The reviewer also finds it astonishing (but perhaps rather typically American!) that this publication, which so strongly espouses the cause of linking philosophy and thinking with geography, is written almost entirely by people from the USA. How refreshing it would have been to read essays by (indigenous) people from Africa, Asia, South America – and even Europe; perhaps such a mix would have produced a less intense, more realistic, approach to the subject! It does seem particularly inappropriate that the chapters about India and Islamic law are written by authors based in North American universities. Is it possible that this might be a form of (neo) colonialism – a lifestyle and approach to people that is so strongly criticized in some other parts of the book?

Animal Geographies is relevant to all those who are concerned about the excessive exploitation of animals by humans, the conservation of wildlife and the maintenance of biodiversity. It provides pertinent insights into the causes of disparate human attitudes to animals. The philosopher who has time to ponder, to search and to reflect, will probably relish the style of presentation. However, there is, regrettably, a real danger that the practical welfarist – who wants to achieve something for animals today, rather than dream for tomorrow – may feel alienated and thus not heed its very important underlying message.

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If a Lion Could Talk: Animal Intelligence and the Evolution of Consciousness

Stephen Budiansky (1998). The Free Press: New York. 219pp. Hardback. Obtainable from the publishers, Simon & Schuster Inc, 1230 Avenue of the Americas, New York, NY 10020, USA (ISBN 0684837102). Price US\$25.00/£20.00.

The title of Budiansky's book alludes to Wittgenstein's claim that 'if a lion could talk we would not understand him'. It would be interesting to know what criticisms Wittgenstein would have made of the subject matter of this book – the field of animal intelligence and consciousness – given his sceptical attitude towards knowing another's mind; but in his absence Budiansky does a fairly comprehensive job of taking the field to task.

Budiansky begins with a lament over the general human tendency for compulsive anthropomorphism – we not only see the human in the animal but we judge the animal by its perceived similarity to the human. In part he acknowledges that the connectedness we feel is a result of similarities in non-verbal, non-conscious cognition that we do indeed share. However, this does not excuse ignoring the important differences and Budiansky is very sceptical of behavioural scientists, who he perceives to be driven by a political motive to bring humankind down a peg or two, arguing for human-animal similarities.

He is particularly damning about the tortured efforts of comparative psychologists to show animals' (and particularly primates') abilities in fields that we ourselves are good at such as language, counting, deception etc. Animal intelligence, on the basis of the evidence so far amassed in these areas, ought better be described as animal stupidity. He is unimpressed by the abilities of primates in these human-like activities, commenting that in any case pigeons have a habit of being able to do all the things primates can do and often more reliably. More tellingly, animals' abilities at these activities are most unimpressive when compared to their abilities at tasks that they actually need to perform in their natural habitat, which may be quite astonishing. As Chomsky noted: if you want to find out about an organism, study what it is good at. Compulsive anthropomorphism has led us on a misguided search for the human in the ape.

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Book reviews

The chief substance of the book lies in a systematic critique of some of the hot areas of comparative psychology, principally tool use, cognitive maps, communication, categorization and counting. As someone unfamiliar with many of the original experiments I found the quality of the discussion excellent and the criticisms well made. Budiansky is clearly sympathetic to the stance of Euan Macphail – the iconoclast who suggested that differences in intelligence between animals ought to be demonstrated rather than assumed and that evidence to date suggested no differences at all. If this is difficult to stomach, Budiansky, along with others, makes a strong case for language being a true discontinuity: a universal algorithm transcending special purpose algorithms and creating a qualitative difference between humans and other animals.

What of consciousness? In this case, Wittgenstein and his edict that 'whereof we cannot know, thereof we must remain silent' has been only partially embraced by Budiansky. He does devote a chapter to the subject – but at heart he is a cognitivist, concerned with the processing of information rather than the actual quality of the representations that animals use. The great success of the cognitivist approach to animal cognition was to break the stranglehold of 'black box behaviourism' by showing that experimental rigour was not the sole domain of behaviourist methodology and that theoretical failures of behaviourism could be elegantly solved by an appeal to internal representations. This strength was bought at the price of rejecting any kind of phenomenological speculation about what it would be like to be the study animal. Now there is a growing thirst among comparative psychologists to address this question once again, particularly among those investigating the ability of animals to infer mental states in others – an ability that might plausibly underlie an ability to reflect on one's own mental states, regarded by some as the source of the experience of consciousness. Typically, Budiansky is not very impressed by the abilities of apes in this area.

The implications for animal welfare are explicitly stated by the author. Pain is not the same as suffering, since the latter involves a reflection on the pain and why it is bad and Budiansky doubts that animals can do this. Since animals merely feel the pain rather than suffering as a consequence of it, there is a tacit assumption that they ought to be able to put up with it. This hardly holds water. There is ample evidence that animals show physiological stress responses to painful events that far outlast the stimulus itself; which is as close as we are likely to get to showing that they too experience mental anguish at their circumstances. That one kind of protracted episode of pain (the kind that Budiansky ennobles as 'suffering' - the exclusive domain of humans) results from a reflection on the meaning of the pain in terms of the whole context of the life of the individual experiencing it, while the other kind results from less cerebral processes doesn't make one easier on the subject than the other. Furthermore, the ability to reflect on one's pain can by the same token act as a palliative: apart from the recognition that the pain will eventually end (which a simpler organism probably couldn't comprehend) a human can view the experience as character building, penance or whatever. This is not to say that species might not differ in their susceptibility to pain, but only that Budiansky's well-made criticisms of the compulsive anthropomorphisms of those who deal with animals professionally or otherwise should not provoke us to disregard pain when it is staring (shaking, rocking or screaming) us in the face.

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