





Stiftung Tierärztliche Hochschule Hannover  
University of Veterinary Medicine Hannover, Foundation

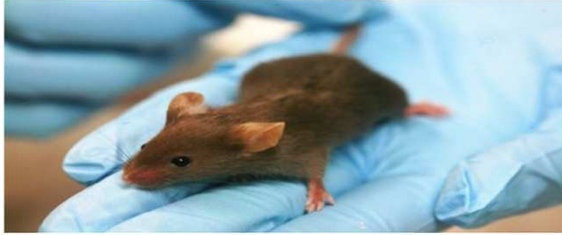


The Relevance of 3Rs for the Ethical Evaluation  
of Animal Research

**Prof. Dr. Peter Kunzmann**

Institut für Tierhygiene, Tierschutz und Nutztierethologie (ITTN)









### Laboratory Animal Ethics: The Three Rs

By [Sweena Chaudhari](#)

<https://bitesizebio.com/32504/laboratory-animal-ethics-the-3-rs/>



- 3Rs is THE answer.
- But to what question, precisely?



- Some of the considerations in direct connection to European legislation.

20.10.2010

EN

Official Journal of the European Union

L 276/33

---

DIRECTIVES

DIRECTIVE 2010/63/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 22 September 2010

on the protection of animals used for scientific purposes

(Text with EEA relevance)



## DIRECTIVE 2010/63/EU



- (12) Animals have **an intrinsic value** which must be respected. There are also **the ethical concerns of the general public** as regards the use of animals in procedures. Therefore, animals should always be treated **as sentient creatures** and their use in procedures should be restricted to areas which may ultimately benefit human or animal health, or the environment.



- “There are also the ethical concerns of the general public as regards the use of animals in procedures. “ (12)



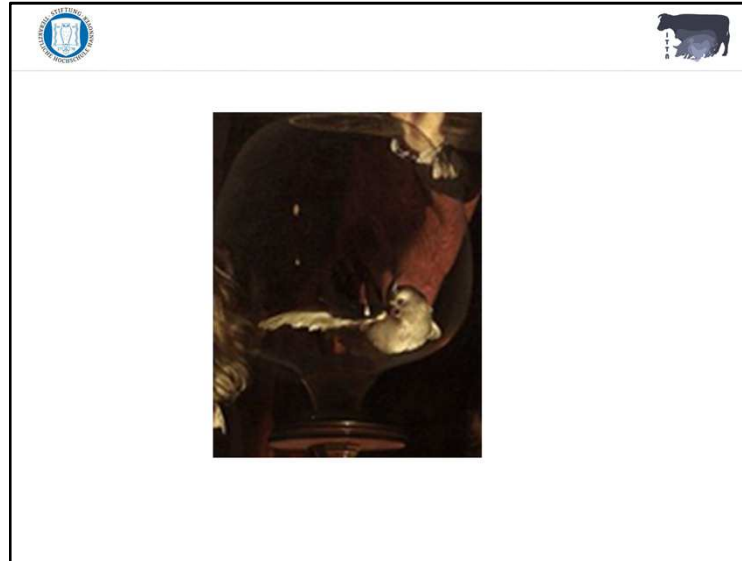
- “There are **also** the ethical concerns of the general public as regards the use of animals in procedures. “ (12)

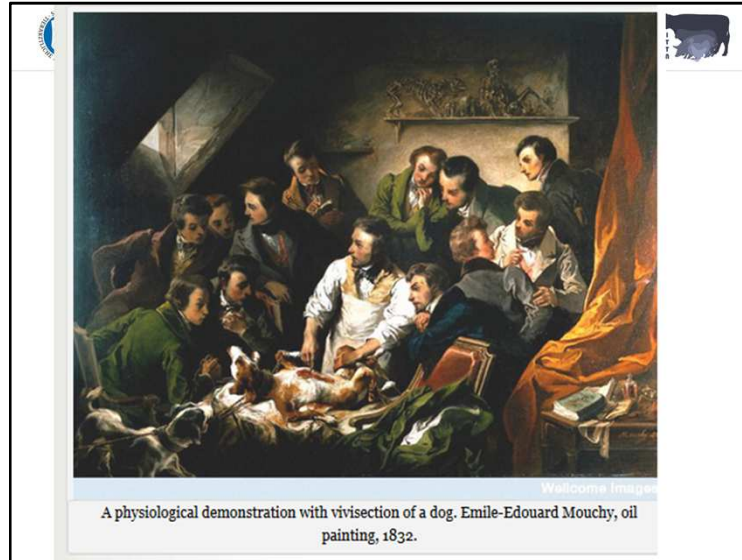


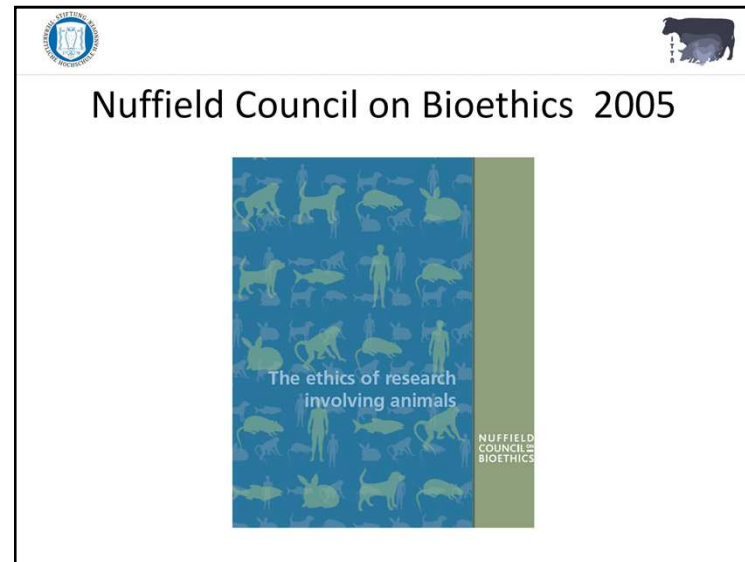
- “There are ethical concerns of the general public as regards the use of animals in procedures. “ (12)

















## Considerations

- Provided there are substantial benefits associated with animal research, why should the use of animals require special justification?
- Can any use of animals by humans be justified? Which specific issues need to be considered in the case of research?
- What role does the unavailability of alternatives play in the justification of research involving animals? (p.33)




## Moral Status




Two questions

- what features of humans and animals make them objects of moral concern?
- how should those features be taken into account in moral reasoning:
  - through weighing of factors
  - or
  - through the generation of absolute prohibitions?




## What to do?




Nuffield Council describes four different positions on animal experiments:

1. abolitionist view
2. „on balance justification“ view
3. „moral dilemma“ view
4. anything goes




## Animal Rights




- “Animals are not to be treated as mere receptacles or as renewable resources. Thus does the practice of scientific research on animals violate their rights. Thus ought it to cease, according to the rights view. It is not enough first conscientiously to look for non-animal alternatives and then, having failed to find any, to resort to using animals. ... Though that approach is laudable as far as it goes, and though taking it would mark significant progress, it does not go far enough. It assumes that it is all right to allow practices that use animals as if their value is reducible to their possible utility relative to the interests of others, provided that we have done our best not to do so. “
- T. Regan, 'The Case for Animal Rights', 1983







## 3Rs and animal rights



- 3Rs in general is NOT an answer to abolitionist claims.
- BUT: **Replacement** (in principle) can provide an answer.

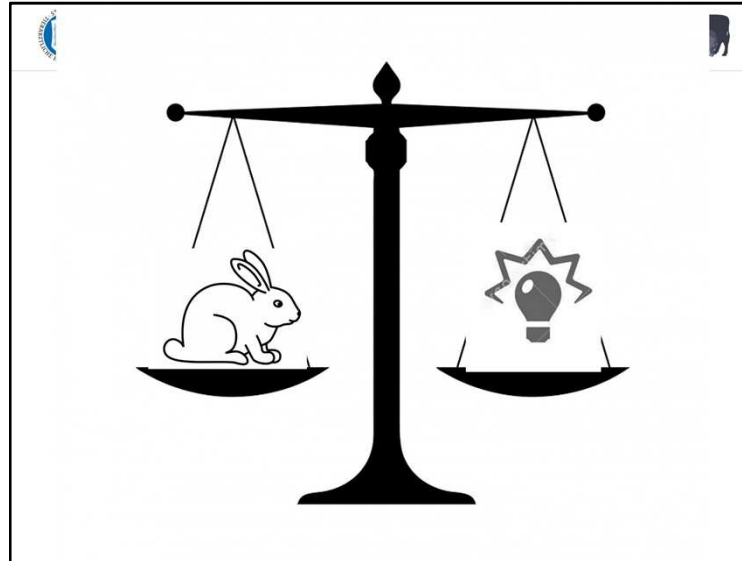


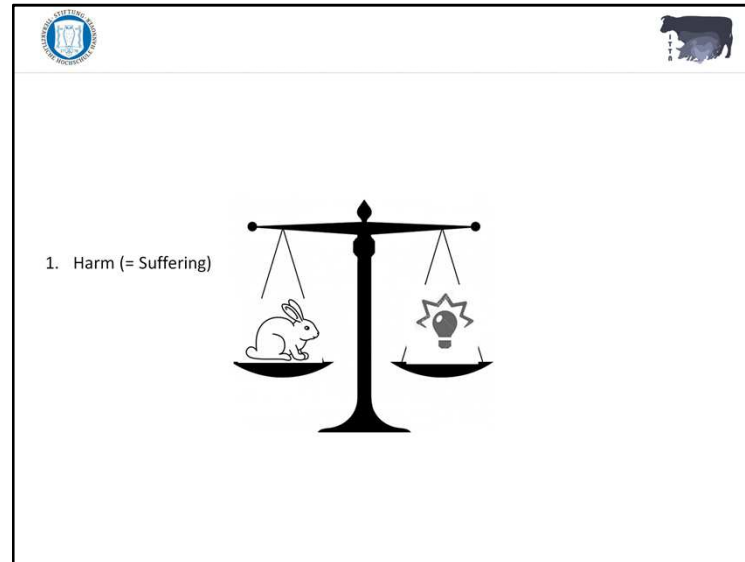
## What to do?





Nuffield Council describes four different positions on animal experiments:

1. abolitionist view
- 2. „on balance justification“ view**
- 3. „moral dilemma“ view**
4. anything goes







## DIRECTIVE 2010/63/EU

- (39) ... The likely harm to the animal should **be balanced** against the expected benefits of the project.

## Jeremy Bentham (1748-1832)



„It may come one day to be recognized, that the number of the legs, the villosity of the skin, or the termination of the os sacrum, are reasons equally insufficient for abandoning a sensitive being to the same fate? What else is it that should trace the insuperable line? Is it the faculty of reason, or, perhaps, the faculty of discourse? But a full-grown horse or dog, is beyond comparison a more rational, as well as a more conversible animal, than an infant of a day, or a week, or even a month, old. But suppose the case were otherwise, what would it avail? the question is not, Can they *reason*? nor, Can they *talk*? but, Can they *suffer*?”


(Introduction to the Principles of Morals and Legislation, 236)




19.11.2018

Stiftung Tierärztliche Hochschule Hannover  
University of Veterinary Medicine Hannover, Foundation


22




## Facts and Values



- [T]he relationship between facts and values is not straightforward. A reasonable discussion between people of differing opinions requires clarity about whether the exact area of disagreement concerns:
- *knowledge of facts* (disagreement about whether or not a particular animal suffers from being used in a particular kind of research) ...
- the *interpretation of values associated with facts* (agreement that animals involved in a particular experiment experience pain, but disagreement about whether or not causing this pain is morally wrong) ... (Nuffield, p. 34)

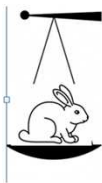


## Harm





“Harm”

- Do we reach our scientific goals with the **minimum of harm** possible?
- 3R: replace, reduce, refine
- Shall we use animals at all? Of which species? In which condition? How many?
- How do we qualify / judge / measure “animal harm” in concrete circumstances
- The termination of an experiment?







## DIRECTIVE 2010/63/EU

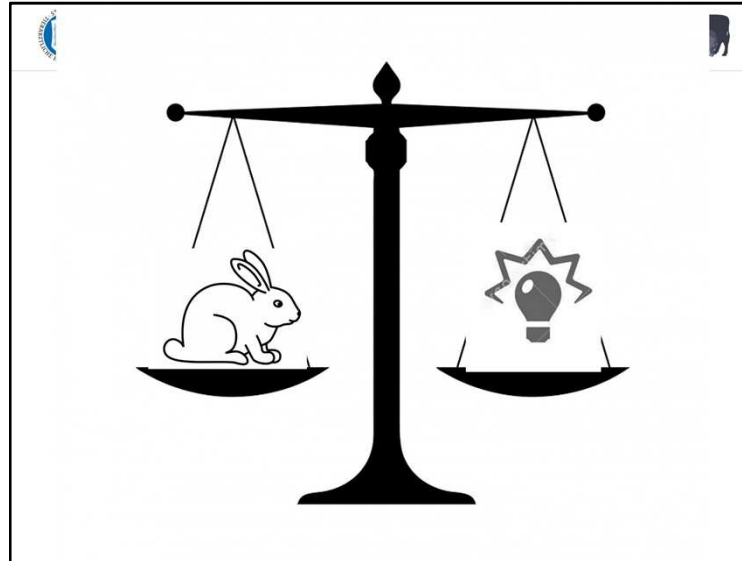
- (38) Comprehensive project evaluation, taking into account ethical considerations in the use of animals, forms the core of project authorisation and should ensure the implementation of principles of **replacement, reduction and refinement** in those projects.

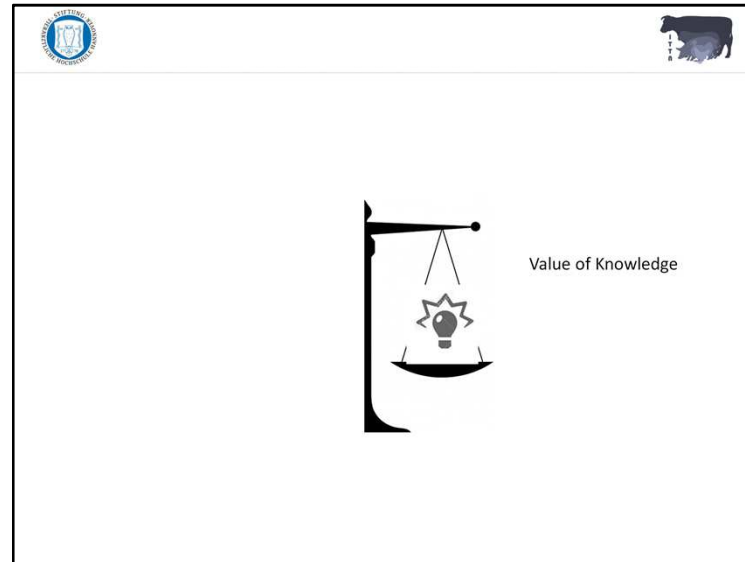



## A Pathocentric View




- We have implemented everything to ensure a minimum of harm.
- What about that minimum of harm?
- “It assumes that it is all right to allow practices that use animals as if their value is reducible to their possible utility relative to the interests of others, provided that we have done our best not to do so. “ (Regan, l.c.)
- 3Rs does not provide an answer to the question whether the infliction of pain is **justified** in *a particular case*.










## Quality of an experiment



- Does the experiment contribute to the scientific goal?
- What really is the goal?
- Two versions:
- (A) Scientific progress has *intrinsic value*
- (B) Scientific progress has *instrumental value*, i.e. if and only if it helps to promote other goals.





## DIRECTIVE 2010/63/EU

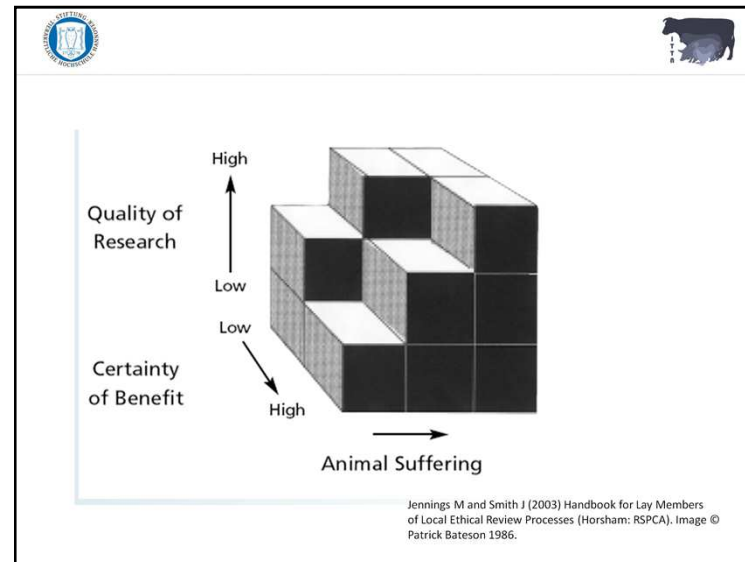
- 12) [Animals'] use in procedures should be restricted to areas which may **ultimately benefit human or animal health**, or the environment.



## DIRECTIVE 2010/63/EU



- Art. 38: 2. The project evaluation shall consist in particular of the following: ...
- (d) a **harm-benefit analysis** of the project, to assess whether the harm to the animals in terms of suffering, pain and distress is justified by the expected outcome taking into account ethical considerations, and may ultimately benefit human beings, animals or the environment;







## DIRECTIVE 2010/63/EU



- (39) It is also essential, both on moral and scientific grounds, to ensure that each use of an animal is carefully **evaluated as to the scientific or educational validity**, usefulness and relevance of the expected result of that use. The **likely harm to the animal should be balanced against the expected benefits of the project.**



P22

ATLA 43, P22-P24, 2011

---


## DISCUSSION

---


### Turning Apples into Oranges? The Harm-Benefit Analysis and How to Take Ethical Considerations into Account

Herwig Grimm


*How can expected study benefits and animal harms be weighed against each other? What is the unit and common currency that allows this weighing to be performed?*



## Harm-benefit-ratio



- Is there a conclusive relation between “harm” and “benefit”?
- The German „verhältnismäßig“ (appropriate) as a tool for evaluating the case
- The experiment must be
  - suitable
  - necessary
- There must be an “appropriate” relation.
- The experiment must at least be “justifiable”.







## 3Rs and justification





- 3Rs in themselves do not proof a particular experiment to be justified or justifiable...
- ... because they do no answer the question whether the result “is worth” the *irreducible minimum* of “harm” to the animals.
- BUT: They are an indispensable way of proofing that we are gaining our results be inflicting a definite *minimum* of animal suffering.
- This is a great help in deciding wright and wrong when it comes to animal experimentation.



## Considerations





- Provided there are substantial benefits associated with animal research, why should the use of animals require special justification?
- *Because we are make sentient beings suffer.*



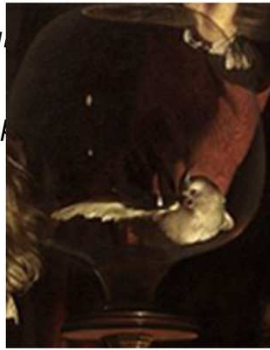
## Considerations



- What role does the unavailability of alternatives play in the justification of research involving animals? (p.33)
- *It marks a difference within the 3Rs: replacement plays another role than refinement and reduction.*



## Considerations

- Can any use of animals by humans be justified?  
Which specific issues need to be considered in the case of research?
- *Because the benefit is uncertain, suffering comes for sure.*
- *So we ought to do everything possible to a minimum.*
- *3Rs!*
- *This is in itself a moral good.*





- Thank you!

