

Jeremy R. Garrett, ed. *The Ethics of Animal Research: Exploring the Controversy*. MIT Press 2012. 356 pp. \$29.00 USD (Paperback ISBN 9780262516914).

The Ethics of Animal Research: Exploring the Controversy is an impressive anthology that would be of interest to philosophers and scientists concerned with the complex ethical and scientific issues surrounding animal experimentation. One of the most useful features of this volume is that it includes detailed discussions of a wide variety of ethical perspectives which are informed by many diverse traditions. In addition to clear statements and defenses of some of the most influential positions in the animal ethics literature (by Alastair Norcross (67-72) and Tom Regan (114-17)), some contributors to this volume draw on ethical perspectives that are not commonly included in this debate. One example that stands out is Mark Rowland's contractualist arguments regarding animal experimentation.

Rowland's discussion is particularly interesting because contractarian or contractualist theories are often understood as justifying the use of animals by humans, as nonhuman animals do not have the characteristics that would make it possible for them to be parties to the social contract. Rowland's revision of Rawlsian contractualism contains two important features. First, it replaces Rawls' veil of ignorance with a metempsychotic thought experiment which asks the reader what kind of society they would choose if they were asked, by a God, to pick one (158). The second component of this contractarian position involves the claim that rational metempsychotic choosers would never select a world where risks taken on by one individual can be involuntarily transferred to another (164). Since choosers in this contractarian thought experiment would not allow for the possibility that their soul could be situated into a body that would have such risks transferred onto it, they would never choose a world where research on animals is permitted, as they have no guarantee that they will not find themselves in the body of a lab rat. This sketch of a position amounts to a plausible, interesting way of turning a contractarian framework against animal research.

Some other contributors bring often-neglected ethical perspectives to this important discussion, such as Garrett Merriam's discussion of virtue ethics and Christina M. Bellon's application of feminist methodological considerations to the topic of animal experimentation. Both contributions are motivated by the thought that we ought to re-direct the conversation away from *whether or not* animal research is justifiable towards a more productive discussion of *how and when* such research might ethically occur. Bellon draws on feminist theory in order to show how a focus on the dependence and vulnerability of animal research subjects, the lack of transparency in animal research, and the non-naturalness of the relationship between subjects and researchers can help move this discussion forward (306-20).

Similarly, Merriam explores a virtue ethical approach to animal research which asks researchers to consider what their decision to engage in specific forms of research implies about the nature of their characters (127). Through a discussion of the emotional consequences of the development of a callous attitude toward animals, the implications of such callousness for moral education, the moral importance of the motives of animal researchers, and many other factors that a virtue ethical perspective can take into account, Merriam develops a position according to which the complexity of the 'moral tightrope' of animal experimentation is acknowledged, but the morally relevant features of such experiments is made plain (130-3).

Of course, no volume with the subtitle 'Exploring the Controversy' would be complete without some defenses of the status quo of animal research. Two justifications of the partiality that humans have for members of their own species are included.

A first, 'Darwinian' argument, is proposed by Stephen P. Schiffer. This argument begins with an explanation of how the positive public perception of animal research is based on the evolutionary principle that 'it is instinctive for us to use other animals for our benefit to enhance the survival of our species' (44). While this seems to sometimes be treated as an ethical principle by Schiffer, he also seems to acknowledge its inadequacy as a moral justification for animal research. He contrasts the previous 'Darwinian' or 'scientific' argument with a 'moral' argument in favor of animal research. However, this moral argument seems to largely consist of claims about what sort of research is currently funded, the role that animal research plays in current policies, laws, and practices, as well as statements of opinions expressed by committees and influential individuals (44-5). Schiffer then appeals to these facts to justify the claim that 'the anthropocentric view of humans toward the use of animals in research has both a strong biological and moral basis' (45). However, this approach is ultimately unsatisfying, as the moral challenges to animal experimentation are specifically aimed at critiquing the societal and institutional norms that Schiffer relies upon.

A more sophisticated defense of our partiality toward humans is provided by Baruch Brody. He begins by rejecting the proposal that human interests have lexical priority over the interests of animals and proposing the following 'discounting' view as an alternative: 'the same unit of pain counts less, morally, if experienced by an animal than it would if it is experienced by a human being...simply because of the species of the experiencer' (61). Brody argues for this type of discounting by pointing to the numerous other ways in which discounting enters into our moral considerations. Just as the parent is not wrong to see the interests of her child as more important than those of a stranger's child, we may not be wrong to see the interests of our conspecifics as more important than those of other species.

It may be plausible to claim that the special obligations owed to family members can be explained as a form of discounting, but this does not imply that there are good reasons to discount interests on the basis of species-membership. Just as there is no reason to discount on the basis of race or gender, we may find that species-membership is simply not relevant to determining the extent to which we should care about an individual's interests. Brody characterizes this objection as the charge that 'discounting animal interests is a discriminatory version of discounting' (64). This is the central objection that any pro-research position must address, as it is just a reiteration of the charge of speciesism that has been at the core of the animal rights debate since its inception. Unfortunately, while Brody acknowledges the importance of this objection, he ends his discussion without providing an account of what differentiates discriminatory from legitimate discounting (65). The result is that his defense of animal experimentation remains only partially complete, and thus is rather unsatisfying.

Regardless of whether or not we can justify discounting based on species-membership, any plausible defense of research on animals will rely on some version of the claim that humans have and will continue to benefit greatly from animal experimentation. The most important recurring theme in this volume is the idea that this claim about human benefits has been grossly exaggerated. One of the most comprehensive discussions of the research on this topic can be found in Robert Bass's contribution, wherein he attempts to provide the empirical data that would be necessary for

determining whether a utilitarian approach would license or condemn most animal research. After a comprehensive survey of some of the recent studies on the efficacy of Institutional Animal Care and Use Committees in making judgments about the scientific merit of animal experimentation and the extent to which the findings of animal research successfully translates to clinical trials on humans (90-2), Bass tentatively concludes that ‘the most reasonable working hypothesis is that the human benefits of animal research are either small or unclear’ (93). This point is also touched on by Tom Regan (108-9 & 268-9), Garrett Merriam (137), David B. Resnik (169), Nathan Nobis (254-5), and others, but the most compelling discussion of this evidence is provided by Mylan Engel Jr.

Engel painstakingly dissects the evidence for and against the ‘medical and scientific orthodoxy’ (219) that animal research is justified because of the great benefits that it produces for humans. He extensively documents the costs for humans that result from animal tests that falsely suggest that certain drugs will be safe for human consumption or falsely predict that an experimental treatment will be effective in humans (222-4). He summarizes these findings with the astounding statistic that ‘the current failure rate of drugs that make their way to phase I human clinical trials on the basis of preclinical animal testing is 92 percent’ (224). Of course, Engel’s analysis of the data applies only to the use of animals in phase 0 biomedical testing, and may not apply to the efficacy of animal research in other areas. Regardless, data like these should give even the staunchest proponent of animal research pause.

If it is true that the benefits derived from animal research have been grossly exaggerated, then the ethical question becomes much simpler. If there are no significant benefits that result from animal testing (as many of the contributors to this volume argue), then any reasonably ethical individual would conclude that experimenting on animals is morally wrong.

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