ROMANCE, REVERENCE, RESEARCH, RIGHTS: WRITING ABOUT ELEPHANT HUNTING AND MANAGEMENT IN SOUTHERN AFRICA, C.1830S TO 2008

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ABSTRACT

The protection and management of large mammals in Africa's national parks is not a matter to be left solely for the attention of natural science and scientists. The way in which the natural world is conceptualised by the humanities and social sciences is also significant, because nature is cultural as well as scientific. This article is an interdisciplinary appraisal of the manner in which the writing (e.g. discourse, vocabulary) about elephants in various literary and scientific texts has altered over time. It aims to provide an analysis of some of the literature about elephants in order to examine literate society's changing responses to the hunting and management of elephants in southern Africa over the past two centuries. The review suggests that new research questions regarding animal cognition and empathy have been generated by these changing attitudes, in conjunction with fresh directions in ecological understanding.

Conservation implications: Biodiversity conservation is an inexact science, and even the distinction between conservation research and conservation management is not clear-cut. Moreover, a degree of emotion is evident in scientific and popular discussions around what should be 'saved' and how best this might be achieved. Nature is cultural as well as scientific and interdisciplinary insights from the humanities and social sciences may beneficially inform protected area management.

INTRODUCTION

Adams and McShane (1992:59) have observed of elephants, 'No other species carries as much symbolic or emotional force. Fascination with elephants is hardly a new phenomenon – man has by turns worshipped, idealised, contemplated, or slaughtered elephants, but rarely ignored them.' Elephants seem appropriate as a particular subject for investigation by scholars in many disciplines, including the humanities and the social sciences, because of their status as the largest African land mammals and their enormous economic and ecological significance; they raise emotions and topics surrounding bioethics and animal rights to a greater degree than any other creature (Scholes & Mennell 2008; Wemmer & Christen 2008).

Elephants (and a small number of other animals) are spearheading the global animal rights movement (Wemmer & Christen 2008). This is a development that environmental historian Roderick Nash (1989) foresaw many years ago. He argued that, on the basis of the existence of an over-extending network of rights, which started with slaves, women and indigenous people, animals and the environment itself would eventually be liberated. This line of thinking generally resonates with changes in scientific perspective (Beinart & Hughes 2007; MacKenzie 1988; Ritvo 1987, 1997; Thomas 1984). Many natural scientists, in a variety of disciplines today, are considering how to balance rights, pondering questions about whether the rights of biodiversity take precedence over those of individual species, or how best we might attempt to manage the planet for favourable long-term outcomes that benefit the largest number of species. Biologists who study elephants are struggling with important questions around the cognitive and self-conscious sentient life of these animals. Research in this field might have consequences on future management philosophy (Bates, Lee, Njiraini, Poole, Sayialel, K., Sayialel, S. *et al.* 2008; Bates, Poole & Byrne 2008; Douglas-Hamilton *et al.* 2006; McComb, Baker & Moss 2006; McComb, Moss, Durant, Baker & Sayialel 2001).

ELEPHANTS IN AFRICA

Ivory has been the major product that has linked Africa with the outside world and shaped perceptions of the continent (Alpers 1992; Carruthers *et al.* 2008; Luxmoore 1991; Meredith 2001). Modern Western writing about elephants generally does not extol the beauty of ivory, perhaps because the demand for ivory is the principal reason why many people in the Western world are mourning the diminution of elephant numbers and, as such, it might seem irresponsible, let alone politically incorrect, to harp on ivory's aesthetic beauty and the satisfaction of ownership. Nonetheless, for more than 10 000 years the 'subtle glowing colour and sensual surface' of ivory has ensured its prominent position among the luxury goods of the world (Luxmoore 1991; Ross 1992).

This luxury market has existed for centuries and raised concern. In 77 CE, Pliny remarked on the reduction of the herds of North Africa (Alpers 1992; Meredith 2001; Wickens 1981). A major peak in supply and demand occurred during the 19th century, with the industrialisation of Europe and the United States; practical as well as luxury objects made of ivory became very popular with the growing middle class and the market expanded accordingly (Oliver & Atmore 1967). In the early decades of the 20th century, ivory was used less frequently in the West, but, in the 1970s, demand from Asia (for ornaments and signature seals) took its toll, particularly in east Africa, leading to a ban on ivory exports from Africa (Parker & Amin 1983; Parker 2004; Wylie 2008). Elephants are not evenly distributed around Africa. In many regions they are illegally hunted and their numbers are dwindling to the point of real concern. In southern Africa, the debate is intense for the opposite reason; many people believe (sometimes on the basis of incomplete evidence) that there are too many elephants – that there ought to be intervention to limit their numbers and thus minimise their environmental impact (Scholes & Mennell 2008).

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The ivory trade has profoundly affected Africa and its people. It brought wealth and power, enabling Africans to control and exploit each other; it laid the foundations of strong states and encouraged the emergence of hierarchies based on wealth and class (Gordon & Gordon 1996; Thorbahn 1979). Initially, ivory was exchanged for iron and other useful metals that contributed to improved methods of cultivation, as well as for cloth, beads and other goods, but, in later centuries, ivory was traded predominantly for firearms and liquor. Ivory extraction, however, led to fragile economies based on a single product; it also created an ongoing trading frontier which expanded into the African interior taking with it warfare and slavery, often leaving economic collapse in its wake (Curtin *et al*. 1995; Gordon & Gordon 1996). In more recent years, the ban on the ivory trade has led to a number of African states becoming financially dependent on donations from animal rights and nature conservation organizations, which has created opportunities for state and private corruption and illegal trade.

NINETEENTH-CENTURY HUNTERS

The texts analysed below are examples of 19th century hunting literature in southern Africa, a genre covered by a number of literary critics (Gray 1979; Hammond & Jablow 1970; McKenzie 1988; Murray 1993; Pratt 1992; Ritvo 1987). As colonial settlement increased and expanded during the late-1700s and early 1800s, small parties of trekboers and traders penetrated the northern interior in search of ivory and other products of the hunt for subsistence and trade (Guelke 1989; Pollock & Agnew 1963; Ross 1989; Van der Merwe 1938, 1945). At about the same time, there were scientific expeditions into the interior (e.g. that of Andrew Smith) and visits by recreational sport hunters, who referred to themselves as 'naturalists', (Harris 1840, 1852; Lye 1975). The Voortrekker parties of this period were also significant because they were potential large-scale, permanent settlers, who acted in the belief that ridding the countryside of wildlife was a pioneering necessity in order to create a 'civilised' state (Carruthers 1995a, 1995b; Kruger 1902).

The settler commercial hunters – generally Boers – have not left literature detailing their exploits; what we know of their activities comes from evidence in legal debates and from literate travellers. One of the earliest and most famous of the visiting hunter-writers was William Cornwallis Harris. His books initiated a new genre, viz. nature and travel writing on the subject of the 'excitement' of hunting wild animals in an 'untamed' Africa (Harris 1840, 1852). Harris, a British army officer stationed in India, arrived in South Africa in 1836 and devoted a considerable part of his furlough – and his books – to describing how he hunted elephants – for their tusks certainly, but also for 'science' and entertainment. His descriptions captured the drama of the hunt and the imagination of his audience. For example, a scene in the Magaliesberg of 300 elephants is described as a 'grand panorama', 'a picture at once soul-stirring and sublime'. After he had 'attacked' and killed some of the females in the herd, he realised that the young were deeply attached to their mothers, as one of juveniles walked around a corpse, 'with touching demonstrations of grief, piping sorrowfully and vainly attempting to raise her with its tiny trunk'. Harris later confessed that 'I had felt compunctions in committing the murder the day before, and now half resolved never to assist in another' (Harris 1852:168–175). Despite his ethical sensitivity that what he was doing might be construed as 'murder', Harris did not desist and his book abounds with descriptions of profligate killing and details of the gory process of extracting tusks.

Another example of the hunting genre in this period is the well-known, and often quoted, *A hunter's life in South Africa*, by Roualeyn Gordon Cumming, first published in 1850. Cumming longed for an encounter with 'the noble elephants' and, when he realised this objective, he killed them at night (Cumming n.d.:178–180), torturing them in an experiment to see how long it would take them to die – an incident he described in detached and unemotional language (Cumming n.d.:227–228). Cumming justified his activities by explaining that the killing of an elephant was 'so overpoweringly exciting that it almost takes a man's breath away' (Cumming n.d.:230). Nevertheless, he was not insensitive to the fact that the elephant was a 'wonderful animal' that had a defined social structure and patterns of behaviour, a well-developed sense of smell and means of communication (Cumming n.d.:180).

Cumming was initially described as 'bold, enterprising and skilful', but, a decade or so later, was referred to as 'an unprincipled man and an indiscriminate slaughterer' (Carruthers 2005:189), as taking pleasure in killing became increasingly morally indefensible behaviour in the West. In addition to the distaste that modern readers have for the reckless and senseless killings perpetrated by these men, it has also become difficult for us to reconcile statements, such as the following, with the actions of the people who made them. Delegorgue, for example, writes:

> *What paltry reason can justify the death and destruction of such beautiful, strong and excellent animals? What are a couple of hundred pounds of ivory compared with the long service which such animals might render to man for generations? … I was perfectly conscious of the mischief I was doing but I was a hunter first and foremost … I desired no other; all the animals of creation, whatsoever they may be, are as nothing compared with the elephant.*
>
> (Delegorgue 1997:3–4)

Perhaps a later writer of the 1930s, Robert Henriques, in *Death by moonlight*, succinctly expressed what these hunters were experiencing:

> *I hunt big game frankly and brutally because not otherwise can I find the same disappointments and reverses, the same excitements, the same antagonists, and the same exhilarating rewards … Above all, I get from it a moment of triumph and of pure emotion which I have never found elsewhere.*
>
> (Henriques, cited in Hammond & Jablow 1979)

Hall-Martin has suggested that, before white settlement, there may have been around 100 000 elephants in South Africa (Hall-Martin 1992). By 1900, almost all had been exterminated through commercial and recreational hunting, with only four remaining populations totalling fewer than 200 individuals. These were in the Knysna area of the Western Cape coastline (30–50), in the Addo district of the Eastern Cape (130–140), an unknown, but very small, number in the tropical coastal Tembe region of Maputaland in northern KwaZulu-Natal, and a few in the Mpumalanga lowveld Olifants River gorge, on the boundary between the Transvaal and Mozambique (Boshoff, Skead & Kerley 2002; Hall-Martin 1992; Roche 1996; Skead 1980, 2007; Whitehouse & Hall-Martin 2000; Whyte 2001).

THE EARLY 20TH CENTURY

The largest remaining population of these four isolated communities of elephants was in the Addo area (Hoffman 1993). They had survived because of the specific local vegetation, currently referred to as 'xeric thicket' (Lubke 1996). In order to modernise the economy of the Sundays River region after the First World War, the government invested in a large and expensive irrigation scheme to encourage the development of large citrus estates. For the elephants, this was an irresistible attraction: water and food in abundance. Local farmers complained bitterly about their losses. After a formal state enquiry, it was decided to kill all of these elephants, despite the opposition of some, like F.W. Fitzsimons, Director of the Port Elizabeth Museum, whose opinion it was that

> *the deliberate extermination of these elephants, would, upon grounds of deeply-felt general sentiment, and in the interests of science, be received by not only very high and influential circles in South Africa, but by the general feeling of the civilised world with condemnation, as a step reflecting no credit upon South Africa.*
>
> (Fitzsimons 1920:270–271)

However, the decision to exterminate them was taken and the was task assigned to Major Philip Jacobus (Jan) Pretorius (1877–1945), a descendant of Boer hero Andries Pretorius (1798–

1853). Major Pretorius had led an extraordinarily adventurous life, which he encapsulated in his autobiography (published in England and Australia, later translated into Dutch and published in Amsterdam), entitled *Jungle Man* (Pretorius 1948).

It is noteworthy that *Jungle Man,* ostensibly conceived in the literary genre pioneered by Harris and Cumming, was the first book in this vein written by a local Afrikaner. Pretorius presented himself as a national hero and the laudatory foreword to the book was written by Jan Smuts (1870–1950), the famous South African statesman. At the time of the elephant killing, Smuts was Prime Minister of the Union of South Africa and, somewhat ironically in terms of his praise of the book and of Pretorius personally, he was deeply committed to wildlife. Smuts wrote: 'I gladly write a foreword to this amazing book …. I have never seen a more thrilling story of a hunter's life' (Pretorius 1948:5–6). In the course of just over a year, killing between three and five elephants almost every week, Pretorius reduced the number of elephants to about 16. Unlike the entertainment and ivory that elephant hunting had offered the sport-hunters, Pretorius was obliterating these elephants in a commercial culling operation, merely because they had hampered economic 'progress' (Hoffman 1993).

In the account of killing the Addo elephants, Pretorius's book marks a shift in the discourse around elephant hunting in South Africa. Pretorius's campaign against the elephants was not a metaphorical 'military campaign', it was a real one. The idea was to exterminate systematically an 'enemy' in order to reduce their numbers and their threat to human welfare. Standing on ladders and injuring oneself on spiny vegetation in the quest of elephants in the Addo thicket was not enjoyable, or sporting, by any standard. Then too, unlike Harris or Cumming, Pretorius was a paid government official, who earned, probably, around £6000.00, in addition to the sale of elephant and elephant products (Hoffman 1993). Hunting the Addo elephants was, for the first time, placed in the same category as vermin hunting. It was designed only to reduce elephant numbers and to prevent human–elephant contact. It was done, not for sport or ivory, but was a calculated extermination programme. It did not even produce the scientific data which might, at least, have been a potentially useful benefit of the extermination exercise. Paradoxically, and for reasons that are not entirely clear, but which almost certainly included Pretorius's own wish, as soon as the numbers of elephant had been drastically reduced, the survivors were given protection within a game reserve, proclaimed by the Cape Province and upgraded in 1931 to the Addo Elephant National Park (Hoffman 1993; Kerley & Landman 2006).

AFTER THE SECOND WORLD WAR

By the middle of the 20th century, wildlife viewing had replaced wildlife hunting, and South Africa's national parks, in particular, the Kruger National Park, had become tourist attractions (Carruthers 1995b, 2009). Values had changed, as had habitats almost throughout the country; ivory was no longer a product from which individuals might make a living. As a result, elephant numbers in certain localities were on the rise. In 1905, the warden of the reserves that later became the Kruger National Park, estimated that there were 10 elephants living within the reserves, by 1925, this had increased to 100, and continued to rise to 250 by 1936, 450 by 1946, and 1000 by 1956. A helicopter count a decade later (1967) gave a confirmed number of 6 586 (Whyte, Van Aarde & Pimm 2003).

After the Second World War, various changes had an impact on wildlife conservation: for example, the change of government in 1948, the increasing influence of ecology and wildlife biology and the eventual retirement of a park warden who believed that nature would manage itself. Consequently, the National Parks Board employed a growing number of university-trained scientists with the responsibility to manage the fauna and flora scientifically. In terms of the prevailing conservation paradigm of that era (ecological climax and stability) and within the limits of managerial knowledge, the Kruger National Park was managed on the principle of carrying capacity, in the same way as an extensive cattle ranch (Carruthers 2007a, 2007b). It was thus decided in 1965 – on the basis of area size and feed and water requirements – that the optimum number of elephants in the Kruger National Park ought be stabilised at around 7000 (0.4 elephants/km^2) (Whyte 2001). Surveys and information for tourists linked expanding elephant numbers with the observed loss of large trees and changes to woody cover, which were held to be the result of 'too many' elephants, even though these ecological alterations might not have been the consequence of elephant activity alone (Whyte, Van Aarde & Pimm 2003).

Elephants were culled regularly in the Kruger National Park for almost thirty years. Not surprisingly, culling did not generate a literary genre, but it was recorded. The annual reports of the Kruger Park carried details of the elephants killed every year: as many as 1846 in 1970, as few as 16 in 1981; from 1967 to 1997, some 14 629 in total (Whyte, Van Aarde & Pimm 2003). This programme led to improvements in census and tracking techniques, in the operation of darting and drugs and to some elephant population and behavioural studies. The by-products of the elephants that were culled were not wasted. The carcasses were transported to an abattoir near (but not in sight of) the Skukuza tourist camp in the Kruger Park, which processed, canned and dried thousands of culled elephant, as well as buffalo and hippopotamus each year (De Vos, Bengis & Coetzee 1983; Meiring 1976:102). Many of the products were used as rations for national park employees and mine workers on the mines nearby. The ivory was sold, until the trade became illegal in 1989.

In the 1990s, east African conservationist, Richard Leakey, was shown this abattoir and exclaimed, 'I watched for a while impressed by the size and scale of the operation, but appalled that this was what wildlife "management" in the late twentieth century had come to' (Leakey 2001:220–221). In *The last elephant: An African quest*, journalist J. Gavron was similarly outraged by sustainable utilisation. He compared the Kruger Park unfavourably with the parks of east Africa, describing the Kruger Park, with its high fences and good roads as too manicured, run on accounting principles and mass harvesting for profit, rather than conserving a representative African ecosystem (Gavron 1993:132–134).

Local South African writers on the Kruger National Park approached their subject from another perspective. One of the most prolific was journalist Piet Meiring, author of *Behind the scenes in Kruger Park* (1982) and *Kruger Park saga* (1976), who also had family ties to the Kruger Park and people in government. Using quotations from the then warden of the park, Meiring extolled the Kruger National Park as an example of 'untouched nature', 'nature's paradise', a place that brings the 'public closer to nature' in a 'blessed atmosphere' (Meiring 1982:68–69). Some 10 pages later, Meiring seems oblivious to the irony of his support of 'the principle of culling and control' to maintain the 'correct population balance' in this apparent paradisiacal landscape (Meiring 1982:77). However, he was firm in his view that 'without such control measures the game reserve would soon degenerate into a desolate wilderness' (Meiring 1982:86). This is language reminiscent of Nash's *Wilderness and the American mind*: 'If paradise was early man's greatest good, wilderness, as its antipode, was his greatest evil' (Nash 1982:9). This type of discourse makes for fascinating analysis in terms of the concepts and linguistics connected to the ideology of 'wilderness' that people who visited the park sought.

Meiring's journalistic style was mirrored by the vocabulary of science and certainty. At a conference on managing mammals in African conservation areas held in 1982, Kruger's warden defended the command-and-control model, warning that non-intervention, as was generally the case in east Africa, was 'impractical, fraught with danger, inherently untidy and can have unpredictable and even shocking consequences' (Pienaar 1983:23). He was, presumably, referring to what had happened to Tsavo National Park, when elephant numbers went unchecked and plummeted, with devastating results, during a serious drought. He also defended taking manipulative action:

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because southern Africa was no longer 'wild', conservation areas were relatively small, fenced, and directly influenced by human activity. Stability and maintenance of the climax ecosystem was, he believed, the key to maintaining a semblance of 'the natural'. Moreover, the economic alternative was ethical in his perspective, because it integrated national parks within the economy and ensured that culling was not wasteful of the lives that had been taken (Pienaar 1983).

As Adams and McShane (1992:100) assert, scientists often have the passion of writers of 'literature' and this is evident in Pienaar's presentation. By contrast – at the same conference – a paper given by the veterinarians who were actually responsible for conducting the culling was chilling because it was so unemotional: the humane killing methods were described with detachment, the carcasses clinically 'removed' and, finally, the slaughterhouse activities outlined in technical detail (De Vos *et al.* 1983). One cannot help but recall Cummings's disturbing detachment in his description of himself putting bullet after bullet into an elephant. It would be tempting – but outside the scope of this paper – to investigate the connection between the culling discourse and apartheid's discourse of this period in South African history. The connection has, however, been made. In a newspaper article in March 2008, which contested the proposed re-introduction of elephant culling in South Africa, a spokesperson for Animal Rights Africa was quoted,

> *The formulation of the government's policy on elephant management, specifically with regard to culling, has been driven by the rampant chauvinistic mindset of utilisation that is deeply rooted in colonialism and apartheid, which disregards the inherent value of each individual elephant and commodifies them into unfeeling units purely to be assessed for their recreational and economic value*.
>
> (Momberg 2008)

WRITING IN THE NEW CENTURY

In 2001, Martin Meredith published *Elephant destiny: Biography of an endangered species in Africa*. Africa is a large and diverse continent, about which generalising is difficult, usually impossible. Certainly, in many parts of Africa, elephants are endangered, but this is not in southern Africa. This region has the largest number of elephants in Africa, accounting for 39% of the total range area. By comparison, central Africa has 29%, east Africa 26% and west Africa 5% (Blanc *et al.* 2007). In 1900, elephant numbers in southern Africa were close to zero. Currently, it is estimated that there are more than 300 000 in the region: nearly 100 000 in Zimbabwe, around 130 000 in Botswana, between 14 000 and 26 000 in Mozambique, 12 000 to 19 000 in Namibia and around 18 000 in South Africa (Scholes & Mennell 2008:3). This growth has occurred because of a combination of the proclamation and fencing of national parks that contained elephants where natural population growth has taken place. In addition, national parks and other protected areas (private, as well as state-owned) have been established or expanded and these have been stocked with 'excess' elephants from elsewhere. Trans-border immigration of elephants has also occurred in the region. There is debate about whether the number of elephant in southern Africa is truly 'too large' and whether the numbers impact detrimentally on the vegetation and habitat (Kerley & Landman 2006). The alternative view is that, having been hunted to near-extinction in certain localities for their ivory, populations are still recovering to previous levels and that vegetation currently considered 'natural' (particularly large trees along major river systems) may only have matured since elephant densities were reduced (Gillson & Lindsay 2003; Owen-Smith 1988; Sharpe *et al*. 2004).

The burgeoning numbers of elephant have become a matter of local and international concern. In 1994, elephant culling ceased in South Africa's national parks for three main reasons. At the time of the transition to democracy in South Africa that year and with an appreciation for the new government's limited financial resources, there was a need to find external sources of funding. Together with a growing revulsion against culling from the animal rights movement, a moratorium on culling was put in place to encourage international donors. Secondly, there was growing scientific evidence that culling might not be the most appropriate tool by which to manage elephant populations in a dynamic system (Page, Slotow & Van Aarde 2006; Whyte 2004; Whyte & Grobler 1998; Whyte *et al.* 2003). Thirdly, a new paradigm of non-equilibrium complex ecosystem dynamics (with its practical application in adaptive management, rather than command-and-control) was being advocated in international conservation biology circles (Biggs & Rogers 2003; Rogers 2003).

Since culling ended, elephant numbers have doubled in the Kruger National Park and the changes they have wrought to the landscape is of concern to tourists and managers alike (SANParks 2005). Biodiversity may be compromised by elephant actions and tourists have complained that the park is aesthetically less attractive to them (Whyte 2001; Whyte, Biggs, Gaylard & Braack 1999). The government of South Africa has been reluctant to re-introduce culling, particularly as the country was the host of the World Summit on Sustainable Development (2002) and the World Parks Congress (2003). Moreover, new conservation legislation has been under consideration during this time, viz. the Biodiversity Act No. 10 of 2004 and Protected Areas Act No. 57 of 2003, and the matter has not been finally resolved, even with the proclamation of the Minister of Environmental Affairs and Tourism of the 'National norms and standards for the management of elephants in South Africa' (Republic of South Africa 2008).

CONCLUSION

Active public participation and interdisciplinary debate about managing and hunting elephants has been in the forefront of South Africa's animal rights debate. To some extent, the rhetoric of animal rights has become more strident, scientists have become less arrogant, perhaps even more hesitant in explaining the limits of their knowledge, while rural communities have demanded a voice in the matter in order to ensure that if culling occurs, they will benefit financially.

In 1979, Gray observed that no southern African literary work about hunting and adventure had received its reverse image (Gray 1979:111). Despite the plethora of illustrated guidebooks, game ranger reminiscences and dense scientific journal articles on southern African mammals, this still applies. Nature writing (which may be defined as non-fiction prose dealing with the natural environment and which relies on scientific factual information) is an extensive and respected genre in Europe, Australia and the United States of America, dating back to Gilbert White, Charles Darwin and Henry Thoreau. Twentieth-century masters of the genre include Aldo Leopold, Rachel Carson, Wendell Berry, Barry Lopez and Stephen Jay Gould – some of whom are scientists, others literary and humanities scholars (Finch & Elder 1990; Lyon 1994). Apparently, however, this genre is not attractive to the South African reading public. By contrast, one might point to the extremely rich South African literature that race relations and race politics has spawned, of which the extraordinary novels of J.M. Coetzee and Nadine Gordimer have become iconic.

Ours has been described as the 'age of the Anthropocene' (Crutzen 2002), because human actions have long-term and permanent effects on the planet. How humanity treats its elephants could, from a literary point of view, become a metaphor for how humanity regards itself as a species. Descriptions of how elephants – an intelligent animal that shares many characteristics with humans – have over-populated the areas to which they have been confined and the extent to which this has resulted in the destruction of their habitat, the reduction in biodiversity and 'natural' behaviour, may be reflective of growing human populations and their impact on the environment at this time, in addition to the effects of climate change. As Alexander Pope expressed, in *An essay on man* in 1734, 'The proper study of mankind is man, but when one regards the elephant, one wonders' (Pope, cited in Watson 2003:60).

Literature certainly has a role to play in identifying how the elephant fits into the various human and cultural worlds, not only into the ecological. This is a matter that one author has recently confronted. In 2003, Lyall Watson – a biologist with an interest in the supernatural – wrote *Elephantoms: Tracking the elephant*. It is an innovative exploration of elephants in South Africa, autobiographically based and recounting anecdote and adventure. Watson's novel approach lies in the fact that he combined science, imagination and history in recording his personal journey into the discovery of elephants. He avoids becoming embroiled in the culling debate, by situating his story along the Cape coast, a specific location in which culling is not an issue because elephants are merely too few – phantoms in fact. The book is worth noting, for Watson suggests that emotion, history, experience, science and all the other ways of knowing, are an integral part of the human-elephant encounter (Watson 2003). Watson touches upon ideas which biologists now study, including elephant cognition, consciousness and behaviour.

Moreover, historical sources, like some of those discussed above, can have more practical scientific value too, in terms of rich descriptive evidence of vegetation and the occurrence of certain species and their abundance in certain localities. Such benchmarks would – as with all historical sources – have to be mediated through the prism of evidential criticism, but they may nonetheless assist management decisions in understanding elephant population dynamics and pre-settlement ranges.

In the above analysis, it is hoped that some of the plethora of voices, and also the variety of discourses that elephants have generated, have been conveyed. These have ranged from the hostile to the sympathetic and from the economic to the ethical, encompassing a gamut of human responses over the past 150 years, straddling the romantic, the reverent, careful research and a discussion about rights.

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