

Holy cows and dirty dogs: The influence of culture and religion on animal welfare in India

Heliga kor och orena hundar: Hur djurvälfärden i Indien påverkas av kulturella och religiösa faktorer

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Abstract

India is home to every sixth person in the world, some 30 million dogs and a quarter of the total world cattle population. A vast majority of Indians are Hindus, and even though the Hindu religion proclaims love, nurturing and worshipping of animals, sometimes the same religion constitutes an obstacle for animal welfare in practice. This paper investigates the significance of historic and religious symbols to the way animals are perceived in modern Indian society, as well as the different social factors which underlie attitudes to animals. The concept of karma, as well as that of good versus bad deaths, is probably the foundation of the general Hindu reluctance to euthanasia in any form. Although in theory all species are generally regarded as equal in Hinduism, in practice there seems to be a differentiation; for cultural, religious, medical and financial reasons. As will be exemplified with the Indian sacred cow, symbols may shape the law, but their meanings may also change depending on the legal and cultural context in which they are discussed. Some ways forward are offered to improve animal welfare in India, for the sake of the animals themselves, but also for the medical health and social status of India's people, and for the global environment.

Sammanfattning

Nästan var sjätte människa i världen bor i Indien, tillsammans med runt 30 miljoner hundar och en fjärdedel av världens boskapspopulation. En stor majoritet av den indiska befolkningen är hinduer och hinduismen förespråkar kärlek, omvårdnad och dyrkan av djur. Ändå utgör religionen ibland ett hinder för djurvälfärd i praktiken. Detta arbete undersöker vikten av historiska och religiösa symboler för hur djur uppfattas i dagens Indien, och ser över de sociala faktorer som ligger till grund för attityderna till djur. Karmakonceptet och teorierna om bra och dåliga sätt att dö ligger troligtvis till grund för den allmänna motsättningen till eutanasi inom hinduismen. Även om alla arter anses likvärdiga inom hinduismen, tycks det finnas en praktisk åtskillnad; av kulturella, religiösa, medicinska och ekonomiska skäl. Som kommer att visas med den indiska heliga kon som exempel kan symboler forma lagen men deras betydelser kan även förändras beroende på i vilka juridiska och kulturella sammanhang de diskuteras. Arbetet erbjuder några förslag till lösningar för att förbättra den indiska djurvälfärden, det indiska folkets hälsa och sociala status samt den globala miljön.

Key terms

India, animal welfare, attitudes, religion, culture, cows, dogs

Introduction

According to official United Nations statistics, nearly every sixth person in the world is Indian, and India is the second most populated country in the world, with more than 1.2 billion inhabitants (Index Mundi, 2012). India is also home to some 30 million dogs, out of which about 20 million are stray dogs – the largest stray dog population in the world (eg. Traub *et al.*, 2005) and 200 million cattle – the world's largest cattle population (Kang, 2003) as well as a quarter of the total world cattle population (Jacobson, 1999). This means that the way in which the people of India value and treat animals is of substantial importance.

Estimates gather that roughly 80% of the Indian population belongs to the Hindu religion (2001 Census of India; in Stepan, 2011; Agoramoorthy & Hsu, 2012). The Hindu religion is fairly unique as a religion in that it has taken a strong stand against the violence of animal sacrifice (van der Veer, 1996), and many Hindus are vegetarians for religious reasons (Agoramoorthy & Hsu, 2012). However, even a religion perceived as animal-friendly may impose negative effects on animal welfare.

Research has shown relationships between support for animal welfare issues and such different factors as age, gender, socioeconomic status, culture, religion, personal relationships, economic and ecologic value. Since animal welfare and the attitude to animals is such an extensive field of research, and India is such a large country with many actively religious inhabitants (Stepan, 2011), this paper will focus mainly on the Hindu religion, with the cow and the dog as examples. It is hypothesized that the cow, owing to its historical sanctity and special status in the Indian legislation, is viewed by the public as more elevated than other mammals, whereas the dog, a medical and economic liability, is perceived as having a lower status than would be expected in other countries. This makes these two species particularly interesting examples.

Having myself worked on numerous occasions as a volunteer at animal shelters in India, some of the effects that religion might have on practical animal welfare have become evident to me. The belief in reincarnation and karma might for instance make a Hindu reluctant to euthanize an old, sick or injured animal. It was also noted through personal observations that the 'sacred cow' did not always receive the treatment most Westerners might attribute to Hindu practices. This made me curious about the underlying causes of this deviation between the perceived norm and common practices, whether it was more than the fear of rabies that was reflected in the hostility towards dogs, and why so many shelter workers seemed uninterested in animal welfare.

Although there is little chance of reaching the entire Indian public, hopefully this paper will provide information to some policy-makers and offer part of the way forward when dealing with animal welfare issues in India.

Aim, hypotheses and questions

The aim of this paper is to investigate the different possible reasons why an animal is attributed with a certain value, and how this is relevant in the case of India, while offering potential solutions to any identified animal welfare problems.

From the studied literature, a logical hypothesis is that the status of the cow in society depends to a great extent on religious, traditional and economic factors, whereas the status of the dog depends largely on medical and economic factors.

Focus of this paper will be on answering the following questions:

- Which are the underlying cultural, religious, economic and medical factors contributing to how cows and dogs are perceived by the Indian public?
- Why is improving animal welfare in India important, from a national as well as a global perspective?
- What could the Indian government and other stake-holders do to raise animal
 welfare awareness and improve the status of the cow, the stray dog, and other
 animals?

Material and method

Multiple internet searches were performed using the Google Scholar search engine. The search words used were "animal welfare India", "religion in India", "India religion census 2012", "united nations statistics", "total world population", "religion attitude animals", "culture attitude animals", "the dog in Hinduism", "the cow in Hinduism", and "stray dogs India".

The search for "animal welfare India" generated 12 relevant articles, and one book. A new Google Scholar search using the search words "religion attitude animals" generated seven articles of interest, and five of these were used. A search using the search words "culture attitude animals" generated two articles that were used for this paper. The search for "the dog in Hinduism" generated six articles that were used for this paper. The search for "the cow in Hinduism" generated 13 articles of interest, which were used for this paper. The last search, for "stray dogs India", produced eight relevant articles. After this, there was no apparent need for further searches due to the high number of retrieved relevant articles.

In addition to the articles, two books were used; one on religion and ecology in India and southeast Asia (Gosling, 2001), and the Bhagavad-Gità (Prabhupada, 1985).

Results

Animals in the history of mankind

A factor which could influence the characteristics and value attributed to an animal is the profit that man can make from that animal. Historically, the nomads' animals were imperative to the people's survival, and this has developed in modern times to a more economical factor. From the other angle, animals which have been a nuisance in the past may carry negative associations with them into present day times (Kellert, 1985).

Religious symbols

Beginning with the earliest carvings on cave walls and tools, animals have accompanied the human evolution and some species have been of particular spiritual and religious importance. The way in which an animal was represented (or misrepresented) in ancient religious scriptures may affect the way some people view these animals today (Serpell, 2004).

Vedic scriptures

The Hindu religion has traditionally promoted the belief that its gods and goddesses occasionally incarnate animal forms, and kings and emperors of the past used various animal species in their emblems to show those animals their respect (Agoramoorthy & Hsu, 2012). Humped cattle are depicted on rock and cave walls in India from the era of the great Indus valley civilization, 2600 to 1900 B.C., and there is some evidence that the cow was a symbolic motif even before the Aryans crossed the Hindu Kush (Korom, 2000; Agoramoorthy & Hsu, 2012). Cattle are depicted more commonly in the Vedic scriptures than any other members of the animal kingdom (Korom, 2000), and legends state that the god Brahma gave life to cows and priests at the same time (Agoramoorthy & Hsu, 2012). Even though cattle were not inviolable or divine at the time, it is clear that the cow had more significance than simply economic (Korom, 2000). In the Atharvaveda, the cow is referred to as the "all-producing and all-containing universe" (Korom, 2000). In the Vedic creation story, the cow emerges from an ocean of milk (Agoramoorthy & Hsu, 2012) and the Sanskrit word for cow, go, is a synonym to earth, heaven, rays of light, sun, water, and heavenly quarters (Korom, 2000). In the most ancient Hindu scriptures commonly known as the Rig-Veda, cows give birth to the sun (Korom, 2000). The cow is a microcosm of the universe; her legs symbolize the four Vedas (Agoramoorthy & Hsu, 2012) and are implanted at the four corners of the universe, pointing in the four directions (Korom, 2000). Her teats symbolize righteousness, material wealth, desire and salvation (Agoramoorthy & Hsu, 2012). The bull symbolizes fertility in the Vedic scriptures (Gosling, 2001).

In the Rig-Veda, the dog is described as a companion, ally and protector, and a gift of dogs is highly appreciated (Washburn Hopkins, 1894). We also find people in the Rig-Veda who are named after dogs or parts of a dog's body (Washburn Hopkins, 1894), implying a positive attitude towards the dog. The two dogs belonging to the first mortal, Yama, have similarities with the dogs of hell in Ancient Greek myths (Bloomfield, 1904). In the Atharvaveda, Yama is described as the God of Death and as always attended by two dogs, "the emissaries of death" (Menezes, 2008). In the Mahabharata, lord Krishna's best friend Arjuna refuses to be reborn unless his companion dog can go with him (Gosling, 2001).

Some animals are depicted in similar manners irrespective of the geography, date and culture in question, which implies a universal symbolism for some species (Bloomfield, 1904). In the Rig-Veda, there is mention of two dogs guarding the road to heaven, of two dogs in heaven, or even "two heavenly dogs", and the dog can also be used to scare evil spirits out of the bodies of deceased people (Bloomfield, 1904). The two dogs in the Rig-Veda are also sometimes compared to night and day or referred to as the sun dog and the moon dog, and these mystical and opposed characteristics can be seen in other ancient scriptures outside of the Indo-European family as well (Bloomfield, 1904).

Indian society

Caste system

There are local variations of the application of the caste system, but the general framework is the same throughout India (Stevenson, 1953). Highest are the Brahmins or priests, followed by Kshatriyas or warriors, then come the Vaishyas or traders/cultivators, and lowest are the Shudras (Leavitt, 2006). The untouchables are not even in the caste system but below it (Leavitt, 2006). Stevenson (1953) explains that a person is born into a certain caste and can generally not rise in ritual status. This is especially true for the lower castes. However, there are studies to indicate that lower-caste communities do mimic the practices of the higher castes in an attempt to increase their caste status (Chigateri, 2008). In accordance with Gandhi's views on vegetarianism, one could equate Brahmins with vegetarians, non-Brahmins with meat-eaters (but not beef-eaters) and the outcastes/untouchables with beef-eaters (Chigateri, 2008). In the Bhagavad-Gità, the outcastes are even referred to as dog-eaters (Prabhupada, 1985). Pollution always overcomes purity, so contact with someone of a lower caste, or with an impure animal, diminishes the status of the higher caste individual. The most dangerous sources of pollution are saliva, sweat or body grease (Stevenson, 1953). For this reason, a human may avoid contact with certain animals, in the same manner that a person of high caste avoids contact with an individual of a lower caste (Leavitt, 2006).

Religion

India has among the highest levels of religious practices and beliefs in the world; 93% of the Indian population claims to believe in God, and 87% describe themselves as very or somewhat religious (2007 State of the Nation Survey; in Stepan, 2011).

There is no common institutional framework for Hinduism (Firth, 2005) and many Hindu scriptures rely on interpretations and oral traditions (Hunter, 2007). However, van der Veer (1996) and Hunter (2007) name the Bhagavad-Gità as the fundamental text of Hinduism and the universal scripture of the Hindu religion. Krishna, the main god and character of the Bhagavad-Gità, is often referred to as "the cowherd" (Kang, 2003), elevating the status of the cow. In the scripture Gità-Mahatmya, the Bhagavad-Gità itself is compared to a cow, that is milked by the lord Krishna, and wise men and pure devotees are said to drink the nectar-like milk of the Bhagavad-Gità (Gità-Mahatmya; in Prabhupada, 1985). Mahatma Gandhi said that all creation, both sentient and non-sentient, is a manifestation of the divine and that man is only a part of this divine creation (Bajaj & Srinivas, 2004). In this sense, one could say Gandhi rejected anthropocentrism (Gosling, 2001). It was also Gandhi who reaffirmed the concept of *ahimsa* or non-violence, including that one should refrain from taking all life, also animal life (Fam *et al.*, 2004).

Reincarnation

The belief that there is a soul in all living beings is shared by most Hindus, as is the concept of reincarnation (Gosling, 2001). It is interesting that the god Vishnu reincarnates through the different steps of organic animal evolution; starting out as a fish, he becomes a turtle, then a wild boar followed by an attempt to achieve human form, then as a pigmy human followed by a "perfect" human and finally as a creature that destroys the planet by giving poor attention to nature (Agoramoorthy & Hsu, 2012). A key aspect of reincarnation is karma, which is a causal law meaning that all moral and immoral actions from previous lives will accumulate and have consequences in the next life (Firth, 2005; Leavitt, 2006). By the acts and thoughts of previous existences, a Hindu is born into a caste (Stevenson, 1953). This means that an outcaste has supposedly done something in a previous life to "deserve" being born an outcaste in this life (Leavitt, 2006). Good karma (as a result of good acts and thoughts) will lead to a good rebirth or, even better, no rebirth; whereas bad karma (obtained through bad acts and thoughts) will lead to a bad rebirth (Leavitt, 2006). Bad acts could be stealing or eating taboo food; a bad rebirth often means rebirth to a lower caste, or to a lower life-form (non-human). If a person is not purified from all sins before the moment of death, then he or she will be reborn to a life of suffering (Prabhupada, 1985). The Vedic scripture Manusmrti states that a person who eats the meat of a certain animal in this lifetime will be eaten by that same animal in the next lifetime and the Mahabharata states that a person who kills a cow will spend as many years in hell as there are hairs on the cow's body (Korom, 2000). Release from the cycle of life and death (moksha) is achieved through meditation and conscious good acts and thoughts (Hunter, 2007). Since animals are generally not considered capable of consciously or physically performing these acts; it is believed that only humans can achieve moksha (Firth, 2005).

There are, according to Hindu faith, good ways and bad ways to die (Firth, 2005). Firth (2005) explains that a typical good death occurs at an old age, in the right place, and is preferably well-planned. A bad death is violent, premature and in the wrong place, often characterized by vomit, urine, faeces and an unpleasant expression (Firth, 2005). According to Firth (2005), recent authorities have argued that only God can take a life, and that humans should not take lives because of the possible karmic effects.

This is also explained in the Bhagavad-Gità; it is generally not allowed to kill anyone without authority, an authority held by God alone (Prabhupada, 1985). These karmic effects concern both the individual performing the euthanasia and the individual who is dying; taking a life is not a good act and might therefore lead to a bad rebirth; dying before being supposed to die might mean there is bad karma left behind and the individual will be plunged back into the circle of life and death (Prabhupada, 1985). There is a generally perceived exception for voluntary euthanasia but it is obviously difficult to know when it is voluntary in the case of an animal, and there is no general consensus within the Hindu community as regards euthanasia (Firth, 2005).

Vegetarianism

Mahatma Gandhi proclaimed that we do not have the right to kill animals if we can subsist on a vegetarian diet, and he also stated that if we can live well on other animals it is a sin to kill cows (Chigateri, 2008). It may seem irrational that beef is overlooked by many Hindus as a food source, since it is abundant and of high nutritional value but many Hindus consider all life sacred and therefore do not eat any kind of meat (Harris, 1966; Agoramoorthy & Hsu, 2012). Vegetarianism is specifically encouraged in the Rig-Veda

(Agoramoorthy & Hsu, 2012) and prescribed in the Bhagavad-Gità (Prabhupada, 1985). However, Hindus are not supposed to be vegans, as the cow is often referred to as "mother" (Barak-Erez, 2010) and we should honour the cow by drinking her milk (Korom, 2000). Chigateri (2008) describes how the lower castes are partially excluded from the beef-eating ban, since they are already low in status and maximally polluted. Some even argue that it was beef-eating that gave rise to the untouchability status in the first place (Chigateri, 2008). Voices are raised from the lower castes and other religious communities about the hypocrisy of the non-beef-eating communities, since beef-eaters fail to see the difference between drinking cow milk and eating cow flesh (Chigateri, 2008). Hindus refer to the holy scriptures where cow milk is compared to mother's milk (Prabhupada, 1985); we drink our mother's milk but we would not kill her and eat her flesh. The matter is however more complex, since many non-beef-eaters still use leather products (Chigateri, 2008).

Factors influencing attitudes to animals

Age and gender

Men, who have traditionally held the economic provider role (Blocker & Eckberg, 1997), are generally considered to be more supportive than women of exploitation and control of the natural world (Kruse, 1999). Women are considered as possessing a "motherhood mentality" (Blocker & Eckberg, 1997), and most animal rights activists are female (Kruse, 1999; Gaarder, 2008). In a 2004 review, Serpell cites 13 different studies which have all shown that women are more affective and less utilitarian in their views of animals, and this is supported by Heleski *et al.* (2004).

Strgar (2008) showed a significant difference in the interest for animals in school children where the youngest children were the most interested. According to the author, this provides us with an incentive to create positive experiences of animals for children already at an early age, so that the interest may remain throughout their adult lives (Strgar, 2008). Kruse (1999) also mentions a positive correlation between young age and support for animal rights.

Social factors

Haidt *et al.* (1993) found that social class seems to be more important than nationality and culture when it comes to moral judgment. There are conflicting results for the correlation between educational level and AAS (Attitude to Animals Scale) scores (Kruse, 1999; Signal & Taylor, 2006). However, a significant difference was seen for the AAS scores of different professions. Healthcare workers had the highest scores (had the most pro-animal attitude) and primary industry workers presented the lowest scores (Signal & Taylor, 2006). The authors suggest that the high scores among healthcare sector employees might be expected and explained with a generally caring attitude within this professional group (Signal & Taylor, 2006). Heleski *et al.* (2004) noted in their study that animal scientists showed a high degree of concern when presented with information in an abstract way, but when faced with a realistic situation that they might encounter in their line of work, the concern tended to be considerably lower. Heleski *et al.* (2004) suggest that this indicates that people might be more empathetic on paper than in their social and economic reality, and the authors propose that some rationalization process may have been at work to protect the scientists from unpleasant feelings when forced to witness animal suffering.

Culture and religion

According to Van Horne and Achterbosch (2008), there seems to be a relationship between income, culture, religion, and animal welfare standards. Fam et al. (2004) claim that in Asia, there is little separation between religion and social conduct. All religions more or less teach us to love our fellow mankind and behave virtuously, and the word compassion is central in both Christianity and Buddhism (Fam et al., 2004) but animals are regarded differently in different cultures (Van Horne & Achterbosch, 2008). Kruse (1999) suggests that where a person lives may have a strong influence on the animal rights perspective, and that religion might react against the animal rights philosophy, due to an anthropocentric world-view. There is also research suggesting that agricultural communities tend to be more traditional in their attitudes toward animals (Kruse, 1999). The domestication of the dog has a symbiotic feature, but the importance of dogs to humans has diminished in some parts of the world (Lonsdale, 1979). One might expect religiousness to show a positive correlation with animal welfare concern, as a religious person might be more inclined to possess a desire to be a good steward of animals. Indeed, some studies have seen a strong correlation between religious beliefs and concern for moral standards (Fam et al., 2004). On the other hand, a conservatively religious person might perceive humans as masters or owners of all animals by some divine right (Bajaj & Srinivas, 2004).

Both Blocker and Eckberg (1997) and Kruse (1999) found a negative correlation between church attendance and support for animal rights among Christians.

Holy cows

Historical significance

Most cows in India belong to the species *Bos indicus*, known as zebu cattle to most Westerners (Jacobson, 1999). This species is extremely hardy and disease-resistant (Jacobson, 1999) and the cow has always been central to the largely agrarian Indian economy (Chigateri, 2008).

Religion

To a Hindu, the cow is the most sacred of all animals (Stevenson, 1953; Agoramoorthy & Hsu, 2012) and its sacredness dates back thousands of years (Barak-Erez, 2010). Mahatma Gandhi called cow protection the central fact of Hinduism, and one of the most wonderful phenomena in human evolution (Bajaj & Srinivas, 2004). Cows are seen as inhabited by deities (Korom, 2000) and are referred to as the source of life (Barak-Erez, 2010). Contact with cow products such as milk, curd, ghee, urine and dung is considered purifying (Korom, 2000; Easterbrook & Maddern, 2008) and many Indians apply cow-dung paste on the floor daily to purify the home and keep evil spirits away (Jacobson, 1999; Korom, 2000). To be noted, cow dung has in recent decades been scientifically proven to have antiseptic qualities (Agoramoorthy & Hsu, 2012).

It is also believed that the urine of a cow contains purifying Ganges water, and cow urine is used as a medicine against spiritual diseases (Korom, 2000). Agoramoorthy and Hsu (2012) claim that, to a Hindu, the cow is holy and cannot be harmed but Harris (1966) reveals that even though cows are supposed to be cared for like unproductive relatives, few cattle actually die of old age. Due to the ban on cow slaughter, cows are instead starved or neglected until they die a "natural" death (Harris, 1966).

Economy and sustainability

The whole country relies on cow products for sustenance and ecological sustainability (Korom, 2000), and the sanctity of the cow may have originated for economic reasons (Agoramoorthy & Hsu, 2012). Cattle played a highly significant role to the predominantly pastoral societies even in the Vedic era (Agoramoorthy & Hsu, 2012) and India today is home to some 200 million cattle, equalling one-quarter of the world cattle population (Jacobson, 1999).

India is currently (2007) the largest milk producer in the world (Sudarshan *et al.*, 2007) and most rural families in India own at least one dairy cow (Agoramoorthy & Hsu, 2012). In other words, Gandhi may have been right in calling the cow the greatest economic asset in national life (Chigateri, 2008).

Some argue that the Hindu cattle practices are irrational since religious prohibitions on killing and eating cows means wasting animal products while at the same time sustaining an unproductive cattle population (Jacobson, 1999). India is quite unique in possessing so much cattle without making a maximal profit from its slaughter (Harris, 1966).

There are other uses for cattle than in the food production industry. Cow-dung generates biogas as well as a sustainable source of domestic cooking fuel (Harris, 1966; Agoramoorthy & Hsu, 2012) and draught cattle are still a crucial source of power in the rural areas (Jacobson, 1999). Cattle contribute to the production of grain crops, since the digested organic matter can be used as a natural fertilizer for these crops (Agoramoorthy & Hsu, 2012). India is extremely short on fossil fuels, and therefore more dependent than many other countries on draught animal power (Ramaswamy, 1998). The alternative fuel source is firewood collected from the forests, and this is seriously detrimental to the country's ecology (Agoramoorthy & Hsu, 2012).

The Indian Veterinary Council has estimated that there is only food to sustain 60% of the Indian cattle population (Kang, 2003) and the rest are left to starve or roam the streets searching for garbage. Agoramoorthy and Hsu (2012) reveal that large numbers of cows in Indian cities die from eating plastic bags, and there is an estimated 40 000 cows roaming the streets of New Delhi alone, spreading garbage and constituting traffic hazards (Agoramoorthy & Hsu, 2012). At the same time, animals browsing the city streets have immense garbage recycling ability (Jacobson, 1999).

Legislation

Until 1790 there was a total ban on cow slaughter in India (Agoramoorthy & Hsu, 2012) and the first cow protection committee was established in 1882 (Jones, 2007). Article 48 of the Indian constitution imposes a duty on the state of India to take steps to prohibit the slaughter of cows, calves and other milch and draught cattle (Chigateri, 2008; Barak-Erez, 2010) and a resolution banning cow slaughter was passed in 1979 (Kang, 2003) Following this article and resolution, there are laws prohibiting cow slaughter in all Indian states except two (Agoramoorthy & Hsu, 2012) and in some states it is not even allowed to slaughter infirm or dying cows (Chigateri, 2008). It is also illegal to transport cows across state lines (Agoramoorthy & Hsu, 2012).

Even in modern times there are punishments for *go hatya* – cow murder: imprisonment, large fines, religious and social exclusion for the offender as well as his family (Jacobson,

1999). However, Kang (2003) reveals that the prohibition is on a constant collision course with the "use value" of cattle and there may accordingly be some variety in the interpretations. In northern India and the Hindi belt, a cow killer is likely to be killed; while in southwestern India, individuals may quietly kill their own cows for consumption (Kang, 2003).

In 2006, the Supreme Court of India called for a total ban on the slaughter of cows (Chigateri, 2008) and in 2001 a book entitled The Myth of the Holy Cow was banned because it claimed that beef was consumed in Vedic India (Chigateri, 2008).

This claim is supported by Agoramoorthy and Hsu (2012), who propose that bulls were sacrificed and consumed during the Vedic period, while the slaughter of milk-producing cows was prohibited. The Indian National Commission on Cattle (appointed in 2001) has recommended a central law banning cow slaughter (Kang, 2003) and there seems to a general expansion of the Indian cattle slaughter prohibitions, with the constitutional backing of the Supreme Court (Barak-Erez, 2010).

Politics and national symbolism

Mahatma Gandhi said that cow worshipping is the symbol of what is best in Indian civilization (Bajaj & Srinivas, 2004). The sacred cow was an ideological focus of the old Indian fight against the British colonialists (Bajaj & Srinivas, 2004; Barak-Erez, 2010) and some argue that the cow was "invented" as a Vedic object during the colonial rule (Korom, 2000; Barak-Erez, 2010). van der Veer (1996) means that the Cow Protection Movement from the late 19th century was actually what first created a sense of a Hindu nation, which would explain why the national symbolic value has remained so strong. Nevertheless, the sacredness of the cow seems to be misused in anti-English and anti-Muslim debates (Barak-Erez, 2010) and there is an ongoing contest of supremacy between Hindus and Buddhists with its roots in animal sacrifice, which is believed by some to have led to the worship of the cow (Chigateri, 2008). Attempts have been made to unify religions under the symbol of the divine cow; in 2009 and 2010 there was a 25 000 km walk to convey the message "Saving cows is saving India's soul", after which religious leaders of Hinduism, Islam and Christianity all voiced their unity for cow protection (Agoramoorthy & Hsu, 2012). Some argue that the sacredness of the cow is an innovation of dominant communities in order to establish a moral superiority, and the taboo on cow-killing has been used by dominant-caste Hindus to oppress both Muslims and lower caste Hindus in different acts of communal violence (Chigateri, 2008). From the other perspective, Hindus in Muslim-dominated areas have been forced to witness cow slaughter (Jones, 2007). Muslim butchers have argued that the ban on cow slaughter infringes Islamic customs but there seems to be lacking evidence that cattle slaughter is a religious duty in Islam (Barak-Erez, 2010). The killing of a single cow has been known to trigger riots targeting Muslim communities in the North (Kang, 2003). There have been numerous clashes, destruction of mosques and over 2000 people have been killed in riots between Hindus and Muslims under the banner of cow protection (Jones, 2007).

Dirty dogs

If the cow is the most respected animal in Hinduism, the dog might be the least respected animal (Prabhupada, 1985). Traub *et al.* (2005) suggests that there are 20 million stray dogs in India. Sudarshan *et al.* (2006) states that India has a pet dog population of approximately 28 million, whereas Menezes (2008) claims that the total dog population is

25 million, and that perhaps 80% of these dogs (meaning roughly 20 million) are pet dogs. While many parts of the cow are considered pure and purifying, it is quite the opposite for dogs (Prabhupada, 1985). The dog is one of the lowest status animals in Hinduism, and the Bhagavad-Gità names outcastes as even lower than dogs (Prabhupada, 1985).

Zoonoses

The role of dogs as reservoirs for zoonotic diseases is recognized as a serious public health problem in the whole world (Traub *et al.*, 2005) and one reason believed to lie behind the general Muslim regard of dogs as despicable animals is that dogs and wolves were historically dangerous, living in packs and spreading diseases such as rabies (Al-Fayez *et al.*, 2003). In fact, the Greek word for "wolf" has the same root as the word for "rabies" (Lonsdale, 1979). Serpell (2004) mentions over-abundance, economical damage and posing significant health and traffic hazards as factors which could negatively influence the attitudes toward certain animal species.

Leptospirosis is regarded as the most widespread zoonosis in the world, and it spreads to humans through contact with water or soil that has been contaminated by urine from infected animals such as dogs, pigs, rodents and cattle (Karande *et al.*, 2003). Even though humans are merely accidental hosts, the symptoms may encompass potentially fatal manifestations (Karande *et al.*, 2003). This is a major problem in India; in a study by Karande *et al.* from 2000, 34% of the screened children had leptospirosis. Rural areas and poor urban areas are more vulnerable, since outbreaks are often related to torrential rains and floodings, when water is abundant and easily polluted (Karande *et al.*, 2003). This is true also for some other zoonotic parasites (Traub *et al.*, 2005).

The role of the dog as transmitter for zoonotic diseases is currently discussed for many human parasites, which can have a prevalence of between 50 and 99% in Indian stray dogs (Traub *et al.*, 2005) and are important from a human health perspective (Abd Rani *et al.*, 2010).

Rabies has existed in India at least since the Vedic period (1500 - 500 BC) and is described in ancient Indian scriptures (Menezes, 2008). In all Asian countries, dogs are the major vectors of rabies transmission (Sudarshan *et al.*, 2007). It has been estimated that from 1990 to 2002, India accounted for nearly 60% of the global human rabies mortality with more than 30 000 annual rabies deaths (Sudarshan *et al.*, 2007; Traub *et al.*, 2005).

Numbers are thought to have decreased in the last decade but it is still estimated by many independent sources that around 20 000 humans die from rabies in India every year, and dogs are believed to be responsible for around 95% of the infectious bites (Nagarajan *et al.*, 2006; Sudarshan *et al.*, 2007; Menezes, 2008). This may or may not seem as a huge number, given India's population size, but in smaller time units it means that a person dies from rabies every 30 minutes (Menezes, 2008). This makes rabies a very real problem in India, not just on an individual level.

Of all the cases of rabies transmission, stray dogs are considered to account for around 70% of the bites (Menezes, 2008; Sudarshan *et al.*, 2006; Sudarshan *et al.*, 2007) so perhaps it is not surprising if stray dogs are regarded as dangerous and unwanted by the general public. There is, however, a tendency to over-look the fact that also cattle and their byproducts are potential transmitters of human diseases with fatal illness symptoms (Traub *et al.*, 2005).

Cattle also contract and transmit rabies, echinococcus, giardia and numerous other dangerous parasites (Traub *et al.*, 2005).

Discussion

For some animals, old negative associations because of real threats in the past linger on. To this day there is talk of 'the big bad wolf' and there is quite possibly some association to the ancient predator threats where the stray dog is concerned. Lonsdale (1979) mentions that historic Mediterranean leaders assigned admirable and spiritual qualities to dogs; in my opinion, this might at least partially explain the elevated status of dogs in Europe.

Considering reincarnation and karma, the pollution concept may be applied to animals in the same way as to the lower castes and outcastes; a traditional Hindu might reason that dogs deserve to be dogs and that if they suffer, they deserve to suffer since it is an effect put into motion by sinful behaviour in a previous existence. The whole concept of karma, as well as that of good versus bad deaths, is in fact probably the foundation of the general Hindu reluctance to euthanasia in any form. The common Western view that there is a difference between life and quality of life, might not be as obvious to a follower of the Hindu faith, since pain and misery might by the latter be considered a way to expurgate sin or bad karma. When dealing with a terminally ill or severely injured animal, a Hindu may withhold euthanasia with the justification "We'll leave it to God" (personal observation) since taking a life might have karmic effects on the next life.

The insensitivity by some Hindus to death and suffering may be explained by the belief that we are not our bodies; they are merely clothing to our souls (Prabhupada, 1985). I also suggest that the rationalization process possibly undergone by the scientists in the study by Heleski *et al.* (2004) may have some bearing in this case. The relatively poor people of India who do not have the practical or financial means to help suffering animals may have developed a rationalizing attitude in order to cope with the misery they are forced to witness in everyday life. In short; maybe we only care about animals as much as we can afford to.

To a Hindu, the cow is holy and cannot be harmed. This is supported in theory in the Manusmrti, where harming cows is discouraged (Korom, 2000) but when it comes to applying these religious norms practically, there is a discrepancy between morals and practices which may lie in the perception of the concept of "harm" based on different ethical approaches. In the Hindu-Muslim, Hindu-Buddhist, and Hindu-Christian debates, the cow as a national symbol for non-violence as suggested by Gandhi seems to be partly used as an excuse for violence.

Perhaps less energy should be poured into punishing cow killers, and more into caring for the cows that are still alive. Considering the worth of draught animals, it is unfortunate that they are not better cared for. Ramaswamy (1998) tells of excessive strain and stress from overloading, whip lashes and beatings, neck injuries from defective harnesses, and general neglect. Applying the anthropocentric view to cows, one might argue that as long as the cow is productive in human terms, it has good welfare (Verhoog *et al.*, 2004). However, Hinduism seems to be more in line with the biocentric view, which then tells us that we ought to respect the inherent worth of all living beings and protect them from harm.

In India, a person is bitten by an animal every two seconds, and about 15 million people are bitten every year, mostly by dogs (Menezes, 2008). This is likely to affect attitudes toward dogs. Taking into consideration that most bites affect persons of poor or low-income status, lacking education among the victims might also mean that they fail to see how a bite could have been avoided, thus adding to the fear of or grudge against an animal. The fact that the native Indian dog is referred to as *Pariah dog* says something about the way in which the dog is regarded, and it interesting in this context that the word *pariah* is also used to denote the outcaste communities. Due to the pollution concept, most animal shelter workers are outcastes. The salary may be much needed and appreciated but many of these workers are not in the business out of an interest in animal welfare issues but simply because it is one of few employments that they are allowed (personal observation). This fact adding to the sense of being oppressed, their frustration may be projected onto the shelter dogs. As for the fear of rabies and other diseases, there is a tendency to over-look the fact that cattle also contract and transmit these zoonoses. Perhaps dogs are not as dirty, and cows not as pure, as religion and tradition would have us believe.

The Indian stray dog is over-abundant in numbers and does pose the above-mentioned threats to the public. Yet, this is weighed against the perceived vulnerability of the dogs, which might be the cause for strong reactions from the public whenever euthanasia campaigns against stray dogs have been initiated. There is an inconsistency regarding the stated size of India's dog population which affects the credibility in some studies - Sudarshan *et al.* (2006) states that India has a pet dog population of approximately 28 million, whereas Menezes (2008) claims that the total dog population is 25 million and Traub *et al.* (2005) suggests that there are 20 million stray dogs. However, this inconsistency could be explained by the fact that alongside the stray dogs, many pet dogs are allowed to roam the streets freely, making them difficult to classify as one or the other. The semi-domesticated pet dogs also add to the problems with scavenging, spreading of diseases and creating more stray dogs.

There are studies implicating that children who grow up with dog companions become more empathic and pro-social also with other humans, and that children who are empathic toward pets also have more empathy for other children (Al-Fayez *et al.*, 2003). This makes animal relationships important for everyone in our society. In general, attitudes toward animals tend to become increasingly positive in all cultures and religions, and this is probably at least in part due to the increased keeping of family pets (Al-Fayez *et al.*, 2003).

Education

It is a difficult balance-act to target animal suffering and present criticism in a polite manner. For cultural and financial reasons, animal welfare issues have perhaps not held top priority in southeast Asian developing countries, but I believe that this is about to change, and that the change could come about sooner with the aid of education. The medium of education can be used to promote the parts of Hinduism that stress the sacredness of nature and all living beings. For example, Kellert (1985) showed a negative correlation between education level and negative views of the wolf; as well as a positive correlation between knowledge about animals and positive views of the wolf. This is in line with my expectation that education may contribute to improving animal welfare. I believe that criticism alone will not relieve animal suffering, especially if the criticism comes from only a few NGOs, and that it is therefore of crucial importance that the governmental bodies of India maintain a constructive dialogue with these organizations. Agoramoorthy (2004) says

that Southeast Asian countries readily accept criticism on animal welfare matters, and that comments from Western authorities are generally held in particular high regard; according to the author this is possibly a spill-over from the mentality of colonial times. My personal experience is, however, that this might not always be true. In contrast, there is a risk that such comments are perceived as an attempt to impose values upon another culture and give the impression that one culture is superior to another. This may be particularly relevant in the case of India. Despite consisting of many linguistic and religious groups, the people of India are generally proud of being Indian and there is a strong sense of cultural belonging (Stepan, 2011). Instead of concluding that there is a negative attitude toward certain animals in India, one might also infer that there is a positive attitude in some Western countries (Van Horne & Achterbosch, 2008).

By no means am I implying that the core issues of the Hindu religion should be ignored. But perhaps an "applied theology" could be used, as explained by Korom (2000) as a theology aimed at solving problems. One important factor influencing attitudes to animals is the concept of familiarity/unfamiliarity (Ilomäki, 2002). We fear what we do not know, and therefore education is of crucial importance if we are to change the negative or indifferent attitudes to animals in some cultures. Recent research into animal behaviour, cognition and consciousness has identified many perceived similarities between human and non-human animals, and it is likely that this has increased positive attitudes toward animals (Serpell, 2004).

Children who are exposed to affectionate relationships with animals in their childhood, tend to hold a more positive attitude toward animals later in life (Al-Fayez *et al.*, 2003; Serpell, 2004). The opposite also seems true; that children who have negative experiences of animals in their childhood tend to apply these experiences to animals they encounter later on in life (Serpell, 2004). For this reason, one way of improving welfare for both human and non-human animals in India, could be to arrange positive animal experiences for young school-children as part of the educational curriculum.

Rabies is a real problem in India, but resolving the problem has traditionally been of low priority (Traub et al., 2005). This is probably at least in part due to restricted resources and the need to deal with diseases of greater incidence and severity, such as malaria and HIV (Traub et al., 2005). However, if one looks at the number of affected individuals, it is evident that rabies control and prevention deserves more attention. It should also be noted that the number of human rabies deaths might be greater than estimated (Traub et al., 2005). Canine rabies and the stray dog populations need to be controlled in order to prevent high numbers of human rabies deaths, but there are different ways to accomplish this. According to the WHO rabies survey from 2004, remedies grading from no treatment at all to indigenous cures to the use of old, inefficient rabies vaccines indicate negligence on the part of the healthcare system. There are also indications that the number of dog bites in India is increasing (Menezes, 2008). Once again, this highlights the importance of educating the public, especially in rural areas where most rabies cases occur (Sudarshan et al., 2006). By reducing one of the main reasons for the negative attitudes toward stray dogs, the Indian public might be more open to humane solutions for controlling the stray dog populations.

In 2006, Sudarshan *et al.* suggested that dog care and management practices in India were unsatisfactory. I suggest that one reason for this is the small space allotted to animal welfare and ethics in the veterinary education curriculum. This idea is supported by de Boo

and Knight (2005; 2006), who propose a syllabus in animal welfare science and ethics for veterinary schools. Women tend to be more interested in animal welfare than men, and the increase of female veterinarians in developing countries slowly brings about a change for the better in terms of animal welfare focus, but this development cannot happen soon enough. There are already training opportunities and workshops in developing countries by provision of the World Society for the Protection of Animals (WSPA) and I would encourage more of these activities. Most animal keepers come in contact with a veterinarian at some point and acquire much of their knowledge about animals from these professionals. If veterinarians give more attention to animal welfare and ethics issues, then so will animal owners and the general public in the next phase. Veterinarians as a group may also help persuade the government to take more efficient measures against animal cruelty, and shed light on some misconceptions regarding stray dogs. Even though stray dogs are probably the main carriers of rabies, a study from 2006 by Nagarajan et al. indicates that it is travelling pet dogs who are responsible for the spreading of different rabies isolates into new regions of India, causing new outbreaks among the stray dog populations. In my opinion, this means that pet dog owners need to take more responsibility in ensuring that their dogs are continuously checked and vaccinated. If this is neglected for financial reasons, the government needs to look into the possibility of subsidizing rabies checks and vaccinations for pet dogs, since this cost is still likely to be lower than the cost of today's stray dog control measures and rabies treatment programmes.

I consider the need for good medical pet care even greater in countries like India, where pet dogs live in such close proximity to semi-domesticated and feral dogs, and no less because humans also live in close proximity of these animals.



Veterinarian and a patient in Chennai, India. Photo: Jennie Allard

On a national basis, the Indian stray dog population is believed to be increasing (Traub *et al.*, 2005), and this needs to be addressed. Before 1998, the Indian stray dog population was kept under control by government authorities that would euthanize unclaimed dogs, but this approach had to be replaced after pressure from animal welfare activists (Menezes, 2008).

The ABC (Animal Birth Control) programmes brought into force after 1998 include the capturing, impounding, sterilizing, vaccinating and re-releasing of stray dogs (Abd Rani et al., 2010) and have been efficient in cities like Chennai where the number of stray dogs as well as the number of human rabies cases have decreased in the last decade (C.S. Krishna, Blue Cross of India, personal message 2005-06-01). My suggestion is that such programmes continue to be promoted and if possibly funded. However, they must be complemented with a free sterilization programme for pet dogs, since pet dogs often generate new stray dogs if kept intact. There is, in fact, such a programme in Chennai (personal observation), which might have contributed to the aforementioned positive results of the ABC programme in that area. Financial aid could come from the general public, from NGOs, from the government itself and from developed countries in other parts of the world, if informed about the need. It is also important that shelter dogs are fed a nutritious diet and that both kennels and animals are kept as clean as possible. Besides rabies, there are many canine diseases that are detrimental to animal welfare if not properly controlled (Abd Rani et al., 2011). The status of shelter workers also needs to be elevated, in order for such employments to appeal to people who have a genuine interest in animal welfare; or the work force at hand needs to be educated in these matters.



Sterilized and vaccinated stray dogs in the ABC programme at the Blue Cross of India animal shelter in Chennai, India. Photo: Jennie Allard

Even with an anthropocentric world view, and even for those uninterested in or indifferent to animal welfare, attitudes toward animals may be of interest, as these attitudes might affect the attitudes toward fellow humans (Signal & Taylor, 2006). In the Bhagavad-Gità, compassion is cited as a divine quality (Hunter, 2007). Perhaps by trying to imagine what an animal is experiencing, it becomes clearer to us which of our attitudes and actions are morally appropriate in a given situation. As admirable as the ban on killing cows may be, there is no ban on neglecting cows. A review by Harris (1966) reveals that people will openly admit to neglecting cows and calves until they starve, but would not kill them. This is a situation when the good intent of an ancient religion actually counteracts the good intentions of modern animal welfare ideas, and this needs to be addressed in an openminded fashion. The scholars of religion should be involved in the discussion on how best to apply religious principles to what we now know about sentient animal welfare.

Economy and ecology

The annual cost of rabies bite treatment in India is estimated at about 40 million Euros (Sudarshan et al., 2006). For any country, but especially a developing country, this is a substantial sum of money. India does have continuing problems with poverty, low levels of literacy, nutrition and basic sanitation (Gosling, 2001; Stepan, 2011) and this must be taken into account when discussing what is feasible in terms of animal welfare legislation and implementation in India. Legislation should be both applicable and applied. India has enacted the Prevention of Cruelty to Animals Act, but according to Ramaswamy (1998) punishment is too low and the laws too complex for an efficient implementation. The lack of protection can specifically be seen in the food production industry. The widespread ban on cow slaughtering has given rise to the production of beef through illegal slaughterhouses (Chigateri, 2008). It is estimated that there are 3600 legal slaughterhouses in India, and ten times as many illegal slaughterhouses (Chigateri, 2008; Agoramoorthy & Hsu, 2012). This means there are no official inspections at about 90% of India's slaughterhouses, and one can only imagine the possible implications of this in terms of animal welfare as well as food hygiene. Ramaswamy (1998) refers to the conditions in even the legal slaughterhouses in Asia as abominable, and this could in part be explained by the fact that in 1998 there were only 500 animal welfare inspectors in India. Besides the animal welfare concerns, insufficient knowledge and hygiene procedures during slaughter at local abattoirs and homes significantly contributes to the transmission of parasites which are potentially lethal for humans (Traub et al., 2005). The existence of illegal slaughterhouses therefore desperately needs to be addressed.

As for beef consumption, I would personally advocate global vegetarianism in order to relieve the suffering of animals in intensive food production systems, and for the sake of the environment. However, caution is needed when it comes to the feasibility aspect from both a financial, cultural and nutritious perspective. As noble as Gandhi's belief about only eating necessary food may be, necessity might mean something entirely different to outcastes and other persons living in extreme poverty. Perhaps there is no contradiction between respect, love and compassion for an animal, and eating the meat of that animal – but animal welfare issues need much more priority.



Cow foraging in garbage on the street in Mahabalipuram, India. Photo: Jennie Allard

European consumers should keep in mind that animal products will be purchased from countries where animal welfare standards are significantly lower than in EU countries, which means that animal welfare in third world countries should be of interest to European consumers as well.

Allowing dogs and cattle to roam the streets freely is positive in terms of garbage recycling, but the disposal of plastic bags and other potentially harmful items must be avoided. The cost of employing people to keep the streets clear of these items is in my opinion most likely lower than the cost of keeping the streets clear of cattle and could be a compromise solution for cities which do not have sufficient funding for a complete cattle banish programme. In addition, these wandering cows could be rescued and rehabilitated at homes where their dung could be harvested to produce cost effective and ecologically sustainable biofuel, thus relieving the pressure on India's forests and ecosystems (Agoramoorthy & Hsu, 2012). In the long term, this could decrease global warming (Agoramoorthy & Hsu, 2012), and is therefore in the interest of everyone.

Draught animal power has been named by the UN as a source of renewable energy (Ramaswamy, 1998). It is therefore of national as well as global interest to increase draught animal welfare; directly for the sake of the animals, and indirectly as a means of maximising the efficiency and sustainability of the draught animal power system. In 1981, 99% of all agricultural power in India came from animals, and even though these figure may (or may not) have changed since then, there is no doubt as to the fundamental importance of draught animals to the agricultural economy, and the ecology, of India.

The status of draught animals needs to be improved - Ramaswamy (1998) claims that animal suffering would be reduced substantially just by modernizing the draught animal power system. It might take a massive programme of modernization, but considering the importance of draught animals for the agricultural economy, this would be wisely invested money, not to mention an environmentally and morally sound measure. The wisdom and morality of the Indian public can already be seen, although perhaps slightly misdirected at

times, in precisely the large number of "useless" cattle as a result of the ban on slaughtering and beef consumption. In my view, this is a rare example of religious/moral values winning over economic interests and I personally think this is something India should take pride in. If it is possible to combine cow worshipping and protection with economic usefulness, this will bring religion and economy closer together. Perhaps all that is needed is that more emphasis be put on establishing good quality lives for India's surplus cattle, and not just lives. In my opinion, we should be open to the idea that a reduction in the number of useless animals would increase the possibilities to enhance welfare, quality and production for the remaining cattle.

Last but not least, the issue of the sacred cow needs to be resolved on a national basis in order to contribute to ending the crisis in Indian Hindu-Muslim relations, a conflict which could otherwise risk spreading and threatening world peace.

Conclusions

As this paper has shown, it is important to improve animal welfare in India; for the sake of the animals themselves, for public health reasons, for infrastructural and financial reasons, as well as for ecological reasons. An improvement of Indian animal welfare could be accomplished with the aid of education and an open-minded theological discussion. The analogy theory indicates that if similar behaviours and functions appear in animals and humans, the underlying feelings are quite possibly the same (Verhoog *et al.*, 2004). Hence, if we would suffer in a given situation, chances are that an animal is suffering in the same situation. The word compassion is a reappearing term in both Hinduism and Christianity as well as other religions, and it is also a founding term for most animal welfare organisations. The golden rule tells us to treat others as we want to be treated ourselves, and it is my belief that this rule could, and should, be applied to non-human animals as well.

Summary

India is home to every sixth person in the world, around 30 million dogs, and 200 million cows and buffaloes. Most Indians are Hindus, and even though the Hindu religion speaks of loving and caring for all animals, sometimes the same religion comes in the way of practical animal welfare. This paper looks into the importance of historic and religious symbols for the way animals are regarded in Indian society today, as well as different social factors that influence attitudes to animals. The concept of karma, as well as that of good versus bad deaths, is probably the reason why Hindus in general are opposed to take a life in any form. All animal species are generally thought of as being equally worth in Hinduism, but in practice a difference seems to be made. This probably has to do with cultural, religious, medical and financial factors. In this paper, the Indian sacred cow is given as an example of symbols that can shape the law, but whose meanings can change for legal and cultural reasons. The author suggests some possible ways to improve animal welfare in India, for the sake of the animals themselves, but also for the medical health and social status of India's people, and for the world's environment.

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