Nonhuman animal experiments in the European Community: human values and rational choice.¹.

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Abstract

In 2008, the European Community (EC) adopted a Proposal to revise the EC Directive on nonhuman animal experiments, with the aim of improving the welfare of the nonhuman animals used in experiments. An Impact Assessment, which gauges the likely economic, scientific and nonhuman animal welfare effects of future changes, informs the Proposal. By using a discourse analytical approach, this paper examines the Directive, the Impact Assessment and the Proposal to critically reflect upon assumptions about the morality of nonhuman animal experiments. Because nonhuman animal welfare is so prominent in the Proposal, it appears that the EC position advances beyond human self-interest (orthodox rational choice) as the sole motivator for such experiments, to ethical questions about the welfare of nonhuman animals (which can be better explained by a multidimensional approach to rational choice). In examining this contention, this paper concludes that, even given concerns about nonhuman animal welfare, nonhuman animal experimentation in the EC is firmly grounded in a morality that focuses on human benefit goals rather than on the wider moral issues associated with the means of achieving such goals.

Keywords: european community, nonhuman, animal, human, experiments, ethics, rational choice.

Introduction

In 2005 in the European Community (EC), over 12 million nonhuman animals were used in experiments (Commission of the European Communities, 2007). Though the rules governing such experiments differ among Member States, discourses associated with their approval are often similar, being typically located within evaluations of the moral integrity (connected with the benefits that might accrue) of conducting them. Taking one Member State as an example: the UK-based Coalition for Medical Research asserts that "...animal research has played a major part in developing improvements in human health", but stresses that "The work we do is performed with compassion, care, humanity and humility" (2007, p.2). This reflection on the welfare of nonhuman animals implies that stark utilitarian choices associated with maximising human benefits² and minimising human costs of such experiments is tempered by a concern with the morality of imposing harms on those experimented upon; accordingly nonhuman experiments are only

justifiable, under these conditions, if nonhuman animal harms are surpassed by the benefits accrued. This is prominent in the EC position on nonhuman animal experiments.

The theme of nonhuman animal welfare is extant in a Proposal (adopted by the EC in November 2008), to revise the EC 1986 Directive 86/609/EEC, which had sought to place foundational requirements for nonhuman animal experiments on Member States (Council of the European Communities, 1986). The Proposal, which aims to protect the internal market and to improve the welfare of nonhuman animals (Commission of the European Communities, 2008b), is informed by an Impact Assessment that gauges the likely economic, scientific and nonhuman animal welfare effects of proposed changes to the Directive (Commission of the European Communities, 2008a). By focusing on the Directive, the Assessment and the Proposal, this paper explores, via critical rational choice theory, the complex character of choice discourses connected with the EC position, in order to reflect upon assumptions central to the claims about the morality of nonhuman animal experiments. Because nonhuman animal welfare is so prominent in the Proposal, it appears that the EC position has advanced beyond human self-interest to wider moral concerns about the welfare of nonhuman animals. Rational choice theories enable exploration of this contention because such theories provide a basis for examining motivations for, and decisions about, nonhuman animal experiments, and critical discourse analysis facilitates some unveiling of the assumptions in which the EC position is rooted. In accordance with this, my main aim is to examine the EC position on nonhuman animal experiments in terms of notions of moral progress by: (a) exploring onedimensional and multi-dimensional approaches to rational choice theory as explanations for the EC position; and (b) by investigating assumptions central to the EC logic on nonhuman animal experiments.

The aims are reflected in the structure of this paper. The opening section summarizes the EC position and explains why discourse analysis is an appropriate tool for undertaking an analysis of the complexity of the discourses associated with the changes proposed. As the focus is on change, the next section explores orthodox rational choice notions of decisionmaking that centre on the weighing up of human costs and human benefits as an explanation of nonhuman animal experimentation. This orthodox approach to the 'rational' focuses on self-interested actors (Zafirovski, 1999) but, because the theme of nonhuman animal welfare is extant in the EC Proposal, in the section that follows I move on to a more complex rational choice approach. Here I utilize the work of the economic sociologist, Zafirovski, who posits a multidimensional rational choice model where 'rational' is defined in both utilitarian and non-utilitarian terms (1999, p. 47). This is a more useful approach for the purpose here, because it allows consideration of the moral reasoning associated with the EC Proposal. However, even given the nonhuman animal welfare concerns extant in the Proposal, I conclude that the Proposal is grounded in human benefit goals associated with the assumed primary moral importance of the human rather than, following Bauman (2000), the wider moral issues associated with the means of achieving these goals.

Examining discourses associated with experiments on nonhuman animals in the European Community Annually more than 100 million nonhuman animals are used in experiments worldwide (Rowlands, 2002, p. 124), and in 2005 in the EC alone 12.2 million (vertebrate, living) nonhuman animals³ were used in experiments (Commission of the European Communities, 2007). Because regulations on nonhuman animal experiments vary among Member States, the 1986 Directive sought to harmonise the regulations "regarding the protection" of nonhuman animals used in experiments in the EC (Council of the European Communities, 1986). Only selected nonhuman animals are 'protected' (and 'protection' here refers to cover by the Directive rather than shielding from danger or injury), and protected nonhuman animals comprise "any live non-human vertebrate, including freeliving larval and/or reproducing larval forms, but excluding foetal or embryonic forms" (Council of the European Communities, 1986, Article 2a). Experiments consist of "any use of an animal for experimental or other scientific purposes which may cause it pain, suffering, distress or lasting harm" (Council of the European Communities 1986, Article 2d). Permitted purposes for experiments are associated with: the development, manufacture and testing of drugs, foodstuffs and other products; disease prevention, diagnosis or treatment; assessment, discovery, regulation or modification of physiological conditions in humans, nonhuman animals and plants; and the protection of the natural environment (Council of the European Communities 1986, Articles 3a and 3b). In November 2008, the European Commission adopted a Proposal to revise this Directive, with the aims of protecting the internal market and improving the welfare of nonhuman animals (Commission of the European Communities, 2008b). The Impact Assessment, upon which this Proposal is based, gauges the likely economic, scientific and nonhuman animal welfare effects of proposed changes (Commission of the European Communities, 2008). The rest of the paper focuses on extracts from the Directive, the Impact Assessment and the Proposal.

In order to explore the complexity of the discourses associated with the proposed EC changes, and to critically reflect upon the moral position extant in the Proposal, I apply a discourse analytical approach to the extracts. This approach is appropriate because discourse is fundamental to our construction of truth as, 'effects of truth are produced within discourses which in themselves are neither true nor false' (Foucault, 1980, p. 118). Accordingly, I consider how the discourses within the texts normalise the oppression of nonhuman animals, and explore how layers of ethical approval and moral progress mask this normalised oppression. Consequently, my approach conforms to critical discourse analysis because I seek to 'analyse how social and political inequalities are manifest in and reproduced through discourse' (Wooffitt, 2005, p. 137). In this regard, I explore the harms-benefits discourse associated with the regulatory choices made about nonhuman animal experiments in the EC, and critically reflect upon the assumption that the endorsement of experiments on nonhuman animals can be ethical. However, I do not use an intense discourse analytical approach, which would provide a more detailed analysis of the language in the texts, rather I use discourse analysis as a tool for uncovering assumptions contained in the texts. To do this, I ground my theoretical approach in critical rational choice theory because this facilitates reflection upon the complex character of choice discourses connected with the EC Proposal. Consequently, I aim to explore constructions of, and assumptions about, human and nonhuman animal liberties (and associated moral positions on these) and investigate how the language in the texts constructs and reconstructs human choices about nonhuman animal

experiments. As the permitted purposes of nonhuman animal experiments are principally located within evaluations of the maximisation of human progress, I now move on to consider motivations for nonhuman animal experiments by means of orthodox rational choice theory of instrumental human motivations. Thus, I interpret orthodox rational choice as relating to costs and benefits to the beneficiary (or the group of beneficiaries) making the choice (in this case humans).

A one-dimensional utilitarian approach to nonhuman animal experimentation

The social theorist Bauman (2000) finds repugnant a world structured around instrumental rational choice, however, he despondently declares that this is the actuality of our current times (Fine and Hirsh, 2000, p. 184). For Bauman (2000), the immorality of the present age is that we spend most of our lives grappling with decisions about which goals to pursue rather than struggling with the moral issues associated with the means of achieving these goals. So, for Fine and Hirsh (2000), Bauman's conceptualisation conforms to an orthodox rational choice model because human action is defined simply in terms of the desire to maximise gains and minimise costs. Our desire to maximise gains and minimise costs are evident at individual, corporate, and societal levels, and this points to a problem; orthodox rational choice theory usually centres on individual level choices because, as Craven points out, there is disagreement about whether collectivities can make "fully rational choices" (1992, p. 22). Of course, many of our choices are not made by us at all, but are made on our behalf (e.g. by elected representatives in governments), and this, not least, demonstrates that attention only to the individual level conceals the role of higher-level decision-making processes (Beckford, 1999)⁴. My focus is on collective decisions, and Zafirovski (1999) contends that (multidimensional) rational choice theory is an effective tool for revealing features of higher-level decision-making (in this case EC decisions about nonhuman animal experiments).

Orthodox rational choice models provide a good starting point for exploring decisions about nonhuman animals experiments because orthodox models focus on, what Archer and Tritter (2000) call in another context, an 'instrumentally rational' costs-benefits approach, where the costs (in this case, what would be lost if nonhuman animal experiments did not take place) are evaluated in terms of the benefits (the benefits of nonhuman animal experiments). It is specifically this attachment to instrumentally rational action, argue Emel and Wolch (1998), that permits nonhuman animal experiments to take place at all. So, as Garner comments, advocates of nonhuman animal experiments claim that "using animals in scientific procedures does, in a way that no alternative could, contribute to the longevity of human life" (2005, p. 131). This position is not without its critics. For example, 'practical anti-vivisectionists' maintain that nonhuman animal experiments do not produce human gains (Garner 2005, p. 127)⁵. Nonetheless, the EC position is that nonhuman animal experiments yield essential benefits and the costs of prohibiting such experiments would be felt in such areas as disease diagnosis, treatment and prevention, and knowledge advancement (e.g. see Council of the European Communities, 1986). Additionally, however, the EC position also exhibits what Archer and Tritter (2000) call a 'substantive' approach to rationality, because moral issues associated with human advancement, both in terms of human and nonhuman animal harms, are signalled. So, under the terms of the Directive, "An

experiment shall not be performed if another scientifically satisfactory method of obtaining the result sought, not entailing the use of an animal, is reasonably and practicably available" (Council of the European Communities, 1986, Article 7 (2)). This problematizes orthodox cost-benefit analyses, because the standard of avoiding nonhuman animals experiments where practicable, reveals a moral condition, associated with nonhuman animal costs, on the attainment of human advancement.

As we have seen, Bauman (2000) observes the immorality of our present age in the narrow self-interested way in which we conduct our lives. In this, Bauman uses the metaphor of a "garden culture" where, for the gardener, "all actions are instrumental, while all the objects of action are either facilities or hindrances" (1989, p. 92). Fine and Hirsh, however, criticise Bauman for "obscur[ing] the inner connections between modernity and the development of moral consciousness itself" (2000, p. 184) and for us, thinking about experiments on nonhuman animals, this is perhaps confirmed by the long history of moral reasoning that centres on the position of nonhuman animals (e.g. see Tester, 1992). Indeed, regarding nonhuman animal experiments, Kean (1998) comments that moral concerns about them have led to their practice becoming increasingly controversial as modernity has progressed. This increasing moral concern is prominent in the Assessment, which seeks to update the Directive because of 'public/societal problems' associated with 'changed ethical and societal values' (Commission of the European Communities, 2008a, p.4). Hence, contra Bauman, it seems that the moral issues associated with nonhuman animal harms trouble humans. This suggests that a multidimensional approach to choice, which complicates human self-interest by incorporating issues associated with moral reasoning, might be an appropriate tool for examining changes in the EC position on nonhuman animal experiments. So, I now turn to Zafirovski's (1999) multidimensional approach to rational choice, which, though having limitations (Peggs and Lampard, 1999)⁶, provides a more effective analytical tool for the exploration of multiple stimuli that go beyond the benefits (in this case repeatedly based in claims about the control and cure of diseases and other ills) often highlighted by promoters of nonhuman animal experiments. This approach enables a teasing out of the cultural, social psychological, political and economic influences associated with decisions about nonhuman animal experiments. I start with cultural variables as this permits exploration of the moral dimension, increasingly prominent in the EC position.

A multi-dimensional approach experiments on nonhuman animals

Cultural variables

Zafirovski's (1999) cultural dimension (which embraces norms and values) most obviously incorporates the moral position extant in the EC texts. This moral position lays emphasis on the conditional granting of licences, approved in the absence of alternatives, and granted on the basis that the alleviation of human suffering will outweigh the suffering of protected nonhuman animals used. Let us explore this further.

The 2008 Assessment responds to the 1986 Directive statement that "All experiments shall be designed to avoid distress and unnecessary pain and suffering to experimental

animals" (Council of the European Communities, 1986, Article 7) by declaring that ethical considerations are "not sufficiently reflected" in the Directive (Commission of the European Communities, 2008a, p.3). The Assessment finds limitations in two main areas of "animal welfare": (a) the different standards of protection for nonhuman animals in different Member States⁷, marked by the differences in "the legal status of the system, the level at which ethical evaluation is implemented and the elements that are integrated in the evaluation process" (Commission of the European Communities, 2008a, p.16); and (b) the number of nonhuman animals used who are not covered by compulsory ethical evaluation, some 4.9 million in 2005 (Commission of the European Communities 2008a, p.16). It is thus clear that the moral focus is on the "Strengthening of the requirements for authorisation and ethical evaluation of projects" (Commission of the European Communities, 2008a, p.5), rather than on whether nonhuman animal experiments should take place at all. This position is confirmed by the assertion in the Proposal that "the use of live animals continues to be necessary to protect human and animal health and the environment" (Commission of the European Communities, 2008b, p.14).

The main aim of ethical evaluation, according to the Assessment, "is to ensure that the use of animals is ethically justified" (Commission of the European Communities, 2008a, p.17). Ethical justification typically conforms to what Garner calls the "moral orthodoxy" where humans are "justified in choosing to sacrifice the interests of animals" in the event of a conflict of interests with humans if, without the pain or death of nonhuman animals, more suffering would result (Garner, 2005, p. 23). Thus the Proposal asserts that 'The likely harm to the animals should be balanced against the expected benefits of the project" (Commission of the European Communities, 2008b, p.18). Signalled by an orientation to the Three Rs principle (of replace, reduce and refine the use of nonhuman animals in experiments), the ambition is to widen the reach of ethical evaluation while aiming for a reduction in the number of nonhuman animals used and a reduction in the suffering caused. The Assessment notes disquiet that the Directive "does not explicitly refer to, nor ensure the full application of the Three Rs principle" (Commission of the European Communities, 2008a, p.3) with only 15 Member States undertaking ethical evaluation on this basis (Commission of the European Communities, 2008a, p.16). This moral concern appears to confirm the departure of purely self-interested humans who inhabited orthodox rational choice models, a departure evidenced by the "harm-benefit" analysis (which focuses on nonhuman animal costs) and the "severity classification system" of nonhuman animal harms, used in 13 Member States (Commission of the European Communities, 2008a, p.16)8. By means of the addition of a moral concern about harm to protected nonhuman animals (and we must remember, we are only talking about those nonhuman animals defined as 'protected'), the EC seems to be positioned beyond an analysis based in the costs to humans if experiments do not take place (cost-benefit analysis), to one that also embraces concerns about the costs to nonhuman animals if they do take place (harm-benefit analysis). This is present in the Proposal statement that "From the ethical standpoint, there should be an upper limit of pain, suffering and distress, above which animals should never be subjected in scientific procedures" (Commission of the European Communities, 2008b, p.16). The harm-benefit analysis indicates EC recognition that protected nonhuman animals do suffer, and suggests a

moral imperative to avoid that suffering (where it is deemed illegitimate) and to ease that that suffering (where it is deemed unavoidable). Furthermore, the orientation to the aspirations of Three Rs principle implies that the experiments that do take place are essential, non-negotiable, and as misery-free as possible Consequently, the harmbenefit analysis and the related Three Rs principle sanction nonhuman animal experiments on the grounds of perceived acceptable costs and acceptable benefits, while conveying a moral position associated with human responsibility to protected nonhuman animals.

Further analysis of the texts indicates that enhancements associated with ethical review reach beyond the welfare of nonhuman animals. The Assessment posits that, "Ethical evaluation is frequently mentioned as one of the key instruments to improve the scientific outcome and the welfare of experimental animals" (Commission of the European Communities, 2008a, p. 17). So, the apparently exclusive concern about harm to nonhuman animals who fall outside ethical review also incorporates a human-centred worry about the effects of nonhuman animal harms on scientific results. This is not surprising. Norms and values associated with the intrinsic importance of (biomedical) scientific research are deeply entrenched in Western societies (Gray, 2003, Haraway, 1997) and mention of damaging effects to scientific results might be intended to persuade doubters about the efficacy of the proposed changes. Never the less the ranking of the concern about scientific results above that of a moral concern about nonhuman animal harms (notice the positioning in the extract above) resonates with the human-centred focus evident in more orthodox instrumental rationality. This is amplified by the persistent reference to the "non-level playing field" of ethical evaluation, which, the Assessment laments, exposes "animal users in different States to an uneven competitive environment" (Commission of the European Communities, 2008a, p. 17). The now demoted concern about nonhuman animal harms is underlined by the subordinate position it is given in the hierarchy of Policy Objectives set down in the Assessment. Here "a significant improvement in animal welfare and protection over the life time experience of experimental animals" appears as a Secondary Objective, behind reducing "unfair competition" (the Overall Objective) and ensuring a "level playing field" (the Primary Objective) (Commission of the European Communities, 2008a, p.29). Accordingly, it seems that the display of concern about nonhuman animal harms is important in presentations of the ethical justification for nonhuman animal experiments, but it is less important than the market distortions that different practices and evaluations generate.

The moral position in the EC is rooted in the differences in moral worth attributed to humans and nonhuman animals. This should come as no surprise; this hierarchy of moral worth is taken-for-granted in most human societies. As a result, protected nonhuman animals are viewed as having some moral worth but only as "second-class members" of the "moral club" (Rowlands, 2002, p. 27). This hierarchy of moral worth is fundamental to the disadvantaged status of nonhuman animals and is the context in which choices are made about legitimate and illegitimate nonhuman animal suffering. Thus, we can speak of a "thin veneer of civility surrounding human-animal relations" (Wolch and Emel, 1998, p. xi) because, in their status as second-class, millions of protected nonhuman animal are used annually in experiments that have been

declared morally legitimate in the EC. However, not all nonhuman animals are allocated the status of even 'second-class', consequently, a further important element is the exclusivity of the 'protected' list of nonhuman animals, and Zafirovski's (1999) social psychological variables facilitate further investigation.

Social psychological variables

Zafirovski (1999) includes interpersonal interactions, ties and networks in his social psychological variables, and the emphasis on human ties and networks is clear in discourses that extol an overriding moral responsibility to humans. Of course, it is understandable that there is a human aspiration to reduce, and optimistically eliminate, the ills associated with human life. For instance, Williams (2006) maintains that it is reasonable that humans will stress the interests of themselves over nonhuman animals because humans are more important to us. This is fundamental to biomedical ethics because, as Welchman observes, in the biomedical community "it is widely held that partiality to human interests is not only defensible, but obligatory" (2003, p. 245). So it seems unsurprising that approval for nonhuman animal experiments is established in identification with the group 'human'. Our collective identity as human is based in our notions of our essential distinctiveness from nonhuman animals (Author 2009a, 2009b), but the grounds for this are becoming increasingly uncertain. For instance, genetics suggests that species are not natural types but are "convenient taxonomic schemes" because all animals share 90 plus per cent of their genes (Fuller, 2006, p. 29), moreover developments in ethology persistently undermine the human/animal dualism (Midgley, 2002). Nevertheless, the tacit assumption of an essential and, most importantly here, hierarchical distinction between human and nonhuman animals is unquestioned in EC texts.

Discourses that justify experiments on nonhuman animals on the basis of assumed essential differences are more complex than the human/nonhuman animal dualism suggests because, although nonhuman animals are identified as 'animal' (Derrida, 2004, p. 125), some identified 'animals' are considered less acceptable (or rarely unacceptable) for use in experiments than others. The most acceptable nonhuman animals are the un-'protected'. The 1986 Directive did not cover "any invertebrate species or the life stages before birth or hatching" (Council of the European Communities, 1986, Article 2d). The Assessment continued this line, though it acknowledges sentience in some invertebrates (Commission of the European Communities, 2008a, p.13), however, the Proposal protects cyclostomes, cephalopods and decapod crustaceans (Commission of the European Communities, 2008b, Annex 1), but not all invertebrates. The Proposal title (2008b) refers to '...the protection of animals used for scientific purposes', which implies that all 'animals' are included, however, most invertebrates, and no humans, are considered 'animal' in this respect. But, the connection between humans and invertebrates ends here. Various legislative instruments protect humans; excluded invertebrates are mainly excluded wholesale. This comes as no surprise; we render ourselves too high to be marked 'animal' 9, most invertebrates we render as too low. This is no revelation; even those who assert that humans have a moral responsibility to nonhuman animals often neglect some, if not all, invertebrates. For example, Garner casually declares "it is extremely doubtful if

insects can feel pain and therefore they cannot be harmed in ways that animals can" (2002, p. 21). Sentience is, to be sure, a problematic gauge, not least because some humans are defined as insentient (Singer 2002, p. 220). However, this notwithstanding, because some invertebrates are covered, the Proposal seems to signal progression on the Directive and the Assessment. Nonetheless, this development is based in categorisations in which some invertebrates, are labelled 'animal' (thus are protected as part of 'moral club') and other invertebrates, are not labelled 'animal', (and thus are not protected as part of the 'moral club' because they are judged lower than 'animals').

Among protected nonhuman animals, species judged closer to human are often considered less (or un) acceptable for use in experiments. For example, nonhuman primates are discussed separately in the Assessment because they are regarded as species with highly developed social skills and behavioural manners that are to some. extent similar to those of human behaviour" (Commission of the European Communities, 2008a, p. 21); and in the Proposal we are advised that "due to their genetic proximity to human beings" their use in experiments is controversial (Commission of the European Communities, 2008b, p.15). Nevertheless, in 2002, 9,000 nonhuman primates were used in experiments in the EC Member States (Commission of the European Communities, 2008a, p.20), and in some cases, their use was obligatory because 'some scientific procedures require the use of [nonhuman primates]'(Commission of the European Communities, 2008a, p.21)¹⁰. So, their similarity to us problematizes experiments upon them, but their proximity to us makes their use highly beneficial, and at times required. Among nonhuman primates, great apes are categorized as closer still to human. The Assessment notes that, 'Great Apes [are] our closest ancestors with highly developed capacities' (Commission of the European Communities, 2008a, p. 52), consequently, 'Due to the similarities with human beings, the ethical justification of their use is a sensitive issue and a subject of serious debate' (Commission of the European Communities, 2008a, p. 21-22). No great apes have been experimented upon in the EC since 1999 (Commission of the European Communities 2008a p.52). Great apes are often viewed as "honorary humans" (Midgley 2004, p. 147) and so, like humans, they are sheltered from a moral reasoning that advances the interests of humans over them. However, this could change. In taking into account the opposition of some scientists (noted in the Assessment) to a total ban on the use of great apes in experiments (Commission of the European Communities, 2008a), the Proposal allows for the use of great apes in experiments in exceptional circumstances that relate to the "preservation of the species or in relation to an unexpected outbreak of a life-threatening or debilitating condition in human beings" (Commission of the European Communities, 2008b, Article 50). As a result, the very closeness of (nonhuman) great apes to humans¹¹ makes their position precarious; because they are so closed to us, we have given them a like-human position in the moral club, but because they are so close to us, this exulted position can be withdrawn when we feel threatened (or when we feel they are threatened) by the exceptional.

The Assessment does not set apart other protected nonhuman animals for special protection; however, the discourse implies reflection on the position of nonhuman

animals with whom humans feel especially allied. For example, there is explicit alarm that "endangered species" might be harmed by "low animal welfare" (Commission of the European Communities, 2008a, p.13) and the Proposal stresses that experiments on endangered species should be severely limited (European Communities, 2008b). Additional reflection is also taken on some mammals, but not all mammals. For example, the casual observation in the Assessment that most of the 12.2 million nonhuman animals used in experiments in 2005 in the EC were mice and rats (Commission of the European Communities, 2008a, p.9) confirms how these nonhuman mammals are viewed as laboratory equipment (see Midgley, 2004, p. 149). Although the Assessment reports that "bigger animals are also used in significant numbers (e.g. about 20,000 dogs and about 10,000 nonhuman primates)" (Commission of the European Communities, 2008, p.9), the discourse conveys assurance that experiments are mainly carried out on small, nonhuman mammals who are held to be relatively trivial. Even so, bigger mammals are used, many of them being nonhuman primates (as discussed above) and even more being dogs. Human relationships with dogs (who are often viewed as companions) render experiments on them controversial in the EC (though less controversial than experiments on nonhuman primates who are deemed closer in essence, rather than in relationship, to humans). The Proposal extends additional reflection to other companions, cats, and proposes that, where appropriate, dogs and cats who have been used in experiments should be 're-homed in families as there is high public concern as to the fate of those animals' (European Communities, 2008b, p.16). Accordingly, the special relationship demonstrated in this hierarchy of human concern extends to nonhuman animals with whom we have daily relationships (e.g. companions), those we want to preserve (e.g. endangered species) and those with whom we have an ambiguous relationship (e.g. nonhuman primates). Consequently, choices made about restrictions on, and permissions for, experiments on nonhuman animals extend beyond simply who is most functional for the purpose (in terms of a one-dimensional cost-benefit analysis), to who is most acceptable.

In summary, ties and networks are central to the EC position on nonhuman animal experimentation; hence, a simple one-dimensional cost-benefit analysis is an inadequate analytical tool for examining discourses associated with such experiments. However, these ties and networks are ambiguous. Some nonhuman animals (e.g. great apes) are regarded as so close to humans that experiments on them are considered taboo, however, their very closeness to humans makes the veto precarious, given the potential for future medical achievements. Some nonhuman animals, such as other nonhuman primates, are seen as less acceptable than other nonhuman animals for experiments as they are categorized as social beings, but their closeness to human results in them being judged as necessary (indeed compulsory) targets. The relationship between other vertebrate nonhuman animals and humans (e.g. dogs and cats as companions) or other similarities to humans (e.g. mammals) further complicates the network. After this, a backbone is decisive. Having a backbone entitles restricted inclusion in an expanded network; with a backbone one's position in the network is determined by closeness to the benchmark human; most of those without a backbone are not even given the protection that allows them to be experimented upon under specified conditions. It is humannonhuman animal power relations, explored below, that underpin this complicated network of ties and moral value.

Political variables

Power and domination are fundamental in Zafirovski's political variables (1999) and nonhuman animal experimentation is based in human power (e.g. see Adams 1995, Author 2009a, 2009b). Human power is unmistakable because humans decide which nonhuman animals will be harmed, whether to limit that harm, and indeed whether any nonhuman animals should be harmed in experiments at all. Thus, the Assessment aims to "Improve animal welfare by ensuring a minimum scrutiny and standards of all animal keeping and use in experimental purposes..." (Commission of the European Communities, 2008a, p. 29). In contrast, nonhuman animals plainly have no decision-making power in choices made about experiments upon them. How do humans justify the power taken? Explanation rests in the presumption that 'human' has a natural essence different from, and hierarchically superior to, that of nonhuman 'animal'.

Notions of the naturalness of the differences (and similarities) between 'human' and nonhuman 'animal' obscure the centrality of power in hierarchical 'insider/outsider' classifications (e.g. see discussion in Author, 2009a, 2009b). Hence, what humans define as 'natural' distinctions between nonhuman animals (them) and humans (us) are taken as affording us the 'right' to experiment upon them; it seems not to be a power issue at all. These 'natural' distinctions are based in a range of indicators that are implied and taken for granted in the Assessment and Proposal (phrases such as "highly developed social skills and behavioural manners", "highly aware and social animals" are applied to nonhuman primates who are considered to be like us), and these human conceptualisations and relational categorisations serve to collectively group nonhuman animals as essentially inferior 'other' and humans as superior 'us' (Author 2009a, 2009b). Although, as we have seen, some nonhuman animals are judged less 'other' (e.g. nonhuman primates) than others (e.g. mice), still it is through the subordination of the collective nonhuman animal 'other' that we can see that the "constitution of identity is an act of power" (Laclau 1990, p. 33) and it is differences in power that enable humans to experiment on nonhuman animals at all. Thus, Adams reflects, nonhuman animal experimentation is a "power issue" because "disenfranchised bodies" are used to increase scientific knowledge (1995, p. 138). Such increases in knowledge, based in experiments on disenfranchised bodies, also provide vast economic benefits.

Economic variables

Zafirovski's economic variables most obviously conform to one-dimensional rational choice models because the economic human is conceptualised as a self-interested "utility maximiser" (Abell, 1989 in Zafirovski, 1999, p. 48) who makes every effort to maximise benefits and minimise costs. Economic motivators are also central to the multi-dimensional approach. Utility, profit and wealth undoubtedly influence choices made about nonhuman animal experiments because experimenting on nonhuman animals is big business (Rowlands, 2002)¹². However, the profits to be made in the EC are threatened by unfairness, according to the Assessment, because of the 'non-level playing

field' (Commission of the European Communities, 2008a, p. 4). The central place of economic considerations is clear in the stated aim of the 1986 Directive:

to ensure that where animals are used for experimental or other scientific purposes the provisions laid down by law, regulation or administrative provisions in the Member States for their protection are approximated so as to avoid affecting the establishment and functioning of the common market, in particular by distortions of competition or barriers to trade (Council of the European Communities, 1986, Article 1).

The Assessment prioritises this sentiment in the pronouncement that the overall objective is to "Strengthen the Single Market and reduce unfair competition" (Commission of the European Communities, 2008a, p. 29), because the "unequal competitive environment" is "defeating the objective of the Directive to avoid fragmentation of the internal market" (Commission of the European Communities, 2008a, p. 3). The main concern is that countries with "high animal welfare standards" incur higher costs and consequent competitive disadvantage (Commission of the European Communities, 2008a, p.11). The Assessment aims to level the economic field by enforcing higher welfare standards as minimum. Although nonhuman animal welfare is prominent, in the Assessment this principle is positioned below the reduction of "unfair competition", which diminishes the importance of the nonhuman animal welfare goal. Moreover, even though the Proposal focuses mainly on the welfare of protected nonhuman animals, in the accompanying "Explanatory Memorandum" reference to "strengthening the protection of animals" retains its subordinate position to the incentive of "ensuring a level playing field" (European Communities, 2008b, p.2). Nevertheless, the Proposal recommends improved conditions for nonhuman animals as a way of solving the problems it identifies.

The Assessment concludes that "some of the options that provide for the highest animal welfare benefits create also the highest costs" (Commission of the European Communities, 2008a, p.68) and consequently suggests a compromise of "favoured benefits" (i.e. those that will achieve 'proportional', 'quantifiable', nonhuman animal benefits), estimated at the €143.7 million per year (Commission of the European Communities, 2008a, p.5). Nonhuman animal welfare improvements linked to, for example, changes to cage size and minimum housing and care requirements, are likely to result in increased economic expenditure and thus it is anticipated that there will be some opposition. Being mindful of this, the Primary Objective in the Assessment, which focuses on a 'Strong convergence of standards that ensures a level playing field for industry, researchers and suppliers of experimental animals' seeks to "reduce unfair competition" by "harmonising the minimum requirements..." (Commission of the European Communities, 2008a, p.29). Thus it is anticipated that the level playing field will lead to positive economic effects for those associated with nonhuman animal experiments; including universities, contract research institutes, pharmaceutical companies, breeders and suppliers of nonhuman animals and experimental equipment, and researchers (Commission of the European Communities, 2008a, 2008b). So, if we think back to orthodox rational choice theory, experiments on nonhuman animals are not only based in a cost-benefit analysis grounded in human attempts to shield ourselves from ills, but, as Adams (1995) contends, they are also economic ends in themselves.

Choosing moral progress rather than moral orthodoxy

Zafirovski's (1999) multidimensional rational choice model reveals that the costs and benefits associated with nonhuman animal experiments in the EC are more complex than an orthodox rational choice model might suggest. Although the multidimensional approach reveals that nonhuman animal experiments in the EC remain grounded in human gains (and interests extend well beyond those expounded by scientists who usually focus on the human health benefits), discourses associated with consideration of the welfare of nonhuman animals have become increasingly prominent. This seems to signify an EC position that queries Bauman's orthodox rational choice "garden culture", where experiments on nonhuman animals would be instrumentally focused on human benefit goals and costs, without concern about the moral issues associated with nonhuman animal costs connected with the means of achieving goals. However, although moral considerations are incorporated in the EC Proposal, these concerns remain rooted in a moral orthodoxy where differences in moral worth are attributed to humans and nonhuman animals.

The Impact Assessment and the Proposal are grounded in discourses that extol human ties with humans, and this promotes emphasis on the interests of humans above those of nonhuman animals. The promotion of human interest is a fundamental biomedical ethic, and values associated with the intrinsic importance of biomedical research for curing human ills are deeply entrenched in Western societies. In consequence, a moral club has been generated (where moral commitment to the human is obligatory), in which humans are first-class members and nonhuman animals are, at best, second-class. Moreover, second-class membership is reserved for chosen nonhuman animals, who are 'protected' by EC regulations, the un-'protected' (that is most species of invertebrates) are denied membership of the moral club. Among the protected, some are judged closer to firstclass than others and, those judged closest to human, especially in essence, are most 'protected' (though the closeness of nonhuman primates to humans makes them obligatory targets in some experiments). Indeed, great apes are judged so close to human that they can only be used in experiments in exceptional circumstances. The moral club is thus more complex than second-class 'them' ('animal') and first-class 'us' ('human') membership implies, but this complexity does not erode the hierarchically superior status that humans have awarded the human; the human is still superlative. The human status of first-class bestows many benefits and one of these is the power to make decisions about the fate of nonhuman animals in the EC.

Presumed 'natural' hierarchical distinctions between nonhuman animals and humans are established as affording humans the 'right' to experiment upon nonhuman animals; the power issue is thus disguised. However, a power issue it is, because it is humans who make decisions about nonhuman animal experiments in the EC; nonhuman animals plainly have no decision-making power in choices made about experiments upon them. Yet, the moral orthodoxy requires that nonhuman animal experiments are justified 'morally' only if they serve 'necessary' human interests; so the 'right' of humans to undertake experiments is tempered by an engagement with moral concerns about 'protected' nonhuman animals. None the less, this moral concern is strongly associated

with economic gains. Most fundamental to the proposed EC changes is the smoothing of the "non-level playing field" and the reduction of "unfair competition" that results from, the Assessment laments, varying ethical review standards in different Member States. So, nonhuman animal experiments are not only based in a cost-benefit analysis grounded in human attempts to shield ourselves from ills, a harms-benefits analysis that examines the harms to nonhuman animals used in experiments, a power relationship that gives the human the power to make the choice, they are primary economic ends in themselves.

The main aim in this paper was to examine the moral reasoning associated with the approval of experiments on nonhuman animals in the EC to examine contentions of moral progress. It seems that our values prevent us from making decisions about nonhuman animal experiments for purely stark human self-interest. So, the EC position rejects cost-benefits for humans alone, and the Proposal strengthens this rejection, which was also apparent in the 1986 Directive. Never the less, the EC continues to operate within the moral orthodoxy, where 'human' is the point of reference and permissible harms and costs are ultimately associated with the well being of the human. Thus, the discourses within the EC texts normalise the 'social construction of speciesist reality' (Nibert, 2002, p.195) and layers of ethical approval and moral progress mask the normalised oppression of nonhuman animals. So, the human still plays gardener in Bauman's garden, with a very narrow moral scope. A wider moral scope extends beyond reiterating human self-importance to seeing nonhuman animals as well as humans as valuable creatures in themselves. In the words of Bauman, we could expand our moral scope by letting in 'the Other as a neighbour...back from the wasteland of calculated interests to which it had been exiled...[via] an ethics that recasts the Other as the crucial character in the process through which the moral self comes into its own' (1993: 84). Such an approach in the EC would demonstrate moral progress indeed.

Notes

¹ My thanks to Keith Tester, and to two anonymous referees for their comments on a previous draft of this paper.

² The Coalition For Medical Research (2007) argues that nonhuman animals also benefit from such experiments.

³ For one Member State the figures are for 2004 (Commission of the European Communities 2007).

⁴ Beckford's (1999) 'degree of complexity' and 'level of agency' provide bases for considering the problem that Craven (1992), among others, points up.

⁵ For example, Greek and Greek, hold that "the extrapolation of results from animal models misleads scientists and harms human patients" (2002, p.11).

⁶ Peggs and Lampard note that Zafirovski seems to acknowledge that his model underestimates 'the extent to which the various factors are part of a complex whole...' (1999: 109)

⁷ Seventeen of the 25 member States have some form of ethical evaluation (Commission of the European Communities, 2008, p.16).

⁸ The Assessment indicates that 13 Member States use a 'harm-benefit analysis' for ethical analysis and 13 Member States employ 'a severity classification system'

(Commission of the European Communities p.16). It is not clear whether the 13 Member States referred to are the same in each case.

⁹ Indeed, the most serious charge that can be laid against humans is that they behaved like 'animals' (Midgley, 2004).

¹⁰ Vaccine research for Hepatitis C, and polio, HIV research and 'investigations into higher cognitive functions' require the use of nonhuman primates (Commission of the European Communities, 2008a, p.21).

¹¹ Humans, chimpanzees, gorillas and orang-utans have been categorized as great apes in for example, animal rights campaigns such as the Great Ape Project (e.g. see Singer 2002).

¹² For example, the total annualised sales of Charles River Laboratories (a supplier of nonhuman animals for experiments) were reported to exceed \$1.2 billion in 2007 (Online Investor, 2008, p. 1)

Bibliography

- Adams, C. J. (1995). *Neither Man nor Beast: Feminism and the Defense of Animals*. New York: Continuum.
- Archer, M. S. and Tritter, J. Q. (2000). Introduction. In M. S. Archer & J. Q. Tritter (Eds). Rational Choice Theory: Resisting Colonization (pp. 1-16). London: Sage.

Author. (2009a.)

Author. (2009b.)

- Bauman, Z. (1989). Modernity and the Holocaust. Cambridge: Polity.
- Bauman, Z. (2000). Liquid Modernity, Cambridge: Polity Press.
- Beckford, J. (2000). When the battle's lost and won. In M. S. Archer & J. Q. Tritter (Eds.). Rational Choice Theory: Resisting Colonization (pp. 219-233). London: Sage.
- Coalition for Medical Progress. (2007). *Medical Advances and Animal Research. The*Contribution of Animal Science to the Medical Revolution: Some Case Histories.

 RDS.
- Commission of the European Communties (2007). Fifth Statistical Report on Laboratory Animals com/2007/675/final. In *Laboratory Animals: Statistical Reports*. Retrieved January 21, 2009, from http://ec.europa.eu/environment/chemicals/lab animals/reports en.htm
- Commission of the European Communities (2008a). Commission Staff Working Paper accompanying the Proposal for a Directive of the European Parliament and of the Council on the Protection of Animals used for Scientific Experiments: Impact Assessment. Commission of the European Communities: Brussels SEC (2008).2410/2.
- Commission of the European Communities (2008b). Explanatory Memorandum and Proposal for a Directive of the European Parliament and of the Council on the Protection of Animals used for Scientific Purposes. Commission of the European Communities: Brussels 2008/0211 (COD)
- Council of the European Communities (1986). Council Directive 86/609/EEC of 24

 November 1986 on the approximation of laws, regulations and administrative provisions of the Member States regarding the protection of animals used for experimental and other scientific purposes. Brussels: Council Of European Communities Publications Office.
- Craven, J. (1992). Social Choice: A framework for collective decisions and individual judgements. Cambridge: Cambridge University Press.
- Derrida, J. (2004). The Animal That Therefore I am (More to Follow). In P. Atterton & M. Calarco (Eds.). *Animal Philosophy: Essential Readings in Continental Thought* (pp. 113-128). London and New York: Continuum
- Emel, J. & Wolch, J. (1998). Witnessing the Animal Moment. In J. Wolch & J. Emel (Eds.). Animal Geographies: Place, Politics and Identity in the Nature-Culture Borderland (pp. 1-24). London and New York: Verso.
- Fine, R. & Hirsh, D. (2000). The decision to commit a crime against humanity. In M. S. Archer & J. Q. Tritter (Eds). *Rational Choice Theory: Resisting Colonization* (pp. 183-199). London: Sage.
- Foucault, M. (1980). *Power/Knowledge: Selected Interviews and Other Writings 1972-177* (C. Gordon, Ed. C. Gordon, L Marshall, J. Mepham & K. Soper, Trans). London: Harvester Wheatsheaf.

- Fuller, S. (2006). The New Sociological Imagination. London: Sage.
- Garner, R. (2005). Animal Ethics. Cambridge: Polity Press.
- Greek, C. R. & Greek, J. S. (2002). Specious Science: How Genetics and Evolution Reveal Why Medical Research on Animals Harms Humans. New York and London: Continuum.
- Gray, J. (2003). Straw Dogs: Thoughts on Humans and Other Animals. London: Granta.
- Haraway, D. (1997) *Modest witness@second millenium: Femaleman meets OncoMouse.*London and New York: Routledge.
- Kean, H. (1998). *Animal Rights: Political and Social Change in Britain Since 1800*. London: Reaktion Books.
- Laclau, E. (1990). New Reflections on the Revolution of Our Time. London: Verso.
- Midgley, M. (2002). Beast and Man. London: Routledge.
- Midgley, M. (2004). The Myths We Live By. London: Routledge.
- Nibert, D. (2002). *Animal Rights/ Human Rights: Entanglements of Oppression and Liberation*. USA: Rowman and Littlefield.
- Online Investor. (2008). Company Spotlight Charles River Laboratories (NYSE: CRL).

 Retrieved February 2008, from

 http://www.theonlineinvestor.com/orphans/articles/charles river la...:1-3.
- Peggs, K. & Lampard, R. (2000). (Ir)rational Choice: A Multidimensional Approach to Choice and Constraint in Decisions about Marriage, Divorce and Remarriage. In M. S. Archer & J. Q. Tritter (Eds.). *Rational Choice Theory: Resisting Colonization* (pp. 93-110). London: Sage.
- Rowlands, M. (2002). Animals Like Us. London: Verso.
- Singer, P. (2002). *Unsanctifying Human Life* (H. Kuhse, Ed.). Oxford and Malden MA: Blackwell.
- Tester, K. (1992). *Animals and Society: The Humanity of Animal Rights*. London: Routledge.
- Welchman, J. (2003). Xenografting, Species Loyalty, and Human Solidarity. *Journal of Social Philosophy*, 4 (2), 244-255.
- Williams, B. (2006). *Philosophy as a Humanistic Discipline*. Princetown: Princetown University Press.
- Wolch, J. & Emel, J. (1998). Preface. In J. Wolch & J. Emel (Eds.). *Animal Geographies:*Place, Politics and Identity in the Nature-Culture Borderland (pp. xi-xx). London and New York: Verso.
- Wooffitt, R. (2005). *Conversation Analysis and Discourse Analysis: A Comparative and Critical Introduction.* London: Sage
- Zafirovski, M. (1999). What is Really Rational Choice? Beyond the Utilitarian Concept of Rationality. *Current Sociology*, *47* (1), 47 113.