

Review Essays

Peter Singer, Ethics into Action: Henry Spira and the Animal Rights Movement, 222pp., Melbourne University Press, Melbourne 1999.

Henry's work can teach us how to make our ethical views become more than words – how to put them into action, so that they have an impact on the world. It is hard to imagine anything more important than that. (Peter Singer, from the Preface).

In many ways, Peter Singer's recent foray into biography, *Ethics Into Action*, can be read as a manual for those who were moved by *Animal Liberation* and wanted to take some action to prevent the unnecessary suffering of non-human animals. Singer's approach is to illustrate how abstract ethical ideas can be applied in the real world and effect change, by way of example: his subject is the late animal rights activist, Henry Spira.

Spira, born in 1927, emerged from a tumultuous and difficult childhood to embark on a varied career as a merchant marine, a private in the United States Army, a teacher at a poor New York City public school and finally a full time activist. His early interests in activism and involvement in various socialist organisations caught the attention of the FBI, who for some time kept Spira under surveillance and documented his movements.

Spira's interest in animal issues really began when he read a review of Singer's *Animal Liberation*, and came to see defence of animal interests as a logical extension of his interests in the rights and interests of human beings. Once committed to the cause of action on behalf of his non-vocal, non-human counterparts, Spira, through strategic planning, creativity and sheer relentlessness, achieved some astounding victories over individuals and organisations involved in animal exploitation. Given the widespread impact of behaviourism in science and the social norms of the period (beginning in the early seventies, when the term 'animal liberation' was often interpreted as a parody of the women's liberation movement, for example), Spira faced formidable opposition. Any reader interested in animal issues will be fascinated by Singer's

accounts of Spira's successes, among them his contribution to preventing the notorious Draize-test through careful negotiation with major cosmetics companies (most notably, Revlon).

To those with an interest in the animal rights movement, *Ethics Into Action* lends an important historical perspective, but some will be disappointed that animal interests and suffering come across as means to an end: a meaningful life for the human beings in question. In the sense that Singer is presenting Spira's life as a case in point, one has the sense that Singer's conception of a meaningful life is unfortunately narrow, and this is the major weakness of the book.

Whilst Spira, who eventually devotes himself to the liberation of animals on a full-time basis, is presented as leading a meaningful life devoted to ethical concerns, Singer neglects to address alternative but perhaps equally valid lives of other persons discussed within the book in relation to ethics. Spira's father, we are told, methodically committed a covered-up suicide in order that his wife and daughters (intermittantly institutionalised for depression) could survive on his life insurance payments. 'He literally gave up his life for my mother and sister', says Spira (p. 42). Like Spira, his father was trying to prevent the suffering of those who could not protect or care for themselves, and yet this morally and ethically significant act is treated by Singer as a mere episode in Spira's life.

Similarly, Spira's life is presented by Singer as that of a model animal liberationist. In contrast, other individuals or groups seen to clash with Spira are presented as hindering the 'good' work he did. Though this may be the case, Singer does not give the reader the opportunity to judge for him or herself, and thus one has the distinct uneasy feeling that the account is biased in Spira's favour. One is also constantly reminded of Singer's own influence on Spira through *Animal Liberation* (chapter four is entitled 'Animal Liberation' and opens with a quotation from Singer's book), yet the book is lacking a philosophical assessment of the utilitarian approach shared by Spira and Singer. Perhaps it is unrealistic to expect Singer to be critical of what is essentially his own position, given that his 'argument' for it is presented in *Animal Liberation*. Nonetheless, when it comes to the biography of Spira, Singer must realise that these views are not uncontroversial. *Ethics Into Action* simply suggests that these views work and that by adopting them and devoting our time to reducing suffering, we automatically accrue vital meaning in our lives.

What is needed are argument and explanation, and more discussion about what constitutes “meaning”. According to Singer, it appears to be physical and mental health and happiness – again, this is uncontroversial, and tends to beg the question.

Given that the text is presented as exploring ethical questions, it comes as a surprise that Spira’s methods are not questioned. He displayed an uncanny ability to negotiate with large corporations in order to effect change, but a potential criticism of this approach is that Spira was success-driven and not principle-driven. Thus he would attempt to work in conjunction with those corporations he was accusing of animal exploitation, in order to achieve a mutually satisfactory outcome. The approach has the merit of being realistic, but Singer does not adequately weigh up its merits and defects, leaving it vulnerable to the criticism that he potentially jeopardised the animal rights movement in its embryonic stages by not taking a strong *enough* position. Singer could have provided more philosophical discussion regarding this issue. Instead, his ‘Advice to Activists’ is entirely derived from Spira’s methodology, as if this is ethically unproblematic.

Singer struggles to straddle the twin genres of biography and philosophy. Unfortunately I don’t think he is successful: as biography the account of Spira is rather brief and selective, as well as being one-sided. In some ways this may be a case of the author being too close to give an objective and well-rounded account of the subject and his concerns. As philosophy, too many assumptions are left unexplored, unjustified or unacknowledged, and Singer tends to feed the reader his own views without challenging them. Though the emphasis is on “action”, the ethical component is disappointing in its lack of depth and its one sidedness. The book could almost be renamed ‘*Animal Liberation into Action*’.

To his merit, Singer has chosen a fascinating subject – Spira’s is a forceful and colourful persona, and the politics behind the animal rights movement provides high drama (conflict, corruption, misappropriation of funds and even – though very much an aside – murder). Readers will enjoy the complex ‘plot’ of this biography, and Spira does present an inspiring example (though not necessarily a blueprint) for activists. Nevertheless, one is left with the feeling that the book, from an ethical perspective, could only have been enriched by the presence of some critical discussion of Spira’s philosophy and life, insofar as this is an example of an ethical existence.

Anne Quain

Randy Malamud, Reading Zoos: Representations of Animals and Captivity, xi + 377pp., New York University Press, Washington Square 1998.

Are zoos texts? Not precisely – and so Randy Malamud, an English professor at Georgia State University (USA), purports to 'read' them through their stories (ie fictional accounts that feature zoo scenes, inhabitants, or visitors). Finding in this way little if any redeeming value in the institution, and much that is objectionable, Malamud writes a staunchly abolitionist denunciation; indeed, his work of literary/moral criticism borders on the polemical. *Caveat lector*, in other words, for here hermeneutics of suspicion drive the argument: 'if we examine the evidence and documents of our own culture, through our representations of zoos, I believe that the inconsistencies, the hypocrisies, the logical fallacies, and the rationalizations that have undergirded the perpetuation of zoos will become readily apparent; the system will deconstruct (p. 49).

Under Malamud's critical lens, zoo stories manifest many defects of their subject. As seen through scores of authors' eyes, zoos originate in imperialistic impulses (melding conquest and captivity, exhibition and exploitation), establish a regime of cruelty that oppresses by depriving wild animals of their freedom and by inflicting painful somatic stress, and encourage practices of spectatorship that stultify visitors and rob inter-species encounters of elemental reciprocity. Given this list of ills, it should not be surprising that Malamud decries the urban weekend ritual of taking kids to the zoo. There is nothing innocent or amusing about such outings: 'zoos prove well-suited as a vehicle for children's anxiety, fear, insecurity; zoos evoke these unsettling psychological reactions more prominently than they inspire (as zoo proponents would proclaim) fun, education, or imagination' (p. 293).

Stark stuff, this. Some readers may not persevere through Malamud's long, dark discourse. But then the history and legacy of the zoo is itself long and dark. So sour a view of the institution may be unexpected, especially for those who have subscribed to the popular, received metaphor of zoo-as-ark of conservation/education. On the other hand, philosophers and cultural critics ought not be strangers to mismatches of ideological rhetoric and phenomenological reality. And such is the

pattern at the structural heart of the zoological park - the central contradiction revealed by Malamud is that even whilst they proclaim to save wild animals, zoos actually extinguish biotic wildness both by dislocating their keep and by overexposing them. Unauthenticity of this sort deserves a thoroughgoing treatment of skeptical analysis.

Reading Zoos delivers that and unfortunately more, as its skepsis spills over into a cynicism that sometimes obscures. There is a tendency in this book, for instance, toward diagnostic totalization-negative judgments are issued with the aprioristic ring of cant: '*inevitably*, commercial culture will overshadow nature, replicating the dominance of imperial culture over the subaltern' (p. 97, italics added); 'the cage *essentially and wholly* defines, subordinates, whatever is inside' (p. 119, italics added). Similarly, polarities of global reasoning arise when, as Malamud seeks to distinguish 'the authentically enlightening intellectual experience of animals' from the distress visited upon animals at zoos, he ends up posing the empirical difference as a dichotomy of principles: 'imagination indicates creation, and pain deconstructs creation' (p. 181). Is the imagination never delusory, one wonders, or pain ever ennobling? Maybe not, but the author's declamatory tone bespeaks a refusal to ponder the former's pitfalls or the latter's generative possibilities. Lastly, cultural cynicism again overcomes Malamud as he offers to explain the popularity of zoos by positing a social addiction, and so we are told that families frequently find themselves at animal exhibitions because 'parents capitulate to some [monolithically evil] socio-cultural force' (p.269). A more plausible account might make reference to the perversion of an innate disposition toward animal affinity (ie the biophilia recently theorized by a broad range of scientists).¹

When it comes to prescribing therapies for the dismal state of biotic encounter in our current culture, Malamud is modest at first and confesses ignorance of the *right* way to regard wild animals. Yet he does think there should be *better* ways than zoological display, ways that would be more genuine and holistic. His chief recommendation is that we enhance what could be called our 'biological imaginary': because 'proper interaction with animals necessitates not [always] knowing exactly where they are' (p. 177), it appears that 'a better way to appreciate the animals with which we share this planet depends upon

¹ See E. Wilson, *Biophilia* (Harvard University Press, Cambridge, Mass., 1984); S. Kellert & E. Wilson (eds), *The Biophilia Hypothesis* (Island Press, Washington, DC, 1993); S. Kellert, *Kinship to Mastery: Biophilia in Human Evolution and Development* (Island Press, Washington, DC, 1997).

the invisible: upon our imagination of animals ... *when they are not immediately present*' (p. 185). Developing an enriched 'mental bestiary' is preferable to keeping zoos, Malamud claims, in that it is less constraining for actual animals and more stimulating for humans. What would this look like concretely? Imaginative exemplars of authentic animal artistry, for Malamud, are the poetry of Marianne Moore and the prints of Albrecht Dürer. Where would we get the natural history necessary to feed and discipline our own zoomorphic imaginings? Here Malamud comes up a bit short in defending nature documentaries as the lesser of evils (compared to either zoos or expanded ecotourism).² I'd suggest rather a renewed investment in local sanctuaries for the rehabilitation of displaced wildlife (eg Belize's Tropical Education Center) as well as greater attention to the prospects for visiting native refuge areas (eg Australia's Penguin Parade).³

Though I have taken issue with Malamud on several points, I find myself in broad agreement with his book's overarching indictment of zoos as unauthentic institutions of animal representation. Perhaps he has over-stated his case, but then – given the abundance in zoo commentary of evasive apologetics and superficial reformism – it is refreshing to read a critique that pulls no punches. If not unique in aim,⁴ *Reading Zoos* is distinctive in method and singular in depth (the wealth of literary coverage and careful interpretation is impressive in itself and fruitful for further study). Before reboarding the ark floated by today's conservation establishment, peruse Malamud and you may want to abandon ship.

Ralph Acampora

² An odd defense of a unidirectional medium (film), particularly since he goes on to reject the interactive imagery of computerized animals (CD-ROMs, WWW sites) as 'glitzy pap' (p.262). The advent on American cable of the channel *Animal Planet* – a kind of MTV of nature shows – demonstrates how biovisual broadcasts can be infected by the empty excesses of cyberculture.

³ Likewise, opportunities for cross-species cohabitation in cities should not be underestimated. Cf. Jennifer Wolch's animal-friendly project of green urbanism in 'Zoöpolis', in Jennifer Wolch and Jody Emel (eds), *Animal Geographies: Place, Politics & Identity in the Nature-Culture Borderlands*, (Verso, New York, 1998).

⁴ See also my 'Extinction by Exhibition', *Human Ecology Review*, 5/1, (1998), pp.1-4, and 'Zoöpticon' in M. Carroll and E. Tafoya (eds), *Phenomenological Approaches to Popular Culture*, (Popular Press, Bowling Green University, 2000). For a sophisticated attempt at transformative commentary, cf. S.L. Montgomery's 'The Zoo: Theatre of the Animals', *Science as Culture*, 21, (1995), pp.565-602.

Hugh LaFollette and Niall Shanks, *Brute Science: Dilemmas of animal experimentation*, 286 pp., Routledge, London and New York 1996.

Hugh LaFollette and Niall Shanks's *Brute Science: Dilemmas of animal experimentation* builds a sophisticated and extremely convincing case against the use of animals in medical research. This is not to say that LaFollette and Shanks categorically reject animal experimentation, instead they call for more effective measures for evaluating the success of animal experimentation and a halt to exaggeration about its benefits. While this reviewer would have preferred that the book take a firmer stance on the issue, not least because the evidence marshalled seems to call for it, this is the only disappointment afforded by the work.

The book is carefully organised around a progression of arguments that at first glance caused consternation due to the claim made early on that '[w]e must delve deeper to determine the scientific and methodological merits of animal experimentation. Only after we have done so will we be able to morally evaluate the practice' (p. 18). The suggestion that moral considerations about the treatment of animals rest upon potential benefits to other species is a position I would hesitate to support. However, setting this objection aside it is clear that the authors put their proposition to excellent use, producing a case that exploits the uncertainty of benefit in contrast to the considerable moral costs of experimentation.

Brute Science begins with a succinct account of both sides of the vivisection debate. A central thesis of the book is that the use of examples in arguing for or against vivisection is an inadequate strategy unless these examples are evaluated in the context of best current biological theory, here, evolutionary theory. Thus examples of medical successes and failures produced by vivisection mean nothing unless the ways in which such successes or failures occurred can be explained through theory. Given that often times this debate is indeed conducted on the level of example exchange, this is an important insight, and one which shapes the book profoundly.

Chapter three looks at the origins of the current biomedical model, citing Claude Bernard as the father of modern biomedicine. LaFollette and Shanks note that Bernard embraced animal experimentation for two main reasons, firstly because he considered observation and clinical research unscientific due to the difficulty of controlling variables adequately, and secondly because he rejected evolutionary theory and

any concomitant view of species as significantly different. As a result, he believed that science was best served by experimentation on animals where as many variables as possible could be controlled, in the context of a view of species differences as no more than superficial.

Thus, the book demonstrates that present day experimentation is founded upon the rejection of evolutionary theory, a state of affairs that is somewhat problematic given that evolutionary theory is presently well accepted. Chapter four details the current biomedical paradigm and makes clear the ways in which Bernard's views are still central. Chapters five and six detail evolutionary theory, setting the stage for later arguments by emphasising evolutionary theory's recognition of real species discontinuities and its commitment to the notion of nonlinear dynamical biological systems, a commitment that suggests that where particular species differences are apparent, these differences, though seemingly irrelevant to the experiment in question, limit the possibility of extrapolating research findings from animals to humans. Here, difference is understood to be not limited to single structures or functions in the body, but necessarily indicative of other variations.

In this discussion a significant theme of the book emerges; that of difference. This theme recurs consistently in section two where animal experimentation is evaluated in scientific terms. A central dilemma based on difference is uncovered here, for while researchers wish to argue that animals are similar enough to humans to yield meaningful data about human diseases, responses to drugs and other matters, they also assume that animals are different enough to warrant different (inferior) moral consideration. Returning to evolutionary theory, the authors are able to demonstrate that both perspectives cannot coexist. Where higher cognitive states are absent in animals (an absence that allows morally for their use in experimentation) evolutionary theory tells us that other, physiological, differences must also exist. Thus, the very grounds upon which animals are considered valid *moral* subjects for experimentation are the same grounds for why they are unsuitable *scientific* subjects for experimentation. This review cannot do justice to the complexity of the arguments made in this section, but suffice to say that chapters seven to twelve provide very strong arguments against the scientific validity of vivisection. Worthy of note here is the observation that the most common defences of experimentation fall into the 'it just works' category, a defence necessitated by the existence of significant theoretical obstacles (demonstrated here) to seeing vivisection as viable and by the lack of a detailed and serious measurement of its successes, failures and costs. Also important to note is the treatment of basic

research in this section, a treatment that is by contrast scant, inconclusive and relatively weakly argued given that it is simultaneously treated as perhaps the only area in which animal experimentation has some clear value. This scant treatment becomes more telling later in the book.

Having established that from a scientific point of view, animal experimentation occupies a very dubious location in relation to medical achievement, the authors move on to a moral evaluation of vivisection. Marshalling an impressive repertoire of philosophical arguments, the authors build a convincing case that due to the very uncertain scientific benefits of animal experimentation, moral justifications are difficult to launch effectively. For example, by arguing that current moral standards consider an evil perpetrated worse than an evil left unprevented, the onus is placed on vivisection to show exceptional benefits given that it is a widely recognised evil perpetrated in order to prevent the evils of illness. Additionally, having argued strongly for the vagueness and inconclusiveness around vivisection's efficacy (as well as around its costs in terms of numbers of animals used), the authors are able to demonstrate that under these terms, the *possible* prevention of evil must be offset against the *certain* perpetration of evil. This is an even tougher moral and scientific ask, given the portrait of vivisection offered above.

It is somewhat disappointing to this reviewer then (as I noted at the outset) that *Brute Science* stops short of identifying itself as opposed to animal experimentation. This may be a strategic move designed to hold the attention of those firmly in favour and easily put off by apparently partisan analyses, but nevertheless, it is a move not supported by its own material. Admittedly, there are many who hesitate to step decisively into the oppositional role in this debate, after all, even well-known champion of animals Donna Haraway, in her influential *Modest_Witness@Second Millennium.FemaleMan@_Meets_OncoMouse™* states, 'my own ambivalence on the subject is unresolved'.¹ However, having offered statements such as the following: '[t]o the extent that researchers cannot measure the benefits of a practice [vivisection], to that extent at least, they should not claim to know that the practice is beneficial' (p. 173) and '[t]herefore, there are no compelling moral arguments for biomedical experiments using animals' (p. 248) one would think that the authors' conclusions would be stronger. Instead

¹ Donna J. Haraway, *Modest_Witness@Second Millennium.FemaleMan@_Meets_OncoMouse™* (Routledge, London and New York, 1997), p.290 (n54).

(and not insignificantly), policy recommendations are made which emphasise the need to learn more about animals used in research, the need to thoroughly evaluate animal research scientifically and the importance of stronger public health interventions to deal with chronic and preventable illness.

In the process, however, the authors return to the uncertain benefits of basic research to conclude that '[t]he evidence to hand suggests that biomedical research using animals - especially basic biomedical animal research - has benefited humans, albeit, indirectly, and might continue to do so' (p. 262). Whether or not vivisection has benefited humans, *Brute Science* has singularly failed to support this statement. If such evidence exists, it is poorly represented in the book.² As such, the claim signals a retreat from stronger conclusions that would be well-supported in the body of the work. This, however, is the only criticism I would offer, given the stimulating and thoroughly argued material the book provides, but in the context of this urgent debate, it is a significant one.

Suzanne Fraser

² Though admittedly this perception may partly be influenced by my own strong objection to animal research.

Jonica Newby, *The Pact for Survival: Humans and their Animal Companions*, 280pp., Australian Broadcasting Corporation, Sydney 1997.

Written by an Australian author and drawing heavily on Australian research and making points illustrated by regional examples, *The Pact for Survival* must have strong appeal for the local readership. Jonica Newby is an Australian veterinary scientist and science journalist, and she acknowledges a particularly heavy debt to another Australian veterinarian, David Paxton, drawing extensively on the 'lateral thinking' manifested in his doctoral thesis for the Australian National University. The book however is anything but parochial in the scope of its ideas. Indeed the outstanding characteristic of Newby's style is her ability to review and integrate a vast array of theories and data, from a vast range of sources. She draws upon the work of archaeologists, anthropologists, historians, geneticists, biologists, philosophers and ethologists (I've probably missed out some), making it accessible and useful to the general reader.

The Pact for Survival must also have a paramount appeal to owners and lovers of domestic dogs and cats, investigating as it does the history, nature and origins of the relationship, and speculating as to its future. However, the questions raised about human evolution and society are hard-headed and exciting, and warrant widespread attention. At the outset Newby dismisses as counter-productive to serious scientific investigation the notion that dogs were somehow a human creation, and by the end she has certainly presented a challenging array of hypotheses as to how the two species came together and influenced each others' development.

Why, Newby asks, have so few species succumbed to becoming pets? What was special about dogs and cats? When and how did the process begin? Is it conceivable that biological and social interactions between humans and their pets have resulted in actual evolutionary change in the human as well as sub-human species? How have they influenced our culture - and we theirs? In the latter part of the book a series of contemporary issues are addressed - are pets good for health? are pets bad for the environment? how do they fit into modern town-planning? All is drawn together in the concluding chapter, 'The Urban Sextipede' (after Paxton), which is provocative, persuasive and fun.

In broad overview, the story runs as follows. The available archaeological record shows that dogs have been around us for at least 12,000 years. Conceivably, when DNA technology improves, there will be a case for arguing that dogs existed as a separate species as long as 80,000 years ago, when humans were acquiring language. 'First dog' may have been a pet, a sewage system, a hearing aid, or, most probably in Newby's opinion, all of the above. A major theoretical step is taken at the end of Chapter 1, with the contention that the mixed species community of dog-human was the unit on which natural selection operated.

The next two chapters discuss evolutionary changes in canine and human species. For dogs, this has involved a reduction in brain size, a dulling of the senses, and neotenisation (retention of juvenile characteristics) - none of which Newby considers to be really bad, given the compensatory advantages of association with humans. An account of an amazing Russian experiment in fox farming supports the notion that selection for friendliness may bring about many and rapid physical changes. The Ancient Romans knew about selective dog breeding; the latest leap in such came with the establishment of breed standards in the late 19th century. The chapter on humans begins blandly enough, discussing the impact of domestic animals in various aspects of our culture - of dogs on hunting, cattle and cats on agriculture, horses on transport and warfare. The real excitement comes with the examination of Paxton's thesis, that the 'extension' of the human brain brought about by the domestication of canines to include the dog's superior olfactory capacities permitted the substitution of the apparatus of speech for the organs of smell, within the limited space of our cranium.

Chapters 4 and 5 take up very broad issues relating to human-animal cultural interactions. Chapter 4 examines the changing fortunes of cats and dogs across human history and habitat - their casting as devil, insensate object, pariah, dinner, and finally, pet. A pet is defined as 'an animal that is kept *for no other purpose*.' The rise of pet-keeping in Europe from the 18th century onwards is portrayed as involving a shift from opportunism to empathy, and as at least partly resulting from increasing urbanisation. Here is foreshadowed the theme on which the second half of the book pivots. Before that happens though, Chapter 5 describes portrayals of animals in art, language and literature, moving on to a mind-blowing discussion of 'talking with the animals'. Another large-scale ongoing study of canine behaviour is reported, this one from the Anthrozoology Institute in Southampton, England, addressing the issue as to whether communication in modern dogs has significantly

departed from that in wolves. Results show that it has; furthermore all the new signals displayed are to do with 'being friendly' - to us. Do dogs have a culture? Well, yes, but canine cultural transmission occurs via the mediation of human language. It is we who pass down to the next generation of ourselves what and how to teach our pets!

There follows a competent review of the literature (much of it carried out in Australia in the 'nineties) on the healing properties of pets in contemporary life. The positive evidence suggests to Newby that the adaptive biological function of dogs and cats in human society continues, only differently. They help us deal with the challenges of urbanisation, most notably loneliness. The author then goes on to counter the notion (particularly popular in Australia) that an urban presence of animal companions has a downside insofar as it increases pollution, a task she accomplishes with ease and some levity. For one thing, keeping pets helps to satisfy our drive towards nurturing, thus assisting with zero population growth. More positively, she expounds the concept of 'biophilia' (after E.O. Wilson) - that we are genetically programmed 'to seek out natural settings and affiliate with animals and plants'. Unfortunately, modern town planners have forgotten to incorporate the means for pet-keeping into their designs. The interests of the animals and their owners are either ignored or misconstrued, as the very demographic trends which make animal companionship so valuable at the same time militate against maintaining it. We need them more, but can have them less. Of course, in Beijing there is a dog farm for city-dwellers to visit, while in Tokyo canine walkees may be rented by the hour!

David Paxton argues the need to examine community change in terms of how it affects a single, indivisible unit, made up of one two-legged and one four-legged partner - the Urban Sextipede. Newby's final chapter is one of advocacy, in which she instances ways and means of dealing with this entity, at the official and self-help levels. She is passionate, practical, but also pessimistic. Although humans may be *able* to survive in environments hostile to our ancient genetic partners, do we really *want* to live there?

There are now lots of books on dogs and cats. Beginning in the 19th century with treatises on their care and breeding, in the 20th century we have this tradition continued, supplemented by manuals of dog training, anecdotes and biographies, histories and picture books. In the second half of the century the field expanded to include psychological and biological studies, beginning in 1954 with Konrad Lorenz's *Man*

Meets Dog. Recently philosophers and psychologists have taken up issues relating to the presence or absence in these species of consciousness and emotion. The present book touches on most but goes way beyond any of these modes in its breadth of knowledge and ideas, scope of enquiry, seriousness and wit.

Alison M. Turtle