

THE ANGUISH OF WILDLIFE ETHICS

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Abstract *As an environmental philosopher I had long been aware of dilemmas between animal ethics and ecological ethics, but now, as the manager of my own biodiversity reserve, I was facing these dilemmas in a more gut-wrenching and complex form than I had ever encountered in the classroom. Pressured by environmental authorities to cull kangaroos on my property, in the name of ecological ethics, I started thinking about the very meaning of ethics, its origins in the evolution of society and its material and metaphysical presuppositions. Two different conceptions of the normative root of society emerged, the deontic conception, appropriate within the material and metaphysical framework of hunter-gatherer societies, and the axial conception, appropriate within the framework of 'civilization', viz the agrarian societies that evolved into the urban-industrial formations of the modern era. The axial conception, based on empathy, aligned with our modern conception of ethics, and underlay our contemporary sense of animal ethics. 'Ecological ethics', on the other hand, seemed to be obscurely underpinned by the deontic conception, and was not ethical at all in the axial sense, and was moreover mismatched, normatively speaking, with the material and metaphysical realities of modern societies. A different set of practices from those currently prescribed by environmental authorities needs to be devised to meet both the ethical and ecological requirements of our contemporary natural environment.*

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I ANIMALS ETHICS VERSUS ECOLOGICAL ETHICS?

When I took up residence at my new 350-acre property on the shoulder of a little stone mountain in Central Victoria last year, I thought I was fairly well prepared to manage it for conservation. I had taught environmental ethics for twenty years and was looking forward excitedly to putting theory into practice. It was straightforward. I truly revered all life. I had devoted an entire academic career to this cause. My environmental ethic was my *raison d'être*. Now at last I had a place where I could regenerate the bush and offer sanctuary for wildlife. However, things were not to be so simple. As soon as I walked through the gate of my new haven, I found myself slapped in the face with one ethical dilemma after another, till I felt punch-drunk and bewildered. It was as though the tough old no-nonsense mountain thought to itself, let's put this little *whitefella* upstart through her paces and see how her classroom ethics stacks up against the life-and-death, anything-but-merry-go-round of the *real* 'environment'.

First it was the rabbits. The mountain, being a granite outcrop, is a headquarters for rabbits. There is quite good remnant vegetation on the property but no further progress could be made towards restoration until the rabbits were brought under control. I had seen the results of uncontrolled rabbit infestation in the past: a kind of earth leprosy, with vegetation stripped off and land collapsed in on itself, rotting and eroding. Rabbits are of course themselves innocent and totally adorable little creatures, but I could not manage the property for biodiversity unless they were controlled. 'Controlled' meant killed, since no other methods for controlling rabbit populations are currently available.

But what method of killing was appropriate in the circumstances? I was lucky enough to obtain a grant for rabbit management almost as soon as I took up residence on the property. An environmental services contractor was recommended to me. His preferred method was to bait with the poison, 1080, via treated grain scattered broad-scale across the entire property. He assured me that this method was safe for non-target species - well, apart from (swamp) wallabies, who were 'greedy', he said, and foolishly stuffed themselves on the grain. There might therefore be one or two wallaby casualties, but this was a minor ecological deficit - it was just the price you paid for bringing the land back into environmental production. I trusted the contractor's information - I knew he was himself a dedicated environmentalist. Nor was I, at this stage, asking too many questions - about the physiological effects of 1080 on rabbits themselves, for instance. I accepted that, though the job was a dirty one, it had to be done. Nevertheless, I was appalled at the prospect of causing wallaby deaths. Wallabies, and other native wildlife, were for me the whole point of the exercise. I was there for the wallabies! Was my first act to be to *kill* wallabies? I asked around. There were evidently less potent poisons than 1080 - pindone, for instance - and it was possible to lay pindone in bait stations that were wallaby-proof. I insisted on this, probably to the annoyance of the contractor, to whom such scruples would have appeared 'sentimental' and worse, obstructive: the method I was proposing was more labour-intensive and therefore more expensive than broad-scale baiting, and the funding I was receiving for the project was premised on efficiency, not ethics. He grudgingly complied, but it turned out that the make-shift baiting stations he supplied were not wallaby proof in any case, and pindone was significantly toxic to all granivorous native animals and birds, as well as to the predators who preyed on them. My first foray into wildlife management thus proved an abject failure. I have no idea what damage to wildlife resulted from the baiting. One very rarely witnesses the effects of such interventions. Farmers assured me nonchalantly they had not seen evidence of toxicity from the routine baiting they practised, but they wouldn't, would they. How often does one see dead birds or possums or lizards in the bush, apart from road-kill? The death of wildlife is generally invisible to the casual eye. By the time I had informed myself of the dangers of baiting and pulled the plug

on the pindone programme, most of the grain had been taken, without any significant reduction in rabbit numbers having occurred.

The best method of eradication, ecologically speaking, seemed, in my humble non-contractor opinion, to be to *harvest* the rabbits and make them available for human consumption. This posed no danger to other species and took pressure off the ecosystem, globally, in the sense that it satisfied a (human) demand for food that would otherwise have to be filled by other forms of meat production. The only feasible method of harvesting, apart from the unconscionably cruel practice of trapping, seemed to be ferreting, supplemented with shooting, and I managed to track down a guy who called himself the last rabbitier in Victoria. He had been supplying rabbits commercially for thirty years and had in the past employed up to seventy shooters ('all of 'em ned kellies!', he said). I was thrilled at this opportunity, as although the ferret hunt must surely be a terrifying ordeal for rabbits, it was quick and clean, in the sense of non-toxic, and seemed on balance the most ethical of the available solutions. I welcomed the ferreter enthusiastically onto my team. However, another disillusionment was in store: he only ever 'took out' the readily accessible rabbits - perhaps 10 or 20 per cent of the population - and left intervals between visits sufficient for the population to recover. I realized I was in fact inadvertently 'farming' rabbits on behalf of my rabbitier. He was also starting to look around for other resources on the property, such as 'firewood' (the fallen trees that provide vital habitat for wildlife), which he obviously thought I would be dumb enough to let him also have for free.

The rabbit saga continues. I have found new contractors who initially agreed to *fumigate* the warrens - far more labour intensive and therefore expensive than baiting, but safer for non-targets (apart from any animals who might have colonized the burrows, which echidnas and goannas sometimes do) and less protracted for the rabbits (though still painful). However, the prospect of fumigation on such a large scale soon palled for the contractors, and they declared that the job would require ripping as well as fumigation. Ripping involves the mechanical destruction of warrens by large blades attached to a tractor. I had rejected ripping earlier on account of the impact of the heavy ripping vehicles on soil and vegetation, but now that the contractors were more or less insisting, I thought I had better investigate the effect of the procedure on rabbits themselves. To my horror I found that in the course of ripping, rabbits inside the warrens are themselves ripped - they are simply sliced up, with those that are not killed outright being left to die, buried alive with appalling injuries, all conveniently out of sight. I had been willing to kill rabbits for the sake of ecological restoration, but this was way too much - it was torture, brutal beyond imagining. Yet this is one of the standard methods of rabbit management, routinely practised across the country, prescribed in all the government literature and on all the official web sites.

I could not condone such a practice on my land, whatever the

environmental and funding consequences. I could not lie in bed at night, after such a procedure, knowing that all around me, underground, small creatures were dying slowly and in agony. Even from the point of view of my own relationship with the place, it was unconscionable. How could I continue to feel the joy of identification with everything in the bustling community of life around me if I allowed myself to become the instrument of such terrible grief? How could I remain psychically invested in this community, 'down amongst it', so to speak, delightedly on all fours with all its members, if I administered such torture? How can we expect landholders to develop an eco-psychology based on identification, as opposed to the distanced and authoritarian consciousness of the proprietor and resource manager, if they are pressured into meting out such hideous treatment to the creatures in their custody? It was necessary, again, to refuse. If such refusal were not to alienate the very allies in conservation on whom one was most dependent, one would have to try, in face of a monumental bureaucratically and rurally entrenched ethos, to argue for the priority of ethics over convenience and economy. A difficult call, but if people never take a stand against such practices, resources will never be directed towards developing more humane methods of negotiating the natural environment.

Rabbits were not the only issue to pose moral dilemmas. In its campaign against the so-called locust plague last summer, the state government misrepresented and demonized the native short-horned grasshopper as an exotic locust and waged a reckless chemical war against nature in the locust's name. All land owners were *legally obliged* to participate in this chemical war (Premier Brumby's self-declared 'war on locusts'). Government propaganda studiously omitted any mention of the impact of the many and mixed prescribed poisons on other invertebrates, and hence on many species of birds and other animals, including aquatic ones, right up the food chain - not to mention the impacts of these poisons on human health.¹ Again I felt miserably obliged to take a stand, which drew disapproval even from my local Conservation Management Network.

Later, in autumn, mice erupted in the area, challenging me on a more personal level. Eventually, when non-lethal measures such as catching and releasing no longer sufficed to keep them out of my stove and cupboards and beds, this issue defeated my moral ingenuity and I voluntarily resorted to poison, despite being aware of the dangers this posed to the magpies, and perhaps other predator-birds, around the house. And then there were of course the foxes and feral cats.

But worse than all these dilemmas, from my point of view, was that of the local kangaroo population, and it is on this that I wish to focus in the present paper. I felt, and feel, passionately protective towards the kangaroos (eastern greys and western greys) who shelter on my property. They are the legitimate, age-old inhabitants of this country, the very distillation of its essence, their existence a kind of efflorescence into sentience of the quiet,

1. There is no shortage of scientific literature detailing these impacts. For a round-up, see the brave and quixotic web site, <savethelocust.com>, which also explains the ecological function of occasional grasshopper swarms: they inject a massive 'protein hit' into the food chain, fattening up and increasing innumerable species against the losses incurred by drought and other environmental rigours.

watchful presence that palpably permeates the landscape. Away from the mount and its surrounding environmental estates however, kangaroos are pitilessly persecuted. The region is mainly given over to sheep and wheat production, and farmers, to whom kangaroos are pests, have permits to kill virtually as many as they wish. The mount itself, which is now technically a nature conservation reserve, has traditionally been a favourite haunt for recreational shooters, and illegal shooting continues there, to which authorities turn a blind eye. Shooters also occasionally, recklessly, trespass onto my own property in pursuit of their quarry.

As if this were not enough, the kangaroos are also under siege from those I had imagined would be their friends and champions - environmental professionals. Government agencies put up 'cull figures': the number of kangaroos per square kilometre they consider to be sustainable - sustainable in the sense of being consistent with environmental conservation. This figure can be as low as 15.² When the number of kangaroos per square kilometre appears to exceed the recommended figure, kangaroos may be culled. My local Conservation Management Network enthusiastically coordinates the count in our area, and the cull. With friends like these, who needs farmers and shooters as enemies? The poor kangaroo, it seems, has no friends in all the world, save for animal rights folk, who are far removed from this particular theatre of war. The cull figure itself seems arbitrary, set without regard for context - such as season, rainfall, topography and type, quantity and distribution of vegetation, breeding profiles and species of kangaroo. Underlying the figure is the concept of 'kangaroo' as a mass term, like fungus or grass, a mere biodiversity 'value', to be juggled alongside other plant and animal 'values' in equations and formulae. The underlying attitude is one of sheer objectification,³ that ignores the significance of kangaroos - and macropods in general - as individuals, not merely sentient but intelligent and highly emotional beings, with a family structure and strong family affections and ties. These family ties are maintained, particularly amongst females, over entire life-times.⁴

There has in fact been relatively little field research on kangaroo behaviour⁵ - which is rather astonishing in view of the kangaroo's iconic status in Australia - but any wildlife shelter operator who takes in joeys will testify to the warm and affectionate nature of kangaroo family life. I myself have known several joeys in care. I particularly remember a young agile wallaby I nursed for weeks when staying with a friend in Katherine in the Northern Territory. Rhonda, as she was named, lived freely in the house with us and soon became bonded to me as I administered her numerous daily feeds. When my friend's two-year old granddaughter came to stay, Rhonda, recognizing a rival for my maternal attentions, became fiercely jealous, and could not be left in a room alone with the toddler without literally boxing her ears!

According to the most conservative official sources, the annual approved cull of kangaroos in Australia involves more than four million kangaroo

2. Personal communication with Conservation Management Network staff.

3. Steve Garlick, Jennifer Carter, Julie Matthews, 'Brutality to Wildlife: Conservation, Welfare and the Ecoverity', *PAN Philosophy Activism Nature* 8, 2011.

4. Stephen Jackson and Karl Vernes, *Kangaroo: a Portrait of an Extraordinary Marsupial*, Melbourne, Allen and Unwin, 2010; Graeme Coulson, 'Repertoires of social behaviour in captive and free-ranging grey kangaroos', *Journal of Zoology* 242, (1997): 119-130.

5. Personal communication with Graeme Coulson.

6. According to Keely Boom and Dror Ben-Ami, three million kangaroos are 'harvested' for commercial use each year; around 300,000 young at foot and 800,000 pouch young are either killed or left to die, 'as collateral

and wallaby deaths. The actual figure is likely to be significantly higher.⁶ Altogether, the figures indicate that the kangaroo kill in Australia is 'the largest land-based slaughter of wildlife in the world'.⁷ Government figures furthermore show that the kangaroo population in Australia has been more than halved in recent years.⁸ It follows that across the continent most kangaroos alive today would have lost members of their family: most would have witnessed the slaughter of mother, father, children, brothers and sisters. How traumatized and psychically disordered the kangaroo population must be by this systematic terror and by the violation of their family systems, their structures of nurturance and defence, territorial regimes and sexual arrangements, socialization and transmission of experience - in a word, their culture?

On the other hand, however, and taking the enormity of the crimes against the gentle kangaroo fully into account, the tragic and inescapable truth remains that macropods are herbivores; they are born to graze but, if over-grazing is not to occur, they are also destined to succumb eventually to their ecologically assigned predators, whose role is to keep their populations in check. Yes, we need to refine the count methods and the estimates, and relativise them to context, but at the end of the day macropod numbers do need to be regulated in the interests of flourishing ecosystems. If we remove top predators - in this case dingoes - from the system, as we have done, to protect introduced herbivores such as sheep, then it seems that we ourselves have to take responsibility for controlling macropod numbers. But how to reconcile this undeniable ecological imperative with the equally compelling moral imperative that emanates from animal ethics, from the powerful sense of moral engagement that results from meeting and mingling with kangaroos and wallabies on the track each day, becoming part of their larger community, falling under the spell of the 'wallaby gaze'?⁹

In search of a solution I again asked around. I had spoken at a conference some twenty years earlier on fertility control in wildlife organised by zoologist and wildlife consultant, Bryan Walters, who had been caught up at the time in a political bun fight over the culling of kangaroos in the Hattah-Kulnine National Park. The hope then was that kangaroo populations could be limited by fertility control, specifically by some kind of contraceptive measures that could feasibly be administered to wild populations. The research was in its infancy in 1990, but perhaps there were new developments that would solve my dilemma? I contacted Bryan, and he put me in touch with macropod zoologist, Graeme Coulson at the University of Melbourne, who, together with colleagues, was experimenting with non-lethal methods of macropod control. I eagerly offered my property as a research site and they came to visit. What followed was another long and in this case very interesting story; the research was promising but still undeveloped, and the upshot was that there is at this stage no remotely feasible method for administering contraceptives to kangaroos in the wild.¹⁰

of the commercial industry', and 200,000 kangaroos and wallabies are killed for non-commercial reasons each year. 'A further unknown number are killed without government authorization'. See Keely Boom and Dror Ben-Ami, *Shooting our Wildlife: an Analysis of the Law and Policy Governing the Killing of Kangaroos*, Report for THINKK, the Kangaroo Think Tank, University of Technology Sydney, Sydney, 2010. Given the widespread culture of shooting across rural and remote Australia, and the very strong sense of entitlement that accompanies it, it seems likely that the number of kangaroos killed without authorization is high. The very significant toll from road accidents also has to be factored into the kill figure.

7. Keely and Ben-Ami, *ibid.*, p3.

8. See government figures cited on < www.kangaroo-protection-coalition.com/kangaroo-facts.html >.

9. Wendy Chew, 'Wallaby's Gaze', *Earth Song* 4, Autumn 2006.

10. Graeme Coulson and Mark Eldridge, *Macropods: the Biology of Kangaroos, Wallabies and Rat-Kangaroos*, Melbourne, CSIRO Publishing, 2010.

11. Peter Singer, *Animal Liberation*, New York, New York Review/Random House, 1975.

12. For an argument that reason alone cannot mandate morality - that it cannot show why we should widen the circle of our natural sympathy for kith and kin to bring 'others' within the sweep of these good or sympathetic intentions - see Freya Mathews, 'The Ecogenesis of Ethics and Religion', *Journal for the Study of Religion Nature and Culture* 5, 3, 2011. The gist of this argument is as follows: while some philosophers claim that it is rational to acknowledge and observe the moral entitlements of others because it is always in our long term interest to do so, there may well be circumstances in which we could, so to speak, genuinely *get away with murder*. In such cases 'murder' might indeed be the rational, in the sense of self-interested, course. And while - following a different, more Kantian line of moral argument - we might acknowledge that, from a third person point of view, those who share morally relevant attributes with us are just as entitled as we are, rationally speaking, to moral consideration, it

Feeling stymied by the intractability of the dilemma and battered by the barrage of animal deaths I was witnessing, and in some cases was complicit in inflicting, I started to wonder about ethics itself. Is ethics indeed, at the end of day, simply *impractical*? What *are* the limits of ethics? Is ethical scruple just a kind of indulgence we can afford only when we are materially removed from the brutal realities of life? (I had noticed my own feelings towards rabbits hardening when burrows started to appear just outside the rabbit-proof fence surrounding my vegetable patch. Would I be so scrupulous about eradication methods towards rabbits who dug their way into my garden and devoured all the leafy greens I had laboriously cultivated?) Maybe it was time, I thought, to take a look at my old lecture notes. I had always addressed the tension between animal ethics and ecological ethics in my environmental ethics courses: animal ethics acknowledges the undeniable moral status of animals but fails to encompass and hence to protect the environment as a whole, while ecological ethics protects the environment as a whole but fails to account for the special moral status of animals. That is to say, no *prima facie* moral distinction is made, from the perspective of ecological ethics, between elephants and ants, for example, or, for that matter, between elephants and plants. So, what conclusions had I drawn when I had considered this ethical dilemma back in those halcyon, responsibility-free days in the classroom? I reviewed the arguments.

First of all there were the basic arguments for animal ethics, dating back to Peter Singer's 1975 book, *Animal Liberation*. Singer saw animal liberation as a natural extension of other liberation movements that were in full swing at the time, for example, women's liberation and Black liberation. By analogy with the terms sexism and racism, he coined the term, speciesism, defining it as a groundless prejudice in favour of the interests of one's own species.¹¹ This prejudice is groundless, Singer argued, because simply being a member of the species *homo sapiens* has no more intrinsic moral significance than being, for example, male or white. That is, any defensible criterion of moral considerability can no more be a matter merely of species membership than it can be a matter of gender or race. To be morally significant one must have certain attributes which can be seen to call forth, by their very nature, a certain kind of consideration. Traditionally, or at any rate in the Western tradition to which this entire ethical discourse was referenced, the attributes conferring moral significance were those associated with reason, or reflective consciousness. Beings who could think, and were accordingly in command of their lives rather than merely part of the ebb and flow of nature, were morally differentiated from the rest of nature. It behoved us to allow such beings, endowed as they were with the capacity for self-determination, to chart their own course. We were to treat them as, in Kant's phrase, ends in themselves, rather than merely recruiting them, as we might the rest of nature, to ends of ours.

Singer challenged this long-standing Western assumption. Following

the lead of nineteenth-century philosopher, Jeremy Bentham, the salient moral question was, he argued, not 'can they reason?' or 'can they talk?' but 'can they suffer?'. The capacity to *feel* - in particular to experience pleasure and pain - is what entitles things to considerate treatment, Singer argued. He called the capacity to feel, *sentience*, and developed this premise - that anything which can feel, and in particular feel pain, is entitled to considerate treatment - along utilitarian lines. This had the advantage of rendering moral decisions tractable - to make a moral judgment in a given situation all that was required was a calculation of the greatest good, defined in terms of pleasure and pain, for the greatest number. But utilitarianism was also a blunt and reductive instrument. It had the disadvantage of seeming to render morality a purely quantitative affair. However, it is important to recognize that animal liberation was, despite its own protestations as to its rationalist base, basically extending to animals the empathy that lies at the root of modern ethics and is properly due to those, whoever they may be, who are capable of feeling, since empathy just is a matter of feeling with and for others who feel. Singer himself explicitly denied this, adhering to a rationalist foundation for utilitarianism, but I have argued elsewhere, and continue to hold, that reason alone can never motivate morality.¹² The motivation underlying consideration for those who feel must accordingly, I would argue, arise ultimately from empathy.

This extension of empathy to animals has since been elaborated and defended in a variety of ways, many of them subtle and sensitive, and not at all reductive like the initial utilitarian move. (For a recent and representative example of such an approach, see Deborah Rose, *Wild Dog Dreaming: Love and Extinction*; extrapolating from Levinas' ethic of encounter, Rose argues for an ethic of responsibility, accountability and ultimately *love* towards animals.¹³)

All of these positions would, I would suggest, conform to the basic *axial* template of ethics, which I will explain in a moment. From the axial viewpoint, animal ethics seems unquestionable and self-evident. Only those patently at odds with the ethical impulse or blinded by human bias could dispute it. Yet in the environmental context, as I have already noted, we face situations in which this ethical response, and our ardent commitment to animals, is bafflingly stymied. We find ourselves up against a counter-ethic which seems to make an equally compelling claim on us but demands that we ignore the promptings of empathy. This counter-ethic is, of course, ecological ethics.

Environmental philosopher, Baird Callicott, first dropped the bombshell of ecological ethics into the animal ethics discourse in 1980. In a highly provocative paper entitled 'Animal Liberation: a Triangular Affair',¹⁴ Callicott contrasted animal ethics, with its ethical concern for sentient individuals, with a particularly holistic version of ecological ethics, Aldo Leopold's land ethic. From the point of view of the land ethic, a thing is said to be 'right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise'.¹⁵ In other words, the moral value of individuals, from this point of view, is not a function of their inner reality -

does not follow that we ourselves are rationally obliged to treat their interests as on a par with our own. This is because any supposed demonstration that others as entitled to our consideration as we are ourselves overlooks the special relation we as organisms have to our own selves. As the subject of a self-realizing system (i.e. as the subject of the organism that I am), I am responsible for the maintenance of myself in a unique and nonnegotiable way - biologically, my responsibility for my own self-maintenance is my primary responsibility. This is a responsibility which no-one else can discharge for me; for example, no-one else can eat for me or drink for me. These - and many other actions - are services I have to perform for myself. In view of this special relation I have to my own interests, it can scarcely be regarded as irrational if I refuse to give parity to the interests of others and continue to give priority to my own interests.

13. Deborah Bird Rose, *Wild Dog Dreaming*, Sydney, UNSW Press, 2010.

14. J. Baird Callicott, 'Animal Liberation: a Triangular Affair', *Environmental Ethics* 2, (1980): 311-328.

15. Leopold quoted in Callicott, *ibid.*, p320.

their subjectivity and sentience, their having of experiences, interests and ends of their own - but rather depends on the external contribution they make to the good of a greater whole, the ecosystem. Individuals have no moral value in their own right, independently of the role they play in this larger system. The contrast Callicott draws in this paper is then between, on the one hand, moral individualism, according to which the proper focus of morality is the individual, and, on the other hand, moral holism, in which the ultimate focus of morality is the greater whole, which is the ground and context for individual existence. From the holistic perspective the interests of individuals may sometimes have to be subordinated to those of wholes, since the interests of wholes do not consist merely in the aggregation of the interests of their constituent individuals. In the interests of the whole, in other words, individuals may sometimes have to be *sacrificed*. So, for example, at my property rabbits - and foxes and cats - are required to be sacrificed in the interests of ecological restoration. Worse, in some circumstances, as we have observed, the sacrifice even of indigenous animals, such as kangaroos and wallabies, may be required.

Callicott added vividness to his contrast by pointing out that while animal ethics posits a scale of moral value proportional to degree of sentience, from the viewpoint of ecological ethics the moral value of living things is in no way intrinsic to the things themselves but varies according to context: animals with positive moral value in their native ecosystem might assume negative moral value in a different system. (So, for example, possums enjoy elite moral status in many Australian environments but are morally null and void in New Zealand.) Moreover, a very simple organism, such as a plant or even a bacterium, might have a higher moral value, in a particular ecological context, than a very complex organism, such as a horse. Callicott rejected the axial assumption that empathy, and hence compassion, is the basis for ethics, arguing, contra Singer, that suffering is not in itself evil. Pain is not in itself what morality should seek to alleviate because pain is information, vitally important to the welfare of organisms. A sentient animal which experienced no pain would be one, as he put it, with 'a lethal dysfunction of the nervous system'. A life without pain would be biologically disastrous. Good and evil are to be identified not in terms of pleasure and pain but in terms of health, where health does not necessarily implicate sentience. Moreover health cannot be realized exclusively by the individual but is a function of wholes as well - individuals can be healthy only if they belong to healthy social and ecological wholes. In some circumstances, health can only be achieved at the cost of pain.

Other contrasts between animal ethics and ecological ethics that Callicott highlighted were that animal ethics draws no moral distinction between wild and domestic animals, nor between members of endangered and non-endangered species. Its main concern is with the welfare of domestic or captive animals (such as those which are factory farmed, subjected to experimentation

or confined in circuses or zoos) and sometimes with those which are hunted (for their fur, for instance). From the viewpoint of animal ethics, the life of a battery hen or feral goat is as significant as that of a quoll or Blue Whale. Advocates of animal ethics are generally vegetarian and opposed to recreational hunting while advocates of ecological ethics are often meat eaters, and sometimes even hunters (as was Leopold himself). While animal ethics is concerned with animals as individuals, ecological ethics is concerned with species, whether plant or animal, especially, as I have mentioned, endangered species.

In that historic paper, Callicott drew the contrast between animal ethics and ecological ethics in harsh and accentuated terms, but the intervention was useful. Both sides of the debate subsequently softened their positions, and admitted the relevance of the other's concerns. Animal ethicists conceded that wildlife needs habitat; since natural environments afford such habitat these environments are entitled to protection.¹⁶ Ecological ethicists conceded that our responsibility for animals varies according to the different kinds of *relationship* into which we enter with them. Wild animals should as far as possible be left to their own devices unless their presence threatens the integrity of ecosystems, but domestic and captive animals, animals whose sovereignty we have pre-empted or whose sociality we have engaged, have a special call on our consideration.¹⁷ Despite accommodations on either side however, subsequent debate has not significantly ameliorated the basic tension between animal ethics and ecological ethics that Callicott's initial article captured so well. Nor has it, I concluded as I put my lecture notes back in the drawer, provided a solution to the dilemma I was currently facing with regard to the obligation to 'manage' kangaroos on my own property.

Further reflection on this tension has led me to see it as opening up a contrast far more profound than is suggested by the neatly congruent phraseology of 'animal ethics' and 'ecological ethics'. It is a contrast not so much between two conceptions of ethics as between ethics proper on the one hand and an altogether different conception of what constitutes 'the right' on the other. This is a contrast, in other words, between two different conceptions of the normative root of society, two different senses of the force and normative direction of the 'ought' that lies at the base of every society.

I do not have space here to explain this contrast in detail or to explore very extensively its implications, which are far-reaching. I will just outline the two positions briefly, and say why at this particular historical juncture it seems crucial to reconcile them, even though they appear, on the face of it, to pull in different directions. I call the two positions *axial* and *deontic* respectively.

II THE AXIAL ORDER

Animal ethics falls under what I would describe as axial ethics, the conception of ethics that took shape during the Axial Age, and is core both to the

16. Peter Singer, 'Animals' in Dale Jamieson (ed), *A Companion to Environmental Philosophy*, Oxford, Blackwell, 2001, pp416-425.

17. J. Baird Callicott's, 'Animal Liberation and Environmental Ethics: Back Together Again' in *In Defence of the Land Ethic*, Albany New York, SUNY Press, 1989, pp49-62.

Western philosophical tradition and to major religions of the world today. The Axial Age, so called by the philosopher Karl Jaspers in his book, *The Origin and Goal of History*, was the period from 900 to 200 BCE, which saw the emergence of Greek and Chinese philosophy together with religions such as Buddhism, Hinduism and the monotheism of Judaism that later flowered into Christianity and Islam.¹⁸ All these traditions, which emanated from *civilizations* - by which I mean expansive patterns of culture established by sedentary, stratified, agrarian societies - included a central commitment to the so-called Golden Rule of do unto others as you would that they would do unto you.¹⁹ This central commitment has also been defined as the 'moral point of view', the injunction to step into the shoes of another and see the world from their perspective.²⁰ Sometimes this new, properly ethical consciousness that demands recognition of the interests of others has been articulated in terms of compassion, sometimes in terms of reason, but it always presupposes the *empathic* recognition that others do indeed have an inner, subjectal life like our own that must be acknowledged and taken into consideration in our dealings with them.

This axial consciousness, which focuses on others as *individuals*, each with a unique inner life emanating in a distinctive point of view, is for us today virtually definitive of ethics. The individual as the locus of will, sentience, feeling and cognition is generally deemed the proper object of ethical consideration. Although the purview of ethical consciousness may initially have included only humans, it should have been self-evident from the start that in principle it extended to all sentient beings. Anyone who has ever sincerely gazed into the eyes of just about any animal could surely have intuited this. One reason the self-evidence of this truth was widely denied was presumably because humans, being omnivorous and descended from hunters, had an irresistible appetite for the flesh of animals. For meat-eating to be consistent with axial consciousness however, it was necessary to deny sentience to animals, to deny that animals were the subjects of an inner life of feeling and cognition. This need to negate animals as proper objects of empathy and compassion, and hence of axial consideration, was presumably one of the major sources of the normative dualisms that have plagued the thought of Western and other civilizations. Animals were ideologically divided off from humans as lacking in the attributes that would entitle them to empathy and compassion. As soon as true axial consciousness removes these carnivorous blinders however, it is perfectly plain that animals are appropriate objects for empathy and hence for ethical regard. Such ethical regard would also, in most circumstances, entail vegetarianism, as it did in many Hindu and Buddhist societies.

It is worth noting here that, from the axial perspective, differences amongst different ethical theories - utilitarianism versus rights, dialogical ethics of care versus rationalist ethics of justice or respect for persons - are of little consequence. They are all different ways of codifying the basic axial insight

18. Karl Jaspers, *The Origin and Goal of History*, London, Routledge Kegan and Paul, 1953.

19. Karen Armstrong, *The Great Transformation: the World in the Time of Buddha, Socrates, Confucius and Jeremiah*, London, Atlantic Books, 2006, pxiv; pp391-392.

20. Kurt Baier, *The Moral Point of View*, Ithaca, New York, Cornell University Press, 1958.

that others, as individual centres of aspiration towards life, matter, where this insight rests on empathy, however that empathy is inculcated - whether through encounter, enculturation or other means.

III THE DEONTIC ORDER

However, axial consciousness is not the only way of making sense of the world, and ethics is not the only lens through which we may conceive of 'the right' or the normative root of society. Axial societies were antedated by non-axial societies, and non-axial societies still persist, marginally, alongside axial societies today. Amongst these I want to single out Indigenous societies of a basically hunter-gatherer variety, and because many such societies have existed, and still exist, on which I am not in a position to comment, I want to narrow my focus to traditional Australian Aboriginal societies, which may, in a particular respect, provide a kind of ideal type for a range of hunter-gatherer formations. The point of doing this is not to make extravagant and indefensible generalizations about Aboriginal or Indigenous societies, but to identify a distinctive alternative conception of the normative root of society.

This distinctive conception of the normative root of society revolves around the notion of Law - tribal Law or Dreaming Law. Law is not ethics in the axial sense. It is not a practice of empathy attuning us to the feelings of others as individuals and thereby instilling in us a compassionate concern to promote their interests and protect them from suffering. Law is ontological: it identifies the patterns in things that enable the *living cosmos* to renew and re-articulate itself in perpetuity.²¹ Law furthermore spells out how people can participate in this pattern. It emphasizes that it is the living cosmos that has given people existence and it details what people *owe* the cosmos in return, what they need to do - *ought* to do - to ensure that this generative order is perpetuated. Law is in this sense *deontic* rather than *ethical* - it is about duty and obligation, setting out an order of grave imperatives that transcend compassion. From the perspective of deontics, a certain complementarity is required amongst the elements of the cosmos: night and day, wet and dry, drought and flood, life and death, eating and being eaten, flourishing and affliction, abundance and decline, all these contrary aspects of the cosmos must forever vie with each other, without either element ever gaining final ascendancy over the other. All species must moreover play their part in these dynamics, suffering the conflicts and reversals that eventually balance out into the eternal recurrence of life. (In her classic ethnography, *Dingo Makes Us Human*, Deborah Bird Rose identifies the basic principles that mesh together to make up the Law: balance, response, symmetry and autonomy, each principle interacting with the others to ensure the equal implicatedness of all elements in the actualization of the living cosmos.²²)

However - and this is a point that Rose does not make - from the perspective of Law, the 'equality' of all elements qua contributors to the stability of the

21. See, for example, Ambelin Kwaymullina and Blaze Kwaymullina, 'Learning to read the signs: law in an Indigenous reality', *Journal of Australian Studies*, 34: 2, (2010): 204-206; Vicky Grieves, *Aboriginal Spirituality: Aboriginal Philosophy/The Basis of Aboriginal Social and Emotional Wellbeing*, Discussion Paper Series 9, Darwin, Cooperative Research Centre for Aboriginal Health, 2009; David Mowaljarlai and Jutta Malnic, *Yorro Yorro: Everything Standing Up Alive*, Broome, Magabala Books, 1993; Deborah Bird Rose, *Dingo Makes Us Human*, Cambridge, Cambridge University Press, 1992.

22. Rose, *Dingo*, *ibid.*

cosmos is not an equality of individuals but of species or kinds. Individuals are, in this scheme of things, intersubstitutable: it does not matter *which* individuals of a given species instantiate the relationships that perpetuate the ordained pattern, provided those relationships are perpetuated. If one individual consumes too much, for example, or otherwise oversteps its species boundaries, it may be another individual of that species that pays the price - that is brought into ecological line. Compassion and a sense of justice or fair play at the level of individuals have little part in the scheme of things prescribed by Law.

This is not because empathy is absent from Aboriginal society. To the contrary, social empathy is a given for peoples who live in face-to-face communities which engender a high degree of social attunement. In such societies empathy accordingly does not need to be *prescribed*. It is part of the natural order of things and does not need to be given the force of Law. What does need to be prescribed is, as I have remarked, the means required for the perennial regeneration of nature, since Aboriginal societies traditionally took their livelihood directly from nature, and needed to understand the intricate patterns that ensured its continued productivity. It is to the perpetuation of these patterns that Law is primarily directed.

In axial societies, on the other hand, little attention is paid to the patterns that are continually constellating in and constituting the natural world because, in the distinctive praxis of axial societies, nature in its larger ecological outlines is backgrounded. A space is carved out of the larger ecosystem for agriculture, and this agrarian space is settled and made-over almost entirely for human purposes, until it becomes the self-sufficient, self-enclosed, built and farmed space of civilization. In such spaces thought is referenced almost exclusively to the human; the ecological principles that sustain life at large lose salience, except to the small extent that they impact upon agrarian production. Engagement with a living, responsive, communicative cosmos, central to hunter-gatherer experience, gives way to the worship of anthropomorphic deities, deities progressively abstracted from the physical texture of the empirical cosmos. The sense of a living cosmos is thus eventually lost to agrarian consciousness, as is knowledge of the principles that sustain such a cosmos. But a consequence of agrarian production, and of the industrialization to which agrarian production in due course gives rise, is the progressive urbanisation of society. Urban society is *stranger* society, and empathy, no longer learned naturally in face-to-face communities, must be *prescribed* if such formations are to remain socially functional. Such prescription is the substance of axial ethics, and so, with the spread of civilization as a social modality, came the advent of the Axial Age.

To recapitulate then, the *axial* or properly ethical conception of the normative root of society - of the fundamental 'ought' which dictates the dynamics of social survival and cohesion - is premised on empathy for individuals as centres of sentience and aspiration towards life. The axial

approach always did in principle include animal ethics in its scope. Since axial societies were/are agrarian, and therefore not reliant on meat for nutrition, vegetarianism ought always to have been a corollary of the axial perspective. The *deontic* conception of the normative root of society, on the other hand, rests on a notion of Law that is ontological rather than ethical, in the sense of compassionate, in its basic orientation. That is to say, its primary intention is not to protect individuals qua individuals but to assure the conditions for the perpetuation of a living cosmos. This ontological orientation dictates the attitude of deontic societies to animals. Animal ethics in the axial sense is not part of Aboriginal Law because Aboriginal Law is at least in part a Law of predation: it prescribes who can eat whom, when and where and under what conditions.

A deeper reason why animal ethics in the axial sense is not a feature of Aboriginal thinking however is that the axial focus on individuals is inconsistent with Aboriginal metaphysics. In the living cosmos of Aboriginal experience, individual beings are not exclusively individual: their identity is not exhausted by a specific spatiotemporal location. They also participate in perennial and non-local beings, or Ancestors.²³ From a Dreaming perspective, any individual wallaby, for instance, is at the same time Wallaby, proto-being or Ancestor; any individual dingo is also Dingo. This is reflected in Aboriginal speech; even in Aboriginal English, people say, there's Wallaby, or there's Dingo, as a wallaby or dingo goes by. In the deontic scheme of things then, the laws of identity do not follow the axial logic of individuation, which is a logic of excluded middle and, essentially, locality: one being cannot exist in two places at the same time, and two beings cannot occupy the same place at the same time. In deontic logic, by contrast, Wallaby, distributed across the manifold of actual wallabies, occupies many places at the same time, so that in killing actual wallabies, the hunter-gatherer is never killing Wallaby. Even the agonizing deaths of wallabies in the jaws of hunting dogs are only transient and necessary interludes in the distributed existence of Wallaby. While Wallaby is being torn to pieces in one locale, she is basking in the morning sun, licking joey's head, in another. The seeming incontestability of compassion as a response to animal existence, viewed from within an axial framework, dramatically loses relevance then from a deontic viewpoint. From a deontic perspective, the mortality and even suffering of wallabies is merely relative: death lacks the finality associated with it in the axial system. The focus of the deontic system is on the preservation of Wallaby rather than on compassion for individual wallabies.²⁴

The relation of humans to animals in axial and deontic societies respectively then is complex. In hunter-gatherer societies, organized around deontics, it was assumed that animals would care for themselves as part of a living cosmos that cared for itself. They were as important, within the cosmic pattern, as every other element, including humanity, but predation was an integral and necessary part of that pattern, and the human being was a

23. Grieves, *Aboriginal Spirituality*, op. cit; Rose, Dingo, op. cit; Deborah Bird Rose, *Nourishing Terrains*, Canberra, Australian Heritage commission, 1996; Stockton, Eugene, *The Aboriginal Gift: Spirituality for a Nation*, Alexandria NSW, Millennium Books, 1995; W.E.H. Stanner, *White Man Got No Dreaming*, Canberra, ANU Press, 1979; W.E.H. Stanner, 'Religion, Totemism and Symbolism' in M.J. Charlesworth, H. Morphy, D. Bell and K. Maddock (eds) *Religion in Aboriginal Australia*, Brisbane, University of Queensland Press, 1984.

24. I explore this notion of distributed existence and its implications for axial and deontic approaches respectively at greater length in 'Axial Ethics and Indigenous Law: Contrasting Perspectives on Animals', in manuscript.

predator: prey species depended on predators to regulate their populations and so preserve the integrity of the ecosystems to which both belonged. Humans owed it to the living cosmos to hunt. Hunting in no way implied lack of respect for the species upon which the human preyed. To the contrary, those species, revered as vital components of the entire sacred scheme, were sustained by hunting and by other ecologically integrated forms of predation. The duty of human beings in this scheme was to comport themselves not so much compassionately as in ways consonant with the ongoing integrity of the cosmos.

So, beneath the glib contrast between animal ethics, based on compassion for individuals, and ecological ethics, aimed at preserving the integrity of wholes, lies an almost unfathomably deep contrast between two incommensurable orders of value and existence. In the conditions created by civilization, compassion, including compassion towards animals, is indispensable, for civilization has displaced the conditions under which the living cosmos renewed itself and in which the mortality of wallabies was offset by their participation in the eternal reiteration of Wallaby. By this I mean that as modern societies have progressively expanded the spaces of human self-encapsulation within which civilization articulates itself, to the point where these spaces are now exceeding their biospherical matrix, the future of many species is in doubt. Wallabies are today vouchsafed only their individual existence: their mortality is final. It is in this sense that there is no longer any assurance of participation in an eternal reiteration of Wallaby. The living and enduring cosmos of Law has disintegrated into a world of truly transient and perishable individuals, and wallabies, once killed, will not return. The exquisite balance that once existed between the one and the many has shifted irrevocably towards the many. The individualistic orientation of the axial perspective has turned out to be self-fulfilling and self-validating.

At the same time however, the collapse of nature - its derangement and attrition under the multiple impacts of civilization - can no longer be ignored. The global ecology that until now continued to look after itself, affording the basic conditions for life, and hence for civilization itself, is breaking down. It seems incumbent on us then to take responsibility for nature, to look after it to the extent that it can no longer look after itself. This is the imperative underlying the advent of environmental management. As environmental managers, we tinker with the fragmented and depleted remains of natural systems in an attempt to simulate the intricate interplay of checks and balances that characterized the original system.

However, as we have observed in relation to kangaroos, environmental management often includes actions, such as large-scale slaughter of wildlife, grossly inconsistent with axial ethics. Such actions are justified by appeal to ecological ethics, where ecological ethics is in turn often justified by appeal to the deontic-type arguments we have just reviewed. I have argued that such actions cannot be justified in this way however, because the conditions under

which deontic regimes were valid were entirely different from those which prevail today. To suspend axial consciousness in the absence of conditions which would justify a deontic approach to animals is dangerous, inasmuch as it risks switching off the faculty of empathy and thereby fostering brutalization. Brutalization, especially when it is fostered in the name of an alternative conception of 'the right', is likely to lead, as critics of ecological ethics often protest, to fascistic tendencies, to a readiness to sacrifice individuals generally to all manner of ideological causes.²⁵ (Indeed, the habitual refusal, in both Western and other civilizations, to extend axial consideration to animals, may well have compromised axial consciousness from the start, where this might explain the sagas of war and violence that have accompanied the history of civilization.) To put this point another way, since nature itself is not 'ethical' in the axial sense, necessitating as it does the sacrifice and suffering of multitudes of innocent beings, we cannot take it upon ourselves to do the death work of nature while still expecting to preserve the axial integrity essential for life in civilization. We cannot, in other words, set axial ethics aside in favour of 'ecological ethics' without this very likely compromising our axial consciousness.

25. Tom Regan, *The Case for Animal Rights*, London, Routledge & Kegan Paul, 1983; Andrew Brennan, 'Environmental Ethics', *Stanford Encyclopedia of Philosophy*, 2008 at < plato.stanford.edu/entries/ethics-environmental >, accessed 21 September 2011.

IV A GENUINELY ETHICAL APPROACH TO ENVIRONMENTAL MANAGEMENT

Does this mean that we cannot address the ecological disorders that have arisen as a result of our derangement of nature? By no means. We can address these disorders simply by reinstating nature as the manager of itself. We can, in other words, reassemble the ecological mosaic that civilization has shattered rather than trying to replicate by our own actions the roles of missing elements. The management of kangaroo populations, in systems in which the top predator, the dingo, has been eradicated in deference to the interests of pastoralists, is a case in point. The way to reconcile an axial approach to kangaroos with the ecological necessity to limit their numbers is simply to reintroduce the dingo back into the ecological equation. Dingoes can savage and slaughter innocent herbivores without ethical consequence because dingoes lack axial consciousness and hence ethical responsibility in the first place.

Of course the pristine natural order that has been lost can never be fully restored. With a current human population that is, from an ecological perspective, vastly excessive, we cannot renew the whole system of balances, symmetries and reciprocities that characterized the original biospherical system. But we can begin to move in that normative direction. This is an approach moreover that not only solves our ethical dilemma but promises to be more effective than culling in strictly ecological terms. For to re-introduce dingoes into kangaroo-systems would not only obviate the need to cull. Evidence is currently coming to light that dingoes not only trim kangaroo

26. Chris Johnson, *Australia's Mammal Extinctions - a 50,000-year history*, Port Melbourne Vic, Cambridge University Press, 2006.

populations but are, as predators, very intolerant of competition, eradicating foxes and cats in their range.²⁶ Since foxes and cats are one of the main causes of decline of native wildlife across the continent, with the further biodiversity losses that the loss of so many animal species entails, the re-introduction of the dingo into the system would, at a single stroke, go a long way towards not only regulating kangaroo numbers but replacing many of the lost pieces of the ecological jigsaw in large areas of Australia. Bettongs, bandicoots, bilbies, smaller wallabies, native rodents, not to mention innumerable song birds and ground-dwelling birds, such as malleefowl and bush stone curlew, would all have a chance of returning to their previous ranges. With foxes and cats out of the way, the quoll too gets a look-in. Vital ecological roles that have been lost with the loss of all these native species, such as soil aeration and root fungal transfer in the case of bettongs - functions vital to forest health - could also be restored. Dingoes would still focus on larger herbivores such as kangaroos, and easy pickings such as rabbits, as their principal prey, so predation on the smaller native species would not be a significant problem. The crude culling of kangaroos on behalf of ecosystems then may be recognized as a travesty of 'ecological ethics' when compared with the strategy of seeking to restore the ecological mosaic.

Of course it will be objected that the reintroduction of dingoes into the farm lands and rangelands of Australia will never be politically feasible, at any rate in sheep-dominated parts of the country. Sheep farmers would never give up farming sheep in deference to ecological arguments; nor would they, as long as they continued to farm sheep, ever countenance the reintroduction of dingoes. While this may be true if the re-introduction were presented as an abrupt and threatening intervention, it could of course be phased in more gradually and in a more adaptive fashion. Dingoes could be introduced first into national parks, marginal lands, remote crown lands, Aboriginal lands and cattle rangelands. Only when the ecological benefits of dingo presence had been demonstrated could re-introduction be proposed for the sheep-dominated southern regions of the continent. When this was proposed, strategies for the protection of sheep would also have to be offered. One of these could be the revival of the ancient occupation of shepherding, which enabled pastoralism to co-exist with wild wolf populations for centuries in many parts of the world. Shepherding could be proposed not in its traditional European form, in which shepherds were human, but in a new form, better adapted to the economic realities of a twenty-first century work place: shepherds could be alpacas or even llamas. Alpacas are formidable guardians who make predation of sheep a somewhat daunting prospect for dingoes. Alpacas can be over-powered by dingoes, but not without a fight that is likely to deter attack. Llamas are a better match for dingoes. Both species require, like sheep, maintenance - shearing, for example - that ensures that neither is well adapted to feral existence. This means that they are not likely to become, in their turn, an ecological problem. Their soft-footedness furthermore

contributes to their relatively benign environmental status.

No doubt there would be complications and unintended consequences in this scenario that would require further sorting out. However, the scenario demonstrates, I think, that, with ingenuity and a willingness to experiment with new strategies instead of insisting on unreflective practices such as culling to support established patterns of land use, the management of nature could indeed be placed back into the hands of nature, so to speak. Such restoration of the capacity of ecological systems to manage themselves must surely, I am suggesting here, be the goal of any regime of environmental management that represents itself as ethical. Our work as environmental managers must be to rehabilitate systems to the point where the death work that is integral to ecology may be handed back to the agency of ecological systems themselves. Only in this way can 'ecological ethics' become genuinely consistent with the essentially axial temper of contemporary ethics.

An earlier version of this essay was delivered as the Val Plumwood Lecture at the 2011 Australian Animal Studies Group Conference in Brisbane. The paper is dedicated to Val Plumwood.