Between the Species

Why Animal Ethics Committees Don't Work

ABSTRACT

Animal ethics committees have been set up in many countries as a way to scrutinize animal experimentation and to assure the public that if animals are used in research then it is for a worthwhile cause and suffering is kept to a minimum. The ideals of Refinement, Reduction and Replacement are commonly upheld. However, while refinement and reduction receive much attention in animal ethics committees, the replacement of animals is much more difficult to incorporate into the committees' deliberations. At least in Australia there are certain structural reasons for this but it is likely that most of the reasons why replacement is left out apply to other countries as well.

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Volume 15, Issue 1

Aug 2012

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1. Introduction

Awareness of the capacity of animals to suffer is growing within Western culture. (Such awareness is highly variable in non-western cultures with Jains displaying an extreme sensitivity and empathy towards animals.) The Aristotelian idea that animals exist for human benefit and the Cartesian view that animals are mere machines had a crucial role in the *slow* emergence of the awareness of animal suffering. Peter Singer's animal liberationist perspective marked a significant shift in thinking. It was as if once we had been encouraged to simply look, we could see the suffering of animals brought on by human actions in factory farms, with battery cages, in circus performances, in marine wildlife parks, in zoos and, insofar as there is information available, in animal experimentation. This led to shifts in human/animal relations in some domains, at least in areas where the economic impact of kindness to animals is not too great, e.g., forming circuses without animals and the closure or modification of zoos and marine wildlife parks. Despite extensive campaigns around factory farming and battery cages, economic interests have triumphed over concern for animals. Also, there has been a trend for greater use of animals in experimentation, especially in genetic modifications, despite the trend away from using non-human primates. Concern about the suffering and death of animals in experimentation is often tempered by the belief that great benefits to humans result from these experiments, and also by the hope that there are regulatory mechanisms in place that only let through justified research.

The publication of *The Costs and Benefits of Animal Experimentation* by Andrew Knight (2011) contains extensive surveys of articles publishing research involving animals that aims to produce results for humans. The human benefits are shown to be quite meagre. Yet regulatory regimes in this area

are often underpinned by a consequentialist ethic: weigh up the costs and benefits and choose courses of action that produce the greatest benefits for the least cost (in terms of pain and suffering). Knight's research is very thorough and convincing. Once this information becomes more widely disseminated, there may be a re-think of the value of a great deal of animal experimentation.

Regulatory mechanisms aim to only give approval to research that is justified. Part of this assessment will be that the likely benefits outweigh the costs. Another part concerns whether or not there are replacements for animals. Alternatives to using animals in scientific research are being developed in a range of areas including *in vitro* studies, computer simulation, epidemiology, genomics, use of microorganisms and ethically-sourced cadavers or human tissue. In the case of psychology, social psychology can sometimes provide a replacement for animal studies. Feminist theory and practice, sociology, cultural studies and political philosophy may also lead to insights about the human condition which are of greater use than animal studies. (See Replace Animals web site for a description of these alternatives.) Increasingly there is a requirement that researchers consider non-animal-based means of doing research and replacing animals in research with other ways of investigating an issue where possible. The regulations covering animal research in Australia have been explicit on this replacement principle. It is hard to imagine how the principle could have been more strongly stated. Yet, as I will show here the ways in which the regulations are played out in practice through animal ethics committees are quite ineffective in promoting alternatives to animal-based research. So a large part of the ethical responsibility of such committees cannot be fulfilled.

2. What are Animal Ethics Committees and Why are They There?

Institutions that use animals for scientific reasons are required to establish an Animal Ethics Committee (AEC) directly responsible to the governing body of the institution. This committee is supposed to ensure, on behalf of the institution, that all care and use of the animals is conducted in compliance with the Australian Code of Practice set by the National Health and Medical Research Council (NHMRC 2004, 1), including applying the Reduction, Refinement and Replacement Principles. It is the latter that has proved most problematic, viz., "To promote the development and use of techniques that replace the use of animals in scientific and teaching activities" (NHMRC 2004,1). The Animal Ethics Committee receives applications to conduct research and the Code states that "the aim is to *approve only those studies for which animals are essential and justified* and which conform to the requirements of the Code. This should take into consideration factors including ethics, the impact on the animal or animals and the anticipated scientific or educational value" (NHMRC 2004, 10 emphasis added).

Researchers are required to fill out a proposal form including a section on replacement that should provide an explanation of why animals are needed for the project including:

- a list of any potential alternatives to animal use
- whether any of these alternatives would be used, and if not
- why alternatives are unsuitable (NHMRC 2004, 15).

The Guidelines to Promote the Wellbeing of Animals Used for Scientific Purposes were published in 2008 (NHMRC 2008) in order to be used in conjunction with the Code. Like the Code, the Guidelines clearly state that: "if a viable alternative method exists that would partly or wholly replace the use of animals in a project, the Code requires investigators to use that alternative. Examples of alternative methods include *in vitro* techniques and computer models" (NHMRC 2008, 4). The first point listed in the "Checklist for Promoting Animal Wellbeing" is the planning requirement that the researchers "determine whether alternative, non-animal techniques could be used" (NHMRC 2008, 49). These Guidelines appear to be strong and any member of the public looking at them may well believe that the situation is under control and that there is no unnecessary cruelty inflicted on research animals, moreover that the research which uses animals and causes them to suffer must have some important aim and so the public need not concern themselves further with what is happening in this area. Unfortunately I believe that this is a false sense of security.

3. Why Don't Animal Ethics Committees Work?

1. *Confidentiality agreements*

AECs are required to include an independent member, a vet, a nominee from an animal welfare organisation, and a scientist using animals in research. In practice the committees usually have many more such scientists than people from the other categories. All members of the committees are required to sign a confidentiality agreement. This means that the committee members are not supposed to tell other members of the institution or public about any deliberations in the committee meetings. If nobody outside the committee knows about the deliberations, then neither the institution nor the public can be sure that the

committees really are working to approve only that research which is essential and justified.

2. *Problem of the independent member*

According to the Code of Practice the independent member on the AEC is supposed to be "independent of the institution". These members "should be viewed by the wider community as bringing a completely independent view to the AEC" (NHMRC 2004, 11). In my acquaintance with the AECs at the University of Sydney over two decades, no such independent members existed. The positions were filled by people from philosophy or philosophy of science within the institution. Over decades speaking with other independent members at other universities, I have found that it has been most common for the so-called "independent" members to come from the institution running the committee and it is understandable that such members would be easier to find than outside volunteers. Some institutions are now appointing outside independent members but this practice is still not widespread. The people who wrote the Code no doubt had in mind the possibility that people from within an institution might be unwilling to criticise the research proposed by colleagues. To be told that one's research has been rejected on ethical grounds would be quite hard to take. It could well be seen as a personal criticism of quite a significant nature. To be told your proposal fails on ethical grounds is different from the other sorts of critical evaluation academics encounter, e.g. your arguments are weak, your teaching is sloppy or you are always late for meetings. So colleagues on an AEC might be extremely reluctant to make that judgement, even if they believe it to be fair. Given that the positions for independent members are not usually filled by "independent" members as specified in the Code, there is the possibility of keeping quiet about research that may be questionable. Of course having an outside member

is no guarantee of independence as such a member may have personal reasons for taking a stand either for or against some research. So the public should not assume that because a member of an AEC is independent from the institution considering the research proposal therefore that member is independent in their judgement.

3. *Problem of the scientific member or members*

The scientists on the committees are supposed to be people "with substantial recent experience in the use of animals in scientific or teaching activities" (NHMRC 2004, 11). As I will come back to later, alternatives to using animals are emerging not from within departments that have been using animals but from different fields. These will not be represented on the committees at all as there is no position for scientists who are not animal researchers. So it is unlikely that there will be informed discussion about alternatives to using animals in research.

4. *No mechanism either inside or outside the Animal Ethics Committees to deal with moral dilemmas of some members.*

If a committee member thinks that research will be approved that he or she in good conscience cannot endorse, this leads to stress, which is not easily addressed. The simplest option is to resign. However this retreat probably does not promote more discussion of the ethics involved. The committee will simply move on.

Another option is to go public, violate the confidentiality agreement and hope that public pressure will stop the research. This is not satisfactory either as the person has to face the fact that he or she has broken a promise and could even be subjected to disciplinary action. This option is rarely taken up. However there was one illustration this year at my university (University

of Wollongong) where one of the members of the AEC contacted the animal protection organisation, Animal Liberation, about proposed research on kangaroos, which was before the Committee though not at this stage approved. The research was to involve 6 kangaroos in the first instance, and later more kangaroos and wombats. The aim was to keep kangaroos in a cage/box measuring 1 metre x 1.3 metres x 1.7 metres for up to 9 months to measure the methane gas expelled. The kangaroos were to be obtained from "excess stock" in wildlife parks. Once Animal Liberation received this news they contacted Professor Steve Garlick from Newcastle University in Australia. Garlick is an expert in kangaroo rehabilitation and he presented a detailed critique of the study with an emphasis on the fact that "This proposed experiment denies the kangaroo their basic needs and is therefore cruel in the extreme… The result is that the animal will be highly stressed in its confinement and will be subject to a range of diseases and illnesses which will make survival unlikely and the research project totally flawed" (Samandar 2011). His critique was sent to many animal protection organisations, who notified their members. It was reported in 12 newspapers around the country.

A large number of people wrote to the University. Within days of the research being made public the research proposal was withdrawn (even though it had funding associated with it). According to my sources, the University of Wollongong could not tolerate the impact on its reputation if the research went ahead and pressured the researcher to withdraw the protocol. The AEC had discussed the research and they had not dismissed it. They were in the process of getting more information about it. The institution took the decision out of the hands of the Committee.

The result came about because the confidentiality agreement was violated, no doubt with personal anguish. This illustrates how difficult it is for an AEC to reject proposals even when it should be clear that excessive cruelty for uncertain gain would result. I have yet to hear of a research proposal put up to an AEC in Australia which has been rejected. The researchers may be asked to *modify* proposals or to use fewer animals but outright rejection does not seem to an outcome. This puts those individual committee members who believe that some research should be rejected outright in a very difficult position. They can put their arguments, if there is time, and there usually is not because of the number of protocols to be discussed in the scheduled meetings. If they do not win over the other members of the committee then their options are limited and unsatisfactory as I have indicated. There is then a consequent reluctance by many non-scientists to become members of AECs.

5. *Animal Ethics Committees are at the end of the approval process*

Research coming before an AEC unless it is for teaching, would normally be funded and normally from the NHMRC. Ethics comes in, then, at the end of the line. (It is interesting that this is different in Britain.) However the researcher, the department, and the institution do not want to lose grant funding, which is all-important for status, promotion and further funding possibilities. The NHMRC says "When planning a project, and before submitting a proposal to the AEC researchers are required to consider 'can the aims be achieved without using animals?'" (NHMRC 2004, 22).

This is slightly disingenuous of the NHMRC as they are not going to take that into account in their decisions on research projects. They will leave those deliberations to the AEC by

which time I believe the institutional pressures are such that there is no possibility that the research will be rejected outright. It would lead to a *scandal* for all concerned. The researcher would feel personally criticized. It would be shameful for the department and university and not just because they would lose the money.

6. *It is difficult for in-coming researchers in disciplines using animal research to buck the trend and consider alternatives.*

To illustrate this point, Dr. Melissa Boyde and I wanted to distribute a brochure on alternatives to final year undergraduate biology students who were interested in pursuing higher degrees at the University of Wollongong. We were told by the University Research Office to clear this with the AEC. We met with the Chair who was also the Head of the Biology Department. He said such a brochure was unnecessary as the Department already used as few animals as possible, even though they always did use animals. We countered that we were concerned about replacement, not just reduction. The biologist's response was that funding comes to teams, and the teams always use animal experiments, so if a student did not want to experiment on animals they would not have a team with whom to work. Thus the brochures were unnecessary. Besides, he said the brochures as yet unwritten "could upset the staff in that they were suggesting alternative approaches." We were told that we would need to put our proposal to the Human Ethics Committee. At this point we gave up. The impediments we, as humanities staff members, uncovered to a serious concern about the consideration of replacements to animal use are some indication about how difficult it would be for undergraduate or graduate students to pursue replacements within such a biology department.

7. *Alternatives are being developed in new subject fields that may be a great distance from the traditional animal-based research disciplines.*

The bulk of the research protocols discussed by AECs are from biology, pharmacology, physiology and psychology, areas in which animal experimentation has been the norm. Non-animal-based methodologies related to disease and medical treatments are not commonly being investigated through these traditional disciplines. This has been true for studies in Australia pertaining to human nutrition for probably over a century but perhaps because of the high hopes for quick cures by drugs, nutritional studies were sidelined to institutions outside of universities and even now do not form a significant part of medical degrees. The universities that do teach nutrition almost always do so under a Bachelor of Science or Bachelor of Health Science degree.

(Nutrition's low status is gradually changing with the realization that possible cures or preventative measures may eventuate from dietary changes for some medical problems, and cures which do not carry the cost of the side-effects of medications e.g., folic acid and birth defects, low fat intake and heart disease, abstention from wheat intake and celiac disease.)

Epidemiology, which usually does not involve animal research, is currently offered only as a post-graduate degree in Australia occasionally following from a medical degree or more commonly after a science degree.

Two big growth areas in universities embrace alternatives to using animals. The discipline of human biotechnology (including molecular biology, molecular genetics and microbiology) now has its own undergraduate degree at 10 campuses out of

the 38 universities in Australia. It is offered as part of a Bachelor of Science degree in 10 other campuses and also occurs in a range of other degrees not associated with the traditional animal-based disciplines of biology, physiology and pharmacology.

The second burgeoning area offering alternatives to using animals is information technology and, in particular, computer modelling or simulation. Seven campuses now offer degrees in this from within science or engineering faculties.

So AECs are presented with protocols from traditional biology, physiology and pharmacology. The researcher is asked to fill in the section whether alternatives are available e.g. in the University of Sydney protocol the researcher is asked: "What alternatives to animals have been considered and why is it not possible to use these?" (2.4 University of Sydney, Ethics Application Form for Research Involving Animals). The Macquarie University form goes even further asking: "What steps have been taken to ascertain the alternative in accordance with the Code?" (2.3.2 Animal Research and Teaching Application Form, Macquarie University). These are good questions. However they will pose considerable difficulty for researchers to answer given that they will normally be immersed in traditional disciplines without any educational background in alternatives. For example, if the researcher's issue is how to treat kidney disease and she is aiming to induce the disease in rats and then trial different drugs, how could she be expected to know that bioengineering is coming up with some very promising lines of research on the development of human stem cells to tackle kidney disease? Or if she does know about this research, how can she be asked to proceed along those lines when she does not have the educational background? The same applies with

all the other alternative fields. The general point is that the research protocols received by the AECs are coming out of animal research dominated disciplines that at present are usually quite separate from the emerging fields of computer simulation and so on. So an unrealistic expectation is put upon researchers to assess all the alternatives. Also how can the AECs respond to the protocols by saying, "we reject this animal research as bioengineering is onto some very promising outcomes and research should proceed along those lines without incurring suffering in animals"? The Committee cannot just send the protocol back with the comment—think about using alternatives to animals as the researcher is unlikely to be trained in working with alternatives.

Another area of animal research about which a great deal could be said, though there is not space here, is psychology. A similar point can be made about this discipline. Many Australian universities make use of animals in research and teaching, and the discipline has ridden on the back of other animal-based studies in the twentieth century. Thus we have psychobiology, psychophysiology and psychopharmacology. There are alternatives especially studies which focus on people as mentioned above. Many believe that we may find out just as much or more about human functioning and distress by looking to these fields rather than focusing on animal studies in psychophysiology and so on. However alternative ways of understanding the human are not usually taught in psychology departments so to ask an animal researcher in psychology to consider feminist theory as an explanation of anorexia for instance, rather than doing experiments on withholding food from dogs (which is currently done), could be thought to be ridiculous.

4. Conclusion

The philosopher Thomas Kuhn talked about paradigms operating within sciences. Paradigms frame ways of seeing phenomena and they are not susceptible to straight refutation. There are ways to handle uncomfortable findings by just shifting around some beliefs within the paradigm so long as they are not core beliefs (Kuhn 1970). However paradigms can change when alternative ways of framing phenomena take people's interest. To ask researchers working in one paradigm to use the methods of another will seem outrageous perhaps even nonsensical to them. I think this is close to the situation with AECs. If we want to move forward in the promotion of alternatives we need to recognise that success will not come from trying to persuade researchers who are putting in proposals to experiment on animals that they should really be working in a different field. Rather it will come from promotion of the alternative fields, such as human bioengineering and computer studies, so that animal research comes to be seen as unnecessary, old hat—that's the way we used to do things. We do not need or want to do that anymore.

What other ways could ethical scrutiny be exercised?

This utopian future could be close or far away. So in the meantime how could things be improved? One positive step would be to have screening of protocols before they go in for research funding. The committee screening such proposals should include scientists from disciplines that are pursuing alternatives to animal studies.

Secondly, given that the NHMRC promotes alternatives to animal use in its guidelines for the use of animal in research, it should be favouring research proposals that have that aim and setting some targets.

It could be that we are in a transition period between animal research and research based on alternatives. If I am right in this regard, then there should be a way for undergraduates to move from animal-based subjects to alternatives without the rigid classifications into departments which makes this difficult at present.

The only mechanisms of ethical scrutiny of animal-based research at the moment in Australia are the AECs with all their disincentives to reject research and their structural bias away from expertise in animal alternatives as I have outlined here. That no other mechanisms exist was confirmed recently in a letter to a senior Sydney surgeon from the NHMRC concerning the issue and also in a response to my question from the floor to Peter Thornber, Manager of Australian Animal Welfare Strategy & Communications, the Federal Government Department of Agriculture, Fisheries and Forestry, at the *Minding Animals Conference* in Newcastle, Australia in 2009. If animal ethics committees are ineffective in the promotion of alternatives, clearly different strategies need to be employed. The public cannot rest easy that all is well with current practices.

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