There is a massive (almost overwhelming) amount of relevant and interesting information contained within this important book. It is perhaps best initially approached by reading the Gimenez's seven-page preface where an outline is given of the thoughts behind the need for the book, what it is trying to do and some of the background factors which have to be considered when dealing with this relatively new subject of large animal rescue techniques.

The volume is largely based on US experience. This is no disadvantage, as the modern approach to large animal emergency rescue as a component of disaster management seems to have first surfaced in the US and has certainly been actively developed there. There is sometimes confusion over the differing national use of some technical terms — this occasionally leads to difficulties, as can be seen in some of the sections dealing with ropes, webbing, knots and lifting devices. There may be minor problems, at times, in the chapters on organisation and communications, in coping with the seemingly endless number of differing US organisations with cryptic or otherwise complex acronyms or abbreviations.

However the overall message from the book is clear:

- There is a need for serious forward planning on a local and regional basis;
- A local communications network, with 24-hour coverage, should be set up so that each participating organisation and individual knows who is capable and willing to do whatever task is required to help contain and remedy the emergency;
- A thorough understanding of the behaviour of animals in disaster situations and their likely response to restraint and handling is essential;
- First responders, ie police, fire service personnel and back-up responders, ie veterinary surgeons, animal welfare society employees should be formally trained in animal rescue techniques and in rescue scene management. The care of any human victims and the safety of the rescue personnel and the inevitable human bystanders should have the highest priority. Over-enthusiastic helpers and the interfering style of some of the media often have to be controlled.

An interesting if somewhat controversial point is made in the preface. The senior authors, ie the Gimenenzs, believe that instruction in large animal rescue techniques can only really be given by simulating rescue situations using live (trained?) animals. This, of course, may result in the demonstration animals being stressed/distressed. Local and national animal welfare rules and legislation may, in effect, directly or indirectly forbid such animal use.

This important and substantial, well-written, well-illustrated and fully indexed book should be on the library shelves of all animal husbandry and veterinary teaching establishments and in the hands of all involved in the development and giving of training courses on technical large animal emergency rescue. The main authors, in the last part of their preface, state that they welcome feedback from readers with suggestions etc which might be incorpo-

rated in future editions. I have suggested that this book is important now, and I believe that it will remain so in its inevitable further editions.

* In the UK, nearly all local so-called animal rescue/welfare groups and societies deal largely and often solely with the control, care and adoption (homing) of lost, stray and unwanted dogs, cats and small domestic pets.

Roger Ewbank

Ashbourne, Derbyshire, UK

Animal Subjects: An Ethical Reader in a Posthuman World

Edited by J Castricano (2008). Published by Wilfried Laurier University Press, Waterloo, Ontario, Canada. 312 pp Paperback (ISBN 978-0-88920-512-3). Price £22.99.

This book has been sitting in various locations in my office for months before I actually got down to reading it. It wasn't the (slightly suspicious but beautiful) tiger face on the cover that scared me, it was the subtitle. Anything post- from the humanities makes for challenging but difficult and confusing reading in my world of a life scientist pretending to have an open mind. As I now sit down to write the review, I'm no less troubled. Should I really write a review of a book in which there are long sections I struggle to understand, admit failure and eventually in despair start transcribing phrases which alternate between accumulating abstractions I've never heard with bringing together everyday words into expressions the meaning of which I fail to decipher? But I realise that even the titles of my own recent papers ('Ethical perspectives on germline transgenesis in marmosets' and 'The spatial learning phenotype of heterozygous leaner mice is robust to systematic variation of the housing environment') must be as impenetrable to Castricano and colleagues as some of their writing is to me. Interdisciplinarity is a tough challenge in our days of highly specialised academic activity.

There are, in my view, two ways of overcoming the interdisciplinary gap: the reader needs to get used to terms, expressions and ways of reasoning in other fields and the writer needs to think about how to express themselves to get the message across outside a very restricted circle. I do have a fair amount of interdisciplinary academic experience and some of the texts in the book are quite accessible, but unavoidably some of the content is lost in the gap between my effort to understand and the writers' effort to be understood. The result is that for at least some of the essays, what might be strong points for the cultural theorist are lost to me, while I'm overly critical of what from my animal welfare science perspective seems like banalities. I'm writing this review nevertheless, based on the assumption that the way I read and understand this book won't be too different from the way that most other readers of the Animal Welfare journal would read it.

The book is a collection of essays of mostly Canadian authors writing from the perspective of cultural studies, calling "into question the boundaries that divide humans from animals, focusing on the medical, biological, cultural, philosophical, and ethical concerns between non-human animals and ourselves". In the introduction, the book's editor, Jodey Castricano (Associate Professor, Department of Critical Studies, University of British Columbia), reflects on the role of animals in cultural studies, followed by an overview of the different essays of the book.

Under the title 'Chicken', Donna Haraway (Professor, University of California) uses the fable of Chicken Little as the basis for a very poignant essay on the role and fate of chickens in human civilisation, as "The first farm animals to be permanently confined indoors and made to labour in automated systems based on Technoscience's finest genetic technologies, feed-conversion efficiency research and miracle drugs".

In 'Selfish genes, sociobiology and animal respect', political philosopher Rod Preece criticises Richard Dawkins' selfish gene theory as insufficient to explain human and animal behaviour. Describing Dawkins' reasoning as part of the history of materialism and determinism to which both utilitarian philosophy and science also belong, Preece argues that Western science has underestimated the role of the will and spirit, kept alive only in literature and art. Describing living beings as genecontrolled survival machines is not only demeaning but also removes any reason for us to give ethical consideration to others. Instead, we should recognise "a compassion for others, including other animals, as a natural part of the human psyche" and something that Preece argues animal welfare scientists ought to preoccupy themselves with.

'Anatomy as speech act' is the title of Dawne MacCance's essay. The author is head of Department of Religion, University of Manitoba, and the essay brings together three topics: the birth of hands-on anatomy teaching with Vesalius moving down from the lectern to the dissection table in 16th century Padua; Descartes' attempts to describe the human-animal dualism and find its corresponding anatomical structure and two paintings of Rembrandt depicting a butchered ox.

Why is it that the three prominent 20th century French philosophers, Foucault, Levinas and Derrida, who challenged a number of presumptions underlying traditional Western philosophy in their writing, largely left the issue of non-human animals untouched? This '(A) missed opportunity' is explored by philosopher Paola Cavalieri, who suggests the explanation is two-fold: much as the tradition they rebel against, these authors consider moral status largely to be determined by the capacity to act morally — thus excluding animals — and disconsidering scientific evidence of animal cognition and sentience.

In 'Thinking other-wise', Cary Wolfe (scholar of English and cultural theory) uses Derrida's deconstructivism to criticise Dennett's view of animal cognition — or more correctly that "line of philosophers from Aristotle to Lacan, Kant, Heidegger and Levians, all of whom say the same thing: the animal is without language". The conclusion he arrives at is very close to the famous Bentham question "Can they suffer?"

Philosophers Michael Allen Fox and Lesley McLean explore the topic of 'Animals in moral space'. Intellectually attributing moral status to animals is not enough to make sure that they are treated with respect, argue the authors: we must move to actually sensing that the moral space we inhabit is one that we share with the other animals. The authors suggest the way to do this is "to focus on particular examples, which requires discussion of individual situations involving non-human animals", and use two such situations: "a poem describing the experience of a young girl and the owl whose life she takes" and "a scientific account of an experiment involving the electric shocking of dogs".

'Electric sheep and the new argument from nature' is philosopher Angus Taylor's exploration of the arguments criticising animal liberationist views such as Regan and Singer on the grounds that "(w)hat counts is not the capacity to suffer (...) but rather the ecological niche of one's species". The author critically reviews this argument — with which it turns out he doesn't agree — in many disguises before introducing the (science) fiction of Philip K Dick to illustrate the difficulty in drawing lines in morality.

In the essay 'Monsters', John Sorensen (Professor at the Department of Sociology, Brock University) uses a parallel between 19th century freak shows and contemporary zoos and aquaria to deliver a massive attack on the Marineland theme park at Niagara Falls. The disrespectful treatment of animals and the doubtful educational value of such establishment is criticised. "When these messages are conveyed to children, they learn that it is acceptable to imprison animals and to harass them (...) presenting dominion as entertainment, slavery as fun". Keeping animals in barren restrictive environments and training them to perform unnatural tricks for human beings "teaches that animals are toys that exist for our amusement, not individual beings who have their own vital concerns and interests".

Under the title 'I sympathize in their pleasure and pains', Barbara K Seeber, Associate Professor of English, discusses the view and writings of 18th-century feminist, Mary Wollstonecraft on non-human animals. In her writings, Wollstonecraft draws parallels between the domination of animals and repeatedly emphasises animal sentience and the importance of respecting that, earning her a "place in the history of ecofeminism".

In the essay 'Animals as persons' ethicist David Szybel explores the question of personhood and to whom it is to be attributed. He rejects the human-centred dictionary definitions and proposes an alternative test of who is a person through a thought experiment: "if you were suddenly to experience the experiences of another conscious being such as a chicken's experience of pain, you would count that as a personal experience". This question is explored in the light of the work of philosophers discussing personhood within the human species as well as across species.

'Power and irony' is the ambiguous title of lawyer Lesli Bisgould's essay about the Canadian art student Jesse Power's physically injuring and eventually killing a cat, while videotaping the events, allegedly as a statement about cruelty to animals. The essay discusses the irony of a legal system where charging the act as an animal cruelty offence (against the cat herself) would result in a milder penalty than charging it as a property offence (against the family owning the cat), and where causing similar injuries to agricultural animals is accepted as a necessary part of farming practice.

In the essay 'Blame and shame: how can we reduce unproductive animal experimentation', with part irony, part frustration, the biologist, Anne Innis Dagg, tells the story of her endeavour telling the biomedical research community off for doing unproductive research with animals. Based on citation analysis, numbers of animals used and severity of experiments, she wrote several critical papers which were sent to different biomedical journals and organisations without any reaction from their side (but eventually published in the *Journal of Applied Animal Welfare Science*).

Johanna Tito, scholar in phenomenology, has chosen the title 'On animal immortality' for her essay, the last in the book, which again is more of a metaphor than a description of the content of the essay, which explores the impossibility of distinguishing between human and animal, immortal and mortal. Based on phenomenology, that area of philosophy dedicated to consciousness as experienced from the first-person viewpoint, Tito argues that animals are not to be understood through objective observation but through empathic interaction. The message that we should not discard animals as so distinctly different from us as to deny them respect is clear.

Reading this book was not an easy task. Was it worth it? Often it was frustrating. Sometimes because I found it just plain difficult to understand (but then I must recognise my own lack of preparation and training). Sometimes because I felt that long abstract discussions about Rembrandt's paintings and Descartes' dissections or Husserl's and Bataille's phenomenology had very little to say about animals (but then cultural studies is a very wide field and in a collection of essays some will unavoidably be peripheral). What frustrated me most, however, was when I had no problem in understanding the text but was left disappointed. It may be that Tito writes for a different readership than animal welfare scientists whose profession is to think about how to understand animals' subjective experience. But who will be helped by rhetoric questions describing empathy with animals as "Who of us, when ill or lonely, has not been comforted by an animal companion? And who has not unmistakably understood the pleas of the hungry, cold stray asking to come in? Was it not impossible to refuse?" Anyone minimally familiar with animal welfare science knows it takes more than everyday anthropomorphising to make a convincing argument about subjective experience. It also takes more than the superficial analyses Innis Digg presented and tried to publish to tell biomedical researchers the inconvenient truth — which I don't dispute — that there is too little critical thinking about when and how to use animals appropriately in biomedical research.

But there were also rewards. I was delighted by Haraway's elegant and pungent writing, and Allen Fox and McLean powerfully convinced me that to situate animals in moral space to the extent that their place is taken seriously in practice, we need many different approaches and many different languages and that the rational discussion isn't enough. I learnt some interesting facts I didn't know, about the history of anatomy teaching or the legal case against the art student who videotaped himself harassing and killing a cat. I was prompted to reflect on my view of animals, on preconceived ideas and widespread assumptions underlying how we handle animals in practice and law. Having to look things up in dictionaries, I've learnt something about concepts, such as critical theory, cultural studies and phenomenological philosophy and was for the first time confronted with the works of philosophers, such as Derrida and Levinas — who are not contributors to the book but play major roles in a couple of the essays — which I've until now shied away from.

As I'm writing this review, the contents alert for December 17 issue of *Nature* (Number 7275) reaches my email inbox. One of the editorials addresses the prospect of true interdisciplinary dialogue between natural sciences and social sciences with part optimism, part scepticism. Animal welfare science is by nature interdisciplinary, but there are aspects of the social science view of animals which admittedly haven't yet made their way into the animal welfare discussion. *Animal Subjects: An Ethical Reader in a Posthuman World* covers a great deal of those, but not all of the essays are written in a style which promotes interdisciplinarity beyond the social sciences. The book may nevertheless be influential in that it clearly demonstrates the position of non-human animals in an intellectual tradition which has largely overlooked them.

Anna Olsson

Institute for Molecular and Cell Biology, Porto, Portugal

The Welfare of Pigs

Edited by JN Marchant-Forde (2009). Published by Springer Publishing Company, New York, NY 10036, USA. 349 pp Hardback (ISBN 978-1-4020-8908-4). Price £114.95.

This book is the seventh volume of a series dealing with the welfare of farm, companion and laboratory animal species. The stated aim of the series is to contribute towards a culture of respect for animals and their welfare, by describing and considering the major welfare concerns for each species. It is designed to provide a set of texts for researchers, lecturers, practitioners and students. In this respect the current volume sometimes falls between objectives for different readerships. Some chapters are very heavily referenced, with a research focus, making them difficult reading for the practitioner. Others are more accessible to a general audience, but give more superficial treatment than required by the research scientist.