Animal Experimentation

The Consensus Changes

ANIMAL EXPERIMENTATION

The Consensus Changes

Edited by
Gill Langley

M
MACMILLAN
PRESS
Scientific & Medical

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Softcover reprint of the hardcover 1st edition 1989

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First published 1989

Published by
THE MACMILLAN PRESS LTD
Houndmills, Basingstoke, Hampshire RG21 2XS
and London
Companies and representatives
throughout the world

Typeset by Vine & Gorfin Ltd, Exmouth, Devon

British Library Cataloguing in Publication Data
Animal experimentation: the consensus
changes.

1. Science. Research. Use of laboratory
animals. Ethical aspects

I. Langley, Gill, 1952–
179'.4

ISBN 978-0-333-45383-4 ISBN 978-1-349-20376-5 (eBook)
DOI 10.1007/978-1-349-20376-5

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Preface

This book addresses practical and philosophical issues regarding the use of animals in biomedical research, testing and teaching. It does so with the aim of presenting in some detail, from numerous perspectives and at different levels, facts and arguments to encourage scientists—whether researchers, doctors, veterinarians, laboratory animal technicians or science students—to reconsider their views about animal experiments. The intention is that fresh, thoughtful insight will be stimulated, generating a deeper concern for the many millions of animals involved worldwide.

The contributors to this book are recognised authorities in their fields, which range from animal-rights philosophy to the reduction of suffering in laboratory animals; from human–animal relations to the legislative scene; from science policy to humane research; and many areas in between. The starting points for the reader are contained in the first three essays. Mary Midgley digs at the roots of the human relationship with other animals: Do we consider ourselves part of the animal kingdom when it pleases us, and assume we are separate from it when expediency requires us to make a delineation? How does this schism affect our view of laboratory animals? Professor Tom Regan presents, logically and coherently, the rights argument as the basis for our dealings with animals, rather than a utilitarian view, and he uses scientific research as his illustration of the principles involved. Drs Margaret Rose and David Adams review, in some detail, the biochemical, physiological, anatomical and behavioural evidence that other animals are capable of feeling pain, and discuss the related question of suffering. Prompted in part by the requirements of new legislation to categorise the severity of procedures on animals, researchers and veterinarians worldwide are now concentrating on these issues.

The middle section of the book deals with the nuts and bolts of animal experimentation itself. Dr Erik Millstone, in his essay on science policy in the context of toxicology, has written a perceptive analysis of the bias and inconsistency which underlie many decision-making processes. Dr Robert Sharpe has marshalled extensive evidence for his case against reliance on animal experimentation as predictive for human medicine. Clive Hollands has documented examples showing that scientific research on animals can be, surprisingly often, little more than a ‘trivial pursuit’, and he expresses the view that it is the responsibility of all of us, scientists and lay-people alike, to condemn the trivial use of animals in laboratories. Dr Martin

Stephens brings us up to date with advances in humane research technology and its increasing potential to replace animal experiments, as well as discussing the factors that have encouraged and hindered progress in the field. Dr David Morton offers advice and information on ways in which experiments can be planned, conducted or modified to decrease the suffering of animals.

The last two essays look at responses by scientists and legislators to the changing consensus on animal experimentation. My contribution pulls together a number of threads which suggest that the scientific community has been reluctant, over many decades, to face the serious moral and practical issues raised by animal-based research. I attempt an analysis of these problems, and suggest that a more sensitive and open-minded approach is overdue. Finally, Dr Judith Hampson reviews the recent changes in British, American and European animal experimentation laws, and assesses the degree to which different legislative systems might be successful in achieving their stated aims.

It has not been an easy task to assemble, in one volume, essays from authors whose personal positions on the subject are widely disparate. Professionals who are known for a particular stance at some point on the spectrum of views on animal experimentation are understandably nervous of seeming to compromise their position. For example, a researcher whose essay might appear within the same book covers as that of an animal-rightist risks being criticised by colleagues for 'going soft' or, worse, for giving credibility to the 'extremists'. Anti-vivisection contributors found in the company of scientists face the accusation that they are compromising their ideals or are in the pay of the drug companies. As the old Chinese proverb so rightly said, 'He who walks in the middle of the road is hit by chariots in both directions'.

These reactions are predictable because the issue of animal research has moved from the wings into the centre-stage spotlight of political, social, scientific and moral concern. Sides have been drawn up, emotions have run high, reputations and livelihoods have sometimes been at stake. That the contributors to this book have agreed to rub shoulders with each other is not so much a result of editorial tact and persuasion on my part (although some of this was required!), as of a realisation that the problem of animal experimentation now, more than ever before, demands an overview, clear thinking, analysis and constructive action by all concerned people, no matter what their shade of opinion. One thing which all the authors in this volume share is a desire to see the suffering of laboratory animals, mental and physical, ameliorated. It should be clear from the foregoing, but I must state it anyway, that the arrival of this volume on the bookshop shelves does not necessarily signify that its contributors agree with each others' detailed views on the subject.

I must also make clear that my own position is not a neutral one. I am, and have been for some 11 years, a committed proponent of animal rights and anti-vivisection. During the preparation of this book it has been difficult, quite often, to withhold the editor's red pen where authors have made statements which clash directly with my own views. However, I believe that to convey an important message successfully requires the presentation of convincing arguments at every and any level where they might be effective. Among readers of this volume, those whose livelihood depends on animal experimentation are unlikely to become supporters of animal rights overnight, no matter how persuasive the argument (which must nevertheless be presented). But such researchers will, at least, be open to advice on modifying their experimental protocol to reduce animal suffering. Scientists whose daily work experience demands an emphasis on objectivity may be enticed into letting a little more feeling and empathy into their relationships with laboratory animals. Those who are already committed to an animal-welfare position may see the logic of the animal-rights philosophy. Science students, on reading this book, may become aware of the desensitisation which occurs in science education, and see the wisdom of resisting it. Veterinarians involved in animal research might feel moved to review the meaning of the veterinary 'Hippocratic oath', which binds them to consider as a priority the interests and well-being of animals. Concerned lay-people will find here an exposition of the contemporary debate on animal experimentation, with the use of technical terms only where this is unavoidable.

The literature on animal experimentation generally divides into clear categories. The obviously pro- or anti-vivisection books, such as Paton's (1984) *Man and Mouse* or Ryder's (1975) *Victims of Science*, may be read by followers of the 'other camp', but usually only with the intention of finding flaws in their opponents' argument. The detailed philosophical approach, such as Regan's (1984) excellent *The Case for Animal Rights*, can nevertheless be daunting for non-philosophers. Several books have tackled a range of animal-orientated issues, including factory farming and bloodsports, from a strongly pro-animal viewpoint, such as Singer's (1985) *In Defence of Animals*, but these may have a limited appeal for scientists. Rowan's (1984) *Of Mice, Models and Men* and Sperlinger's (1981) *Animals in Research* contained much of interest for pro- and anti-vivisectionists. This book follows and expands on those earlier works, in addressing a primarily, but not solely, scientific readership on the topic of animal experimentation; in explaining the limitations of animal models in medicine and toxicology; in presenting a wide spectrum of expert views on animal welfare and rights, in a factual and non-combative way; and in bringing readers up to date with practice and philosophy, policy and politics. We also hope

to change hearts and minds, and encourage a new and just perception of animals as individuals whose interests and needs deserve our careful attention. The task is probably impossible, but the arguments for concern and compassion which are marshalled in this book are, no matter what your own present position, compelling.

Hitchin, Herts, 1989

Gill Langley

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The Contributors

Dr David Adams has worked in general veterinary practice and has studied immunology at Oxford University. His present position is at the CSIRO Pastoral Research Laboratory at Armidale, New South Wales, Australia, where his major interests include immunology, animal husbandry and animal welfare.

Dr Judith Hampson has a background in biology, and for six years worked at the RSPCA. She is now an independent consultant in laboratory animal welfare, her special interests being legislative reform, education and the philosophy of animal rights. She is a member of the UK Government's Animal Procedures Committee, and an adviser to the EC Commission on the implementation of the EEC Directive on the use of animals in research.

Clive Hollands has worked for human as well as animal welfare for many years. He is Consultant to the Scottish Society for the Prevention of Vivisection, Secretary to the St Andrew Animal Fund and also to the Committee for the Reform of Animal Experimentation. He is a member of the Home Secretary's Animal Procedures Committee and an Honorary Associate of the British Veterinary Association. His views on joint action and compromise have made him a controversial figure in the animal-welfare movement.

Dr Gill Langley has a doctorate in neurochemistry from Cambridge University and experience of tissue-culture research. An animal-rightist and a vegan since 1978, she is scientific adviser to the Dr Hadwen Trust for Humane Research and to Animal Aid. She is also a freelance writer and consultant on animal experimentation, humane research, alternative medicine, and diet and health.

Mary Midgley is a philosopher with a special interest in evolution, in the relation between our species and those around it, and in the way in which our beliefs about these things can affect our practical conduct. About the treatment of animals, she particularly welcomes the present tendency for co-operative discussion to replace barren debates between extremists, and believes that this clearer and less combative thinking may lead to necessary and useful changes in practice.

Dr Erik Millstone is a lecturer at Sussex University's Science Policy Research Unit. In the course of his work on the testing and control of food additives, he has explored some aspects of the scope and limits of toxicology and the value of animal tests for chemical safety.

Dr David Morton is a research scientist and a laboratory animal

veterinarian, with a particular interest in animal welfare and the assessment of pain and distress in laboratory animals.

Professor Tom Regan is a Professor of Philosophy at the North Carolina State University, USA, and president of the Culture and Animals Foundation. He is author and editor of over 20 books, many of which address the issue of animal rights. His *Case for Animal Rights* is the definitive work on the subject.

Dr Margaret Rose is a veterinarian with a PhD and has been involved in biomedical research for 20 years. She is a Senior Project Scientist at the University of New South Wales, Australia, and has been involved in animal-welfare issues since 1975. She serves on a number of committees, including the Animal Welfare Advisory Council and the Australian Council on the Care of Animals in Research and Teaching, and is Chair of the New South Wales Animal Research Review Panel.

Dr Robert Sharpe is a scientific adviser and consultant to the British and international animal-rights movement. He was formerly a research chemist at the Royal Postgraduate Medical School in London and also served as Director of the Lord Dowding Fund for Humane Research, an organisation which promotes and sponsors the development of alternatives to animal experiments.

Dr Martin Stephens is Director of the Laboratory Animals Department at the Humane Society of the United States. Prior to joining the HSUS staff in 1985, he was a consultant to several animal protection organisations and wrote critiques of animal experimentation in particular fields of research. His own research and training is in zoology and he received his PhD in biology from the University of Chicago in 1984.