A Different Nature: The Paradoxical World of Zoos and Their Uncertain Future
D Hancocks (2001). Published by the University of California Press. Distributed by John Wiley and Sons Ltd, Distribution Centre, 1 Oldlands Way, Bognor Regis, West Sussex, PO22 9SA, UK. 279 pp. Hardback (ISBN 0 520 21879 5). Price £24.95.

There can be no doubting David Hancocks' contribution to the development of zoos in modern times. As a past director of the Woodland Park Zoo in Seattle and the Arizona Sonora Desert Museum in Tucson, he has left his indelible impression on zoo thinking over the last thirty years, particularly in the field of exhibit design. He is currently the director of Victoria's Open Range Zoo, in Werribee, Australia. Hancocks, an architect by training, has a particular view of zoos, of their role in society and of their future. *A Different Nature* is an opportunity to explain and justify his philosophy, to tell us why he wishes to "*un*invent zoos as we know them".

Strongly held views, many of which are highly critical of zoos around the world, are fair enough. Self-criticism and analysis from within the zoo community is healthy. Hancocks tells us that after thirty years in zoo design and management he has "formed some heretical opinions", and I suspect he wears his badge as a zoo maverick with some pride. So, does this book really help us in our study of (as the subtitle puts it) *The Paradoxical World of Zoos and Their Uncertain Future*?

In the preface, setting the scene for later discussion, Hancocks confirms his "ambivalence" to zoos, telling us how they can leave him "confused and depressed". "When I lift images of zoos to mind", he tells us, "I find a jumble of unpleasant sights and sounds". But he also lists experiences of "delight and astonishment" that he would "never have enjoyed without visits to a zoo". He tells us of "glimpses of evidence that zoos can truly be places of wonder, bridges to paradise".

These thoughts are developed later in the book, but how does the author treat the subject of the four pillars that are often quoted to justify the existence of zoos — recreation, research, conservation and education? We get a summary dismissal of recreation, research, conservation breeding, and pedagogical education, all within half a page in the preface, and very little detailed discussion on these subjects later in the book. The author is entitled to his opinion, but the reader is entitled to some reasoned argument.

Just one of these pillars, and Hancock's attitude to it, is worth dwelling on for a moment because, perhaps, it gives us an insight into the author's attitude. Most reasonable people these days accept that recreation alone does not represent an adequate *ethical* pillar to justify the existence of zoos. Hancocks dismisses the recreational role of zoos as "surely suspect". But it isn't that simple. As an ethical pillar, recreation alone may not stand scrutiny. As part of an overall mission it can. More importantly, it stands as a crucial *financial* pillar for many, if not most, zoos in the world. It is the recreational role that brings in money through gate receipts, not only to allow the kind of development that the author wants to see, but also to be channelled directly into both *in situ* and *ex situ* conservation.

Some of the world's zoos — those subsidised by central or local government or private wealth — are not so dependent on money from admission charges. But even where gate receipts are the only meaningful source of finance, as in the British Isles, much useful work can be done. A recent survey of Federation zoos found that 43 member institutions are involved in supporting 177 field conservation projects worldwide. Their ability to carry out this work is sustained, either directly or indirectly, by revenue from their recreational role. This is money that would not have found its way into conservation by any other route. Hancocks' four-line dismissal of the recreational role of zoos reveals an underlying inability

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or unwillingness to see the reality of zoo economics throughout much of the world. This attitude hints at an elitism perhaps not surprising from someone who has spent most of his zoo career in the wealthiest nation on earth.

The early sections of the book deal with the history of wild animals in captivity and, as such, tell us nothing new on the subject. Indeed, others have done it better. But those parts that chart the development of ideas in exhibit design are useful precursors to the book's central thesis.

At no time in the book does Hancocks seriously question the existence of zoos in principle. He acknowledges "their amazing potential" and charts the way he believes they should develop. He believes that their role in maintaining biodiversity through captive breeding is "a flimsy platform", and that their research role is a "contentious thesis". It is through the educational role of zoos that Hancocks sees their future. He explains his vision of zoos that "develop a concerned, aware, energised, enthusiastic, caring and sympathetic citizenry". He has already dismissed the recreational role of zoos and informed us that "a family day out" at the zoo is "an indulgence" that is "difficult to defend". The author must now explain how the citizenry is to be attracted into his zoo of the future, if not for recreation. He fails to do so. Hancocks' vision has much in it with which we might all agree. It is the way this should be achieved that gives him his distinctive, and some might say eccentric, voice.

There seem to be four essential elements to the Hancocks vision of tomorrow's zoos. Firstly, and underlying all his various pronouncements, is a genuine commitment to the welfare of the animals. Secondly, in order that zoos should interpret "a holistic view of Nature", they should "metamorphose" to encompass "botany, geology, and palaeontology". Zoos should venture into areas previously reserved for museums. They should "help us read the entire book of Nature, not just isolated chapters". He cites, with enthusiasm, one or two examples of where this is already happening. No one could deny that such developments are fascinating and exciting, but are they *essential*?

Interestingly, nothing is new. A zoo in the UK opened a natural history museum in 1964, complete with botany, geology and palaeontology exhibits. It was highly praised in 1970 by the then Secretary of the Federation of Zoos, Geoffrey Schomberg. The important lesson for Hancocks in this story is that at about the time some zoos were developing these exhibits in Europe, the UK zoo was closing its museum and converting it into an education centre and lecture room. In the real world, then as now, most zoos have to make difficult decisions on budget allocation. This zoo had a stark choice — it was one or the other. We know, presumably, which Hancocks would have preferred, but is he right?

The third element of Hancocks' reinvented zoos is that of *in situ* conservation. "Zoos can and must become gateways to the wild", he tells us, and "must become directly involved in wildlife habitat protection". He acknowledges that this is already happening, and in this respect he pushes at an open door.

Much of *A Different Nature* is devoted to the fourth and central element of the Hancocks thesis, and that for which he is perhaps best known — zoo exhibit design. That he has some interesting and important things to say on the subject is undeniable. To read his description of the merits of "landscape immersion", a zoo design concept first developed by landscape architects Jones and Jones for Woodland Park Zoo, Seattle, is to read a good deal of sense. The design brief given to the architects, Hancocks tells us, included the request that they "blur the barriers by putting the same landforms and plantings in both the public and the animal areas. The intention was that by exhibiting animals in landscapes that closely

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resembled their natural habitat in every possible detail and by immersing the viewer within that same wild habitat, people would subconsciously make connections between the interdependence of certain animals, plants and habitats".

Hancocks falls down, not when he proselytises on behalf of a concept that can produce some outstanding exhibits, but when he raises the status of the issue quite beyond its rightful place. "The most compelling and obvious impact on visitor attitudes towards wildlife", he tells us, "is the way that zoo animals are presented. This is why quality of exhibit design is of paramount importance". If the use of the word paramount was a reference to meeting the welfare needs of the animals then we could all agree. Hancocks states that animal welfare is "the first essential", but he goes on to declare that "seamlessly attached to that come the important needs of the human visitors and the justification for displaying animals at all". He believes that "zoos are built primarily and essentially for people". This then gives logic to the contentious idea that the design elements for visitor education are of equal importance to, and cannot be separated from, those for animal welfare.

He dismisses "the propensity among British zoos in particular" to complain "that they don't have the same level of funding as American zoos" without addressing the serious and valid issue of prioritising funding for capital development. Convincing immersion exhibits, particularly for larger vertebrates, are very expensive. High-quality artificial rockwork, that satisfies the author of *A Different Nature*, cuts deeply into budgets. We would all like to have sufficient funding to provide naturalistic exhibits in addition to meeting the welfare needs of the animals. In reality, most zoos do not. Limited budgets should be directed primarily to animal welfare — design features such as landscape immersion must, by necessity, take second place.

The rest of the world may feel that a particular zoo is doing rather well in meeting its mission in terms of animal welfare, pedagogical education, conservation breeding and research, but if the zoo doesn't meet David Hancocks' standards of exhibit design then its existence is not justified. On the subject of British zoos he thinks "it would be better if 90 per cent of them were closed". Again we see an elitist attitude not supported by rational argument. All we get is the unbelievably naïve assertion that the resources that currently sustain all British zoos would somehow be diverted to support the handful of which he approves — ironically, none of which have landscape immersion exhibits, or museum-type displays.

Frequently throughout the book, sound common sense and judgement are juxtaposed with some surprisingly ridiculous notions. For example, the zoo community is criticised for its "unwillingness to provide assistance" to the Born Free Foundation, an organisation that is dedicated to the closure of zoos. Hancocks is wrong on all counts. Zoos are highly critical of BFF on ethical and practical grounds, but *do* occasionally work with them. A recent example was the transfer by that organisation of two rescued brown bears from Italy to a UK zoo. More significantly, Hancocks has misplaced the moral dilemma. It lies with an organisation that rescues animals and places them in zoos, and at the same time campaigns to undermine public and corporate support for zoos — support that funds the welfare of those same animals.

Sometimes it is difficult to know whether issues are dealt with superficially by the author because of ignorance or because acknowledging the complexity of the subject might dilute his narrow design message. An example is the description of "a depressing phase of zoo history". The period from "the late thirties through the sixties" is described by Hancocks as the "Disinfectant Era". At this time, animal enclosures were designed with hygiene as a high

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priority. It is true that this could result in sterile environments that were the antithesis of the enriched environments for which good zoos strive today, and that some zoos hung on to this design and husbandry philosophy longer than they needed to. What Hancocks fails to acknowledge is that zoos were able to move on from this era for many species, responding to pressure from behaviourists for enriched environments, and pressure from architects for naturalistic exhibits, only because of the pharmaceutical revolution. Before the availability of anthelmintics and other drug therapies, great apes, for example, could not be maintained on earth substrates. Easily cleaned floors were the only way to avoid the lethal build-up of parasites and pathogens.

A Different Nature should be read by anyone with an interest in zoos and their development. The author is probably wrong as frequently as he is right but that does not devalue the importance of the issues discussed. He is sometimes lucid and inspirational, sometimes illogical and irrational. The book is perhaps as much about the paradoxical world of David Hancocks and his attitude to zoos, as about the zoos themselves.

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Why Animal Experimentation Matters: The Use of Animals in Medical Research

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The way in which the debate on animal ethics is portrayed by the media gives the impression that anyone who takes the well-being of animals seriously must advocate the complete abolition of the use of animals in medical research. As an animal welfare scientist who has recently ventured into the world of biomedical research, I have been looking for a serious and coherent argumentation from the animal experimenter's point of view, and I was enthusiastic to find this book. The central theme of the introduction and of the following eight essays is the grounds on which humans can allow themselves the right to do harm to animals for the benefit of humankind. Biomedical researchers, social scientists and philosophers present their views on different aspects of this ethical issue.

The introduction and the first three essays emphasise the most common argument used by scientists in defence of their activities: that of the human benefit of experimentation. Social scientist Ellen Frankel Paul introduces the theme with an overview of the contribution of animal experimentation to medical knowledge and of the philosophy and actions of the animal-rights movement. Kenneth F Kiple and Kriemhild Coneè Ornelas (historian and sociologist/anthropologist, respectively) devote their essay to the history of the use of animals in science from Aristotle's time to the modern day, pointing out the importance of animal experiments for advancing human knowledge. Veterinarian and neuroscientist Adrian R Morrison gives a personal account on resolving the moral dilemma. In addition to referring to superior human cognitive capacities, Morrison points to the fact that humans' use of animals is just one of many examples in nature of how organisms use other organisms, and suggests that humans ought to make use of the extraordinary curiosity we as a species possess: "To refrain from exploring nature in every way possible would be an arrogant rejection of evolutionary forces". Morrison also presents a critical analysis of how the

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