

ANIMAL RESEARCH ETHICS

By
Alphaxard Manjurano

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Introduction

Animals Research

- Biomedicine research , involves experimentation on live animals
- Directed towards the discovery of new ways to prevent, alleviate, or cure human diseases
- Animals on which experiments are performed have limited freedom, or are subjected to distressing or severely painful interventions, or are killed.
- Animals can not consent to their own participation in research
- Generally, will they benefit from such participation? they appear to be capable of experiencing not only pain, but other forms of suffering as well.

Introd-cont

Animal Research Ethics

- The ethical issues that animal research raises
- Ethics of animal experimentation to be the moral status of animals
- The interests of animals taken into account when designing and justifying experiments involving them.

HUMAN BENEFITS OF ANIMAL EXPERIMENTATION

- A famous early example is William Harvey's investigation of the role of the heart in blood circulation.

William Harvey (1628) *On the Motion of the Heart and Blood in Animals*

- Purposes for Animals Research/ Experimentation:
 - Developing pharmaceutical and medical products
 - Advancing fundamental scientific research in the life sciences
 - Testing the safety of potentially toxic products and substances

Human benefits of Animal experimentation -cont

Others

- Breeding of more animals
- Educational and Training purposes: Scientists and Veterinary personnel
- Diagnosis of diseases
- Production of biological matter: Cells and antibodies

THE COSTS TO ANIMALS

- Animals may **suffer** because the relevant experimental interventions provoke one or another of a wide range of unpleasant states.
- It is about Animal Welfare Approaches
- Health and biological functioning of the animals
- Subjective feelings of animals (Suffering)
 - *Pain*
 - *Fear*
 - *Frustration* (being in a restrictive environment)

THE COSTS TO ANIMALS

Animal welfare involves the subjective feelings of animals. The growing concern for animals in laboratories, farms, and zoos is not just concern about their physical health, important though that is. Nor is it just to ensure that animals function properly, like well-maintained machines, desirable though that may be. Rather, it is a concern that some of the ways in which humans treat other animals cause mental suffering and that these animals may experience "pain," "boredom," "frustration," "hunger," and other unpleasant states perhaps not totally unlike those we experience.

**Marian Dawkins (1990) From an Animal's Point of View:
Motivation, Fitness, and Animal Welfare, *Behavioral and Brain Sciences***

THE ETHICAL DILEMMA

- The ethical dilemma is summed up by the four claims:

1. The need for Animal Research

Live animal research is the **only effective** way in the prevention and therapeutic treatment

2. Discover ways of preventing or treating life-threatening human diseases is rare

It is morally imperative to find new ways to prevent or treat serious human diseases.

THE ETHICAL DILEMMA-cont

3. The Animal's Experience of Pain

live animal research, individual animals suffer, and they will not benefit.

4. The Moral status of Animals

It is morally imperative to preserve the welfare of animals, one should not cause an animal to suffer if no benefit

- The question is not, Can they *reason?*, nor, Can they talk? but *Can they suffer?* Bentham (1789) *The Principles of Morals and Legislation*

I am urging that we extend to other species the basic principle of equality that most of us recognize should be extended to all members of our own species...The racist violates the principle of equality by giving greater weight to the interests of members of his own race when there is a clash between their interests and the interests of those of another race. Similarly, the speciesist allows the interests of his own species to override the greater interests of members of other species. The pattern is the same in each case.

Peter Singer (1989) All Animals are Equal, in Animal Rights and Human Obligations

NECESSITY OF ETHICAL THEORY

- People unsure with research in animals
 - Opposing use of living animals in research
 - Supporting experiments on live animals for drug testing and developing treatments
- Double standards
 - *Moral objection*
 - *Indefensible logic*
- Rising debates on rights and wrongs of animals use.
 - Lead to three theoretical views: **contractarianism, utilitarianism, and rights views**

Contractarianism view

- Why should we act morally? *Acting morally for self interest*
- Egoism - morality guides agreement among rational, independent and self-interested subjects
 - Gaining from agreement (*human can't refrain from killing animals*)
 - Capability of keeping the agreement (*animals can not make agreements*)
- Animal protection right is dependent on human concern
 - Compare: distress to cats and dogs and distress to rats & mice.
- *For the contractarian, since neither animal suffering nor the killing of animals is an ethical problem per se, animal experimentation is in itself ethically acceptable.*

Utilitarianism view

Interest- as capacity for suffering or enjoyment/happiness

- Interests count morally and deserve equal consideration
 - All living beings (*humans & non-human*) have interests
 - In biomedical research, animal interests sacrificed to satisfy vital human interests
 - It is important if there is increasing well-being for improvement

...If a single experiment could cure a major disease, that experiment would be justifiable. But in actual life the benefits are always much, much more remote, and more often than not they are nonexistent...an experiment cannot be justifiable unless the experiment is so important that the use of a retarded human being would also be justifiable.

Singer 1975

- In Utilitarian duty to act always to bring about improvements has important consequences for society

Utilitarianism-cont

- Animals use as **morally attractive development** when
 - Less-invasive sampling techniques
 - Improved housing systems
 - Precise models requiring fewer animals

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- **Singer (1975) *Animal Liberation***

Principles

In realist utilitarian perspective “principle of the three Rs” apply:

- Replacement
 - Replacement of existing live-animal experiments with alternatives
- Reduction
 - Reduction in the number of animals used
- Refining
 - Refined methods that cause animals less suffering

Rights View

- No benefit can justify disrespect for the rights of an individual — human or animal —
- so where an experiment violates an animal's rights, there is no reason to look for its expected benefits.
- Human beings have dignity—to be treated always as an end never as a means only
- Animals research *UNACCEPTABLE* for treating animals as means to an end

Rights View-Cont

- Dignity should be extended to animals
 - Experiment justified if is respectful and preserves animals' dignity
- Both human beings and animals
 - *Experiencing subjects of life*
 - *Conscious creatures*
 - *Having individual welfare*

Principles

- The basic right to life/not to be killed
 - Not basic to animals as human beings happily eat animals that have been killed just for this purpose
- The right to protection from significant suffering
 - Animals need protection from suffering, prolonged pain/distress that they can not control
 - Yet animal suffering in experimental conditions is always **UNJUSTIFIED**
- Few countries have animal research legislation???

TWO CONCERNS ABOUT THINGS OTHER THAN SUFFERING

Genetic modification

- **Transgenesis** – modifying genome of animals where no genuine ethical issue is considered
 - Creation of transgenic animals is morally unacceptable because the naturalness of an animal is important
 - Human beings alter genetic makeup of animals

Genetic Modification-cont

- **Euthanasia** – killing an animal while preventing feeling of fear or pain
 - Unethical to prevent a creature from realizing future desires
 - No justification of cognitive capacity of animals that is comparable to human infants or mentally deficient adults.

Societal concerns

- No clear existing animal research legislation and codes of practice that are observed/used and agreed.
- Would it be morally acceptable to use animals in this way?

ETHICS COMMITTEES

- The recognition that animal treatment in the laboratory raises ethical questions leads quickly to a demand for regulation.
- Researchers, animal specialists, people with training in law and ethics, animal advocates, and representatives of the general public.
- Develop instruments for decision-making to describe animal costs and human benefits
- Play a proactive role in the development of animal research projects
- Competent ethics committees function as a crucial interface between the research community and society in general

A reasonable pro-research position on animal research

- Animals have **interests**, which may be adversely affected either by research performed on them or by the conditions under which they live before, during, and after the research.
- The adverse effect on **animals' interests is morally relevant**, and must be taken into account when deciding whether or not a particular program of animal research is justified or must be modified or abandoned.
- The justification for conducting a research program on animals that would adversely affect them is **the benefits that human beings would receive** from the research in question.
- In deciding whether or not the research in question is justified, **human interests should be given greater significance** than animal interests.

Conclusion

- The ethical dilemma at the heart of animal research can be captured in several dimensions.
- Three ethical theories — **contractarianism, utilitarianism, and the rights view** —these generate different conclusions about the rights and wrongs of animal experimentation.
 - The contractarian viewpoint seems the most liberal.
 - The rights view places severe restrictions on animal use.
 - Utilitarianism, animal suffering is treated as no less important, morally, than human suffering.
- Overall balance of suffering and benefit, the **utilitarian** concludes that research projects in which animal suffering is minimized and the human dividends are **substantial are best permitted**.

Conclusion-cont

- In practice, the researcher can keep animal suffering to a minimum:
 - by devising experiments that use no animals at all,
 - by using fewer animals,
 - by refining experimental techniques so that the pain or distress they cause is lessened.
- There is little doubt that, if it continues to be pursued, animal research will make important contributions to the development of new medical treatments at the initial stages of research

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