

ANIMAL ISSUES

philosophical and ethical issues related to human/animal interactions

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ANIMAL ISSUES

The aim of this journal is to investigate philosophical and ethical issues related to human/animal interactions. Papers are invited on any topics within this general area.

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India's Sacred Cow: Her Plight and Future

Michael W. Fox

India's sacred cow is embedded in an economic, religious, religious and political morass. Her plight is a tragic consequence of many forces, from overpopulation to modernization, the outcome of which depends upon upon the path that India chooses to take as it becomes a player in the global marketplace. The spirituality of compassion is a boundless ethic that is the cornerstone of a truly equalitarian society that gives all of its members, human and nonhuman, equal and fair consideration. This is the challenge and the solution for all countries whose economic wealth is in part determined by the humane and sustainable utilization of animal and plant life, and for India in particular. All Indians, regardless of caste and creed, have a long history that links them with a sense of gratitude and reverence for cows. And it is this linkage that can move all to transcend their differences and become unified in their respect and commitment to enhance the health, welfare and protection of all cows and their offspring.

Introduction

India has the largest concentration of livestock in the world, having one-third of the world's cattle on approximately 3 percent of

the world's land area.¹ India is the world's second largest milk producer, with over half its milk coming from buffalo. Seventy-six percent of Indian people are rural, living in some 600,000 villages. The economic and social values of cattle are so great that cattle have long been seen as religious symbols and are regarded as sacred.

According to Professor N.S. Ramaswamy², two-thirds of cultivated land is ploughed by cattle and buffalo, and by hauling freight they save India some 6 million tons of diesel fuel annually. Dr. R.K. Pillar³ estimates that about 67 percent of all rural transportation is provided by bullock carts and that some 15 million bullock carts are in operation (2 million urban and 13 million in rural areas). In India's villages today, one can see the close relationship between cattle and their owners who have high regard for their animals as individuals, as vital family-providers, if not also actual family members. Hence the strong resistance to killing and eating such close animal allies. But this symbiotic alliance is breaking down as larger modern dairies are established and animals' individuality is lost, and as venture capitalists purchase bullocks and carts to be rented out, or leased to individuals who are complete strangers to the animals, and who have no emotional or economic interest in them.

Sadly, India's sustainable pastoral communities have become almost a thing of the past. There is not enough land for all to share. The combined effects of population growth, rural poverty, and ecological illiteracy have had devastating environmental and socio-economic consequences. Abandoned cattle wander everywhere searching for food, along with other cattle whose urban families are landless. Many are hit by traffic or develop serious internal injuries from consuming plastic bags, wire, and other trash.

India's cattle are extraordinary. They are beautiful. Some bulls are quite awesome. Many are colonial cross-breeds, half Holstein or Jersey. These are subject to more abuse in many ways than the hard working indigenous breeds that will soon become extinct if India goes the way of Western industrial agriculture and sacrifices its rural people and relatively self-reliant communities on the altar of 'progress'. These European cows suffer more because they are less able to cope with the climate and diseases to

¹ D.O. Lodrick, *Sacred Cows, Sacred Places* (University of California Press, Berkeley, California, 1979).

² 'Cruelty to animals', *Cartman Journal*, 1/2, (1988), p.18.

³ 'Modernization of bullock carts', *Cartman Journal*, 2/9, (1989), p.18.

which local breeds have acquired much resistance over thousands of years. When European cows' productive lives are over and they are turned out to graze, they may starve to death because having been stall-fed their entire lives, they don't know how to forage for themselves.

These formerly high-yielding dairy cows are also less able to digest much of the food they are given in the cow shelters. Their hardier native sisters do better and some are rehabilitated. The beautiful and productive herd of white cows that I saw in Jaipur were all rehabilitated in the regional gowshala. But these cows were being bred in order to give milk, and so, as the nation's herd increases, so does the suffering. India's 'white revolution' to help rural people make money with milk cows entails offering low-interest loans to purchase a milk cow. More cows mean more milk and lower milk prices and more starving male cows whose mother's milk is needed to pay off the government loan.

This 'white revolution' began in 1970, a nationwide dairy cooperative scheme called 'Operation Flood' that was initiated to increase milk production. The World Bank and the World Food Program provided most of the funds, but this scheme has caused many problems.⁴ Less grain and lands are available to feed people since more are diverted to feed dairy cattle owned by the rich. Also, fodder prices have increased, creating difficulties for poorer cattle owners and landless cattle owners.

India now has so many cattle, according to Professor Ram Kumar of the India Veterinary Council, that there is only sufficient feed for sixty percent of the cattle population. This means that of an estimated 300 million calves, bulls, and bullocks, some 120 million of these animals, especially in arid regions, and elsewhere during the dry season and droughts when fodder is scarce, are either starving or chronically malnourished.

This tragic situation is made worse by the taboo in most states against killing cattle, either for food, for population control, or even for humane reasons. While Moslem, Christian, and other Indians eat meat (buffalo, sheep, and goats, whose slaughter is permitted) the majority of Indians are Hindus, for many of whom the killing of cattle and eating of beef is unthinkable because this species is regarded as the most sacred of all creatures.

⁴R. Crolty, *Cattle, Economics and Development* (Oxford University Press, New York, 1980).

Cow Worship

Cow and bull worship was a common practice in many parts of the world, beginning in Mesopotamia around 6,000 B.C. and spreading to Northwestern India with the invasion of the Indus Valley in the second millennium B.C. by Aryan nomadic pastoralists who established the Vedic religion. What is remarkable is that such worship has persisted uniquely in India to the present day. Deryck Lodrick⁵ in his book *Sacred Cows, Sacred Places* concludes that revulsion against sacrifice, the economic usefulness of cattle and religious symbolism were factors contributing to the formulation of the sacred cow doctrine, but it was ahimsa (the principle of non-violence/non-harming) that provided the moral and ethical compulsion for the doctrine's widespread acceptance in later Indian religious thought and social behavior.

India can be seen as two nations in one: a majority of Hindus, for whom vegetarianism is linked to caste and ritual purity; and the meat-eating Moslems, who are seen as unclean and their touch polluting. Moslems regard Hindu worship of temple images heathen and immoral and their democratic views contrast with the caste system of Hindus. The elite abstain from eating meat. Yet in spite of their differences, they are still united in their opposition to slaughter modernization. From an ecological viewpoint and an economic one, Hindus and Moslems are highly complementary when it comes to cattle. One eats the male calves while the other takes the calves' milk.

Cow protection has become a highly politicized core of the Hindu religion. What was once a compassionate, symbiotic human-animal bond linked with virtuous behavior (personal purity) that brought with it such principles as ahimsa and vegetarianism for Hindus, and for Moslems the ritual codes of animal sacrifice that helped affirm community and family ties, now also serve political ends.

The consequence is much pointless animal suffering. As spirituality and ethics need to be rescued from religion, so India's sacred cow needs to be liberated from politics and anthropocentrism.

⁵Lodrick, *Sacred Cows, Sacred Places*.

The belief that certain beings and things are 'unclean' takes many twists and turns in India's mixed Hindu, Moslem and animistic tribal communities. The notion of being defiled or unclean is linked with certain religious totems and taboos, and with a person's caste and desire to maintain a socially prescribed degree of purity. Thus, orthodox Hindus, and especially Jains, would never make their homes impure by cooking meat for whatever dogs and cats they might have. Cats and dogs in Moslem households are generally healthier since they are not expected to live on rice and milk, but are given meat, eggs and fish by those who can afford it. But since dogs are considered unclean by orthodox Moslems, they are not allowed into the house, and physical contact with them is generally avoided.

These observations are not meant in any way to disparage these religious traditions but rather to point out how religious beliefs, totems, and taboos have a profound influence on the human-animal bond and on the health and welfare of not only cattle, but of other domestic animals. Religious beliefs that ultimately contradict nature's reality and which see the nature of other creatures as unclean or immoral, become life-negating rather than life-affirming, and cause great harm.⁶

Cattle Welfare Concerns

Because of a seasonal and regional lack of fodder (and water), and because of overstocking and overgrazing, many cattle suffer from chronic malnutrition. This in turn weakens their immune systems and makes them susceptible to parasitic infestations and other diseases. Large numbers of poorly nourished cattle create a potent medium for outbreaks of infectious diseases which necessitate costly vaccinations, which are too often ineffectual due to inadequate refrigeration, and other contagious disease control programs. The widespread notions that you only give fodder for a cow who is giving milk and deprive unwanted male calves of adequate milk only make matters worse.

There is also the widespread belief that there is no real cattle surplus, and that India would do better with even more cattle because their organic

⁶For further discussion, see M. W. Fox *The Boundless Circle: Caring for Creatures and Creation* (Quest Books, Wheaton, Illinois, 1996).

manure is so valuable to agriculture. The environmental damage in some regions from overgrazing is especially caused by 'scrub' cattle that are kept simply as manure-makers before they are driven to slaughter or die. Their sad existence in semi-starvation, often also chronically sick, will continue without mass public education and government assistance. The overall cattle population must be reduced; and health and productivity enhanced through genetic improvement, and by better nutrition by establishing emergency fodder banks and sources of water to see them through the dry seasons; and alternative sources of income provided for farmers who are reliant upon cattle manure as a major product, as by raising milk-goats and producing more fodder.

According to *India Today* (January 11, 1996), 'As long ago as 1955, an expert committee on cattle said in its report: "The scientific development of cattle means the culling of useless animals...by banning slaughter...the worthless animals will multiply and deprive the more productive animals of any chance of development."'

Ecologist Professor Paul Shepard asserts, 'One anthropologist wrote a long article defending the sacred cow on "ecological" grounds as a consumer of weeds and plant materials that otherwise went to waste....This is a flagrant but familiar abuse of the concept of ecology as maximum use instead of a complex, stable, biocentric community. If the sacred cow in India were not a manure and milk producer, its protection might diminish quickly. In any case, the celebration of maximizing of grazing/browsing/scavenging as a kind of vernacular wisdom is a form of cow-towing to the subequatorial Third World and exhibition of modern blindness to the ecology of the soil, its invertebrate and plant associations, as a truly productive environment.'⁷

Seeing the increasing desertification of pasture lands caused by overgrazing, and cattle having less and less grazing land as good land is put under cultivation, environmentalist Valmik Thapar foresees that if the cattle problem is not soon corrected, 'Finally there will be a clash because

⁷ P.Shepard, *The Others. How Animals Make Us Human* (Island Press, New York, 1996), pp 346-47. **Note:** Shepard is referring to anthropologist Marvin Harris, who argued in his book *Cannibals and Kings: The Origins of Cultures* (Vintage Books, New York,1991) that the Hindu Brahmins who once supervised the slaughter of cattle prohibited such killing for food in times of drought and food scarcity because people would not have any bullocks left to plough the land once the monsoons returned.

the land mass of the country can't sustain the growing human and animal population. Then the question will arise as to who is going to eat. Man or cow?'⁸(India Today, January 11, 1996)

Cattle Shelters

The first animal shelters in India began with the advent of Buddhism, to whom King Ashoka (269-232 BC) converted. Ashoka ruled over much of the Indian subcontinent, converting millions to accept Buddhism, and was the first to set up pinjrapoles and animal hospitals, although some historians believe that Buddha himself was the first to do so. Ashoka put compassion into action, by caring for animals in need, and into the law also, setting up wildlife preserves and punishments for those who abused and killed animals.

India now has thousands of gowshalas and pinjrapoles where as many as several hundred sick and injured cattle, spent milk cows, unwanted male calves, and broken bullocks formerly used for draft work are kept until they die. In 1955, a government census indicated that there were 3,000 such refuges in India, maintaining some 600,000 cattle and thousands of other animals from deer and dogs to camels and cats.

Gowshalas and pinjrapoles are located throughout India and are supported by taxes and charitable donations from the business community. Gowshalas are refuges for cattle, often linked with the Hindu cult of Krishna, while pinjrapoles serve as a refuge for a more diverse animal population, including birds, other wild animals, and even insects and microorganisms in collected piles of household dust.

Not all regions of India have sufficient cow shelters. They are most prevalent in northern and western India with very few in central regions like Orissa and Andhra Pradesh and in the southern states of Tamil Nadu and Karnataka. These regional differences, according to Lodrick, may be due to the dominant influence of Aryan (Vedic) traditions in the North, and the older Dravidian cultures in the south. Pinjrapoles are mostly concentrated in Gujarat. Their spread to other regions are linked to the

⁸ *India Today*, January 11, 1996.

movement of Gujarati Jains (called Marwaris) who set up businesses in other states. Community and temple pinjrapoles in many regions were also established by the Marwaris and that explains why most gowshalas and pinjrapoles are located in urban areas. Many smaller cow shelters suffer from limited funding and public support. But there are some well funded regional ones in Gujarat and Assam, and in cities like Bombay and Calcutta according to Lodrick, that rehabilitate and breed animals to produce milk and make draught and milk animals available to the community. Some temple gowshalas and pinjrapoles located at popular Hindu pilgrimage sites are also well funded by donations given by devotees for darsan (cow worship).

Even though Indians know that the buffalo is a better quality milk producer than most varieties of cows, buffaloes are rarely found in gowshalas because they are considered unclean and not worthy of the same respect as cows.

As part of the Indian government's five-year plan during 1951-1956, state, rather than community-funded, cow shelters called 'gosadans' were set up as an alternative to slaughter to deal with the many problems from disease and suffering to competition for grazing and crop damage of ownerless, discarded cattle. Each gosadan was set up to harvest manure and process dead cattle into fertilizer and leather.

Pinjrapoles, gowshalas and gosadans represent a merging of religious and economic sensibilities, the sacred and the secular, that make eminent sense within the nexus of Indian society. In times of severe drought and famine, they also serve as emergency shelters for villagers' animals.

Regrettably, the gosadan scheme, though endorsed in subsequent five-year plans, never took hold, suffering from poor management, lack of funds and community support. Political support was divided since many felt that funds would be better spent on increasing the usefulness of productive cattle and in developing intensive dairy operations. The Gowshala Development Scheme implemented in the 1957-1961 five-year plan to provide subsidies to improve existing gowshalas were more successful during some periods than others since their implementation. Funding provided by the government has not, however, been sufficient to bring many gowshalas and pinjrapoles up from being mere holding facilities for dying animals and death-camps when animals starve to death for lack of

adequate food. The chronic seasonal shortage of fodder for productive animals in the community seals their fate. Providing funds to purchase feed for animals in pinjrapoles and gowshalas at such times, as I have experienced, causes social friction and antagonism when people lack the resources to feed their own productive animals.

The prevailing view that such a fate of starvation is better than having cattle defiled by the butcher's knife, does little to encourage local public support. Levying a tax on milk, hides, manure, bone and meat meal fertilizer, and taking a percent of the profits from wholesalers of these cattle products to help defray the costs of running a gowshala that serves the community, is the kind of initiative that is needed, but which politics in many regions would preclude. Bone meal from urban cattle who live in high density traffic areas, where leaded gasoline is used, becomes potentially toxic with accumulated lead.

According to Lodrick's study, all gowshalas that keep dry cows and cattle that cannot be rehabilitated for draught work, operate at a deficit. Attempts to make them more productive are not likely to significantly reduce this deficit and so without adequate community and government funding, as is the case throughout much of India, cattle suffer a fate surely worse than the butcher's knife.

The antipathy toward cattle slaughter can have absurd and cruel consequences. For example, according to the *Indian Express* (Coimbatore, February 25, 1997), local authorities 'tied up a huge wild bull on the rampage'. It was decided to auction off the creature for slaughter, which fetched much opposition from the devout. Someone killed the bull with some poison during the night to 'save it from being defiled by the butcher's knife'.

In spite of the excellent research, scholarship, and dedicated field work visiting animal shelters throughout India, Lodrick says nothing about the suffering of cattle in gowshalas or of other species in pinjrapoles. Lodrick sees, in spite of their economic inefficiencies, gowshalas and pinjrapoles persisting in India because cows are held to be sacred and because of the principle of ahimsa that prohibits killing, even for humane reasons. This prohibition is motivated less by compassion than by the belief that to kill is to make oneself impure. So rather than defile themselves by so doing, orthodox Jains and Hindus may inadvertently cause unnecessary and

prolonged suffering to animals who should be euthanized. While this principle of ahimsa has many virtues, its historical validity and context has changed as India has become more populated and multicultural (with many meat-eating Christians, Moslems, Westernized Hindu businessmen and tourists). Indian hotels import beef from Australia, which a devout young Hindu waiter in Bangalore told me filled him with shame when he had to serve it. His sensibility is to be respected, but the suffering of India's sick and starving cattle needs to be acknowledged by all of India.

Cattle Death Drives

Millions of old, spent cows, exhausted bullocks, and young male calves are driven on foot up to 300 miles, or are crammed into trucks for transit into Kerala, or in railroad cars to West Bengal where their slaughter is legal. Their often bleeding, worn down hooves make hardly any sound as they pass by. Veterinarian Dr. Ghanshyam Sharma from Sikkim, in the Northeast of India where cow slaughter is also legal, sees cattle coming in from Jamma, Kashmir, Bihar, and Nepal. He observes, 'Often entire hooves of these animals are snuffed out and gunny bags are tied around the wounded stumps and this way they walk.'⁹ Many sustain injuries being loaded and off-loaded during part of the journey or die in transit. Some collapse on the way, are beaten, and even have salt and hot chillies rubbed into their eyes and have their tails hammered, twisted, and broken to make them get up and keep walking. Some of those being transported get trampled and suffocate, or have an eye gouged out by another's horn. Water and fodder are rarely provided during their long journeys, and even at rest stops. An estimated one million cattle are taken every year into Kerala from other southern states to be slaughtered.¹⁰

Journalist Subhashini Raghavan, in his expose of these cattle death marches, found a complex network of middlemen traders, 'who are callused by constant exposure to cruelty' and they develop the attitude that 'if an animal is slotted for slaughter, it ceases to be a living being with pain, hunger and terror.' Raghavan found that vast numbers of cattle are made to walk hundreds of miles through pedestrian sideroads to escape

⁹Quotation from *The Hindu*, (April 16, 1995), article entitled 'The March of the Doomed'.

¹⁰ *India Today*, (January 11, 1996).

checkpoints, en route to regional markets from local markets and then on to transfer points where they may then be put into trucks. He concludes his article stating that, 'throughout the length and breadth of this birthplace of Ahimsa, the tragic march of the condemned continues unabated -- a poignant symbol of our callousness, in even denying the last comforts and dignity of those who lived their lives serving us.'¹¹

Cattle shelters -- gowshalas and pinjrapoles -- cannot possibly absorb all the unwanted cows, calves, and bullocks, since the cattle population is constantly increasing because a cow must have a calf to produce milk. The ecological damage of overstocking, overgrazing, and of millions of low-yielding milk cows and 'manure' cattle is turning some parts of India into desert, devoid of trees, topsoil, and wildlife. India's 40 million sheep, 120 million goats, 60 million buffalo, and expanding human population now estimated at 930 million, further compound this environmental devastation.

Cattle Slaughter

Belief in ahimsa (not harming) and in aghnya (not killing) possibly arose as a reaction against the Vedic religion and social order that sanctified animal slaughter, the Brahmans being the highest priestly caste that supervised the killing.

Between the eighth and sixth centuries BC a new wave of philosophical treatises emerged that included references to ahimsa, and also reincarnation and karma, that were not included in the Vedas. These treatises along with the emergence of the religious traditions Buddhism and Jainism that espoused ahimsa, were a challenge to orthodox Hinduism and may have led to the Brahmans prohibiting cow slaughter and promoting ahimsa. Yet still today thousands of animals -- buffalo, sheep, and goats especially -- are slaughtered in Hindu temples.

India is unique in having a specific provision in the Constitution against cow slaughter. Article 48 under the Directive Principles stipulates that the government must take proper steps to prevent cow slaughter. But as will be shown, this provision can jeopardize cow protection and welfare.

¹¹'The March of the Doomed'.

Except in West Bengal and Kerala, where cattle slaughter is permitted, the Cow Slaughter Act prohibits the killing of cattle under 16 years of age. The penalty for illegal slaughter of cattle is rigorous imprisonment for two years and a fine. Article 48 of the Constitution of India, Part IV, Directive Principles of State Policy, Article 48--Organization of Agriculture and Animal Husbandry, says: 'The State shall endeavour to organize agriculture and animal husbandry on modern and scientific lines and shall, in particular, take steps for preserving and improving the breeds and prohibiting the slaughter, of cows and calves and other milch and draught cattle'.

India does not want her cattle to suffer, and there is much guilt and denial. I was told that one top Indian environmental attorney said, 'There is definitely no cow slaughter in India because it is prohibited.'. I reminded him about the cruel cattle drives into Kerala and West Bengal, where cow slaughter is not illegal. But illegal slaughter of cattle is widespread, even in the nation's capital, Delhi, in backyards where there is no sanitation or meat inspection. That night I showed him a rough cut of my 22-minute video documentary *India's Animals: The Sacred and The Suffering*, and he sat there and wept.

According to one government study, 50 percent of small animal slaughtering and 70 percent of large animal slaughtering is illegal, taking place in clandestine facilities where there is no supervision of hygiene, animal welfare, or meat safety inspection.¹²

Of the 3,600 licensed abattoirs in India, only two are mechanized and hygienic, and these are facing strong public opposition.¹³

Other livestock like chickens, pigs, sheep, goats, and buffalo also suffer hardship and many diseases, but there are no prohibitions against their slaughter for human consumption or for humane reasons. To kill an injured or dying cow for humane reasons, one must first obtain a veterinary certificate, which is difficult and costly for remote rural farmers who rarely see a veterinarian, and not worth the bother for most passersby who may see a cow injured by the roadside. People who care for animals feel that

¹²*Report of the Expert Committee on Development of the Meat Industry* (Ministry of Agriculture and Co-operation, New Delhi, 1987)

¹³ *India Today*, (January 11, 1996).

nothing can be done when the local police are indifferent to animal cruelty and neglect. When there is no SPCA or Blue Cross animal shelter, or any means to transport injured and sick cows to receive proper care, and when euthanasia cannot be easily undertaken, cattle become the victims of religious sentiment in collision with reality. How can the authorities allow such animal suffering to continue, in violation of its own constitution? Article 51-A (g) of the Constitution of India states, 'It shall be the fundamental duty of every citizen of India to protect and improve the natural environment...and to have compassion for all living creatures.'. This is not in keeping with the predominantly religious sentiment that interprets compassion for living creatures as 'rescuing' cows and other abandoned cattle from slaughter and putting them into death camps where they starve to death or die slowly from infections and parasites.

The Euthanasia Question

Catholic nun Mother Teresa was known worldwide for her hospices for India's dying street people. Humanitarians would never contemplate euthanizing these people, and on the surface there is no difference between her hospices for dying humans and cattle shelters. Since there is so little food and basic resources for close to one billion people and 200-300 million cattle, the suffering of millions will continue unless, and until, the human and animal populations are reduced to the levels that can be adequately fed and cared for. In the interim India needs more human hospices and shelters for all domestic animals. Euthanasia to end intractable suffering is a bioethical imperative that should be endorsed by both religious and secular authorities.

Euthanasia of suffering animals, according to the Prevention of Cruelty to Animals Act, is allowed if 'it would be cruel to keep the animal alive' but only if the court, other suitable persons or police officers above the rank of the constable concur. Because of the religious opposition to euthanasia, even of dying animals in severe pain, there is no legal requirement that the owner of such an animal should have it killed. Many orthodox Hindus and Jains oppose the killing of animals for any reason because they feel it is wrong to interfere in any way with another's karma or destiny. It would seem that the doctrine of ahimsa as it relates to the treatment of cattle has been corrupted to serve the interests of social status, caste distinctions and

politics, since lower Hindu castes, tribal peoples and non-Hindus (and non-Jains) do kill and consume cattle and other animals, be they healthy or in a condition that calls for immediate euthanasia.

Indians have reasoned with me that killing a sick cow is like killing your own mother and that is unthinkable. But would Indians put their own mothers into death camps where they will starve to death because what little food is available is reserved for those who are healthy and can work?

Many point out the parallel between gowshalas and Mother Teresa's hospices for the poor and dying people whom she rescued from the streets, to let death come with peace and dignity. But the analogy breaks down when one looks at the numbers: cattle and other animals are in the hundreds of thousands in shelters, far too many for most communities to even provide the most basics of humane care.

Because of religious prejudice, predominantly cattle and not buffalo or abandoned draught animals that no one will eat, like donkeys, ponies and horses, are taken into shelters. Sheep, goats, pigs, calves and buffalo are usually slaughtered and consumed by low caste Hindus, tribals, Christians, and Moslems (who eschew pork). But this is not to say that India is lacking animal shelters for such animals and also for abandoned camels, dogs, cats and injured wildlife, especially monkeys that sometimes survive accidental electrocution. The Animal Welfare Board of India, the chronically understaffed and underfunded government agency without any power to enforce animal protection laws, does help subsidize local Blue Cross and SPCA animal shelters and hospitals but without more support from the central government and from foreign animal protection organizations, the plight of India's animals will worsen as the human population increases and resources become ever more scarce and costly.

Vegetarianism, Religion and Politics

Vegetarianism in India, like ahimsa, has as much, if not more, to do with concerns about reincarnation, one's personal degree of purity, and place in society than with concern for animals. The Hindu and Jain sect taboo against killing animals has more to do with personal purity and caste than with the principles of ahimsa and aghyanya (non-killing). In the currency of

spiritual merit and advancement, dissociation from being involved in the slaughter of cattle and other animals for consumption leads to vegetarianism. But it is not total vegetarianism, since dairy products are consumed by most Hindus and Jains. Few are pure vegan (eating no animal products). Some Jains have agreed with me that to be consistent with their religious beliefs and with the ecological and economic dictates of the current situation, veganism is an ethical imperative. Abstaining from all dairy products would be more consistent with the principle of ahimsa that they hold so dear, than 'saving' spent dairy cows, calves and bullocks from slaughter and condemning them to slow death by starvation in gowshalas or pinjrapoles.

Yet it is in Jainism that the principle of ahimsa was first espoused, most notably is Mahavira (599-527 BC), a contemporary of Buddha, although earlier Jain leaders (tirthankaras) well before the time of Buddha, like Parsvanatha (circa 840 BC), renounced the world and established an ascetic community that practiced ahimsa. Some contemporary Jains get around the problem of ahimsa by becoming land owners and having others do the farming, clearing the land and killing wild creatures, ploughing the land and killing worms, and using all manner of pesticides.

Jainism reached its peak between the 5th to 13th centuries AD, spreading across much of India, then was superseded by Hinduism and Islam following the invasion of the subcontinent by the Moguls in the 11th century. Moslems killed and ate cattle, which was anathema to the non-tribal, upper castes of Hindu society. Cow protection and worship then gained political importance and popularity in opposition to Moslem rule and influence. Hindus and Jains will confide today that it is better to put a calf in a gowshala than have a Moslem eat it.

Cow protection became a political icon for Hindus in their conflicts with Moslems and also when under British rule. Moslems settled in India around the 13th century and can trace their roots to Mogul pastoralists and Arab-Islamic values. Their ritual slaughter of buffalo, sheep and goats is looked down on by Hindus, some castes of which, nonetheless, eat meat. According to Srinivas, the whole Brahmanic caste is vegetarian. Of the non-vegetarian castes, fish-eaters look down on those who eat goats and sheep,

who in turn look down on eaters of poultry and pigs, who look down on beef-eaters.¹⁴

Moslems, under British rule, fought successfully to have their religious freedom of ritual slaughter upheld. The British wanted pre-slaughter stunning for humane reasons, but this was not part of sacrificial ritual slaughter under Islamic law. Pre-slaughter stunning eliminates the need to cast the animal onto the ground prior to having its throat cut, thus eliminating much fear associated with being cast.

For Mohandas Gandhi, cow protection was an important aspect of Indian independence from British colonial rule, figuring in the return to traditional values. He wrote:

The central fact of Hinduism is cow protection. Cow protection to me is one of the most wonderful phenomenon [sic] in human evolution. It takes the human being beyond his species. The cow to me means the entire subhuman world. Man through the cow is enjoined to realize his identity with all that lives....Protection of the cow means the protection of the whole dumb creation of God....Cow protection is the gift of Hinduism to the world. And Hinduism will live as long as there are Hindus to protect the cow. Hindus will be judged not by their *tilaks*, not by the correct chanting of *mantras*, not by their pilgrimages, not by their most punctilious observance of caste rules but by their ability to protect the cow.¹⁵

In spite of the fact that the doctrine of ahimsa was advanced some 500 years BC by the Seventh Jain Saint Mahavira, and that Ashoka, influenced by Buddhism, was the first to build animal shelters in his kingdom (around 250 BC), Srinivas believes that humanitarianism (or what I would call compassion without self-interest) is a Western value. It is a value embodying concern for all human beings irrespective of caste, religion, age, sex and economic position; and for all beings irrespective of species, economic, religious or other human-centered value.

¹⁴M.N. Srinivas, *Social Changes in Modern India*. (University of California Press, Los Angeles, 1968).

¹⁵M. K. Gandhi, *How to Serve the Cow* (Navajivan Publishing House, Ahmedabad, 1954), pp.3-4.

Lodrick, in reviewing this history of animal care and shelters in India, concludes that, 'Buddhism, although the major vehicle for the spread of the ahimsa concept throughout India and indeed throughout much of Asia, never carried the doctrine to the extremes of Jainism. In Buddhist thinking, ahimsa became a positive adjunct to moral conduct stemming from the cardinal virtue of compassion, rather than the all-encompassing negative principle of non-activity of the Jains.'¹⁶

This inference by Lodrick, an Indian himself, may help explain the lack of compassion I have witnessed in a Jain-operated pinjrapole in the Nilgiris, South India, where cattle and other animals were saved from slaughter but allowed to starve to death or die from injuries and diseases that could have been easily treated. This is a point of concern since most pinjrapoles and gowshalas are funded and managed by Jains.

Humanitarian concerns over animal slaughter and attempts to modernize slaughtering facilities to make them more humane, sanitary, less wasteful and causing less pollution have been opposed by both Moslems and Hindus for religious and political reasons. Moslems see it as threatening their religious freedom (by the adoption of pre-slaughter stunning) and many Hindus see slaughter modernization as a threat to traditional values, totems, taboos, and even national identity and security.

Such opposition is reminiscent of the Hindu cow protection movement that arose in opposition to British rule and the proposed slaughter of cattle as part and parcel of economic development and modernization. Now under the pressures of trade liberalization and an emerging global market economy that is being pushed by the World Trade Organization, efforts to modernize livestock slaughter are being renewed; and opposition intensifies.

But in the name of ahimsa and compassion, animal slaughter in India is in urgent need of improvement. It is indeed tragic that religious and political factors should become obstacles to progress in animal welfare and protection in this modern day, and especially ironic since one would expect religious values and democratic principles to advance rather than obstruct such progress.

¹⁶ Lodrick, *Sacred Cows, Sacred Places*.

Social, Economic and Ethical Perspectives

India is urbanizing faster than any other country, and urban centers include a diversity of people and beliefs. Since the majority believe that it is unethical and sacrilegious to eat meat, especially beef and veal, those who do eat meat surely have a social and moral obligation to advocate for the development and adoption of more humane ways of slaughtering animals for local consumption than are currently being practiced.

Humane methods of livestock transportation, handling, pre-slaughter stunning and actual killing are long overdue. The flesh and other body parts of animals should be treated with respect since they are part of that which many should regard as sacred. Regardless of the potential risk to consumers, therefore, unsanitary conditions in slaughterhouses might then be seen as gross disrespect, a sacrilege.

India should consider prohibiting the importation of meat and other animal products from other countries that are using cruel, intensive methods of meat, dairy, and egg production -- so-called factory farming. Even if such prohibition were to be in violation of GATT and judged illegal by the World Trade Organization, an ethical reason for refusing certain imports could set a significant precedent for other countries to follow. Likewise, the adoption of such intensive, factory production systems in India as a production base for transnational corporations like McDonald's, Kentucky Fried Chicken, and Domino's Pizza should be opposed on all fronts.

The Indian veterinary profession needs to have full government support for developing the livestock and poultry sectors not primarily to produce meat for export and urban consumption, but to integrate livestock and poultry with ecologically sound and sustainable, humane and organic (chemical-free) crop and fodder production: and in the process enable the rural poor to become more self-reliant. It is unwise economically and ecologically, and also socially unjust, to raise any species of farm animal in India (or in any other country for that matter) primarily for meat. More meat for the rich means less bread or grains for the poor. A major goal should be to reduce the overall livestock population to facilitate ecological restoration. Increasing the productivity and health of milk cows and goats through selective breeding and husbandry improvements also needs more concerted and effective attention and financing. Meat from male offspring and non-productive females ought to be a by-product rather than a primary

product, and either be consumed locally or marketed to the meat-consuming sectors. The tempting rationale to raise livestock and poultry for their meat to supply urban markets and for export to gain foreign exchange revenue -- a rationale being vigorously promoted by multinational banks and transnational corporations as the way to prosperity for India and other developing countries - must be resisted, because it is not sustainable, even in the developed world.

Western influences and values (where cattle are simply valued in terms of economics) and attempts to modernize the Indian economy and social structure, have turned the 'Sacred Cow' into a symbol of conflicted values between religion and reality. But as one Hindu friend told me, Hindu worship of the goddess of wealth, Lakshmi, and the belief in material wealth (artha) as one of the roads to salvation, contradict the Western view that India's 'spiritualistic' values exclude Western materialistic values and thus limit India's hopes of economic modernization.

The flaw in the principle of ahimsa, when it takes precedence over compassion is that it becomes a contradiction. By excluding compassion from ahimsa and refusing to accept humane killing of incurably sick, injured and suffering animals, the principle of ahimsa is violated. The reason for this is purely selfish (ie., to avoid defiling oneself by defiling the animal in taking its life). This aspect of India's 'sacred cow complex' cannot be subject to the light of cool reason and compassion when broached to orthodox Jains and Hindus. After all, it is against the law. Though many will accept that the economic inefficiencies of India's livestock and dairy industries are in large part due to the dilemma as to what to do with millions of nonproductive cattle that compete with productive animals for feed, water, and veterinary care, and are short-changed for economic reasons, the resistance to killing nonproductive cattle who are suffering, or have no feed, results in great suffering.

Some Solutions: Eating with Conscience

Why not reduce all this suffering by reducing the cow population? The 'white' revolution of Operation Flood was aimed at stemming a bloody red revolution by loaning cows to the poor. It should have been a green revolution, not a revolution on the backs of the poor cows. The

revolutionary solutions require religious sanction and political agreement. Otherwise the collision between religion and reality will obliterate the last of India's pastoral heritage, and economic and social fabric. As I see it, most Hindus and Jains should become vegan -- consume no dairy products -- because a vast and expanding human population, in relying upon dairy products as a dietary staple, needs so many dairy cows. Each cow must become pregnant every other year in order to produce milk, and so much suffering results, especially to unwanted male calves and to cows when their productive lives are over.

It is incomprehensible to me that for reasons of law, Constitution, and religious doctrine, cows cannot be slaughtered legally in most states and so they starve to death, wander the streets and beg for food. Sometimes they may have an eye bludgeoned out or be hacked with a machete by an angry vegetable merchant for trying to get some of his produce. It is also incomprehensible to me that unwanted male calves are starved of milk. They sicken, spread disease, and suffer terribly. The most rugged survivors are castrated and turned into beasts of burden. Then when their productive lives are finished, they go to shelters along with the spent dry cows, to produce a little manure that is not worth enough to buy sufficient fodder, especially during the dry season. They die, often ravaged by disease or almost mummified by starvation and dehydration.

There are very few death camps for India's horses, camels, and donkeys, and none that I know of for pigs, sheep, goats, or buffalo. They are eaten. Why should cows suffer more just because of their high value in the religious currency of the culture? Is it unrealistic to suggest that those more affluent Indians who can afford to choose what they eat become vegan, eschewing all animal products, including dairy, in order to accord with the Constitutional right of their cows that is so widely violated, as well as the Constitutional duty of all citizens to improve the natural environment -- and have compassion for all living things? Much animal suffering would be reduced if more Indians 'eat with conscience' knowing that all animal produce they consume comes from animals treated humanely through their entire lives, and ideally from ecologically sound organic farming systems. Ironically, because of high pesticide residues, including DDT, the milk from India's cows is not acceptable for export to the west, according to Devinder Sharma.¹⁷ Hindus and Jains who endeavour to live by the principle of

¹⁷Nationally, it's not the milky way. *The Indian Express*, (September 20, 1997).

ahimsa of nonviolence and of not harming other living beings, need to more closely examine the consequences of their lacto-vegetarian tradition and exercise more compassion and conscience in their food choices.

Jains and Hindus must respect the Moslems, Christians, tribal people, and 'lower' castes who consume the meat of spent cows and abandoned male calves. Meat should not be a major byproduct of the nation's vast dairy herd, or from overgrazed land producing sheep, goats, and buffalo that Macdonald's and other multinational corporations are trying to capitalize upon in India today. Those who do consume meat in India should take action against inhumane slaughter, and follow the Siik practice of decapitation, and where that is not possible with big horned sheep, goats, and mature cattle and buffalo, to use a stun gun to render the animals unconscious before or immediately after their throats have been cut. Consumer risks of developing Creutzfeldt Jakob disease (CJD) after eating the meat of cattle afflicted with 'mad cow disease' is of concern in India where CJD is apparently on the rise, some 30 cases being on record.¹⁸

Attempts to modernize existing slaughterhouses to make the killing of cattle (in states where it is not prohibited) and of buffalo, sheep and goats more hygienic and humane, have been blocked for political and religious reasons. Some fear that slaughterhouse modernization will lead to increased export of meat. A resolution by the Animal Welfare Board of India in 1994 to ban meat exports was rejected by the Ministry of Agriculture, since the Parliamentary Committee of Agriculture is seeking to increase meat exports as a source of foreign exchange.

While orthodox Jains and Hindus may be forced to turn a blind eye to the economically efficient, if not inhumane recycling of 'useless' cattle into meat, hides, fertilizer and blood tonic, they and other humanitarians will agree that ethical limits should be set on all forms of animal exploitation. Animal suffering that results from religious rather than economic exploitation, as icons and totems of divinity, has yet to be addressed, as well as the suffering of other species that are not regarded as sacred but 'unclean', like buffalo, pigs, donkeys, and dogs. Animals should not fall victim to religious prejudice but should be embraced equally in the spirit of compassion and reverential respect for all Creation.

¹⁸B. Kurian, 'Mad cow disease strikes India.' *The Indian Express*, (September 24, 1997).

Dr. Sulekh Jain, former president of the Jaina Association of North America¹⁹ proposes that ahimsa has two basic dimensions: micro-ahimsa, as it relates to animals as individuals, and macro-ahimsa that concerns the entire life community - animals, people, and the environment. Both the micro and the macro dimensions of ahimsa need to be considered. For example, promoting the humane treatment of cattle (micro-ahimsa) and doing nothing to promote sustainable husbandry practices to reduce ecological harm (macro-ahimsa) is short-sighted and counter productive. Similarly, as in the United States and Europe, efforts to improve the transportation and handling of livestock (micro-ahimsa) is short-sighted when cruel intensive methods of livestock production that are harmful to the animals and to the environment are not addressed, along with the harm to consumers who unwisely regard meat as a dietary staple.

People also tend to confuse ahimsa with aghnya, the doctrine of non-killing. In the name of compassion, incurably ill and injured animals, those creatures suffering because of old age, and sometimes even those who are newborn, but cannot be provided adequate food, should be humanely killed. Compassion must take precedence over both aghnya and ahimsa, otherwise India will never develop a humane and sustainable agriculture. Her sacred cows will continue to suffer until humanity evolves into a more empathic state, or the entire system collapses.

Public and Political Initiatives

There are ecologically valid and humane reasons for India coming to accept the humane slaughter of cattle as a vital population-control measure, and to see the wisdom of establishing small slaughterhouses in states where cow slaughter is prohibited. But reason alone will not convince people who regard cows as sacred to permit their slaughter for local human consumption. There are no simple solutions to the plight of India's cows and their offspring, but with reason and compassion, much suffering could be alleviated. Terminally ill and injured cattle should be euthanized. Population control could be facilitated by putting a moratorium on breeding cows every alternate year and by applying appropriate biotechnology in artificial insemination to stop unwanted male calves from being born. Cattle and other animals should be used for draft work and

¹⁹ personal communication

allowed to roam free only in rural areas, not in cities and congested towns and highways.

Cow slaughter is culturally unacceptable as a way to reduce the adverse environmental and economic impacts of millions of relatively nonproductive cattle. Therefore much greater effort and resources are needed to provide feed, water, shelter, and make gowshalas and prinjapoles more humane and self sustaining. Most importantly, the transportation and overall treatment of cattle going to those states where slaughter is permitted must be greatly improved. Furthermore, thousands of cattle are being killed secretly under the most inhumane and unsanitary conditions in states where slaughter is banned. Because of public aversion to animal, and in particular to cow, slaughter, resistance to slaughterhouse modernization has meant great suffering for billions of sheep, goats, and buffalo, whose care and transportation to slaughter is no better than that of cattle, except that fewer are driven the great distances that cattle are because most are killed within the regions they are born and raised. Valuable by-products like blood, manure, and biopharmaceuticals like various hormones and enzymes, are discarded in primitive slaughterhouses and become hazardous sources of environmental pollution. Tanneries are also a serious source of chemical pollution of rivers and ground water resources. Slaughterhouse modernization to utilize every part of an animal, and slaughterhouse decentralization to permit the slaughter of livestock close to where they are raised and to thus reduce transportation costs, suffering, injury, and poor meat quality, are morally enlightened initiatives. But to raise livestock primarily for their meat and for export, and to modernize slaughterhouses for this purpose, is ethically unacceptable and should be opposed on every front.

Some Indians contend that if India cannot consume all the meat that is produced as a byproduct of her dairy and wool industries because of cost or personal aversion, it is surely not immoral to export such meat to gain foreign currency to go back directly to help provide more feed for India's livestock and for the poor and hungry to enjoy a better life. Such benefits are unlikely, however, since the profits will go to private corporations and wealthy traders.

Others have argued that provided the animals are treated and killed humanely, if their production is ecologically beneficial and sustainable, and does not divert land and food from those most in need, or adversely impact

wildlife and biodiversity, then their consumption may actually be necessary. But peoples' appetites, like human population growth and industrial expansion, must be constrained for the good of the entire life community of the Earth, including life in the seas that have been ravaged by pollution and over fishing. Any new initiative in food production especially involving animals, like shrimp and other aquaculture ventures, goat milk and rabbit meat production, should be humane, sustainable alternatives that are geared to helping local people become self-reliant. We have seen enough of the ecologically and socially damaging 'top-down' commercial scale aid and development programs.

Programs designed to promote the production and consumption of any plant or animal foods must be linked with family planning to curtail population increase. One more goat or five more rabbits per family should mean one less child, otherwise the goal of food security and agricultural sustainability will never be achieved.

Agricultural Modernization, Politics and Cattle Welfare

As India shifts to a more capital-intensive industrial agriculture, countless native cows become surplus and urban scavengers for their impoverished owners, and rare breeds become extinct. Many native peoples have been made landless by agricultural 'modernization' and migrate in increasing numbers to the cities along with their few animals and possessions. The high cattle population in the nation's capital Delhi is evidence enough. In 1995 some 50 cattle per day were killed or severely injured by traffic.²⁰

The Prevention of Cow Slaughter Act of 1955, which allows the slaughter of cattle that are diseased, disabled, or more than 15 years old, allegedly resulted in young, nonproductive cows having their legs hacked and broken so they could be legally slaughtered.²¹ The Bharatiya Janata Party (BJP) banned all slaughter of the bovine species when it gained control of Delhi in 1994, purportedly to tighten various laxities in the prohibition of

²⁰Kindness to Animals and Respect for Environment (KARE) *Expose Newsletter*, New Delhi, 4/1, (July 1995).

²¹Molly Morre, 'New Delhi's Council bans bovine slaughter', *The Washington Post*, (April 1, 1994).

cow slaughter. The BJP voiced Mohandas Gandhi who told all India in 1921 that, 'Hindus will be judged...by their ability to protect the cow'.

In order to deal with Delhi's cow population that was in conflict with the modern urban world, ten small cattle impoundment centers (go-sadans) around the outskirts of Delhi were planned to be constructed. All free-roaming cows would be rounded up and put in these cattle pounds. If unclaimed by their poor owners, who would have to pay a fine to get their animals released, the cows would then be sent to bigger go-sadans for 'rehabilitation'. Only three pounds were in operation in 1995, and one operated by a well known animal welfare organization was seen by observers as a filthy hell-hole of starvation and suffering.

Under an interstate quota according to Nikhil Moro, some 5,500 cattle are brought into Mumbai (Bombay) for slaughter. Moro writes, 'While transporting live animals to the abattoirs, calves' legs are broken and slung over their necks to prevent them from running amuck, and pregnant and diseased animals are treated with violent cruelty.'²²

During the tumultuous 1996 elections, the Vishnu Hindu Parishad (VHP) party, 'ignoring the facts and problems' of cattle overpopulation, starvation, disease and suffering, according to *India Today* (January 11, 1996), launched an anti-cattle slaughter campaign. At a rally one sadhu exclaimed, 'We shall cut off the heads of those who shed a single drop of cow's blood.' Another party leader proclaimed, 'The blood of cows has polluted every river'.

According to *India Today*, the VHP claims that:

- The trembling and wailing of the cows being slaughtered lead to earthquakes.
- Cow urine can cure cancer, impotence, sexually transmitted diseases, liver problems, tuberculosis, polio and obesity.
- Eating red meat causes blindness, skin diseases and heart attacks.

²²'Chilling Killings', *Bombay Times* (January 31, 1997).

- It also results in divorce because eating red meat causes precocious sensuality in children, which later leads to impotence and ultimately divorce.

Leftist opponents believe the VHP/BJP should do something to protect starving cows that wander the streets and get killed and injured by motorists in cities like Delhi where they are in power and remember that beef is an important protein source for the poor. According to a 1992 Indian Market Research Bureau survey reported in this article, 74.2% of urban households are nonvegetarian, the majority consuming mutton, fish, and chicken, and some 12.7% beef. (How much is buffalo meat is not clear.)

When the BJP won control of the central government in May 1996, the new President Shankar Sharma announced in his opening of Parliament address a total ban nationwide on cow slaughter as one of the new government's policy agendas. One member of the opposing Congress party rose to object, saying such a policy contravened India's secular constitution, which guarantees equal rights to all religions.²³

India is at a crossroads where the choice is between rural sustainability and industrial growth and productivity. It is clear which road India is now taking. India exports much animal produce -- millions of tons of milk, hides, meat, poultry and eggs -- even to developed countries like the United States, Australia, and the United Kingdom. I learned of this from some faxed, undated documents that Ms. Maneka Gandhi gave to me during a 1995 lunch and business meeting in Delhi with fellow animal rightist and environmentalist Deanna Krantz.²⁴ I was surprised to read in these annual food export figures that Australia was listed as receiving 8.110 metric tons (MTS), the U.S. 0.250 MTS, and the United Arab Emirates (UAE) 5.750 MTS of processed chicken. The UAE also received 457.460 MTS of live poultry and was the major recipient of most of India's sheep and goat meat (8,695.110 MTS). Only Malaysia received more buffalo meat than the UAE -- 24,714.959 and 17,427.834 MTS respectively of frozen buffalo meat, and 9,019.175 and 1,667.728 MTS for 'fresh' meat.

²³Jawed Naqri, 'Moslems in India protest plan to ban cow slaughter', *The Washington Post*, (May 25, 1996).

²⁴Deanna Krantz is my wife and director of the India Project for Animals and Nature (IPAN) based in the Nilgiris, Tamil Nadu, S. India, one of several programs of Global Communications for Conservation Inc., New York.

More recent data on the annual quantities of animal products that India exports were subsequently obtained for April 1996 - March 1997. I have taken a few examples to illustrate which of many countries receiving these animal products are the main recipients (figures in metric tons).

Meat of Bovine Animals, Fresh or Chilled (Carcases and half carcases):

France 33.9; Bahrain 199.4; Greece 121.0; Iran 771.0; Italy 12.0; Ivory Coast 32.0; Malaysia 643.9; Netherlands 66.0; Oman 753.1; United Arab Emirates 1,472.0; USA 25.0 MTS.

Under the category **Boneless Meat of Bovine Animals, Fresh or Chilled:**

Australia received 2.4; France 256.8; Greece 149.8; Ivory Coast 128.4; Malaysia 3,713.4; Philippines 4,457.2; Switzerland 24.8; United Arab Emirates 758.1; and the USA 15.8 MTS.

Meat of Bovine Animals, Frozen (Carcases and half carcases):

France 57.0; Iran 1,962.0; Malaysia 1,456.6; Netherlands 39.0; United Arab Emirates 8,058.5; USA 377.2 MTS.

Under the category **Boneless Meat of Bovine Animals, Frozen:**

France 196.7; Germany 50.9; Greece 1,535.4; Iran 3,351.4; Jordan 1,693.6; Kuwait 2,614.7; Malaysia 49,231.1; Netherlands 200.7; Philippines 20,864.2; Turkey 1,354.9; United Arab Emirates 20,873.8; United Kingdom 265.0; USA 812.8 MTS.

The total annual metric tonnage of beef exported for April 1996 - March 1997 was reported to be 113,289.260 MTS.

Of the sheep and goat meat exports during this same period, it is notable that the USA imported some 332.726 MTS. The USA was the sole importer of meat/edible meat offal salted in brine, dried/smoked, edible flour and meals of meat/meat offal, meat and edible meat offal of bovine animals totaling 6 MTS.

Bones, Horns and Bone Meal:

Some 119,467.557 MTS of bone and horn products from livestock are exported to Europe and Japan and the USA, to be used for various purposes including cosmetics and food additives.

Export of Dairy Products

Between April 1996 - March 1997 India exported 186.7 MTS of powdered whole milk, some 15 MTS going to the Netherlands, and 91 MTS to the USA.

The USA received 11.5 MTS of powdered milk designated for babies, and the federal Republic of Germany 22 MTS.

The USA received 15.5 MTS of cream (of a total export of 236.642 MTS) and 18.6 MTS of other processed dairy products. Of the 142.2 MTS of exported butter, the USA received 1 MTS, the UK 90 MTS, and Canada 1 MT. The USA also imported 22.245 MTS of cheese products.

Eggs

Of the 2,326.972 MTS of processed egg products exported, the USA received 2 MTS, the most going to the United Arab Emirates 1,037.825 MTS, and Oman 555.829 MTS. Oman also received 2,155.032 MTS of 'fresh' eggs (additional figures on fresh egg exports not available).

To what degree these imports of animal products and byproducts into the industrial West accord with these countries' food, health, and safety regulations is an open question. Another is which processed and convenience foods for infants, adults, and companion animals actually include these various imported products from India's livestock population? Other questions pertaining to social justice, adequate nutrition for India's poor and underprivileged, and the appetites of richer nations surface when we reflect on the above export figures from one of the poorest and most overpopulated countries in the world. It also concerns me that the multinational corporations, in importing these animal products and byproducts (that only enrich the coffers of a handful of indigenous traders and brokers) are undermining the livelihoods of farmers in their own

countries. This is the reverse process of the industrial West 'dumping' its own agricultural surpluses on poorer countries that undermine the fair market price for locally produced foods and has the same pernicious consequences.²⁵ The rich get richer and the poor get poorer.

Might there not be more food for the landless poor, and fodder for the starving cows of India if a ban on poultry as well as beef and dairy product exports were set in place? I have witnessed the slaughter of buffalo, goats, and sheep in Delhi. On one occasion I was with a chief government veterinarian, who, on seeing a hobbled and helpless buffalo being stabbed repeatedly in the throat, shook his head in disbelief and told me, 'That's not Halal' (approved Moslem ritual slaughter). I wondered if the Gulf state of Moslem consumers would be concerned.

If India could lead the world by putting a certification of 'ahimsa' on all its meat, eggs, dairy and leather products, it would be a major step for humanity. India's reputedly second most lucrative agricultural export commodity is leather, much coming from cows. It is unfortunate that no such leather could be labelled 'ahimsa leather' with guaranteed veracity for the many Jain, Hindu, Buddhist, and other consumers who walk in footwear made of leather. The toxic chemicals that most of India's tanneries continue to discharge into rivers and watersheds cause serious ecological and human health problems.

A letter dated June 20, 1994, addressed to me from the Secretary of the Akhil Bharat Krishi-Goseva Sangh Society of Bombay, which claims to be engaged in the preservation and protection of the "cattle wealth' of India, states:

Our efforts towards preservation of cattle wealth at the political level are not meeting with the desired success in our country in view of the thick skinned bureaucracy and politicians who are hell bent on destroying the cattle wealth of our nation at the behest of the meat lobby, which finds enormous wealth in this activity as also at the behest of FAO, an organ of United Nations which dictates policies in third world countries, aiming at total destruction of the cattle resources of third world countries.

²⁵see: M. W. Fox, *Eating with Conscience: The Bioethics of Food*. (Troutdale, OR: NewSage Press, 1997)

However there is a silver lining to this otherwise discouraging scenario and that silver lining is in the form of our judiciary. Some time back a case instituted in a court in New Delhi involving shifting of a slaughterhouse from one area of Delhi City to another area, the Learned Judge who delivered a judgement in this case has made an excellent analysis of the whole issue and established the legal rights of animals as well as the need for conserving animals for conservation of environment. He has established that the human race, the environment and the animals are interrelated and extinction of animals will spell doom for environment and mankind.

Contrary to this Learned Judge's views on environmental conservation, an almost insoluble problem has been created by the ecological damage caused by overgrazing of cattle, buffalo, sheep, and goats and their diseases and hunger, problems compounded by a lack of fodder and vital grazing land that has been taken over to grow feed and fodder for intensive modernized dairies, buffalo calf meat production and egg and poultry factories, and for cash-crops. The root of the problem is ideological, and the ideological conflicts between the reasonable and the less reasonable must be resolved. India's 'cattle wealth' is first and foremost a family and community matter. The above Delhi judgement is based more on historical tradition than on reality. The expansion of the domestic animal and human populations in India will spell doom if they are not controlled. Certainly at one time, cattle and other domestic animals generally helped play a positive role in environmental conservation, recycling manure, urine and crop-leftovers and in enhancing biocultural diversity. But under the pressures of the global monoculture of industrialism, all vestiges of humane, organic and sustainable agricultural practices, wisdom and spirituality, may be obliterated forever.

As a veterinarian, I find it particularly distressing to see Indian government veterinarians, with few exceptions, being assigned to the poultry, dairy and meat and slaughter agro-industry sectors, rather than being more involved in the kinds of rural animal health and welfare issues that IPAN is addressing and also in related sustainable agriculture and aquaculture initiatives and wildlife disease control and conservation programs. These are so important in terms of economic security, national democracy and spiritual tradition. The monopolistic capitalization of India's 'cattle wealth' by developing export markets that are not based on humane, sustainable

and socially just methods of animal and plant production, is unwise and bioethically unacceptable.²⁶

It is significant that in the US, the Roman Catholic Church has spoken out against industrial agriculture and the expansion of livestock factory farms, a position endorsed by the Sierra Club, one of America's largest conservation organizations. India's cattle wealth cannot be determined by the number of animals alone, but by their diverse social, economic, ecological and religious contributions to traditional Hindu, Jain, and Moslem communities. These rural and para-urban communities are under transformation today, and though the final outcome will probably mean fewer cows for fewer families, animals should not be the exploited victims of 'modernization' or be neglected during times of social and economic transformation. This is particularly true for a country like India that from the outside is seen by the rest of the world as a nation uniquely dedicated and constitutionally mandated to respect the welfare of animals and the spirituality of compassion.

Cattle Ways of Seeing

Like most animals, cattle are seen and valued in essentially four different ways. First, they are valued symbolically in accordance with a culture's particular religious traditions, mythology and history. For example, India's cow is a symbol of the divine mother-provider to millions of Indians. Second, cattle are valued objectively, and materially or economically for the various services and produce they provide. A milk cow's great economic value most likely helped her gain sacred symbolic status. But as the economic climate has changed in recent times, so has her symbolic status in the eyes of many. Third, cows and their offspring are valued subjectively and emotionally, as a source of social status, security, and companionship. Fourth, they are valued spiritually, as a manifestation of divine creation, as sentient souls embodied in bovine form with inherent value, interest, and sanctity, to be recognized and respected by society.

It is from their spiritual significance to us that our ethical sensibility, our respect for the sanctity and rights of animals is derived. Likewise, from

²⁶Ibid.

their material significance we come to value their utility. From their subjective, emotional significance we come to empathize with animals and in the process learn about their feelings, what gives them pleasure, and what causes them distress and suffering.

Without the spiritual and emotional perspectives, the objective, material perspective becomes exploitative. Where empathy and ethical constraint are lacking, inhumane treatment and suffering are likely consequences. The symbolic value of the animal may or may not promote compassion and humane treatment. In the absence of emotional and spiritual significance, cruelty may be condoned, like the widespread prohibition against euthanizing cattle in India when they are incurably ill, injured and suffering. That the symbolic value of the cow should take precedence, in this instance, over the emotional and spiritual dimensions of the human-cow bond, is indeed a travesty of the ethics of compassion and ahimsa. Likewise, when the material utility of the cow takes precedence over all else, as on the Western factory farm, she comes to be treated as a milk and calf producing biomachine. Her welfare is of no significance so long as the costs of improving her condition are not reflected in increased profits from greater efficiencies and productivity.

As Deryk Lodrick shows, anthropologists are not unanimous in their acceptance of the many reasons why cows are sacred in India. The present status of the cow in India, who by many people is given the same respect and consideration as a revered member of the family²⁷, is the result of many complex factors -- the 'cow complex'. This includes ancient totemic fertility cults and Goddess-worship²⁸; the influence of more recent religious traditions and doctrines (Hinduism, Jainism and Buddhism share the doctrine of ahimsa) as well as social order (caste food taboos), and also ecological and economic considerations.

The complexity of the human-animal bond is evident in these four very different ways in which cattle are seen and treated. What is called for is a unified sensibility that integrates the symbolic, material, emotional, and spiritual components of the human-animal relationship into a mutually

²⁷A devout Hindu will proclaim 'Gai hamari mata hai'-- the cow is our mother!

²⁸For further details on the complexities -- religious, social, historical, and ecological -- of dietary choices in India, see F. J. Simoons, *Eat Not This Flesh* (University of Wisconsin Press, Madison, 1961. Also, Buffie Johnson, *Lady of the Beasts* (Harper & Row, San Francisco, 1988).

enhancing symbiosis. The human side of the relationship is more balanced and equitable when the rights, interests, and welfare of animals are given equal and fair consideration. The ethical inconsistencies in the religious and secular communities' attitudes toward and treatment of animals is more evident in India than in other countries precisely because India is the birthplace of the highest spiritual principles pertaining to animal welfare and yet they are not always put into practice.

No human community can be sustainable for long or enjoy peace and prosperity if there is no reverential respect for animals and nature. The major challenge facing the ever multiplying human populace is food security, clean water and adequate shelter, fuel and sanitation. With the present escalating rates of population growth, resource consumption, and environmental destruction, the Earth cannot sustain our species.

As the history of India is interwoven with the cow, so is the future of both. From my perspective after several tours of duty working in animal protection in India, the future does not look good. This is not simply because of poverty, population pressures and environmental destruction. I see a lack of vision that is more than a conflict between traditional and Western values and imperatives as between national sovereignty and becoming a player, or victim, in the new world order of a 'free' global market economy. This impaired vision is in part attributable to the confusion and anarchy of widespread corruption, but more especially, I believe, to a lack of ethics and compassion. The same may be said of most other countries to varying degrees, but in no country do animals suffer more, especially cows, because they are sacred. In essence, the body and the spirit of India are divided and they must be brought together and healed, otherwise both will perish. By the same analogy, the cow as a symbol is treated with reverence, but real animals are too often treated with cruel indifference. Their sufferings, often a result of human ignorance, are accepted fatalistically -- a consequence of karma, and inaction results. This can be due to a lack of available veterinary care; lack of enforcement of animal protection laws; sheer poverty and desensitization to others' suffering; and the belief that condones non-activity, namely, that it is wrong to interfere with another's fate. We need to heal the divisions between the sacred and the secular and between belief and practice, so that ahimsa does not mean nonactivity or nonintervention, but leads to active compassion toward all beings, human and nonhuman.

Caring for animals and caring for people, for the poor and the hungry, go hand in hand as part of the humane agenda of any democratic society. While this article focuses particularly on India's cattle, the plight of these creatures mirrors the plight of the poor. According to one recent study on the issue of world hunger:

Many of the countries in which hunger is rampant export more agricultural goods than they import. For example, India ranks near the top among Third World agricultural exporters. In 1995, while at least 200 million Indians went hungry, India exported US\$625 million worth of wheat and flour and US\$1.3 billion worth of rice, the two staples of the Indian diet. In addition, the American Association for the Advancement of Science found in a 1997 study that 78% of all malnourished children under five in the developing world live in countries with food surpluses.²⁹

There are no miracle remedies for hunger and poverty from advances in technology, science, or medicine. The miracle will come not via genetic engineering of animals and plants but through the transformation of humanity into a compassionate, empathic, and responsible life form. A mutually enhancing symbiosis with the Earth community of plants and animals, both wild and domesticated, is our only viable future. Our hope lies in our capacity to reconnect empathically with all living beings and to use compassion as our compass.

Biography

Dr. Michael W. Fox joined The Humane Society of the United States (The HSUS) in Washington, DC in 1976 and has produced numerous publications and developed several technical research programs that apply scientific methods to the investigation of the many uses of animals, notably laboratory, companion, and farm animals. In addition, he is on the Board of Directors for the Center of Respect of Life and Environment, an affiliate of The HSUS. Dr. Fox has authored over 40 books and for the last 25 years has written a nationwide syndicated newspaper

²⁹Frances Moore Lappe, Joseph Collins and Peter Rosset with Luis Esparza, *World Hunger: Twelve Myths*, Second Edition (1998).

column, 'Ask Your Animal Doctor', enjoying a weekly readership estimated at 12 million. He is also a consulting veterinarian and bioethicist, and gives lectures, seminars and presentations both in the US and abroad on a variety of topics related to animal welfare, behaviour, conservation and bioethics.

Garden

Simone Poirier-Bures

My husband stared at the hoof tracks in the soft earth and shook his head with disgust. 'It's bad enough that they bother the fruit trees; now they're after the garden.'

I stared at the tell-tale indentations between the sprouting potatoes and tasselling chives, and imagined them: their sleek necks, their soft brown eyes. We seldom saw them in daylight but their ghost shapes haunted our yard at night.

They'd been stripping our small orchard for years, but they'd always left the garden alone. Until last winter, that is. We'd left the parsnips and carrots in the earth to sweeten, and one morning found them nibbled all the way to an inch below ground.

Now they were back, these moonlight feeders. Checking things out.

'I suppose I'll have to put up a big fence or there'll be nothing left,' my husband said. 'News travels fast.'

He was proud of the garden, a beautiful, intricate thing with raised beds of herbs, vegetables, and flowers. In mid-summer it became a marvel of ordered lushness: The scents, the drone of bees, the butterflies. The colors. The plump veggies to share and eat--the sheer bounty and beauty of it!

We walked along the carefully mulched paths between the plump mounds of mint and lemon verbena, the sprawling rhubarb leaves, the waving orange poppies, the L-shaped pods of fingerling tomatoes, beans, and peppers, and mourned. Fenced in, the garden would not be so beautiful.

My husband set to work, pounding six-foot tall metal rods along the garden's perimeter. Together we strung wire between the rods, leaving only a small open area for us to pass through.

'They can probably still jump the fence if they want to,' my husband said. 'So I got this.' He showed me a roll of florescent green plastic ribbon. 'They can't see color, but it's windy here, and maybe something moving will scare them.'

Oh wonderful, I thought. Flags of flapping plastic. Like a used car lot. But I did as I was asked, and spent the next 20 minutes tying strips of the plastic every three or four feet along the wire fencing.

Afterward, I stood back and looked at it. All the little plastic ribbons were flapping and snapping madly. But it didn't look like a used car lot at all. It looked more like a Tibetan prayer wheel. I'd seen them in a documentary, wheels of brightly colored ribbons flapping wildly, each ribbon sending out a prayer into the universe.

Prayers to keep the deer away, I thought.

I remembered the Tibetan sand paintings then, intricate constructions of colored sand that take hundreds of hours to make but are not intended to last. The act of making them is what's important. Making them is an act of humility, an acknowledgment of temporality, a surrender to impermanence. But it's also a celebration. A celebration of that temporality.

The garden, I realized then, was a lot like a Tibetan sand painting, with its intricate shapes, everything manicured and carefully mulched, the hundreds of hours it took to maintain. Yet it, too, was only temporal. For a garden, like a sand painting, is impermanent. It lasts for only a season, and has to be remade each spring. Then it becomes something new; for a garden is never the same twice.

I thought of the Tibetan notion of celebrating temporality. What did it mean? Why celebrate the fact that things fade? That nothing lasts, not even the deer who would come and gaze in wonder, and perhaps fear, at the strange moving shapes that now guarded the garden?

On my way to the basement to put away my things, I passed the pyracantha. A bird whirled out at me and perched on a nearby tree to scold. After I passed, she returned--to a hidden nest, I suppose. We'd found nests there before, abandoned ones, their temporal purpose over. Each spring it all began again, the nest-building, the baby birds to marvel at. And then it struck me: Would beauty be so precious if it didn't fade? Without the barrenness of winter, would spring and summer be so wonderful?

I turned to look again at the garden, at the green ribbons still flapping like so many prayers. Prayers to keep the deer away, yes, but more than that. The little ribbons, the same yellow-green as the tiny new lettuce leaves, seemed to me now like prayers of celebration: celebration for all that grows, all that is beautiful and transient, all that nurtures us for a season, and then is gone.

Biography

Simone Poirier-Bures is the author of two books: Candyman (1994), a novel set in her native Nova Scotia, Canada, and That Shining Place (1995), an award-winning memoir of Crete. Simone's stories and essays have won numerous prizes, and have appeared in more than two dozen literary journals in the United States and Canada as well as in eight anthologies. She is currently working on a book of stories (fiction and personal narratives) about human relationships with animals and the natural world. She teaches in the English Department, Virginia Tech, US.

The Death Penalty or Lifelong Encagement: Moral dilemmas about animals-without-further-destination

Will Kort and Medard Hilhorst

In the first part of this article we consider the emotional burden that comes with killing a laboratory animal. We go on to raise questions about the value of the animal and its future perspectives. In the central part of this article we describe the different possibilities for the surviving laboratory animal once the experiment is completed. One of the moral dilemmas we treat in depth is the choice between the 'death penalty' and 'lifelong encagement'. We conclude by offering some practical recommendations.

Knowledge that an animal may survive an experiment has to be taken into consideration by any Animal Ethics Committee. In the process of approving the experiment, the perspectives of the animal after the experiment should be taken into account. Postponing this decision until it will be clear that there is no purpose any more for the animal is not in anyone's interest and certainly not in the interest of the animal. Humanely killing¹ an animal in such a situation may be an act of mercy and not just a cheap way of solving a problem.

1. The emotional burden of killing an animal.

Killing a laboratory animal often causes a sense of guilt. This sense of guilt will be enhanced when the animal in question is healthy and has been taken care of for a long time, and an emotional relationship has been established. Our feeling that a warm relation with a helpless living creature is needlessly ended inspires the emotions of guilt: You are spoiling

¹ Although we think it is possible to speak of 'euthanasia' in the context our article, we prefer to use the more neutral term '(humane) killing'.

something; you are destroying something. Very negative feelings indeed. Despite the fact that with sick animals the same feelings may play a role, these feelings will certainly be less fierce. After all, in such a situation we are putting the animal out of its misery: an act of mercy.

Although in many western countries there is still support for the death penalty as a means to deal with barbaric crimes, an execution often brings about new public debate. The killing of a human is widely seen as unethical but a lifelong imprisonment seems to meet lesser objections. Apart from the fact that 'Though shalt not kill' has been laid down as one of the Ten Commandments, and has, as such, a high moral value, death is the end of having experiences, while 'lifelong' always holds a certain perspective. After all, a prisoner may eventually get a reduction of his or her penalty. A change of political climate, the birth of a prince, has led in the past to a reduction of punishment, and confirms the saying: 'While there is life, there is *hope*'.

Our ethical intuitions with respect to surviving laboratory animals seem to point in the same direction, when it is suggested that killing these animals is less ethical than to keep them alive, though engaged for the rest of their life. A strong argument in favour of lifelong imprisonment for humans is 'hope'. Not only, as said, because this hope often proves to be realistic, but also because people can *image* their future and put their present situation in a time perspective. We think, however, that animals do not have such abilities. Animals don't have the capacity to 'hope' in a human way, in the sense that this hope for a better future can relieve their present circumstances. But even, if they could 'hope' in some way: hope for what? Many laboratory animals (purpose bred) have been born engaged and cannot have any idea of a better future. And to be realistic, if we are not able to give them a better future (see 3.3.8 below), lifelong engagement remains lifelong to the end.

Arguments of those who oppose killing healthy animals for which no further employment exists can sometimes be paraphrased as: 'The animals were bred and kept for the benefit of science, but see what happens, as a reward for their suffering they were finally killed.' (Often words such as *murdered* or *slaughtered* are chosen to express the emotions and you will understand that *reward* is used cynically). It expresses the feeling that an animal somehow deserves to be kept alive by us. On the other hand you

might say that the researcher, out of empathy for the animals and keeping in mind their poor perspectives, feels often morally obliged to euthanase the animal. A kind of *coup de grâce* carried out under very difficult circumstances.

In practice the scientist mostly is neither the person who takes care of the animal, nor the one who actually has to kill it. The emotional burden of the killing is often not to the person who has the (scientific) merits of the experiment; just the burden and not the merits are for those involved with animal care and husbandry. That does not seem fair. It should not surprise us that the latter category, those who carry out animal experiments, are the ones who have objected most strongly to the killing of animals at the end of an experiment. The scientists have in general lesser objections.

Apart from killing animals after the completion of an experiment it appears that 'fatal experiments' with primates (especially chimpanzees) also are highly criticized. If this view is shared by many, it may be wondered whether experiments with these kinds of animals can be carried out. And for non-fatal experiments with them an even greater problem may be encountered in the end: what to do with the surviving animals? Sooner or later a difficult ethical dilemma has to be solved. Preferably this should be done sooner and not later.

To summarize, we think that despite the feelings we may have with respect to the animal and despite the emotional burden of killing an animal-without-further-destination, we should face the fact that the choice of killing may well be the better of the two. Arguments for this conclusion, which should first of all refer to the animal's best interests, will be given below. So far we have drawn attention to the fact that laboratory animals are not capable of seeing their lives in a time perspective, which could relieve their present circumstances somewhat.

2. The intrinsic value of an animal obliges us to think about its future

If one morally accepts that animals can be used for experiments and killing is inherent to it, one need not deny that animals also have a life of value on their own. This value, independent of their laboratory or scientific value for us can be called intrinsic. Although we take it not to be an absolute value, it can and should be respected in a number of ways. Respect requires that animals should only be used for experiments when this is absolutely necessary. Russell and Burch have formulated (in their book *The Principles of Humane Experimental Technique*²) the three well-known R's: to use *alternative* methods if these exist (Replacement), to use *as few animals as possible* (Reduction) and to use *techniques and conditions causing the least harm to the animals* (Refinement).

A tension always exists between Reduction and Refinement. On the one hand we have to work efficiently with animals to get as much information out of as few animals as possible. One animal should thus be used as much as possible. On the other hand we are obliged to take into account each animal's interests, which implies a limitation on the time and the degree of pain and discomfort that one may impose on an individual animal. We take the view that an endless reuse of laboratory animals is not a responsible way of reducing the number of animals; therefore Refinement should have priority over Reduction. Each individual animal should morally be taken seriously. We should not only be concerned about the best experimental conditions in order to gain sound scientific knowledge, but also about the living conditions we should create in the best interests of each animal.

We think that all this is consistent with an increasing awareness in our western culture that animals do have intrinsic value. This concept is adopted in the Dutch Animal Experimentation Act and has led to a so-called 'no, unless' rule, ie. killing an animal in the context of an experiment is not allowed without further argumentation. In a note on 'Killing and slaughtering of animals' the Minister of Agriculture speaks of permission 'under well-defined conditions and with good reasons'. The three R's form no doubt the basis of the Animal Experimentation Act, and also the

² Russell, W..M. and Burch, R.L., *The Principles of Humane Experimental Technique* (Methuen & Co. Ltd., London, 1959).

limitations on Reduction in favour of Refinement can be found in Dutch policy.

According to some ethicists killing an animal is justified when the animal's suffering outweighs its happiness. Others formulate their view in a more animalcentric way arguing that we should kill an animal out of respect when its life contains less than a certain value or quality of life. In practice these two views do not need to lead to completely different conclusions. Both perspectives look for what is a reasonable, acceptable life for the animal, if we take into account its environmental and health conditions. We should define some standard between a reasonable-minimum and reasonable-maximum and this, of course, will leave room for discussion. However, many publications have appeared in laboratory animal science on the sizes of cages, health-monitoring systems, prevention of stress and cage enrichment. One may therefore assume that knowledge of reasonable life conditions for most animal species is or will become more and more available.

Whether or not *retirement* is an alternative for killing has widely been discussed by both proponents and opponents of vivisection. On both sides, however, one can find people who consider retirement as not quite satisfactory. In the discussion on retirement of animals-without-further-destination we have to determine what life conditions should be realized for these animals and for this we need a point of reference. Are we going to give a moral judgement on the basis of a comparison with the 'ideal' situation, or with more desirable, achievable, affordable or natural conditions? Do we want to compare the life conditions of surviving laboratory animals with those animals, which live in the wild or in a zoo? Each of these comparisons is problematic and does not get us much further. The circumstances of animals under laboratory conditions are quite different from those in nature. On the one hand the laboratory animal does not run the risk of being taken by a predator, on the other hand it is lacking the opportunity to participate in this natural predator-prey animal life. Likewise, the comparison to conditions in a zoo does not fit. In a zoo there is still a (human) purpose for the animals, whereas with regard to retirement of ex-laboratory animals this is mostly not the case. These considerations lead us to the conclusion that we have to develop a different (ethical) framework for animals-without-further-destination. In our view we should formulate life conditions under which an ex-laboratory animal can live its life in such a way that it is a reasonable presumption that the

animal does not suffer any abnormalities in behavior. This seems to us to be a reasonable minimum, which will guarantee the animal at least the fulfilment of its basic and fundamental needs. We will return to this point below. It would imply that if we are not able to create these 'caring' conditions, we should give a moral preference to killing.

There are many possibilities to stimulate an animal to do more physical and mental training in order to be able to cope with boredom. It is doubtful, however, if this would benefit the animal much, if many needs are still not fulfilled. It may then live and die in a good condition, but it would nevertheless lack the proper living conditions it should in our view have. So we have to be critical here and ask: 'What do we intend if we keep animals alive after an experiment, when we can offer them only inadequate living conditions?' Do we value their life because there is still *some* pleasure in it? We consider this standard too low. Do we think that an animal-life-over-time should be seen as a whole, and should be lived *entirely*, and that therefore it should not be ended? This, we hold, would be too anthropomorphic. The primary interests of animals concern the *present*, the fulfilling of their direct needs. Living a full life, however, we do not see as an end *in itself* for a laboratory animal, in that we should try, at all costs, to achieve this. Our position, of course, reflects the idea that the situation of human beings is different in some fundamental aspects - hope is one of them - from animals in the context of a laboratory and thereafter.

We are inspired by the ideal that we should offer the animal only a good life or no life and we have concerns about the circumstances in which experimental animals sometimes are left behind. One should not haggle with the situation of these animals, and accept less proper conditions for them on dubious grounds. One can be motivated by some feeling of guilt: 'they have been so valuable to us, we should at least, as a sort of compensation for what they have suffered, keep them alive'. It can also flow from deep feelings that killing is intrinsically wrong and should be avoided with all means. We think that these feelings can lead to confused motivations to keep these animals alive even when this is not in their interest, but at their cost. Sometimes they are even kept alive under doubtful circumstances for higher, ideological motives: to keep their unfavourable fate on the political agenda, by falsely choosing as the main factor in this debate factors which work against the interests of individual animals while suggesting that their circumstances can be improved. We should be very aware of all these mixed feelings and critical about the dubious motives.

It is, of course, possible that our emotions are nurtured by important intuitions. Therefore, emotions have not always to be suspected and should not be put aside too easily. They may indicate a moral sensitivity to life, for animals with a certain (or higher) conscience, and also for what should be our own place in nature and our attitude towards the life that surrounds us. Indeed, willingly or not, a close relationship with laboratory animals as our companions may have become a fact.³ It would be fundamentally wrong for us not to pity these animals and leave them alone after the experiment with the devices we have given them to play with under undignified conditions, confused by what to do with their lives. This would - paradoxically - be a repudiation of the intrinsic value of the animal. When an experiment ends in a dead-end-street, we have to blame ourselves that we have not been less ambiguous about its destination and we should be open enough to reconsider our earlier decisions. It may be that in this situation the killing of the animal is the lesser of two evils, but the next time we should consider the options in advance, and more carefully.

It is common knowledge and accepted by most of us that in scientific experiments the interests of animals and of humans are in fundamental and inevitable conflict. We think, however, that it is essential for a society as a whole that more information be made available for the public about the benefits of certain experiments as well as the harms and burdens for the animals that go with them than there usually has been. The question of the justification of animal experiments should be widely discussed and far beyond local Animal Ethics Committees. Growing knowledge and awareness can contribute to more sensitive attitudes towards laboratory animals and a better justification of animal experiments.⁴ The discussion on *death penalty* or *lifelong encagement* should also be placed in this broader context.

The healthy animal-without-further-destination is like a mirror held up to us, in which we appear as beings who deal reluctantly, ambiguously and hesitantly with these animals when we are confronted with their fate. On the one hand we should strive for explicit decisions and clear solutions. On

³ A. Beck and A. Katcher, *Between Pets and People*, Revised Edition (Purdue U.P., West-Lafayette, 1996).

⁴ M.T. Hilhorst, 'Xenografting as a subject for public debate' in *The Social Management of Genetic Engineering*, eds. P. Weale, R. von Schomberg and P. Glasner (Ashgate, Abingdon, 1998).

the other hand it will go from bad to worse when we push aside our feelings and hesitations and come with hasty solutions or hide behind technical procedures. The best we can do is to analyze all the different options carefully and go through things systematically. This at least is what we intend to do in the remaining part of this article.

To summarize, respecting the intrinsic value of an animal obliges us to think about its future. We can only be guided by what the best interest of the animal is. We take this to be the *present* best interest, and not *our* hope that maybe, some time, we can give them better circumstances than they have at present. Any perspective over time, realistic or not, cannot alleviate an animal's present suffering. It would be far beyond the immediate needs, desires, longings and yearnings that animals have. It is our moral responsibility to do what we can to respond to them adequately. We should therefore guarantee that living conditions are available to them necessary to fulfil their basic and fundamental needs. If we can't, killing is the better option, which we should rightly choose. That we are left with ambiguous feelings is part of moral life, and should be taken seriously.

3. How the animal is terminated

An experiment can come to an end in different ways⁵

1. the animal dies, or the animal is killed for the purpose of or as a result of the experiment
2. the animal is killed for harvesting blood or organs
3. the experiment is terminated, but the animal does not have to be killed

3.1

Based on data on the use of laboratory animals at the Erasmus University, relatively few animals die as a direct result of an experiment. This amount will probably be much higher when an institute performs toxicology

⁵ In most breeding systems there is no purpose for many animals. These animals are too old, of the wrong sex, etc., and may only be used in training programs or pilot experiments. Most of these 'unwanted' animals will still be killed without being used. With regard to mice and rats the number of animals killed in this way may be up to 10% of the total number of animals registered.

studies: it is still necessary to take 'death' as an endpoint in certain types of experiments (eg in challenge studies). These studies receive much criticism, however, and alternatives are sought in other more 'humane' endpoints. For instance, in studies in which a lethal infection is given, hypothermia may be used as a parameter of effectiveness of drug therapy, and therefore the animals can be killed before they suffer severe harm.⁶ Whatever the procedures are, the sick animal's life cannot be saved.

3.2

Animals are often killed for no other purpose than merely the collection of blood and organs: about 12% of the total amount of animals involved in laboratory practice are used for this in the Netherlands, according to data on 1996.⁷ It is remarkable that primarily rats and mice are used for this purpose, much more than the 'higher' animals such as non-human primates. The feeling is that with respect to rats and mice no real harm is done, but only mild discomfort. Killing as such is not regarded as additional discomfort by Dutch law.⁸ Although killing animals is inevitable here and inextricably connected to animal experiments, a reduction of the number of animals could be achieved when researchers 'share' animals, ie using one animal for more than one purpose: someone needs the kidney, another one the liver, etc. The Animal Ethics Committee reviewing the animal protocols may be able to stimulate this sharing.

3.3

When the researcher completes his or her experiment and the animals have survived the procedures and will not be used for pathology, the problem arises concerning what to do with them. The following issues should have our attention, to see what role they may play:

⁶ E.D. Olfert, 'Defining an acceptable endpoint in invasive experiments.' *Animal Welfare Information Center Newsletter*, 6, (1995), pp.3-7.

⁷ Veterinary Public Health Inspectorate in the Netherlands. *Animal Experimentation in the Netherlands. Statistics of 1996* (1997).

⁸ An animal experiment is defined by law as: 'any act or series of acts carried out in relationship to a living vertebrate for the purpose of...', and 4 different purposes are then mentioned, 'in so far as it must be reasonable to suppose that the health of the animal may thereby be impaired, or that appreciable pain, injury or other grave discomfort may be caused to the animal'. In many European countries, the killing of an animal alone, ie. without any proceeding action, is not considered an animal experiment, because discomfort is not conceived to be at issue here.

- 1 preceding inconvenience to the animal
- 2 health status at termination of the experiment
- 3 animal species
- 4 laboratory animal housing conditions
- 5 financial considerations
- 6 emotions
- 7 time between termination of an experiment and the start of a (possible) new one
- 8 adequacy of housing conditions
- 9 way of humane killing
- 10 review by the Animal Ethics Committee

3.3.1 preceding inconvenience

In the Dutch Animal Experimentation Act the following clause can be found: An animal which has been used in an experiment in which the animal has endured severe inconvenience or long-lasting discomfort, regardless of anaesthesia or sedation given, is not allowed to be used in a following experiment except when the animal is healthy and in a state of wellbeing, and

- A the animal is kept in the next experiment under constant anaesthesia and will not recover, or
- B the next experiment is an experiment in which the animal is exposed to mild inconvenience only.

It will be evident that these restrictions given by the Dutch Law are in conflict with another basic principle of responsible use of experimental animals, which we mentioned earlier, ie Reduction. According to the Dutch Animal Experimentation Act, the Animal Ethics Committee should morally give priority to the animal's individual wellbeing, even if this would increase the total number of animals used.

3.3.2 health status at termination of the experiment

At termination of the experiment the animal can be:

- under anaesthesia

- sick as a result of the experiment (or as the result of a complication of the experiment)
- (bodily) healthy (again)

We think that it is ethically difficult to justify letting an animal recover from anaesthesia merely for the purpose of using it again, when during that period of anaesthesia surgical intervention or another invasive or radical manipulation has taken place. Recovering will cause additional harm to the animal and add to the burden that an animal has to bear. From the *present* interest perspective we described, a decisive argument can be derived to contend that it is better to prevent this new discomfort for the animal. We should not make ourselves believe - fool ourselves - that we can provide for some good life for the animal before it will be used again. The same holds for the situation where the animal is not healthy at termination of the experiment. It would mean that just for the sake of a new experiment the animal has to be treated for its illnesses and recover. Moreover, there are the restrictions of the Animal Experimentation Act (see 3.3.1). As a consequence of all this the real problems for potential reuse of laboratory animals will only be encountered when the animal is bodily healthy at the completion of the experiment.

3.3.3 animal species

In most ethical decision systems used by Animal Ethics Committees the 'psychological complexity' is taken into account, for instance by making distinctions between 'non-human primates' (more weight), cold blooded animals (lesser weight) and other vertebrates (neutral).⁹ This implies that non-human primates, but certainly also companion animals, such as cats and dogs, will always get more specific attention when used as laboratory animals. Additional responsibilities will be implied when endangered species are to be used. This valuing should not be so much a question of higher and lower, or more and less, but of attributing *specific* value to each animal, according to its own particularities.

When we presume that killing a member of a 'higher' species is more emotional for the researcher than killing a member of a 'lower' species, then

⁹ J. Vorstenbosch, J.A. Joles, F.R. Stafleu and R. Tramper, *Weighing animal interests against human interests: ethics in the balance* (Center for Bio-ethics and Health Law, Utrecht University, Utrecht, 1997).

we must take into account that the requirements for good environmental conditions for these higher animals should also have to be substantially more complex. It can be assumed that a higher animal suffers more under the laboratory housing conditions than a lower animal. With higher animals we should therefore be extra careful, if we do not even want to run the risk of supplying them with unfit and consequently unworthy housing conditions. Interfering with the higher animal's basic or essential needs or with its species-specific behavior may damage its wellbeing severely and will be contrary to our respect for it. Moreover, we think that humans are more able than animals to cope with psychological stress as a result of pain, discomfort, or deficiencies in environmental conditions. Human's self-consciousness may enable us to escape the present conditions somewhat – as we argued when we discussed 'hope' – whereas animals seem to be inescapably 'captured' by the present and by their feelings. When we cannot fulfil these needs of the animal and not provide the necessary high standard housing conditions, for whatever reasons (eg this can be financial: see 3.3.5), the conclusion seems inevitable that the death of the animal is the least bad of two choices.

3.3.4 Laboratory animal housing conditions

Animal discomfort is dependent (among other factors) on the quality of the husbandry conditions a research institute is able to offer. It turns out that certainly dogs and non-human primates are particularly impeded in their species-specific behavior. For this we refer to the research and findings of Wemelsfelder in *Animal boredom*.¹⁰ Husbandry conditions for these animals are usually justified by saying: 'They do not know better'. Wemelsfelder, however, makes clear that this argument should be seen as containing a fallacy. Scientific evidence supports the fact that animals that have been kept under good husbandry conditions are better able to cope with stressful procedures than animals that do not have such a history. Present laboratory conditions for housing of dogs and non-human primates prove to be amply sufficient according to the standards in the EC Council Directives.¹¹ If we really would take seriously our moral responsibility to guarantee the fulfilment of their needs in terms of their particular species-specific

¹⁰ F. Wemelsfelder, *Animal boredom: toward an empirical approach of animal subjectivity*. Thesis, (Leiden, 1993).

¹¹ EC Council Directives on the approximation of laws, regulations and administrative provisions of the Member States regarding the protection of animals used for experimental and other scientific purposes (1986).

behavior, with regard to exploration, play, socialization, foraging, etc., we would have to improve their conditions substantially. Under the present conditions only boredom and stereotypic behavior have resulted. It may be that animals, which 'have known better times' suffer more from these housing conditions and for that reason Animal Ethics Committees should be, we think, very restrictive concerning protocols in which the animal to be used originates from the wild or has lived with us as a companion animal.

Housing conditions for non-human primates are far from desirable. Despite the fact that good recommendations for the *short* term - as has been given by Wemelsfelder: re-socialization, more group housing, supply of wood chips for individually housed animals - may meet some of these demands, for the animal it remains caging in a way in which species-specific behavior still is severely hampered. Coen, an HIV-positive chimpanzee, may serve as a good illustration here. Coen has been supplied with a real television by the Dutch pro-animal organization *Pro Primate*, a well-meant effort to improve Coen's housing conditions. It seems to us to be rather a poor improvement in anthropocentric respect, but should we regard this as so much better from the animal's perspective? What are we trying to prove when we are keeping this animal alive in this way; and to whom are we proving this, and at what costs?

Only recommendations for the *long* term - as made by Wemelsfelder: such as group housing in wooded surroundings - will meet a part of the natural environmental conditions of the animals, in which their lives may flourish. However such a recommendation does not seem to be very realistic. It is not only that we seem to be not prepared to accept the financial consequences, but also a number of practical questions play a role as well. Firstly, resocialization of animals that have been housed alone for a long time proves to be difficult and often impossible. Moreover, for those animals for whom these improvements - whether farfetched or not - would be mostly necessary, ie the non-human primates infected with HIV or SIV, this even seems to be impossible due to the risks and dangers they inflict on others. In short, the only perspective for them is lifelong engagement under improper circumstances.

3.3.5 financial considerations

In principle, the reuse of animals will decrease the costs of animal experimentation. This is certainly true when reuse can take place soon after the previous experiment. If it takes a long time before they can be reused, however, or if retirement of the animals is intended, the money spent on housing can eventually be the largest part of the costs of the experiment. It seems reasonable that the scientist who does the experiment should be held responsible for these costs. At least, (s)he should be aware of them.

When the animals cannot be reused, but are still healthy after the experiment one has to decide what to do with them. Among the considerations should be a fair estimation of the costs of a retirement as part of the total costs of the intended experiment. Because costs for lifelong housing of animals under good housing conditions (*a conditio sine qua non*) may be very high, the implication is that retirement of animals-without-further-destination will no doubt be at the expense of other experiments. For those who do research there seems to be then no other way out than killing the animals, if they will not close off their (and society's) future research. It does not seem fair though to saddle them or the Animal Ethics Committees who have to judge their protocols with this dilemma. The choice between killing and keeping alive under proper housing conditions is not only a financial one. It is also ethical. It is between the (justified) interests of research and the (justified) interests of ex-laboratory animals. It is about what a society can afford and probably should do for these animals which we have purposely brought into our community and about what costs we are prepared to pay to keep them alive. In the end it is about society's priorities and values and therefore we must conclude that society as a whole should be involved intensively in this discussion.

3.3.6 emotions

An emotional relationship may develop in particular between companion animals (cats, dogs, etc.) or primates and those who are taking care of them. This relationship may be closer as the period of care-giving has been longer. A decision to kill an animal-without-further-destination, which has been taken care of for a long time, will certainly bring along a lot of resistance and argument. However, we have to realize that these emotions may be not completely free of self-interest. The one who is taking care of the animals may feel that his or her daily work is taken away. Or the scientist may,

when confronted with the high costs of lifelong husbandry, too easily decide in favour of killing. We have pointed earlier to all the mixed feelings and dubious motives that can play a role, and we should be aware of them and critical about them. Motivations either to kill or not to kill an animal need not always be in the best interest of the animal.

3.3.7 time between the completion of an experiment and the start of a new one

In general laboratory animal housing conditions are not adequate for a long time and certainly not for lifelong husbandry. When a proposal is made for an animal experiment in which animals may have to live for a long time under laboratory housing conditions, one should also take into account this discomfort for the animal and not only the harm and burden caused by the experiment itself. A fair assessment of the proposal is only possible when the total amount of harm is considered that an animal has to sustain. In fact, one should realize that the experiment to be reviewed is just a small part of the total life span of the animal. It is important that data for each animal be available concerning its future housing conditions as well as its history and what the animal has already endured. A moral judgement should be based on complete data about an animal's life as a whole, from its birth to its presumed death. Most of the time we only weigh the possible infliction of the animal's wellbeing in say a 3-month experiment, and forget that many of the animals still have a period of many years ahead, which are not at all free from discomfort. This, however, should not be left out of the equation.

When reuse of an animal is considered we should know how long each animal has to wait for its next (second, or third, etc.) experiment. One should be very clear about this. A period longer than some weeks, we think, is not acceptable. Some time is needed for monitoring the condition of the animal, to be sure that it is completely fit again to take part in the new experiment; but no more time than that, if we keep in mind that our laboratory housing conditions are too poor. Good management and explicit agreements are required from all parties involved. It should not occur that animals have to be killed (or suffer needlessly) because the next experiment is delayed or turns out to be not feasible. In practice, one should verify directly after an experiment the purpose for reuse and the period of time that has been agreed on. If this cannot be confirmed, the animal should be killed or retired, under acceptable conditions.

3.3.8 Adequacy of housing conditions

One may assume, based on earlier remarks, that we see it as the (first) researcher's responsibility to take care of good housing conditions. He or she also has to be held responsible for adequate outplacement for those animals that are eligible for it. Animal welfare officers or other people responsible for the wellbeing of laboratory animals may offer help and may have knowledge of the locations where reused animals can be placed. The Animal Ethics Committee should take it as their responsibility to consider whether the conditions of outplacement are in the interest of the animals. One of the conditions should be that animals would only be placed in and accepted to and from institutes that adhere to husbandry conditions that meet good standards. It would be an excellent task for the AAALAS, an organization that accredits animal care and use programs, to describe such standards and register institutes that meet these.

It would also be a good thing for data on demand and supply of surplus animals to be available and through a data system easily accessible. In a very early stage it then will be known whether it is possible and realistic to have a certain animal reused. Today, all too often we 'push' an animal - coming out an experiment - into a new experiment, or begin to think of a new experiment, just because the animal 'is there'. We may be able to prevent this in the future by working more methodically. When early proposals for new experiments are made the Animal Ethics Committee and the animal welfare officer may persuade the researchers to have them placed on a list, either as a demander or a supplier of reused animals.

3.3.9 way of humane killing

Recently two articles of an EEC working party on euthanasia have been published in *Laboratory Animals*.¹² Methods described in this report can be considered as the 'state of the art'. They concern all the technicalities on the methods of killing. If we accept these as given, we think that the discussion on the killing of animals-without-further-destination can be directed to the

¹² B. Close, K. Banister, V. Baumans et al, 'Recommendations for euthanasia. Report of a working party. Part 1 *Laboratory Animals*, 30, (1996), pp.293-316 and B. Close, K. Banister, V. Baumans et al. 'Recommendations for euthanasia. Report of a working party. Part II *Laboratory Animals*, 31 (1997), pp.1-32.

question of under what circumstances killing is permissible or even morally obliged.

3.3.10 review by the Animal Ethics Committee

In our view the Animal Ethics Committee should consider very carefully those experiments in which the researcher indicates that the animals will survive the experiment and cannot be reused. If there is consensus that the great apes, such as chimpanzees are not to be used in terminal experiments or in experiments in which there is a risk that they may die, one may wonder if these animals can be used for animal experiments at all. In some countries such as the UK, there is an agreement that chimpanzees and the other anthropoids may not be used any more. However, such an agreement may not have much effect when researchers are still allowed to do their experiments elsewhere. On a global scale researchers as well as governments should therefore be asked to adhere to the statements laid down in the Great Ape Project.¹³

An Animal Ethics Committee still has their own responsibility and may decide that such experiments should not be carried out, based on the poor perspectives for the animal. But it would be of great importance when governments would be prepared to support the view that certain types of animals should not be kept any more for long under present laboratory and housing conditions. Either the conditions should be improved substantially or these experiments should end.

4. Conclusions and recommendations

When an animal survives an experiment, the researcher should be asked in advance what options remain for it. If the animal can be reused, we should define the conditions under which the next experiment has to be carried out. If the animal cannot be reused, we should explore the future perspectives for the animal in terms of its possible living conditions. These options and their consequences have to be discussed by the Animal Ethics Committee as an inextricable part of the moral assessment of the proposed experiment, and prior to approval. Optional destinations include, of course, a zoo or children's farm, etc. When no adequate housing conditions can be

¹³ P. Cavalieri and P. Singer, *The Great Ape Project. Equality beyond humanity* (Fourth Estate, London, 1993).

made available animals-without-further-destination should be killed humanely.

We recommend that a data system be created for dogs, cats, and non-human primates, and possibly some other animals as well, which should be kept in research facilities, accredited by AAALAC (or another organization evaluating quality programs). These data on demands and supplies should facilitate experiments that are reviewed by an Animal Ethics Committee and are both scientifically and ethically of high quality. (We are willing to set up such a data system!)¹⁴

Biographies

Dr. Will Kort is an animal welfare officer at the Erasmus University in Rotterdam, The Netherlands. He supervises the welfare of the experimental animals and does research on animal well-being in particular on the notion of 'refinement' of experiments. Dr. Kort has also carried out animal research for more than 20 years in the areas of microsurgery, transplantation and cancer. Most of his studies involved the use of rats but he has used other animals including non-human primates. Dr. Kort completed his Ph.D. in Biology in 1987. The title of his thesis was 'Stress, diet and cancer' (Rotterdam, 1987)

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¹⁴ This is a revised version of an article which appeared in Dutch in *Biotechniek*, 37, (1998), pp.18-24.

Review Essay

Colin Allen and Marc Bekoff, Species of Mind: The Philosophy and Biology of Cognitive Ethology, xxi + 209pp., MIT Press, Cambridge, Mass 1997.

In *Species of Mind*, Colin Allen, a philosopher, and Marc Bekoff, an ethologist, defend and sketch out suggestions for a 'cognitive ethology', a discipline bringing the fruits of the cognitive revolution in psychology to the field of ethology. When one reads in the preface their description of this projected discipline as involving a 'comparative, evolutionary, and ecological study of animal thought processes, beliefs, rationality, information processing, and consciousness' (p. ix), one gets an immediate sense of the ambitiousness of the project as well as the range of opposing views with which it will have to engage.

Skepticism at the idea that animals think, reason and are conscious seems to have been the 'official' view throughout the duration of western culture. Aristotle had thought of reasoning as the capacity to 'perceive universals', and had understood this as a distinctly human capacity. After this, as many have pointed out, the Christian account of creation seemed to drive human and non-human forms of existence even further apart. One may think that the more recent scientific displacement of humans from the centre of creation may have aided the idea of the continuity of mindedness across the species, but in this century science had tended to cut both ways in relation to this question.

Early in the century the behaviourist revolution tended to level the difference between human and non-human psychology by eliminating the mind as a bearer 'thought processes', 'beliefs', and 'consciousness' for all. In light of this, the discovery of animal mentality has had to wait upon the rediscovery of the human mind, a process that many see as starting with the 'cognitive revolution' which has marked the last third of the century. Behaviourism had always had its critics for whom its apparent dismissal of human mindedness was counter-intuitive, but it wasn't its counterintuitiveness that led to its eclipse, but rather its inability to adequately account for various aspects of human behaviour. 'Mentalism' came back in the form of the postulation of mental processes involving 'representations' posited to explain forms of behaviour that had escaped

the very limited explanatory repertoire of behaviourism. With the re-establishment of human mentality, a general adherence to Darwinism would surely suggest that this explanatory approach could then be extended to the behaviour of other than human animals. Here, however, it will be recalled that one of the first blows struck against the behaviourist orthodoxy in the late 1950s was Chomsky's critique of the ability of Skinnerian behaviourism to account for a type of behaviour that, in Chomsky's view, is uniquely human – linguistic behaviour. Since then, in various disciplines including philosophy, the thesis that 'higher' cognitive functions depend upon a uniquely human linguistic competence, the thesis that 'thought needs talk', has emerged as a popular basis for the continued skepticism towards the idea of animal minds.

The sketch above of course over-simplifies what can often seem to be a chaotic jumble of views characterising late 20th century views of the mind, and the authors' presentation of a clear and cogent case for cognitive ethology against this chaotic background is in general one of the real achievements of this book. As they point out, at its beginning ethology was already 'cognitive' with the work of Darwin and his follower George Romanes. As such, however, it was limited to a somewhat anecdotal and uncritical ascription of mentality to animals, and came to be regarded as unscientific with the onset of behaviourism in this century. With the later decline of behaviourism, the issue of animal mentality returned to the scene most forcefully, perhaps, with the work of Donald Griffin. But while sympathetic to the broad goals of Griffin's work, Allen and Bekoff agree with his critics who argue that his attribution to non-human animals of intentionality and consciousness remains uncritical and anecdotal. Allen and Bekoff see their goal as that of using advances in recent philosophy of mind and cognitive science to suggest ways in which mentalistic approaches to animal behaviour might be tested, and this results in an approach that is admirably open and non-dogmatic. Anyone interested in the issue of animal mindedness will, I'm sure, find the book interesting and enlightening. Moreover, by bringing conceptual and empirical issues together in making their case, the authors fruitfully open up the issues of human consciousness and intentionality to new ways of thinking as well, and so the relevance of the book goes beyond the brief the authors have set for themselves.

Thematically, *Species of Mind* falls roughly into two halves. From chapters 1 to 5 Allen and Bekoff cover in a clear way the relevant background material

needed for understanding exactly what will be at issue when proposals for a cognitive ethology are later defended. Such coverage is by necessity synoptic, but these early chapters provide helpful overviews of an array of complexly intertwining disciplines in a way that makes them accessible for the general reader. Successively, after sketching out their interdisciplinary approach, they present a brief history of classical and cognitive ethology, discuss the methodological problems inherent in describing behaviour, sketch the main forms of objection to the scientificity of a cognitive ethology, survey the disputes over the role of 'folk psychological' explanations (that is, explanations of behaviour invoking beliefs and desires) in scientific psychology, and problems facing their extension to the realm of non-human behaviour.

This last issue, dealt with in chapter 5, is effectively the turning point of the book, and in chapters 6 and 7 the authors discuss two forms of animal behaviour which they see as sufficiently complex to require a cognitive approach, specifically an approach that appeals to intentional contents in its explanations. These behaviours are those of social play on the one hand, and antipredatory behaviour on the other. As mentioned, the focus here is that of a purported animal intentionality, and in particular, on whether the explanation of these forms of behaviour requires attributing to animals 'higher-order' forms of intentionality, for example, an animal's having beliefs about the beliefs of other animals. In the following chapter they shift to the issue of consciousness, arguing that a functional approach to consciousness in the context of the strategy of inference to the best explanation may settle questions about consciousness which are often not thought to be empirically tractable. In the final chapter, besides pulling the various threads together, the authors illustrate their own approach by resuming a dispute with critics who have challenged the possibility of using intentionalistic descriptions of animal behaviour in ethological contexts.

While such debates about animal mentality are never far from hotly contested ethical and political issues concerning the treatment of animals, here, such disputes remain largely in the background, and perhaps congruent with this is the fact that the authors have focused more upon the issue of animal intentionality rather than that of consciousness. (This latter tends to come to the fore in ethical debates because of the question as to whether animals feel pain.) This seems to me to be a wise decision. Although the authors have interesting things to say regarding the concept

of consciousness, one is left with the impression that the issue of intentionality is the more tractable from this perspective and that the clarification of consciousness is more likely to follow progress made in the understanding of intentionality than vice-versa.

As I have mentioned, it would seem that the front on which the authors are going to have to defend their thesis most strongly is that of the whether or not thought requires talk. (Among recent similar books which are skeptical of animal mentality on this basis, see, for example, Euan Macphail's *The Evolution of Consciousness*,¹ Stephen Budiansky's *If a Lion Could Talk*.² In philosophy, this idea has been advocated by thinkers as different as (the later) Ludwig Wittgenstein, Donald Davidson, and Martin Heidegger.) My feeling was that this was not perhaps dealt with as directly as it may have been. (The authors acknowledge on page 54, that, in this work at least, they do not intend to become embroiled in disputes 'about what constitutes a language', but one wonders if such disputes can really be avoided). Perhaps these issues are most directly addressed in chapter 5 where the authors engage with one form of this objection when they address the skepticism of Dennett and Stich over the idea of attribution of concepts to animals. Here the authors' frustration with philosophers' tendency to believe such issues can be settled in isolation from actual empirical research is apparent, both Stich and Dennett restricting their empirical base to the behaviour of that much studied canid, 'Fido'. As Allen and Bekoff point out, the Dennett-Stich argument runs along the following sorts of lines. We commonly say things like 'Fido wants a piece of steak', or 'Fido was trying to catch the squirrel', but are we really justified in attributing concepts like 'steak' or 'squirrel' to animals? Isn't it the case that to say that Fido has the concept 'steak' under which he can classify that thing in his dinner dish misleadingly suggests that he understands the contents of his dish as being part of a butchered animal? After all, that is part of what is contained in the concept 'steak'. But this move, the authors respond, stacks the deck against the case for animal mentality by shifting from the issue of whether Fido has a concept of that which is in his dish to whether he has our, English, concept.

But this response does not seem to meet the criticism at the depth at which it is intended to operate. What Dennett, Stich and others mean by 'concept' is something that by its very nature will stand in constitutive relations to

¹ Oxford, Oxford University Press, 1998.

² New York, The Free Press, 1998.

other concepts. In short, to attribute a concept to an organism is to attribute to it the sort of inferential activity which conceptual structures allow, concepts being, as it were, those very hinges upon which inferences turn. Whatever analogue of the English concept 'steak' (call it 'steak-F') that one attributes to Fido, it will stand in some connections with other concepts just in virtue of its being a concept. And this means that attributing to Fido the belief that x is 'steak-F' means that one is committed to attributing a pile of other beliefs to Fido that he knows by inference. It is the idea that only representational media as rich and as articulated as those of human languages are capable of supporting that kind of inferential activity that is the basic idea involved in the 'thought-needs-talk' thesis (at least many versions of it – Davidson's, for example).

It is around this basis for skepticism that, it seems to me, the authors' replies pull in two different directions, one helpful, one less so. In places they seem keen to support the idea that the conceptualized content attributable to animals should be thought of as analogous to that the type of propositional content commonly attributed to humans. Thus they invoke a Duhem-Quine style conceptual holism in criticism of Griffin's way of attributing beliefs to animals one by one on the basis of individual behaviours (pp. 50 and 172), and even seem to suggest some type of translation of canid concepts into English with the idea that 'the differentiations of dictionary English' might be manipulated 'so as to delineate the contents of the dog's brain' (p. 81). These are points at which they are most likely to meet rejoinders based on the 'thought-needs-talk' idea. On the other hand they pursue a direction of thought using Ruth Garrett Millikan's suggestive functionalist analyses of concepts based in the notion of 'intentional icon'. This latter direction linking mental states and communicative systems might offer a less contentious way of pursuing questions of animal 'intentionality' and its relation to the capacities we attribute to humans when we speak in that way. With the usual philosophical approaches to human intentionality that tend to trade exclusively in propositional contents, the question of whether or not animals have intentionality seems an all or nothing affair. In contrast, Millikan's focus on the 'iconic' features of human language brings out features which, along with Peircean 'indices, human languages share with communicative systems used by other species, even if those systems do not contain genuine Peircean 'symbols'. Even if it is the case that human communicative and intentional systems have features not found elsewhere, this should not obscure the extent to which such systems might be

understood as continuous with those of the non-human animal world. The cognitive ethology advocated by Allen and Bekoff promises a way of understanding the sense in which non-human animals may be said to be minded, but it also promises a less anthropocentric understanding of the nature of human mindedness itself.

Paul Redding

Book Reviews

Barbara Noske, Beyond Boundaries: Humans and Animals, 253pp, Black Rose Books, Montreal, New York, London, 1997.

It is good to see the reissue/revised edition of this important book, which should be more widely known than it is. As the most detailed and systematic critique available of the pervasive assumptions of human-centeredness that affect the treatment of animals in science and popular scientific culture, *Beyond Boundaries* should be on the reading list of every course that deals with animal issues or the human-animal interface. *Beyond Boundaries* is a small book that is accessible and not too intimidating for students, but still manages to cover a remarkable amount of ground, skilfully blending philosophy and empirical studies. New postscripts update the readings and sketch an unerringly radical course that navigates astutely between various hazards, for example the issue of whether animals should be of concern as individuals or as species. Some influential ecofeminist critiques of the treatment of animals focus heavily on hunting and masculinity, but Nose's book, although still identifying as ecofeminist, strikes a much better balance, naming capitalism as well as patriarchy as the problem.

The book opens with a brilliant critique of animal commodification of the contemporary 'animal industrial complex' which brings out significant parallels between rationalising scientific management of human workers and that of animal workers, the latter of course being far more ruthless. An impressively comprehensive historical chapter on the devaluation of nature and animals in the west then sets the scene for Noske's discussion of human-animal continuity and locates the cultural sources of the pervasive mechanism that continues to frame most scientific approaches to the continuity question. This chapter includes very useful critiques of both Marx and Darwin, as major figures who were obliged to come to terms with the interrelatedness of humanity and animality, which argue that neither of them were able to overcome the subject-object approach. The next chapter builds on this to develop a major critique of sociobiology and other schools of animal investigation that neglect the individuality, subjectivity and autonomy of animals and reduce the types of explanations sought to the deterministic and mechanistic form that is usually taken to represent the 'biological'. In this and the following chapter on discontinuity

Noske exposes in detail common fallacies in the treatment of animal communication. The concluding chapter presents a vision for a science of animals that is much more like anthropology, aiming to recognise the subjectivity of animals and meet them on their own ground instead of expecting them to perform according to human standards, escaping the 'dilemma...that there seems to be no option to imposing on animals either object status or human subject status' through recognition of positive otherness. *Beyond Boundaries* is essential for anyone wanting in on this project and its sophisticated philosophical insights are crucial for developing more self-critical knowledge frameworks essential for doing any good work on humans, animals or the human-animal boundary.

Val Plumwood

Gary L. Francione, *Rain without Thunder: The Ideology of the Animal Rights Movement*, xii + 269pp, Temple University Press, Philadelphia, 1996.

Francione mounts a convincing argument that much of the ideology or theory behind the contemporary movements in support of animals is confused and that there are weaknesses in the animal welfare approaches which will always put a lid on change. It took me a while to get into Francione's way of thinking as the key argument is peppered with much personal accusation which is distracting, especially if not all the figures are known to the reader. However this is not a side issue for Francione as these are the figures who are producing the muddled thinking.

About a third of the way into *Rain without Thunder* I came to accept his argument against his opponents but I am not totally convinced of all aspects of his positive view. I make these personal references because I believe the book is important but the tone may put some readers off especially in the beginning. Persist.

Who are Francione's opponents? Those who support animal welfare, even those who support animal welfare as a means of eventually bringing about animal rights. Animal welfarists take their main task to be the alleviation of pain and suffering. Francione argues firstly that they are not very successful in this aim. Most of the national organisations looking out for the interests

of animals, at least in the US, are dominated he claims by a welfarist approach. Animal welfare is encoded in legislation and regulation. Yet animals suffer more now than one hundred years ago. The rearing of animals for food has moved more into intensive farming practices which generate greater suffering than previous practices. Animal experimentation is getting worse with genetic engineering and cross-species transplants presenting 'new and arguably worse threats to animals in terms of pain and suffering' (p.115). He states that there is no evidence that animal experiments in general are decreasing or that there has been a significant drop in the number of painful experiments without analgesics or anaesthesia. Hunting continues. Furs are still worn and so on.

Francione does not discuss the European experience which reveals greater gains, especially on hunting, on battery chickens and on cosmetic experimentation using animals. It would help in evaluating Francione's argument to ascertain whether the welfarist approach is as dominant in Europe as the US. I suspect not.³

Secondly Francione argues that it is simply inconsistent to claim to support a long term goal of animal rights by pursuing an animal welfare agenda in the short term. This is because an animal rights view rejects the treatment of animals as means to human ends, but a welfare position accepts that they can be means to human ends, so long as the ends are 'significant' and the treatment is 'humane'. Francione acknowledges that different interpretations may be put on these two terms, so that on the one hand those who exploit animals might be said to adopt an animal welfare position or on the other hand, there are those who make serious attempts to limit what counts as 'significant'. Here he cites Robert Garner's book, *Animals, Politics and Morality* as presenting the most progressive analysis. Even Garner's position is unsatisfactory for Francione however as it does not oppose all uses of animals as means for human ends.

It is the rejection of this use of animals or put another way, the rejection of the property status of animals which Francione sees as the key element of the animal rights approach and the only way to improve the lot of animals. While animals are regarded as the property of humans a conflict between them 'is identical to that between a person and her shoe' (p.127) He draws the analogy between animals and slaves and notes that concern about the

³ See Nichola Taylor, 'Wither rights? Animal rights and the rise of new welfarism?' *Animal Issues*, 3,1, (1999), pp. 27-41.

welfare of slaves was quite a different matter from attempts to abolish the practice. This does not mean that it was inappropriate for people to show compassion for slaves, or for instance to give them water, but that welfarist campaigns on the part of slaves were unlikely to be important in ending the practice. This contrast between working for welfare and working for the end of exploitation has surfaced recently in Australia with the concerns about collusion in an unjust practice which trouble members of animal ethics committees who are there as animal guardians.

Francione is quite right to point out that Singer has confused the debates by defending a philosophy which does not call into question the property status of animals and using rights talk as a political slogan. (I would not go so far as to agree however that Singer is caught in a welfare position.⁴)

Francione sets up a contrast between animal welfare and animal rights as an exclusive one. This is incorrect. There are positions which could be characterized by neither perspective⁵ but putting that to one side, what merits are there in his positive view? He claims that an animal rights philosophy is not utopian. There is little possibility of achieving its aims quickly but there are various incremental changes in line with the rights philosophy which are realizable eg. refusing in one's own practices to be involved in the exploitation of animals as much as is possible, involvement in education, protests, demonstrations, boycotts and campaigns, usually outside the legislative and regulative processes. The latter rider is added as changes within these processes would most likely be simply reforms in institutional exploitation. Such reforms would carry the assumption that it is acceptable to violate animal rights in the short term which he of course rejects. Short term aims (ie. aims short of the abolition of animal exploitation) could involve various prohibitions, eg. making the use of animals in drug addiction experiments illegal, the Great Ape Project (removal of all chimpanzees, orangutans and gorillas from all exploitation), an absolute prohibition of animal use for product testing or in drug addiction studies, the elimination of battery cages, and the prohibition on dehorning of animals.

⁴ See An Interview with Peter Singer, *Animal Issues*, 1,1, (1997), pp.37-44.

⁵ See for instance Barbara Noske, *Beyond Boundaries: Humans and Animals* (Black Rose Books, Montreal, 1997) reviewed above.

Francione relies on Tom Regan's theorizing⁶ to give substance to his rights philosophy. This is where I start to part company. The argument against the limitations of a welfarist approach is well put and the plea to drop the property status of animals is well made and can be sustained by appealing to the intrinsic value of animals *without* adopting a rights position. One doesn't need to take that extra step.

The foundation for according intrinsic value to animals is not sufficiently well worked out in Regan's book. Francione skips over this problem by simply referring to Regan's notion of 'subject-of-a-life' without going into further details. This is the concept which Regan uses to claim that animals have intrinsic value and to be the subject-of-a-life is to be an individual who has beliefs and desires; perception, memory, and a sense of the future with feelings of pleasure and pain; the ability to initiate action in pursuit of one's desires and goals and an individual welfare in the sense that one's experiential life fares well or ill for one.⁷ Does this apply to a chicken? Probably not, yet Francione is certainly putting an argument for stopping the exploitation of chickens if not all animals. Also this description accords value to aspects of life which humans value. Perhaps or even most likely, animals value life in a different way. Regan's criteria have a rationalistic, anthropocentric ring.

Regan argues for animal rights on the basis of their inherent value. However the rights talk comes across as somewhat superfluous. He doesn't introduce the notion until near the end of his theorizing and drops it in his summing up. There are notorious problems with notions of rights such as how to deal with conflict between different rights and if there is no way of enforcing them appeals to rights can be empty. Francione interweaves his discussion of rights more into his theorizing but I am not convinced that a lot would be lost if he dropped it.

Rain without Thunder is a very rigorously argued clarification of some key points in contemporary theorizing about animals. The rain could be tears (compassion), the thunder, significant change (justice).

Denise Russell

⁶ Tom Regan, *The Case for Animal Rights*, (University of California Press, Berkeley, 1983)

⁷ *Ibid.*, section 7.5.

Book Notes

Bekoff, Marc , ed. with Meaney, Carron, A., *Encyclopedia of Animal Rights and Animal Welfare*, xxi + 446 pp., **Greenwood Press, Westport, Connecticut, 1998.**

The 400 or so pages which constitute the Encyclopedia consist of alphabetical entries of approximately two pages each containing a general description of a topic eg. 'student objection to dissection', or author and a selected bibliography. The topics summarize contemporary debates. The authors are mainly the historical fathers and mothers of contemporary debates.

The Encyclopedia also contains a fairly extensive list of organizations that provide humane education materials directly pertaining to animals and a ten page list of some key writers on animal issues with their affiliations.

There is also a chronology of some historical events (mainly in the UK and US) related to the use of animals and to animal rights and animal welfare. The chronology runs from 1822 to 1995.

This is an important reference book and will be particularly useful for people new to the field now or in the future.

Kean, Hilda., *Animal Rights: Political and Social Change in Britain since 1800*, 272pp., **Reaktion Books Ltd., London, 1998.**

This book traces the historical moves against cruelty to animals in England in the last 200 years. Kean is not concerned with the argument about whether animals have rights or not, which might mean the title is somewhat misleading. Rather she looks at particular issues, such as vivisection in the nineteenth century and the actions that people took to change this practice. In looking at specific examples she attempts to say something about how animals have been integrated in different ways into British cultural life. This is a very well researched book with a wealth of historical detail and a few fascinating historical illustrations of animals.

Guither, Harold D., *Animal Rights: History and Scope of a Radical Social Movement*, xiv +272 pp., **Southern Illinois University Press, Carbondale, 1998.**

Animal Rights shares the title of the previous book but is very different. It is a sociological account of the animal rights and animal welfare movements and Guither also discusses the role of certain key figures. The movements are mainly US based. An outline is provided of some contemporary debates, eg. over animals in research, testing and teaching, intensive animal production for food, hunting, vegetarianism. One chapter deals with the organizations critical of the animal rights movement such as the Farm Animal Welfare Coalition, National Pork Producers Council, and Putting People First. The issue of how animals are protected in US law is also examined.

Walters, Kerry S and Portmess, Lisa, eds., *Ethical Vegetarianism: From Pythagoras to Peter Singer*, xi + 287pp., **State University of New York Press, Albany, 1999.**

A wonderful collection of articles and extracts from ancient Greece to the present containing arguments for 'abstinence from animal food' or against 'carnivorous callousness'. The pieces are neatly organized into four sections: antiquity, the eighteenth, nineteenth and twentieth centuries. There are some twentieth century authors who may surprise and from antiquity it is probably not commonly known that Ovid said

...Earth is generous
with her provision, and her sustenance
Is very kind; she offers, for your tables,
Food that requires no bloodshed and no slaughter.

when writing of the teachings of Pythagoras who lived in the 6th century BC.

conference announcement

Representing Animals at the End of the Century

a conference at the

Center for Twentieth Century Studies

University of Wisconsin-Milwaukee

April 13-15, 2000

By tracing how animals have been represented in different contexts, in different practices, and by different disciplines over the course of the last hundred years, this conference will explore the connections between our understandings of animals and the historical and cultural conditions in which those understandings have been formed. The conference will move from discussions of the material presence of animals -- studies, for example, of the changing place of animals in urban spaces and modern sensibilities -- to explorations of how contemporary media culture is shaping our fundamental cultural expectations of animals, of ourselves, and of our environments.

Selected papers from the conference will be included in a book planned for publication in the Center series, *Theories of Contemporary Culture* with Indiana University Press.

Special Guest Speaker: Jane Goodall

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For further information contact: Nigel Rothfels and Andrew Isenberg,
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