

A Philosopher's Perspective on the Ethics of Transgenic and Chimeric Research on Primates

Adam Shriver

Oxford Uehiro Centre for Practical Ethics

Wellcome Centre for Ethics and Humanities



What is Ethics?

- Ethics is the intellectual attempt to decide which action has the best moral reasons to undertake (Gary Comstock)

What Ethics is Not

- Narrow self-interest
- Unreflective, emotional reactions
- Custom
- The law

Moral judgments are universalizable

- If you say that an action is right, you are saying not just that you would perform the action, but that anyone in a relevantly similar situation should also perform it

Doing Ethics Well

- Like good science, good ethical analysis acknowledges and responds to the relevant aspects of competing positions

Basic moral concepts

- “Moral Theory is the study of substantive moral conceptions, that is, the study of how basic notions of the right, the good, and moral worth may be arranged to form different moral structures.” –John Rawls
 - Value Concepts (the good)
 - Deontic Concepts (the right)
 - Moral Worth (character)

Value Concepts (good and bad)

- “A high GDP is good.”
- “The tragic mine accident was bad”

Deontic Concepts (right and wrong)

- “It’s wrong to lie”
- “Keeping her promise was the right thing to do”

Moral Worth (virtues and vices)

- The concepts have to do with character
 - Virtues (honest, courageous, etc.)
 - Vices (untrustworthy, greedy, etc.)

Three Types of Ethical Theory

- Consequentialism
- Deontological Theories
- Virtue Theories

Consequentialism:

- The view that what is right depends entirely upon what is good
- Actions are right if they result in outcomes with the best ratio of good consequences

Justification of Animal Research Appeals to Consequentialist Reasoning

- The harms to animals in biomedical research are outweighed by the potential benefits to humans
- Overall, the argument goes, more good is produced than bad, which justifies the practice
- This argument can be directed at any level.... research as a whole or at particular instances of research

The central questions for consequentialist analysis

- 1. Which harms and benefits are included in the analysis?
- 2. How do we weigh the various harms and benefits against one another?



1. Which harms and benefits are included in the analysis?

Good Consequences that Result from Animal Research

- Health/well-being benefits to people
- The creation of knowledge
- Benefits to other animals
- Unexpected benefits

Which harms should be weighed?

- Distress/suffering in research
- Distress/suffering from procurement of animals, transport, housing?
- Ecological consequences?

Capacities and Moral Standing

- The capacities of research subjects determines what types of moral obligations we have towards them
 - Sentience
 - Forward-looking desires
 - Sense of self
- Those features that make primates good models for various types of human psychological conditions are precisely the features that make research on primates particularly morally significant

Uncertainty and the precautionary principle

- Since nonhuman animals cannot verbally self-report, it can be hard to know which capacities they have
- ***The precautionary principle***: “where there are threats of serious harms, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent these potential harms” (Daniel Steele, Jonathan Birch)

Chimeric and Genetically Modified Animals

- Research that creates chimeras or that alters the psychological capacities of marmosets has the potential to change their interests
- If we potentially increase their capacities, we also potentially create new interests that need to be taken into consideration
- This seems particularly important if we are creating negative psychological states

Chimeras

- There has been significant discussion of human-animal chimeras
- Are new ethical issues introduced with animal-animal chimeras?
 - Increased capacity
 - Can there be a risk of incompatible genetic programming?

What is being weighed?

- Individual moments or lives-as-a-whole?
- Is a marmoset harmed by being brought into existence and then sacrificed?
- On consequentialist reasoning, only if the marmoset led an overall poor life.
- Thus, providing many happy, enriching, positive experiences can make a big difference in the consequentialist evaluation

The Three Rs

- Reduction, Replacement, Refinement
- These can be seen as methods for reducing the harms in a harm benefit analysis

2. *How* do we weigh various harms and goods against one another?

- "Minimizing harms" during research is not the same thing as weighing harms against benefits
- There needs to be a point of direct comparison
- But this leads to a challenging question: how do we weigh animal interests against human interests?

Two ends of a spectrum:

- Lexical superiority: *any* human interest, no matter how trivial, always trumps the interests of nonhuman animals
- Equal Consideration: animal interests deserve just as much weight as human interests

- The principle underlying the (moral) idea of equality – The Principle of Equal Consideration of Interests (PEC):

“... the interests of every being affected by an action are to be taken into account and given the same weight as interests of any other being.” (Peter Singer, *Practical Ethics*)

What the PEC Doesn't State

- The PEC doesn't state that non-human animals have exactly the same interests as human beings.
- Animals might have a distinct set of interests than people, due to the difference in capacities.
- But it does say that we should treat similar interests similarly

- But this raises a challenge: if we are specifically inducing a state of distress or suffering in a nonhuman animal that is designed to be as similar as possible to humans, what justification is there for treating it as less morally important?
- Is it possible to obtain the experimental relevance without replicating the suffering?

Consequentialism Questions:

- Which harms and benefits should be included in discussions of animal research?
- How can different categories be weighed against one another and, in particular, how does one weigh animal interests when compared to human interests?
- Can these be discussed in a transparent way such that the public is aware of how these questions are answered by the relevant decision-makers?

Deontological Ethics

- Can be defined as a denial of the consequentialist claim that only consequences matter
- Human research ethics is decidedly non-consequentialist
- What is considered morally right does not depend wholly on the consequences that result
- The idea of “rights” as in human rights are fundamentally deontological: they suggest that some things are always impermissible even if they result in positive consequences overall

Are there Deontological Obligations to Primates?

- The most basic obligation suggested for humans is the right not to be harmed for another's benefit
- But what is the basis for this right?
- Different opinions: sentience, capacity for moral reasoning, ability to reciprocate, personhood

Other Deontological concepts used in human bioethics:

- Dignity
- Bodily Integrity
- Autonomy

Other possible deontic obligations in animal research

- A right not to be harmed past a certain threshold?
- A right to engage in natural behavior?

Deontological Ethics Questions

- Are there limits on what can be done to animals in the name of producing positive overall consequences?

Virtue Ethics

- Assessments of character depend on more than just making decisions about how to act in particular situations
- Character traits embody broader, more holistic aspects of a person's life

Virtue ethics and animals

- Our interactions with nonhuman animals in one context should be viewed in light of one's *overall* set of interactions with animals
- A virtuous commitment to animal welfare is not domain-specific...it applies across different parts of one's life

Virtue Ethics Question

- What does it mean to be committed to animal welfare as a virtuous person?

Conclusion

- There are many under-discussed ethical issues related to research on nonhuman primates
- There's a strong need to have a discussion of the ethical commitments involved in current research and to carefully consider alternative perspectives
- And there needs to be a space where this can occur without people feeling personally attacked
- Just as with the best science, the strongest ethical positions are those that take into account and respond to the ideas raised by others



Thanks!