on the matter. For instance, at the EU level, the Eurobarometer is recognised as an important tool for measuring 'public' opinion and monitoring long-term trends and, featuring specific sections on animal biotechnology, data from the Special Eurobarometer 341 (2010) is included in several meta-reviews of studies of views towards

animal research (Pifer et al., 1994; Crettaz von Roten, 2009; 2012; Ormandy and Schuppli, 2014).

In the UK, market research company Ipsos MORI has been conducting studies of 'public opinion' on animal research since 1999. Over the years, studies have been carried out on behalf of varying stakeholders, such as 'the Medical Research Council (in 1999), New Scientist magazine (in 1999), the Coalition for Medical Progress (in 2002 and 2005), the Department of Trade and Industry (in 2006), BERR [Business, Enterprise and Regulatory Reform] (in 2007) and BIS [Business, Innovation and Skills] (in 2008)' (Ipsos MORI, 2009). In 2014, the original survey was updated to 'reflect how the context of life sciences in the UK had changed' (Ipsos MORI, 2018) and this new version of the 'tracker survey' has since been conducted biennially. This new survey is conducted on behalf of the governmental Office for Life Sciences, a joint office between the Department for Health and Social Care and the Department for Business, Energy and Industrial Strategy and aims to measure the views of a 'representative' sample of Great Britain, enabling 'cross-wave' comparisons in order to track changing trends and patterns in the public acceptance of animal research (Ipsos MORI, 2018).

The Ipsos MORI surveys have wide-ranging significance in UK dialogues on animal research, being referenced by stakeholders invested in the continuation of scientific animal use (Understanding Animal Research, 2019) and its abolition (PeTA, 2019; Cruelty Free International, 2019), and by animal welfare organisations such as the RSPCA (Butler, 2019). The polls are often referred to as a measurement of what 'the public' *think, feel, know,* or *want* at a given time and used as a way to bolster stakeholder positions with democratic weight. For instance, discussing the 2018 wave of the survey, the head of the RSPCA Research Animals Department is quoted as stating '[t]hese results yet again show the public's ongoing and serious concerns for lab animals – concerns which are shared by the RSPCA' (Butler, 2019). However, as suggested in the previous studies discussed above, the restrictive nature of polls which constrain contributions to set responses misses the complexity and 'changeability' (Michael, 2001) of views towards animal research. Indeed, in their assessment of the methodological weaknesses of previous studies of views towards animal research, Ormandy and Schuppli (2014) contend that although 'polls can be valuable in tracking attitudes over time, and they invite broader perspectives from a wider and more representative sample population', they 'remain subject to the prior criticism of using fixed

response options for participants to choose from' (ibid, 401). In this case, surveys often limit responses to issues of animal welfare, regulation, and knowledge capacity, preventing the expression of concerns around the scientific validity of certain types of animal research, and, as Lund et al. (2012a) have pointed out, rarely include consideration of balancing risks and benefits of particular forms of research.

The restrictive nature of such methods thus means that they are particularly effective for evidencing pre-determined institutional agendas, with stakeholders able to guide and then gesture to what 'the public' thinks or wants in ways which serve their intentions. Indeed, in this way, Lezaun and Soneryd (2007) contend that opinion polls function as a 'technology of elicitation', which, along with 'the cohorts of experts that control their application and interpret their results' compose 'a veritable extractive industry' in which 'public opinion' is something to be produced and won in order to serve pre-defined institutional aims (Lezaun and Soneryd, 2007: 280). Hence, public opinion may be used to evidence a lack of awareness or to signal the level of trust that publics have in certain actors, both often lending to responses based around educating 'the public'.

The Ipsos MORI surveys are also enrolled in informing animal research policy. Indeed, UAR's launching of the Concordat on Openness in Animal Research in 2014 was, in part, a response to Ipsos MORI's repeated finding that a majority of those sampled characterised the bioscience sector as secretive (Ipsos MORI, 2009; 2013). Commissioned by UAR to run workshops on openness intended to feed into the Concordat, Ipsos MORI note that, given the nature of qualitative research, 'we cannot assume that the views of this small group will be reflected in the same proportions within the population at large', however they repeatedly fall back onto discussing their participants' views as 'the public's'. For instance, introducing its purpose, the report states that 'the public dialogue aimed to better understand what the public consider to be openness and transparency with regard to animal research' (Ipsos MORI, 2013: 11). Hence, the wants of those sampled become the wants of 'the public', i.e. '[t]he public want the sector to demonstrate its commitment to openness by creating greater scrutiny of itself' (ibid, 56).

As well as referencing the Ipsos MORI polls as a signifier of public opinion, campaigning groups have also conducted their own studies of what publics think about animal research. For instance, in 2013, market research agency Savanta ComRes were commissioned by UAR to

survey a 'representative sample' of the British public, asking '*To the best of your knowledge, do you think it is legal to test finished cosmetic products on animals in the UK?*' (Understanding Animal Research, 2013). Discussing the poll's findings, UAR's Chief Executive is quoted as stating that '[i]t is clear that we must do more to explain how and why animal research is conducted in the UK […] There is a risk that well-intentioned members of the public oppose animal research because they mistakenly think this means cosmetics testing […] I hope this survey will encourage scientists to talk more about their work to alleviate human and animal diseases. It is an opportunity to explain to the public that animal research is about medicine, not make-up' (ibid).

More recently, in the wake of the COVID-19 pandemic, UAR commissioned market research company Ipsos MORI to investigate public opinion during the crisis. Discussing the findings of this study, UAR determine that '[g]enerally, the public thinks of animals in scientific research related to products that they consume such as testing for cosmetics or for drugs. Many people do not think of the enormous amount of research carried out in universities, research institutes or in research arms of private companies, but it seemed that over a few short weeks this had changed' (Understanding Animal Research, 2020b: 2), suggesting that the usual portrayal of a comprehensive deficit of public awareness has narrowed towards specific pockets of ignorance.

In 2020, Cruelty Free International (CFI), an animal advocacy group which campaigns for the abolition of animal use in science, commissioned Savanta ComRes to conduct a survey of Europeans' views towards animal research (ComRes, 2020). Similar to previous polls in this area, responses were structured by scales of knowledge (from knowing 'A great deal' to 'Little/ Nothing at all') and agreement (from 'Strongly agree' to 'Strongly disagree'). Discussing the findings of this poll, CFI's Director of Science is quoted as contending that '[t]he results of our poll show the EU public is ready for animal tests to become a thing of the past. Now it's up to leaders to listen and put in place a plan that will end cruel and unnecessary suffering of animals in European laboratories once and for all' (Cruelty Free International, 2020).

Similarly, advocacy organisation The Fund for the Replacement of Animals in Medical Experiments (FRAME) conducted their own study of public views towards animal research in 2020, aiming to 'drill down into the detail of public understanding and perceptions – as well as misconceptions – around animal testing and animal use in research' (FRAME, 2020a: 6).

Key aims of the survey included measuring 'knowledge of the regulations' and 'awareness of alternatives' (ibid). Correspondingly, discussing the survey's finding, FRAME's Chief Executive gestured to the poll as evidence of public knowledge deficits, stating that '[e]ven though there have been scientific advances in recent years and some improvements in regulation, there are still many misconceptions about the use of animals in testing and research' (FRAME, 2020b).

As these examples of stakeholder use of opinion polls and surveys show, claims about what publics know and think about the practice are a resource of great importance in animal research dialogues. However, the way in which such methods frame respondents' contributions continues in the heavily critiqued tradition of the 'knowledge deficit-model' (Millar and Wynne, 1988), an approach based on the assumption that publics are lacking in relevant knowledge and once educated they will agree with the perspective of the speaker (for analysis of the persistence of this approach, see Meyer, 2016; Raps, 2016; Simis et al., 2016; Suldovsky, 2016).

Such an approach ignores decades of learning from the fields of STS and PUS, which have complicated the lay/expert divide, challenging the pressure to inform and educate the public by emphasising instead the value of lay expertise and local and embodied knowledges (Wynne, 1992; Epstein, 1995). Indeed, as Epstein's (1995) influential case study of AIDS activism in the US demonstrated, when required, laypeople can amass scientific knowledge in order to participate in expert technoscientific fields, becoming 'genuine participants in the construction of scientific knowledge', able to affect 'changes both in the epistemic practices of biomedical research and in the therapeutic techniques of medical care' (Epstein, 1995: 408). Therefore highlighting, as Jasanoff (2014) does, that rather than acquiring scientific knowledge in one comprehensive transference, 'understanding science for most adults is a process, not a steady state' (Jasanoff, 2014: 23).

Of course, this critique is not just aimed at polls and surveys but also implicates the dominance of studies which break down understandings of animal research into the internal and external influences documented earlier. In constructing samples to represent 'the public' and correlating their views with particular influences such as 'education', these studies overlook how knowledges other than the scientific are relevant in shaping understandings of animal research. Animal research is more than a technoscientific issue, it draws on ethical,

political, relational, and affectual dimensions of social life. In considering these aspects of how animal research is made meaningful in everyday life, the next section will explore the areas of knowing and not-knowing, trust, hope and fear, and care.

2.3 Lived lenses for analysing understandings of animal research

Unlike many of the previous studies which have analysed how views towards animal research are influenced by different variables such as demographic categories, implying fixed and homogenous assumptions of what these mean across lived realities, this section will attend to how certain *processual* analytical lenses may shape understandings of animal research. In reviewing literature on how publics relate to technoscientific issues, it is clear that certain analytical lenses have been prominent across the fields of Science and Technology Studies and Public Understanding of Science. The choice of analytical lenses included below are informed by these, whilst also drawing from work from the emerging field of the Sociology of Ignorance (McGoey, 2016) and the field of Care Ethics (Tronto, 1993). Additionally, this literature review and my positioning within it has also been influenced by my interactions with the Mass Observation Project and the theoretical work which dwells upon its methodological approach and value. In considering the lenses of knowing, trusting, hoping and fearing, and caring, I aim to illustrate the important insights these offer for studying how animal research is related to in the everyday. I have referred to these as 'lived lenses' in the subheading of this section in an attempt to capture their nature as practices through which social life is lived and experienced. Although such analytical optics have been used to examine the animal research domain itself, they remain underused in critical studies of *understandings of* animal research. Therefore, this second half of the literature review will discuss the important empirical and conceptual lessons offered by scholarly work which contends with such practices and each subsection will end by considering their application to studying understandings of animal research.

2.3.1 Knowing and not-knowing

The question of what individuals or publics *know* about animal research dominates analytical framings of the issue. However, when engaging in the process of knowing about technoscientific and socio-ethical issues, multiple considerations navigate what individuals come to know and that which remains unknown. In exploring these, studies from the Sociology of Ignorance (McGoey, 2016) emphasise that a shift should be acknowledged which

moves the framing of knowing as a passive act through which people absorb information, as implied in the previous studies of views towards animal research discussed earlier, to knowing as an active and often strategic process.

As well as recognising knowing as an active and deliberate practice, not-knowing or ignorance should also be understood as a part of this process, not as the antithesis of knowledge, but as existing alongside it on a shared continuum. This is because knowing is continual and despite enlightenment framings of knowing and learning as a process of illuminating dark spots of ignorance (Bogner, 2015), leading to the 'domination of ignorance by knowledge' (Woolsey, 1988), there will always remain areas unknown. Discussing why ignorance has traditionally been ignored in Sociology, Smithson (1985) claims that the 'foremost conceptual problem stems from the (usually implicit) assumption that ignorance simply consists of the absence or distortion of "true" knowledge', an assumption he characterises as informing functionalist and Marxist sociology and their treatment of ideology as 'erroneous thought, with "science" usually providing the template for correct thought' (Smithson, 1985: 151). But, in contrast, learning new information only brings us into contact with more areas where our knowledge is lacking. As Gross (2012) describes, '[w]henever knowledge grows, so too does ignorance' (Gross, 2012: 425).

Indeed, science itself produces ignorance as well as knowledge (Kourany, 2015). In this way, knowing is always partial, as Haraway (1988) illustrates with the powerful metaphor of the 'god trick', a concept she uses to critique the dangers of scientific objectivity and its promise of 'infinite vision' (Haraway, 1988: 582). Rather, Haraway argues for a 'feminist objectivity' which is grounded in 'the view from a body […] versus the view from above, from nowhere, from simplicity' (ibid, 589). Such recognition of our positionality and partiality as knowers and seers enables 'us to become answerable for what we learn how to see' (ibid, 583) and, importantly, also what we do not. As feminist philosopher Tuana (2004) puts it, '[i]gnorance, far from being a simple lack of knowledge that good science aims to banish, is better understood as a practice with supporting social causes as complex as those involved in knowledge practices' (Tuana, 2004: 195). Being alert to the construction and preservation of what is known and unknown and by whom can thus 'provide a lens for the political values at work in our knowledge practices' (ibid).

Examining the ways in which not-knowing can be an active and functional practice, legal scholar Somin (2015) describes a 'rational ignorance', referring to when someone 'has decided not to learn some body of knowledge because the costs of doing so exceed the benefits, based on the decision-maker's own objectives' (Somin, 2015: 274). Similarly, McGoey (2012) discusses a 'strategic ignorance', which is 'distinguishable from deception or the suppression of data by virtue of the fact that unsettling knowledge is thwarted from emerging in the first place' (McGoey, 2012: 559). In such terms, the legal advantages of strategic ignorance are evident. For instance, an organisation designed to keep certain illegal practices from the knowledge of its executives can be seen as preserving their innocence; it was not possible for them to know. Yet, strategic ignorance may also be used to preserve one's internal harmony through 'practices of obfuscation and deliberate insulation from unsettling information' (McGoey, 2012: 555). Using the language of denial rather than ignorance, Cohen (2001) also discusses how we manage unsettling information. For Cohen, there are three types of denial: literal, interpretive, and implicatory. Whereas literal denial is a refusal to accept the knowledge itself and interpretive denial is a refusal to accept a particular *interpretation* of the knowledge, implicatory denial is useful to consider here in that it refers to instances where one denies the *implications* of said knowledge. As Cohen states, '[u]nlike literal or interpretive denial, knowledge itself is not at issue, but doing the 'right' thing with this knowledge' (Cohen, 2001: 9). In this case, Cohen writes that '[w]e turn away from our insights and hide their implications. We half-know, but don't want to discover the other half' (Cohen, 2001: 34).

Such theorising reframes ignorance and denial as ordinary, everyday practices, which, rather than being inherently negative, can be personally and culturally beneficial. Challenging the notion that ignorance is something to be eradicated through the gaining of knowledge, such understandings of ignorance highlight both its social and psychological utility. When confronted with an opportunity in which one may come to know something about an issue that is already associated with uncomfortable knowledge, the refusal to know more or engage with the implications of any knowledge acquired can thus be seen as a coping mechanism.

As well as being usefully enacted at an individual level, practices of not-knowing are often collective, with ignorance being a relational phenomenon (Smithson, 1990), and, in many cases, one can only turn away from certain information if others also work to maintain a

cultural veil of ignorance. The risks of rupturing such collective ignorance are discussed by Wicks (2011), who argues that when 'distancing from unpleasant information is a collective enterprise, it can be seen as the social organization of denial […] The costs then also become social' (Wicks, 2011: 189). Although Wicks claims that engaging in collective denial may generate social losses through the exhaustion such 'serious collaborative effort' (ibid) requires and the amount of tension it produces, the *interruption* of collective denial by acknowledging the 'elephant in the room' also poses a social threat. As they go on to suggest, '[c]haracterized by a strong emphasis on avoidance, taboos frequently manifest themselves in the form of strict prohibitions against looking, listening or saying. Those who defy or ignore these prohibitions are universally regarded as social deviants' (Wicks, 2011: 192).

Ignorance is not only enacted as a defensive strategy but can also be used to challenge dominant framings of an issue and consequently reclaim a level of autonomy over it. In relation to scientific knowledge, Michael (1996) suggests that acknowledging and defending one's ignorance can represent attempts to stake independence from science and challenge its epistemological authority (Michael, 1996: 120). Relatedly, in examining 'don't know' responses to questionnaires on scientific issues, Turner and Michael (1996) contend that such articulations do not necessarily reflect a lack of knowledge but instead may be a way of expressing political contention towards the topic at hand. McGoey (2012) also discusses the production of ignorance as valuable in resisting the pressures to fit into constraining power structures. Drawing on Sedgwick's challenge of the homo/hetero distinction in *Epistemology of the closet* (1990), McGoey describes an 'emancipative ignorance, where deliberate ambiguity becomes a weapon against the dogmatic certainties and schematic impositions of others' (McGoey, 2012: 7). In these ways, the production of ignorance and promotion of not-knowing does not simply reflect an absence of knowledge, as naivety or unawareness, but rather a potential resource with political value that can be deliberately cultivated.

In summary, then, this section has outlined key ideas across the Sociology of Ignorance which suggest that knowing and not-knowing are active processes, placing emphasis on how they are continually enacted rather than treating them as achieved states. Such an understanding of knowledge and ignorance demonstrates that knowledge, and as is often assumed, scientific knowledge, cannot eradicate areas of non-knowledge or ignorance, but rather the two exist together on a shared continuum. In this way, ignorance is not an inherently negative

phenomenon, and given the partiality of knowing with its necessary limitations, being ignorant is a normal and regular occurrence. Indeed, as the studies mentioned above illustrate, producing and maintaining ignorance can be functional, performed *deliberately* and *strategically* to protect individuals and collectives from potentially disturbing knowledge.

In the context of dialogues around animal research, such framings of knowing and not-knowing are significant for challenging the dominance of deficit-model approaches to publics and their contributions to societal discussions on the topic, which reinforce the idea that the 'general public' require more scientific or regulatory knowledge to be able to fully participate. In their study of the meaning of openness on animal research in Sweden, Holmberg and Ideland (2010) claimed that 'public debate on animal experimentation is restricted by selective openness and by the enlightenment/deficit model of public communication' with assumptions of 'the idea of the public as uninformed and misled (in different ways), effectively hindering other perspectives on and knowledge of animal-experimentation-based research' (Holmberg and Ideland, 2010: 366). Similarly, picking up on the prevalence of deficit-model approaches to science-society dialogue on animal research, Crettaz von Roten (2020) suggests that given the evidenced ineffectiveness of such an approach, 'scientists who care about public attitudes should rethink their representation of the science-society relationship and move toward two-way and interactive activities that foster dialogue' (Crettaz von Roten, 2020: 16). Nonetheless, analysis of how individuals actively engage in knowing or not-knowing about animal research has been overlooked and with it a critical appraisal of what such knowledge may mean and how ignorance may function as a protective practice in relating to the ethically and emotionally contentious topic of animal research.

2.3.2 Trust

Emerging from and overlapping with diagnoses of a public deficit of scientific knowledge, science governance has turned its attention to a public deficit of trust (Hagendijk, 2004; Irwin, 2006; Wynne, 2006b). Discussing the markers of this shift in scientific governance, Irwin (2006) claims that 'the old language of cognitive deficit increasingly is in competition with talk of a new form of deficit: this time a deficit not of scientific understanding but of *public trust*. Just as top-down communication was seen as the cure for the old deficit, greater openness and consultation can remedy the new one' (Irwin, 2006: 303). Commenting on the influential 2000 report on '*Science and Society* by the House of Lords Select Committee on

Science and Technology', Wynne (2006a) describes the document as 'an emphatic official acknowledgement of a sense of widespread crisis of public mistrust of science used (as it is, increasingly) as supposed public policy authority' (Wynne, 2006a: 211). In responding to this apparent breakdown in public trust of science, Wynne (2006b) observes the mobilisation of a 'second-order' deficit model, which interprets problems around trust as a result of misunderstanding regulatory processes. In such framings of mistrust, the dualism of experts and laypeople is preserved and public engagement processes become ways of managing and pacifying a threatening public body using the familiar agenda of educating and informing.

The measurement of public trust in the regulation of animal research and in different sources of information on the issue is a key element of the Ipsos MORI polls discussed earlier in this chapter. Similar to their treatment of knowledge, these polls conceptualise 'public trust' as something which can be measured en masse as a capacity which can increase and decrease (Ipsos MORI, 2018), rather than a practice which is enacted. Here too, mistrust has been linked with a lack of knowledge or awareness, with a decline in public trust in the bioscience sector picked up by earlier Ipsos MORI polls being a catalyst for the launch of the Concordat on Openness on animal research (Ipsos MORI, 2013: 10; MacArthur Clark et al., 2019: 36). Indeed, in their reporting of a 'public dialogue' intended to feed into the Concordat, Ipsos MORI state that the 'ultimate aim of the sector being more open and transparent is to boost public awareness of, and create more informed debate about, animal research. Concordat group members hope that in a climate of openness and transparency, better discussions can happen, and indeed that the public might then be more supportive of animal research as an integral part of scientific discovery' (Ipsos MORI, 2013: 10). Hence openness is constructed as a way of resolving mistrust of the sector through creating an informed public body (McLeod and Hobson-West, 2015).

Similarly, discussing between the UK animal research community's turn to openness and the research culture in the US, MacArthur Clark et al. (2019) write –

> 'science is becoming increasingly complex, making it even more difficult to "translate" research into terms the public can understand and appreciate. However, the Pew survey did show that more highly educated respondents, or those with increased knowledge about science, are more likely to support animal research. Anecdotal information reveals that programs and individuals who proactively communicate

about their animal research are more likely to gain public trust' (MacArthur Clark et al., 2019: 37).

Again, science-society communication is thus presented as revolving around one-way education, with mistrust being primarily a symptom of scientific ignorance. Public trust is thus treated as a resource to be won by stakeholders.

However, rather than simply signalling a lack of awareness, mistrust can often be a rational response to unequal power distributions across local and global contexts. As demonstrated in Wynne's (1992) influential study of how Cumbrian sheep farmers responded to scientific advice on the restrictions introduced after the Chernobyl nuclear disaster, relationships between lay communities and experts can become marked by mistrust due to a lack of recognition of relevant lay knowledge, resulting in the use of scientific expertise as an authority that dominates other ways of knowing. Although, Wynne (2006a) later suggests that disempowerment does not always result in a withdrawal of trust. Rather, in situations where people may feel a lack of choice otherwise, what Wynne calls an 'as-if' trust can develop, symbolising a 'reluctant acquiescence of the public in its knowingly inevitable, and relentlessly growing, dependency upon expert institutions' (Wynne, 2006a: 212).

Crucial here is that the credibility of science as an epistemology rests upon the credibility of particular scientists in a given context. Mistrust towards 'science' is thus often entangled more closely with mistrust towards actors involved in creating, disseminating, and putting into practice scientific knowledge. Pointing to the relational quality of trust, Scheman (2015) observes that 'claims to credibility—what makes our beliefs justified—rest in large part on [sic] socially grounded reasons for trusting' (Scheman, 2015: 217). Given this, Scheman argues that it is 'irrational to expect people to place their trust in the results of practices about which they know little and that emerge from institutions— universities, corporations, government agencies—which they know to be inequitable' (ibid, 230). As Whyte and Crease (2010) put it, 'if science is to provide [sic] public benefits, then "science" and scientists must be trustworthy in the eyes of ordinary citizens' (Whyte and Crease, 2010: 413).

This turn directs attention away from trust as a capacity that publics express in varying levels and which can be measured via polls and surveys, i.e. in being *trusting*, towards a performative quality enacted in being *trustworthy*. In commenting on which factors impact

on trustworthiness, Rolin (2002) contends that credibility is not always deterministic. Rather, they claim that there can be a 'systematic mismatch between credibility and trustworthiness, so that the socially powerful is assigned credibility in spite of the lack of trustworthiness, or the powerless is denied credibility in spite of trustworthiness' (Rolin, 2002: 100). To be able to trust, Cortassa (2016) suggests that one must be able to appraise 'the competences and trustworthiness of the teller' (Cortassa, 2016: 456-457). Such appraisals can be informed by indirect sources, such as 'others' references' or from one's 'own general understanding of the skills and values that could be expected from someone at a certain realm or institution' (ibid, 457). For Cortassa, the ability to make such judgments through 'alternative sources' is crucial in science-society relationships, 'because [laypeople's'] links with scientists are rarely close or sustained enough to provide evidence about the aptitudes and qualities of a given speaker' (ibid). Such approaches help to emphasise the significance of material worlds through which publics encounter science and scientists and which imbue scientific work with meaning.

Others have sought to develop the notion of trust, and its withdrawal, as not simply a rational act but also an *affectual* one. Engdahl and Lidskog (2012) describe trust as an 'emotional attitude, a feeling that affects our judgments and makes us perceive the world (others as well as ourselves) in a specific way' (Engdahl and Lidskog, 2012: 712). Rather than being 'the opposite of reflexivity or rationality', trust is better described then as 'an emotionally based strategy that bridges the gap between the present and the future by anticipating the result that trust, if successful, creates' (ibid, 711). In building trusting science-society relationships, Engdahl and Lidskog argue that the concerns and understandings of publics must be accounted as part of the issue at hand and, within them, citizens 'must, to some degree, be able to positively recognize their personal identities and social identities' (ibid, 712-713). If correct, public trust in science therefore depends on the acknowledgment of areas of dissensus and a valuing of alternative framings of an issue.

However, importantly, Camporesi et al. (2017) emphasise that trust and distrust do not necessarily exist as polarised positions, such as those suggested by methods which seek to measure and monitor the trends in public trust towards different facets of animal research practice. Rather, they contend that 'we need to move away from hydraulic and binary notions of trust to articulate its complexities in expert knowledge systems, which are necessarily relational and mediated' (Camporesi et al., 2017: 29). Indeed, a pertinent example of the co-

existence and relationality of both trust and distrust is offered in Michael and Brown's (2004) study of views on xenotransplantation. As they observed, 'on the one hand, the sensationalism/ individualism of animal welfare groups vs. the objectivity/broadness of governmental bodies, and on the other, the "willingness to expose" of the animal welfare groups vs. the "tendency to secrecy" of the governmental bodies' mean that 'both animal welfare organizations and governmental bodies can be both trusted and distrusted' (Michael and Brown, 2004). Adding to the relationality of trust, Szerszynski (1999) calls attention to its performative nature, meaning that rather than conceiving of trust as a stable and measurable capacity, trusting 'in un-civic situations where the dialectic of trusting and trustworthiness has faltered or not yet started' can reflect attempts 'to restart it through illocutionary acts of entrusting' (Szerszynski, 1999: 250). Again, such considerations reinforce the significance of situating understandings of trust within lived experience and the contexts through which trust relationships emerge.

In the case of animal research, attention to trust is important given the role of the regulatory framework in ensuring scientific practice is conducted in a way which safeguards the welfare of laboratory animals (Home Office, 2014). If this regulatory framework is expected to placate the concerns of publics around the scientific use of animals, as animal research advocacy organisations (UAR, 2019: 2) and their associates (Festing and Wilkinson, 2007) suggest, then trust in the systematic implementation of such legislation is paramount. As touched on in the earlier discussion of previous empirical studies of views towards animal research, relational approaches to trust have featured in some of the qualitative research in this area. For instance, enriching understandings of how the 'cost (now referred to as 'harm')-benefit' framework is mobilised in lay grasping and judging of xenotransplantation, Michael and Brown (2004) argue that 'costs and benefits entail unarticulated cultural assumptions and unexamined relations of trust' (Michael and Brown, 2004). Macnaghten's (2004) study of public attitudes to the genetic modification of animals also considers the role of trust, with their analysis suggesting that 'the misgivings people express towards the applications of GM animal technologies appear to be reflections of broader syndromes of mistrust towards those institutions seen as responsible for such applications' (Macnaghten, 2004: 547). However, such relational understandings of the role of trust in relating to animal research are

overshadowed by deficit-model approaches in this area which treat mistrust of the bioscience sector as the result of misinformation or ignorance.

In reframing trust as performative, as a quality which is cultivated in *trustworthy* acts, emphasis can be shifted from measuring how much trust in the bioscience sector publics *have*, to how trustworthy the bioscience sector is deemed as *acting.* Discussing the UK's and Switzerland's openness agendas around animal research (as signified by their respective formalised commitments to transparency via the Concordat (UAR 2014a) and the Basel Declaration (BDS 2010)), McLeod (2018) argues that such initiatives 'are unlikely to be enough on their own to build greater trust between the AR community and wider society' (McLeod, 2018: 70). In order to cultivate science-society trust around animal research, McLeod suggests that there also needs to be evidence of the *trustworthiness* of the AR regulatory system and the accountability processes that govern it' (ibid, emphasis added). Indeed, this shift in focus from assessing trust as capacity to exploring how trustworthiness is enacted encourages a recognition that mistrust may, at times, be a sensible way of relating to certain actors and institutions. As Wynne's study of the Cumbrian farmers demonstrated by contextualising the farming community's distrust of scientists responding to Chernobyl to pre-existing controversies at the local nuclear station Sellafield (Wynne, 1992: 285), mistrust towards government and science can have deep sociocultural roots.

Further, as discussed earlier in this section, trust as well as mistrust can signify a response to unequal power distributions, with trust being 'given' in circumstances of disempowerment. In this way, 'gaining trust' does not necessarily indicate support, thus complicating assumptions that measurements of public trust in animal research can also determine levels of acceptance. Rather, attention to trust as a relational act can reveal how animal research is entangled within broader power structures, such as governance, which shape how it is related to in the everyday and, indeed, what kinds of relations are even possible.

2.3.3 Hope and fear

When considering science-society relations through the lens of trust, the related role that hope and fear plays in guiding such relationships also becomes evident. Indeed, hopes and expectations in relationships between publics, patients, and biotechnology have been documented as a key focus within the Sociology of Expectations and its attention to emerging innovations across science and technology. For instance, discussing debates around the

emergence of in vitro fertilisation (IVF), Mulkay (1993) observes a 'rhetoric of hope', which tends to 'avoid consideration of the social changes that may be needed to put new technologies into successful operation' (Mulkay, 1993: 728). In the context of science-society relations, this rhetoric of hope works to project 'a radically simplified future where scientific knowledge necessarily extends our control over disease, disability and death, and progressively generates, despite pockets of resistance, substantial improvements in the way of life of society at large' (ibid). Such analyses reveal how imaginaries of the future are invoked in order to secure public 'buy-in' for projects whose promises may not be delivered in the short-term, whether such imaginaries invoke hopes for a desired future or fears towards a future that must be prevented.

Writing broadly about public engagement exercises, Felt and Fochler (2010) locate participation as occurring within a 'technoscientific economy of promises', emphasising that 'ever more strongly both in scientific and political discourse, promises of future applications have become a central currency in both attaining funding and in legitimising public expenditures for technoscience' (Felt and Fochler, 2010: 235-236). Many of these insights into the role of hope in science and technology have been made from learnings in the field of the Sociology of Expectations, within which, as Michael (2017) writes, 'accounts of the future are seen as performative – they are understood as enacting a particular future (while also marginalizing alternative futures) in order to enrol actors in the present, who will, ideally, help realize the projected future in the future' (Michael, 2017: 513).

Similarly, Adams et al. (2009) have written of 'anticipatory discourses' around technoscientific innovations, arguing that anticipation 'reconfigures the 'lay of the land' as sites that in colonial logics were mapped as either primitive (past and out of time) or modern (present and in time) and turns them both into productive ground for anticipatory interventions, each forecasting its own type of darker and/or more hopeful futures' (Adams et al., 2009: 248). They claim that a key state of anticipation is 'abduction' which, in its darker manifestation, 'can be a form of kidnapping, where life in the present is held hostage to the potential violence of the future' (ibid, 255). In navigating this potential future, biopolitical discourses advocate an 'optimization', which entails 'maximizing one's chances for a best possible future but also that the pursuit of the 'best possible' is legitimately infinite in its scope and always ongoing' (ibid, 256). Such orientation to a threating future leads to an 'anticipatory preparedness' which,

they argue, 'is speculative and reactive, in 'preparation for' the event and the trauma as if it were already here, rather than offering 'prevention of' it so that it never happens (ibid, 257).

Such attention to the creation and investment of hope, expectation, and fear in the animal research domain may help to reveal how acceptance of animal research in the present often hinges on expectations of its bringing forth a particular future. This might involve the replacement of animal models with non-human animal alternatives as well as promised medical benefits for human patients. Correspondingly, resistance towards the use of animals in science in the present may also be linked to resistance towards a particular future their use is seen as heralding. However, the role of hope, expectations, and fear in understandings of animal research or science-society relations around the practice remains surprisingly unattended to in social scientific studies. Discussing fear narratives in openness regimes around animal research, McLeod (2018) has written about the animal research community's perceptions of a public body which is fearful of what goes on in animal research laboratories and also elicits fears in scientists using animals due to the history of animal rights extremism. However, this work is based on a comparative analysis of UK and Swiss openness initiatives around scientific animal use and is thus not explicitly focused on how fear might shape societal understandings of animal research in general. Nevertheless, attention to the role of hope, expectation, and fear when exploring views on animal research encourages a shift away from what intrinsic qualities a respondent can be said to have and how these might shape their relation towards the practice, as detailed in the earlier discussion of previous studies emphasis on variables. Instead, promoting consideration of how discourses around animal research work to rhetorically enrol publics in projects of futuring and how such rhetorics of hope and fear are understood in the everyday.

2.3.4 Care

Though traditionally overlooked in analyses of public relations with technoscience, literature which explores ethics and practices of care demonstrates how care is entangled with practices of *knowing* and also *not-knowing*, in that caring often directs what we decide to engage with in a process of knowing or choose to ignore. Indeed, discussing the prologue of Primo Levi's (1947) *Survival in Auschwitz* which commands the reader to retain and retell that which the book will impart, Hatley (2000) emphasises that one is required to accept their responsibility to care before one can come to know. As they put it, '[b]efore there is knowledge, before the

exact shape of the world and its entities can be fixed, one must already have considered that one is obliged to consider' (Hatley, 2000: 12). Similarly, van Dooren (2014) argues that 'the obligation to 'know more' emerges as a demand for a kind of deep contextual and critical knowledge about the object of our care, a knowledge that simultaneously places us at stake in the world and demands that we be held accountable' (van Dooren, 2014: 293). However, rather than getting lost in the directionality between knowledge and care, the point here is to emphasise how they are entwined. On this point, Puig de la Bellacasa (2012), following on from Haraway's (1988) work on situated knowledges, argues, '[t]hat knowledge is situated means that knowing and thinking are inconceivable without a multitude of relations that also make possible the worlds we think with […] relations of thinking and knowing require care' (Puig de la Bellacasa, 2012: 198).

Care Ethics has been argued to represent an interdisciplinary field of inquiry (Leget et al., 2019). Initially emerging from the field of nursing (Watson, 1979) and becoming a key feminist theoretical approach (Noddings, 1984; Gilligan, 1993), the lens of care has brought together a diverse range of scholars exploring social fields beyond healthcare settings (for instance, see Riley, 2013; Hankivsky, 2005; Popke, 2006). An example of this related to the topic at the centre of this thesis, Donovan (1996) has called for the application of a feminist care ethic to the issue of animal welfare and 'rights' philosophy, arguing that, rather than appeals to a universal logic, a 'viable ethic for the treatment of animals can be rooted in sympathy, a passionate caring about their well-being' (Donovan, 1996: 98). The call for approaches to ethics which are based in care rather than moral rules or principles thus promotes attention to how ethics are practiced relationally, with care offering, as Jennings (2018) puts it, an 'instructive constitutive context [sic] within which the moral identity of persons is grounded and articulated in recognition' (Jennings, 2018: 554).

Before considering the ways in which publics might 'care' about animal research, it is important to first address the dichotomy imposed between caring *for* and caring *about*. This is particularly important given how the current emphasis on interpersonal, professional, and material manifestations of care reflects a privileging of practices of caring 'for'. Smith (1998) distinguishes between caring 'for' and 'about' by describing the former as 'beneficence', 'as doing good or showing active kindness' and the later as 'benevolence', 'as merely the desire to do good or charitable feeling' (Smith, 1998: 16). Similarly, Silk (1998) has described caring

about others as involving 'a genuine ethical and emotional engagement, being troubled or concerned about their situation; we wish to do good or entertain charitable feelings', whilst caring for others represents a 'crucial step' in going 'beyond' this, requiring 'doing good or actively showing kindness, providing support for their emotional and physical needs and well-being' (Silk, 1998: 167). Although, Silk claimed that 'the traditional reliance of activities of care and caring upon face-to-face interaction and associated action will continue', they anticipated that 'increasingly they will constitute only one link in complex sets of chains and circuits of actions and interactions' (ibid).

In such distinctions, the treatment of caring about as an abstract form of care or an initial step towards establishing or enacting care is evident. However, refuting assumptions that caring *about* is a lesser form of care, Barnett and Land (2007) make the case that caring about is essential for one to provide adequate care *for* another. As they put it, '[r]ather than supposing that caring-about is a secondary, derivative variant of a more genuine set of relationships of caring-for, we might instead start from the observation that any caring practice, in order for it to be caring, has to be attentive and responsive to the needs of the other' (Barnett and Land, 2007: 4).

Differentiating between caring for and about by understanding the former as implying 'a specific subject as the focus of caring' and the latter 'a more general form of commitment that refers to less concrete objects' (Milligan and Wiles, 2010: 740-741), Milligan and Wiles (2010) argue that caring about 'refers to the emotional aspects of care [which] might also include the generalized relational and affective elements of being caring' (ibid, 741). Similarly challenging representations of caring about as a detached and disembodied experience, they contend that such relations can become deeply embodied by the way in which 'caring about can impact on and shape an individual's personal politics and belief systems' (ibid, 742).

Taking a broader and more inclusive understanding of care that can thus encompass the for/about binary, Fisher and Tronto (1990) suggest that 'caring be viewed as a species activity that includes everything that we do to maintain, continue, and repair our 'world' so that we can live in it as well as possible. That world includes our bodies, our selves, and our environment, all of which we see to interweave in a complex, life-sustaining web' (Fisher and Tronto, 1990: 40). Such a conceptualisation of care as implicit in the co-constitution of social worlds signifies the prevalence of care, existing beyond traditionally narrow constructions of

'caring' acts. With this approach, the importance of care in binding together all areas of social life is evident and, as such, practices like animal research may be understood as meaningful because of their implication in broader care networks. In this way, attention to embodied care practices, rather than ethical principles such as beneficence, non-maleficence and harm-benefit analyses, enables a more situated and relational study of understandings of animal research.

In the animal research domain, care has emerged as a prominent lens of analysis, with much recent focus concentrated on the material and affectual multispecies relations in the laboratory (Holmberg, 2011; Greenhough and Roe, 2011; 2018b; a; Friese and Latimer, 2019) and their constitution of a 'culture of care' (Davies et al., 2018). Such work signals a shift from the centrality of the politics of animal research, with examinations of how polarised 'sides' in the debate relate to each other (Michael and Birke, 1994a; Paul, 1995), to the intersubjective practices of care and 'somatic sensibilities' (Greenhough and Roe, 2011) involved in doing animal research.

At an official level, the cultivation of a 'culture of care' is now encouraged by stakeholder organisations such as the National Centre for the Replacement, Refinement & Reduction (NC3RS) (Brown, 2014) and regulatory bodies such as the government's Animals in Science Regulation Unit (ASRU). The latter defines a good culture of care as 'an environment which is informed by societal expectations of respectful and humane attitudes towards animals used in research', with each establishment having 'its own way of conveying its culture of care' (ASRU 2015b: 4). As notable in this definition, wider societal values around the appropriate treatment of animals are taken as informing care relationships in the laboratory, however, to date there has been little attention given to how publics and representations of publics feature in such care networks. With much focus concentrated inside the physical space of the laboratory in which care is emphasised as the performative product of a situated intersubjectivity, a 'common existential corporeal experience' (Svendsen and Koch, 2013: 124), how publics who rarely enter the laboratory space may enact care 'at a distance' (Silk, 1998; 2000; 2004) towards those involved appears currently overlooked. Given the dominance of focus on what publics *know* about animal research and deficit model approaches in this area, this lack of consideration of how publics may practice care towards the issue and those implicated within it is therefore important to address.

2.4 Conclusion

To conclude, this chapter has provided an overview of how previous studies have explored understandings of animal research, critiquing the prevalence of quantitative macro-level studies which have tended to frame understandings of animal research through the influence of internal and external variables. As argued, in aiming for samples which are representative of a given 'public' population, such studies reify public opinion as a phenomenon which can be objectively measured, monitored, and correlated with levels of support or opposition. In its construction of a homogenous public body restricted to expressions of consent, dissent, confusion, or ignorance such an approach misses the affectual and relational dimensions of how individuals relate to the issue, overlooking what it *means* to them and why. Therefore, in looking at literature across the fields of the Sociology of Ignorance, STS, PUS, and Bioethics, I have considered instead the utility of the four analytic lenses of knowing (and not-knowing), trust, hope and fear, and care, which, although have featured in studies of certain aspects of animal research, remain underused in studies of societal *understandings* of animal research. These lenses have informed and helped to structure my analysis of MOP writing on animal research, with the first data chapter specifically concentrating on the role of knowing and not-knowing and the second data chapter exploring the role of caring and not-caring. The role of trust and hope and fear are touched on within each data chapter in varying levels, not being central analytical foci but being included within the meta-themes. In examining these lenses here, I hope to have added further weight to calls for more substantial qualitative approaches which embrace the relationality inherent to understandings of animal research. The next chapter will present my own methodological approach to exploring how UK publics relate to and understand the use of animals in scientific research, introducing the method at the centre of this thesis, the Mass Observation Project.

3. Introducing the Mass Observation Project

3.1 Introduction

This chapter offers an overview to the method at the centre of this thesis – the Mass Observation Project (MOP). Although, as will be illustrated, the MOP has been used as a method for data collection across the social sciences, the use of archival methods is still relatively novel in Sociology. Indeed, in their paper entitled '*A Sociologist's Field Notes to the Mass Observation Archive'*, Lindsey and Bulloch (2014) stress the need for an interdisciplinary approach when engaging with Mass Observation materials. They write that 'the sociologist's expectations and habits are challenged when engaging with this socio-historical data source. The access routes to the data, its structure, the relationship between researcher and researched, as well as the agency of the researcher, require a particular type of engagement with the data that challenges pre-conceptions and discipline-bound methodological approaches' (Lindsey and Bulloch, 2014: 10). Therefore, because of the particularity of Mass Observation, I feel it is important to provide a dedicated chapter to exploring how the Project works, the unique positionality of Mass Observers and how their writing should be treated, and the kinds of academic research that MOP materials have been used in. In doing so, this chapter is also intended to give context to Chapter 4's outline of the specific ways I have utilised the MOP as a research method and analysed MOP writings on the topic of animal research.

As argued implicitly and explicitly throughout this chapter, the MOP occupies a unique position in relation to knowledge production and social research, with its correspondents – the Mass Observers – acting not merely as subjects of research but as participants in its production, engaging with the archivists and researchers in their investigations of social life and sometimes with as much or more at stake in the research (Sheridan, 1993). Indeed, as Pollen (2014) puts it, 'MO material is collectively produced and its meaning is collectively owned' (Pollen, 2014: 10). Because this thesis uses the MOP to research an area dominated by quantitative assessments of what people think, with such studies frequently generalising their samples as representative of 'the public', it is necessary to present this detailed look at the methodological standpoint underpinning the MOP, a standpoint that is radically at odds with much of the previous research on views towards animal research. As demonstrated in Chapter 2, this issue of representing 'public' or 'societal' views has been a prominent

consideration in my navigation of this project and has further informed my understanding and use of the MOP. Therefore, in providing this overview to the MOP, I aim to illustrate its particular methodological approach and contextualise my use of MOP materials and also reflect on the Project's value for exploring views or understandings. In order to do so, this chapter explains the way in which the Project functions, explores who the Mass Observers *are*, and finally, details some of the ways in which the MOP has been used in academic research.

3.2 How does the Mass Observation Project work?

Housed in an archive called The Keep at the University of Sussex, the Mass Observation Project is a 'national life writing project about everyday life in Britain' and is 'one of the major repositories of longitudinal qualitative social data in the UK' (Mass Observation, 2015b). Being established in 1937, the Project began its life as the social research organisation Mass Observation (MO) and upon winding down its activities in the years following World War Two, collections from this early period came to comprise the Mass Observation Archive (MOA) when they were deeded to the University of Sussex in 1975. In 1981, Mass Observation's activities were resumed once again and MO entered its current phase as the Mass Observation Project (MOP).

The MOP maintains a panel of voluntary correspondents from across the UK who are referred to as 'Mass Observers' or 'Observers'. In early 2019, there were 310 active writers on the panel, a high representation of whom are located in South East England, are female, and are over the age of 61 (Mass Observation, 2019). The Mass Observation Project engages with its panel of voluntary correspondents through 'Directives', which ask Observers to write on a particular topic, guided by a set of questions or prompts. The MOP conducts three or four Directives per year, usually divided into seasons (i.e. February is the Spring Directive and May/June the Summer) and most Directives feature two or sometimes three topics which are split into separate parts. Directives span a diverse range of topics but can be brought together under the heading of 'everyday life'. In composing Directives, Bloome et al. (1993) highlight that '[e]very attempt is made to make the Directives interesting and varied so that at least one part of it will appeal to all correspondents' (Bloome et al., 1993: 5). Most Directives are internally designed using input from archival staff, but the MOP also accepts commissions from external researchers and suggestions from Observers themselves (ibid). Directives often

follow an open-questionnaire format but occasionally the MOP asks Observers to submit a one-day diary, usually for a specific national event.

Mass Observers are issued with identification numbers to use in place of their names when responding to Directives and only archival staff can link an Observer's number to their name (Mass Observation, 2015a). The anonymity of the panel allows Observers to reveal as much of themselves as they decide, an important attribute in enabling respondents to express themselves openly on intimate or sensitive topics. However, the anonymity of Mass Observers does not mean that their accounts are closer to a social 'truth'. The writing of MOP correspondents is still produced within the specific conditions that instigate and shape its expression in particular ways. Hence, as sociologist Shaw (1998) states, 'it would be naive to imagine that M-O writing is 'truer' or less mediated than other texts used in social science, or that the experience recorded can be taken at face value', although, for Mass Observers, 'the absence of an interviewer is crucial' (Shaw, 1998: 4). As well as safeguarding privacy through anonymised identification numbers, in order to publicly reproduce excerpts of Mass Observers' writings (e.g. in journal publications) permission from the archive must first be sought. This involves sharing the selected excerpts with Mass Observation archivists so that they can check the copyright status of the Mass Observers involved, with some correspondents having particular restrictions on their writing. Again, such a process reflects that Mass Observers are not simply research subjects whose writings academic researchers can extract but are participants with 'shared ownership' (Pollen, 2014) in the collective Mass Observation Project.

3.2.1 Responding to Directives

Mass Observers are able to respond to Directives in a myriad of formats. Responses can be hand-written, typed, word-processed, audiotaped, or video recorded. As former Mass Observation Director (1990-2008) Dorothy Sheridan (1993) describes, written responses encompass multiple genres, covering 'letter-writing, answering questionnaires, being interviewed, keeping a diary, writing a life story' (Sheridan, 1993: 34). These can be submitted to the archive through post or e-mail. With no single genre of writing proving to be the most appropriate, Sheridan claims that those involved in Mass Observation are engaged in 'the process of forging a new genre: the 'Mass-Observation directive reply' (ibid). The flexibility that the MOP offers in correspondence with the archive is important in capturing the writing

styles of individuals, particularly given the Project's interest in preserving the practices of those who stand to be forgotten by the formal institutions of history. By enabling Mass Observers to adopt their own writing preferences when responding, the MOP stands to capture non-professional writing, the writing of 'ordinary' people. For those interested in literacy, this is an important aim in itself, as Bloome (1993) describes –

> 'The phenomenon of the Mass Observation Archive itself - that "ordinary" people enthusiastically volunteer to write for the Archive, and that they feel it is important to do so - suggests that there is a breadth and depth of writing in the general public, among "ordinary" people, that has not yet been revealed or understood by scholarship on writing and literacy' (Bloome, 1993: 7-8).

That the material choices that Mass Observers make in responding to a Directive are preserved adds to the richness of their history-making. The kind of paper used and the condition it might end up in, the style of handwriting or word-processing font and formatting all offer a material suggestion of where and how the writing took place. As social scientists Moor and Uprichard (2014) emphasise –

> 'a focus on materiality allows a way of approaching data not only to study what people have said, thought or done at a particular point in history, but also to reflect on the 'dating' and the 'timing' of social action at both individual and collective levels' (Moor and Uprichard, 2014: 3).

They remind us that the writings of Mass Observers exist in physical form in the archive and that when reading their words, the content is best examined within the materiality which bears it. Analysing how Observers write about a topic therefore requires us to consider not only the things they discuss and the vocabulary and the grammatical structures they use to discuss them, but also how an Observers' corporeality and temporospatial location shapes the form their writing takes. As Lindsey and Bulloch (2014) describe of MOP writing, 'looking at the type of paper on which it is written, the stains it has acquired, the handwriting, the spelling, the colour of the ink, the reader forms an impression of the writer's level of education and class, favoured beverage, the level of care given to the theme on which they are writing and perhaps, whether they have written the piece in one sitting' (Lindsey and Bulloch, 2014: 8). Alongside this, it is important to acknowledge the influence that the archive

as a physical and cultural space, with its given practices, have on our interpretation of Mass Observation documents. As Moor and Uprichard note, the 'fact that the men's and women's responses were kept physically separate is interesting in itself, and reflects the materiality of social ordering at work' (Moor and Uprichard, 2014: 4).

A more pronounced way in which the writings of Mass Observers are shaped is provided in Sheridan's (1993) emphasis on the role of the Directives. As Sheridan puts it, the testimonies that correspondents send to the MOP 'may not have existed at all, and certainly not in such a specific form, if it had not been for the initiative of the interviewer/researcher; there is inevitably a considerable degree of dependence on external prompts' (Sheridan, 1993: 33). In being mindful of this, we can understand MOP materials as relational products. Stressing this point, material and visual culture scholar Pollen (2014) states that, 'writing to MO is always solicited and consequently shaped by the nature of the questions asked and the contributors' conceptualisation of the larger project' (Pollen, 2014: 10). Indeed, for some Mass Observers, the relationship they share with the archive is not simply institutional, but felt to be personal, as Shaw (1998) describes, '[e]ven without face-to-face contact there is intimacy, trust and a sense of being in a relationship. Many writers have contributed for years and this reliability, plus the Archive's responsiveness, leads them to feel, and to be known by the staff' (Shaw, 1998: 4).

Generally, correspondents do not have a set deadline for responding but the suggested timeframe for replies are within three to four months (Mass Observation, 2015a). Although the general rule of thumb is for Mass Observers to respond within three to four months of receiving a Directive, the Mass Observation website advises those interested in joining the panel that '[o]ccasionally, however, you may not have the time or inclination to write for a while, and we are still pleased to accept Directive replies which arrive late or in bulk' (ibid).

3.2.2 Archiving of responses

Once Directive responses have been collated, they are recorded by archival staff and filed according to the topic. Directive responses are publicly accessible at The Keep, an archive at the University of Sussex which houses Mass Observation materials and the current Mass Observation Project, being accessible by appointment and read 'by a wide range of researchers' (ibid). In registering with The Keep, visitors are given access to the reading rooms where they can request to view archival documents. In accessing MOP materials, researchers

receive ‘basic information about each person (age, sex, marital status, current occupation and town of residence) […] and background information about the whole Project’ (ibid). As suggested above, researchers using the archive come from a range of disciplinary backgrounds and bring with them different research interests when engaging with the materials. Those researching the archival materials include academics such as sociologists, psychologists, historians, and geographers, as well as students, school children and journalists (ibid). Hence, the MOP offers a wide range of uses, from educational to research applications and, as will be detailed later in this chapter, this use spans disciplinary boundaries.

3.3 Who are the Mass Observers?

As one might expect of an archive which claims to record ‘everyday life in Britain’, the question of the MOP’s representativeness features often in critiques of the method. Indeed, as Pollen (2014) points out, the MOP panel is skewed towards ‘older rather than younger contributors, with a greater attraction to women rather than men, and with a population more commonly located in the south east of the UK than the north west’ (Pollen, 2014: 4). In conducting a longitudinal study of certain Mass Observers, Lindsey and Bulloch (2014) similarly note that the ‘available demographics of the MOP writers […] mirror what we know about the demographics of volunteers, the so-called 'civic core', which in the UK consists of older, middle-class females from the south-east (Lindsey and Bulloch, 2014: 6). As these demographics suggest, Mass Observers may also share motivations for contributing, with archival staff, scholars, and Observers themselves identifying multiple roles that are performed through the process of Mass Observation. Such roles include the citizen journalist, documentarian, local historian, recorder for posterity, or amateur writer and such identities are not always distinct for Observers (Bloome et al., 1993; Pollen, 2013). Rather, their writing for the MOP may emerge through a blend of such performances.

One way of understanding MOP writing is to say it is stimulated by what Sheridan (1993) has called an ‘auto-biographical impulse’, with the subjectivities of writers often taking centre stage in their descriptions of social events and issues. In their determination to document collective social life, Mass Observers are often reflexive of their own position, assessing the foundations their thoughts are based on and considering how others might perceive the topic at hand. In this autobiographical style of writing, Sheridan explains that some correspondents write to imagined future selves, addressing their writing to ‘versions of themselves, real selves

in the future, or imagined selves in the form of their actual descendants or their spiritual descendants, people 'like them' who enjoy reading about ordinary people's lives in the past' (Sheridan, 1993: 21). However, writing for the MOP also complicates traditional understandings of autobiography in its resistance of producing finalised life narratives. Rather, as Sheridan puts it, the MOP materials collectively reflect 'a kaleidoscope of experiences, mediated by a multitude of texts' (ibid, 33). In the view that autobiographies tell the story of the self, detailing a traceable identity through time, the summative autobiographical project of the MOP, then, is forever out of reach.

Understandings of MOP writing as straightforwardly autobiographical are also complicated by the attention that Mass Observers give to other perspectives and voices in their responses. Mass Observers often take care to consider the knowledges and experiences of others when responding to a Directive, and the personal views or beliefs they articulate in their writings are frequently embedded in wider sociocultural and historical contexts. In this sense, we may argue that the MOP captures a sense of the plurality of narrative and knowledge, rather than privileging a singular, unified telling. Yet, along with the MOP's emphasis on the plurality of experience and knowledge, a thread which runs through the motivations of many Mass Observers is a commitment to documenting the voices of 'ordinary' people, a commitment which, as will be discussed, shapes how they interact with the archive and how they approach their writing on different topics.

3.3.1 Being ordinary

Since its inception, capturing the thoughts, feelings, and experiences of 'ordinary' people, those whose contributions will be otherwise missed by the formal institutions of history, has been key to the MOP and comprises an important element of the Mass Observer identity. Highmore (2010) traces this foregrounding of the 'ordinary' in the collective identity of Mass Observers back to the 'period of Mass-Observation after 1981 [when] diarists were explicitly asked to write for future historians who would want to understand the lives of ordinary people' (Highmore, 2010: 92). However, rather than viewing this motivation for writing as a positivist construction of Mass Observers as neutral conduits of 'everyday life in Britain', Observers may instead be driven by the chance to record an alternative history, a window into worlds that may be forgotten, mundanities that might one day stand to be remarkable. As Pollen (2013) describes –

> 'Correspondents give generously of their thoughts, feelings, experiences and opinions in part because they enjoy the process as self-developmental or even therapeutic, but also, at times, as a kind of social altruism, as an oppositional 'ordinary' voice against 'official' culture' (Pollen, 2013: 220).

Rather than taken as an agreed upon signifier, the idea of what constitutes an 'ordinary' person or life can more accurately be seen as a performance of particular standards of normality. This lens of the 'ordinary' that frames much of MOP writing challenges the power dynamics associated with traditional historical records, with Mass Observers compelled by an expectation that their experiences may go towards establishing a history of 'the people'. As Bloome et al. (1993) claim, Mass Observers 'often express a shared sense of creating a history of ordinary people - ordinary as opposed to those they describe as "kings and queens," "the posh," "the big cheeses," and "the media"' (Bloome et al., 1993: 15). In this sense then, Sheridan (1996) writes that '[c]alling themselves "ordinary" signifies *what they are not*, at least within their identities as Mass-Observers; they are not […] people who have certain sorts of power to define what history is' (Sheridan, 1996: 9, emphasis in original). From this perspective, we can see how the MOP might offer its correspondents an opportunity to re-value their life experiences and recognise the significance of the 'mundane' or 'everyday'.

3.3.2 Being out of the ordinary

However, some Mass Observers have expressed that, through their participation in the MOP, they are in some ways different to the 'ordinary' person. This self-reflection is highlighted in the following responses to the 2004 Directive on '*Being Part of Research*' as referenced in Pollen's (2014) work on the 'shared ownership' of Mass Observation –

> *'I suppose we represent a somewhat limited cross section of the community - the verbose, reasonably literate section who like to express our opinions on every possible subject'* (Mass Observer quoted by Pollen, 2014: 9-10).

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> *'I joined Mass Observation because I believe in its aims and objectives. I have always hoped it provided a kind of 'history of ordinary people'. However, I have thought that it is possible that Mass Observers themselves might form a category of people who are in fact not 'ordinary'. Perhaps they are a type of person who likes to reflect on their*

> *lives by writing about themselves; thus they might be considered as being extraordinary'* (Mass Observer quoted by Pollen, 2014: 10).

The troubling of Mass Observers' claims to 'ordinariness' therefore raises implications for who the panel can be said to represent. As the above excerpts suggest, for some Mass Observers, their positioning as reporter of self and society may challenge their ability to represent ordinary lives, with the act of reflecting on and writing about everyday life complicating their membership within the world of 'ordinary' people. Indeed, as Kramer (2014) describes, 'as well as recounting their personal experiences, [Mass Observers] also document or 'bear witness' to contemporary social life, making observations about society, as well as describing their own individual personal experiences. They are then both the self-observed, and the observer' (Kramer, 2014: 7). This liminality associated with performing Mass Observation means that the MOP troubles what Sheridan (1993) identifies as the dominant meaning of 'representativeness', the privileging of 'the individual, the single voice, and [..] the assumption that people can only be seen to represent themselves' (Sheridan in Bloome, 1993: 18). Under this model of representativeness, 'the quality of representativeness lies not in what [people] say, but in who they are (as defined by selected socio-economic characteristics which permit large scale generalisations about the whole population)' (ibid). Overall, the 'dual vision' (Kramer, 2014) of Mass Observers as both researchers and the researched, and the slippage between being extra/ordinary that their role on the panel might create, thus emphasises the importance of embracing the particularity of the MOP and the materials it produces.

3.3.3 Mass Observers and 'the public'

As well as unsettling assumptions about representativeness, the relationality of Mass Observers to others in their writings is also significant in its challenge of dominant approaches to exploring 'public' thought. The Project's encouragement for Mass Observers to consider how others' views, feelings, or experiences might relate to the topic of discussion or how others might react to the Observer's own writing moves the Project away from reductive notions of the 'individual' which, as highlighted in Chapter 2, are common throughout previous studies of views towards animal research. This means that when using the MOP to understand collective views towards an issue, we should be mindful of the particular positioning of Mass Observers and how their writing and knowledge claims are being used. Given the focus of previous studies on 'public' or 'societal' views towards animal research

amongst which this thesis is situated, this negotiation of the Mass Observer identity and their location amongst wider publics has been an ongoing concern throughout this PhD research.

Typical of MOP writing is how Mass Observers contextualise their thoughts about a topic with the personal relevance (or irrelevance) it represents, what it means within their particular social world and how it has been influenced by their lived experiences. As well as locating their views in specific contexts, Mass Observers often consider the epistemic value of their knowledges and the limits to what they can claim to know. As Kramer (2014) explains –

> 'Mass Observers do not then simply write of their experiences: they explain and account for the relevance of the information they provide, allowing researchers not just access to personal experience, but also insight as to how Mass Observers understand and present the value of their knowledge and experience' (Kramer, 2014: 3).

This means that in reading MOP accounts to get a sense of how an issue is viewed or understood, the reader must face the uncertainty that Mass Observers themselves convey in their writing. Reckoning with the fluidity and contingency of the thoughts expressed in such writing thus unsettles the notion of 'opinion' or 'views' as free-floating phenomena which can be extracted from their surrounding contexts, an assumption which, as discussed in subsection 2.2.3, frequently underpins the use of opinion polls and the interpretation of their findings. Rather, Mass Observers ground their writing in embodied experiences and shared social worlds and, in doing so, reveal the dependency of their writing upon multiple others.

Challenging the traditionally individualistic view of opinion-formation raises implications for who it is we engage when we want to understand views and feelings about something. As discussed in the literature review, research from throughout the fields of STS and PUS has demonstrated how publics are dynamic and performative, coming into being through their mobilisation around particular issues (Converse, 1964 [2006]; Michael, 2009). In taking lessons from such fields and from the MOP's embrace of the locatedness of knowledge, using the MOP for studies of opinion thus demands attention to the particularity of the Project and its panel.

As touched on earlier in this chapter, there may be multiple overlapping motivations for becoming a Mass Observer, such a passion for contributing to a 'people's history',

documenting the 'everyday', or non-professional writing. Although these attributes or identities can be used to describe Mass Observers as a collective, in their writing on different topics, the identities of Mass Observers may shift not only generally over time but through interactions with different topics and the different elements of one's identity that they may solicit or foreground. The Directive itself thus plays a crucial role in *directing* how correspondents enact their identity, with the 'form of reply shifting [sic] in relation to the ways in which the writers see the task they are performing' (Sheridan, 1996: 12). In this way, as Pollen (2014) puts it, 'MO contributors are partly produced by their users; who they are and what they contribute is in part defined by what researchers ask and what they think their audience wants' (Pollen, 2014: 5).

Therefore, any understanding of the identities of Mass Observers, should ultimately centre on their commitment to the overall project of Mass Observation. Whether or not their motivations for contributing to the MOP are the same, as the beginning of this section stated, Mass Observers should be recognised as invested in the Project, not merely as respondents or research subjects, but as *co*rrespondents who are engaged in the collective mission of recording 'everyday life' in the UK.

3.4 Using the Mass Observation Project as an academic resource

Given the MOP's attention to the far-reaching corners of 'everyday life', academic publications that have used MOP materials encompass a broad range of themes, covering social practices, institutions, and relationships. For instance, the MOP has been used to study areas such as ethical consumption (Adams and Raisborough, 2010), gardening (Bhatti and Church, 2000; Bhatti, 2014; Bhatti et al., 2014), libraries (Black and Crann, 2002; McNicol, 2004; Black, 2011), friendship (Smart et al., 2012), kinship (Kramer, 2011), and belonging (May, 2016b; a; 2017). Describing why the MOP is particularly useful for those researching relationships, Smart identifies the 'richness and depth of the narratives that many panellists provide' and 'the policy of the MOP to encourage people to write about actual experiences and real events, rather than offering opinions and attitudes' (Smart, 2011: 541).

As well as being valuable for research because of its emphasis on lived experience, the MOP's longitudinal nature has also offered methodological opportunities. For instance, looking at food practices, Nettleton and Uprichard (2011) analysed responses to the 1982 MOP Winter

Directive on food and eating along with food diaries submitted by MOA panel members in 1945. Likewise, Clarke et al.'s (2017) study of anti-political sentiment in the UK analysed diaries from 1945, 1987, and 2001, with these dates identified as key moments in political history. However, although Mass Observation provides a valuable resource for such longitudinal research, as Lindsey and Bulloch (2014) observe 'academics have tended to use it thematically and cross-sectionally, focusing on responses to a given theme at given points in time' (Lindsey and Bulloch, 2014: 3).

Whilst most research based on MOP writing has been qualitative, a few have taken a quantitative approach (Lowe, 1995; Sloboda and O'Neill, 2001). Though Lowe (1995) found the MOP to be useful for quantitative research, Pollen (2013) contends that in 'seeking objective data correlation, not enough attention is paid to the particular status of MOP writing, which is viewed as an unproblematic generator of facts to be mined for 'evidence' and statistical frequencies, rather than as complex, variable, subjective material solicited so as to access experience, opinion and feeling' (Pollen, 2013: 224). Hence, Pollen argues that through their reduction of 'reflective and sometimes extensive writing to numerical information' quantitative use of the MOP can do 'violence to the qualitative nature of MOP material' (ibid, 224).

Of particular interest to my own use of the MOP are instances where MOP materials have been used to explore understandings of, experiences with, and feelings towards science, technology, medicine, or animals. Located within these areas, and echoing my own assessment of why the MOP is a valuable methodological resource, is Cook's description of his use of MOP materials to study public perceptions of AIDS amidst the crisis of the 1980s. He states that, '[u]nlike opinion polls or surveys that ask direct questions and demand direct answers, MO sought discursive responses guided by general themes and loose questions. These responses allow us to see something of the complex texture of thought, opinion, and feeling' (Cook, 2017: 248).

Similar to Cook's desire for somewhat less tethered responses, Haran and O'Riordan's reason for choosing to self-commission the 2006 MOP Directive on '*Genes, Genetics and Cloning*' was based in the method's ability to 'contribute to something of a gap in the field by eliciting discussion in an open way that did not constrain the responses through a focus on particular media genres, issues, or patient groups, or through assuming particular criteria about what

constitutes appropriate knowledge in the genomics or cloning field' (Haran and O'Riordan, 2018: 3-4). As such research demonstrates, the MOP's strength in providing rich, personal, and reflexive accounts and the flexibility that Mass Observers have to write about topics in ways which are relevant to them have been recognised as valuable for investigating views towards technoscientific issues.

Looking at relationships beyond and between species boundaries, Charles has employed the MOP to investigate kinship amongst humans and other animals (2014), the case of post-human families (2016), and how the medium of writing enables the communication of kinship with non-human animals (2017). In this latter work, Charles argues that methodologies which allow for anonymous correspondence through writing are crucial to gaining insight into human-animal relationships in ways that are not constrained by the risk of normative judgement. As they suggest, '[w]riting about relationships with animals produces a particularly intimate account which is almost confessional, while talking to another person about similar relationships renders the intimacy less obvious and represents human-animal relations in a different way' (Charles, 2017: 117-118). Given the controversy that surrounds animal research in the UK, a matter which was touched on in the introduction to this thesis, the MOP's potential for offering a literary 'safe space' for discussing sensitive or taboo subjects is especially important.

Overall, the diverse research interests of those drawing on materials from the MOP reflects the breadth of topics that the Project explores and the range of writing it generates. As discussed, the MOP elicits a plurality of voices, knowledges, experiences, backgrounds, and writing practices and that such works also span disciplinary boundaries highlights the applicability of the method and materials to multiple modes of social research.

3.5 Conclusion

This chapter has provided an overview of the methodology of the Mass Observation Project, with a particular consideration of how the MOP relates to questions about who 'the public' are and the merit of the MOP for examining views and understandings. In doing so, I have covered how the MOP functions, the multiple identities of Mass Observers and their relation to the Project and the wider public imaginary, and what kinds of academic research MOP materials have been used to explore. Being informed by a critical approach to public

understandings of science, I have suggested that the MOP's embrace of the situatedness and plurality of knowledges, the ways in which they emerge from relationality within particular social worlds, presents a radical alternative to the reductive methods of polls and surveys which are predominant in studies of views towards animal research. Having now introduced the MOP, the next chapter will focus on my specific employment of the MOP as a research method and my use of MOP responses to the Summer 2016 Directive on '*Using animals in research*'.

4. My use of responses to the 2016 Mass Observation Project Directive on *'Using animals in research'*

4.1 Introduction

This thesis is based on an analysis of 159 responses to the Mass Observation Project (MOP) Summer 2016 Directive on *'Using animals in research'*. This Directive was commissioned by Dr Pru Hobson-West as part of a Leverhulme-funded programme of research named '*Making science public*' [2], which involved animal research as an area of study. The aim at the time was to understand more about the potential of the MOP as a resource for research. Subsequent research then led to a Wellcome Trust Collaborative Award bringing together 5 UK universities under the programme 'The Animal Research Nexus: Changing Constitutions of Science, Health and Welfare'[3]. As part of this Award, the idea to conduct a detailed analysis of responses to this Directive was proposed. By my PhD start-date of October 2017, the majority of responses to the Directive had been collated by archivists at The Keep, with only a few responses being received by the archive after this point.

Although my primary supervisor had commissioned the '*Using animals in research*' Directive, other modes of data collection were of course possible and, indeed, in choosing to use the MOP responses, there was no plan determined for how to go about this. Throughout the earlier stages of this PhD, interviews were discussed as a possible supplementary form of data collection, and there was also consideration of whether I should look at responses to other MOP Directives, particularly those focusing on animals such as the 2009 '*Animals and Humans*' Directive (see Appendix B). However, after my first reading of the 87 electronic responses to the 2016 '*Using animals in research*' Directive, I felt that they offered a substantial amount of depth and richness for analysis. Therefore, once I had visited the archive to make copies of the 72 paper responses, thus completing the set of responses to the '*Using animals in research'* Directive, I decided that I would not need to supplement this dataset with any other forms of data.

[2] https://www.nottingham.ac.uk/sociology/research/projects/making-science-public/
[3] https://wellcome.org/grant-funding/people-and-projects/grants-awarded/animal-research-nexus-changing-constitutions

This chapter details the specific ways that I have approached, handled, and analysed responses to the '*Using animals in research*' Directive, explaining my research journey with the method in a chronological order, from research design to analysis. In doing so, I will first discuss the Directive's design and offer some critical reflections on the ways it may have shaped Mass Observer writing on the topic of animal research. Following this, I will describe the approach I took in 'making data' from the MOP materials. Then I will explain how I handled the dataset and, finally, how I analysed it. In choosing to structure this chapter chronologically, I hope to aid readability by offering a clear and coherent sense of how I have used the MOP materials at the centre of this study, moving from what Law (2007) describes as the 'mess' of research methods to the distinct yet overlapping themes that form the data chapters of this thesis. However, the processes signified by the headings of the following subsections were not always distinct or linear, such as the way the handling of the dataset and the analysis of it bled into each other. The messiness of doing social research and of using the MOP as a method is not something to be cleaned up in an attempt to reconstitute the process as neat and scientific, capable of exact reproduction by another researcher who can simply follow the steps. Rather, the mess is an inextricable part of the method and therefore in presenting my particular use of the MOP I also hope to illustrate the emergent nature of doing qualitative data-driven research whilst still clarifying the approaches and considerations which guided my decisions.

4.2 The Directive design

Although I was not involved in designing the Directive, in analysing the responses to it I can offer some critical reflections on the ways it may have shaped Mass Observers' writings. The '*Using animals in research*' topic was Part One of two topics that comprised the Summer 2016 Directive, with Part Two of the Directive being on the topic of '*Being 'thrifty'*" (see Appendix A) I did not intend to methodologically consider Part Two of the Summer 2016 Directive nor analyse the responses to this part of the Directive. However, like others who have analysed the responses to only one part of a Directive (Harrison and McGhee, 2003), I do acknowledge that the ordering and placement of these two topics in proximity to each other within the Directive may have influenced how Mass Observers responded to Part One on '*Using animals in research*'. Having noted this, from this point onwards, my use of the term 'Directive' will

refer specifically to Part One: '*Using animals in research*' of the Summer 2016 Directive unless explicitly stated otherwise.

The Directive begins by introducing the topic with an explicit framing of the issue around medical research, i.e. –

> *'Experiments on animals are widely used to understand disease and to develop and test new medicines. However, using animals for this kind of research remains controversial. Is animal research necessary to understand and improve human health, or are there other ethical issues to consider?'*

In focusing on biomedical uses of animals, particularly those which lead to medicine development, it was likely assumed that the topic would be made more accessible and relatable for the diverse group of correspondents that comprise the MOP panel. This angle can be seen as providing Mass Observers with a material 'way in' to the topic, in their consumption of medicine and experiences and ideas of health and illness. Such a framing is valuable in offering an alternative to abstract ethical conceptualisations, the merit of which is acknowledged in Macnaghten's (2004) work on views towards genetic modification, and also to prevent the conflation of animal research with animal 'use' in general (Ormandy and Schuppli, 2014: 400). However, it is also important to note how this focus on *medical* uses of animals in particular steers responses away from other purposes for which animals are used in research, such as regulatory testing, environmental research, or military research. Of course, this is not to say that such uses of animals could not still be raised by Mass Observers. Indeed, purposes other than the biomedical were discussed in multiple responses and, as Chapter Seven will explore in detail, the use of animals for cosmetic purposes was mentioned across many accounts. Yet, it is nevertheless significant to acknowledge that in setting up the Directive on '*Using animals in research*' with an emphasis on medical purposes and applications, Mass Observers' views towards 'animal research' as a broad topic were likely filtered through this framing.

In a similar regard, the Directive uses the terms 'animal research' and 'laboratory animal research' interchangeably, reinforcing the idea that animal research only occurs within laboratories. Discussing the dominant construction of the laboratory as the main space in which animal research takes place, Palmer et al. (2020) write, 'the conflation of "animal

research" with research in laboratories may contribute to a lack of attention to research conducted on animals at POLEs [Places Other than Licensed Establishments]' (Palmer et al., 2020: 7), e.g. in field-based environmental research. In reproducing this conflation, the '*Using animals in research*' Directive could be said to uncritically foreground certain scientific uses of animals over others and suggests particular ideas about housing conditions, species use, and severity which do not necessarily reflect the animal research conducted at POLEs, which, for instance, are 'often only marginally invasive' (ibid, 3).

The main body of the Directive is organised into 3 sections: Thinking back; Everyday life; and Policy and Practice. The first section 'Thinking back' asks Mass Observers if they have any memories of animal research in the news or media, if such stories prompted any discussions between family and friends, and if their impressions of animal research has changed over time. The second section 'Everyday life' asks Mass Observers to situate their responses in their personal experience, asking whether they have experience of working within an environment in which animal research is performed, whether they conducted experiments using animals during their education, and whether they consider the involvement of animals in producing medicines when buying or taking them. The third and final section 'Policy and practice' asks Mass Observers their impressions of those working in animal research laboratories, whether some species are more acceptable for use in research, and their opinion of the claim that '*the general public needs to know more about animal research, and that more 'openness' from scientists and the government is therefore needed*'.

Given the emphasis on knowledge and awareness in previous studies of views towards animal research, particularly those using polls and surveys (see subsection 2.2.3), the '*Using animals in research*' Directive's inclusion of questions which focus on the epistemological, i.e. memories of encountering the topic or considerations of animal research when buying or consuming medicine, as well as the relational, i.e. discussions had about animal research and personal experience of experiments involving animals, is of value in potentially encouraging rich and contextual contributions to the area. This is because such questions go beyond the aim of capturing the presence or absence of knowledge about the topic of animal research, working to also capture what this *means* to Mass Observers.

Related to the aim of generating reflections on what a topic means to Mass Observers, given the MOP's longitudinal nature, it is understandable that some prompts in the '*Using animals*

in research' Directive have an explicit focus on the past. In encouraging Mass Observers to trace their feelings towards animal research over time, such prompts allow space for writers to contextualise their current thinking and, in noting how this might have shifted, record any uncertainty or conditionality of their feelings towards the issue. Although, the Directive may have benefitted from the inclusion of questions with a more explicit inquiry into visions of the future of animal research, as this appears to be a gap in previous studies in this area. Nevertheless, as will be demonstrated in the data chapters, and particularly the third data chapter, expectations of the future were still prominent in MOP writings on animal research and can be seen as informing views towards the practice in the present.

As well as this, given the need for more relational studies of views towards animal research, such as those offered by Macnaghten (2004) and Michael and Brown (2004), the Directive might also have benefitted from including explicit probes into other ways that humans relate with non-human animals, (i.e. consumption practices which involve animals or pet ownership), and how this bears upon views towards the use of animals in research. Although, there are of course pragmatic limits to how much can be included in a Directive and I acknowledge that a careful balance must be sought between making the topic accessible through wider experience and maintaining a focus on the matter at hand. However, similar to the role that expectations of the future play in MOP writing despite not being explicitly featured in the Directive's questions and prompts, as is demonstrated in Chapters 5 and 6, Mass Observers often dwelled on their relations with other animals, and discussions of pets and eating practices were common throughout responses.

Similarly, it is interesting that although the Directive does not feature an explicit probe into which kinds of scientific uses of animals or which purposes are felt to be more or less important or necessary, many Mass Observers discussed animal research in this way, identifying the value of medical research and the connection of animal research in advancing healthcare (as explored in Chapter Seven). Medicines are mentioned in a question within the '*Everyday life*' section which asks: '*When taking medicines or buying them for you and your family members, to what extent do you think about the scientific research on animals that went into producing them?*' and therefore we might assume that this prompted wider discussion of medical research. However, as we will see in Chapter Seven, many Mass Observers who mirrored the Directive structure in their responses wrote about necessary

scientific uses of animals before reaching this section. Again, although responses to Directives can include discussion of aspects of a topic that are not explicitly mentioned in the Directive itself and indeed may ignore some of the Directive's specific prompts, it is important to note that the Directive's foci still play a crucial role in shaping responses.

Overall, these particularities of the Directive, the areas it focuses on, those it does not, and how these are framed, are not necessarily limitations. Rather, they mean that the Directive shaped the writing of Mass Observers on animal research in specific ways and it is the acknowledgment of this which is crucial. To recognise this is to situate the Directive responses in the context through which they emerged, as a product of the exchange between the archivists, researchers, and Mass Observers. Therefore, although the MOP offers an alternative to the restricted methods that dominate studies of views and understandings of animal research (as discussed in Chapter 2), like all methods, it remains important to ground MOP writings in the necessarily partial contexts in which they are produced.

4.3 Making data: collating MOP writing

On beginning the PhD project in 2017, I was given the 87 electronic copies of the email responses to the 2016 '*Using animals in* research' Directive by USB. After spending the first year of my PhD immersing in relevant literatures, I read through the electronic copies to get a general sense of the data before travelling to the archive to make photographic copies of the paper responses. On November 28th 2018, I travelled to The Keep, the archive at The University of Sussex in Brighton from which the MOP runs and in which its materials are housed, to retrieve copies of the 72 paper responses and complete my dataset of 159 responses to the 2016 '*Using animals in research*' Directive (a process I blogged about (McGlacken, 2019)). To do so, I purchased a photography pass and took photographs of each of the paper responses, as is advised by The Keep [4]. I chose to photograph the paper responses rather than use the scanning equipment, judging this to be a quicker method given the number of documents I had to copy, and this was completed over two days of visiting the archive.

Although others have analysed samples of MOP responses, such as Busby's (2000) creation of a 'pragmatic sample' to study the particular issue of sickness leave in relation to paid

[4] https://www.thekeep.info/services/self-service-copying/

employment or May's (2016b) analysis of a sub-sample of responses to a Directive on belonging to look specifically at the theme of non-belonging, I decided to keep the entire dataset of 159 responses for analysis. Though by doing this I could not expect to analyse the MOP accounts at a micro-level, I made this decision to aid an analysis of the data which sought broad themes across the dataset and, importantly, allowed for shared societal and structural ways of relating to animal research to emerge in my analysis. This meant I could explore the writings of Mass Observers at a meta level, looking at the macro processes which characterise UK science-society relationships around animal research, processes which are wide-reaching but still configured in micro and highly contextual ways through particular lived experience. In doing so, I hoped to address the gaps identified in the literature review, looking at the ways in which animal research is meaningfully lived and felt in the everyday, whilst acknowledging the structural constraints which shape this. This analytical approach, along with my exploration of the 'lived lenses' discussed in Chapter 2 (see subsection 2.3), led to an eventual concentration on the meta-themes of knowledge, care, and medicine.

As demonstrated in subsection 2.2.1 of the literature review, given that much of the previous work around views towards animal research have concentrated on demographic categories to explain findings (e.g. Pifer et al., 1994; Crettaz von Roten, 2008; Ormandy et al., 2013), working to construct samples which are 'representative' of a wider public body, I wanted to use the MOP materials in a way that resists such generalisations. Because of this, such demographic analyses do not feature in my representation and interpretation of the data. In addition, although a basic demographic breakdown of Mass Observers who responded to the Directive could be retrieved through the archive, I felt it important to recognise that Mass Observers have the option to include, omit, and shape their demographic information in responding to each Directive. For example, some of the short biographies heading MOP accounts break with traditional demographic conventions, instead being playful, conversational, open-ended, and choosing to convey identity in flux. For instance, Mass Observer K798 wrote the words '*creative daydreamer*' after their age and I filed this into the 'Other' section of my 'Occupation' category when classifying each Mass Observer in my qualitative data analysis software (QDAS) (my use of which will be discussed in the following subsection). Similarly, Mass Observer H2418 wrote in their short biography – '*retired perhaps - who knows? Took voluntary redundancy end of February 2016 volunteer at hospice, perhaps*

that ending soon too' (Mass Observer H2418). As this Mass Observer's currently active role was that of volunteer at a hospice, I categorised this person as 'Volunteer'. But this could have been characterised differently, choosing instead to foreground their status as retired. Both examples demonstrate how a question which appears simple on the surface, such as asking Mass Observers to state their occupation, can generate short yet complicated answers. Hence, even these mini biographies can become messy depictions of identity and resist neat categorisation.

As the previous chapter emphasised, to recognise this is to appreciate how the Directive itself plays a crucial role in directing not only how Observers write about a topic but, in turn, how they enact their identity as Mass Observer and who they write *as*. Furthermore, given the relationality of Mass Observers to the social worlds they document, being both 'Observer' and 'Observed' (Kramer, 2014), MOP writing can be best said to reflect more than the views of an individual. As Sheridan (1993) claims, '[e]ven when the correspondent is not explicitly representing others, we can see that there are other voices embedded within the texts' (Sheridan, 1993: 20). Thus, identity can be seen as shifting both across responses and within them and surpassing simplistic demographic categories.

4.4 Handling the dataset

In deciding how to best handle the dataset, I briefly reviewed literature on the use of QDAS. Although QDAS is often seen as providing 'rigour' in the analytical process (Richards and Richards, 1991), I was aware of the criticism such positivist assumptions have received. For instance, MacMillan and Koenig (2004) claim that, in such approaches, '[r]igor is treated not as the product of concise conceptual thought, ideas, and examination of research materials within a particular research framework but as something provided by a software tool able to produce replicable data sets' (MacMillan and Koenig, 2004: 184). Similarly, Fielding (2004) states that many interpretations of the software 'confuse [sic] a technical resource with an analytic approach' (Fielding, 2004: 3). Rather than providing the benefit of rigour, some argue that QDAS can instead impede the analytical process, generating distance from the data or reducing it to coding trees. Related to this last point, QDAS is sometimes associated with a difficulty in knowing when to stop coding (Welsh, 2002). This has been referred to as 'data fetishism' (Cisneros Puebla, 2003) and as García-Horta and Guerra-Ramos (2009) explain, this

‘‘let’s code everything’ strategy, in turn, can lead to excessive and non-reflexive coding which inflates the results that are to be reported’ (García-Horta and Guerra-Ramos, 2009: 163).

In relation to analysis of MOP writing in particular, the use of QDAS raises other methodological issues to consider. Given the materiality of MOP accounts and the importance this can have to the analytical process, converting such materials into digital documents has an important impact which is difficult to mitigate. As Hurdley (2014) claims, ‘[f]or researchers accustomed to interview transcripts, surveys, field notes or film/audio recordings, which can be fed into Qualitative Data Analysis Software packages, or at least stored digitally, translating MO submissions into units for analysis is challenging’ (Hurdley, 2014: 3).

In discussing traditional qualitative approaches, Hurdley argues that the ‘rhetoric of sociological text production strives towards unity and closure, a standard story in which gaps are closed, traces erased and contours smoothed’ (ibid, 19). Yet, the messiness of MOP materials do not fit easily into neat narrative forms for analysis. Instead, as Hurdley puts it, ‘it is a messy archaeology of things, to show that any 'anthropology of ourselves' must encompass dust, mess and gaps if it is to materialize in a different methodological architecture’ (ibid). Similarly, Law’s (2007) critique of the realist drive in qualitative Sociology, calls for an embracing of mess and an acknowledgment of that which is excluded in the formation of analytical narratives. On this point, Law states that the ‘problem is not exclusion as such’ but, rather, the ‘refusal to acknowledge that this is going on’, a refusal ‘to recognise what is sometimes (though in a different register) called ‘invisible work’’ (Law, 2007: 7).

On the other hand, however, Le Blanc (2017) found that QDAS can help in *resisting* the pressure to form neat, realist research narratives. As they report of their usage, QDAS ‘subverted the authority of any one privileged telling and allowed for the creation of research narratives that were fluid, fragmented, and resisted closure’ (Le Blanc, 2017: 789). Whilst it was not ultimately relevant to my analysis of responses to the ‘*Using animals research in research*’ Directive, with the Directive receiving no images, Le Blanc also argues that the ‘hypertextual environment [of QDAS] can permit researchers the liberty to craft representations that display greater degrees of complexity and openness than orthodox ethnographic texts’ (Le Blanc, 2017: 796).

Most important in determining my decision to use QDAS to handle the MOP materials was understanding the software as an organisational, rather than analytic, tool. Given the large size of the dataset, I felt that the comprehensive storage, organisation, and coding of data that QDAS can offer could help to navigate the 'unwieldiness' that has sometimes been associated with MOP materials (Moor and Uprichard, 2014; Casey et al., 2014) and lend confidence to my claims about the dataset. As Odena (2013) puts it, 'researchers are still in charge of building up the analysis, having the ideas, engaging with the data and making all the decisions about the study. Computers may save time locating a piece of text within a large data-set, such as an interviewee's answer to a particular question, but the relevance of the answer and its implications are assigned by the researcher' (Odena, 2013: 358). Indeed, although recognising the concerns associated with the use of QDAS to handle Mass Observation materials, Lindsey and Bulloch also decided to use software in their research, viewing QDAS not 'in itself a method or methodology, but rather […] a set of tools that are flexible enough to adapt to a range of analytical approaches' (Lindsey and Bulloch, 2014: 7). In particular, the capacity for quick searches of the entire dataset for simple information, keywords, the recurrence of codes, etc. and the ability to create coding structures which enable clear organisation of the connections made between themes were identified as especially valuable. As Haran and O'Riordan (2018) describe of their use of QDAS to handle MOP data, such software can help to 'identify patterns in the digitised material that otherwise would have been difficult to discern' (Haran and O'Riordan, 2018: 691).

Relatedly, the ability to record information about Mass Observers on QDAS was also identified as important for my thesis and its positioning amongst studies of 'public' opinion. This meant I could record any demographic information provided in the brief biography which opens each Directive response (which, as discussed earlier, is voluntary and varies in the level of detail given). Although, as was discussed, I have deliberately chosen not to analyse the writings of Mass Observers through demographic information, this information may be requested or useful in future uses of this data and, as such, the capacity of QDAS to record this was of value.

Having said this, it is pertinent to note that, although QDAS was used in this thesis primarily as a way to handle the dataset, I recognise that each interaction between my data and the QDAS are necessarily part of the analytical process and cannot be separated from it. In choosing to use QDAS to hold the data and organise my coding of it, it is clear that this will

have had a significant impact on my thematic analysis of the writing and my use of it in this thesis. Indeed, given the large number of responses, it is unlikely that I would have been able to analyse all responses in an organised way without the use of QDAS.

The particular type of QDAS used in this research was NVivo 12. The decision to use NVivo 12 was down to the popularity of this software and its free access and promotion through the University. Because NVivo12 requires documents to be word-processed to enable search functions, the 87 electronic responses to the Directive were uploaded onto NVivo12 first and then I had to decide how to transcribe the PDFs of the 72 paper responses. Given the amount of paper responses I would have to transcribe, I met with the University of Nottingham's digital research team to inquire about possible ways of expediating this process. With the transcription process offering another opportunity to get closer to the data (for discussion of transcription of speech, see Kowal and O'Connell, 2014), I did not want to go down the route of hiring a professional transcription service. Additionally, the difficulties that Lindsey and Bulloch experienced with several professional transcription services in their work with MOP documents reinforced this decision, with the authors advising that 'close, face-to-face supervision of the transcription process is necessary' (Lindsey and Bulloch, 2014: 9).

In discussion with the University's digital research team, the option of using the *Microsoft Computer Vision* optical character recognition (OCR) online tool[5] was suggested. However, this raised ethical and privacy concerns around whether it would require responses to be stored on 'the cloud' or any other system, with archivists at The Keep clarifying through personal correspondence that the data cannot be stored beyond the life of the project. Therefore, confirmation was sought through the digital research team that the responses would not be stored elsewhere in using this tool. After this was confirmed, I began transcribing the paper responses assisted by the OCR tool.

In using the online transcription tool, I was required to upload one MOP account at a time onto the website which would then provide a near-immediate digital transcription of what was written. Although I still checked each transcription against the PDFs of the original documents for accuracy, this tool aided the expediency of the transcription process, particularly for those responses which were typed and thus clearer for the OCR tool to

[5] https://azure.microsoft.com/en-gb/services/cognitive-services/computer-vision/

transcribe. However, given that many of the MOP paper responses were handwritten, I sometimes skipped use of the OCR tool altogether as it struggled to accurately recognise words and could not use context to decipher particularly ineligible writing. Once all paper responses had been transcribed into Word-processed documents, they too were uploaded onto NVivo 12.

As discussed in the 'Responding to Directives' subsection (3.3.1) in the previous chapter, much of MOP writing has a physical materiality which provides its own analytical insights and adds further interpretive possibilities to readings of the text alone (Moor and Uprichard, 2014; Lindsey and Bulloch, 2014). Therefore, in choosing to first make photographic copies of the paper responses, then to transcribe them into word-processed documents and upload them onto QDAS, my analysis of the documents lost touch with much of their materiality. In their analysis of MOP writing, Lindsey and Bulloch analysed PDFs of the original physical documents alongside the word-processed versions they had uploaded onto QDAS. They also created 'field-notes' which described the physical documents along with 'how the physical scripts, as well as the views expressed in the writing, had influenced and affected us' (Lindsey and Bulloch, 2014). However, because of my intention to look across the entire dataset of responses to the '*Using animals in research*' Directive, engaging with themes across the dataset rather than drawing out the voices of individual Mass Observers, I did not take steps to record information about the materiality of the documents. On reflection, attention to the particular modes of writing of individual Mass Observers and the identities that these suggest would have been an interesting angle to have taken within this research, yet this was incompatible with the approach I decided to take.

4.5 Analysing the dataset

Following the advice of others who have used MOP materials (Harrison and McGhee, 2003), I initially read through all 159 accounts and took notes before coding on QDAS. In making preliminary observations, I recorded what I deemed to be interesting or important themes, either being recurrent across responses or related to my emerging research questions, with these being iteratively formed through my review of the literature and my engagement with the MOP writings. As well as this, I asked questions of the data and made refence of particular MOP excerpts that could be returned to in greater detail when using QDAS. As stated, because my dataset was split into two response formats which were collated at different times, the

electronic responses were read and coded on NVivo 12 before the paper responses. Therefore, in analysing the paper responses on NVivo 12 my coding was informed by, though not limited to, those codes that had already been generated through the initial coding of the electronic responses.

To analyse the responses I took the approach of inductive thematic analysis, reading through each account to generate thematic codes which, as Clarke and Braun (2017) write, provide 'a framework for organizing and reporting the researcher's analytic observations' (Clarke and Braun, 2017: 297). This approach allowed me to remain at a meta-analytical level, looking at themes across the MOP responses collectively rather than at each individual response in its entirety, as this would not have been possible to do with the entire dataset within the timescale of the PhD. When coding, I selected entire paragraphs rather than just sentences to help capture more context of what was written. As Mass Observers do not always follow the Directive structure in their responses, greater contextualisation would have been helped by coding full responses instead of coding extracts. However, given that I intended to look across the entire dataset as stated, this level of attention would not have been feasible.

In employing this analytical approach, I loosely followed Braun and Clarke's 6 steps of inductive thematic analysis, with their approach offering a clear procedure to undertake. These are: 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 (ibid, 87). My coding of the MOP responses was a mixture of theoretical and empirical codes, though none took a strictly inductive adoption of words and phrases that Mass Observers had themselves used. In responding to the data, I followed Braun and Clarke's (2006) advice to code as many potential themes as possible, with the rationale that 'you never know what might be interesting later' (ibid, 89). This meant that I had a large number of codes and, in the end, when I had decided on which themes to focus my data chapters on, some codes appeared to be more 'miscellaneous' than others, with less connections shared between these codes.

In producing documents for supervision meetings, I made my way through the later steps (4-6), sharing early thoughts on important themes, reviewing and refining these by creating thematic 'Project maps' in which connections were drawn between codes and some codes were organised into sub-themes. In my use of the map function on NVivo12, I first created a

Project map which included all of the codes I had made and organised these under thematic headings, i.e. the code 'Kinship' was placed under the thematic heading 'Interspecies relations' (see Appendix C). I used this space to draw broad connections between the codes or identify which codes stood 'alone' and eventually delete codes which had become duplicated under other names. Through this process, I thought about the meta-themes that were represented in this Project map and with this visual analytical aid I was then able to produce more focused Project maps for the 3 themes I felt were particularly interesting or important to my thesis (See Appendix D, E, and F).

I used this process to form my data chapters, going back and forth between the writing process, which I identify as a crucial part of the analysis, and the use of QDAS to assess whether all sub-themes were being covered in each chapter and to consider 'the overall story' (Braun and Clarke, 2006: 87) that my analysis was telling. As Bailey (2012) discusses of her use of thematic analysis to analyse MOP writing on funeral attendance for her PhD thesis, the 'process begins with one's fieldnotes, or, in this case, M-O replies, one searches for categories and patterns (themes), one marks up the data and re-sequences it to construct the outline of one's thesis' (Bailey, 2012: 154). In producing Project maps to represent the data insights that would be covered in each data chapter for supervision meetings, I reflected on which codes could become subthemes of the meta-theme, i.e. the code 'Emotion' became a subtheme within the meta-themes of both 'Knowing and not-knowing' and 'Care'. However, the Project maps do not provide a completely accurate depiction of the themes my data chapters eventually focused on, with some of the themes included in them being omitted. Rather, I have discussed them here and included them in the Appendices to highlight the role they played in offering a space to draw analytical connections.

Though I agree with Braun and Clarke's assertion that the prevalence of a theme within the dataset does not necessitate its importance to the research (Braun and Clarke, 2006: 82), the three meta-themes which inform my data chapters became important in my analysis, in part, because of their prominence across the MOP responses. For example, though I was initially interested in the concept of necessity broadly, a key reason why my third chapter explores necessary *biomedical uses* of animals is due to the frequency with which necessity was discussed in relation to medicine throughout the responses. Of course, each speak to something more than quantity, being themes which, as shown in the literature review, I

identified as problematically constructed or absent in previous studies of views towards animal research. For instance, the first data chapter on the theme of 'Knowing' enriches the past attention given to knowledge capacity and awareness in studies of views towards animal research (see subsection 2.2.3) by understanding knowing as an actively mitigated practice and as a spectrum which involves not-knowing. In this way, the themes of my data chapters were selected through an iterative process of reviewing the literature and coding the MOP accounts. When I had finished coding all of the responses, I was able to look at which themes were both recurrent across the dataset and also important to my assessment of problems with or gaps in the literature. In using MOP writing in this thesis, then, I aim to illustrate wider arguments through my analysis of the excerpts, though I am aware that such steps from the data to wider claims are not necessarily representative of the dataset as a whole but rather are made from my particular positioning in this area.

The meta-themes of the first and second data chapters emerged earlier in the analytical process, however, as alluded to above, the third data chapter on the meta-theme of 'Medicine' took longer to determine, forming originally around the theme of 'Necessity'. Upon writing about the theme of necessity within the MOP responses, with the perspective and feedback of supervisors, I realised that the themes I was exploring in the third data chapter were more accurately discussing constructions of necessary *biomedical* uses of animals. As this description of my analysis shows, my process reflects Braun and Clarke's position that 'analysis is not a linear process of simply moving from one phase to the next' but is more of a 'recursive process, where movement is back and forth as needed, throughout the phases which replies to come back to and read again' (ibid, 86).

As stated earlier in this section, I viewed the process of writing my data chapters as a central part of the analysis. In writing, I was able to more closely analyse my interpretation of MOP extracts and their relation to wider concepts. However, similar to Lindsey and Bulloch's experience of transcribing archival materials as sociologists, I was also unfamiliar with the conventions of quoting written texts, and, like them, encountered the methodological and ethical issue of deciding whether to transcribe spelling and grammatical errors. Making the same decision as Lindsey and Bulloch who 'consulted the archivists to ask how others quoted MOP material, and were informed that researchers tend to reproduce writer's spelling and grammatical errors' (Lindsey and Bulloch, 2014: 8), in the aim of preserving Mass Observers'

individual styles of writing and formatting I chose to include grammatical errors, typos, and paragraphing.

The need to acknowledge formatting decisions is arguably more crucial when dealing with MOP documents given the ways in which the writing of Mass Observers is shaped by the structure of the Directive (Sheridan, 1993; Pollen, 2014). In responding to the '*Using animals in research*' Directive, the majority of Mass Observers broadly followed the Directive structure to guide their writing. Across responses there were varying levels of detail given to each prompt and a range of full response lengths. Some Mass Observers wrote multiple pages, some a small paragraph, and a few Mass Observers were notable in the brevity of their Directive response, expressing a lack of ability to write about the topic or refusing to engage with it, in doing so, communicating back to the MOP about their expectations for Directives. However, as will be covered in Chapter 5, rather than representing a failure to appropriately engage Mass Observers on the topic of animal research, the capacity to record disconnections with the issue and hear, even briefly, something from those who feel unable or unwilling to discuss it, is recognised in this thesis as of significant methodological value.

4.6 Conclusion

This chapter has presented and reflected on the ways I have approached and used responses to the Mass Observation Project Summer 2016 Directive on '*Using animals in research*'. My use of the MOP to explore views towards animal research generated lots of interesting analytical insights, yet given the necessary constraints of the PhD process, I have focused on the meta-themes of knowledge, care, and medicine. Hence, the presentation and discussion of the MOP responses featured in this thesis are partial and should not be taken as representative of the entire dataset. Similarly, as will be emphasised in Chapter 8 when I offer further methodological reflections, my use of these Mass Observers' writings should not be taken as proxy for views of the 'general public'. As well as this, as noted in this chapter, the writings of Mass Observers discussed in this thesis are shaped by the Directive design and the wider socio-temporal moment at which such writing was elicited. Thus, their writing was produced in relation to a particular framing of the topic of animal research. I recognise this contingency as a necessary part of all social research rather than a limitation as such. Therefore, with the contexts which have shaped these responses in mind, this thesis will now

present three data chapters which explore the meta-themes of knowledge, care, and medicine in MOP writing on '*Using animals in research*'.

5. Data Chapter One: Knowing and not-knowing about animal research

5.1 Introduction

Bearing the current push for openness around animal research in mind, this chapter aims to explore the currently understudied aspect of how individuals mediate information on the topic. Since the 2014 launch of the Concordat on Openness on Animal Research[6], emphasis has been placed on informing and educating laypeople on animal research practices. As argued in Chapters 1 and 2, fuelled by an assumption that public knowledge of this area is lacking, openness strategies function on the basis of correcting this deficit, with the suggestion that increased awareness of details such as the UK regulatory framework will resolve societal concerns over the scientific use of animals (Festing and Wilkinson, 2007). Such openness regimes construct lay publics as passive absorbers of information on animal research, their purpose being to witness the enacting of openness. Hence, rather than enabling laypeople to contribute to science-society dialogues on the topic, openness on animal research often functions as an end in itself, making information 'available' in the public domain without consideration of how audiences may engage with it. However, as this chapter aims to demonstrate, people can be active in managing their knowledge (and non-knowledge) of animal research.

This chapter considers what Mass Observers want and do not want to know about animal research and examines the role that active ignorance plays in negotiating this in the everyday. As this analysis will demonstrate, some Mass Observers articulate profound discomfort in thinking and writing about animal research and report that the practice raises feelings of sadness, guilt, and shame. In order to mediate these feelings, some Mass Observers discussed a general avoidance of engaging with the issue and expressed a subsequent ambivalence towards the prospect of more openness on the use of animals in the bioscience sector. At the extreme end of such discomfort around animal research, a few Mass Observers stated only that they could not write about the topic at all. As will be contended, at the centre of such reluctance to engage with animal research are questions of power which beg consideration of the capacities that individuals have to act on knowledge gained around the practice.

[6] http://concordatopenness.org.uk/

On the other hand, some Mass Observers were enthusiastic about the prospect of increased openness on animal research. Reinforcing the problems associated with current knowledge on the practice, in that one is unable to act on it, key to such support for openness in this area was the capacity for it to empower laypeople to intervene in animal research at some level. In discussing the benefits of openness on animal research, certain constructions of the 'public' were mobilised to make claims about *who* needs to know such information and *who* can be trusted with knowing it. Here, the figure of the 'general public' was often imagined as scientifically illiterate, therefore requiring knowledge on animal research, and also irrational, with such openness thus presenting a source of risk. Hence, the benefits of openness and the agentic capacities that it should bestow are embedded in notions of the 'good citizen', with some Observers constituting themselves as trustworthy knowing subjects in contrast to an irresponsible 'general public'.

This chapter is organised in three sections. The first will describe the problems associated with knowing about animal research and why this is often associated with discomfort. The second will explore why practices of not-knowing are employed to mitigate the discomfort associated with encountering information on animal research. Finally, the third section will consider support for openness on animal research, what this should entail and who its intended 'audience' should be. By structuring the chapter in this way, my aim is to illustrate how ignorance around animal research may, at times, not only be functional but also a necessary response to the problems associated with knowing. It is hoped that this analysis of Mass Observer reluctance to engage with information on animal research and their requirements for openness on the topic to be beneficial will contribute to the development of science-society dialogues which are mutually meaningful and productive. This means acknowledging that, for many, animal research rightfully remains an uncomfortable topic and, therefore, public communications must strive to empower those who choose to engage with the issue. In short, this chapter stands to emphasise that openness should not be perceived as an end in itself and, rather, must address the existing unequal distribution of power in animal research decision-making processes, thus working to foster dialogical processes which are fruitful for all involved.

5.2 The uncomfortable knowledge of animal research

They all know it is there, all the people of Omelas. Some of them have come to see it, others are content merely to know it is there. They all know that it has to be there. Some of them understand why, and some do not, but they all understand that their happiness, the beauty of their city, the tenderness of their friendships, the health of their children, the wisdom of their scholars, the skill of their makers, even the abundance of their harvest and the kindly weathers of their skies, depend wholly on this child's abominable misery.

- Ursula Le Guin, The Ones Who Walk Away from Omelas

For many, the biomedical use of animals presents a moral conflict between their subscription to a value system which promotes the just treatment of animals and the desire for medical treatments and advances. Perhaps this goes some way to explaining why animal research continues to be regarded as highly controversial and a key bioethical concern (Hobson-West, 2010). Analysis of writing from the Mass Observation Project on the topic demonstrates a palpable discomfort in thinking and writing about animal research, but also reveals that feelings of uneasiness around the practice are not straightforward. As Mass Observers articulate, disquiet around animal research does not necessarily translate into opposition towards the practice. Rather, such discomfort reflects ambivalence towards animal research, complicating the simplified 'for' or 'against' readings of public opinion presented in national opinion polls (Ipsos MORI, 2018). Hence, in disliking the scientific use of animals whilst recognising their benefiting from this use, some Observers find the topic highly uncomfortable to dwell on or discuss.

5.2.1 Confronting complicity

Though the harm-benefit model underpins the ethical review of scientific animal use (Animals in Science Committee, 2017), this analysis reveals that viewing animal research through a lens of harms and benefits does not always help individuals to morally and emotionally justify the practice. In valuing medical treatments, the development of which is argued to depend on the use of animals (Barré-Sinoussi and Montagutelli, 2015), whilst disagreeing with the treatment of animals as experimental subjects, some Mass Observers regard engagement with the topic as a confrontation of their complicity in the practice. Given this, animal research

is perceived and felt to be an uncomfortable subject to contemplate, as the following MOP excerpt demonstrates –

> 'Just seeing written, or heard said, the term 'Laboratory Animal Research' makes me feel very sad. Of course I realise over many years cures and treatment for many illnesses, some of which were terminal some years ago, medicines now widely used safely would not have been 'found' without long years of research and experimentation, and probably members of my family, friends and acquaintances have benefited from this research, but the poor animals that have been kept sometimes in poor conditions who cannot speak but have been used to find some of the cures, make me very emotionally upset.' (Mass Observer D2585)

This Observer (D2585) opens their response to the Directive by expressing their sadness upon encountering the words 'Laboratory Animal Research'. They go on to acknowledge animal research as a facilitator of medical advances, which have personal significance, yet return to the mistreatment of vulnerable animals ('who cannot speak') and the emotional impact of considering this. Like some of the people of Le Guin's Omelas, the utopian city in which all good things depend on one child's perpetual suffering, this Observer appears to struggle with knowing that valued medical benefits come at a cost to the laboratory animals involved in producing them. Though it might be argued that work is being done to improve the conditions that laboratory animals are kept in[7], for this Observer the very nature of using animals in this way means that suffering cannot be alleviated entirely, as they go on to write –

> 'I feel, hope and pray that now, as in recent years laboratories have become more open about research, the animals are housed in safe conditions, they do not suffer (although I'll never believe they do not suffer to some degree)' (Mass Observer D2585)

Therefore, for some, the fact of animal research remains an unsettling one and welfare interventions can only relieve such concerns up to a point. It is this sense of complicity in animal research, a practice which routinely involves the confinement and ultimate killing of animals in the name of largely human-oriented biomedical advances that constitutes a moral conflict and means that some find the matter emotionally-distressing. In this case, animal research presents what Rayner (2012) has called 'uncomfortable knowledge', that is,

[7] https://nc3rs.org.uk/3rs-resources/housing-and-husbandry

knowledge which is in tension with our simplified ways of understanding the world. As Rayner puts it, 'uncomfortable knowledge is disruptive knowledge' (Rayner, 2012: 113). Hence, as illustrated, knowing about animal research can be disruptive for some in that it forces the recognition of one's benefiting from the situation of laboratory animals, a recognition which can contradict pre-existing self-perceptions.

5.2.2 Caring about non-human animals

Crucial to experiencing knowledge of animal research as disruptive and uncomfortable are the obligations of care that are felt towards non-human animals. Such care relations are experienced intimately and perhaps most saliently in the form of pet ownership. The tensions that such interspecies bonds, and the identities that accompany them, can generate when deliberating on one's relation to animal research are evident in the following MOP excerpt –

> 'For me the subject has never come up. I think this is because we all have animals and to think of them being harmed is too much to think about. I am aware that this is a very ignorant view.' (Mass Observer R4365)

As this Mass Observer (R4365) suggests, the conflict between the treatment of companion animals (the animals that we 'have', that we care for on an interpersonal level) and that of laboratory animals makes animal research a challenging issue to discuss. For this correspondent, to think about animal research is to imagine 'their' animals in the position of those used in the biomedical industry, a line of thought which takes an emotional toll, and indeed, is 'too much to think about'. This identification of oneself as an animal 'owner' or 'lover' means that confronting one's complicity in animal research, despite how problematic and constrained such acceptance might be, is uncomfortable and threatens one's self-identity. Discussing public trust in science, Engdahl and Lidskog (2012) claim that given the 'broader social, cultural, and hermeneutical aspects that concern social relations and sense-making', and the social context of risk, '[c]itizens evaluate the social meanings of an issue and the extent to which it threatens or supports their social identities' (Engdahl and Lidskog, 2012: 707). Perhaps it is not surprising, then, that Rayner identifies four 'tacit information management strategies' to mediate one's exposure to uncomfortable knowledge all of which revolve around different forms of not-knowing: 'denial, dismissal, diversion (or decoy) and displacement' (Rayner, 2012: 113).

Rayner uses the notion of 'uncomfortable knowledge' as a bridge between Rittel and Webber's (1973) concept of 'wicked problems', 'often characterized by multiple competing definitions of what the nature of the problem is' (Rayner, 2012: 111), and Shapiro's (1988) 'clumsy solutions', a term which arose in the legal context to describe a solution allowing 'for the coexistence of common, but differently theorized conclusions' (Rayner, 2012: 112). This suggests that if citizens feel lacking in options to resolve the internal moral conflict raised by animal research, then other strategies for dealing with the issue may be sought out. Yet, writing from the Mass Observation Project reveals that some would rather turn away from information on animal research which threatens both their personal identity and that of the nation's as animal lovers, as this Mass Observer (F5890) explains –

> 'All my friends and family are animal lovers and I cannot remember talking about using animals for research as it is probably just too raw a subject for us all. I know that now if something comes on the television or I see something in a paper or magazine I switch channels or turn the page as I find it difficult to deal with and feel that I as an individual can do very little to change things.' (Mass Observer F5890)

As captured here, seeing oneself as part of a community of 'animal lovers' may mean that any discussion of animal research becomes taboo. The use of animals to produce new biomedical knowledge, the continual production of which can be seen as self-justifying, with scientific knowledge valued for its own sake (Callahan, 2003; Wayne and Glass, 2010), is therefore disruptive in Rayner's sense in that it troubles such simplified understandings of ourselves. That is, how can we love animals whilst also causing them to suffer? As illustrated in the above excerpt, with little capacity to affect change over the situation that causes such uncomfortable knowledge, it may be felt that the best course of action is to simply turn away.

In feeling disempowered to modify one's relationship to animal research, avoiding or ignoring information on the issue may be functional at both individual and collective levels. In discussing common responses to images of catastrophe, Kaplan (2011) claims that 'what draws the viewer initially to the image of catastrophe is some sort of empathy. However […] the original empathic impulse to help turns back on the viewer or listener because the shock is too much; it overwhelms and freezes the subject' (Kaplan, 2011: 260). In the case of animal research, with its proclaimed necessity (Barré-Sinoussi and Montagutelli, 2015) and absence of routes for citizenly intervention, empathetic viewing of images or reading of texts can

therefore be immobilising. As will be explored in the following chapter, such encounters with animal research practices may become particularly affecting when one feels too near to the topic. Whether relating to the practice from a (current or future, personal or relational) patient standpoint heightens one's sense of guilt, or encountering traditional companion species, with members of which a correspondent might share their home, as experimental models rather than pets or kin (Charles, 2014), animal research can be painful to consider.

Such literature suggests that it is often rightfully difficult to engage with large-scale socio-political issues and the multiple edges of conflict they can generate in lived experience and this analysis confirms that the same can be said for the topic of animal research. To learn about animal research, the types of species involved, forms of research conducted, the regulatory framework that structures its practices, and so on, without clear avenues to act on what one may come to know, is risky. For some Mass Observers, knowing about the role of animals in biomedical research involves facing the vulnerabilities of oneself, loved ones, community and species, and our investment in mitigating these through the use, and, to a large extent, suffering, of other animals. Given this, active ignorance towards animal research might be understood as a sensible approach to guarding oneself against unsettling information. It is this practice of not-knowing that we will now turn to explore.

5.3 Choosing not to know

Previous arguments made on the subject of openness around animal research have claimed that publics wish to remain willingly ignorant and thus providing more information on the practice is not encouraged, as Yogeshwar (2011) writes –

> 'The general public, on the other hand, are not a threat. They know that animal experiments exist, just as they know how meat is produced and how battery-farm chickens are treated. But most are happy to turn a blind eye to these things and accept the benefits, from pharmaceuticals to steak and eggs. This is normal, and scientists can use it to their advantage' (Aziz, Stein and Yogeshwar 2011: 459).

Similarly, an investigation of 'public views on openness' undertaken by market research organisation Ipsos MORI (2013), intended to feed into the development of the 2014 Concordat on Openness on Animal Research, found that some participants were hesitant to know more about the practice (Ipsos MORI, 2013: 21). As with Yogeshwar, this resistance to

knowing about animal research is left without consideration of the structural reasons that may make disengaging with the issue appealing to lay publics. However, analysis of MOP writings on animal research reveals how this assumed 'ignorance is bliss' attitude of publics simplifies the ambivalence that some feel around animal research. In exploring the reasons that some Mass Observers engage in practices of not-knowing around animal research, this section will cover themes of self and collective protection, the role of care in not-knowing, and the value of ambivalence in a debate dominated by assessments of what 'the public' know.

5.3.1 Protecting self and society

Although knowing about animal research can generate negative emotions and moral stress, practices of not-knowing are themselves not unproblematic. Contrary to assumptions that publics are generally happy to remain ignorant about animal research, some Mass Observers expressed guilt and shame over knowing and thinking about the uses of animals for scientific research and also *not* knowing or thinking about this. This is demonstrated in the two MOP excerpts below –

> 'As regards buying and taking medicines, I don't think I have ever given the scientific research involving millions of animals a second thought which I suppose is rather shameful. It's just something I block out I suppose – back to my feeling of not being able to do anything about it.' (Mass Observer F5890)

~

> 'I suppose overall I have a quite a "head in the sand" approach to testing/experiments on animals. My instinctive reaction is to say it is wrong and barbaric and should be stopped. But when I take medicines I don't give any thought to what animal it might have been tested on. So perhaps I am a hypocrite.' (Mass Observer R5682)

The sense of shame or hypocrisy articulated by both Mass Observers reflects how although avoiding information on animal research might prevent exposure to the issue, knowledge of the practice and one's connection to it cannot be entirely eroded. To ignore something implies having some knowledge of that which you ignore and, indeed, knowing and not-knowing are continual processes. Therefore, at times, an individual may be aware of their turning away and sheltering from unsettling information, a practice which may raise feelings

of moral guilt or shame. That such feelings accompany the avoidance of information on animal research illustrate that partial ignorance is not necessarily blissful and does not bring straightforward relief in morally troubling situations. Indeed, shame is intimately tied to our sense of morality, as Scheff (2003) describes, 'shame is a key component of conscience, the moral sense: it signals moral transgression even without thoughts or words. Shame is our moral gyroscope' (Scheff, 2003: 254).

Feelings of shame, guilt, or hypocrisy over one's lack of thought for laboratory animals, beings who are intimately entwined with conceptions of our own health and wellbeing, perhaps reflects their common representation through a lens of sacrifice. As Lynch (1988) observed, the rhetoric of sacrifice is integral to laboratory conduct, transforming the animal from 'naturalistic' to 'analytic', at which point it can be anatomized for its scientific data. In this way, as Birke et al. (2007) have also demonstrated, sacrifice is not just euphemistic in laboratories. The metaphor of sacrifice enables animals to become models that produce knowledge for the wider scientific community. As well as this, understanding the killing of laboratory animals through a lens of sacrifice can offer emotional protection for those working in the lab. Nonetheless, as Arluke (1988) suggests, although the '[o]bjectification of laboratory animals provides *some* degree of emotional protection' (Arluke, 1988: 99, emphasis added), this process is never absolute. Hence, (some) laboratory animals are also metamorphized into pets (see Arluke, 1988; Greenhough and Roe, 2018a), enabling recognition and fulfilment of subjective interspecies relations.

Given that the rhetoric of sacrifice may help those within the laboratory to cope with the killing of animals, perhaps some of those outside of the laboratory also find comfort in viewing the process as sacrificial. Iliff (2002) has suggested that memorial services through which laboratory animals can be remembered can offer benefits to many actors involved in the biomedical process, satisfying 'a desire to recognize formally the contributions that laboratory animals have made, and continue to make' (Iliff, 2002: 46-47). They claim that such events may 'allow individuals to break the barrier of silence, to openly share their feelings about their job and about animal use', thus concluding that the community should '[c]onsider putting into practice this additional "R"—remembering the animals' (Iliff, 2002: 47). However, as the above Mass Observers (F890) and (R5682) suggest, remembering the lives and deaths of laboratory animals in the name of biomedicine may be complicated by ambivalence, both

wanting and not wanting to think about the matter. In this way, the construction of laboratory animals as sacrificial might implicate the lack of recognition for their sacrifice as shameful, as though reaping the benefits of their plight without acknowledgment indicates a failure to reciprocate our end of the bargain.

Important to consider here is how emotions, or, as Ahmed (2004) would put it, objects of emotion, circulate through the fabric of social life. As they write, 'emotions are not 'in' either the individual or the social, but produce the very surfaces and boundaries that allow the individual and the social to be delineated as if they are objects' (Ahmed, 2004: 10). In understanding emotion as a cultural practice that creates feeling subjects, Ahmed's perspective enables a more pointed focus on how shame and guilt are produced by the language that constitutes what we mean by animal research. Rhetoric of sacrifice and openness thus generate expectations of laypeople who are grateful and obliged to witness, the failure of which is affectively constituted as guilt or shame.

However, implicit to these practices of ignorance is the power, or lack of, that an individual feels they possess to act upon what they come to know. Surveying two studies in the genetic testing domain (the first on Huntingdon's disease and the second on genetic ovarian-breast cancer), Yaniv and Sagi (2005) found that the majority of participants chose to opt out of genetic testing when there was no available treatment for the condition being screened for. In such cases, they argue that 'maintaining uncertainty about one's own predisposition is appealing as a form of self-protection' (Yaniv and Sagi, 2005: 2) and label this practice 'protective ignorance'. Also relevant here is Macnaghten's (2003) qualitative study of responses to global environmental issues and how this relates to experiences of politics which found that '[i]n different ways people were now *choosing not to choose* to dwell on global environmental threats, as a pragmatic response to apparently intractable problems, and in order to maintain a positive outlook on life' (Macnaghten, 2003: 77). Though occurring in different contexts, ignorance around animal research appears to be enacted by some Mass Observers for a similar protective purpose, for instance, in protecting one's self-identity as an 'animal lover' from fracturing upon confronting one's complicity in laboratory animal suffering. As in Yaniv and Sagi's study, a perceived inability to act upon, and, moreover, work to resolve the uncomfortable knowledge that animal research represents is instructive in

motivating a desire not to know. Without autonomy in this area, laypeople may regard ignoring the issue to be in their best interests, as this excerpt shows –

> ‘Although I'm a massive animal lover, I tend not to think about animal testing. I never use cosmetic products that have been tested on animals if I can help it but I guess I shy away from thinking about animals used for testing medicine. The reason I suppose is that if a family member or myself was in poor health + the only cure was one that had been tested on animals then you would want that cure at any cost.’ (Mass Observer W3730)

The dilemma described by this Mass Observer centres on a lack of choice. For them, cosmetic testing is straightforwardly unacceptable and cosmetic products tested on animals can be avoided. However, medical research does not present the same opportunity for action and its necessity is reinforced in contrast to the frivolity associated with the cosmetic industry (this distinction between the medical and the cosmetic will however become blurred in the Chapter 7). In choosing to limit their knowledge of animal research, these Observers can be seen as enacting a level of control within an arena that is currently disempowering, withdrawing their gaze when they feel unable to act upon its implications. As Wynne et al.’s (1993) influential study of Cumbrian community’s feelings towards the local nuclear plant revealed, denial and ‘fatalistic acceptance’ are often at play in situations where laypeople feel disempowered to affect change. Yet, as the writings from the MOP show, protecting oneself from such information is not unproblematic, rather, feelings of guilt or shame may accompany the acknowledgment of one’s active ignorance of animal research and the suffering they associate with the practice. Similarly, in Wynne et al.’s study, fatalistic acceptance was accompanied by ‘indications of guilt and even shame at being a 'community' which allowed itself to be dictated to so comprehensively’ (Wynne et al., 1993: 40). Perhaps this suggests that in resigning themselves to a situation out of step with personal and local values and which they feel unable to change, certain social identities of individuals and communities become compromised.

Such guilt and shame induced by turning away from animal research may also be attached to a perceived civic duty to engage with issues of social justice. Given the mounting attention placed on individuals to take responsibility for global challenges such as climate change (see Whitmarsh et al., 2011), for some Mass Observers, animal research may represent yet

another ethical issue that citizens feel called upon to engage with though simultaneously disempowered by. Studies of public communication strategies around climate change have discussed the pros and cons of dialogues which induce guilt in audiences (for an overview see Swim and Bloodhart, 2015; Bloodhart et al., 2019), however, such insights from the MOP suggest that people may also feel guilt or shame when *disengaging* with such communications. Hence, being aware of social norms around engaging with socio-ethical issues such as animal research, which, when viewed through the lens of the 'animal lover' identity, might become an issue centred on the societal treatment of animals, means that active ignorance towards the issue may itself become a source of personal guilt or shame.

Nevertheless, despite the negative self-perceptions that refusals to engage with the topic of animal research might evoke, such ignorance appears generally beneficial in the shelter it offers from disturbing information. McGoey (2012) defines this as 'strategic ignorance', which they claim is 'distinguishable from deception or the suppression of data by virtue of the fact that unsettling knowledge is thwarted from emerging in the first place' (McGoey, 2012: 559). Strategic ignorance may also be used to preserve one's internal harmony through 'practices of obfuscation and deliberate insulation from unsettling information' (McGoey, 2012: 555). Using the language of denial rather than ignorance, Cohen (2001) also discusses how we manage unsettling information. For Cohen, there are three types of denial: literal, interpretive, and implicatory. Whereas literal denial is a refusal to accept the knowledge itself and interpretive denial is a refusal to accept a particular *interpretation* of the knowledge, implicatory denial is useful to consider here in that it refers to instances where one denies the *implications* of said knowledge. As Cohen states, '[u]nlike literal or interpretive denial, knowledge itself is not at issue, but doing the 'right' thing with this knowledge' (Cohen, 2001: 9). In this case, Cohen writes that '[w]e turn away from our insights and hide their implications. We half-know, but don't want to discover the other half' (Cohen, 2001: 34) .

As both of these concepts suggest, individuals are not entirely absent of knowledge about that which they strategically ignore or deny, but rather, what they know about the subject propels a desire to not know any more about it. This half-knowing and half-not-wanting-to-know is demonstrated in another Mass Observer's (B3227) writing on the proposal of increased openness around animal research, in which they reflect –

> ‘If we were asked flat out, Do you approve of secrecy? Are you in favour of greater openness?, we would say no and yes, but the truth is that some of us, and some part of all of us, are essentially happy to be kept in the dark about unpleasant things.’ (Mass Observer B3227)

This Mass Observer (B3227) acknowledges a cultural valorisation of openness and consequent disapproval of secrecy, yet, in an almost confessional tone, claims that such support for openness exists alongside a willingness to remain unaware of ‘unpleasant’ knowledge. In these circumstances, openness is presented as harmful and secrecy becomes an act of public protection. Such writing reframes ignorance and denial as ordinary, everyday practices, which, rather than being inherently negative, can be personally and culturally beneficial. Challenging the notion that ignorance is something to be eradicated through the gaining of knowledge, an epistemology underpinning the classical enlightenment spirit of science (Bogner, 2015), such understandings of ignorance highlight both its social and psychological utility. When confronted with an opportunity in which one may come to know something about animal research and the practice is already associated with uncomfortable knowledge, the refusal to know more or engage with the implications of any knowledge acquired can thus be seen as a coping mechanism. As Cohen writes, ‘[w]hat looks like denial is an accommodation to cognitive threat. The attack on your life assumptions is blunted, and threatening information is cut down to tolerable doses’ (Cohen, 2001: 49).

In the case of knowing about animal research, not only are there limited opportunities to act upon knowledge gained if one finds it disturbing (Hobson-West, 2010; Pound and Blaug, 2016), but given that animal models are claimed to remain essential to medical progress, individuals may find it even more crucial to turn away. This is not to conclude that the Mass Observers quoted here do not want to know about *anything* related to animal research, but instead lends further emphasis on the need to deeply consider both the kinds of information on animal research that are publicly shared and how this is done.

5.3.2 Not knowing but still caring

As advocated by this analysis, to take a sensitive reading of unwillingness to engage in dialogues on animal research problematises what Jenni (2016) has called ‘moral laziness’, a term they use to describe cases where individuals refuse to engage with information on the human-inflicted suffering of animals. As they describe, ‘[w]hen someone declines to read or

watch films about the brutality of meat (and milk and egg) production, choosing willful ignorance over knowledge of what the animals experience, they exhibit moral laziness, as well as (often) a kind of cowardice' (Jenni, 2016: 34). Rather, writings from the MOP emphasise the centrality of power in acting upon what one sees or hears, without which knowing may be seen as futile and, further, detrimental at individual and collective levels. This reading is supported by Hertwig and Engel (2016), who suggest that an important factor in determining what they term 'deliberate ignorance', defined as 'the conscious individual or collective choice not to seek or use information' (Hertwig and Engel, 2016: 360), is 'whether any action can be taken in response to the information obtained' (ibid, 364).

The significance of the power to act in motivating epistemological engagement with animal research can be inferred by the frequency with which cosmetic testing involving animals was denounced and held as an unambiguous example of the limits of scientific uses of animals across the MOP responses. Cosmetic products and surgical 'enhancements' were largely regarded by Mass Observers as trivial and beyond the concerns of biomedical science. As will be discussed in Chapter Seven, this juxtaposition constructs medical research as intrinsically altruistic and exceptional to the restrictions that other forms of research are expected to be beholden to. Although cosmetic testing has been banned in the UK since 1998 and in the EU since 2013 (UAR, 2018), as suggested by studies of societal views on animal research (Lund et al., 2012a; Knight and Barnett, 2008), the practice still appears to remain at the forefront of public imaginations around the scientific use of animals. This has been interpreted by some in the bioscience community (Festing and Wilkinson, 2007), and research advocacy organisations, such as Understanding Animal Research (UAR 2019), as symptomatic of a lack of public knowledge about current legislation on the scientific use of animals. However, discussions of the unacceptability of using animals to develop cosmetic treatments or products may also represent a way in which individuals can demonstrate their agency and enact ethical boundaries, something they may feel is less possible in relation to biomedical research. As this Mass Observer (C5716) explains –

> 'With regards to medicines, I try not to consider whether they are the product of animal testing. I intellectually accept that pharmaceutical companies may need to test on animals however morally I don't agree with it. But were I or someone I loved put in

> a position where the only medicine available to make me/them better was a result of animal testing I would not refuse it...
>
> This may make me seem hypocritical but I imagine that most people would be of the same opinion should the occasion arise. Although I can stick to my convictions in respect of cosmetic testing I'm afraid that medical testing is an issue that I 'stick my head in the sand on'. Not necessarily hoping that it will go away, but pretending that it isn't there.' (Mass Observer C5716)

Here, it is important to consider the *consumer* power that citizens have at their disposal in relation to supporting or resisting cosmetic items produced through research using animals. The sense of choice associated with cosmetic products, whether this is produced by the availability of 'cruelty-free' cosmetics or by regarding cosmetics as nonessential, enables individuals to discuss their discomfort with animal research in a way that becomes closed-off when concerning medical treatments. With the need to advance biomedicine often taken as beyond question, expressing one's views towards with the use of animals for biomedical purposes might also be felt as taboo. Consequently, as the above quoted Mass Observer (C5716) expresses, one's 'convictions' can be maintained in regard to disapproving of cosmetic research using animals, but biomedical research is trickier, with distaste for the process being mixed with a desire for its expected outputs. Therefore, biomedical research and the ambivalence it produces may necessitate turning away from.

Jenni (2016) argues that 'moral laziness can be seen as sorrow over and rejection of the burdens and effort required to maintain a caring relationship to others – in particular, for our purposes, to nonhuman others' (Jenni, 2016: 39). Yet, maintaining an ignorance of or withdrawing from circumstances in which one may come to know about the suffering of others does not necessarily mean that one does not care. Instead, such instances may reflect uncertainty or vulnerability around what one is able to do with such information once processed. As Cohen explains, '[p]assivity and silence may *look* the same as obliviousness, apathy and indifference, but may not be the same at all. We can feel and care intensely, yet remain silent' (Cohen, 2001: 9). That empathy drives individuals to turn away from engaging with issues they care about is one explanation for the few Mass Observers who stated that they were unable to write about the topic, apologised for an uncharacteristically brief response, or proclaimed that they would not respond to another Directive on this topic –

‘Sorry, I can’t write about this.’ (Mass Observer L2281)

~

‘Sorry [illegible] but this is going to be terribly disappointing. I’ve never written so little in a Directive.’ (Mass Observer W1835)

~

‘No animal should be used in research.

I don't think animals should be used in research

I'm totally against it

I won’t respond if you write about animal testing again

I find it too upsetting’ (Mass Observer B42)

Although there is not enough information provided to be certain that discomfort with the topic was the main reason for the responses given by the first two Observers (L2281 and W1835) quoted above, in the case of Mass Observer B42 it is clear that animal research was experienced as an unwelcome Directive topic due to the negative emotions it evokes. Such aversion to thinking and writing about animal research could be said to represent a reaction to what Pallotta (2016) calls ‘traumatic knowledge’, a term they use to describe knowledge of human exploitation of non-human animals. As Pallotta details, ‘[t]raumatic knowledge refers to learning the often gruesome facts about what routinely happens to animals used in society for food, research and product testing, clothing, and entertainment…’ (Pallotta, 2016: 180). Contextualising such knowledge of human-inflicted animal suffering, Pallotta states that ‘witnessing and reporting violence against animals in a socially dismissive context where that violence is not acknowledged can result in the development of post-traumatic stress symptoms’ (Pallotta, 2016: 181). In addition, as much of the MOP writing signifies, such stress is not only induced at the point of learning about unsettling information but is relived each time one is forced to confront this knowledge. The moral distress that knowing about animal research can cause illustrates the entanglement of *knowing* and *caring*, in that it difficult to know precisely because one cares. The link between caring and knowing has traditionally been theorised as linear, in that the more one can claim to care, the more one must engage in knowing. As van Dooren (2014) states, ‘the obligation to ‘know more’ emerges as a demand for a kind of deep contextual and critical knowledge about the object of our care, a knowledge

that simultaneously places us at stake in the world and demands that we be held accountable' (van Dooren, 2014: 293). However, care for laboratory animals within structural conditions which render them expendable and through which laypeople can only act as distant observers of their lives, witnessing them through annual statistics, scientific journalism which mentions their involvement, virtual laboratory tours[8], or activist exposés. Therefore, in the case of animal research, laypeople may feel that these barriers to *caring for* such animals also prevent them from *knowing* more about their lives.

Furthermore, that grief over animal suffering and death is still widely regarded as illegitimate, and is indeed 'disenfranchised' (Stewart et al., 1989), may also contribute to the need to turn away. This is because to take seriously the killing of laboratory animals for primarily human gain is to therefore trouble what Peggs (2009) has termed 'Human Primacy Identity Politics', an identity '[b]ased in unquestioned assumptions about essential human identity as separate from and superior to 'animal'' and through which 'discrimination against the subordinate 'other' is achieved and maintained' (Peggs, 2009: 8). With this in mind, the articulation of discomfort around animal research can be seen as affectively challenging the human-oriented harm-benefit model underpinning its practice and, in doing so, putting into dispute the cultural hegemony of anthropocentric science. Such challenge, whether enacted politically in opposition campaigns or affectively through potentially subversive feelings of sadness, guilt, or shame, scientific uses of animals can come at a loss to the identity of both individuals and collectives. This is illustrated in Twine's (2014) use of Ahmed's 'killjoy' figure, originally used to problematise the construction of feminist identities in patriarchal contexts, to describe the characterisation of vegans within anthropocentric contexts. By practicing veganism, Twine argues that individuals are 'contesting the social order' and are thus 'in struggle with a normative affective community that embeds happiness norms within the status quo' (Twine, 2014: 637-638). Hence, to engage with animal research and encounter the negative feelings it evokes is perhaps to confront the rooted assumption that human lives matter more than those of other organisms, the challenge of which remains culturally subversive. Although as Pallotta (2016) argues, expressions of grief over losing a companion animal have 'undergone increasing social legitimization', there remain 'other categories of animals who are socially constructed as commodities to be exploited, as opposed to "friends" or "family members,"

[8] http://www.labanimaltour.org/

[and who] are culturally invisible as individuals […] and to mourn them is to experience profound alienation from the mainstream culture and dominant social norms' (Pallotta, 2016: 181). Restricting one's capacity to encounter such animals is therefore to protect oneself from facing a culture which renders their suffering culturally invisible and insignificant.

Metaphors from popular culture such as 'going down the rabbit hole' or 'taking the red pill' exemplify the risk or danger posed in taking steps to learn about particular topics, with both metaphors associated with knowledge which is transformative in some way. In pursuing such knowledge, one may be aware that its pursuit has the potential to unsettle pre-existing values and, once known, such information cannot then be *un*known. In the case of animal research, the threat of knowing comes from an expectation that it will conflict with one's ethical values yet cannot be outright opposed due to belief in the necessity of its intended outputs (i.e. effective medical treatments) and trust that the use of non-human animals is vital to attain these. As the full paragraph of the excerpt from Mass Observer R5682, quoted at the beginning of this subsection, illustrates –

> 'I suppose overall I have a quite a "head in the sand" approach to testing/experiments on animals. My instinctive reaction is to say it is wrong and barbaric and should be stopped. But when I take medicines I don't give any thought to what animal it might have been tested on. So perhaps I am a hypocrite. I do think there should be more openness from scientists/the government about animal research. The public has a right to know and we should be living in an age of transparency, rather than secrets. But I have a feeling that some things are kept secret from the public because those in power know there would be a huge outcry if certain experiment were made known. I think most people would be appalled to hear about cruel experiments on animals and if such research became known about there would be a huge backlash by the general public, as in general the UK is seen as a nation of animal lovers and I think this is pretty much the case.' (Mass Observer R5682)

Here, the sense of being caught between conflicting positions is twofold, with this Observer feeling stuck between opposing animal research whilst wanting the medicines such experimentation promises and supporting institutional openness whilst also wanting to bury one's 'head in the sand' and not risk the disruption of a public outcry. The characterisation of the UK as a 'nation of animal lovers' in this excerpt acts as a caution against raising awareness

about animal research, as it is imagined that, if aware, such a public would be outraged. This reflects that practices of not-knowing are often collective, in that one can only turn away from certain information if others also work to maintain a cultural veil of ignorance.

The risks of rupturing such collective ignorance are discussed by Wicks (2011), who argues that when 'distancing from unpleasant information is a collective enterprise, it can be seen as the social organization of denial […] The costs then also become social' (Wicks, 2011: 189). Although Wicks claims that engaging in collective denial may generate social losses through the exhaustion such 'serious collaborative effort' (ibid) requires and the amount of tension it produces, the *interruption* of collective denial by acknowledging the 'elephant in the room' also poses a social threat. As she goes on to suggest, '[c]haracterized by a strong emphasis on avoidance, taboos frequently manifest themselves in the form of strict prohibitions against looking, listening or saying. Those who defy or ignore these prohibitions are universally regarded as social deviants' (Wicks, 2011: 192). Therefore, acknowledging the controversy of animal research may be disruptive at the local lay level, in raising the issue with friends, family, or colleagues with whom the topic remains taboo, and also at the hegemonic level, in either challenging an entrenched anthropocentrism or a rhetorical national identity of animal lovers.

The aim of this section has thus been to acknowledge the difficulties that can accompany knowing about animal research. In exploring this, this analysis of MOP writing suggests that the topic can evoke both internal and interpersonal tensions which can make its active avoidance appealing or even necessary. In this way, the writings of Mass Observers challenge the dominance of deficit-model understandings of public opinion on animal research, instead, revealing the strategic ways in which knowledge of the issue is managed. In turning away from the issue of animal research, these Mass Observers demonstrate the entanglement of knowing and caring, reflecting that, just as caring can compel the desire *to know*, it can also compel the desire *not to know*. As this suggests, the motivation to disengage with or ignore the topic of animal research illustrates the ambivalence of feeling around the issue. Yet, ambivalence may have its own power in relating to animal research and it is to this area that we now turn.

5.3.3 Reclaiming ambivalence

As this analysis of writing from the MOP shows, how Mass Observers report their feelings about animal research is nuanced and Observers often reflect on their own ambivalence

towards the issue. However, through the construction of views on animal research as irreconcilably polarised (for critique of this in UK and US contexts, see Marris, 2006; Levin and Reppy, 2015; DeGrazia and Beauchamp, 2019), ambivalence around animal research has traditionally been overlooked and minimised. Yet, as their writing reveals, the discomfort that many Mass Observers feel around animal research does not necessarily manifest in outright opposition to the practice and, with their own investments in its continuation, dwelling on the matter consequently offers little appeal. This contrasts with the approach of biomedical research advocacy organisations like UAR (2016), who, in an online pamphlet entitled '*Where do medicines come from?*', set out their aim as 'to achieve broad understanding and acceptance of humane animal research in the UK to advance science and medicine' (UAR 2016: 1). Rather, this analysis of writings from the MOP reveals that acceptance of or trust in the current necessity of animal models does not always render knowledge of the practice any less disconcerting. As the following Mass Observer (O3436) suggests –

> 'The general public should be allowed to learn about animal research but only if they want to. The relevant establishments should be monitored so that there is as little cruelty as possible. I am not keen on knowing all details but I realise this work is a necessary evil. I understand that we all benefit hugely from this research but I really hate having to think of it.' (Mass Observer O3436)

Unlike Lund et al.'s (2014) study of public views of animal research in Denmark, this analysis of MOP writing reveals that those without clear positions on the issue may prefer to disengage with animal research altogether rather than considering each individual case in order to reach a definitive position. Indeed, rather than deciding 'to approve or reject animal research on a case-by-case basis by weighing the animal costs and human interests' (Lund et al., 2014:441) mirroring the process of harm-benefit analysis through which experiments are licensed or not, some ambivalent Mass Observers were troubled by the harm-benefit model itself. As expressed by the following Mass Observer (N5744) –

> 'I'll never feel entirely comfortable with the fact that creatures have probably been harmed and made to suffer so that I can be healthy and feel well.' (Mass Observer N5744)

As this excerpt reflects, rather than providing reassurance in justifying the practice, thinking about the issue through the frame of harms and benefits, with animals bearing the brunt of the former and humans the latter, appears to be one of the very facets that makes animal research such an acute source of discomfort. As Michael and Brown's (2004) qualitative work on societal views on xenotransplantation also shows, laypeople do not treat the harm-benefit model uncritically. Instead, Michael and Brown contend that 'lay discussion of such arguments quickly goes beyond and beneath cost–benefit to encompass a series of concerns and views that eventually render those cost–benefit arguments highly spurious, and which in the longer term, and potentially at least, again challenge the credibility of both advocates and critics' (Michael and Brown, 2004: 394). As their research suggests, such data complicates the approach of both 'advocacy' and 'opposition' organisations who frequently operate on the assumption that they can win public favour by offering their version of the 'truth'.

With little room for ambivalence in the polarised representations of debate around animal research, there exists a pressure for individuals to 'pick a side' and identify with a clear-cut position 'for' or 'against' the use of animals in scientific experiments. In such a context, reluctance to engage with animal research may also reflect a way of resisting such expectations. Drawing on Sedgwick's challenge of the homo/hetero distinction in 'Epistemology of the closet' (1990), McGoey (2012) describes an 'emancipative ignorance, where deliberate ambiguity becomes a weapon against the dogmatic certainties and schematic impositions of others' (McGoey, 2012: 7). As this reflexive MOP excerpt below demonstrates, practices of not-knowing may provide room for one's ambivalence around animal research –

> 'I have not really thought about animal research beyond the fact I do not approve of it at all. I do not make any real effort to keep up to date with protests or media coverage. I suppose I should. I do feel a hypocrite in saying that I do not want animals to be tested on, but I and family and friends freely use medicines that have been tested on animals. But the truth is, I can use medicines and also not want them to be tested on animals.' (Mass Observer D3644)

Though acknowledging a conflict between their disapproving of animal research whilst accepting the medicines it plays a part in producing, this Mass Observer (D3644) resists adopting a definitive position or drawing the conclusion that they are a hypocrite. Instead,

they assert their claim to a middle ground from which they can consume medicines and simultaneously oppose the use of animals in their current development. As well as providing space for ambivalence, such ignorance around animal research may also reflect Michael's (1996) suggestion that acknowledging and defending one's scientific ignorance 'is part of an effort to maintain social independence from science and, possibly, to challenge the authority of interests using 'science'' (Michael, 1996: 120). Ignorance is hence not only enacted as a defensive strategy but can also be used to challenge dominant framings of an issue and consequently reclaim a level of autonomy over it. Although such acceptance of one's conflicted feelings towards animal research was rare in the MOP responses, the point that one can proclaim their right to medical interventions whilst opposing the use of animals in their development is still pertinent to acknowledge.

Ambivalence around openness on animal research is also demonstrated through concerns about *how* such transparency initiatives will work in practice, as the following MOP excerpt illustrates –

> 'I'm wary of calls for more openness, because they're predicated on an ability to deal with the information which has been opened. I forget whose government it was, probably ours or the US, who responded to calls for openness by just dumping data - 'this is every email we've sent in the last year, you sift through it for something useful'. We can't do that, there is more information than any individual can deal with. So we sift it through authorities - 'X in the Daily Paper has sifted them, and they say IT IS BAD'. I worry who the authorities would be. […] On the other hand though, I've been morally negligent largely because I've been allowed not to think about this. If you gave me a warning like I get on cigarette packets, my life would be a lot easier, and my morality a lot more consistent.' (Mass Observer J5734)

Writing on the practicalities of how openness is enacted and the tendency for governments to 'dump data', this Mass Observer (J5734) articulates their mistrust towards how such information is then filtered and publicly communicated. Yet alongside their concerns over such information being used to promote certain agendas, this Mass Observer (J5734) also criticises the ease of individual indifference towards animal research that the sector has permitted. Warning labels like those featured on cigarettes packets are suggested here as an example of product transparency which would support ethical consumption practices. Such

scepticism towards governmental openness practices echoes Moore's argument that '[w]e might have much more public data available to us, but, for many people, the means by which we might understand, act upon and collectively challenge that information have been slowly eroded' (Moore, 2017: 426). Ambivalence is here demonstrated in wanting to be held accountable to one's moral beliefs around animal research whilst also being uncertain about the forms of openness that citizens have come to expect from government.

Although it is important to explore ambivalence towards controversial issues such as animal research, rarely is it valued in the processes by which science-society relations are represented. This is demonstrated in the treatment of ambivalent attitudinal categories in the 2018 Ipsos MORI poll, which states on the topic of trust in regulation that '[t]hree in ten (31%) neither agree nor disagree, suggesting that they do not feel they know enough to give an opinion either way' (Ipsos MORI, 2018: 29). However, to conclude that ambivalence reflects only a deficit of knowledge is to undermine the complexity of lay knowledge of science. As Bucchi and Neresini (2008) argue, '[f]actual information is only one ingredient of lay knowledge, in which it interweaves with other elements (value judgements, trust in the scientific institutions, the person's perception of his or her ability to put scientific knowledge to practical use) to form a corpus no less sophisticated than specialist expertise' (Bucchi and Neresini, 2008: 451). Yet, that polls are not designed to enable participants to explain *why* they have responded a certain way obscures their ambivalence towards animal research and renders it analytically meaningless.

Such restriction of lay contributions is, however, useful for guiding science-society dialogues into conclusions which allow for biomedical research using animals to continue without interruption. In this way, Irwin's (2006) claim that the call for further science-society dialogue put forward in the landmark 2000 House of Lords Select Committee report on Science and Technology 'is intended to secure what the Lords see as science's 'licence to practise', but not to restrict it' (Irwin, 2006: 308) remains relevant to the modern rhetoric around openness in the bioscience sector. To serve such ends, societal views on scientific issues are chiefly constructed as matters of knowing the 'right' information or not and therefore, as Irwin aptly puts it, '[t]he clear implication is that society must understand science better rather than vice versa' (ibid).

This section has aimed to show that encountering information around animal research can be uncomfortable and, at times, even emotionally immobilising. Without routes to intervene in the practice and resolve one's relation to it, or, more accurately, sense of complicity in it, this analysis has found that Mass Observers engage in practices of not-knowing through which the topic is avoided and ignored. Such turning away from animal research therefore cannot be said to indicate indifference to the topic but rather has been shown here to represent strategies that protect the self, social relations, and wider hegemonic norms. Given this, ambivalence is not only understandable around animal research, an issue which, as will be discussed further in the following chapter, generates tensions between practices of caring towards the self and others, both near and far and human and non-human, but can also provide a space for lay empowerment. Recognising the validity of ambivalence around the scientific use of animals may move the dialogue on from an expert affair which can be won with rational arguments and facts to one which is enhanced by sociocultural values and feelings, which include discomfort and uncertainty. In doing so, perhaps encounters with animal research can offer laypeople a way to relate to the issue that is not polarising or steeped in guilt or shame.

In making these points through analysis of MOP writings, it is important to appreciate the ways in which methods such as the MOP can enable laypeople to not only articulate what they know or do not know about around the issue, but to also assess the value of such knowledge, which, as contended in this section is at times immobilising and unwelcome. In this way, methods such as the Mass Observation Project allow for the 'ways of thinking which do not imply that all 'deficits' can and should be avoided' that Irwin (2014) has called for. Through the reflexive writing of Mass Observers, considering their own knowledge, where it is limited, how it is managed, and what such knowing *means* and *feels like*, the controversy of animal research is shown to be irreconcilable by increasing the availability of information alone.

5.4 Wanting to know

Not all Mass Observers responding to the Directive expressed an aversion to increased openness on animal research, indeed, some articulated support for such proposals. Enthusiasm for openness around animal research differed on *what kinds* of information should be publicly communicated and *who* needs to know. Some Mass Observers desired

more openness around the possibility of alternatives to animal models or more information about 'everyday' research, rather than the sensationalised media reports about cases of malpractice or particularly controversial experiments. Yet, such suggestions for openness initiatives were not simply concerned with providing specifically focused information. Also key to support for openness around animal research was the capacity for such knowing to enable one to act on what they come to know. Given the problems of knowing about animal research detailed earlier, interest in openness on the practice was often shaped by an expectation that such information will then allow laypeople to participate or intervene in some way. Yet, also significant in accounts which endorsed the suggestion of further openness on animal research were allusions to *who* can be trusted to know which often relied on deficit-model constructions of an irresponsible 'general public'. It is on the three matters of empowering knowledge, who *should* know, and who can be trusted to know that this section will now focus.

5.4.1 Empowering knowledge

Though discomfort towards the topic of animal research was a common theme in MOP writing, not all Mass Observers were averse to the proposal of increased openness from the bioscience sector. Key to much of the support for openness initiatives in this area was the capacity for openness to enable laypeople to act. As the following excerpts demonstrate, the agentic prospects expected to manifest from openness on animal research varied across MOP accounts –

> 'I have heard animal rights protesters say there are other ways of testing medicines + doing research. This is perhaps a taboo subject that should be brought into the open more. What are the other alternatives? Would they be as effective? The case was well made against animal testing for cosmetics so the debate should be moved onto health research more.' (Mass Observer W3730)

~

> 'I think it would be sensible for the general public to know more about animal testing. I, for one, am not very knowledgeable on the topic, and I feel that most of what people know is from scandalous reports. If people were made aware of everyday research,

then the line between what is humane and what is not might be made more clear.' (Mass Observer W5572)

~

'I feel that it would be useful for the general public to know more animal research to help them decide what is acceptable.' (Mass Observer H5741)

~

'I think their ought to be more openness about animal research. At least not just to say who does it but to be able to legitimately justify it. If the same trials & tests can be done without animals but it costs more then I think so be it. Profit should not come before animal welfare.' (Mass Observer G4296)

For these Mass Observers, proposals to increase openness around animal research should enable publics to act in some way. In its potential to offer laypeople the means and modes to participate in varying ways, I will call this 'empowering knowledge'. This can be seen in how the first Observer (W3730) links openness around alternatives to fostering wider debate on the topic, the second (W5572) and third (H5741) call for information which will enable publics to make informed decisions on which kinds of research can be called 'humane' or 'acceptable', and the fourth Observer (G4296) emphasises the importance of openness strategies which publicly *justify* the scientific use of animals. Due to the prompt on openness provided in the '*Using animals in research*' Directive describing openness as directed at the 'general public' (i.e. '*Some people claim that the general public needs to know more about animal research, and that more 'openness' from scientists and the government is therefore needed. What do you think of this suggestion?*' (see Appendix A), the benefits of openness on animal research were often interpreted in relation to this mass entity. Given this, MOP writing on openness around animal research often contrasted with the largely first-person based expressions of discomfort towards the topic discussed earlier, with Observers here being called on to assess wider societal impacts of such openness.

In each of these accounts the availability of such information in and of itself is not the key focus, rather, significance is placed on what agency such information can bestow upon publics in this domain. Information that enables publics to draw boundaries between necessary and

unnecessary, humane or inhumane, and acceptable or unacceptable biomedical uses of animals is important in that it permits publics to be active co-constructors, rather than passive consumers, of scientific knowledge. Yet, making certain data available as a way of appeasing a public characterisation of the sector as secretive without also providing ways for publics to act upon such information falls short of this. Such openness practices fail to deliver what Forst (2014) has emphasised as the foundation of justice – the right to justification. As Moore summarises, 'for governance to be 'adequately justified', the state must take an active role in explaining, evidencing and defending decisions and actions' (Moore, 2017: 425).

A key element of enacting openness around animal research which Mass Observers characterise as useful to publics appears to be that such strategies work towards fostering reciprocal science-society dialogues around the practice. Openness within such a framing is a mechanism which can enable publics to engage with the issue in meaningful and productive ways, rather than as an end in itself. As the following Mass Observer (T1843) reflects, openness is not only about transparency from the sector which can then be witnessed by public spectators, openness also signifies that an issue is open to public *involvement* –

> 'I think there should be total openness about the issue, just as there should be around abattoirs in fact. We should not flinch from knowing how we get from a to b: we become too protected from the truth about how we conduct ourselves in society in order to have what we supposedly want. As it's an ethical issue, everyone should be involved in it, particularly when it comes to medical research.' (Mass Observer T1843)

This Mass Observer's (T1843) conception of openness seems imbedded in a sense of societal duty, with awareness of the steps in our consumption chains (i.e. 'abattoirs') being constructed as almost a civic responsibility. Similar to the writings on not wanting to know discussed in the previous section, this Observer (T1843) regards ignorance around animal research as a form of protection – being 'protected from the truth'. However, in characterising animal research as an ethical issue, they determine that everyone has an obligation to know about it and act accordingly. This links back to the feelings of guilt and shame expressed by the Mass Observers quoted earlier in this chapter, with their self-confessed practices of ignorance towards animal research perhaps felt as a shirking of the obligation to get involved that the above Observer (T1843) discusses.

As discussed in Chapter 3 (see subsection 3.4), this sense of civic duty is a significant element of the Mass Observer identity, with the role itself having been based in citizen journalism and local history which encourages writing on the behalf of one's self and surroundings (Kramer, 2014). Given this, Mass Observers are perhaps a sample primed for thinking about issues at both the individual and collective level and inclined to promote the value of socio-political participation at a broad level. However, as will be discussed next, in describing what forms of openness should be afforded to the 'general public', divisions were sometimes made between members of this public, their need to know, and their capacity to participate.

5.4.2 Who should know?

Given that the Directive features a question asking what Mass Observers make of claims that the 'general public' needs to know more about animal research (see Appendix A), some Observers articulated their support for openness through their agreement with this suggestion. In doing so, the public entity was often constructed as scientifically illiterate, ignorant, close-minded, or irrational. Openness, in this case, presents an opportunity to educate and inform such a public and quell any concerns around animal research by restating its necessity to scientific and medical advancement. As this Mass Observer (S5292) suggests –

> 'I think that the public needs to know more about animal research, but it needs educating in science generally. There is an increasing view that science is somehow 'optional' within the decision making process. There is also a disconnect in the public view of animals. More people are vegetarian, many of the rest get their meat, not cut up in front of them in a butcher's shop, but in sterile 'tasteful' packages that do not betray the origin from within a living creature. My opinion is - Openness, Yes, but with 'Willingness to learn' as the public's end of the deal.' (Mass Observer S5292)

In this account, the public body is characterised as lacking in knowledge of both science and the reality of animal lives. For this Mass Observer (S5292), modern practices of meat consumption symbolise a disconnect between the public's imagination of how products (food, medicine, etc.) come to be and the reality of their production. The image of the responsible consumer as one who is knowledgeable about the production of commodities is used here to make the case that publics as patients, or medical consumers, should also be aware of how healthcare products and treatments are produced. However, in the context of

food consumption touched on in the excerpt, there is evidence that some publics do not want to know the whole story of how food products are made. As Cook et al. (1998) found in their study of consumer understandings of food origins in North London, there exists a '"structural ambivalence" at the heart of consumer engagements with systems of food provision' which stems 'from the combination of a desire to use food to construct a domestic realm with some autonomy from the public sphere, and the reliance upon public systems of provision to realise that desire' (Cook et al., 1998: 165). This means that in constituting the domestic sphere, knowledge about food items must be gained, for instance, to ensure food safety, and then forgotten so that the product can then be used 'without the burdens of responsibility' (ibid). As this study demonstrates, in exploring consumer understandings of food it is not simply the quantity of knowledge possessed that is necessary to consider, but 'the *character* of consumer knowledge; its form, its source and its use' (ibid, emphasis added).

In constructing such a public and commenting on what *they* need, this correspondent suggests that they themselves are a responsible scientific and political citizen and thus stand apart from this wilfully ignorant public body. Such technopolitical citizenship is thus associated with a trust in and deference to expertise and, therefore, for the general public to participate in dialogues around animal research they must show a 'willingness to learn'. Again, it is important to note that when Mass Observers discuss the 'general public' they are, in turn, relating to their role as 'the people's representatives' (Shaw, 1998), with the authority to offer comment on what 'the people' need.

This differentiation between Mass Observers and the wider public imaginary reflects Michael's (2009) distinction between two types of publics: 'publics-in-general' (PiG) and 'publics-in-particular' (PiP). Michael states that the PiG can be 'regarded as an undifferentiated whole that is distinguished from science that is itself characterized globally in terms of some key dimension', echoing a 'version of society seen to be "uniform and total" for which everyone was held to be a member' (Michael, 2009: 620). Whilst PiPs are characterised as 'those publics that have an identifiable stake in particular scientific or technological issues or controversies' (Michael, 2009: 623). With the particular positioning of Mass Observers as interested documenters of 'everyday life', their writing to the archive can be seen as performative of a particular version of citizenship. In enacting this role, Observers write from both inside and outside of the public and through such writing the identity of both

the Mass Observer and the 'general public' are co-constituted, with the figure of the 'general public' authenticating the credibility of the Mass Observer to speak both for and of the people. Hence, as Michael suggests, 'laypeople in enacting themselves as "members of the public" do so in the ongoing processes of discussion, and through identification with, and differentiation from, other actors that might be experts, but might also be other publics of various sorts' (Michael, 2009: 620).

5.4.3 Who can be trusted to know?

In implicitly placing themselves outside of the figure of the 'general public' when discussing the usefulness of openness initiatives around animal research, some Mass Observers not only reinforce a deference to scientific expertise but also condemn public mistrust of science and government. As this Observer (T3155) discusses, 'the public' is only to be trusted with openness around animal research if this trust is reciprocal; 'the public' must trust 'the system' –

> 'A great many truths are hidden from Joe publics eye. Politicians, bend the truth to conceal what's going on, what they cannot reveal, with no benefit to us if they did.
>
> The doctor that hides the truth from a nervous patient, the 50/50 scenario.
>
> The fireman cutting out a seriously injured crash victim, telling 'all will be well'.
>
> How open are we with our children, a rare example, my brother in law would not tell his children of Santa Claus, because that was a lie!
>
> If we wish to know about animal research, first visit an abattoir. Paul McCartney recommends it, as a method to turn a person into a vegetarian. He has sheep on his land that die of old age, and local farmers laugh at it!.
>
> If we are to open up information, just to use it as ammunition to 'knock' the system I'm dead against it.' (Mass Observer T3155)

Illustrating the importance of public trust by drawing comparisons to other relationships characterised by an imbalance of expertise, this Mass Observer (T3155) reframes the secrecy associated with animal research as a protective act to safeguard publics. Here, the withholding of information is, in certain contexts, presented as a form of care. The relationships outlined here, within which knowledge may be concealed for the good of the

other, are marked by trust in the expertise of the knowledge-holder. In the contentious and polarised context of animal research, such reinforcement of the authority of the expert and construction of an uninformed or irresponsible public body can also be seen as an attempt to establish oneself as a good and trustworthy citizen. Michael and Brown (2005) found similarly that publics reproduced images of 'the public' as prone to spectacle when discussing their understandings of xenotransplantation. Again, such efforts are performative in enabling one to differentiate themselves from this public imaginary. As they point out, in demonstrating their self-awareness and epistemological limits 'one can see such accounts as resisting a totalizing charge of irrationality' (Michael and Brown, 2005: 47). In mobilising such a figure of the public, this generalised lay body is framed as in need of management, either by withholding information or, as the following Mass Observer (O4521) quips, withdrawing trust –

> 'I would be more open and agree with the suggestion. Animal research clearly occurs – we clone sheep now and grow ears on mice, it should not be the 'corner case' exceptional news items – the freak shows if you will, that get the new headlines. Be open and honest – let's make informed decisions (but not trust the UK to vote on the matter (Brexit sarcasm).' (Mass Observer O4521)

As this excerpt shows, MOP writing on openness and public dialogue around animal research also draws on other ongoing discourses, as demonstrated by the reference made to the 2016 United Kingdom European Union membership referendum. This reflects how public understandings of animal research and their relationship to it as a scientific and governmentally regulated practice are both personal and political, they involve personal feelings towards the issue which are co-constituted by judgments of the political landscape in which it takes place. This means that in writing about the proposal of increased openness around animal research whilst distancing themselves from the 'general public', Mass Observers are also reflecting on the premise that such openness will set for the participation of *other* citizens.

Methodologically, such references to 'Brexit' also illustrate the importance of the temporality in researching particular issues (Hobson-West et al., 2019), here underlining how scientific practices, particularly areas which remain controversial, are embedded in the wider politic and current notions of democracy. It is perhaps unsurprising that at a time when British

society was marred by distrust, situated both in a public body characterised as distrustful of the establishment (Hobolt, 2016) and in the distrust directed between 'remain' and 'leave' voters, that such constructions of the British public as irresponsible are mobilised in discussions on governmental and institutional openness and science-society relations. As the above excerpt suggests, mistrust towards the 'elite' or the 'system' can also manifest as mistrust *between* publics, as individuals work to distinguish themselves from those groups who cannot be trusted with democratic power.

In regard to animal research, such management of this untrustworthy public body appears intimately linked to the issue's history of activism and extremism, with the British public historically characterised as a source of risk (Raman et al., 2018: 240). As the following Mass Observer (E5014) demonstrates, this irrational public is not only felt to be politically untrustworthy but is also potentially dangerous –

> 'The idea of openness seems laudable, however I have a fairly low opinion of the British public and don't believe that they are capable of drawing rational conclusions on any subject (as demonstrated in the recent BREXIT result). I'm quite sure that the first sight of a cuddly animal being experimented on would result in acts of violence and intimidation against those working in animal experimentation.' (Mass Observer E5014)

The assumption made here is that with the British public unable to understand the scientific rationale of experimentation, seeing only 'a cuddly animal being experimented on', openness around animal research will lead to violence against laboratory staff. This echoes Welsh and Wynne's (2013) claim that the 21st century's intensifying focus on local and global risk has increasingly treated publics as politicised subjects requiring policing and surveillance. Under these norms, they argue that '[p]ublic obstruction of technoscience, identified as commercial innovation, is thus likely to be labelled as anti-science and as a security threat' (Welsh and Wynne, 2013: 555). Similarly, Moore claims that contemporary transparency initiatives are disposed to 'conceive of the public through the lens of trust, in terms of a problem to be solved rather than a co-participant in the creation of an open society' (Moore, 2017: 427). Yet, the characterisation of protests against animal research expressed by the above Mass Observer (E5014) are particularly interesting when considering their following claim that –

> ‘any action that could raise the state of fear around animal welfare protest would be counterproductive, as those who would like to raise legitimate concerns would become afraid to do so for fear of being labelled as extremists. It could also possibly incur the wrath of the extremists for not being extreme enough.’ (Mass Observer E5014)

If, as touched on here, some concerns around animal research are indeed legitimate, yet public contestation of animal research is characterised as irrational or imagined to be extremist, then it appears that this Mass Observer (E5014) feels such legitimacy is out of reach for the ‘general public’. Yet, without providing lay publics with opportunities to learn of and understand ongoing animal research practices their ability to voice concerns is limited. Perhaps such concerns reflect the historic characterisation of animal rights protestors in the mid-2000s UK as extremists (Munro, 2005; Mills, 2013; Yates, 2011) and a subsequent absence of ambivalence around the issue. Stepping back, what this again signifies is the positionality that Mass Observers occupy, writing from both within and with*out* this notion of a ‘general public’ which permits them to make such observations. Though being ‘ordinary’ has been, and continues to be, crucial to the Mass Observer identity (Bloome, 1993), by their very presence on the MOP panel, Observers are already taking a step to identify as a group that witness, indeed, *observe,* and document ‘everyday life’. That is to say, Mass Observers constitute a particular public of their own and, therefore, taking on the role of Mass Observer is somewhat performative in distinguishing them from the ‘general’ population before they even ‘step foot in a Directive’ (Hobson-West et al., 2019).

This section has demonstrated how Mass Observer enthusiasm towards the proposal of increased openness on animal research is tied up with notions of agency, hinging on the potential of knowledge gained through openness to enable laypeople in general to get politically, morally, economically, or rhetorically involved with the issue of animal research, what I have termed ‘empowering knowledge’. However, in constituting themselves as trustworthy with openness on animal research, some Mass Observers construct the ‘general public’ as irresponsible knowing subjects. In doing so, deference to expertise and political docility are at times reinforced as normative citizenly values. Such analyses emphasise the positionality of Mass Observers and also, apparent in the numerous sardonic references to the 2016 ‘Brexit’ vote, the political landscape at the time of writing.

5.5 Conclusion

This analysis of MOP writing demonstrates that individuals may take active responsibility for how they manage information on the topic of animal research. In taking this seriously, gaps of knowledge identified in public understandings of animal research are reframed through this analysis as not simply a failing of the education system, media, or publics themselves, but rather as sometimes reflective of deliberate epistemic and emotion management strategies.

Section one demonstrated that the ways in which knowing about animal research can be unsettling, generating tension between one's appreciation for the medical benefits that animal research is understood to produce and one's ethical views on the acceptable treatment of non-human animals. Interspecies care relations are crucial to why many Mass Observers find animal research uncomfortable to discuss, with their ambivalence towards the scientific use of animals seen to unsettle their moral identity and values.

In exploring how Mass Observers manage the discomfort generated by the issue of animal research, section two looked at the role of not-knowing as a way of sheltering from disturbing information. In their discussions of not only *what* they know or do not know about animal research but also *why* this is so, Mass Observers reveal the functionality of practices of not-knowing, in providing protection from morally and emotionally unsettling information and creating room for ambivalence. Such deliberate avoidance of the topic of animal research raises larger questions about the ways in which science-society relations play out in this domain and the role that publics are currently able to perform within these, as witnesses of openness or vessels of knowledge and opinion (Hobson-West, 2010). As writing from the MOP indicates, the occurrence of 'public ignorance' around animal research is not simply a problem to be corrected through approaches which explain the regulatory framework, the science, or the outcomes such experiments are expected to provide. Indeed, as Evans and Durant (1995) have shown, greater scientific understanding does not necessarily raise support for scientific research and this link is particularly fraught in relation to controversial areas of research. Rather, the writings of Mass Observers who struggle with the expectation that they *should* know about animal research problematise the notion that knowledge acquisition is inherently positive.

On the other hand, the final section of this chapter considered those Mass Observers who articulated support of further openness on animal research. In expressing enthusiasm for increased openness, the writings of these Mass Observers emphasise the significance of the role of agency and being able to act on what one comes to know in everyday life, without which knowing can become futile and problematic. Openness should therefore offer individuals a participatory route, enabling them to intervene in the practice of animal research at some level. Alongside this, in envisioning beneficial ways of knowing about animal research, some Observers identified risks that such openness might generate, constructing an irresponsible 'general public' who could not be trusted to know and act and, in doing so, constituting themselves as good citizens. In this way, the chapter has highlighted how Mass Observers vacillate between responding from 'inside' and 'outside' of the public imaginary.

Stepping back, the empirical analysis presented in this chapter develops previous studies of views or understandings of animal research by providing insights into how epistemological relations with animal research play out, in doing so, highlighting the presence of ambivalence in relations with animal research, rather than polarised dualisms of acceptance or opposition, openness or secrecy. Such an analysis signifies that challenge of deficit-model assumptions about 'lay' or 'public' knowledge on animal research does not need to be grounded in affirming what individuals *do* know about the issue, but rather, can underscore the prudence behind choices *not* to know given current limits on what can be done with such knowledge.

Furthermore, in illustrating the entanglement of knowing and caring, this data analysis raises broader questions around the obligations that institutions have to care for laypeople and their capacity to manage knowledge which may be distressing. This is not to suggest that public communication on sensitive topics such as animal research should necessarily be limited, but instead to emphasise that such communication must be mediated by care for its audience, who may be upset by such information precisely because they care about the topic. Simply making information available to citizens without consideration of the resources they have to process and action such knowledge may therefore force interested or caring publics to turn away from the issue. As Hobson-West and Davies (2017) have shown, animal research regulation is informed by societal concerns, and the local ethical review process not only considers the effect of experimental procedures on animals but also on the human community outside of the laboratory. One might therefore argue that how openness around

animal research is enacted should also be subject to similar consideration. This point will be returned to in Chapter Eight (see subsection 8.3.2), but, for now, the next chapter will more fully explore the role of care in Mass Observer writing on animal research.

6. Data Chapter Two: Caring and not-caring about animal research

6.1 Introduction

As covered in the literature review (see the end of subsection 2.3.4), the practice of care within animal research environments is subject to growing interest from both academics studying multispecies relations within these spaces (Holmberg, 2011; Greenhough and Roe, 2011; 2018b; a; Friese and Latimer, 2019) and stakeholder organisations, such as the NC3Rs (Brown, 2014), who seek to cultivate caring research environments and facilitate the circulation of ongoing institutional care practices. In seeking to explore the role of care in how those outside the laboratory relate to animal research, this chapter will analyse the role of care in MOP writing on animal research.

In exploring the theme of care, this chapter is laid out into three sections covering not caring about animal research, caring through animal research, and caring about animal research. This triad has been chosen to structure the data analysis in order to reflect how animal research fits into the traditional caring for/caring about dualism (Silk, 1998; Smith, 1998; Milligan and Wiles, 2010; Barnett and Land, 2007). Firstly, as a socio-ethical issue, animal research can be cared *about* or not and, for some Mass Observers, animal research was described as a low priority and not actively cared about, with other issues being identified as more deserving of care. Secondly, in caring *about* the health and wellbeing of others, animal research may, for some, present an opportunity to indirectly care *for*, with the practice being seen as a process through which to channel care. Further, in examining how animal research can be cared *through*, this second section will end with a focus on those who are implicated within this process not as objects of care but as *conduits* who enable care to be directed towards others. Finally, animal research and the actors it involves can be cared *about* as objects of care themselves, with both the wellbeing of laboratory animals and laboratory staff being explored as important considerations in MOP writing. Rather than affirming a straightforward prioritisation of human needs over animals, this analysis illustrates how the categories of 'human' and 'animal' are not always determining factors when considering who is worthy of care in the domain of animal research.

6.2 Not caring about animal research

In thinking about the role of care in how Mass Observers understand animal research, it is first important to recognise that, for some Mass Observers, animal research was not identified as an issue that they particularly care about. Capturing this articulated disinterest towards the topic is a significant benefit of using the MOP, with the shared process of Mass Observation being open to critique from Mass Observers as to what 'proper' Mass Observation work involves, i.e. which topics and what kinds of answers are appropriate (Sheridan, 1993; Kramer, 2014). Enabling the expression of indifference to the topic of animal research is methodologically valuable because it reveals how the issue is culturally situated amongst other socio-political issues that demand care in the 'everyday'. Therefore, as the following subsection will examine, for some Mass Observers animal research was deemed as less important than other issues.

6.2.1 Not a priority

For some Mass Observers, animal research was considered to be of less important than a host of other causes which warranted their care. As implied by the following Observer's admission that animal research is a 'low priority' issue for them personally, animal research as an object of care is one situated amongst many other socio-political issues –

> 'I am afraid that on the scale of issues, this is a low priority one for me. I am involved in so many issues to do with justice and human rights for people that I feel to be too preoccupied with this would be a kind of luxury when human tragedy is all aroube allowed tond us. Having said that, however, I do believe that a society which is civilised in its treatment of animals is also more likely to be civilised in its treatment of people, so I am aware that these things are not separate entirely.' (Mass Observer S4743)

In this case, caring about animal research is weighed against caring about what are deemed to be exclusively 'human tragedies [sic]'. When located within such a landscape, this Mass Observer regards attention spent on animal research as 'a kind of a luxury'. In making a distinction between which issues demand care and which are of less consequence, it appears that this Mass Observer draws on species boundaries. However, this separation between humans and other animals is then troubled, as the Mass Observer (S4743) then remarks that social norms around the treatment of animals also influence treatment of humans.

Species as a boundary of care towards animal research is suggested in another Mass Observer's account, as they write –

> 'At the end of the day I do feel for any animals that suffer in the service of humanity, but there are a lot of issues in the world that I think are more pressing. And let's face it, we didn't get to be top dog on this planet by being nice to other species (or our own) – nor are animals, as a rule, nice to each other.
>
> I just hope our scientific understanding and control over the natural world can advance to a point where survival does not demand that we make moral compromises.' (Mass Observer T5672)

Here, the exceptionality of humans is regarded as having been achieved through the struggle for survival that all animals engage in, with the biomedical use of animals reflective of a natural, evolutionary fight for dominance. When taken as representative of this species struggle for survival, animal research is therefore viewed as a low priority matter, with 'a lot of issues in the world' considered 'more pressing'. Such species divisions work to justify caring for one's 'own kind', however as the second line in the excerpt above expresses, it is hoped that scientific endeavours for human survival do not entail 'moral compromise [sic]'; there are ethical limits to species survival.

However, as the following Mass Observer illustrates, even amongst Observers whose care priorities were not bound by ties to one's own species and, indeed, expressly cared about 'animal issues', some still felt animal research to be relatively unimportant –

> 'There are other pressing matters related to animal cruelty that I find myself far more concerned about, such as dog fighting, irresponsible and unmonitored breeding, over-breeding, neglect and abuse.' (Mass Observer R5647)

The 'pressing matters related to animal cruelty' identified by this Mass Observer detail a particular focus on dogs and their treatment and management as companion animals. The practices mentioned here as of particular personal concern may reflect the physical and affective proximity that certain species share with humans and the special sociocultural status they occupy. Now existing largely as 'companion species', Haraway (2003) emphasises the intricate evolutionary intertwining of dogs and humans 'who shape each other throughout

the still ongoing story of co-evolution' (Haraway, 2003: 29). Moreover, Charles' (2016) analysis of MOP responses to a Directive on kinship between humans and other animals demonstrates that Observers' 'kinship practices construct a world where dogs and humans are part of the same social group' (Charles, 2016: 10). Such species often live intimately amongst us and do so in ways which unsettle traditional notions of 'family' and, therefore, it is perhaps understandable that issues relating specifically to dogs are prioritised above other 'animal cruelty' issues. However, as will be explored later in this chapter, for other Mass Observers, relationships shared with companion animals can also act as a catalyst to caring about animal research.

That, for some Mass Observers, species might present a barrier to caring about animal research supports the argument that where one directs their care is never neutral or unproblematic. One cannot care about everything, because, as stated earlier, caring about requires understanding and responding to the particular situation and needs of that which or whom such care is directed towards. Therefore, where one directs their care is necessarily limited and always involves exclusions. To direct one's 'care-full' attention (van Dooren, 2014) in a particular direction must mean there are sites and subjects left unattended to as a consequence. As Puig de la Bellacasa (2012) puts it, 'where there is relation there has to be care, but our cares also perform disconnection. We cannot possibly care for everything, not everything can count in a world, not everything is relevant in a world – there is no life without some kind of death' (Puig de la Bellacasa, 2012: 204).

Given the necessary confines of care, the use of species distinctions as a guide for caring that might construct animal research as a trivial or superfluous issue to care about reflects wider sociocultural values around who deserves our limited care. In the case of caring about animal research, then, anthropocentric discourses which shape many areas of our social worlds and, indeed, are foundational to the biomedical use of animals, may make one's caring attention towards laboratory animals questionable when such effort could instead be directed towards humans. Though, of course, animal research involves and impacts myriad multispecies bodies, as discussed in the previous chapter in terms of knowing, caring about issues which are often defined as chiefly 'animal' within anthropocentric contexts may be subject to particular scrutiny. As Peggs (2009) describes of 'Human Primacy Identity Politics', 'a human sense of advanced human morality confirms human notions of the pre-eminence of human needs'

(Peggs, 2009: 96). Acknowledging the many care relationships that individuals are, intimately, locally, and globally, part of necessitates that certain groups and sites are, at times, left unattended to and deprioritised. Hence, given how animal research is embedded within a culture of using animals for human interests, it is understandable that, for some, the issue does not resonate as something they care about.

Although there was by no means a majority of Mass Observers who expressed a lack of interest or care towards animal research, such disconnections with the issue are significant to acknowledge as they reveal how the practice is culturally situated amongst other socio-political issues and regarded in the 'everyday'. Furthermore, that caring about animal research is seen by some as a low priority or a luxury emphasises the work that is required in order to care. The emotional energy that caring requires is indicated in the following Observer's discussion of why they feel 'curiously indifferent to the suffering caused by animal research' –

> 'I never consider scientific research when I buy products. I don't like thinking of any animal being distressed. But I know that products must be tested. I feel curiously indifferent to the suffering caused by research. There is so much pain and unhappiness in the world. I'm aware of it but take the lazy option of not letting it bog down my daily life. I can't afford to take on the pain and despair of every living thing. If I did that I'd be a tortured mess.' (Mass Observer E5551)

The way in which caring about issues such as animal research is described by this Observer, as something which can 'bog down [sic] daily life' if allowed to do so, illustrates the affective labour such attentiveness requires. Caring is here conceptualised as necessitating that one must 'take on the pain and despair' of others, and as this Mass Observer (E5551) expresses, such relating is seen to take an emotional toll. Characterising their indifference to the experiences of animals in research as 'the lazy option' signals that caring is not merely attitudinal, but requires energy expenditure and can be draining, as Puig de la Bellacasa puts it, 'too much caring can asphyxiate the carer and the cared for' (Puig de la Bellacasa, 2012: 212). This feeling may be particularly acute when considering, as suggested above, that 'every living thing' might warrant such care. Again, this deliberate withdrawal of care towards certain issues emphasises their location amongst other causes for concern. Indeed, a similar turning away was observed in Macnaghten's (2003) study of responses to environmental

concerns which suggested that 'reflexive strategies of non-engagement with 'the big picture' – a term which embraced global environmental issues alongside other global issues such as poverty, aids, debt, 'the future', and so on – reflect the ways in which such issues tend to be grouped together as 'negative issues' where personal engagement is felt as likely to be both inconsequential and personally damaging' (Macnaghten, 2003: 78). Given this understanding of what is involved in caring, as a process which demands that one considers and attends to the suffering of others, caring carries risks and, thus, there is a need to preserve one's own wellbeing and care for oneself.

In summary, such writing around not caring about animal research or not caring about it as much as other socio-political and ethical issues highlights the necessary partiality of care, how it is limited and actively employed in some directions and withdrawn from others. To recognise that some Mass Observers feel this way is not to depict them as failing to act ethically or failing to recognise the importance of the issue. Rather, this analysis suggests that animal research is situated within wider landscapes of care, in which it may at times be felt as important or unimportant.

6.3 Caring *through* animal research

Another way in which care was prominent in the MOP writings was in the construction of animal research as a way of channelling care, as a process which enables indirect caring for others that one cares about, and as an issue which instigates care towards particular others. These others are both human and non-human, near and far, in the present and the future. However, the presence of care does not negate the moral problem of animal research. Indeed, as the following section touches on, tensions around unequal distributions of care and whose care is prioritised, can work to exacerbate the emotional toll of engaging with the topic of animal research.

6.3.1 Caring about the self

As this section aims to demonstrate, analysis of MOP writing reveals how Mass Observers may conceive of animal research as a way to care *for* the self and one's own healthcare needs in the present or an imagined future. However, it is first important to account for those who expressed that feeling *too* close to animal research could conversely act as an obstacle to caring about the issue. Often, this tension was articulated through experiences of ill health

and reliance on medical treatments arising from experimental uses of animals, whether writing about one's individual need, that of their loved ones, or of an imagined future in which either may come to need such interventions. Feeling somewhat dependent on animal research in this way meant that the Directive was a challenging topic for some, as the following Mass Observer discusses –

> 'This is such a difficult topic for me! l know that as a cancer patient for the last 11 years my treatments will probably, highly probably, been tested on animals and I love animals and believe that as creatures of the world they have a right to a good and free life.
>
> […]
>
> My views have changed, perhaps because of my condition and perhaps because my husband wants me to live longer. I try not to think too much about this when I have my chemotherapy.' (Mass Observer A4820)

As the above writing suggests, animal research may prove a particularly difficult topic to engage with when writing from the position of a current (or future) patient. Connecting their views about the treatment of non-human animals, their reliance on medical interventions as a cancer patient, and their husband's investment in their health and longevity, this Mass Observer highlights how multiple subjects are implicated in one's caring about animal research. This example demonstrates how feelings of dependence on or complicity in the use of animals in research can make knowing and caring about animal research distressing, generating tensions between one's care priorities and unsettling hierarchies of whose care comes first.

A similar sentiment was expressed in another Mass Observer's discussion of their dependence on insulin and the experimentation with dogs involved in its creation –

> '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)

Similar to the previous Mass Observer's (A4820) discussion of their dependence on treatments derived through animal use as a cancer patient, this Mass Observer expresses a sense of regret towards their continual use of insulin. Importantly, this Observer's feelings towards their insulin use suggests that the emotional distress caused by the use of animals in developing medicines is not necessarily lessened if said animal use was in the 'past'. Rather, the initial use of animals in research and development of a medicine that one is now reliant on can still be meaningful to those who care about animals, with certain species, such as dogs in this case, arguably having particular emotional resonance.

Additionally, being reliant on medications at the time of writing might not only make thinking about animal research uncomfortable, but in periods of acute or longstanding illness, one may find it difficult to even consider their relation to the practice beyond an individual need for effective medical treatment. As can be inferred from the following Mass Observer, in such times of ill health, broader thinking around medical consumption and animal research may be out of reach –

> 'It is not fair that some diseases get more research funding than others. It is not fair when medicines and treatments exist but people cannot afford to have them because companies want to make a profit as well as support research and development. But it is not a perfect world. All I want when I buy medicine is to feel better. If you want me to think more widely, ask me when I'm not ill!' (Mass Observer M5113)

As captured here, broader concerns than simply the need for medical treatment when ill are raised by this Mass Observer (M5113) as they highlight the lack of fairness around funding priorities in biomedical research and the accessibility of medical treatments. However, such concerns are drawn back to the principal interest in the role of medicines to make one feel better when ill. Significant here is the implied difficulty to care *about* others when one needs to be cared *for* themselves, echoing Smith's (1998) characterisation of disadvantaged groups who might be 'too preoccupied with feeling the need for care, or with the difficulty of providing it, to think of much else' (Smith, 1998: 16). Indeed, such responses also emphasise the significance of timing when asking questions which touch on health and illness. Given the shifting ways that individuals relate to their state of health or illness, it is important to recognise that solicitations of writing on animal research may come at moments when engagements with the topic feel unmanageable. As said, at such times, the urgency of

addressing one's own care needs may be felt as obstructing wider thinking and, in turn, requests to engage with the topic of animal research and the moral and emotional burden it can pose may be experienced as inappropriate for those feeling acutely entangled with the practice.

6.3.2 Caring about family

Yet, as mentioned, current dependencies on medical treatments and the role that animal research is seen to play in providing them were not the only ways in which Mass Observers related with animal research through healthcare. Future imaginaries which may hold illness for oneself or one's loved ones, particularly those for whom we are explicitly obliged to care, such as children, were also important in shaping *who* can be cared about in relation to animal research. The conflicts that caring for oneself and one's loved ones *through* the use of animals in biomedical research can generate are demonstrated in the hypothetical scenarios pondered by the following two Mass Observers –

> 'As for which animals should be used or not used in research purposes then none should be used would be the ultimate aim, but then how would new drugs be tested and introduced to society. Not an area I have thought about, it is difficult if a loved one or I became very ill and no drug was available or a new on may be being developed then testing would certainly be considered however should animals be tested on, no oh what a dilemma. Feel I am not being useful in this topic.' (Mass Observer C4988)

~

> 'If either of my children were ill, would I want them to accept a treatment that had been developed using animal tests, no matter how terrible the tests were? Yes, of course. I would do anything to protect my family.' (Mass Observer T5672)

In the scenarios posed by both Mass Observers here, their ethical stances on animal research are assessed by what the latter Observer (T5672) calls an 'acid test question' which theoretically asks if one would approve the use of medical treatments derived from animal research if they or their loved ones became ill. The hypothetical and future-oriented nature of such relating to animal research reflects that rather than being a static and complete socio-ethical issue for deliberation, biomedical research and the possibilities of medical intervention imbued within it may be viewed as a project whose ethics and merits cannot be

confined to and judged only in the present moment. In caring not only for one's own health and wellbeing but also for loved ones, it may be that using animals for biomedical research offers a sense of health security for potential futures and thus any resistance to this may be seen as undermining one's caring responsibilities. In this way, 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 opposed. Animal research thus becomes a way to defend oneself and loved ones against the threat of illness, as implied by the latter Observer's (T5672) statement: 'I would do anything to protect my family'.

Although such interpretations of whose care comes first seem to centre on the pre-eminence of human needs over those of non-human animals, key to the above Mass Observers' priorities towards animal research are familial bonds. The ways in which we relate to animal research are not merely situated in Ryder's (2000 [1970]) concept of 'speciesism', i.e. the prioritisation of the interests of our species before all others, they are enmeshed within relationships which are interpersonal rather than simply genetic. In making sense of animal research and those implicated within it, Mass Observers often draw on their prominent and intimate care relations. Such partiality displayed towards particular individuals and groups is arguably necessary for sustaining intimate relationships. As Friedman (1991) discusses, 'I favor my children, my friends, and so on, because such favoring expresses the love I feel for them, promotes their well-being which is of special concern to me (and, in some cases, is also my responsibility), differentiates my close relationships from relationships to people whom I do not particularly love and respects the uniqueness of those I love by the specifically appropriate responsiveness which I show to them' (Friedman, 1991: 819-820). In this way, she argues that if 'personal relationships are necessary for integrity and fulfillment in life, then, to that extent, partiality is instrumentally required as a means to achieving those morally valuable ends' (ibid, 820).

This assumed partiality to family members before unknown, distant, or indeed, *different* others, features often in the rhetoric of animal research advocacy organisations. In pitting the lives of family members, particularly children, against the lives of laboratory animals, particularly rodents, such groups construct the choice that publics have to make on the matter as one of either/or and life/death. This is captured succinctly in a billboard campaign

by US-based biomedical research advocacy organisation The Foundation for Biomedical Research (FBR) which juxtaposed an image of a white rat, symbolic of the laboratory, with that of a young girl and asked passers-by 'Who would you rat/her see live?' (see Harrison, 2011). Although certain care relations are legally obligated, as in the case of children, Friedman adds an important qualification to the righteousness of partiality as she contends that the moral justification of partiality expressed in close relationships can only be assessed by the moral worth of those particular relationships themselves (Friedman, 1991: 820). In other words, not all close relationships are morally or even interpersonally good. Furthermore, although partiality towards certain others might seem common-sense given the need to distinguish some relationships as special or intimate, when thinking about how we *should* care and *who* we should care for and about, such partiality can become questionable. In discussing the dichotomy made in animal research dialogues between caring about family members and animals, one Mass Observer flipped the argument in order to draw attention to the perspective of the 'other' who is sacrificed for the sake of ourselves or our loved ones in such scenarios –

> 'When discussing situations such as this, a person will often say "if it was you or one of your family that needed a cure, you'd be in favour of testing on animals." To which I reply, "if you, or one of your loved ones, was kidnapped and tortured or murdered for the purpose of medical research that helped a stranger, would you feel it was justified?"' (Mass Observer N5744)

By questioning the assumed duty to care for oneself and family before and over others, this Mass Observer (N5744) appears to be encouraging a sense of empathy for those whose lives are offered up through such reasoning. By inverting the hypothetical scenario posed here to test if such reasoning holds if it were the individual themselves or one of *their* loved ones being sacrificed for the good of a stranger, being the provider rather than receiver of such life-saving potential, it seems this Observer is attempting to question the ethical nature of the dilemmas at the core of such arguments. Shifting the focus from commitments to close relationships and instead positioning *our*selves and loved ones at the point of sacrifice helps to reveal the vulnerabilities that connect all those who can suffer and die.

Such partiality to one's 'own' can only go so far and, as the above Mass Observer (N5744) suggests, at a certain point conflicts with other normative claims around care within which

the existence of systemic care for unknown others, e.g. the welfare state, is inscribed. As Tronto (2012) discusses of global ethics, 'everyone is not responsible for everyone else's care. But in any society, decisions about who cares for whom, how, and why, underpin the way the society or social system is organized' (Tronto, 2012: 309). Similarly critical of simplistic conceptualisations of care as based in partiality, Barnett and Land (2007) contend that the 'idea that care's value lies only in the intense familiarity of circumscribed personal relationships is not sustainable once we recognize the degree to which any caring practice depends on mediating practices, relations of professional competency, and various institutional and material infrastructures' (Barnett and Land, 2007: 4). In other words, the care networks which include those whom we actively care for and about intimately hinge on relations with others whom we will never meet. Because such relations matter morally, this analysis shows that caring through animal research is not unproblematic and prioritisations of care for one's nearest and dearest at the expense of distant and different others are not necessarily harmonious.

6.3.3 Caring about kin

However, such close relationships are themselves not necessarily drawn according to species boundaries. The practice of keeping animals as pets in Britain is not new, nor are the intimate human-animal bonds we now often expect to accompany such interspecies relationships (see Thomas, 1983 [1933]). There is much research documenting the intimacy and legitimacy of relations between humans and their companion species (see Cudworth, 2011; Fudge, 2014) and, as Charles (2014; 2016; 2017) claims, writings from the MOP also confirm the importance of relationships with non-human animals. Therefore, for some Mass Observers, their intimate social circle includes non-human animals, who, though accepted as different to humans, constitute a valuable member of one's family, kinship, or friendship group (Charles, 2016). Indeed, Charles (2014) suggests that such MOP accounts demonstrate that 'relationships with animals were valued not only because animals were 'almost human' but also because they were not' (Charles, 2014: 725).

As mentioned in the literature review, the experience of pet-keeping has also been examined as a factor influencing views towards animal research (Hepper and Wells, 1997; Hagelin et al., 2002). However, such studies focus on how pet-ownership impacts levels of acceptance or opposition to animal research, rather than considering how relationships shared with

companion animals might shape understandings of biomedical animal use and care practices across species boundaries. Yet, this analysis of MOP writing reveals that relationships with particular non-human animals play an important role in defining care obligations, extending care outwards from an individual animal to other unknown species members. In this way, as the following Mass Observer (H2639) discusses, traditional companion species such as cats and dogs are often felt to be unacceptable experimental subjects, particularly when compared with traditional laboratory animals such as mice and rats –

> ‘I have always loved cats and so did my father so we always seemed to have pet cats when I was young, and several years after I married our daughter and myself finally won my husband over into becoming the owner of cats, needless to say after several months of living with them he became a real "softie" with them and loved having them around.
>
> This is why I would be horrified to think a beloved cat was being experimented on in the name of Medicine, and the same applies to dogs. I would hope that Research Scientists would be able to test prospective Medicines in some other way and not on animals. Many years ago I read an article which told me how scientists had discovered Insulin which helped Diabetics, by experimenting on dogs. I thought this was awful, however when I weighed up the effect of Insulin and how it had saved so many Human lives. People who had gone on to lead productive lives, even perhaps becoming Doctors or Researchers themselves perhaps it could be justified. I must also confess that using Rats or Mice for experiments does not seem so bad as other animals because these creatures have always been thought of as vermin who actually brought diseases.’ (Mass Observer H2639)

In their discussion of the species used in experiments, this Mass Observer (H2639) writes of their long love for cats, having ‘pet cats when [sic] young’ and later convincing their husband to share their house with cats. Due to this, the Observer writes that they ‘would be horrified to think a beloved cat was being experimented on in the name of Medicine, and the same applies to dogs’, with dogs likely included here due to their common grouping with cats as companion species. However, the special connection identified with such species is placed in tension with the biomedical value of dogs as scientific models, here captured in the example given of experiments leading to the development of insulin, an outcome this Observer deems

may justify the use of dogs due to the number of human lives saved and the potentiality those human lives possess, 'perhaps becoming Doctors or Researchers themselves'. In this way, the biomedical use of dogs becomes a way to care for other humans.

By their common status as 'vermin' and carriers of disease, rats and mice are contrasted against dogs and cats. Through powerful historical framings of rodents, particularly rats, as harmful to humans, being dirty and overpopulous (Knight et al., 2000), such species often become excluded from interspecies care networks. As suggested by the above Observer's (H2639) comment that rats and mice 'have always been thought of as vermin who actually brought diseases', the association of such species with zoonotic disease transmission lends itself to the notion that such animals *deserve* ill treatment; they do not enact care for us, so we shall not care for them. Yet, rather than simply demonstrating cultural hierarchies of animal species and human superiority or exceptionalism, as denoted in Arluke and Sanders' (1996) concept of a 'sociozoological scale', expressions of care for certain species over others also emphasise the importance of experiencing affectual relationships with individual non-human animals. For instance, although cats and dogs are the species most often mentioned in MOP writing on animal research as being loved or special in some way, the following Mass Observer (D4736) reflects that those who keep mice and rats as pets may also feel a special affinity with these traditionally unloved species –

> 'Are there some species of animals that shouldn't be used for research? I think cats and dogs are exceptional companions for mankind and I would draw the line there because of the unique relationship we have with them. It is hard to do that though, people keep mice and rats as pets and would probably say the same.' (Mass Observer D4736)

In considering that people who keep mice and rats as pets might categorise such species as 'exceptional companions for mankind', this Observer (D4736) finds drawing boundaries around which species of non-human animal are acceptable for biomedical research 'hard to do', with the value of animals as companions and the moral status this imbues them with being relational. Thus although some may regard rodents as outside of the special bond that humans are seen to share with cats and dogs, others may feel differently. Indeed, some ethicists have argued that it is precisely this ability that is essential to the construction of a moral community. For example, looking at levels of community through the concept of

'solidarity', Mason (2000) shows how 'members must give each other's interests some non-instrumental weight in their practical reasoning' (Mason, 2000: 27). In short, through this lens, 'ethics' becomes a communal exercise. To return to the data analysis of the MOP writings, this suggests that enacting care also involves accounting for the interests and relations of others in one's community.

Furthermore, as Charles (2014) identified in MOP writing on the topic of 'Humans and animals', the writing of some Mass Observers suggests that 'relationships with animals can be experienced as providing more stability and consistency than those with human family members but also that they are deeply embedded in family relations and are often understood in terms of kinship' (Charles, 2014: 726). That non-human animals may be included in some Mass Observers' sense of family or kin is significant in considering their views on animal research, with such relationships signifying how caring about those who are tied up in and with the practice, from the breeding of experimental animals, the experimental process, to the expected outcome for patients and publics, is not strictly determined by species barriers. In this way, communities that are relevant to understandings of animal research both directly and indirectly encompass the more-than-human.

6.3.4 Conduits of care

So far, this section has deliberated on how animal research is understood in relation to caring about multiple others. This subsection will focus specifically on the beings who are constituted as enabling such care to be provided, being implicated only as a means to care for others by their own exclusion from networks of care.

As touched on earlier, in writing about animals used in biomedical research Mass Observers often make distinctions between species, drawing varyingly on notions of cultural status, sentience, scientific efficacy and translatability, and experiences of intersubjective interspecies relationships. Drawing on such resources appears to enable the formation of boundaries around which bodies are ethically and scientifically acceptable for experimental use and which are not. At first sight, it would be possible to conclude that such an analysis points to an absence of care for certain beings. However, as this subsection will aim to show, an alternative reading is that certain beings are constituted as conduits of care, channelling the care they receive into caring ends for others. In this way, such entities can be seen as disconnected from care themselves, their bodies instead representing an instrument in

meeting the care needs of others. For example, writing as part of a wider human collective, this Mass Observer identifies distinctions made between certain species and finds that rats and mice are most societally acceptable for scientific use –

> 'I think what you may find is that most folk would have no objection to researching on rats as they are classed as vermin + seem dispensable. But we are rather uneasy when it' a monkey (as they are not so different from us) or dogs (as we class them as pets). In the end most humans think of themselves at the top of a hierarchy + those at the bottom end (rats, mice) are fair game for research. I think it's our survival instinct kicking in.' (Mass Observer W3730)

This Observer (W3730) suggests that rats and mice are 'fair game for research' due to the case being that 'most folk have no objection to researching on rats as they are classed as vermin + seem dispensable'. On the other hand, the scientific use of dogs or monkeys is regarded as generating discomfort due to the proximity such species share with humans as companion animals and as close genetic ancestors. In such hierarchical framings of the animal world, rats and mice are deemed low-ranking. Being culturally and legally defined as 'pests', treated as intruders in both agricultural and urban spaces occupied by humans or their assets, such species have long been a part of a process of, in Haraway's (2008a) words, 'making killable'.

However, as alluded to above, in the case of animal research, we can go further with this analysis to think about how the use of one species enables the care of others. This is because making laboratory animals killable is entwined with a process of 'potentializing' (Svendsen and Koch, 2013). For these animals, death bestows the potential to become something else, a final transformation into scientific object, through which their bodies are infused with hope for biomedical progress and the alleviation of human suffering. As the MOP writings discussed in this chapter reflect, thinking and writing about laboratory animals is often bound up with experiences and expectations of human health and illness and within such framings laboratory animals become symbolic of recovery and cure. In this way, disconnections of care, such as a lesser concern for mice and rats, may actually enable publics to care for other humans. Not caring or caring less for some means that care can be practiced for others.

Another concept we can utilise to make sense of this complex relationship between animal use and human benefit is Ginn et al.'s (2014) use of the ethic of 'flourishing', a tenet 'which enshrines life's emergence and the prospects or conditions for life's emergence as the good to be upheld or nurtured' (Ginn et al., 2014: 114). They contend that '[f]lourishing always involves a constitutive violence; flourishing does not imply an 'anything goes' free-for-all, but requires that some collectives prosper at the expense of others' (ibid, 115). This helps us make sense of the finding that, for some Mass Observers, human survival is seen to justify the use of certain species in scientific experiments.

In summary, caring about laboratory species (or not) is a process deeply entangled with caring about other humans. Indeed, such an argument is sometimes made by stakeholders in support of animal research. For instance, as physiologist Nicoll (1991) puts it, 'we not only have a need and a right to protect ourselves from harm, but we also have an obligation to use all resources available to prevent or cure diseases and relieve suffering in humans and animals' (Nicoll, 1991: 308). More recently, UAR have made similar arguments around the topic of the COVID-19 pandemic, stating that the widespread suffering caused by the coronavirus and the need for animal models to tackle it show 'that those attempting to falsely discredit animal models are serving a principle of never using animals over the ethical choice of saving millions of lives' (Magee, 2020). Such arguments have also been made outside of the scientific community, for instance, bioethicist Harris (2005) has claimed that animal research is required by the 'powerful duty of beneficence, our basic moral obligation to help other people in need' (Harris, 2005: 242). As they explain, '[m]ost, if not all diseases create needs, in those who are affected, and in their relatives, friends, and carers and indeed in society. Because medical research is a necessary component of relieving that need in many circumstances, furthering medical research becomes a moral obligation' (ibid).

However, it is not only certain species of non-human animal who are deemed by some as less deserving of moral consideration in relation to biomedical research. Human populations are also sometimes suggested as more appropriate experimental subjects, as in the case of prison inmates. People in prison, defined by their incarceration, are sometimes mentioned in public dialogues around animal research as a more ethical alternative to using animals for research purposes due to their characterisation as deviant in contrast to the innocence of animals. The circulation of this argument is reflected in commentary by stakeholders in animal research,

such as an article by UAR entitled '*Why Testing on Prisoners is a Bad Idea*' (Holder, 2015a), which refers to the recurrence of such themes in comment sections to online articles and videos on animal research. Such narratives around the ethics of animal research are important to address as they highlight the fragility and contingency of the very categories of 'human' and 'animal'. As shown throughout this section, such identities are not a given. Rather, they are power-laden and do not provide a straightforward reflection of care allegiances.

Though deeply problematic, notions of 'deservingness' in the context of animal research reveal a critique of the ways in which animals are used across society and the normative frameworks which construct their use as natural. Furthermore, through suggestions of using prisoners who are sometimes seen as particularly 'deserving' of such (mis)treatment, the practice of animal research is itself constructed as a process which is primarily a form of punishment.

Mention of the use of prisoners was rare in the MOP accounts. In one of the few allusions to the topic, the following Mass Observer mentions the use of prisoners when discussing biomedical research using dogs by the charity *British Heart Foundation* and then, in a later excerpt, their ailing mother's use of medicines derived from animal research –

> 'I remember in the last two or three years, I've read articles in the Sunday Express about very cruel experiments done on dogs by the British Heart Foundation. They were forcing the dogs to have heart attacks over a period of weeks. How horrendous can you get? That seems like licensed animal cruelty and it makes me feel ill to imagine how those poor dogs felt during all that. I was so upset by the story, I decided I could never support the BHF again and I always tell my family not to give to them any more. They should find human volunteers or use prisoners - not innocent creatures.
>
> […]
>
> 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. But now I think it should be human test subjects such as prisoners. How can we possibly extrapolate from a mouse or a rabbit or a pig to a human? And who are we to decree that they should suffer for us?' (Mass Observer B5342)

The first reference made by this Observer (B5342) towards the experimental use of prison inmates is in connection to reading about 'very cruel experiments' involving dogs conducted by the British Heart Foundation, a charity that the Observer states they 'could never support [sic] again'. Following this, 'human volunteers or [sic] prisoners' are suggested for biomedical research as opposed to using 'innocent creatures'. Later in their account, this Observer discusses how their dying mother was prescribed oral chemotherapy and suggests that this was the 'only time' they felt unconcerned with the biomedical use of animals. Yet, 'now', at the point of writing, the Observer states that experimental subjects 'should be human test subjects such as prisoners', with the suggestion that this might resolve issues of translating results from animal models to humans and also address the moral quandaries posed by using animals.

This example could be read as revealing the shifting nature of care relations and how one's ethical principles can become strained or diminished when sensed to conflict with lived care obligations. In making sense of such suggestions, Butler's (2004) notion of 'grievability' is perhaps useful to consider, with the exclusion of those in prison from moral communities reflecting how the social stigma of the prisoner identity has stripped away their 'grievability'. Butler contends that, 'the differential allocation of grievability that decides what kind of subject is and must be grieved, and which kind of subject must not, operates to produce and maintain certain exclusionary conceptions of who is normatively human" (Butler, 2004: xiv-xv). However, this analysis of MOP writing presents a partial challenge to the reinforcement of human life as exceptionally sacred as Butler's sense of grievability suggests. Instead, human volunteers and prison inmates, consenting or otherwise, are suggested for use as biomedical experimental subjects in the face of the ethical issues inherent to the human exploitation of non-human species. However, as Butler posits in earlier work (1993), constructing the human/animal divide and the moral implications that accompany this, i.e. the formation of moral boundaries, is a project of degrees. As Butler puts it, 'the construction of the human is a differential operation that produces the more and the less "human," the inhuman, the humanly unthinkable' (Butler, 1993: 8).

Relatedly, in exploring views towards the genetic modification of animals, Michael (2001) argues that 'one can accept the value of animal experiments, and recognize associated ethical problems not simply because of some complex calculation of costs/ benefits but because

animals in themselves are polysemic, and the identities of the respondents are multiple in relation to animals' (Michael, 2001: 215). However, as this data analysis shows, ethical judgments about animal research are not always based in mobilisations of a human/animal divide. As such problematic discussions around replacing the use of animals in experiments with prison inmates highlight, the 'human' identity is also used in ways which seeks to draw borders *within* the human species, excluding some from the full moral and political status that the category is held as offering. Indeed, attention is drawn to the intra-divisive nature of the human identity by bioethics and animal studies scholar Wolfe (1998), who contends that humanism 'is species- specific in its logic (which rigorously separates human from nonhuman) but not in its effects (it has historically been used to oppress both human and nonhuman others)' (Wolfe, 1998: 43). Therefore, turning back to the MOP excerpt above, in mobilising the notion of 'innocence', non-human animals are contrasted with prison inmates, suggesting that, by their deviance, such groups are less deserving of the moral status given to the normative human.

Though not suggesting the replacement of non-human animals with prison inmates in biomedical research, relevant here is another Mass Observer's recollection of how they became interested in animal rights. In detailing how they became interested in the topic, this Observer discusses a documentary which featured the execution of a prison inmate and a rabbit in a gas chamber and considers the societal propensity for killing animals –

> 'I don't have experience of working in an environment where research involving animals has ever been carried out but animal rights are a reoccurring theme in my life. My interest in the topic began in an unorthodox fashion when I watched a documentary about an American man who was convicted of murder. Prior to his execution in the gas chamber, a rabbit was placed in there. It was so that the prison officers could test that the equipment inside was working properly. It was. The rabbit died slowly and in obvious distress, just as the condemned inmate also did later that day. It struck me as quite bizarre that this horrendous penalty, which is reserved for the most despicable individuals, was casually inflicted upon a harmless animal. It spoke volumes to me about how little empathy people have for their fellow creatures' (Mass Observer N5744)

This Mass Observer's (N5744) reflection on how 'casually' this 'horrendous penalty' was 'inflicted upon a harmless animal' again demonstrates the salience of notions of deservingness and innocence in ethical relating to the societal treatment of animals. Again, such writing implies that human exceptionalism is less relevant in making ethical judgments than concepts of (un)deservingness which transcend species boundaries.

Overall, this section has demonstrated the ways in which animal research is understood as a means of generating care, with some being included within the practice's encompassing care network only as an instrument to care for others. With the care provided through animal research requiring decisions on whose care is prioritised, whether this be the sacrifice of laboratory animals so that human patients can receive the expected medical benefits, this data analysis has shown how care in one direction can cause conflict elsewhere. Because of the way in which multispecies care obligations become tangled and strained in relating to animal research as a socio-ethical problem, this section has illustrated the distress that accompanies even those who are accepting of the scientific use of animals to provide certain benefits. Ultimately, this reflects that caring through animal research is not unproblematic; the benefits of using animals in science can be recognised as important in distributing care to others, yet still be felt as morally and emotionally conflicting.

6.4 Caring *about* animal research

Having considered how animal research can be perceived as a way of producing care, as a process which care runs *through*, this section will examine how some Mass Observers articulated care towards the topic of animal research in and of itself. In doing so, this section begins with an analysis of how laboratory animals are cared *about*, before moving onto care towards humans in the laboratory, namely laboratory staff.

6.4.1 Caring about laboratory animals

In contrast to some of the previously discussed MOP extracts which made sense of animal research through narratives of human survival, some Mass Observers were more hesitant about giving preferential treatment and consideration to certain species over others. In critiquing the reliance on categories such as intelligence for determining the moral acceptability of using non-human species in biomedical research, this Observer focuses on an experience that is central to defining living organisms as sentient, that of 'suffering' –

> ‘If you’re asking about whether some animals should be tested on and not others, then no – no animals should be tested on. There is a fashion for realising animals are more intelligent than we thought they were – crows can solve basic puzzles, elephants mourn, chimps have a sense of injustice, and so on – and so they should be exempted. As if having no cognitive framework in which to understand pain made that pain any better. No, if we’re imagining a future world, we’re imagining it without suffering, and so we stop the suffering we are causing. And if I am working towards a world in which there is no suffering, I need to stop allowing things to suffer on my behalf, and give up the pills.’ (Mass Observer J5734)

The assumption that it is more ethical to use species deemed as possessing lower cognitive capacities for scientific research is questioned here, with the infliction of suffering, regardless of how such experiences may manifest between different species, considered to be an ethical issue in itself. The Mass Observer (J5734) concludes this section by dwelling on their individual responsibility towards the issue and identifying medicine consumption as a possible way to act upon it. Such reflection on the vulnerabilities shared across species can be seen here as leading to this Observer’s consideration of the responsibilities that ‘we’, both as a species and as individuals, might bear towards other animals.

In considering their accountability for the suffering of other animals in pursuit of human health advancements, the Mass Observer (J5734) concludes by stating ‘I need to stop allowing things to suffer on my behalf, and give up the pills’, an act that requires not only recognition but also acceptance of one’s own vulnerability. This sentiment connects with Bird Rose’s (2013) argument that, ‘[t]o understand one’s self as part of a community of life is to accept responsibilities, and also to accept vulnerability’ (Bird Rose, 2013: 311). However, as the same Mass Observer muses earlier in their writing, accepting one’s vulnerability and ultimate mortality and resisting the defences and treatments that biomedicine is seen to offer, is easier said than done –

> ‘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)

Although, as living beings, mortality is one experience we all share in common, as reflected on here, 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 Mass 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 declining. However, as this Observer highlights, provisions for adequate social care are also important aspects to consider when thinking about ill health and dying. Although, as detailed earlier, biomedicine is seen as playing a key role in how people care about those with health conditions, with much hope invested in research aiming to advance medical knowledge and treatments, care practices which support patients in living with, rather than overcoming, such conditions are important considerations in thinking about the ethical legitimacy of animal research.

Though without clear routes for action, the discomfort this Mass Observer (J5734) expresses towards how 'we fetishise death' serves to complicate the standard assumption that medical advancement is inherently positive. Theorists have also attempted to question the often taken-for-granted struggle against human mortality. For example, Haraway (2008a), observes, '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' (Haraway, 2008a: 81-82). As will be explored further in the following data chapter, not all biomedical endeavours are perceived necessary and the extension of the human lifespan at the expense of other animal lives is, for some, an area of particular concern.

This data analysis also revealed how, rather than being treated as in opposition with one another, in some cases, the suffering of both laboratory animals and humans were connected.

How this connection between the bodies of laboratory animals and humans can play out outside of the laboratory, mediated by care, is demonstrated in the following Mass Observer's discussion of a school experiment and its later impact on their pregnancy –

> 'We did do one experiment on water fleas that I did find very disturbing and it still disturbs me. We had to keep giving the fleas caffeine and record the effect it had on their heartbeats, basically until their little hearts gave out. I was part way through doing the experiment when it struck me that I was killing a living creature. It still haunts me now – when I was pregnant with my daughter, I gave up caffeine completely as soon as I heard her heartbeat for the first time because I kept thinking of the effect it had on the little flea's hearts.' (Mass Observer S4002)

The connection that this Observer (S4002) draws between the experiment they conducted at school with water fleas and their subsequent avoidance of caffeine during pregnancy suggests how even when not being used as explicit models for human physiology, laboratory animals are imaginatively tied up with human counterparts. Indeed, it is the accomplishment of greater understanding and management of human bodies that justifies the entire biomedical pursuit.

In summary, then, the above excerpt implies a recognition of the shared vulnerability of both flea and foetus. To make sense of this, it is helpful to turn to Acampora's (2006) notion of 'cross species awareness of vulnerability' (Acampora, 2006: 83) as an important part of ethical relating and interspecies care. As Acampora puts it, 'such minimal mutuality of common carnal nature suffices phenomenologically to establish compassionate concern for the other' (ibid, 130). In the case of animal research and as suggested in the MOP excerpt above, the vulnerabilities that such animals share with human bodies can produce moral trouble and societal concern whilst simultaneously determining their use as models in the first place. This issue has been commented on by other scholars looking at the biomedical research domain. As Svendsen and Koch state of their study of piglets used for neonatal research, 'human health is entangled with the lives and deaths of animals' (Svendsen and Koch, 2013: 118). Importantly, it is also worth noting that despite the concern that this Mass Observer (S4002) shows here for the water fleas, being invertebrates, they remain unprotected under the current legislation which, through a 2013 amendment of the EU Directive 2010/63/EU, only

provides protection for one group of invertebrates, those being cephalopods (Fiorito et al., 2014).

In their writings on animal research, some Mass Observers were critical of the prioritisation of human needs underpinning the use of animals in biomedical experiments. For some, in enacting beneficent care, as in the form of charitable giving, who they care about might be structured in explicit contestation of the obligations expected towards humankind, as the following Mass Observer's charitable practices suggest –

> '[…] I don't like the idea of any animal suffering and if I support/give to any charity it is always animal /environment related. Makes me sound horrible but I would never give to a charity related to humans. We're too selfish and have caused most of the problems in today's world!' (Mass Observer R5682)

That this Mass Observer (R5682) justifies their aversion to donating to charities 'related to humans' by claiming that humans as a collective are at fault for 'most of the problems in today's world' suggests that, again, notions of deservingness are evoked in enacting care boundaries. Given the current socio-political emphases on notions of environmental justice and individual responsibility for the, now declared, climate crisis (see Whitmarsh et al., 2011), such articulations of care for those whose suffering is identified as symptomatic of human activity perhaps reflect shifting relationships and priorities of care in the Anthropocene.

In relating such feelings specifically to animal research, the same Mass Observer (R5682) continued to articulate their sympathy for non-human animals and the environment, which, in relation to, humans are ultimately seen as a negative force –

> 'I've always been uncomfortable with experiments on animals and felt it was cruel and that such tests should be done on humans. But then I have to ask myself would I volunteer/be prepared to have experiments done on myself/other humans in the place of animals? I would like to think I would. It sounds an awful thing to say but I have more sympathy with animals and mother nature. I look at the damage that humans have inflicted on the planet and really think that planet earth would be better off without us. Sorry - rather a negative train of thought to develop from writing about experiments on animals/animal liberation!' (Mass Observer R5682)

In their disapproval of the ways in which human life has impacted on the planet, which, as they put it, 'would be better off without us', the Observer (R5682) can be seen as fundamentally challenging a key aim of biomedical research: the advancement of human health. Caring for humans through biomedical research at the expense of animal lives is here clearly situated in a point in time in which we are increasingly being told of the negative effects of human activity on the planet and the other forms of life it hosts. Chakrabarty (2009) contends that in this new historical epoch of anthropogenic global warming and climate change, 'it is no longer a question simply of man having an interactive relation with nature […] Now it is being claimed that humans are a force of nature in the geological sense' (Chakrabarty, 2009: 207). In such a context, species distinctions and discourses of human exceptionalism in biomedicine which calculate non-human life as expendable if the benefit to humans is judged worthy are perhaps less salient and thus, for Observers like the above, offer little justification for such treatment of animals.

Disputing co-founder of PeTA Ingrid Newkirk's oft-quoted phrase 'a rat is a pig is a dog is a boy' and its implied challenge of anthropocentric notions of moral status and care obligations, US veterinarian and biomedical researcher Morrison (2002) argues that '[n]ot only do such statements trivialize humanity, they impede progress toward reaching consensus on how animals should be treated' (Morrison, 2002: 16). However, within the more recent global context in which scientists are highlighting cross-species vulnerabilities to ecological threats, and the role of humans in generating these, perhaps, for some, making moral distinctions between species is increasingly dubious and, as such, is deemed as requiring re-evaluation of our care obligations towards more-than-human life. Relating to this point, another Mass Observer discusses the current societal treatment of animals –

> 'I believe we have to stop thinking of animals as possessing some sort of 'otherness' that is fundamentally different from ourselves. We can no longer use the necessity for food, for instance, as an excuse to harvest other species. This is the 21st century. There are other dietary options. Can we still, with a clear conscience, argue the need for laboratory experiments on animals too? I don't think we ever could but that has never made any difference.' (Mass Observer N5744)

In their critique of the cultural regard of animals as 'other' to humans, this Mass Observer (N5744) implicitly questions the human exceptionalism which grounds many of the ways in

which we relate with animals. Drawing an analogy with animals used in food production, the Observer implies that animal research is outdated – 'This is the 21st century' – and expresses doubt towards its moral justification. In prescribing different modes of ethical relating to other animals, this Mass Observer can be seen as relating to their membership of the human species. This reveals how such forms of caring about animals involved in structural practices such as animal research may play out on a macro scale which demands collective change to the ways that 'we', as a species, enact care. However, it should be noted that these human/animal and nature/culture distinctions are made from within a specifically Western humanist paradigm and suggested calls for a collective planetary ethics that decentres the human are problematic in their neglection of the non-Western cultures which do not practice such ontological separations (Salmón, 2000; DeMello, 2012) and the sustainable ecologies of some Indigenous communities (Apffel-Marglin and Marglin, 1998; Cajete, 1999). Nevertheless, such reflections on the problems of human exceptionalism suggest that the anthropocentric underpinnings of animal research are, for some, fracturing.

For some Mass Observers, then, caring about experimental animals is aligned with a radical reframing of wider human-animal relations and a questioning of the human exceptionalism that such practices are based upon. As the excerpts in this section have shown, in caring about laboratory animals, the treatment of non-human animals at large has been reflected as of both personal and global significance, with consideration of the human impact across domains and even at the planetary level driving critical self-reflection on the ways in which non-human animals are used for human ends.

6.4.2 Caring about laboratory staff

In demonstrating care towards animal research, some Mass Observers also directed their attentions towards laboratory staff. In such MOP accounts, with many Observers having minimal personal experience of those who work in biomedical research facilities, impressions of laboratory staff were often framed in terms of hopes and expectations. As the following Mass Observer touched on, such hopes may include regulation and organisational support for those working in laboratories –

> 'I hope that those working in such laboratories would employ humane methods as dictated by law and their own or their employer's code of ethics. I can't imagine it would be a pleasant job, and as such I would hope that they receive support should

> they suffer mentally as a result. However I appreciate that whilst I might struggle to do this job there probably are people who can do it without any issues at all.' (Mass Observer E5014)

Firstly, this Mass Observer (E5014) conveys hopes around the practice of animal research and the treatment of laboratory animals, specifically that laboratory staff 'employ humane methods' which are inscribed either in legislation or institutional protocol. In this way, we can note how those outside of the laboratory demonstrate care towards laboratory animals through expectations of laboratory staff conduct. Yet, given that this Observer 'can't imagine' working in such laboratories to be 'pleasant', care is also shown towards laboratory staff, who, it is hoped, have access to support services 'should they suffer mentally as a result'. Finally, the Observer acknowledges that such assumptions about those who work in animal research laboratories are based in projections of their own feelings towards working in such an environment and that others may feel differently.

In such expressions of concern for the working conditions of laboratory staff, it is evident that caring about animal research is not simply caring about non-human animals. Rather it hoped that animals and humans alike are protected by and cared for by the structures in place around using animals in biomedical research, whether at the legislative or institutional level. Expectations of the regulatory framework were key to how some Mass Observers imagined those who work in biomedical laboratories, with regulation being implicitly or explicitly mentioned in around a fifth of all responses. This suggests that discomfort with the practice of animal research did not necessarily lead to resentment towards those involved in such work. Rather, as the following Mass Observer implies, judgement may be directed at the policy, rather than individual, level –

> 'On the question of my opinions of the people that work in research laboratories, I find this quite difficult to answer. I assume that all people working in such laboratories are subject to strict controls and ethical policies etc., and as such I do not view them as bad people individually. I wouldn't consider somebody to be a bad person purely based on the fact that they worked in a research laboratory in which experiments on animals took place. I also assume that the people working in such facilities are qualified in science in some capacity - assuming that the experiments on animals are taking place to address legitimate issues; I would hope that the people involved in

> such experiments are genuinely passionate about addressing the issues which experimentation on animals can help to address. As such, assuming that staff members conduct themselves in an ethical and humane manner, I do not view them badly.' (Mass Observer W5345)

This Mass Observer (W5345) frames their opinion of those who work in animal research laboratories through their expectations of the regulatory framework, assuming that such work and workers are subject to 'strict control and ethical policies' and, as a consequence, meaning that the Observer does 'not view them as bad people individually'. This example of locating the work of laboratory staff in broader governance structures when giving an opinion on the workers themselves reveals the role that trust plays in caring. In caring about distant others, such as laboratory workers and non-human animal subjects, whose everyday lives are largely hidden from lay-publics, it is crucial that citizens are able to trust the frameworks which regulate the treatment of both groups. Discussing the practice of care networks over distance and difference, Barnett and Land (2007) observe that 'we are in fact bound up with and implicated in the lives of all sorts of people living in all sorts of different places' (Barnett and Land, 2007: 5). Given the distance between those who work (and are worked with) within laboratories and the wider populace, the barriers which obstruct direct forms of caring *for*, trust in the policies that guide laboratory staff conduct is paramount. As shown in the above MOP excerpt, such policies are assumed to protect not only the non-human animals involved in research, but also to safeguard staff themselves from any negative impacts such work may present.

Validating this Mass Observer's (W5345) focusing of attention towards policy rather than individuals is the respected credibility of those 'qualified in science in some capacity' and the association this bears with a scientific dedication to solve 'legitimate issues'. Like the regulation governing animal research, commitment to the science underpinning this use of animals is regarded as investing further credibility in such work. Hence, this Observer's hope that 'the people involved in such experiments are genuinely passionate about addressing the issues which experimentation on animals can help to address' reveals the importance of staff dedication to the scientific goals of such research. In this way, as Camporesi et al. (2017) put it, the 'expertise and authority of science is also an object of trust' (Camporesi et al., 2017: 25). Therefore, as this Mass Observer implies, assumptions of those who work in this arena

as being driven by the science may, for some, justify the enterprise and the involvement of those who work within it.

For other Mass Observers, impressions of laboratory staff were grounded in the view that they are simply doing a job. As the following Mass Observer suggests, for some this is an unpleasant but ultimately necessary job, and, as they themselves relate, external pressures can mean that job preferences are not always viable –

> ‘Firmly being in the world of work and doing a job I no longer enjoy I know that some people are doing a particular job because they have to, just to pay the mortgage. I don't suppose anyone ever wakes up and says "I want to become an animal tester". I imagine that because of the threat involved and the moral question it's quite a well-paid job. My guess is they must have a strict vetting procedure so that people doing it for the wrong reasons don't get through. It's one of those jobs that nobody probably wants to do, but someone has to, like being an undertaker or working in an abattoir.’ (Mass Observer C3210)

This Mass Observer (C3210) assumes that those who work in animal research laboratories do not relish their work, yet, like the other jobs listed (which, interestingly, are both concerned in different ways with death) they conclude that such work must be done by someone. Again, institutional protocols are mentioned as a safeguarding measure, here ensuring ‘that people doing it for the wrong reasons don't get through’ the interview process. Such understandings of laboratory workers perhaps reflect the MOP’s emphasis on the ‘everyday’, meaning that Mass Observers are predisposed to thinking about issues at the mundane, ordinary level. Through such a lens, Mass Observers with little experience of the details of working in an animal research environment may instead, as demonstrated by the Mass Observer above, relate to those who work in such an area in the basic and empathetic sense that they are doing a job to pay the bills. This contrasts with impressions of laboratory workers which centre on the scientific nature of the enterprise, as previously discussed. Rather, relating to laboratory workers as ‘doing a job’ which is, at least at times, perceived to be distressing but overall necessary suggests an empathetic recognition of those doing work ‘that nobody probably wants to do, but someone has to’. Unlike the focus on regulation articulated by the previous Mass Observers which directed judgement at the policy level, thinking about laboratory workers as doing a job that needs doing presents a way to relate to those in this

arena as *people.* Such understandings of laboratory staff are important to acknowledge given the historic sensational caricaturing of those who work in this area (Wolfensohn, 2006; Fox, 2014; McLeod, 2018).

Relatedly, many Mass Observers were critical of anti-animal research activism and were sympathetic towards laboratory staff who have sometimes been the target of such activities. Some of the criticism of activists involved the previously discussed arguments, that laboratory staff are ultimately just doing a job which is difficult but necessary and therefore should not be subjected to disruption and derision. This can be seen in the following MOP excerpts –

> 'Those people who work in laboratories using animals for research are often subjected to violent condemnation and criticism from certain extremist sections of the public - "Animal Rights" etc. who hold protests at the laboratories targetting the staff with insults and physical threats to themselves and their families. This I feel is totally unacceptable. The scientists we doing a valuable and essential job even though we may not like the idea of animals being used. No one (hopefully) thinks' I'd like a career which involves hurting animals' - these are professionally trained staff who realise the validity of their work, and must presumably accept the use of animals for the medical benefits gained.' (Mass Observer T2543)

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> 'I respect those people who work in animal research - it is a tough environment that few people would choose to work in unless they were particularly committed. The scientists who work on animal research surely have the right to get on with their work and not to be intimidated by the press or by activists.' (Mass Observer G4374)

Again, in both of these excerpts, animal research is taken to be necessary work. Those who work within the field are held in high esteem due to the dedication which is assumed to be essential to work in such a 'tough environment' (Mass Observer G4374), performing a task that many people find disagreeable, i.e. 'though we may not like the idea of animals being used' (Mass Observer T2543). There is a sense in both excerpts that the perceived difficulties of such work imbue laboratory workers with a sense of trustworthiness, in that, as the first Observer (T2543) puts it, 'few people would choose to work in unless they were particularly committed' (Mass Observer G4374). Similarly, the second Observer (G4374) references the

perceived difficulties of such work, ‘‘No one (hopefully) thinks' I'd like a career which involves hurting animals’’, as a marker of the necessity of using animals, ‘- these are professionally trained staff who realise the validity of their work, and must presumably accept the use of animals for the medical benefits gained.’ (Mass Observer T2543). Here, that people are willing to work in such an environment, with its particular challenges, is taken as endowing research using animals with a professional credibility. Holmberg (2011) discusses the faith that scientists place in animal models, through which ‘animals thus come to embody the hope for future breakthroughs’ (Holmberg, 2011: 154). This analysis of writing from the MOP suggests that, for some, the trust that scientists place in the use of animal models reflects outwardly to lay publics, signifying that they can also place their trust in this scientifically-sanctioned use of animals.

However, though not wanting to generalise in their judgements about those who work in animal research laboratories, some Mass Observers still held reservations about the character of a person who could work in such an environment. As the following Observer expresses –

> ‘It is wrong to make generalisations about any group of people – we are all individuals – but I cannot fathom how anyone with what could be considered a normal degree of empathy could conduct research on animals every day without finding it continually upsetting. Have the laboratory workers ever had a close bond with a pet? Anyone who has ever had a cat or dog for example knows that they have subtle ways of communicating what they want, often insightful ways that would be missed by anyone other than their attentive owner.’ (Mass Observer N5744)

In perceiving the use of animals for research purposes to be emotionally challenging, this Mass Observer (N5744) expresses their inability to imagine how a person with ‘what could be considered a normal degree of empathy’ could cope with the emotional toll of such work. Given this, working in animal research is seen to put into question the capacity to have a ‘close bond with a pet’ and vice versa. Consequently, this is taken to suggest that laboratory workers are unable to *properly* care for animals, with the job seen as necessitating a lack of the intuitive sensing of an animal’s needs, an ability this Observer describes as characteristic of those living with cats or dogs. Such reasoning reveals how, for some Mass Observers, the nature of work in animal research environments is seen to require employees who are indifferent to the interests of animals. In such assumptions, the explicit instrumentalisation

of animal bodies that characterises their use in scientific research is perceived as entirely at odds with interspecies practices of care.

Such perceptions of how animal research is put into practice by laboratory staff are understandable from outside of the contradictory logic of the laboratory, within which the entanglement of 'good science' with 'good care' is now asserted as a guiding principle (Davies et al., 2018; Friese et al., 2019; Druglitrø, 2018) and animals can be both cared for and killed. As ethnographic research has shown (Birke, 2008; Holmberg, 2011; Giraud and Hollin, 2016; Greenhough and Roe, 2018), interspecies care is practiced on both affectual and technical levels in the laboratory and acts as a current guiding much of the work undertaken within its confines, influencing not only *what* but also *how* things are done. As Druglitrø (2018) puts it, being 'skilled' at caring in the laboratory involves both technical and affective forms of care, with this standard of care 'involving the handling and coordination of various technologies, people, and animals' and also 'affective (embodied) investments of various kinds' (Druglitrø, 2018: 660). For animal technicians, then, the development of such intersubjective connections, attuning oneself to the preferences and peculiarities of animals as species groups and individuals, is precisely part of performing one's job well. Indeed, as Holmberg (2011) observes, animal technicians often define their role through narratives which emphasise an affective care, with love and friendship being key characteristics of their work. In this way, Holmberg identifies that 'in the laboratory there is no clear-cut boundary between personalised animals ('pets') and others; being an 'animal friend' creates certain moral obligations to all individuals' (Holmberg, 2011: 159). Yet, for those on the outside, perhaps most clear are the *limits* of human-animal bonds in the laboratory which are ultimately marked by a fatal instrumentalisation.

In summary, this section has considered the ways in which Mass Observers articulate care towards laboratory animals and staff. As has been demonstrated, caring about laboratory animals is often entwined with care towards non-human animals in a broader sense and lends to critical reflexivity on the exceptional positioning of human needs. Interestingly, for some Mass Observers, caring about laboratory humans, those who work within animal research, entails hopes that staff are supported in ways which care for them and enable them to care for the animals in their charge. For some correspondents, the perceived difficulty of the job suggests a commitment to the higher good of the science. For others, being able to perform

such work implies a lack of empathy with non-human animals. And for other Mass Observers, impressions of those who work in animal research laboratories were shaped through an understanding that not everyone has the capacity to be particular when it comes to employment and, like other lines of work, the use of animals in research represents jobs that, though unpleasant, need to be done. Overall, this analysis shows that caring about laboratory animals does not necessarily mean not caring about laboratory staff. Conversely, for some Mass Observers, caring about experimental animals *requires* caring about the conditions that laboratory staff work within and the support they receive, revealing a recognition of the care-full interdependence at play within biomedical research.

6.5 Conclusion

The first section of this chapter has illustrated the location of animal research as one ethical issue amongst many others in a landscape demanding care in multiple directions. For some Mass Observers, species presented a barrier to caring, with human problems deemed as more important. For others, animal research was considered a low-priority animal-related issue. Recognising the situation of animal research amongst other problems also helps us to understand expressions of needing to withdraw one's care towards such issues, which can take an emotional toll, to enact care for oneself. Hence, highlighting disconnections of care towards animal research articulated by some Mass Observers emphasises the nature of care as a limited resource which is necessarily employed in some directions over others.

The second section of this chapter analysed how animal research can be understood as a way of caring for others, as a process through which care passes towards known and unknown recipients. In caring about the self, family, and kin, for some Mass Observers animal research represents a means of generating (health)care *for* those who are cared *about*. However, given the necessary exclusions of the non-human animals at the centre of biomedical research, the ways in which they must be confined and killed so that humans may benefit, this analysis has also reflected on the conflicts that emerge through such caring. For some Mass Observers, caring through animal research was enacted along with an exclusion of caring about certain beings, with these particular humans and non-humans being implicated in such networks as an instrumental means of caring for others.

The third section of this chapter examined how Mass Observers care *about* the issue of animal research itself, looking at care towards laboratory animals and staff. This analysis revealed a recognition of the interdependence of laboratory animals and laboratory humans, with care towards one often entangled with care towards the other. For some Mass Observers, caring about laboratory animals invoked reflection on the wider care duties that humans have for other animals and for the planet at large, with the scientific use of animals for human benefits representing an example of human egotism and abuse of the world. For some, then, caring about the issue of animal research requires personal and collective change, though this is not without ambivalence, given the prevalence of biomedical frameworks of health.

Stepping back, this chapter suggests that studies of views towards animal research should acknowledge that the issue is not merely a matter of knowing the 'facts' (as suggested by UAR 2009; FRAME, 2020a) or making abstract ethical calculations (as critiqued by Macnaghten, 2004). Rather, as this data analysis has contended, an important way in which animal research is made sense of is through near and far care practices, in which the prioritisation of human interests is not always comfortably accepted. Indeed, as suggested, caring about animal research may require radical shifts in how 'we' as individuals and as a human collective relate to the more-than-human world. As will be explored more in Chapter 8, the importance of care to understandings of animal research raises broader questions around the obligations that scientific institutions have to engage with public audiences in care-full ways, ways which are sensitive to the moral problem that the use of animals in science continues to pose.

7. Data Chapter Three: Constructing and constricting the 'necessary' use of animals for biomedical research

7.1 Introduction

Whilst it is claimed that animals have been used as models to understand human bodies for over 2000 years (Ericsson et al., 2013), comparative vivisection of animals became an established part of biomedical science in the 19th century (Rupke, 1987). In contemporary bioscience, research using animals is claimed to remain essential to scientific advancement (Barré-Sinoussi and Montagutelli, 2015; Phillips and Roth, 2019), although there is now much challenge of the scientific validity of animal models (Shanks et al., 2009; Knight, 2011; Bailey and Taylor, 2016; Bailey and Balls, 2019; and see Herrmann and Jayne, 2019). As scientific models, animals often become surrogates for human bodies, as Birke (2012) suggests, '[a]nimal bodies, whether alive or dead, thus stand in for human ones, representing our diseases – so much so, that lab animals can be said to represent our salvation from the terror of our own mortality' (Birke, 2012: 157). It is in this representational sense that this final data chapter aims to explore how Mass Observers understand the scientific use of animals as necessary or unnecessary, in doing so, looking at the construction of medical research and 'cosmetic testing'.

It has been claimed that public support of animal research is stronger in relation to the use of animals for medical purposes, which can encompass 'basic (experimental), clinical, and epidemiological research' (Röhrig et al., 2009). For instance, the 2018 Ipsos MORI biannual national survey on public attitudes to animal research claims that '[m]ost of the public accept the use of animals in scientific research for medical and scientific purposes (65% and 68% respectively)' (Ipsos MORI, 2018: 6). From such data, animal research advocacy organisation Understanding Animal Research (UAR) concluded that '[p]ublic acceptance of animal research remains high but is conditional on research being conducted for scientific and medical purposes and with high animal welfare standards' (Understanding Animal Research, 2019).

Bearing such claims in mind, this chapter explores how Mass Observers construct medical research, what hopes and expectations they place in it and what kinds of anxieties it can generate. In analysing how some forms of animal research are judged as necessary or unnecessary, this chapter does not deal with metaphysical concepts of necessity such as those

associated with Kant (1871) or Hegel (1874) or try to pin down a particular definition. Rather, the aim here is to understand how the distinction between necessary and unnecessary research is made, what this characterisation achieves, and the ways in which this boundary can become blurred. I have chosen to examine 'necessity' rather than related concepts such as '(un)acceptability', because of the frequency with which the terms 'necessary', 'unnecessary', and 'necessity' were used across the MOP responses and the common description of animal research as a 'necessary evil' (Blakemore, 2008; Masterton et al., 2014; Franco and Olsson, 2016).

In exploring these concepts in relation to animal research, this chapter is organised in three sections. The first of these looks at the advancement of medicine as a necessary purpose for using animals in research and the stipulations within this. The second considers the construction of cosmetic-related research as unnecessary, the role this plays in justifying medical research using animals, and how this distinction can be challenged through points at which the medical and cosmetic divide becomes blurred. Finally, the third section explores how Mass Observers may disrupt the authority and reach of biomedicine itself, articulating different visions of health and illness.

7.2 The necessity of biomedicine

In much of the MOP writings on the topic of '*Using animals in research*', scientific uses of animals for medical purposes, whether advancing medical knowledge, providing medical training, or developing medical treatments, are explicitly mentioned as areas of particular value and necessity. This section will explore how in many of the MOP responses, biomedicine is central to understanding the scientific use of animals as necessary. In doing so, three key aspects of necessary medical uses of animals will be considered: the importance of advancing the field of medicine, the application of medical knowledge gained through animal use, and the prioritisation of particular elements of health and illness.

7.2.1 Advancing medicine

In identifying medical purposes for scientific animal use as necessary, the need to *advance* the medical field was frequently mentioned by Mass Observers, as the following excerpts illustrate –

> ‘I'm vegetarian so I'm against animal testing - BUT..... I'm one of those annoying people who can always appreciate both ways of an argument, so I can absolutely understand how medical scientists can argue that there would be no advances in medicine if one wasn't allowed to practice and experiment on animals.’ (Mass Observer A1706)
>
> ~
>
> ‘My views have perhaps become more informed over time rather than changing. It is the sort of thing you just accept as happening, or is necessary. I don’t think I would have ever believed it was entirely unnecessary because of the need to advance our medical knowledge and capabilities, as well as educating those going into that profession.’ (Mass Observer D4736)
>
> ~
>
> ‘My immediate gut reaction is always “No, no, no” as I am a real animal lover and cannot bear to imagine ever doing anything deliberate to hurt an animal – but I think of all the advances in medicine which would never have happened if not for laboratory animal research.’ (Mass Observer F5890)
>
> ~
>
> ‘Although using animals for research may seem barbaric, so much in the medical field has been discovered, it is time to look at this issue more positively.’ (Mass Observer M2061)
>
> ~
>
> ‘In common with in many people, I don't dwell on the suffering of the animals involved in research, but accept the necessity for the advancement of medical knowledge.’ (Mass Observer T2543)

As the above excerpts suggest, Mass Observers might regard animal research as ethically problematic or unpleasant and yet still deem it to be necessary for the purpose of advancing medical understanding and practice. Despite discomfort with animal research in general, as some of the Observers above articulate, such purposes for using animals appear to be given exceptional status, with medical advancement taken to be a largely necessary endeavour. In

relating to the notion of medical advancement, progress made through animal research is embedded within constructions of the past, present, and future. For instance, the current state of medicine is taken as emblematic of the progress made by using animals in research, i.e. 'I think of all the advances in medicine which would never have happened if not for laboratory animal research' (Mass Observer F5890), and also is indicative of the need to keep using animals 'for the [further] advancement of medical knowledge' (Mass Observer T2543).

In regarding animal research as a crucial factor in the development of today's medical practice, the suggestion is that non-human animals as scientific tools represent a building block for its future advancement. With this, there is the suspicion that the important medical provisions available now may have been jeopardised if the use of animals in research had been disrupted in the past and therefore the same logic can be applied to future developments. In other words, disturbances in the use of animal models now may threaten the success of the medical field in the future. Such projections of the past onto the future are reflected in Engdahl and Lidskog's (2012) analysis of how citizens make sense of science. As they claim, '[c]itizens' interpretation of science always includes projection of the familiarity of the past onto the unfamiliarity of the future' (Engdahl and Lidskog, 2012: 708). Hence, implicit in readings of today's medical treatments as evidence of the efficiency of animal research are expectations of continuing advancements, and, as will be discussed later in this section, such expectations are particularly concerned with 'cures' for certain health conditions and ending human suffering more generally.

Also important to such understandings of medical progress is trust in expert opinion on the matter. As demonstrated in the first quoted Mass Observer's (A1706) explanation that 'I can absolutely understand how medical scientists can argue that there would be no advances in medicine if one wasn't allowed to practice and experiment on animals', the claims of relevant experts can be crucial for individual sense-making of the use of animals in research. Such expressions of trust in claims made by those in the biomedical community on the necessity of animal research to medical progress are imbued with a clear sense of reciprocity. By trusting that animal research is integral to medical progress and validating the necessity of such uses of animals Mass Observers expect to reap the rewards promised, such as the discovery and deliverance of new treatments and cures for illnesses and disease. As another Mass Observer (H260) explains –

> ‘Today we have sanitation and antiseptics to cure filth, but it is only due the people who experiment to find these cures. In the past I have seen so much change and am also grateful for the pills and potions that keep me living a fairly pain free life. My Parents and Grand-Parents were not so lucky and I have seen them suffer without help. So I say to the scientists keep on working and finding new cures. We, the public, do not need to know too much about your experiments. We must trust you to keep the animals pain to a minimum, in order to keep our pain to a minimum!!
>
> Keep on using your wonderful brains, for which we are grateful.’ (Mass Observer H260)

Here again, the necessity of animal research is seen as justified by healthcare improvements witnessed through personal experiences over time. This Mass Observer (H260) constructs health in terms of the prevention or management of pain. Their ability to live a ‘fairly pain free life’ is attributed to the development of pharmaceuticals, ‘pills and potions’ and, correspondingly, ‘the people who experiment to find these cures’. Here, animals in the context of scientific research become linked to human bodies through the health benefits they are seen to produce and the eventual cures they promise. This view of laboratory animals is observed by Haraway (1997) as she writes about the rhetoric around Oncomouse, the first patented mammal, genetically modified to have an active cancer gene. Critical of such perceptions of animal models as sacrificial saviours, Haraway identifies that ‘S/he is our scapegoat; s/he bears our suffering; s/he signifies and enacts our mortality in a powerful, historically specific way that promises a culturally privileged kind of salvation----a "cure for cancer” (Haraway, 1997: 79). Such understandings of animals as models for human bodies, in sickness and health, also echo a finding of Lund et al.’s (2012) study of attitude formation towards animal research, in which participants ‘readily associated “benefits” with the notion that animal research is employed by scientists in order to model humans and their diseases’ (Lund et al., 2012a: 481).

Appearing to address the biomedical community on behalf of ‘the public’ and also appeal to their fellow members of the public, the above Mass Observer (H260) goes on to emphasise a citizenly trust in biomedical researchers by stating that ‘We, the public, do not need to know too much about your experiments. We must trust you to keep the animals pain to a minimum, in order to keep our pain to a minimum!! Keep on using your wonderful brains, for which we

are grateful'. Trust is configured here as an unequivocal faith, through the cultivation of which researchers can act without the constraint of public accountability and intervention. However, such a reading does not mean that the trust directed towards biomedical scientists is blind and without expectation. Rather, one way of interpreting such admissions of trust is to understand them as performative, serving to emphasise what is at stake in the practice of animal research and the responsibility that scientists bear to publics and the animals that are used on their behalf. On this point, Szerszynski (1999) claims that '[e]xpressions of trust in institutions can be […] directive declarations whose intention it is to remind institutions of their obligations to live up to that trust – to fill an empty trust, belatedly, with its justification' (Szerszynski, 1999: 250). Given the prominence of understandings of the MOP as building a socio-historical record of everyday life (Sheridan, 1996), such writing may indeed be intentioned to address a public audience and to fulfil part of their role as a panellist to observe and document the practices and opinions of others.

In this way, pleas for other members of the public to trust that the conduct of biomedical researchers will meet societal sensibilities, that those involved will minimise the pain of the animals they use, can be interpreted as performing multiple functions. In emphasising the trust that 'we' on the outside must have in scientists' minimisation of the pain that laboratory animals might experience, the above Observer (H260) can also be recognised, following Szerszynski, as appealing to scientists to fulfil this expectation, the implementation of which then represents a way for them to personally justify the endeavour. With this, the costs accrued, i.e. the harms suffered by laboratory animals, for 'our' benefit can be reconciled as a necessity. Ultimately, then, using non-human animals in ways which may inflict pain and suffering upon them, albeit pain which is hopefully minimised, is trusted as a central way for preventing human pain and is thus regarded as an enterprise that 'we' as a society should faithfully support.

7.2.2 Applying medical knowledge

In identifying animal research as an important contributor to biomedical progress, some Mass Observers also voice explicit concerns about research activities that do not have clear applications for the knowledge they aim to produce. Basic research, research which is often characterised as 'curiosity-driven' (Duronio et al., 2017), was viewed by some as disconnected

from the development of clinical treatments and thus less justifiable. As the following Mass Observers describe –

> 'I've always had very mixed feelings myself. I really don't like the thought of it at all and when you read some of the horrific stories of the type of experiments carried out in the name of research it makes you very angry. But I do feel that trying out drugs or surgical procedures on animals prior to their use on humans is a valid option, but I don't agree with experiments just for the sake of it to see what happens.' (Mass Observer R1025)

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> 'I am not against using animals in research but I think there should be a specific rationale and goal in mind that is, at least potentially, likely to be of benefit to mankind or, indeed, other animals. This would be along the lines of medical research into combating diseases, developing vaccines and improving treatments.' (Mass Observer R4526)

Here, both Mass Observers articulate concerns around research using animals which is conducted 'just for the sake of it to see what happens' (Mass Observer R1025) or does not have 'a specific rationale' (Mass Observer R4526). In both excerpts, legitimate reasons for using animals in experiments are suggested in terms of developing and safety-testing medical treatments for human health issues. Suggested in such writing is that animal research is made legitimate, necessary, and morally acceptable through the witnessing of tangible clinical outputs. As discussed earlier, given that the benefits of animal research may be understood as part of a promised future of medical progress, ambivalences over curiosity-driven research hint at the limits of such futuring. In other words, the outputs of animal research may be viewed as belonging to a future but, in order to legitimise the current use of animals, this future cannot be too distant or vague. Given that in 2019, over half (57%) of the experimental procedures involving animals conducted were categorised as for basic research (Home Office, 2020: 10) such anxieties are of no small consequence.

In a similar vein, some Mass Observers recalled high-profile cases of developmental biology research involving cloned animals, such as 'Dolly' the sheep, the first mammal cloned from an adult cell, and tissue engineering research such as the 'Vacanti' mouse with an ear-like

structure grafted onto its back. Given the frequency with which both animals were mentioned across MOP responses to the Directive on '*Using animals in research*', it is fair to say that they remain icons of animal research with resonance in the United Kingdom. For many, such stories and the images that accompany them continue to represent the power of biomedicine and its role in creating potential futures that might be anticipated with both anxiety and excitement. For the following Mass Observers, Dolly the sheep and the Vacanti ear-mouse are reflected on as, on the one hand, an example of the futility of some research endeavours and, on the other, evidence of the cumulative and unpredictable nature of scientific progress, in which societal benefits sometimes only become clear in retrospect –

> 'I specifically remember when Dolly the sheep was cloned and it was on Newsround and explained in a typical child-friendly way. I just accepted it back then, whereas now I think it's like something from a sci-fi film, and I wonder what benefit the feat actually brought us? It was a bizarre, freaky thing to do and I can't help but think of all the poor little animals that must have been slaughtered to or achieve the end goal. It seems like useless science to me. We shouldn't play God to that extent. I feel like genetic abnormalities are triggered when we do things against nature, and that clones will die awful premature deaths of terrible diseases. Without looking it up, I can't remember if Dolly the sheep happened in Britain, or somewhere like Korea. I think it's wonderful that British scientists cracked the DNA code, but when they do pointless things it's stupid.
>
> I also remember the mouse with an ear grafted onto it very vividly. It has a very shocking image and I found it difficult to look at. I can't remember what point it actually proved. Things like that come across as wanton cruelty and that's why people get so upset about it. Sometimes I wander what these scientists think about when they close their eyes at night.' (Mass Observer B5342)
>
> ~
>
> 'Dolly was about cloning, and although I thought it was a pointless and a cruel thing to do at first, I think now that there was a point to it. Scientists have discussed cloning as a medical treatment for a long while, and perhaps it is better to try it on a sheep rather than a human, although poor Dolly got arthritis. It is quite exciting to think that some

of the research resulting from Dolly could improve and save lives in the near future.' (Mass Observer T4715)

Key to the way in which Dolly and the Vacanti mouse are made sense of in the above MOP excerpts is the expectation that the suffering of research animals should bear clear and deliberate outputs. As the second Mass Observer (T4715) notes, such benefits may only be fully comprehensive later down the line, with time enabling a recasting of such experiments as worthwhile and of the harms amassed through them as necessary. Contrasting with concerns that clinical benefits of research should not be *too* far in the future, such retrospective writing reveals how necessity can be constructed over time, instilling something felt to be abstract and pointless at the time with a newfound utility. Similar concerns about the application of research findings were observed in Macnaghten's (2004) study of current and future applications of animal biotechnology via lay focus groups, within which some participants questioned 'the apparent 'usefulness' of the prospective applications and their known and unknown consequences' (Macnaghten, 2004: 545).

Indeed, this reflection on the realisation of valuable research benefits over time can be understood as evidence of the overlap or interdependence identified between basic and applied or 'translational' research (Flier and Loscalzo, 2017). Correspondingly, some reject the justification of an ethical distinction between the two categories. As Stefan Treue, head of the German Primate Centre in Göttingen is quoted as suggesting in a news piece for *Nature*, 'It's not a logical argument to say, 'I accept applied research but I don't want the underlying basic research', because you can't have one without the other. I have to admit that partly the science community is to blame for not explaining that more clearly and more frequently in public' (Cressey, 2011: 453). However, although the distinction between basic and applied research may not be as clear-cut as their separation first indicates, this data analysis shows that the distinction between these forms of research matters in terms of everyday expectations of benefits to tangibly and materially justify the harms inflicted upon animals.

Such consequentialist interpretations of the necessity of animal research are evident in the harm-benefit analysis which underpins the ethical review of each experiment proposing to use animals. However, given the need to anticipate the benefits of a procedure before it is completed, the generation of 'actual' benefits through such work is always subject to uncertainty. As the advisory body Animals in Science Regulation Unit (ASRU) discuss in a 2015

advice note, '[s]ince the HBA is done before the work is started, there is always some uncertainty about benefit delivery. This makes the evaluation of benefit difficult. It is, by necessity, a value-laden judgement of the benefits and the likelihood of their delivery' (Animals in Science Regulation Unit, 2015a: 17). Therefore, given that the future benefits of biomedical research are often unknowable it is understandable that considerations of risk are also involved in Mass Observer understandings of whether certain uses of animals are justifiable. This relates not only to the potential harms of the animals involved in such research but also, with a lack of control over where the research might lead, what outputs it might generate, what precedents it may set, and the creation of potentially harmful futures for humans.

In the case of animal biotechnology, particularly that which involves genetic modification, lay concerns around such risks have been well-documented (Frewer et al., 1997; Macnaghten, 2004; Lassen et al., 2006; Črne-Hladnik et al., 2009) and are often bound up with a valuing of 'naturalness' and a juxtaposition of science and nature. Lay responses of this manner are documented in a 2005 public consultation on animal research conducted by the Nuffield Council on Bioethics, which states that many respondents were 'opposed to the genetic modification of animals on the grounds that they felt it was unnatural and breached the intrinsic value of an animal' (Nuffield Council on Bioethics, 2005: 306). Articulating a similar concern, the former quoted Mass Observer (B5342) writes about the creation of Dolly the sheep, 'I feel like genetic abnormalities are triggered when we do things against nature, and that clones will die awful premature deaths of terrible diseases' (Mass Observer B5342). Suggested here is that by interfering with the genetic nature of animals, scientists will cause unintended harms, which this Mass Observer implies is retribution for transgressing nature and venturing to 'play God'. Yet, that such concerns are expressed alongside the judgment of this case of cloning as '*useless science*' perhaps reveals how ideas of naturalness and the limits of science are also influenced by expectations of discernible biomedical benefits. With the research effort that produced Dolly the Sheep seen as failing to proffer any substantial wider benefits, for this Observer (B5342) the harms incurred are thus unjustified. The case of Dolly the sheep is contrasted with work around the human genetic code, with the Mass Observer stating, 'I think it's wonderful that British scientists cracked the DNA code, but when they do pointless things it's stupid' (ibid). Implied here is that lay understandings of the necessity of

animal research are not limited to either purely deontological or consequentialist frameworks, but may, at times, mobilise both. Overall, this reflects that, when considering the application of biomedical knowledge produced through animal use, Mass Observers may mobilise a harm-benefit framework which also involves trust and risk mitigation. Furthermore, this data analysis illustrates that the benefits upon which acceptance of animal research hinges may be subject to particular time-bound expectations.

7.2.3 Identifying medical priorities

In constructing the use of animals for medical research as necessary, not all medical applications are judged as equal. In describing outcomes of research using animals which are seen to justify the endeavour, Mass Observers often referenced such aims as 'saving lives' or 'preventing suffering'. As the following MOP excerpts suggest, such medical and *moral* imperatives are largely held as being necessary or more necessary than other research goals and their expected outcomes perceived as outweighing the problems around this use of animals –

> 'If it can help save human lives in the future, then I see nothing wrong with it, generally speaking.' (Mass Observer K798)

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> '[…] 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)

~

> 'It is true I have been disturbed by pictures of animals growing physical bits which should not be there, but on the whole I am not disturbed by controlled experimentation which is designed to lead to reduced human suffering.' (Mass Observer W2322)

Saving human lives and minimising human suffering are discussed here as largely acceptable reasons for using animals in experiments. Such motivations for using animals become exceptional in that they represent not only medical imperatives but also moral imperatives. Drawing back to the previous chapter on the role of care obligations in shaping how Mass

Observers relate to laboratory animals, expectations of medicine as a field can thus be seen as shaped by care obligations to alleviate, and work to end, human suffering. In articulating the moral good of medical interventions into human morbidity and mortality, such expressions perhaps reflect that though non-human animals are at some level included in one's moral community, what are seen as the ultimate human interests (i.e. to live without suffering) are still to be prioritised at their expense. Suggested by such boundary-formation around which medical aims justify animal research is that this enables those who find animal research morally uncomfortable to demonstrate a 'balanced' ethical stance on the issue, conveying consideration and care for both humans and non-humans. In other words, by constructing acceptable scientific uses of animals as those which concern matters of 'life or death', the ethical problems raised by using animals in science perhaps become less nuanced, with the stakes presented as of critical urgency.

Related to this denial of nuance, in constructing necessary uses of animals in research as framed by 'life or death' decisions, the above Mass Observers rely on generalising phrases and abstractions. This can be seen in the former and latter Observers' use of phrases such as 'generally speaking' (Mass Observer K798) and 'on the whole' (Mass Observer W2322), and questioning of the pragmatic potential of animal research, i.e. 'if drug testing on animals could support the creation of life- saving treatments nowadays […]' (Mass Observer P5940). Such devices work to provide distance from the specifics of scientific experiments using animals, whether caused by a lack of detailed knowledge or the desire to maintain consideration of animal research at a broad level, at which it cannot be threatened by the minutiae of individual cases. Indeed, the use of such rhetorical positioning as a 'trump meta-argument' in discussions of the acceptability and necessity of animal research was observed in Michael and Brown's (2004) study of lay views towards xenotransplantation. As they describe, '[t]here is recourse to some vision of a generic life—life per se—which trumps all critical views or negative valuations of any biomedical innovation' (Michael and Brown, 2004: 387).

However, as the conditionality of the MOP excerpts above suggest (i.e. their hinging on 'ifs'), such constructions of animal research as a matter of life and death and of freedom from suffering are also subject to uncertainty. Therefore, in demarcating particular research endeavours as necessary uses of animals, these Mass Observers are perhaps attempting to call such a reality into being. In this way, such hopes reflect not only affectual investment in

biomedical research but, as Novas (2006) puts it, 'a political and economic materiality that seeks to bring to fruition the many future possibilities inherent in the science of the present' (Novas, 2006: 289). This analysis of MOP writing suggests that, in the case of biomedical research using animals, support for the practice often hinges on hopes for advancements towards what Michael (2017) has termed 'big futures', futures which 'imply very substantial, qualitative changes (eg some sort of epochal 'break'), that are widespread and far-reaching, whose spatio-temporal horizons are relatively large-scale' (Michael, 2017: 510), here being futures in which major diseases have been cured. Therefore, rather than representing an overall acceptance of the use of animals for medical research, such admissions might instead signify an active hoping that such motivations for using animals are actualised. Such a 'rhetoric of hope' (Mulkay, 1993) can thus be interpreted as performative, articulating citizenly expectations of science in the aim of supporting their fulfilment.

In the context of animal research, particularly salient are Brown's (1998) observations of hope discourses in biotechnological innovation, which characterise hope as 'capable of designating a vocabulary of survival in situations and environs of action where survival itself is at stake' (Brown, 1998: 21). They continue that, generally, 'discourses of hope in modern biomedicine [..] are tied into what counts as a meaningful response to death and dying' (Brown, 1998: 22). 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 also shapes how Mass Observers construct medical imperatives that justify animal use. In other words, the construction of health as *survival* lends to the construction of medical advancements as necessary. Through the investment of hope in animal models as a defence against a threatening future, the prohibition of their use therefore becomes akin to leaving patients and eventual-patients vulnerable to the future, unable to pre-empt or defend against the suffering it will inflict.

Though articulated through the culture surrounding cancer, Jain's (2007) concept of 'living in prognosis' is useful to consider here as a standpoint which influences the way that many Mass Observers related to animal research. Jain writes that through prognosis of cancer, '[o]ne is moved into an abstraction that seems explanatory through its gesture toward universality, yet one will only ever live or die. Either way, one's future will only be absorbed into the truth

of prognosis, a truth that recursively projects a future as it acts as a container for a present' (Jain, 2007: 79). Such a future of totalising prognosis can be seen as attached to animal research and its representation as a mode of safeguarding against an impending future which threatens individual and collective human survival. The mobilisation of such risk-averse futures therefore constructs a world in which the possibility of human illness and death in the future becomes more salient than the suffering and death of animals in the present, in that such a future *will* arrive and is thus demanding a response in the present.

In their hoping for a future that animal research can either bring into being or prevent, Mass Observers often described particular health conditions as having more justificatory power in relation to the scientific use of animals, as the following two excerpts suggest –

> 'I am not against the use of animals for medical testing though I think testing for cosmetics should not occur. I suppose it's a case of the ends justifying the means. If we can eradicate diseases like ebola, malaria, if we can learn more about cancer, multiple sclerosis, heart failure, diabetes and all the other dreadful diseases which afflict people then I think that carefully controlled experiments on animals are justified. I think the control is of fundamental importance – and suffering should be absolutely minimised.' (Mass Observer S4743)

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> 'I would never, knowingly, buy a product that I don't deem as a necessity – eg. makeup, perfume, cigarettes (not really applicable as I don't smoke) that has been tested on an animal bred for the purpose. I have a different attitude to animal testing in relation to drugs, but then again, it would have to be drugs that are life saving, for cancer for example.' (Mass Observer E743)

Both Mass Observers above can be read as indicating that some health conditions are of higher priority and research in these areas which uses animals is therefore more morally justifiable. The conditions mentioned may be associated with high mortality rates or reduced lifespan, highlighting the attention given to extensions of life, as the first Mass Observer (SE743) qualifies 'it would have to be drugs that are life saving, for cancer for example'. Again, such research aims are discussed in a way which relates to their ends, suggesting expectations that related uses of animals will work to 'eradicate' (Mass Observer S4743) a targeted ailment

and ultimately *save* lives. As briefly detailed earlier, these types of expectations circulate around medical research more generally. However, here, they work to justify the ethical problems that animal research raises, reflecting affective investments in the material reality promised by the harm-benefit model and not just acceptance of its intentions. In other words, such expectations signify an apparent 'accept*ing*' of animal research which is premised on the condition that experiments deliver substantial medical benefits.

Inevitably, the other side to judging some health conditions to be more deserving of research attention and as justifying the use of animals is that other health conditions may be regarded as undeserving. As the following Mass Observer (F4813) indicates, health conditions that are seen to be brought on by or as having the potential to be resolved by an individual's own actions may be felt as medical issues of lesser importance and thus the use of animals for such research judged as less justifiable –

> 'To my knowledge I have never come directly in contact with someone working in laboratories using animals for research. I have, however, often seen people on documentaries carrying out work in this environment and they come across as serious scientists who are using their skills to carry out work which they feel will be of benefit to others; such documentaries, however, are usually focused on work relating to development of treatments/cures for serious medical conditions rather than on work relating to development of cosmetics/weapons/treatments for conditions which could be avoided through lifestyle changes (e.g. nicotine patches for those trying to give up smoking who could instead just go "cold turkey") and I think I would feel less kindly towards animal researchers working in these fields' (Mass Observer F4813)

At a general level, such boundary formation between 'serious medical conditions' and 'conditions which could be avoided through lifestyle changes', a differentiation which is acknowledged as a societal concern in the Animals in Science Committee's (ASC) review of the HBA (Animals in Science Committee, 2017: 61), perhaps reflects the prevalence of personal health responsibility narratives under neoliberal healthcare regimes. As Peacock et al. (2014) observe, neoliberal discourses 'cohere around a valuing of the self-regulating, self-surveillant and autonomous self, where those who are not equal to this task face both strain and fears that others will judge them as insufficiently responsible' (Peacock et al., 2014). Given the emphasis on individualism and personal rather than state responsibility in

contemporary neoliberalism, the mobilisation of narratives around personal responsibility for one's health and illness in relation to animal research may be unsurprising. Indeed, the impact of neoliberalism on public healthcare provisions in the industrialised West and cultural understandings and practices of health more broadly have been well documented (see McGregor, 2001; Teghtsoonian, 2009; Ayo, 2012). Thus, with these shifts towards the privatisation of healthcare, Rose (2001) claims that '[e]very citizen must now become an active partner in the drive for health, accepting their responsibility for securing their own well-being' (Rose, 2001: 6).

Discussions of health responsibility have been particularly pertinent in relation to the transplantation of organs which are often associated with 'self-inflicted' unhealthy lifestyle choices, a prime example of which being liver transplants (Glannon, 1998; Brudney, 2007; Glannon, 2009). Representations of ill health as the product of personal failings to *be* healthy may not only have ramifications on equal access to healthcare but also, as suggested by the above Mass Observer (F4813), on research priorities and the subsequent development of medical treatments. Yet, such categorising of medical conditions more widely reflects that research funding is not equal and priorities are already made in practice which mean that certain health conditions, and the people that experience them, have more or less clinical treatment options at their disposal. Such boundary-formation around which health conditions warrant scientific investigation using animals also works to construct animal research as a method that deals primarily with 'cures' and not prevention, with the latter represented above as within an individual's control and not requiring medical intervention, i.e. one 'could instead just go "cold turkey"' (Mass Observer F4813).

Regardless of the validity of such claims that certain health conditions are preventable, perhaps this thinking demonstrates a way of unsettling the ultimate prioritisation of interests represented through animal research, that being the preference given to improving human life at the expense of non-human animals. Reading the above Mass Observer's (F4813) writing through the dominant harm-benefit framework demonstrates that human health does not always trump that of non-human animals. In this context, mobilising personal health responsibility narratives might signify a way of balancing considerations for laboratory animals alongside humans who require medical interventions by employing hierarchies of human health and illness which destabilise the prioritisation of human interests.

Overall, the data analysis presented in this section demonstrates that constructions of necessary scientific uses of animals hinge on advancing the field of medicine. Yet, this overarching objective has particular conditions, with the application of medical knowledge and the witnessing of this through personal experiences of healthcare developments over time being crucial to legitimising animal research as necessary. As well as this, many Mass Observers discuss certain aims and areas of health and illness as priorities for biomedical research using animals. Hence, medical purposes for using animals in science are shown as having conditionalities, the fulfilment of which is central to accepting their necessity.

7.3 Defining medicine

In further exploring understandings of medical advancement as a necessary purpose for using animals in research, this second section will analyse a distinction frequently made throughout MOP responses between the 'medical' and the 'cosmetic'. In doing so, the example of cosmetics and product testing as a way of contrasting and thus defining what constitutes medicine will be examined, along with Mass Observers' reflections on instances where this dichotomy becomes blurred.

7.3.1 Medicine as not cosmetics

In articulating the necessity of using animals in medical research, many Mass Observers contrasted medical research and its underlying drives, i.e. advancing medical knowledge and treatments, alleviating human suffering, and 'saving lives', against the use of animals for developing and safety-testing cosmetic products. Indeed, such a distinction is also evident in the scientific literature (Kabene and Baadel, 2019). As the following excerpts illustrate, in making the case for the exceptionality of using animals for medical purposes, common across MOP responses were uses of the example of cosmetics and product-testing as a 'foil' to validate the distinction being made –

> 'I consider work on cosmetic products frivolous but people working on medical research which has tangible benefits for people's lives I consider to be doing good work.' (Mass Observer S5780)

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> 'As a teenage girl I applauded the introduction of cruelty free cosmetics, because cosmetics aren't necessary to keep a person alive – that comes under my dislike of

> cruelty for recreational purposes mentioned above. But drugs are made to prevent human suffering and I am grateful for the human work and animal life that has gone into providing that for me.' (Mass Observer C5831)
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> ~
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> 'I find it a really tricky subject and I think I have probably changed my views over time. I am more aware now of the scientific advances which have used animal testing before applying to humans, and I do think that this is valid. I don't however think that there is justification for animal testing in non-medical areas (such as cosmetics) – to me if it has the potential to save lives or help combat illnesses then that is where I think there is a justification.' (Mass Observer S3711)

The juxtaposition of using animals for the development or testing of cosmetic products with medical research was common across MOP accounts, with the former often described as frivolous and absent of the association that medical research bears with saving lives and alleviating suffering. In making this distinction, the use of animals for 'cosmetic testing' was often presented as self-evidently unjustifiable in comparison to medical research, which, as can be inferred from some of the above excerpts, was taken to be nuanced but ultimately worthwhile. In this way, cosmetic testing is raised in order to act as an unambiguous example of the socio-ethical parameters of using animals for research, parameters that often become blurred when discussing the use of animals for medical purposes. In doing so, evoking the case of cosmetic testing helps to define what medical research *is* through contrast with what it *is not*, as Gieryn (1983) puts it, 'the public better learn about "science" through contrasts to "non-science"' (Gieryn, 1983: 791). This can be seen as constituting not only scientific boundary work, but also 'ethical boundary work' (Wainwright et al., 2006; and for analysis of ethical boundary work by laboratory scientists, see Hobson-West, 2012) around what is and is not an ethically legitimate research endeavour.

There are different ways to interpret the mention of cosmetics in discussions of animal research. In their investigation of 'public views on openness' around animal research, Ipsos MORI interpreted references to cosmetic testing by participants as reflective of 'inaccurate and outdated beliefs around *why* research is carried out on animals', stating that '[e]ven when presented with the facts that cosmetics research is no longer legal in the European Union, many still kept referring to 'cosmetic testing' when discussing animal research later in the

sessions' (Ipsos MORI, 2013: 17). However, this analysis of writings from the MOP suggests that discussion of the use of animals for the development and testing of cosmetics does not merely represent a lack of knowledge or belief in a persistent 'myth' (Ipsos MORI, 2013: 57) about animal research. Rather, as touched on in the first data chapter, in such discussions, expressing a clear judgment on the unacceptability of cosmetic-related research may represent a way in which people can demonstrate clear ethical limits towards an issue which is often perceived as a moral dilemma.

One way of interpreting the frequent mention of cosmetics across MOP responses is that it indicates the relevance of the practice of consumption to discussions of animal research. Commenting on the process of governing through consumption, Rose (1999) argues that '[d]isciplinary techniques and moralizing injunctions as to health, hygiene and civility are no longer required; the project of responsible citizenship has been fused with individuals' projects for themselves' (Rose, 1999: 88). In this construction of selfhood as a project to be actualised through consumption practices, so called 'ethical consumption', which Barnett et al. (2005) conceptualise as 'a form of action-at-a-distance', is to be recognised as a way of constituting moral selfhood or part of a 'moral selving' (Allahyari, 2000).

Given the performativity of consumption practices, the option of choosing 'cruelty-free' cosmetic products, those with no animal involvement in their development or safety-testing, may thus signify a way in which agents can act upon their moral convictions around the use of animals in research and development processes and, further, intervene by 'voting with one's wallet'. Within this consumer context, the 'cruelty-free' label can be seen as casting animal research practices (and the products they bear) as 'cruelty-involved' (indeed, this suggestion is also inferred by UAR chief executive Wendy Jarrett (see Devlin, 2014)) and insinuating, given that the replacement of animals has been possible in this area, that their use is no longer necessary elsewhere. Looking beyond the consumer context, more than simply being used to describe consumptions practices or products themselves, 'cruelty-free' as a label can be applied to modes of living more broadly (Potts and Parry, 2010). Therefore, given the importance of consumer contexts for ethical performances, the repeated mention of cosmetics and 'cruelty-free' products in animal research discussions cannot simply be interpreted as reflecting a lack of awareness of current legislation. Rather, cosmetic products and 'cruelty-free' labelling, in which animal research is present through its absence, should

be recognised as a significant way in which people encounter animal research in the everyday and, unlike other areas of scientific research, as an issue on which clear-cut ethical positions can more easily be demonstrated.

Moreover, by locating animal research in the everyday contexts which are central to Mass Observation, the mention of cosmetics may be understood not as a deficit of regulatory knowledge, but, conversely, a manifestation of the banning of this type of animal research at both the national and European level (EU Directive, 2010). Such writing about the unacceptability of 'cosmetic testing' which uses animals may function to *reaffirm* these sanctions on the scientific use of animals. In this way, the discussion of cosmetics in relation to animal research can be viewed as occurring in conversation with the ban on using animals for cosmetic testing, which, given the role that citizen lobbying played in its accomplishment (McIvor, 2019), may loom large in lay imaginations of animal research.

Additionally, given that commodity chains can often extend beyond national boundaries, national legislation cannot always be relied upon to guide ethical consumption practices, as the following Mass Observers suggest –

> 'I am glad animal testing for cosmetics is banned in the UK although companies can still test abroad and then sell products here.' (Mass Observer M4780)

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> 'Many years ago, I remember one highly publicized example of rabbits being used for eye make-up research which horrified me and many millions of others – it was just so very wrong. I am not the type of person to protest but I remember signing a petition at the time and I still believe that animal testing for solely cosmetic purposes is totally unacceptable. I believe it is now illegal or at least strictly controlled in this country but it concerns me that so many products are now being brought in from abroad - China in particular and their animal welfare standards are not even close to ours.' (Mass Observer F5890)

Both of these Mass Observers identify that the use of animals for developing or safety-testing cosmetic products is banned in the UK, though still express concern about products imported from countries without such legislation in place. Such recognition of the global context in

which commodities circulate therefore renders partial the impact of national or regional (EU) law and may be seen by consumers as requiring personal diligence when attempting to consume in line with one's own ethics. In the case of cosmetic products, this means that the 'Leaping Bunny' logo[9], the widely recognised symbol of 'cruelty-free' products, is more than symbolic. This logo tells consumers that a brand does not use animals in the production and safety-testing of any of their products and adheres to these standards in all countries, not selling in those requiring animal testing by law (i.e. Mainland China). The topic of cosmetics may therefore still find relevance in discussions of animal research due to the global context of consumption. Considering this, perhaps the repeated mention of cosmetics could reflect a citizenly urge to enforce such standards upon the global market or prevent the sale of such products within national or European borders. Paying attention to the global marketing of cosmetics therefore means that the use of animals for 'cosmetic testing' also remains pertinent at a procedural level to animal research discussions.

7.3.2 Cosmetics as medicine

On the other hand, rather than reinforcing the boundary between cosmetics and medicine, some Mass Observers touch on nuances within this distinction and express uncertainty around deeming cosmetics as unequivocally unnecessary. As the two Observers below discuss -

> 'I think testing for cosmetic purposes has to be made illegal, on the basis that it's a vanity product. But for some people it's a necessity – for example for those who have suffered extensive scarring or disfigurement and need a certain type of makeup for their mental and emotional well being.' (Mass Observer E743)
>
> ~
>
> 'I still don't buy cosmetics or products tested on animals because it's not necessary to do so, and it's pointless to harm a rabbit with shampoo.
>
> But I don't think twice about whether or not medication has been tested on animals […]

[9] https://www.crueltyfreeinternational.org/what-we-do/corporate-partnerships/prohibitions-cosmetics-testing-eu-and-elsewhere

> I think I'd be against a drug tested on animals that was for something of very dubious efficacy, say a weight-loss pill that didn't really work, or an injected substance used for cosmetic purposes. That said, I know some drugs are used for cosmetic procedures and for medical purposes : as a recipient of botulinum toxin for migraine and chronic pain I might sound hypocritical saying I disapprove of animal testing on such substances. Morally I object to botox being used for cosmetic reasons, especially if it means an animal has suffered in the process. But I don't think about animals being harmed when I get my treatment, only the resulting respite from my symptoms.' (Mass Observer T4715)

As the first Mass Observer (E743) describes, cosmetics can at times be seen to serve a similar purpose to medical treatments, acting as tools to promote positive mental or emotional health. Here, external physical conditions i.e. 'extensive scarring or disfigurement' are understood as having the potential to impact negatively on mental health, and in such cases, cosmetic products transcend their common status as 'vanity products [sic]' and become akin to medical interventions. The second Mass Observer (T4715) acknowledges that some drugs are used for both 'medical' and 'cosmetic' purposes and, as an example of this, considers their personal receipt of Botulinum toxin (commonly referred to as 'Botox') for pain relief. A distinction is made between their usage of Botox, 'for migraine and chronic pain', and 'botox being used for cosmetic purposes'. However, this Mass Observer (T4715) also recognises their lack of reflection on the suffering inflicted on animals for their own receipt of the treatment, thinking about 'only the resulting respite from my symptoms'. Such admissions reveal how the construction of ethical boundaries between cosmetics and medicine may be experienced, even by those who erect them, as blurred.

Indeed, the blurring of both categories has been charted through the emergence of a new medical field: 'aesthetic medicine', which, Edmonds (2013) claims, 'aims at nothing less than fusing health and beauty' (Edmonds, 2013: 233). In considering the medical appropriation of beauty, categorising biomedical research endeavours as for 'cosmetic' or 'medical' purposes becomes trickier. Furthermore, the example of research into the efficacy of using aesthetic treatments such as Botox injections to reduce clinical depression, based on ideas that Botox 'may make patients appear more physically attractive and/or express less negative affect

during social interactions' (Coles et al., 2019: 295), illustrates the complex entanglement of beauty and biomedicine, together seeking to make health interventions.

This blurring of cosmetics and medicine has also been prominent in feminist theorising of 'beauty' and the female body (Wolf, 1991; Heyes, 2007), which has even demonstrated overlap between medical concepts such as 'cosmetic' and 'reconstructive' surgery (Naugler, 2012). Such literature has sought to both politicise the growing prevalence of cosmetic procedures and the booming beauty industry and understand the motivations of those, mainly women, who utilise such products and procedures. In situating the use of cosmetics within patriarchal cultures, feminist approaches enable a reinterpretation of women's investment in their appearance as culturally and politically charged, and, phenomenologically, as part of a wider performing of a normative feminine body (Dolezal, 2010; Heggenstaller et al., 2018; and for discussion of race in this area see Heyes, 2012; Menon, 2017) which has been appropriated through health discourses. Though not unproblematic, and with much contention around the agency of those who elect to undergo cosmetic procedures (Morgan, 1991; Davis, 1995; Heyes and Jones, 2009; Alsop and Lennon, 2018), recognising the location of such practices in structures which scrutinise the appearance of women acknowledges the role that cosmetic bodily interventions play at personal and political levels, thus granting them more meaning than is often assumed.

Overall, this section has aimed to demonstrate the ways in which constructions of cosmetics as unnecessary remain meaningful and relevant in animal research discussions. In paying attention to everyday contexts, instead of merely signifying a lack of knowledge about current legislation the frequent mention of 'cosmetic testing' can be seen as reflecting the key role that consumption plays in ordinary encounters with animal research. As argued, within such contexts, asserting one's opposition to the use of animals for developing or safety-testing cosmetic products remains salient due to the marketing of 'cruelty-free' products and the global nature of commodity chains, which generate uncertainty about products without such labels and the regulation (or lack of) in countries that export products to the UK. As well as this, discussion of the unacceptability of using animals for 'cosmetic testing' can be understood as a way for Mass Observers to enact clear ethical limits towards the scientific use of animals, which, as illustrated in the previous section, can become blurred in regard to medical research. As argued earlier in this chapter, by their common associations of

biomedicine with altruistic aims of alleviating suffering and aiding the treatment of 'serious' diseases and illnesses some Mass Observers can be seen as performing ethical boundary work. In such framings, the advancement of medicine is treated as an ethical purpose for using animals and non-medical usages, such as the prime example considered here of 'cosmetic testing', are met with suspicion and concern. However, as this section has demonstrated, some Mass Observers also reflect on the overlap between 'medical' and 'cosmetic' categories and identify areas in which cosmetic products and procedures may serve 'medical' purposes, thus troubling a clear-cut distinction between necessary and unnecessary (and ethical and unethical purposes) for using animals in science.

7.4 Unsettling biomedicine as progress

Unlike the previous two sections which have analysed the ways in which Mass Observers make distinctions between 'necessary' and 'unnecessary' uses of animals in research, using the authority of medicine to navigate such judgements, this section will demonstrate how the definition and reach of medicine itself may be challenged and resisted. As will be shown, some Mass Observers offer contesting interpretations of 'medical' research and express concern over medical interventions which are seen to breach the 'natural' state of both human and non-human animals, leading to a more radical or foundational challenge to the biomedical endeavour itself. Given this, the title of this section is deliberate in its double meaning, alluding to both the act of unsettling and the experience of being unsettled by biomedicine and its entanglement with notions of progress.

7.4.1 The limits of biomedical research

The association of medicine and the 'medical' with altruism displayed in the previous MOP excerpts was not shared by all those who responded to the Directive. Although only a minority of correspondents were critical of the status of medicine, such critique is important in the way it unsettles the notion that medical advancements represent an unquestionable societal good. As the following Mass Observer's querying of the types of activities subsumed under the heading 'medical research' suggests, the medical classification is open to multiple interpretations –

> 'Of course their are all sort of questions about what is medical animal research? Is it animal research to see how many chickens can be stuffed into one crate and still

> survive to be sold, and as that affects the diets of many people is there a health aspect to that?' (Mass Observer B3010)

In imagining an experiment with clear welfare implications, 'how many chickens can be stuffed into one crate and still survive to be sold', and one which relates more closely to livestock production yet may affect 'the diets of many people', this Mass Observer (B3010) can be seen as making a point about the ambiguity inherent to the categories of 'health' and 'medicine'. However purposely provocative, such questions reveal the multiple configurations that health can take. The mundanity of this example contrasts with the classic image of the sterile laboratory, which 'displays itself as a site of action from which 'nature' is as much as possible excluded' (Knorr-Cetina, 1983: 119), as a standardised 'placeless' space (Birke et al., 2007: 37) which is afforded status as 'a moral haven, a socio-ethical domain within which things are "done properly"' (ibid, 158). In suggesting a connection between this type of 'experiment' and human health benefits, the Mass Observer (B3010) gestures to the diversity of structures in which human health is implicated and, in turn, can be read as decentring the exceptionality of 'modern' medicine. The implications of such provocative questioning regarding animal research are to challenge the taken-for-granted authority of 'medical research', a category which, as argued earlier in this chapter, is often constructed as beyond reproach and of the ultimate necessity.

The lack of specificity in what counts as 'medical research' and the performative role that this categorisation plays has been commented on by Blattner (2019). Blattner 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 and give the 3Rs only relative validity. But simply dropping the words *cancer research* cannot and should not automatically justify the use of animals' (Blattner, 2019: 176). That such critique of the vagueness of 'medical research' and the legitimising role it plays is apparent in lay understandings of animal research is important to recognise, particularly given, as discussed in Chapter 6, that some in the bioscience community have made appeals to a moral and citizenly duty to care for the health of others (Harris, 2005; Nicoll, 1991). Scepticism towards the employment of the broad category of medicine as a reason for using animals in research suggests, at least in part, that more detail is needed to provide an accurate insight into both *how* and *why* animals are being used for medical purposes.

Related to this querying of the boundaries of medical research and the category's justificatory power, a different Mass Observer (S496) questions the limits of medical knowledge, asking –

> 'Now that the scientists know so much about human bodies, do these test's ever have an end to them? How much more do scientists need to know?' (Mass Observer S496)

Charting the progress perceived to have been made in medical science, this Mass Observer questions the existence of an end goal of animal research, and perhaps scientific research in general. Such querying of the continual quest for scientific knowledge as justification for this use of animals challenges the 'research imperative' underpinning medical research, a term first used by moral theologian Paul Ramsay during a debate in 1976 and which has since featured prominently in the work of bioethicist Daniel Callahan. Callahan (2003) describes the research imperative as 'the drive to gain scientific knowledge for its own sake or as a motive to achieve a worthy practical end. Research generates not only new knowledge but new leads for even more future knowledge […] Research has its own internal imperative, that of learning still more, and more' (Callahan, 2003: 3). Discussing the research imperative's employment as moral imperative, Wayne and Glass (2010) claim that 'given the scientific soundness of any given project (in other words, its legitimacy as research), medical research is always good to pursue. Research that is not good is so only because it is not good medical science' (Wayne and Glass, 2010: 375). Critiques of the self-justifying construction of medical research are important in considering what 'healthcare' means and at which point medical research goals will have been fulfilled. As implied by the above Mass Observer (S496), personal visions of medical futures are not uniform and do not always involve the realisation of ongoing scientific research.

Relatedly, another Mass Observer considered the value of other factors in progressing medicine and management of illness and disease. As the following Observer (K4722) suggests by reflecting on their professional insights into cancer care working as a nurse, advancements made in this area are not entirely the product of biomedical research and the associated development of clinical treatments. Rather, improvements to diagnostic tools and screening practices are also important to recognise as contributing to progress in cancer care–

> 'When buying any medication for myself or family, I never think about the scientific research on animals that went into producing them. Although, I do at work, as a nurse

> giving chemotherapy to patients with cancer. I have been aware of the years, that animals have been used for scientific research in order to produce the Chemotherapy. I am acutely aware that rats have been used to help produce some of the monoclonal Antibodies and cytotoxic drugs that we administer.
>
> I have to confess, that I do feel a bit tied, as I think that animal testing for research is cruel, yet if we didn't use this practice, then we would not have seen the medical advances that we have seen today. In cancer care, I know that this hasn't been the only thing that has produced results, as screening has also got much better.
>
> But over the last 15 years, whilst giving chemotherapy, the drugs that we give have also been able to give researchers the spring board to improve on the drugs that come out next, but without using animals in the past, we wouldn't be where we are now. I do believe, that animal are not used near as much as they did years ago, as science are now able to produce a more synthetic version of drugs, that had previously used animals.' (Mass Observer K4722)

This Mass Observer (K4722) notes the contributory role that animal studies have played in developing cancer treatments, such as chemotherapy, which in their professional capacity they administer to patients. Yet, as they go on to 'confess', animal research makes them 'feel a bit tied', due to their understanding that without the previous scientific uses of animals, 'we would not have seen the medical advances that we have seen today', with the implication of this being supposed as an inability to deliver the forms of clinical care that are now available. However brief, considerations of the roles that other clinical procedures, in this case screening, are important to acknowledge in discussions on animal research due to the dominance of the research imperative across the biomedical sciences.

7.4.2 Medicine without animals: hopes for alternatives

Another consideration of importance to this topic is how some Mass Observers gestured to the future development of non-human animal alternatives, expressing hopes that such technological advancements will replace the need to use animals altogether. Even amongst Observers who conditionally agreed with the use of animals for (at least certain aspects of) medical research, hopes towards the total replacement of animal models were prominent alongside this, as the following MOP excerpts illustrate –

> ‘My hope is that science will come up with solutions to make animal testing redundant. I think technology is advancing in this direction and I feel fairly confident it will happen during my lifetime.’ (Mass Observer C3210)

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> ‘In terms of openness and educating the public, I think vivisection is something people don’t *want* to think about. I know I don’t like to. It is a necessary evil - if my husband or my baby niece got ill I probably wouldn’t care how many animals had died in the name of research - but I hope it will become less necessary as in-vitro and computer modelling techniques improve.’ (Mass Observer C5847)

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> ‘Scientific advances are producing accurate and less expensive non-animal testing methods. We now know how to grow human cells and tissues in a laboratory – without harming anyone. The rise of computer modelling techniques is also moving us forward. Hopefully we will soon reach a point when animals do not need to be used in scientific research.’ (Mass Observer D5698)

Perhaps such hopes that the scientific use of animals will, at some point, cease to be necessary help to mitigate one’s guilt and shame for ‘accepting’ the infliction of such harms on non-human animals for what are felt as both intimately personal and collective human benefits. In this vein, the expression of hope for alternatives and replacement may also reflect another way that Mass Observers can demonstrate ‘good morals’, in that although they, in some cases, reluctantly accept the current scientific use of animals, it is ultimately hoped that this use of animals will eventually be unnecessary. Implied by such expectations that animals will sooner or later be replaced by alternative models is that acceptance of their use if ‘necessary’ in the present may be undermined if such expectations are not fulfilled and the ‘present’ of the future remains one in which animals are still argued to be scientifically necessary. Furthermore, given the ways in which some Mass Observers question the pre-eminence of human interests represented through animal research and more widely, as demonstrated in the previous chapter’s examination of how Mass Observers articulate care obligations beyond anthropocentrism, trust in the ‘necessity’ of animal models may diminish if substantial advancements in this direction are not granted in the future.

Thus, alongside the rhetorical work of such hoping, helping to ease one's own ethical trouble over the condoned suffering of animals, the articulation of such hopes may be intended to play a pragmatic role in MOP accounts on animal research, in, as touched on earlier in this chapter, attempting to enrol those in the present in one's vision of the future (Michael, 2017). For instance, although A(SP)A 1986 states that project licences are only granted on the condition that 'the specified programme of work does not involve the application of any regulated procedure to which there is a scientifically satisfactory alternative method or testing strategy not entailing the use of a protected animal' (Home Office, 2014: 37), there is argument of widespread failures in exploring suitable alternatives (Knight, 2011) and also that the development of non-human animal alternatives is significantly underfunded (Taylor, 2014; Taylor, 2019), therefore maintaining reliance on animal models. Given this, to take seriously the prominence of hopes for the total replacement of animals in MOP writing on animal research would be to acknowledge lay interest in increased funding for developing alternative models.

Therefore, in recognising lay emotional investment in alternatives, the emphasis research advocacy groups like UAR place in statements such as '[a]nimal research can only be carried out in the UK where there is no suitable non-animal alternative' (UAR 2014b) and a 'large proportion of the UK public accept the use of animals for research as long as there is no unnecessary suffering and there is no alternative' (Williams, 2020b) as signifiers of public acceptance is undermined. This is to say that, as any claims of any 'public's' acceptance of animal research hinge crucially on the argument that animal models are (currently) necessary, with hopes and expectations invested in the future replacement of animals, the claimed necessity of animal research cannot itself be seen as an unproblematic guarantor of societal support.

In summary, the data analysis presented in this chapter up to now reveals that, although using animals for the purpose of advancing medicine plays a key role in Mass Observers' constructions of the practice as necessary, such advancements are themselves subject to conditions. As discussed here, key to many Mass Observer configurations of using animals for medical purposes is scepticism towards 'basic research' and, in depicting valuable applications of medical research, the prioritisation of 'curing' major illnesses and developing medical interventions which are perceived as 'life-saving'. Such aspects of Mass Observer

expectations, hopes, and anticipations for medical progress arising through animal research are often made in reference to a future which stands to threaten the health and survival of human lives near and far. However, other visions of the future are also often at play in Mass Observer 'acceptance' of animal research for medical purposes, that being hopes for the total replacement of animal models brought about by the development of non-human animal alternatives. If we frame this future imaginary as part of an 'anticipatory regime' and thus as 'demanding a response' (Adams et al., 2009: 249), then lay interests in the future replacement of animal models can be seen as lending weight to further attention to this area in the present. The implications of such hopes for alternatives to animal models will be discussed further in the final chapter of this thesis. For now, this subsection stands to emphasise that support for the use of animals for medical research is often also tied up with investments in the eventual replacement of animal models with non-human animal alternatives.

7.4.3 Health beyond medicine

However, not all Mass Observers mobilised a medical model in writing about health. Considering the purpose of medical research to improve human health, some Mass Observers raised more fundamental concerns towards the scientific use of animals, articulating doubts towards the idea that medical interventions, particularly those that extend human life, are always societally desirable. Although making different points, the following Observers both articulate normative limits to biomedical interventions in human health –

> '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)

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> '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 suggest that there should be socio-ethical limits to medical interventions, the former 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 being that medicine's prolonging of human life is in some way detrimental. However, this thought is then self-reflexively answered by the Observer's 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' (H5845). As touched on in the previous chapter on care, such care obligations are crucial to thinking about animal research and complicate the enacting of broad ethical propositions such as the perhaps glibly suggested return to a brutally competitive 'nature'. Nevertheless, 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 are to be brought into being.

In this vein, perhaps the observation that research is '*advancing medicine in leaps and bounds*' (H5845) reflects that the pace of biomedical research might be felt as moving beyond socio-ethical parameters, leaving behind societal concerns, and hailing a future that some do not feel ready for. Such reflections on the role of momentum and time in understandings of biomedical progress, may relate to Knowles' (2014) concept of 'slow disasters'. Knowles describes the slow disaster as stretching 'both back in time and forward across generations to indeterminate points, punctuated by moments we have traditionally conceptualized as "disaster," but in fact claiming much more life and wealth across time than is generally calculated' (Knowles, 2014: 777). In contrast to the 'slowness' of the disasters that Knowles describes, concerns around the speed and scope of biomedical research may amplify anxieties in that we may not realise the full extent of its ethical ramifications until 'too late'. In the case of animal research, the 'disaster' envisioned through such worries is both fast and slow, the ramifications of biomedicine are felt as fast-paced and sweeping, yet are also gradual, with roots that reach 'both back in time and forward across generations'. Given this, concerns towards biomedical research and its impact on human health may coalesce around the *precedent* being set in harming animals to support or extend human life.

With a similar, though differently articulated focus on the longevity of human life, the second Mass Observer (F4873) quoted above distinguishes 'Valid research' as that which produces

''real' medicine and not just that to keep people hanging on to live into their 100's'. Objections to biomedical research concerning the extension of human lifespans emphasise 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 much philosophical debate (Harris, 2004; Pijnenburg and Leget, 2007; Caplan, 2005), 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) 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' (Callahan, 2000: 654). However, as implied in such excerpts from the MOP, 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.

Overall, this section has examined instances where biomedical frameworks of health are resisted or reframed, touching on concerns towards the ambiguities within 'medical' classifications, scepticism towards the existence of an end goal to medical research, hopes and expectations for the replacement of animals in science with alternatives, and worries about the futures that biomedical research might bring forth. In considering these challenges towards the foundations of biomedicine, ruptures are identified in assumptions of unanimous acceptance of animal research for medical purposes (Ipsos MORI, 2018), with medicine and health being open to multiple interpretations, some of which work to unsettle the widespread prioritisation of human life at the expense of other animals.

7.5 Conclusion

To conclude, this chapter has illustrated that although the notion of 'medical research' and the advancement of medicine as an overarching aim was key to many Mass Observers' construction of some forms of animal research as necessary, within this construction are particular conditions and nuances. For instance, the first section demonstrated that classifications of scientific uses of animals as 'medical' are subject to particular stipulations, such as the application of scientific knowledge to generate tangible, worthy, and timely medical outputs. Yet, this data analysis has also shown how instilling value in animal research applications may be done retrospectively, with some Mass Observers reassessing past

biomedical endeavours with current understandings of their implications in the present. The value of such applications is also considered through a lens of risk, with concerns expressed towards biomedical ventures which breach notions of naturalness. Alongside expectations of the application of scientific knowledge, many Mass Observers discussed the importance of medical research for focusing on areas which can prevent the most suffering or prolong human life, with some correspondents making distinctions of deservingness between health conditions in which some illnesses are characterised as self-inflicted and belonging more to the realm of lifestyle than medicine.

In exploring medicine and medical research as representative of necessity, the second section analysed the common distinction made in the MOP responses between the 'medical' and the 'cosmetic', using the latter to validate the former by way of contrast. As was argued, such a division centres on constructions of medicine as inherently altruistic, being crucial for the promotion of health, and cosmetics as frivolous vanity products. Rather than representing a knowledge deficit or a persistent belief in 'myths' (Ipsos MORI, 2013), this analysis argued that cosmetics remain relevant to animal research discussions due to the importance of consumption practices in the everyday. With the consumption of 'cruelty-free' cosmetic products providing a way to enact clear ethical boundaries towards the use of animals in research and remaining pragmatically relevant in the global context of consumption practices with legislative differences across states. Yet, this section also illustrated that the demarcation between the 'cosmetic' and the 'medical' may become blurred, with some Mass Observers reflecting on instances where the cosmetic and the medical overlap. As discussed, such understandings relate to frameworks of aesthetic medicine which seek to establish a link between cosmetic interventions and health. This analysis thus troubles the boundary work between medical research and so-called 'cosmetic testing' by reflecting on instances where medical boundaries become permeable.

Finally, the third section of this chapter explored how the writings of some Mass Observers suggest a more fundamental challenge of the biomedical field itself, with some individuals expressing concern over its reach and articulating different visions of health in which medical interventions are not always desirable. Suggested through such anxieties towards the span of biomedicine is that 'saving' human lives does not always justify the harms that such research inflicts on other animals. Rather, other modes of health which may centre on an embracing

of the vulnerability that all living beings share, that of mortality, were hinted at, perhaps reflecting shifting care relations in a cultural moment where the negative impact of human activity is being witnessed across the planet. Such ambivalences towards biomedical frameworks of health and the conditionalities of necessary medical research identified in the first section reflect that assumptions of general acceptance of animal research for medical purposes are overly simplistic. As this data analysis shows, visions of medical futures are not homogenous and there are particular expectations of medical research for it to qualify as a necessary use of animals. In this way, the necessity of animal use in medical research is not a given but is dependent on the material realisation of particular forms of healthcare and, for some, is situated amongst multispecies care relations that may unsettle anthropocentric harm-benefit analyses which prioritise human life at the expense of others.

8. Implications and conclusion

8.1 Introduction

In investigating the research questions that have informed this study, the three empirical chapters of this thesis have explored the meta-themes of knowledge, care, and medicine. Attending to these themes, the data analysis chapters have sought to illuminate how relating to animal research in the everyday involves affectual as well as rational processes and how interactions with the topic are experienced and actively managed. Given the ethical problem that animal research continues to pose, understandings of the issue go beyond knowledge of regulation or the scientific merit of animal models and therefore this thesis has examined questions which are foundational to human-animal relations and interspecies ethics in the everyday. This is exemplified when considering what kinds of feelings are suggested in writing about animal research, how the topic of animal research is negotiated in everyday contexts, how the animals of animal research are constructed and what role species distinctions play, whose harms and benefits are implicated in the practice, and whether some kinds of research are deemed more acceptable, worthy, or necessary.

Bringing together the insights offered in these data chapters, this final chapter aims to draw out the wider implications for the Mass Observation Project, the public dialogue around animal research, and the concept of necessity in animal research practice. In opening up the analytical claims offered in this thesis to the above areas, I hope to illustrate their value for particular audiences. These audiences include those interested in using the MOP to research sensitive topics, those invested in cultivating public dialogue on animal research and making claims about societal views towards it, and those involved in shaping the ethical review of projects involving animal research. As such, this chapter is organised into three sections. These speak to (i) those interested in using the Mass Observation Project as a qualitative research method, (ii) stakeholders invested in the public dialogue around animal research, and (iii) those whose work concerns the policy and practice of scientific animal use – particularly the implementation of the harm-benefit analysis. Although organised into these three sections and audiences, implications offered within each are also implicitly and explicitly directed at researchers interested in studying views and understandings of animal research, with suggestions being made throughout to enhance future studies in this area.

8.2 The MOP and methodological implications

Having presented empirical insights garnered from my analysis of responses to the 2016 '*Using animals in research*' Directive, I will now step back in order to comment on the particular context of this research, what it has covered and what it has not, and identify methodological lessons for future researchers interested in using the Mass Observation Project.

8.2.1 The important partiality of this research

What is offered in this thesis is an exploration of how some Mass Observers discussed the topic of animal research in 2016, with a focus on the particular areas of knowledge, care, and medical necessity. As with all research, my account of what, how, and why the Mass Observers mentioned in this thesis wrote about animal research is partial, with many avenues within the dataset left unattended to. For instance, one of these unexplored avenues was the figure of the 'animal rights extremist' which recurred across MOP responses, particularly in response to the section of the Directive which prompted discussion of media stories featuring animal research (see Appendix A). Although the historical prevalence of 'anti-animal research' activism (Illman, 2005; Franco, 2013) suggests that analysis of this theme would have been an important contribution to the area, I chose not to pursue this as it would have required me to situate within and orient towards social movements literature. Given my interests in how Mass Observers themselves relate to the topic of animal research, this would have diverted from my overall focus and therefore, although making preliminary notes on this theme, I did not pursue it for analysis in its own right. However, so-called 'animal rights extremism' and the figure of the extremist is still present at times in this thesis, being touched on in the first data chapter as an element of the public identity and in the second data chapter as one of the risks of working in animal research, the threat of which was for some a source of sympathy for animal research staff. To mention this here is to draw attention to the fact that my analyses of course do not tell the 'whole story' of the data and, indeed, are themselves constructions shaped by my particular relation to the MOP and the topic of animal research. Therefore, it is my hope that this work might inspire other future analyses (by myself or others) of unexplored aspects of the responses to the '*Using animals in research*' Directive, highlighting different elements and offering different interpretations of Mass Observer writing on animal research.

Though MOP writing reaches into the past and the future and societal discourse around animal research involves recurrent themes and narratives (such as the importance of concepts of naturalness (Macnaghten, 2004) or analogies with eating meat (Michael and Brown, 2004)), the responses to this Directive are products of the temporospatial contexts in which they were produced and so too are my analyses of them. This means that issues of relevance to Mass Observers in 2016 may be diminished in later moments and the perceptions of animal research captured in these writings may shift. In the ways in which their thoughts and feelings about animal research are imbedded in everyday experiences, the writings of Mass Observers illustrate the fluidity and particularity of views or attitudes towards the practice, with my analysis directing attention towards the *processes* and *framings* through which individuals relate to animal research rather than fixed ethical standpoints.

In emphasising the importance of the contexts through which the MOP responses at the heart of this thesis emerge, I hope to encourage further work which grapples with how animal research is related to within the everyday worlds which imbue it with meaning. By reflecting on this point as I finish writing this thesis amidst the global coronavirus pandemic, it is impossible not to consider how the writings of Mass Observers and the design of the '*Using animals in research*' Directive might differ if produced now. How might the Directive's questions about media coverage of animal research, conversations had on the topic, or reflection on the production of medicine be responded to in a time when the development of a COVID-19 vaccine is touted as the only real way out of the current crisis (Smyth, 2020)? To reflect on this is to recognise that each engagement with publics on animal research, whether soliciting their views towards the issue, facilitating discussion, or otherwise, happens within a particular temporospatial moment. As the references to Brexit in MOP writing on animal research illustrate, at certain points there may be overarching historical events which come to bear on scientific and ethical issues, influencing how obligations between institutions and citizens are politically configured.

In the case of the COVID-19 pandemic, other political currents may come to bear on perspectives towards animal research and the role of the individual and the figure of the wider public in relating to it. For instance, media reporting of vaccine hesitancy (Siddique and Elgot, 2021; BBC, 2021b) or the UK government's response to the pandemic and relationship with its scientific advisory group SAGE (Sample, 2020; BBC, 2021a; McMullan et al., 2021)

might reshape trust relationships between publics and institutions and between publics themselves in particular ways which bear on feelings towards the practice of animal research. Given the positionality of Mass Observers' writings within the historical project of the archive, as a method for social scientific research the MOP promotes an attunement to the situation of knowledge-making in time and space. For future studies of how animal research is discussed or research into views or feelings towards it, it is imperative to embrace the locatedness of knowledge, with a need for qualitative research which allows participants to imbed their contributions in their everyday worlds of meaning and steers away from analytical generalisations.

The importance of situating understandings of animal research within the contexts they emerge has led me to consider how I might have handled and analysed the MOP responses differently if I were to begin the project again. Having included the entire dataset in my analysis (see subsection 4.3 for justification of this decision), I was inevitably restricted in the attention I could give to each individual Observer and my exploration of the identities they brought to bear in their responses was limited. Therefore, if I were to start over, perhaps I might follow Courage's (2018) example of using 'vignettes', which in their case entailed looking at how specific Mass Observers had responded to multiple Directives and constructing a narrative identity that expands beyond a singular Directive response. Such an approach could offer greater insight into the people behind the MO identification numbers, enabling this thesis to tell more of their own personal stories in which relations with animal research are caught up. In doing so, I could have analysed responses to other Directives with relevant topics, such as those with an explicit focus on animals, science, or health. As well as allowing for more detail in the analysis of Mass Observer identities, the use of vignettes may also better illustrate the complexity of understandings of animal research, with views potentially shifting throughout different contexts. However, although prompts exploring 'the past' and memories were present in the '*Using animals in research*' Directive (see Appendix A), such a narrative-focused analysis might correlate better with a Directive involving more explicit focus on life stages, enabling a tracking of biographical narratives in which animal research features.

As well as being situated in the moment of solicitation, it is also important to recognise that the writings of Mass Observers are part of a larger project, with the longitudinal nature of the MOP opening their views up to rearticulation in future acts of correspondence, and also that

Mass Observers are often reflexive about how their views might change. For instance, the self-questioning that featured in each data chapter, with some Mass Observers putting down their opinions on animal research then immediately deliberating on their validity, illustrates the capacity of the MOP as a method to move away from presenting views on the issue as stagnant and definitive. That the MOP enables correspondents to articulate the fluidity of their thoughts, feelings, and opinions is a methodological benefit with significance not only to the animal research debate but to societal debates around contentious issues more generally, providing better insight into the *process* of understanding such topics and the relationality which shapes this.

8.2.2 Ethical obligations towards Mass Observers

As a research method, the MOP offered an innovative way of moving beyond the restrictive response formats of opinion polls and surveys which, as shown in the literature review, dominate studies of views towards animal research. Although the solicitation of writing on sensitive topics may raise ethical concerns (Hobson-West et al., 2019), that the MOP captured responses expressing resistance towards engaging with this topic is methodologically valuable. In allowing correspondents to articulate their resistance or ambivalence towards animal research beyond selecting 'unsure' or 'other' tick boxes, the MOP aids an analysis which grapples with the complexity of feeling towards the practice beyond the binary of support or opposition.

In responding to the Directive, the majority of Mass Observers broadly followed the structured prompts to guide their writing. Across responses, there were varying levels of detail given to each prompt and a range of full response lengths. As previously discussed in Chapter Four, some Mass Observers wrote several pages, some a small paragraph, and a few Mass Observers only a line or so, expressing an inability to write about the topic or refusing to it engage with it, and, in doing so, communicating back to the MOP about their expectations for Directives. As covered in the first data chapter, rather than representing a failure to appropriately engage Mass Observers on the topic of animal research, the capacity to record disconnections with the issue and hear, even briefly, something from those who feel unable or unwilling to discuss it, is recognised in this thesis as of significant methodological value.

However, the prevalence of discomfort detected in my analysis of the MOP responses raises ethical questions for how communications, engagement events, and even research studies design their interactions with others on animal research and other potentially sensitive and distressing topics. Reflecting on my methods, I think it is important to consider whether using methods such as the MOP to solicit writing on animal research might represent an invasion of the personal domestic space with unsettling moral quandaries, leaving participants 'alone' at home with emotionally and morally troubling thoughts and feelings (Hobson-West et al., 2019: 4). This sense of insensitivity in asking Mass Observers to write about topics which can be upsetting is reflected on in Bailey's thesis on funeral attendance, with one of their foremost regrets in using the MOP to explore the topic being 'the pain that was caused to some correspondents' (Bailey, 2012: 159).

Of course, there are two sides to this concern, with the time and space to think and articulate oneself away from the archivist or researcher that the MOP affords its correspondents being an important methodological benefit for research into complex and sensitive socio-ethical issues. As well as this, the MOP allows correspondents to skip past certain sections of the Directive or to not respond altogether. With the anonymity of the panel, passing on particular topics can be done without anxieties around judgement from the commissioner of the Directive. As well as this, Mass Observers often discuss their Directive topics with others, sometimes mentioning conversations or the thoughts of others in their responses and sometimes even asking someone they feel has a particularly valuable perspective to write part of the response (Sheridan, 1993), with the writing process thus being a shared rather than solitary one. And, indeed, notions of the home as the manifestation of the public/private divide or a space of respite are themselves far from unproblematic (Oakley, 1974; Boyd, 1997).

However, more than the discomfort towards knowing about animal research, it is both the sense of guilt and shame surrounding the desire not to know and the need for empowering knowledge on the topic which suggests that group-oriented methods that enable participants to share the burden of such thinking together may be useful for future research in this area. Rather than pushing for increased public knowledge of certain aspects of animal research practice (UAR 2014a), with such openness strategies focusing on one-way transmissions of information, group-based discussions may alleviate the sense of personal moral failure that

some feel of their inability to engage with the topic. In this way, perhaps collective acknowledgment of the difficulty of knowing about animal research and the need that some feel to avoid the topic may lift the blame surrounding individualised ways of knowing and engagements with the problem of animal research might become easier.

Indeed, collective acknowledgment of the difficulty in discussing animal research does not necessarily require group methods. As Jenkins and Harkins' (2021) public engagement survey on multi-species dementia demonstrates, there are ways of building care for the wellbeing of participants into the method. In their case, the survey's first page acknowledges that '[s]ome people can find answering questions about dementia or the use of animals upsetting' (Jenkins and Harkins, 2021) and advises those who are likely to find these topics upsetting against participating. As well as this, the survey includes 'temperature checks' – pop-up questions which ask the participant if they 'are experiencing any distress as a result of taking part in the survey' (ibid) – with an affirmative response resulting in the survey being immediately terminated and the disposal of recorded information. Such an approach displays recognition of the affectual strain that engagement with such topics can take, taking some of the pressure off participants who may feel negatively, as some Mass Observers expressed in responding to the '*Using animals in research*' Directive, if they are unable to cope with discussing sensitive topics. However, we could also argue, as I have done in this thesis, that discomfort is methodologically valuable and thus instead of circumventing discomfort from arising and being considered, perhaps it would be better to cultivate methods which make uncomfortable discussions manageable.

In the first instance, this line of thinking suggests that all solicitations on the topic should acknowledge that animal research is, for many, a moral problem and as such may be troubling for those asked to participate in activities based upon its discussion. To do so, is to reshape expectations of what kinds of contributions can be made to such activities, moving from the 'capturing of views', as if these can be neatly distilled, to hosting conversations in which narratives and themes can be observed and unpacked. The problem of animal research should not be side-stepped in such engagements but opened up for participants to articulate in their own ways, with an embrace of ambivalence and uncertainty rather than 'for' and 'against' binaries. Indeed, this data analysis has intended to promote a revaluing of ambivalence in discussions around animal research. As the three data chapters have shown, questions of

whether there should be more openness on animal research, whose care should come first when thinking about our ethical obligations to those implicated in the practice, and if the scientific use of animals is necessary remain open to multiple judgements. This cannot be explained as merely a symptom of ignorance or misunderstanding about the 'facts' of animal research (UAR 2009; FRAME, 2020a) but is rather a reflection of the socio-ethical problem posed by animal research in which there are no facts to be uncovered and learned. Acknowledgment of the moral and emotional conflict a sensitive topic such as animal research might generate and the ambivalence that some might feel when discussing it are not only important methodologically in encouraging rich and reflexive responses but also ethically important for empathising with the toll that such topics can take.

8.3 Public dialogue on animal research

Having analysed ways in which the Mass Observers who responded to the '*Using animals in research*' relate to the issue, this section will now open up these analyses to suggest their implications for the wider public dialogue around animal research.

8.3.1 The relationship between Mass Observers and 'the public'

A prominent consideration throughout this thesis has been the question of who 'the public' are. Although this research has aimed to be specific in presenting an analysis of the writing of Mass Observers who are not intended to represent the wider public by proxy, Mass Observers occupy a unique position in relation to their role as 'Observers'. As discussed in Chapter 3, Mass Observers are encouraged to record the views and behaviours of others around them, acting as both the 'Observer' and the 'Observed' (Kramer, 2014). This role as 'the people's representatives' (Shaw, 1998) was demonstrated in the first data chapter 'Knowing and not-knowing about animal research' and was particularly clear in Mass Observer responses to the final prompt in the Directive which asked: '*Some people claim that the general public needs to know more about animal research, and that more 'openness' from scientists and the government is therefore needed. What do you think of this suggestion?*' (see Appendix A). Given that this prompt raised the suggestion of more openness around animal research in relation to the '*general public*', the analysis presented in this chapter illustrated how the 'public' were imagined, often being constructed as uneducated, ignorant, or irrational, with different consequences for their capacity for openness. In their constructions of the public, this chapter argued that some Mass Observers performed a responsible technopolitical

citizenship in their writing, presenting themselves as scientifically educated or respectful of the authority of experts in the animal research domain. In such performances, Mass Observers thus present themselves as responsible knowing subjects who, unlike the risk-imbued entity of the general public who might weaponise such openness, can be trusted with more information from the bioscience sector.

This example of the relationality of Mass Observers, who, at times, discuss the 'general public' as a collective they stand outside of, raises an important point about how identities are performed in writing about socio-political aspects of technoscience. This performativity, how views on what might be good or bad for 'the public' are articulated through performances of citizenship, has methodological implications not only for uses of the MOP but for studies of views towards animal research more widely. Given that many previous studies on societal views in this area break down views into demographic categories which constitute identity as static and fixed (see section 2.2 in the literature review), the role of the method in eliciting performances of identity is overlooked.

As this data analysis has shown, in writing about animal research, Mass Observers often take particular standpoints, i.e. responding as a patient or a dog-owner or, more implicitly, a 'good citizen', each of which are identities that become relevant when locating animal research in particular social worlds. For instance, as discussed in the first data chapter, this performance of the 'good citizen' who can be trusted with further openness on animal research was expressed by some Observers in contrast to the particular figure of the irresponsible general public in light of the 2016 Brexit vote. Such examples illustrate that performances of citizenship draw on distinctions made within specific socio-temporal contexts and thus in seeking 'public' views towards an issue, researchers must first acknowledge that 'member of the public' is not a neutral position. Rather, in using methods such as the MOP which allow individuals to situate their responses to the topic of animal research in lived experience and relevant contexts, neutral framings of 'the public' are challenged by the emergence of specific positionalities through which feelings and opinions are articulated. This reaffirms both Sheridan's (1996) and Pollen's (2014) assessments that how Mass Observers write and who they write *as* are heavily influenced by the Directive.

As well as this, the analysis presented within this thesis shows that when asking individuals for their views on issues in relation to the 'general public', they may respond by taking a

position within that public (Davies et al. 2020) or outside of it, marking a distinction between themselves and the broader public body. This raises an important methodological consideration not only for those seeking to capture the views of 'the public', but also for researchers using the MOP. The role of Mass Observers to document everyday life, standing both inside and outside of their everyday worlds in order to do so, necessitates this 'dual vision' (Kramer, 2014) oriented both inwards and outwards. Therefore, uses of MOP writing should also acknowledge the role of the materials as not only historical observations but as performative texts through which individuals constitute their role as Mass Observer, with the MOP itself promoting particular ideals such as ordinariness which influence how Directives are responded to (see subsection 3.4.1). This means that, though admittedly tricky, analysis of MOP writing should be careful not to separate the identities of Mass Observers from their performance of doing Mass Observation and the particular ways of relating that the process cultivates.

8.3.2 Communicating with care on the topic of animal research

Throughout the data chapters, the discomfort of some Mass Observers in responding to the '*Using animals in research*' Directive has been a prominent theme, raising both methodological and ethical implications for how communications around animal research are performed. As the first and second data chapters illustrated, animal research can be an acutely uncomfortable topic for some because of the ways it unsettles existing care relations between humans and other animals, revealing tensions between whose care comes first. In mitigating the impact that encountering the topic of animal research can have, the first data chapter explored Mass Observer descriptions of deliberate practices of not-knowing, demonstrating that knowing about animal research is an active process based in emotional as well as rational understandings (if such a dualism can even be imposed).

One way of understanding the need to turn away from engagements with animal research presented in the first data chapter is the inability to act on what one comes to know, with a lack of routes for laypeople to intervene in the practice (Hobson-West, 2010; Pound and Blaug, 2016). This sense of disempowerment in affecting change upon biomedical uses of animals in the everyday was often implicitly contrasted with 'cosmetic uses' of animals, which many Mass Observers discussed in ways that allowed enactment of ethical boundaries. For instance, buying 'cruelty-free' products was mentioned across many MOP responses,

reflecting the relevance of ethical consumption practices in everyday engagements with animal research. In the third data chapter, the sense of agency associated with cosmetic products was explained as also related to judgments of cosmetics as nonessential, particularly in comparison to medicine. With the necessity of biomedical advancements often being culturally constructed as beyond question, this chapter suggested how the case of cosmetics might enable Mass Observers to discuss their discomfort with animal research in a way that becomes clouded by taboo or ethical ambiguity when discussing medical research (an issue I also blogged about, see McGlacken, 2020). Such a finding suggests that in order to aid individuals in expressing their discomforts around animal research, dialogues around the issue should include discussion points which enable agentic ways of relating to the topic. In doing so, participants may be able to better manage the 'heavy' (Tessman, 2009) or 'uncomfortable' (Rayner, 2012) knowledge of animal research, with the moral problem it poses not being diminished but recognised as caught up with real-world constraints on individual moral action and intervention. To acknowledge this is to reaffirm that examples such as the importance of choosing 'cruelty-free' products throughout the MOP responses are valid forms of moral expression, enabling individuals to demonstrate their ethical limits within the dilemma of animal research.

As the introduction to this thesis described, the current openness agenda around animal research in the UK places its emphasis on making data about how animals are used in bioscience institutions available and promoting awareness of the regulatory framework which underpins the scientific use of animals. As argued, this approach is not limited to the bioscience community but is also taken by organisations campaigning against animal research, with the assumption that once the bioscience sector is truly 'transparent', publics will be outraged and support their efforts to abolish the practice. However, the analysis presented in this research reveals how, without consideration of how audiences perceive and manage information on animal research, this push for openness throughout the sector may further isolate individuals who care about those implicated in the practice yet feel unable to cope with such information.

Therefore, instead of pushing one-way transmissions of information on animal research with the assumption that these will win the favour of public audiences, stakeholders in science-society dialogues around the practice should acknowledge that, for some, the topic of animal

research is associated with discomfort and disempowerment. In accounting for this, communications on animal research should be conducted with care for their audience, being mindful of the ways in which some might feel compelled to turn away from the issue because they care about those implicated in it. Indeed, it is because practices of knowing and caring are entangled that the need to withdraw from animal research is experienced by some. As well as challenging the effectiveness of current openness strategies to foster productive science-society dialogue, this raises broader questions around the obligations that institutions have to care for laypeople and their capacity to manage knowledge which may be distressing.

In beginning from a responsibility to care for publics when communicating about animal research, stakeholder organisations such as UAR, FRAME, CFI, RSPCA, etc. and media involved in promoting public dialogue around the issue should acknowledge the current burden of knowing associated with it, such as simply stating a recognition of the issue as an ethical concern that may be challenging to consider. Again, this is not to suggest that the moral problem of animal research should be sidestepped, but rather, to account for the impotence that some Mass Observers associate with animal research, routes for publics to enact their ethics in relation to animal research must also be present. This means that processes of *knowing* about animal research should also enable *acting*, and, more specifically, ways for publics to care for experimental animals. In promoting science-society dialogues around animal research with care, Engdahl and Lidskog's (2012) discussion of the emotional basis of trust is relevant. They write that 'trust cannot be achieved by being a spectator, by passively being fed knowledge, or by standing alone outside of social life. Instead, trust is created when citizens are emotionally involved, take part, have a say, and in some sense are able to recognize themselves in the recipient of their trust' (Engdahl and Lidskog, 2012: 714). In recognising the emotional nature of engagements with issues such as animal research, communication must be built upon care for how publics can make meaningful use of opportunities to know.

Methodologically, the finding that some Mass Observers were hesitant to know more about or discuss the topic of animal research highlights that studies of views towards the practice should not focus only on the contributions of 'issue' (Converse, 1964 [2006]) or 'attentive' (Devine, 1970; Adler, 1984) publics, whose positions on animal research are publicly vocalised, but also consider how to include those who tend to withdraw from interactions

with the topic due to discomfort. In both studies of views towards animal research and engagement activities around the issue, efforts should be sought to facilitate the involvement of those who feel immobilised by the issue *because* of their care towards those caught up in it. Again, for me, central to facilitating comfortable ways of expressing discomfort is for dialogical and participatory processes around animal research to be built on an acknowledgement of the moral problem of scientific animal use and the emotional difficulty that many individuals experience in interacting with it.

Drawing back to the earlier point on the importance of enabling individuals to express their ethical limits in relation to animal research, Macnaghten's (2003) work on environmental concerns and everyday practices is resonant here, signalling a 'clear need to engage with people in their own terms, as responsible and capable individuals, resonating with different lifeworlds through lived particulars' (Macnaghten, 2003: 82). In recognising the messiness of ethics in everyday life and the multiple (and, at times, conflicting) pulls on our care obligations, perhaps feelings of sadness, powerlessness, shame, or guilt in relation to animal research can become valued parts of the societal dialogue. In so doing, such feelings can thus be understood not as individual failings to rationally accept the 'facts' or live a morally consistent life, but as part of the shared experience of negotiating the scientific use of animals.

In considering the role of care in relations with animal research this data analysis ultimately emphasises the entanglement of practices of knowing and caring and, in bringing insights from Care Ethics into the area of Public Understanding of Science, offers an expansion of both literatures. As discussed in subsection 2.3.4 of Chapter 2, there has been much recent attention given to caring practices within animal research laboratories, yet how wider publics might understand animal research through the lens of care has been overlooked. However, as the data analysis presented here has shown, care relations and obligations play an important role in interactions with the issue, being present not only in the dedicated data chapter on care (Chapter 6) but recurring throughout each data chapter. Thus, the cultures of care associated with animal research facilities could be seen as expanding beyond these physical spaces to include wider publics who may conceptualise animal research as a way of caring for others and care about those involved in the practice. In doing so, as dwelled on

here, the responsibilities that the animal research community has to also care for publics are brought to the fore.

8.3.3 Attuning to the present and the future of animal research

As the third data chapter explored, hopes and expectations around alternatives to using animals were prominent in many of the MOP accounts. The prevalence of hopes for non-human animal alternatives and the future replacement of animals in research across the MOP responses was understood as a way of coping with acceptance of scientific animal use in the present. As this chapter discussed, even amongst Mass Observers who conditionally agreed with the use of animals for (at least certain aspects of) medical research, hopes for the replacement of animal models often accompanied such acceptance. Such insights reveal how acceptance of the present use of animals as 'necessary' may be contingent on a future in which their use will no longer be needed.

References to this imaginary of the future in which animal models are no longer necessary may also be understood as a way of demonstrating that there are ethical limits to current acceptance of animal research. This future can therefore be understood as an area which provides individuals a sense of agency in animal research discussions, enabling a move beyond the present claim that the scientific use of animals is necessary and thus unavoidable to a point when this is no longer so. That, for some Mass Observers, present acceptance of animal research is bound up with its future replacement implies that such articulations are not merely 'wishful thinking' but are responses to stakeholder dialogues around the practice which, whether asserting or challenging the current necessity of animal models, hail a future in which animals are no longer used. Therefore, acknowledging investments that individuals have in the replacement of animal models, science-society dialogues on animal research should strive to involve participants in specific discussions around alternatives and visions of the future. Linking back to the responsibilities I have suggested stakeholders have to approach their public interactions with care for the emotional capacity of audiences, that some may find it easier to discuss the area of alternatives to animal models offers an opportunity to foster public dialogue around animal research which is accessible and mutually productive.

As well as acknowledging the role of future imaginaries of animal research, this analysis emphasises that stakeholders invested in fostering science-society dialogue around the issue must allow for participants to embed their views within the temporospatial contexts they

emerge. As the data chapters have illustrated, the broad issue of animal research is understood in the everyday contexts which imbue it with relevance. These may be consumer contexts which give salience to the prominence of discussions around 'cruelty-free' products, the relationships shared with companion species, or the political landscape which shapes current understandings of democracy and citizenship. In regard to the latter, given the timing of the '*Using animals in research*' Directive, being administered in the summer of 2016, it may be unsurprising that references to 'Brexit' appeared in some of the responses. As discussed in the first data chapter, the UK's EU referendum was relevant to some Mass Observers' discussions of openness on animal research because of its impact on views towards democracy and trust in the capacity of the 'general public' to act as one's version of a responsible citizen. Stepping back, references to political happenings such as Brexit reflect how significantly current political contexts can shape feelings towards the responsibilities of scientific institutions and how values such as openness and transparency come to be viewed as risky. In seeking to foster productive science-society dialogue on animal research, then, it is important to allow publics to situate their feelings towards animal research in the personal and political contexts which shape how the practice and science-society relations more widely are perceived.

In the current climate of the global coronavirus pandemic, the hinging of an effective vaccine on scientific animal use has been assumed by some stakeholders as, perhaps temporarily, allaying previous ethical concerns towards animal research. An example of this can be seen in a survey investigating public opinion towards animal research during the UK's first national lockdown in Spring 2020 which was commissioned by research advocacy group Understanding Animal Research (UAR) and conducted by Ipsos MORI (and which was also referred to in the literature review, see page 35). Reporting on this survey in an online communication titled '*High public acceptance of animal research to find treatments for COVID-19*', Williams, UAR's head of engagement, states that –

> '[w]e know from ongoing tracking polling of public opinion that people in Great Britain are generally very accepting of the use of animals in research. […] However, the public is usually less certain about how animals are used in research, and less accepting of the need to use larger animals such as dogs and monkeys. This survey shows that, faced with a health crisis like COVID-19, people are prepared to accept that animal

> research is going to be necessary if treatments and vaccines are to be developed' (Williams, 2020a).

The implication is made here that in times of collective health crisis, the necessity of animal research is more readily accepted. However, given the restrictive nature of such surveys, the lack of capacity they offer for respondents to situate their feelings in the wider moment of the coronavirus pandemic, they do not allow for discussion of why feelings might have shifted and how the current context has come to bear on them. Thus, in striving to measure levels of 'acceptance', ambiguities towards animal research are dismissed. For example, in the survey's report, the finding that '62% of the UK public think the UK has strict rules governing the use of animals in research, but 28% gave a neutral response' is explained away as 'most likely because they are unsure about the rules and welfare standards' (Williams, 2020b: 10). Rather than opening up these 'neutral' response options to allow respondents to explain, answers which do not fit into the binary positions of agree or disagree are dismissed by way of deficit-model assumptions about respondents' lack of knowledge or comprehension. Given that the survey also found that only 51% of respondents agreed that they trust the UK government to find a solution to the outbreak (ibid, 12), such dismissal of these responses disregards apparent uncertainty towards governance at a moment of national and global crisis.

This example illustrates the importance of allowing respondents to contextualise their responses in wider contexts. As references to Brexit and the untrustworthy figure of the general public made in some of the MOP responses demonstrate, current cultural and political happenings imbue concepts such as openness with meanings that are salient in that moment of solicitation. Yet, in doing so, interactions with publics on the topic of animal research should also move beyond simplistic understandings of 'acceptance' which ignore ambiguities and also the constraints that can, in a sense, coerce publics into expressing acceptance of animal research. Rather, acceptance is better understood here as a continual process which is always contingent on particular requirements and, as the third data chapter explored, may be entwined with particular expectations of the future. This thesis therefore supports further qualitative studies which allow participants to locate their understandings of animal research in lived contexts and resist closure of such narratives, instead, identifying the socio-temporal contingencies upon which acceptable scientific uses of animals hinge and attending to the socio-ethical practices through which the problem of animal research is

continually negotiated. Without such an approach, studies of how individuals relate to animal research risk further straining science-society relations around the issue, lending to interpretations which could further alienate publics who care about the practice and sow more distrust amongst those critical of it. In other words, instead of helping to understand and address societal views and concerns towards animal research, such studies may in fact work to exacerbate unease around it.

8.4 Accepting and resisting the current necessity of animal models in biomedicine

In identifying the implications of Mass Observer constructions and deconstructions of necessity in animal research, this section sets out the importance of understandings of the purpose of biomedical research and the role of future imaginaries for animal research policy and practice.

8.4.1 Accounting for societal understandings of necessity in the harm-benefit analysis

In exploring how Mass Observers understand the necessity of animal research, the analysis presented in the third data chapter challenges the authority of science to decide what forms of research are not only scientifically but socio-ethically acceptable or not. This chapter examined how animal research is judged to be necessary and key to this was the purpose of advancing medicine, chief components of which were tangible healthcare applications, prioritising medical applications which can prevent human suffering or save lives, and the future replacement of animal models with alternatives.

In looking at what constitutes medical research in Mass Observer responses, numerous references were made to cosmetic uses of animals. As discussed earlier in this chapter, this worked as a contrast with medical research which enabled Mass Observers to clearly demarcate ethical boundaries in the scientific use of animals. Yet, some Mass Observers also reflected on the overlap between 'cosmetic' and 'medical' categories, describing instances where cosmetic products and procedures may serve 'medical' purposes and unsettling the power of the medical signifier to characterise necessity. As well as this, some Mass Observers put forward a broader questioning of the role of the definition and authority of medicine itself, with some expressing anxieties over the assumed inherent desirability of medical interventions, particularly those that seek to extend the human lifespan at the expense of shortening those of other animals.

The implication of this blurriness between the categories of the medical and the cosmetic is not to contend that using animals for cosmetics-related testing should be accepted but to challenge the exceptional status afforded to the field of medicine. In illustrating the permeability of the medical and the cosmetic, it is my intention to add to a critical understanding of the 'medical' in the animal research domain and unsettle the ease with which the ban on cosmetic research across the EU (EU Directive, 2010) is gestured to as a signifier of moral boundaries in biomedicine (McGlacken, 2020). Indeed, despite having different and often conflicting positions on the necessity of the scientific use of animals, campaigning organisations in the animal research domain largely assume a homogenous societal vision for medical progress, with the divergences between them centring on the adequate means to achieve this. However, as this analysis suggests, some individuals may approach the question of a need to use animals in biomedicine from a more foundational questioning of the medical endeavour itself.

This third data chapter also reflected on the role of the futures promised in medical experiments and how, for some Mass Observers, assessments of the necessity and value of experiments using animals emerge with expectations of a timeline of when everyday healthcare benefits will be witnessed. Such expectations mean that the outcomes of such research must not belong to a future too distant as to have only a vague suggestion of how they will be realised. These insights reflect the situation of judgments of the necessity of animal research in temporal care relations which demand that the harms inflicted upon animals provide substantial, worthy, and timely clinical benefits, thus contesting the production of knowledge for 'its own sake'. However, in considering the high-profile cases of Dolly the sheep and the Vacanti mouse, experiments which they perceived as pointless at the time, other Mass Observers discussed how some clinical benefits may only be properly understood at a later date. Yet also at work here are assessments of risks posed by animal research, meaning that usage of a harm-benefit framework should involve mitigating not only the harms posed to research animals, but to humans through the cultivation of certain medical futures. Such concerns around the reach of medicine and the possibility that, rather than *alleviating* health issues currently faced, some medical research areas may be *generating* problematic healthscapes are important to acknowledge in decision-making processes which consider not only the ethics of specific research proposals, but their societal necessity.

In their consideration of how to clarify what is meant by valid or worthwhile benefits, Eggel and Grimm (2018) propose an alternative model of project evaluation. They advocate for the replacement of the HBA with 'a "harm-knowledge-analysis" (HKA) for prospective project evaluation and an analysis of the societal benefits in a retrospective evaluation in the form of systematic reviews' (Eggel and Grimm, 2018: 11). In this model, 'the inflicted harm on animals would be weighed against and justified by the expected knowledge gain', the importance of which, they suggest, 'would be qualified by its impact on a given research field or research objective (i.e., important human interests)' (ibid). In following this reworking of the HBA, criteria for what would constitute valid societal benefits would need to be identified on the political level and there would also need to be retrospective evaluation of whether research endeavours have met such criteria (ibid, 12). Also concerned with a lack of specification over the validity of benefits is animal law scholar Blattner (2019), who argues that 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' (ibid).

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 raises the question of whether lay members of animal welfare ethical review bodies (AWERBS) who are involved in the process of reviewing research proposals involving animal use at their institution and deciding whether or not to grant a research license, should be involved in assessing not only the ethical harms posed by animal experiments but also their societal necessity. Indeed, on this point, McLeod and Hartley (2018) observe that '[s]ome animal welfare organizations have called for greater public scrutiny of project license applications before they are approved, but these calls have been unheeded on the basis that the public is not qualified to scrutinize animal research proposals' (McLeod and Hartley, 2018: 731). Given the reliance on the 3Rs to demonstrate responsible governance in the animal research domain, they contend that '[t]oo often, a 3Rs approach to responsibility closes down opportunities to challenge the political dimensions of animal research, particularly its purpose' (ibid, 735).

Although produced close to two decades ago, still resonant with this analysis is the Animal Procedures Committee's (now Animals in Science Committee) 2003 review of what was then

termed the ‘cost-benefit assessment’ in animal research. The APC advise that past benefits provided from animal research and the projection of potential future benefits should not determine ‘that the benefits of proposed experiments should go unquestioned’ (APC 2003: 24). Rather, they contend that ‘in assessing scientific validity, critical evaluation of the need to use animals is always required, along with exhaustive, on-going efforts to avoid using animals wherever possible’ (ibid, 23). This suggests that publics have much to offer the harm-benefit review of animal experiments, in helping to assess what the 2003 APC report describes as ‘possibly the most difficult and contentious part’ (ibid, 24) of the process, evaluating the likeliness that they will produce valuable benefits. As the APC state, ‘[p]eople's perceptions of what counts as a 'worthwhile' benefit vary’ and there is ‘disagreement about who has the expertise to make such judgements, who can be trusted to do so, and whether there is sufficient transparency in the process at present’ (ibid).

Despite shifts towards openness throughout the bioscience sector (UAR 2014a), similar concerns around the transparency of the harm-benefit analysis are articulated in the ASC’s 2017 review of the harm-benefit analysis (ASC 2017: 58). Highlighting the lack of any formal capacity to identify and understand societal concerns, the report contends that ‘[a]t present, societal concerns relevant to harms and benefits (along with important ethical concerns and novel or contentious issues) are not well defined. In addition, there is no clear mechanism for ensuring that the diversity of relevant issues is identified and given due scrutiny within the project evaluation and HBA processes’ (ASC 2017: 62). Concurrent with the ASC report, the analysis presented in the third data chapter of the thesis underscores the need for more attention to societal views on the proposed benefits of scientific animal use as well as the potential harms.

Speaking to this, the data analysis presented in this thesis supports the call for ethical review processes which are more attentive to societal judgments of necessity and benefit, which may at times conflict with dominant ideas of bioscientific and medical progress. As the second data chapter argued, the desirability of benefits of animal research can be seen as drawing on frameworks of care, in which the use of animals acts as a way of caring for the health of others near and far, now and in the future. This suggests that mechanisms of assessing the societal necessity of benefits should employ a lens of care in order to identify whether proposed research chimes with existing care relations, which, as the third data chapter showed, are not

always based in human exceptionalism and species boundaries. Rather, sense-making around which kinds of experimental animal use are necessary are also informed by care obligations to ourselves, other humans, and to the non-human animals caught up in our healthcare systems. In recognising the role of care relations rather than abstract ethical principles in judging whether biomedical uses of animals are necessary or not, decisions around necessity become much more nuanced.

As discussed in the third data chapter, care obligations to 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), as a practice which conflicts 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. Therefore, this suggests that in seeking to monitor areas of particular societal concern as the ASC report alludes to, the ethical review of animal research should consider the issue through a lens of care, identifying how procedures using animals for medical research might enhance or conflict with existing care relations in the community. This could be enacted at both national and local levels, with considerations of how care relations shape understandings of animal research helping the ASC to identify areas of societal concern which can then aid harm-benefit analyses at the local AWERB level.

8.4.2 The importance of replacement to accepting the current usage of animals as necessary

Also tied up with constructions of the necessity of animal research, as discussed earlier in this final chapter, are hopes for and expectations of its eventual replacement with non-human animal alternative models. In recognising hopes for this particular future of biomedical research as crucial to acceptance of the practice in the here-and-now, the investment of resources into developing alternatives can be more explicitly framed as an issue of public interest. Following this, the ways in which research projects might build into or divert away from imagined biomedical futures can be reframed as potential benefits or harms which should be accounted for in the ethical review process.

Such an argument again reaffirms suggestions made in the APC's review of the cost-benefit analysis. For instance, opening the review is a letter to the Minister from then chair of the APC Michael Banner, which insists that the bioscience sector must not rest on acceptance of the use of animals as a 'regrettable necessity' –

> ‘For many people the use of animals is thought of as a regrettable necessity; in that context, there can be no satisfaction with the status quo, but only a determination to consider what steps can be taken, compatible with legitimate scientific progress, to avoid or reduce animal suffering’ (APC 2003: 1).

In emphasising the need for continual critical reflection on how to progress bioscientific research in ways which avoid or reduce animal suffering, Banner hits on a point made in the data analysis presented in the third data chapter of this thesis, that the animal research community should not rest on the repeated claim that publics accept animal research as necessary when no alternatives are available and no ‘unnecessary’ suffering is involved (for examples of this, see Clemence and Leaman, 2016; Ipsos MORI, 2018; Williams, 2020b). To view such claims as evidence of trust in the rigour of the ethical review process or to interpret them as signalling a broad ‘public acceptability’ of the practice is to ignore the constraints which border such ‘acceptability’. Indeed, another way of reading this claim would be to point attention to the investment of publics in developing alternative models and preventing animal suffering in science altogether.

In dwelling on the current reliance on animal models as necessary and trying to measure levels of acceptance in relation to conditions which are perhaps more ethically palatable but arguably misleading, attention is shifted away from the ethical urgency of and emotional investment individuals have in replacement. For instance, public acceptance of the necessity of animal research is framed as hinging on two conditions which are themselves problematic, such as the idea of only inflicting ‘necessary suffering’ or presenting the lack of alternatives in an apolitical way, ignoring critiques that claim research into replacement is globally underfunded (Herrmann, 2019). To read such constrained acceptance as signifying support for the practice is to ignore how this is infused with turmoil and regret, enabling efforts spent on replacement as a bonus to rather than a prerequisite of ‘acceptance’ in the here-and-now. By overlooking the conditions through which acceptance of animal research emerges and the discomfort that still surrounds it, societal concerns towards the practice are left unidentified and unaddressed in science-society dialogues, risking undermining recent emphases on fostering better communication and engagement with publics and, further, corroding the social contract seen as legitimising the scientific use of animals.

Schuppli and Weary (2010) summarise that the '[s]ocial acceptance of use of animals in scientific research hinges upon the perceived benefits of the research and concern for the suffering of the animals' (Schuppli and Weary, 2010: 695). As the data analysis presented in this thesis has shown, necessary scientific uses of animals can differ and, for many, the future replacement of animal models is crucial to accepting their use in the present. Going forward, in order to develop better understandings of valid societal purposes for using animals in biomedicine, there is a need for further qualitative social scientific research which critically explores understandings of healthcare and the role that biomedicine plays within this. In exploring the relation between frameworks of human health, in which medical progress has become predominant, and multispecies ethics of care which ask how we can better coexist with other animals, criteria upon which the necessity of animals in scientific research rests can be identified and unpacked, perhaps revealing ruptures in the notion that medical uses of animals are perceived as inherently necessary. This is a continual project that, in line with the conditionalities of current acceptance of animal research, must be ongoing until societal expectations are met and animal models are replaced with non-human animal alternatives.

8.5 Conclusion

In seeking to answer questions that have emerged through this research, the data analysis presented in this thesis has focused on the ways in which the issue of animal research is interacted with and managed in everyday life, what kinds of concepts and emotions that thinking about and discussing animal research can generate, and whose interests are considered (and how) when thinking about animal research. Attending to the relational processes through which individuals relate to the topic of animal research in the everyday, this data analysis has sought to validate the importance of the entanglement of emotion and rationality in understandings of the issue, considering the role of care relations, both intimate and distant, which are affectual and material rather than calculative.

I have argued that the use of animals in scientific research has come to represent a way to channel care towards the self and others, an investment in healthy futures for humans near and far and, further, part of an obligation that we share as parents and caregivers, friends and relatives, and members of society to prevent and alleviate human suffering. However, at the same time, biomedical research efforts are often clouded by regret when the involvement of animals is placed centre-stage. This regret and the way in which some Mass Observers

discussed strategies of not-knowing to avoid the emotional impact of encountering the topic highlights what has often been overlooked in previous studies concerned with 'views towards' animal research; that is the ubiquity of ambivalence, rather than simplistic polarised positions in support of or opposition to the practice. In this way, animal research remains a deeply uncomfortable topic for some individuals, with the ethical dilemmas it poses being currently irreconcilable.

In considering the problems that animal research continues to pose, this thesis has argued that the development of non-human animal alternatives and the full replacement of animal models is a source of hope to many and, indeed, expectations that this future is beckoning are central to accepting some forms of scientific animal use in the present. To acknowledge this is to accept that animal research remains societally problematic, conflicting with commonly held values around the treatment of non-human animals and human-animal relations, the importance of which mean that utilitarian methods of weighing harms against benefits cannot entirely resolve discomfort with the practice. Therefore, instead of striving to explain away concerns through appeals to the current necessity of animal models to medical advancement and the strength of regulation, it is my contention that science-society relations around animal research would fare better with honest acceptance of the moral trouble and discomfort at the centre of the issue. To do so is not to denigrate the commitment to responsible scientific practice and animal welfare of those working with animals in research; it is not to reinforce black and white notions of good and evil. Rather, acknowledgment of concerns and ambivalence around animal research, which do not necessarily translate into clear opposition to the practice and indeed may accompany its acceptance, allows for conversations around what 'we' as a society feel about the practice to move beyond professional reputation management and collectively grapple with the complexity of understandings of the issue. In being careful to refrain from treating concerns around animal research as an inherent attack on those who are professionally invested in it, such expressions can be opened up and engaged with in ways which would better alert the bioscientific community to the socio-ethical parameters that shape good practice and help to identify societal priorities around the scientific use of animals going forward.

Concern towards the use of animals in science consistently motivates better policy and practice and such concern comes from both within the bioscientific community and outside

of it. Indeed, reporting on a 2011 Nature poll examining bioscientists' views on animal rights extremism, Cressey (2011) writes that '[i]t can be challenging to explain the type of nuanced positions on animal research that the poll revealed: 33% of respondents had "ethical concerns" about the role of animals in their current work' (Cressey, 2011: 453). That scientists who work with animal models might have ethical concerns may seem challenging to understand at first glance, however, this is only so if we continue with the idea that the moral question of animal research is settled and that discussion of the issue should now tackle only the science. Such a framework constructs ethical concern around animal research as belonging only to those outside of the bioscientific community, as a hostile force which is borne from misunderstanding or ignorance. It reinforces the polarisation between scientists using animals and those whose concerns are most vocal or visible, such as campaigning organisations and activists. However, I believe that recognition of the ethical problem at the core of the scientific use of animals is key to good practice. Discussing what American bio-mathematician Carol M. Newton termed the '3 Ss: Good Science, Good Sense and Good Sensibilities', Smith and Hawkins (2016) emphasise empathy as crucial to good sensibility in the scientific use of animals, with empathy for research animals being 'a prerequisite for the reduction of suffering and a "life worth living" for the animals' (Smith and Hawkins, 2016: 3). In my view, this empathy for research animals should be based in a recognition that the current situation is ethically problematic, that the material situation they exist within is not in *their* interests and, although positive animal welfare can be worked towards in the confines of research facilities, the very use of animals as means for primarily human ends remains fraught with ethical concerns.

Given that we are all implicated in the scientific use of animals, as funders through taxation, as beneficiaries of the knowledge and applications it generates, and as citizens who give legitimacy to the social contract upon which animals can be justifiably used, concerns towards the practice are the concerns of those whose name animals are used in. In this sense, an open embracing of such concerns is a democratic obligation, and, as one Mass Observer (T1843) put it, 'As it's an ethical issue, everyone should be involved in it…'.

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Appendices

In reproducing Mass Observation Project Directives here, there may be slight formatting differences from the originals. This is due to the integration of the Directives into Microsoft Word. The original Directives can be accessed here http://www.massobs.org.uk/mass-observation-project-directives.

MASS OBSERVATION
Recording everyday life in Britain

The Mass Observation Project

Summer 2016 Directive

Part 1: Using animals for research

Please start each part of your Directive reply on a new sheet of paper with your MO number, sex, age, marital status, the town or village where you live and your occupation or former occupation.

Remember *not to identify yourself or other people* inadvertently within your reply. It is best to use initials instead of real names.

Experiments on animals are widely used to understand disease and to develop and test new medicines. However, using animals for this kind of research remains controversial. Is animal research necessary to understand and improve human health, or are there other ethical issues to consider?

Before you read on, please note down the immediate phrases or images that come to mind when you hear the term 'laboratory animal research'.

Thinking back

Over the years, there have been many highly publicised examples of animal experiments, and coverage of protests against animal research. Are there any examples that you specifically remember?

Have any media stories you may have seen prompted you to have conversations with friends or family about this topic? Have your own views on the subject changed over time?

Everyday life

Do you have any personal experience of working in an environment where research using animals was/is carried out?

Were animals used in science classes at your school or college? How did you feel about this at the time, and do you have any reflections now looking back?

When taking medicines or buying them for you and your family members, to what extent do you think about the scientific research on animals that went into producing them?

Policy and practice

What are your impressions of the people who work in laboratories that use animals for research?

Are there some species of animal that shouldn't be used for research, and other species that are more acceptable? Please give details.

Some people claim that the general public needs to know more about animal research, and that more 'openness' from scientists and the government is therefore needed. What do you think of this suggestion?

Part 2: Being 'thrifty'

This Directive is about how you manage resources around the house. Do you 'make do and mend', or do you prefer to buy new when something is broken? Those who have been writing for MO for a while may remember that we issued a similar Directive in the 1980s. This Directive revisits the subject to see if, and how, things have changed.

Please start each part of your Directive reply on a new sheet of paper with your MO number, sex, age, marital status, the town or village where you live and your occupation or former occupation.

Remember *not to identify yourself or other people* inadvertently within your reply. It is best to use initials instead of real names.

Being thrifty

What do you think of when you think of thrift or being thrifty?

Is being thrifty generational? Can you remember your parents or grandparents doing anything specifically to save resources?

Do you have any objects, handed down to you, which you still use today (kitchen utensils; furniture, gardening equipment or tools)? Why do you keep these? Are they better than the ones you can buy today?

Have you noticed any resurgence in the notion of being 'thrifty'? If yes, why has this happened?

You

What things do you do to be economical with your resources? Maybe you collect rainwater, or darn socks? Are you committed to knitting, mechanics, baking or DIY? Maybe you never

waste food, preferring to freeze it or give it away? Please share any tips, no matter how trivial you might think they are!

Do you do any of these activities for pleasure (as a hobby)? Or, do you do them out of necessity to save money?

Thrift and time

Have these tasks become part of your everyday routine? Do you do things at set times every day or week or perhaps every month/season/year? Does being thrifty take time and planning?

Thrift and waste

How does being thrifty relate to being environmentally responsible? Is this a new thing? Are we all consuming too much? What about the push to reduce food waste?

What do the terms 'upcycling, recycling and reuse' mean to you? Do you do any/ all of these things? How do you do them?

Your neighbourhood

Thinking now about your neighbours, do you share things with them such as food or tools? How much do you rely on them to help you out with lending, borrowing and sharing, or helping with tasks around the home? If not your neighbours, what other networks or groups do you rely upon to get by?

Local events

The 1987 Directive talked specifically about Jumble Sales. These seem to be a thing of the past, but what other events are popular in your community?

Please let us know if you have seen any thrifty events advertised in your local area. This could be a food bank, or a 'Bring and Buy' sale, Jacobs Joins, Pot Lucks or a clothes swapping party. Who attends these events? Have you attended anything like this?

Are there more or less of these events then there were 10 years ago? In what ways have they changed and in what ways have they stayed the same? Do people get more out of such events than just being thrifty, such as meeting new people and making friends? Please share any thoughts.

Please post your response to: **Freepost: RTGU-AYJE-YSSC**, **The Mass Observation Archive, The Keep, Woollards Way, Brighton, BN1 9BP** or by email to: **moa@sussex.ac.uk** JS Summer Directive/No. 106

The Mass Observation Project
Summer 2009 Directive

Part 1: Animals and humans

This directive is about the part played by animals in your life, from your childhood until the present day. You may live and work with animals or rarely encounter them – whatever your circumstances we are interested in your experiences with animals and any stories you can tell us which throw light on the part they play in your life.

As usual, please start each part of your directive reply on a new sheet of paper with your MO number (NOT name), sex, age, marital status, the town or village where you live and your occupation or former occupation.

Remember not to identify yourself or other people inadvertently within your reply.

What do animals mean to you?

Before you answer the more specific questions below, please could you jot down ten separate words or phrases which describe what animals mean to you.

Childhood and animals

What part did animals play during your childhood? Did you read stories about animals? See films about animals? Visit zoos or circuses? Ride horses? Have pets? If you had a pet please can you describe your relationship with them. Were you responsible for looking after a pet? Did you experience the death of a pet? How did this make you feel?

What part do animals now play in your life?

Are animals part of your daily life? If so, please can you describe your involvement with them and your relationship to them.

Has the type of animal you're involved with changed over time? Are animals relevant to you in any other way? Do you see this as being typical of your community or social group?

Living with animals

Do you share your home with any animals or have you done so in the past? How would you describe your relationship with them? Is it similar to or different from your relationship/s with the people who you share your home with or are close to?

Please describe your daily routine with an animal that you feel or have felt particularly close to. How would you describe your relationship with this animal?

If you have never shared your home with an animal please could you tell us if there is any reason for this.

PLEASE TURN OVER

Working with animals

Do you work with animals? How would you describe your relationship with the animals that you work with?

Please can you provide an account of your working day and your interactions with the animals you work with. Do you get attached to any of them?

Animals and well-being

Do animals contribute to your well-being in any way?

Do they enable you to meet people? How?

Have you experienced the death of a companion animal? How did this make you feel? What made you feel better?

Animals as food

Do you eat animals/wear clothing made from animal products?

If you do, how does this relate to the way you feel about animals?

If you are a vegetarian please can you tell us how you became one and the reasons for this, particularly if they relate to your feelings about animals.

Animal welfare

Are you concerned about the welfare of the animals that provide us with food and/or clothing? Do you support any animal welfare organisations? Might you consider leaving a bequest to an animal charity? What do you feel about people who donate to animal welfare in this way?

Sport

Are you involved in any sport with animals? (This could be racing, hunting, shooting, fishing). Please can you describe your relationship to the animals involved.

Do you oppose any sports involving animals? Please can you describe the form this opposition takes.

Television and films

Do you watch television programmes or films about animals? What sort of programmes/films are they and what is it about them that you enjoy?

Wild animals

Do you have any relationship with wild animals? Do you feed birds or other animals in your garden? Do you consider any animals to be vermin?

Have you been 'on safari' or to a wildlife reserve?

Are you involved in any conservation projects or environmental organisations? Why?

And now we'd like you to think about these more general questions

What is it that distinguishes a pet from other animals?

It is often said that a dog is a person's best friend. Do you think there is any truth in this? People sometimes say that their animals are part of their family – has this been your experience?

Have you encountered any cultural or national differences in the way we relate to animals?

Part 2: Heaven and Hell

Please start both Part 2 and Part 3 of your directive reply on a new sheet of paper with your MO number and a brief biography (see page 1).

This Directive is about 'heaven' and 'hell'. What do these words actually mean to us nowadays?

- What do 'heaven' and 'hell' mean to you? What sorts of feelings, images or relationships come to you when you use or hear these words? (Please expand, or even illustrate)

- What do you think about the idea of an afterlife? Do you spend time thinking about this? What do you think determines what happens to us in the afterlife?

- Where did your first ideas about heaven and hell come from? How have your ideas of heaven and hell changed over time? Have your experiences of life changed your ideas about heaven and hell?

- How do you think science has changed how we think about the afterlife? Do you think our understandings of heaven have been, or will be, affected by the ongoing scientific exploration of the universe?

- Why do you think people have ideas about heaven and hell?

Part 3: Swine flu or H1N1

What do you think about the swine flu pandemic so far?

Views please on the whole issue, publicity and media coverage, health advice, fears for the future.

Please include, as always, your own direct experience either of the illness or of any preparations to cope you have witnessed or done yourself.

How concerned are you for yourself and those near to you?

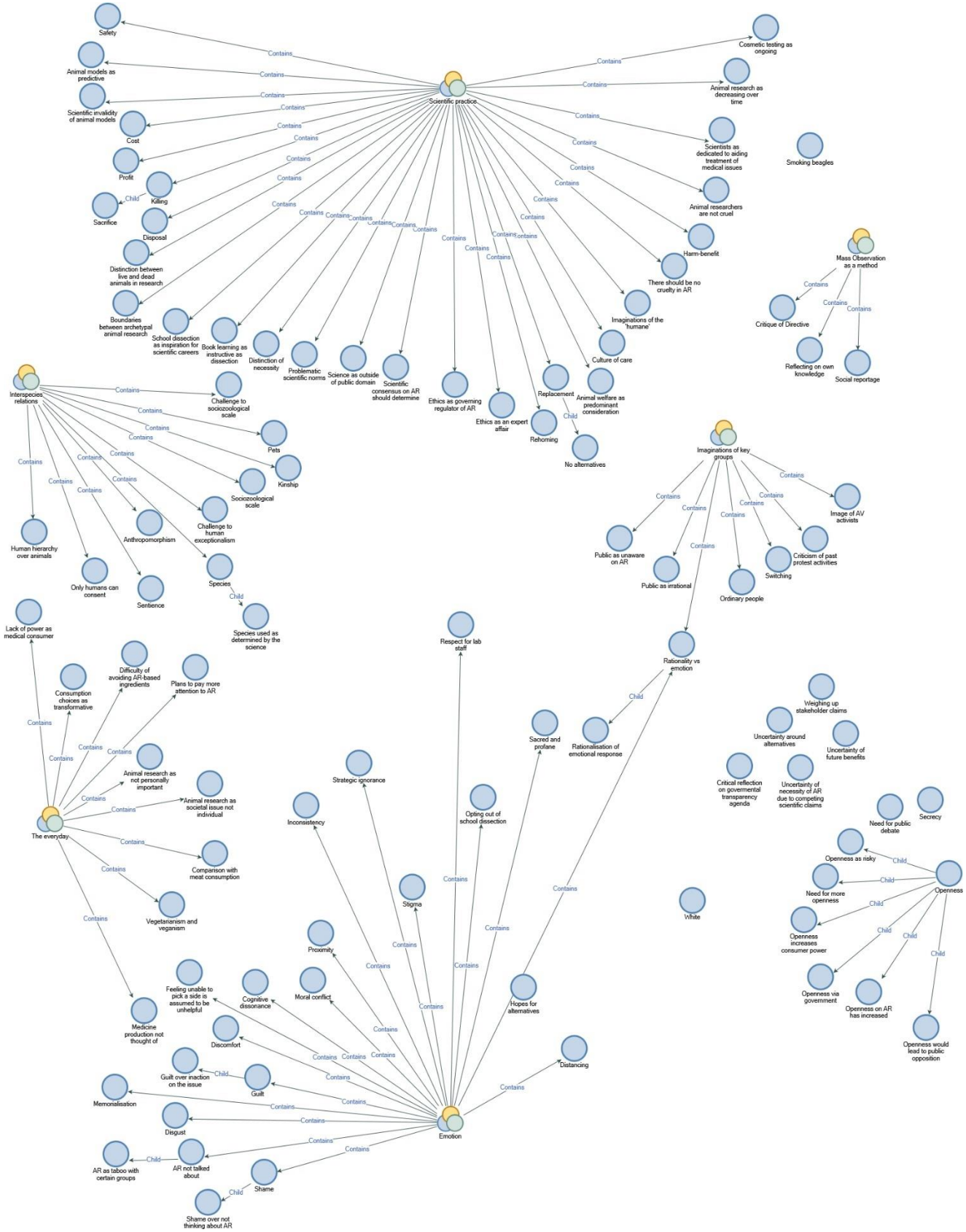
Have you been involved in any outbreaks? If so how has it affected you?

Have you changed your own behaviour in any way? More careful hand-washing? sneezing into your elbow? Buying medicines? Talking to your doctor? Other changes?

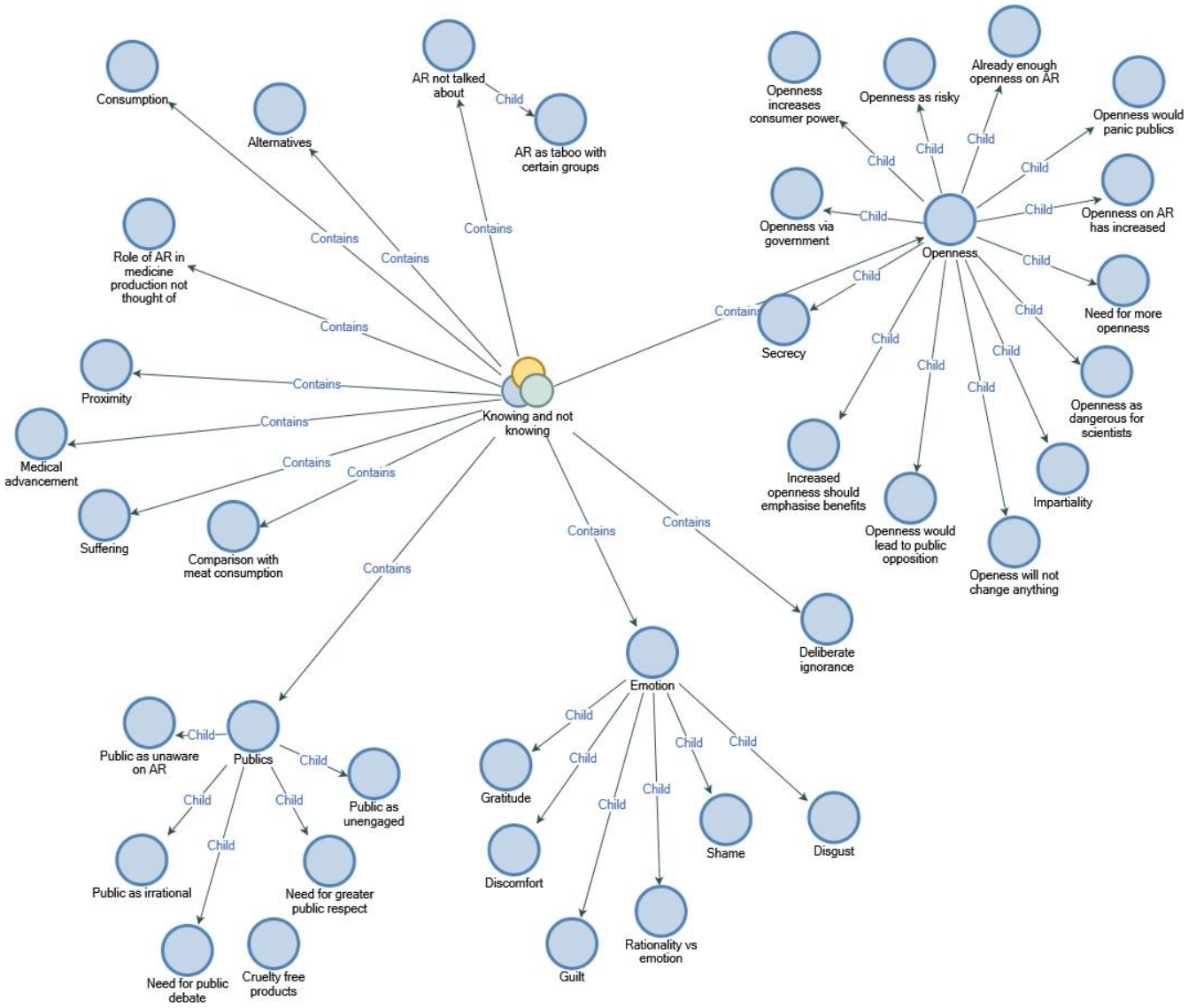
Please post your response to:
The Mass Observation Archive, FREEPOST BR 2112, The Library, University of Sussex, Brighton BN1 1ZX Or by email to: **moa@sussex.ac.uk**

DS/July/August 2009/Directive No. 86

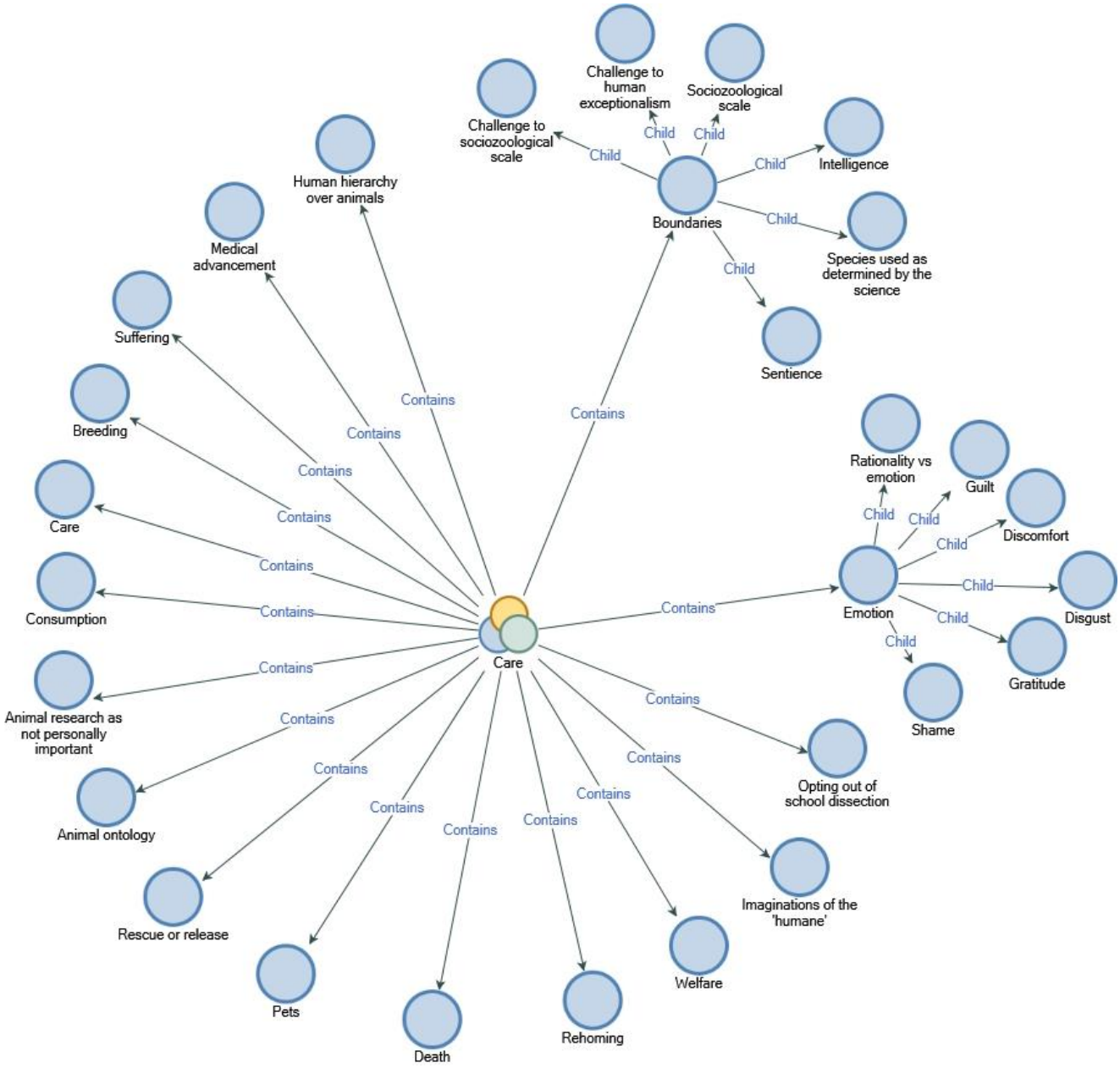
Appendix C: Thematic Project map created on NVivo 12



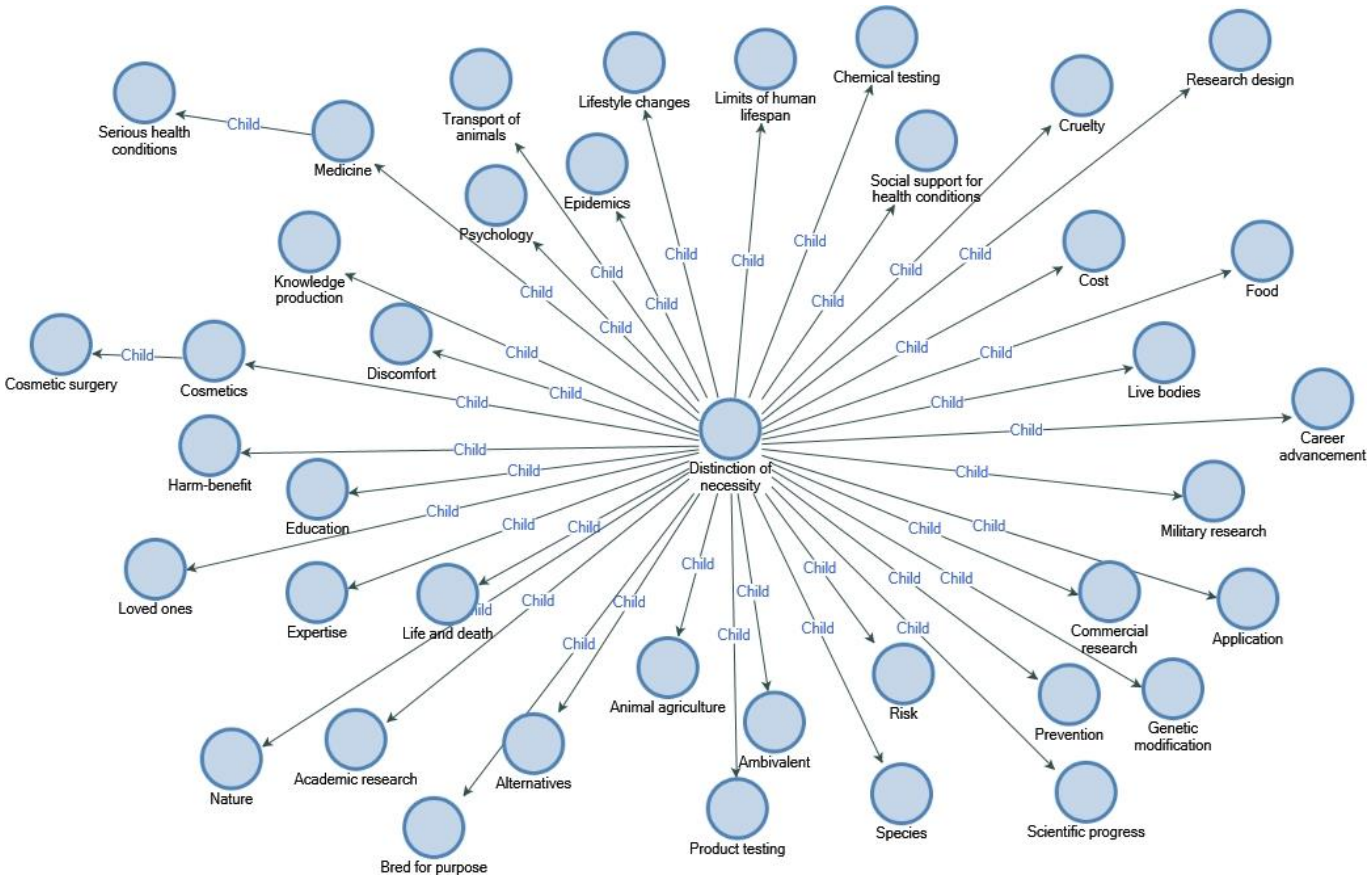
Appendix D: Thematic Project map created on NVivo 12 on theme of 'Knowing and not-knowing'



Appendix E: Thematic Project map created on NVivo 12 on theme of 'Care'



Appendix F: Thematic Project created on NVivo 12 on theme of 'Necessity'



Appendix G: Written outputs from the PhD

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McGlacken, R. (2019a) '*Having Conversations with the Past and the Present: Visiting an Archive*' [Blog post]. The Enquire Blog. University of Nottingham. Available at http://blogs.nottingham.ac.uk/enquire/2019/07/22/winner-of-the-2nd-prize-of-the-enquire-blog-post-competition-2019-renelle-mcglacken-having-conversations-with-the-past-and-the-present-visiting-an-archive/.

McGlacken, R. (2019b) '*Animal Research and Publics: Knowing and Not Knowing in the UK Debate*' [Conference proceeding]. *Sustainable governance and management of food systems*.

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Davies., G, Gorman, R., Greenhough, B., Hobson-West, P., Kirk, R. G. W., Message, R., Myelnikov, D., Palmer, Al., Roe, E., Ashall, V., Crudgington, B., McGlacken, R., Peres, S., and Skidmore, T. (2020) Animal Research Nexus: A New Approach to the Connections between Science, Health and Animal Welfare. *Medical Humanities* 46(4), 499-511.

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Morris, C., Kaljonen, M., Aavik, K., Balázs, B., Cole, M., Coles, B., Efstathiu, S., Fallon, T., Foden, M., Giraud, E. H., Goodman, M., Kershaw, E. H., Helliwell, R., Hobson-West, P., Häyry, M., Jallinoja, P., Jones, M., Kaarlenkaski, T., Laihonen, M., Lähteenmäki-Uutela, A., Kupsala, S., Lonkila, A., Martens, L., McGlacken, R., Mylan, J., Niva, M., Roe, E., Twine, R., Vinnari, M., and White, R. (2021) Priorities for Social Science and Humanities Research on the Challenges of Moving beyond Animal-based Food Systems. *Humanities and Social Sciences Communications* 8(1), 1-12.

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