

Journal of Buddhist Ethics

ISSN 1076-9005

<http://www.buddhistethics.org/>

Avoiding Unintended Harm to the Environment and the Buddhist Ethic of Intention

Peter Harvey

School of Arts, Design, Media and Culture
University of Sunderland
peter.harvey@sunderland.ac.uk

Copyright Notice: Digital copies of this work may be made and distributed provided no change is made and no alteration is made to the content. Reproduction in any other format, with the exception of a single copy for private study, requires the written permission of the author. All enquiries to: editor@buddhistethics.org

Avoiding Unintended Harm to the Environment and the Buddhist Ethic of Intention¹

Peter Harvey

School of Arts, Design, Media and Culture
University of Sunderland
peter.harvey@sunderland.ac.uk

Abstract

This paper reflects on how the mainly intention-based ethics of Buddhism relates to issues of causing *unintended* harm across a range of issues of relevance to environmental concern, such as species protection, resource depletion and climate change. Given our present knowledge, is environmental concern to be seen as morally obligatory for a Buddhist or only a voluntary positive action? Writers sometimes simply assume that Buddhist ethics are supportive of the full range of environmental concerns, but this needs to be critically argued. The paper reflects on a range of principles of traditional Buddhist ethics, both Theravāda and Mahāyāna, and concludes that, in the present world context, Buddhist considerations urge not only that we should not deliberately harm any living being, but that we should also look after the biosphere-home that we share with other beings, by using our knowledge of unintended effects of our actions to modify our behavior, and that we should act positively to benefit others beings, human and non-human, and enhance their supportive environment. The paper also considers issues such as Buddhism's attitude to wild nature, industrialization and "progress."

What kind of world do we want to live in—and what kind of world are we helping to create? What reflections and considerations are most relevant in helping to motivate Buddhists, and those respectful of Buddhist ideas, toward taking greater care of the environment? Should the emphasis be on avoiding harmful actions, and the bad karmic results that come from such actions, or on doing environmentally beneficial actions, perhaps seen as generating good karma? Does Buddhism give sufficient emphasis on avoiding indirect, unintended harm?

The Relevance of Intention

Regarding the nature of Buddhist ethics, it is often stressed that it is one of intention, karma being the impulse or act of will behind an action: "It is will (*cetanā*), O monks, that I call karma; having willed, one acts through body, speech or mind" (A.III.415). For many monastic rules, there is no offense if the relevant action was "unintentional" (*asañcicca*). Thus there is no offense in killing a human if it was "unintentional . . . for one not meaning death" (Vin.III.78), for example, if a stone is accidentally dropped on someone during building work (Vin.III.81). Moreover, as Andrew Huxley has shown (1995), the *Kurudhamma Jātaka* (J.III.366-381) emphasizes the idea that, at least in a lay context, unintended harm to others should not be counted against one, and it is not wise to agonize over such matters, such as a king who ceremonially fires arrows in the air, and losing track of one, worries it might have landed in a lake and killed a fish (p. 194-195).

For a number of monastic rules,² it is actually specified that there is no fault if the action is "unintentional, for one who lacks mindfulness (*asatiyā*), not knowing"—i.e., being "absentminded" or perhaps "careless." This no-fault clause applies, for example, in the case of the *Pācittiya* offenses of digging the ground, destroying vegetable growths, sprinkling with water known to contain life, and killing a living being (Vin.IV.33, 35, 49, and 125). In a few *Vinaya* cases, though, the behavior of a *reckless* nature is specifically

condemned. When some monks, in fun, throw a stone down Vultures Peak, and it ends up killing a man, they are guilty of a wrongdoing, though not the full *Pārājika* offense that would entail expulsion from the monastic order (Vin.III.82).

Moreover, poor mindfulness does not always excuse a person, particularly regarding matters where intention is not needed for an offense to take place. In the *Vinaya Parivāra*, one of the ways that a monk might fall into an offense is "through confusion of mindfulness (*satisammosā*)" (Vin.V.102 and 194). In such cases, the American Theravādin monk Thanissaro says (1994:24-25):

There are . . . acts with damaging consequences that, when performed unintentionally, reveal carelessness and lack of circumspection in areas where a person may reasonably be held responsible. Many of the rules dealing with the proper care of communal property and one's basic requisites fall in this category . . . the minor rules that do carry such penalties may be regarded as useful lessons in mindfulness.

What of actions that inadvertently kill small living beings? The *Milindapañha* (p. 166) says that to accidentally crush worms while crushing sugarcane for its juice is not blamable. This is unproblematic in the case where one does not know or suspect that the sugarcane contains worms. Indeed, for many monastic rules, there is no offense "for one who does not know (*ajānantassa*)." Thus for the offense of making use of water containing living beings that will be killed by this, there is no offense when "not knowing that it contains living things" (Vin.IV.125). Nevertheless, lack of full knowledge does not completely excuse. In regard to killing an animal, the full *Pācittiya* offense may need to be done "intentionally, knowingly," but it is still the lesser offense of "wrongdoing" if a monk, when he fires an arrow at something, has some uncertainty on whether or not it is living (Vin.IV.125). Similarly, for the *Pācittiya* offense of sprinkling clay or grass with water known to contain living beings (Vin.IV.49), being absentminded leads to there being no fault, as does ignorance that the water actually contains life,

but doing the act when one is *not sure* that the water does not contain life is an act of wrongdoing. In such cases, suspicion that an action *may* kill something means that it is blamable to a degree. Thus foresight that an action would or could kill something, even if this is not the intent, might certainly make such an action a wrongdoing, at least for monks and nuns.

Thus intention is required for some monastic offenses to be committed, but not for others, and where it is, its impact will be dependent on a monk's knowledge or unclear perception regarding the facts of the situation. Some offenses are excused if done absentmindedly, while others may be committed even if done through poor mindfulness, and particularly if done recklessly. Apart from the specifics of monastic ethics, in which some actions can break a rule even if lacking unwholesome/unskillful intention, a key general criterion of whether an action is wholesome/skillful (Pali *kusala*, Sanskrit *kuśala*) is to look at its "root" (*mūla*) or impelling cause/motive (M.I.47): an act is unwholesome if rooted in greed, hatred or delusion, and wholesome if rooted in non-greed (generosity or renunciation), non-hatred (lovingkindness or compassion), or non-delusion (wisdom). Also relevant (Harvey 2000:46-48) is whether the action can be seen to conduce to the harm of oneself or others (making it unwholesome: M.I.415-416) or not (making it wholesome), and whether it leads to further unwholesome or wholesome states (M.II.114-116).

Unintended Harm to the Environment

A potential issue, here, is that it seems that an action which is not recognized as harming any being, and perhaps even has a positive motivation, may, in actual fact, contribute to harmful effects to the environment and the beings in it. Indeed, while the primary emphasis of the lay ethical precepts is also on avoiding intentional harm, negative environmental effects can be unintentional consequences of people's actions.

As regards actions which directly and intentionally harm beings in the environment, it is clear that this is directly against Buddhist ethics, for example:

- killing animals, whether they belong to an endangered species, or not;
- dumping toxic chemicals in areas where it is known that they will do harm (cf. Vin.IV.49, as discussed above);
- burning large areas of forest with no regard for the animals whose life depends on it.

For example, the *Brahmajāla Sūtra*'s forty-eight secondary precepts for *Bodhisattvas* include:

14. On Starting Wildfires. A disciple of the Buddha shall not, out of evil intentions, start wildfires to clear forests and burn vegetation on mountains and plains, during the fourth to the ninth months of the lunar year. Such fires [are particularly injurious to animals during that period and may spread] to people's homes, towns and villages, temples and monasteries, fields and groves, as well as the [unseen] dwellings and possessions of deities and ghosts. He must not intentionally set fire to any place where there is life. If he deliberately does so, he commits a secondary offense.

What, though, of the fact that *unintentionally* causing harm is generally seen as not generating bad karmic results—though we have seen that the *Vinaya* censures even some of these? When we look at the range of environmental problems facing the world, their harmful effects are often not intended by those that produce them:

- global warming, as a result of burning fossil fuels—an activity which, in itself, seems fairly innocuous, though evidence indicates that if this is not reduced in the next few decades, it may reach an uncontrollable, self-sustaining level, that will be a great threat to much life on earth;

- depletion of the ozone layer;
- pollution of air, land, and water, by industrial effluents, agricultural chemicals such as insecticides and fertilizers—and noise, all of which may be side-effects of such things as producing goods and providing jobs;
- resource depletion;
- extinction of species, e.g., due to logging and human population encroachment.

Ian Harris reflects that:

Much that is characterized as environmental pollution is, strictly speaking, the unintentional byproduct of industrial activity, etc. Does that mean that the general degradation of the environment should be regarded as a necessary evil from the Buddhist perspective, particularly when we hold in mind the Buddha's continually reiterated teachings on the structural impermanence of all conditioned things? It would clearly be a misrepresentation to suggest that Buddhists are in favor of pollution and environmental decay. The correct application of right mindfulness . . . would presumably instill a greater awareness of the unintentional consequences of their actions in the minds of potential polluters. (Harris 2000:115-116)

He goes on to suggest that the "correct Buddhist response to inevitable environmental flux" is a middle way of equanimity, avoiding support for existing polluting modes of production, and activist intervention to "re-establish untainted 'nature'". I agree that the Buddhist response should be somewhere in this wide middle ground—but where, and how should Buddhists assess the unintended harm that their actions may contribute to?

What should Buddhists' response be to actions that have unintended harmful effects on the environment? Where these effects are not known about, or not even suspected, then there is no real possibility of moral blame being relevant—unless there is a willful lack of interest in possible

effects. Compare, here, the above case of the monks who thoughtlessly throw a stone down a hill and end up killing someone. What if the immediate side-effects of an action bring no harm, but further knock-on effects do? How far does responsibility for the results of action stretch?

A good case in point, here, consists of Buddhist practices aimed to benefit living beings, so as to "make merit", but which have knock-on bad consequences for living beings. For example, in Thailand, some people may pay to release captured birds, as a positive act of "liberating beings". This encourages other people to make money by catching birds, which sometimes harms or even kills them. Duncan Williams reports a similar situation as regards catching fish to later liberate at a festival in medieval Japan, many of the fish dying before being released (Williams 1997:155). Both seem cases of unintended consequences of a good impulse. But as the consequences become known, there is a clear case for saying that the actions should have been modified so as to bring benefit without also leading others to bring harm.

That said, in cases of the treatment of terminally ill patients in great pain, it does sometimes seem to be morally appropriate to overlook known knock-on effects of a course of action. A doctor may increase the dose of a painkiller with the *intention* of alleviating increasing pain, but knowing that the dose may also kill the patient. This seems to be different from actual euthanasia, and to be acceptable on Buddhist grounds (Keown 1995:175; Harvey 2000:300-301). Here, though, the compassionate concern of the doctor can be seen to differentiate such a case from most ordinary actions which we now know will tend to harm the environment.

Moreover, in the *Vinaya* is the case of a monk who gives treatment or medicine to an ill monk and the latter dies; there is no offense if he "did not mean to cause his death" (Vin.III.82). In the above painkiller example, given that the intention is not to kill, the doctor's action would not be a *Pārājika* offense for a monk. Nevertheless, if he can foresee that death will result

from his action, this *might* be a wrongdoing for a monk if there is a genuine element of recklessness.

Another issue which highlights some different Buddhist attitudes to such questions is that of meat-eating. In early Buddhism and the Theravāda school, the first precept is broken by any intentional killing, whether done oneself or through asking/telling someone else to kill.³ Logically, this includes for example:

- pointing to a live fish in a restaurant, and asking that it be cooked for one;
- ordering in advance a specific item such as a turkey at a butcher's or store, so that this order is transmitted back up the supply line to ensure an animal is killed to supply it.

It is not seen as broken, though, by buying the meat of an already dead animal from the market. Monks are also allowed to accept flesh food as alms if it is not "seen, heard or suspected" that the animal has been killed specifically for making the donation (Vin.I.237-238; Harvey 2000:159-163).

In the Mahāyāna, though, there are arguments, which have been influential in East Asian but not Tibetan Buddhism, that one should not eat meat. The Mahāyāna *Brahmajāla Sūtra* code for lay and monastic *Bodhisattvas* states:

3. On Eating Meat. A disciple of the Buddha must not deliberately eat meat. He should not eat the flesh of any sentient being. The meat-eater forfeits the seed of Great Compassion, severs the seed of the Buddha Nature and causes [animals and transcendental] beings to avoid him. Those who do so are guilty of countless offenses. Therefore, Bodhisattvas should not eat the flesh of any sentient beings whatsoever. If instead, he deliberately eats meat, he commits a secondary offense. (Buddhist Text Translation Society)

The *Laṅkāvatāra Sūtra* has the Buddha denying the above *Vinaya* idea of it being "blameless" to eat meat that is "pure in three respects," and gives a series of arguments against meat-eating (Suzuki 1932:211-212; 1930, 368-371; Harvey 2000:163-165). Various kinds of arguments are used, for example:

- i) all beings, in some past rebirth, have been one's close relative, such as one's mother, or a close friend. One should look on all beings as if they were one's only child, i.e., with loving-kindness, and not eat them;
- ii) meat-eating prevents progress in meditation;
- iii) meat-eating leads to a bad rebirth; vegetarianism leads to a good rebirth;
- iv) if no meat is eaten, no-one will destroy life, as there will be no market for the bodies.

The last of these brings in considerations other than the intention of a person or results for oneself alone—one should consider the known but unintended knock-on effects of one's actions on others, too.

Nevertheless, for any Buddhist tradition, there is in fact an emphasis on certain positive actions:

- *dāna*—generosity/giving;
- loving-kindness and compassion;
- helpfulness (Pali *attha-cariyā*; Sanskrit *tathārthacaryā*: e.g., D.III.152).

Not doing these may not necessarily generate bad karma, but doing them is seen to generate good karma. Hence even in the Theravāda tradition, vegetarianism tends to be admired as a voluntary, though not obligatory practice.

The Relevance of Classic Buddhist Ideas of Environmental-social Decline

Before we further reflect on Buddhist reasons for avoiding unintended harm to the environment and its beings, it is useful to examine some classical Buddhist ideas on how human actions may affect the environment, to highlight further reasons for avoiding harm to it.

In various Buddhist texts, the environment is held to respond to the state of human morality; it is not seen as a neutral stage on which humans merely strut, nor a sterile container unaffected by human actions. This clearly has ecological ramifications: humans cannot ignore the effect of their actions on their environment. This message is strongly implied by the *Aggañña Sutta* (D.III.94-93), which gives an account of the initial stages of the development of sentient life on earth. This occurs when previously divine beings fall from their prior state and, through consuming a savory crust floating on the oceans, develop physical bodies, and later sexual differentiation. At first their environment is bountiful, but it becomes less so the more they greedily take from it. They feed off sweet-tasting fungus, and then creepers, but these in turn disappear as the beings differentiate in appearance and the more beautiful ones become conceited and arrogant. Then they feed off quick-growing rice, gathering it each day as they need it—as "gatherers," if not "hunter-gatherers." Due to laziness, however, they start to gather a week's supply at a time, so that it then ceases to grow quickly, necessitating cultivation. Consequently, the land is divided up into fields—agricultural society develops—such that property is invented, followed by theft. Here, then, is a vision of sentient beings and their environment co-evolving (or co-devolving). The beings are affected by what they take from their environment, and the environment becomes less refined and fruitful as the beings morally decline and greedily exploit it.

In this process, beings do not *intentionally* harm their environment, but their actions, driven by developing unskillful states of conceit, laziness, and greed, nevertheless set up conditions which bring harm, in an echo of the second Ennobling Truth of Buddhism, that craving leads to suffering.

Humans are seen as having an effect on their environment not only through the purely physical aspects of their actions, but also through the moral/immoral qualities of these. That is, karmic effects are sometimes seen to catch up with people via their environment. It is thus said that, if the leader of a country acts unrighteously (*adhammika*), and this bad example then spreads throughout society, the sun and moon, and then the stars "go wrong in their course"; hence: "days and nights, months and fortnights, seasons and years are out of joint; the winds blow wrong, out of season. Thus the gods are annoyed. This being so, the sky-god does not bestow sufficient rain." Thus the crops are poor and the humans who live on them are weak and short-lived. Right actions have the opposite effect (A.II.74-76). Whatever one makes of the precise claimed linkages, here, the message is plain: the weather and seasons can be disrupted by unethical human actions. Note here that the passage does not imply that human conduct is the only cause of good and bad weather, just that it sometimes is!

Consumerism and the Idea of Progress

In the modern world, consumerism is increasingly becoming a world ideology: a quest to "consume"—to devour, literally and metaphorically—more and more, as a supposed route to happiness. Unfortunately, even while this is psychologically ineffective, it also produces increasing strains on the world's weather and ecosystems which we all depend on for our sustenance, security, and happiness.

The consumerist ideology also goes hand in hand with the idea of inevitable "progress" in human affairs. Well, over the twentieth century, there was moral progress in certain areas, but also two world wars, Pol Pot's Cambodian holocaust, and genocide in places such as Rwanda.

The classical Buddhist view is not one of inevitable social progress—indeed there is the idea that, since the time of the early phase of Buddhism, there has been a gradual overall decline in morality and spirituality. The *Cakkavatti-sihanāda Sutta* (D.III.58-77) sketches out a past time when, due to

the son of a compassionate *cakkavatti* world ruler allowing poverty to develop, theft and then general social unrest and unwholesome actions develop, precipitating a long decline in civilization, with human life-spans declining to ten years in a violent age—perhaps reminding one of child-soldiers that are found in several world conflicts today. Those who react against this situation and hide in the forests then emerge to see the error of people's ways, so as, together, to re-build a moral society, such that people then start to live longer again. Life-span increases—up to 80,000 years!—with the development of an ethical society, until a future time when a new *cakkavatti* and then the Buddha Metteyya (Sanskrit Maitreya) eventually arrives. If one compares this mythic vision to our current situation, it is unclear whether human society is presently on a trajectory of increasing moral conduct and happiness, or still in a process of decline. Maybe the twentieth century included the worst we will see, maybe not. If not, environmental disruption caused by global warming may be what will sow the seeds for increasing human conflict over resources and access to relatively safer environments.

The upswing part of the *Cakkavatti-sihanāda* scenario, though, affirms that genuine social progress must be allied to ethical conduct, in which such things as sharing, mutual support, and trust help society to develop in a wholesome way. Greed and aggression do not produce a happy world. Just as an individual's good action is seen to lead to a happy rebirth, so communal good action helps make the world a better place.

Interdependence

An early expression of the idea that beings exist in a dependent relationship with their environment is in the *Khuddaka-pāṭha*, a short text of the fifth *Nikāya* of the Theravādin *Sutta-piṭaka*. In a short passage (section IV) linking numbers, from one to ten, to certain doctrinal points, the first is: "One is what? All beings subsist by nutriment (*sabbe sattā āhāra-tṭhitikā*)." This quotes A.V.50-51, where it is said by the Buddha to be a matter that should rightly lead a monk to dispassion, non-attachment, and liberation.

Elsewhere the four "nutriments" (*āhāras*) "for the maintenance of beings" are listed as physical food, sensory contact (*phassa*), mental volition, and consciousness (M.I.48). One can see these as physical nutriments, experiences, doing things, and awareness and thought. At the physical level, living beings survive through a constant exchange of the four basic elements with their environment: "earth" as solid food and excrement, "water" as drink and urine, "fire" as warmth and sweating, "air" as in and out breaths. Ending any of these exchange processes soon ends in death. These conditional relationships are examples of the broader principle of Conditioned Arising.

Those modern writers⁴ who seek to infuse ecological activism with a Buddhist motivation often refer to an extension of the idea of Conditioned Arising: the Hua-yen image of Indra's net, in which each item of existence in the universe "inter-penetrates" every other, in an all-encompassing network of interdependence. Each item is made possible by, and reflects, every other, for they all condition it in one way or another. Nothing can exist by itself, and each item makes its own contribution to the whole, indeed it is seen to be the unique cause of the kind of world which includes it. Francis Cook sees this perspective as one of "cosmic ecology" (1989:214).

As the Vietnamese monk Thich Nhat Hanh says, "We, ourselves, are made of non-self elements, the sun, the plants, the bacteria and the atmosphere" (Badiner 1990:177).⁵ In a similar vein, Stephen Batchelor says,

We feel ourselves to be separate selves in a separate world full of separate things. We feel separate from each other, separate from the environment that sustains us and separate from the things we use and enjoy. We fail to recognize them for what they are: part of us as we are of them. (Batchelor and Brown 1992:32)

The *implicit* logic of such Buddhist writers on ecology is that we should respect the other beings and environment that we depend on, and be aware that our negative actions toward the rest of nature go on to affect us. Certainly those who harm the environment, for example by dumping toxic

waste, help shape our world—we are dependent on them just as much as on more benign people and things. However, we surely have some *choice* over, and hence responsibility for, what kind of world we help make. Those who abuse nature, in blindness to our interdependence with it, should be respected as human beings, but not aided.

Does Buddhism Value Wild Nature?

In a rather skeptical tone, Ian Harris questions how deep-rooted environmentalism is in Buddhism, suggesting that it is largely in response to fashionable concerns coming from the West. Its recent rise as a self-conscious concern among Buddhists, though, can be seen as largely due to an awareness of the destructive impact of modernization—which was first experienced in the West. Harris cites D.III.74-75, from the *Cakkavattisihanāda Sutta*, which describes the future golden age in which humans have learnt to be highly moral again, and the world is prosperous. Then, "cities and towns are so close to one another that a cock can comfortably fly from one to the next. In this perfect world, only urban and suburban environments are left. The jungle has been fully conquered" (Harris 1991:108).⁶ Harris sees this passage as expressing a vision in which civilization is compatible with the "total destruction of the wilderness".

The passage is certainly an interesting one: the jungle as a refuge from the violent collapse of human civilization, followed by a steady redevelopment of human compassion and civilization, culminating (for a while, as everything is impermanent) in a prosperous human civilization in which there is no untamed nature. The message as regards nature, here, seems to be that, while an immoral society weakens itself and has to look to nature for renewal, a genuinely moral human civilization can take over more of the earth without destroying it, perhaps in an environment of closely clustered human communities—the text actually says *villages*, towns, and cities—that may still have nature interspersed within it in semi-wild parks etc.:

*Those who set up a park or a grove, the people who construct a bridge,
A place to drink and a well, those who give a residence:
For them karmic fruitfulness always increases. (S.I.33)*

That is, perhaps, that in a highly moral society, there is no actual *need* of wilderness, not that it should be "conquered." This is quite a subtle and complex message!

In actual fact, the value of wilderness is clearly expressed in a number of the poems attributed to the early *Arahats* in the *Theragāthā* (Thag.), a Theravādin text. A number are attributed to Mahā-Kassapa (vv.1062-1070), an ascetic character claimed by the Ch'an/Zen school as the first teacher in their line (Mahā-Kāśyapa). He speaks of his appreciation for the delightful rocks, "cool with water, having pure streams, covered with Indagopaka insects" (v.1063), resounding with elephants and peacocks, "covered with flax flowers as the sky is covered with clouds" (v.1068): "With clear water and wide crags, haunted by monkeys and deer, covered with oozing moss, those rocks delight me" (vv.1070). Sāriputta affirms, "Forests are delightful, where (ordinary) people find no delight. Those rid of desire will delight there; they are not seekers after sensual pleasures" (v.992). That is, the enlightened appreciate nature in a non-attached, non-sensual way. Bhūta speaks of contentedly meditating in a cave at night, while outside the thunder rumbles, the rain falls and fanged animals roar (v.524). In a more tranquil vein, Rāmaṇeyyaka says, "Amidst the sound of chirping and the cries of birds, this mind of mine does not waver, for devotion to solitude is mine" (v.49). For such early wilderness-meditators, the environment could itself be a teacher, especially of constant change and impermanence. As Vimāla says, "The earth is sprinkled, the wind blows, the lightening flashes in the sky. My thoughts are quietened, my mind is well concentrated" (v.50). The environment could also be an example, such as a mountain as an image of unshakeability (v.1000). Thus Mahānāma says that he is "found wanting by the mountain with its many shrubs and trees" (v.115). All in all, the mountain and forest environment loved by such early saints is one in which a person can develop such qualities as non-attached joy, fearlessness,

energy, and full enlightenment. As Kāḷudāyin boldly affirms, "While the wind blows cool and sweet smelling, I shall split ignorance asunder, as I sit on this mountain top" (v.544).

Such appreciation for the forest is also found in Mahāyāna texts. Thus in his *Bodhicaryāvatāra* (VIII.26 and 28), the poet Śāntideva praises the forest as a delightful place conducive to non-attachment:

Trees do not bear grudges nor is any effort required to please them. When might I dwell with those who dwell happily together?

When shall I dwell in the vast regions owned by none, in their natural state, taking my rest or wandering as I please? (Crosby and Skilton 1996:90)

In his *Śikṣā-samuccaya*, Śāntideva cites the *Ugradatta-paripṛcchā* as saying that the forest-dweller should seek to be like the plants and trees, which are without a sense of self or possession (Bendall and Rouse 1971:193). He also says that if a *Bodhisattva* has to be away from the forest for a while, to teach or learn from others, he should retain a "cave-and-forest mind" (Bendall and Rouse 1971:194).

The *Upāsakaśīla Sūtra* (Shih 1994:161) says of a *Bodhisattva* seeking to keep the precepts, "If he goes to a city, it is like going to a forest with a sword": that is, presumably, he must be on his guard to protect himself from the "attack" of temptations. Here, then, the forest is used as an image of untamed danger in need of pacification. Yet given that the forest is also a good place to meditate, the "pacification" needed is not that of the forest itself but of the human heart and its "wild animals" such as greed, hatred, and delusion! The vices of the city need to be tamed by the mind attuned to the forest! One can perhaps see this in the way some urban Thais seek out remote forest monasteries to receive teachings from the meditation-oriented "forest monks."

Industrial Development

The world is increasingly industrializing. No one can deny that this generates products that reduce human drudgery, and bring faster transport, and greater health and enjoyment, e.g., easy access to uplifting music. It can also free up time for reflection and meditation—though in practice, it tends to speed up the world and leave us with *less* time for these. This is generally not an intended result, but a knock-on effect. As more basic wants and needs become more easily satisfied (for some), we think of more things to want and chase after, and need to work harder to get the money to purchase these... This is based on an ignorance/ignoring of an aspect of what Buddhism calls the first Ennobling Truth—the things that we crave are never *really* satisfying; we always tend to want *more*.

Industrial productivity is an expression of human energy (Pali *virīya*, Sanskrit *vīrya*). In the Theravādin *Abhidhamma*, this is a quality which can strengthen and intensify either skillful or unskillful states. Accordingly, industrial productivity needs carefully to focus on products that do not harm people, animals, or the environment. It is also necessary for "consumers"—those who "eat" the industrially processed resources of the world—to realize that over-eating can be as harmful to health as under-eating: "Riches ruin the foolish, but not those in quest of the Beyond; through craving for riches, the foolish one ruins himself as (if he were ruining) others" (*Dhammapada* v.355).

Wealth is fine as long as:

- it is made in an ethical way, without harming humans and other beings;
- it is used to bring happiness to oneself and one's family, and shared with others, including employees; and
- one is not greedily attached to it, without contentment (S.IV.331-337; Harvey 2000:187-238).

In the *Vimalakīrti-nirdeśa Sūtra*, it is said of the lay *Bodhisattva* Vimalakīrti, "Though profiting by all the professions, yet far above being absorbed in them" (Tsunoda et al. 1964:I.101). To be able to see how to increase one's wealth is fine, but not to be blind to moral considerations, so as to do so with "tricks, fraud and lies; worldly, purse-proud": this is to be "one-eyed" (A.I.129-130)—to only look for profit, and not also what is right.

Right Livelihood

The "right livelihood" factor of the Ennobling Eightfold Path entails that one's means of livelihood should not be dishonest (M.III.75) or otherwise cause suffering to other living beings. "Wrong livelihood" as seen as trade in: weapons (being an arms salesman), living beings (e.g., keeping animals for slaughter), meat (being a slaughterer, meat salesman, hunter or fisherman), alcoholic drink or poison (A.III.208). The Mahāyāna *Brahmajāla Sūtra Bodhisattva* code says:

32. On Harming Sentient Beings. A disciple of the Buddha must not sell knives, clubs, bows, arrows, other life-taking devices, nor keep altered scales or measuring devices. He should not abuse his governmental position to confiscate people's possessions, nor should he, with malice at heart, restrain or imprison others or sabotage their success. In addition, he should not raise cats, dogs, foxes, pigs and other such animals. If he intentionally does such things, he commits a secondary offense. (Buddhist Text Translation Society)

A modern Buddhist might add other forms of wrong livelihood. For example: doing experiments on animals; developing pesticides; working in the arms industry; and perhaps even working in the advertising industry, to the extent that this can be seen as encouraging greed, hatred, or delusion, or perverting the truth (Saddhatissa 1972:52).

Positive Action for the Human World

He who has understanding and great wisdom does not will (ceteti) for the harm of himself, of others, or of both. So willing, he wills for the welfare of himself, of others, of both, and of the whole world. Thus, monk, one has understanding and great wisdom. (A.II.179)

In Buddhist traditions, there are a range of ideas and ideals about acting so as to bring positive benefit for the world, and it makes sense to see this as including benefit to the environment, for the benefit of both humans and other beings that we share the world with.

Such an attitude is seen in right resolve, second factor of the Ennobling Eightfold Path, and, with right view, seen as comprising wisdom (M.I.301): the resolve for renunciation—which implies less greed for the world's resources—the resolve for non-ill-will, or loving-kindness to all, and the resolve for non-cruelty, or compassion.

A relevant reflection, here, is that actions both harmful and beneficial to the environment often have results over a long time-span, beyond the life-span of the present human generation. We should certainly try to bequeath to our children and grandchildren an environment that is as peaceful and supportive of life and Buddhist practice as we can. As the Dalai Lama says:

Destruction of nature and natural resources results from ignorance, greed, and lack of respect for the earth's living things. This lack of respect extends even to the earth's human descendants, the future generations who will inherit a vastly degraded planet if world peace does not become a reality and if destruction of the natural environment continues at the present rate. (<http://www.tibet.com/Eco/dleco2.html>)

Moreover, from a Buddhist perspective, we may well be reborn in the future human (and animal!) generations that will suffer from the damage that the

current human generation is doing to our planet. We "make our bed" now and in future may have to lie on it.

Regarding the importance of a good environment, and hence the value of helping to sustain or bring this about, the Theravādin *Maṅgala Sutta*, in its list of blessings, includes, "To reside in a *congenial* environment (*patirūpadēsavāso*)" (Sn.260). If the local or global environment is disrupted, conditions for Buddhist practice, for calm and reflection, are disrupted. The "biosphere" is a thin envelope, a few miles thick, which encompasses the oceans, land, and lower atmosphere. Only if conditions here are right is life possible on earth, and more particular conditions are needed for a *congenial* environment. Global warming is a threat to all of this.

In the *Dhammapada* commentary (Dhp.A.I.264-272) is the story of how Sakka, chief of the thirty-three gods of a key heaven, attained his state on account of good deeds in a past life as Magha. Living in a village of rough people, with a neglected environment, Magha determined to bring happiness to it. He therefore set to cleaning the village and then making the road smooth and even. When others saw him at work, thirty-two men gradually joined him, as he said that he was "treading the path that leads to heaven." Women later joined them in their project. The village head-man became jealous of Magha's increasing influence, and tried to get him and his companions killed, but their composure and kindness protected them. Persistent effort brought beauty and peace to the area. This story is a favorite one of the Sarvōdaya Śramadāna village development movement in Sri Lanka.

In the Mahāyāna, Asaṅga, in his *Bodhisattva-bhūmi*, sees a key aspect of the ethics of the Bodhisattva as "working for the welfare of beings" (*sattvārthakriyā*) (Harvey 2000:131; Tatz 1986:16). This covers a range of actions to bring real help to others, including: protecting from wild animals, kings, robbers, and the elements; comforting those stricken by calamities; giving to the destitute (Tatz 1986:50-55). In a modern context of environmental problems and dangers, one could surely add, for example: acting to reduce global warming. While many Buddhas in the Mahāyāna are seen to produce "pure

lands," with conditions which are even and peaceful, more conducive to enlightenment than this world, one can surely see any action to make *this* world more peaceful and supportive as *Bodhisattva*-action.

Care for Other Beings

Buddhist principles counsel non-violence to any sentient being, not just humans, for Buddhism sees humans and other beings as fellow-sufferers in the round of rebirth. While humans are seen to be particularly worthy of respect due to their moral and spiritual potential, these very qualities imply that we should not thoughtlessly exploit other beings, but show our relative superiority through kindness and care.

Such actions are also ascribed to the gods: it is said that Sakka (who gained his divine status by being the helpful Magha, above) was once fleeing with his army from the army of the *asuras*. Seeing that his chariot was about to destroy some birds' nests, he stopped the retreat (which then shocked the *asuras* into stopping their pursuit; S.I.224).

In the *Cakkavatti-sihanāda Sutta*, the ideal ruler is seen as establishing "guard, ward and protection" for both various groups of people in town and country, and animals and birds (D.III.61). Emperor Asoka's edicts relating to animal welfare include the following:

The Fourteen Rock Edicts: 2 Everywhere within Beloved-of-the-Gods, King Piyadasi's domain . . . has Beloved-of-the-Gods, King Piyadasi, made provision for two types of medical treatment: medical treatment for humans and medical treatment for animals. Wherever medical herbs suitable for humans or animals are not available, I have had them imported and grown. . . .

The Seven Pillar Edicts: 7 . . . Along roads I have had banyan trees planted so that they can give shade to animals and men, and I have had mango groves planted. At intervals of eight krosas, I have had wells dug, rest-houses built, and in various places, I have had watering-places made for the use of animals and

men. . . I have done these things for this purpose, that the people might practice the Dhamma. . . (Dhammika 1993)

The *Upāsaka-śīla Sūtra* says of the *Bodhisattva*:

In places where there are no trees, he erects posts and builds sheds for animals. . . . Seeing animals who are in fear, he helps and shelters them and persuades hunters [to stop hunting] by providing them with material things and kind words. (Shih 1994:133-134)

If he feeds ants with a bit of noodle, he can also gain immeasurable rewards. (Shih 1994:113)

The *Brahmajāla Sūtra*'s forty-eight secondary precepts for *Bodhisattvas* include:

20. Failure to Liberate Sentient Beings. A disciple of the Buddha should have a mind of compassion and cultivate the practice of liberating sentient beings. . . . If a Bodhisattva sees an animal on the verge of being killed, he must devise a way to rescue and protect it, helping it to escape suffering and death. The disciple should always teach the Bodhisattva precepts to rescue and deliver sentient beings. (Buddhist Text Translation Society)

Of course, one could add a rider here: but not liberate them in ways that lead others to first harm them!

We should act in such a way as to take into account the interests of other forms of sentient life in the environment that we share with them. We might sometimes choose to override such interests in favor of our own human ones, individual or collective, but we should never simply ignore them as if they do not exist. We sometimes end up overriding the interests of other people where we have a conflict of interest with them, but we should always first seek to find ways in which both parties' interests are

satisfied to a degree, and it is good to sometimes allow the interests of the other party to prevail. Social interactions often involve such balancing of interests. To always prefer one's own interests is recognized as acting selfishly. We should treat interactions with non-human beings in a similar way. We also need to become increasingly sensitive to the fact that harm to other forms of life often has knock-on effects that bring harm to humans, too. Buddhism has often taught that harm, and true benefit, of self and others are intertwined.

Protecting Other Species

One of emperor Asoka's edicts says:

The Seven Pillar Edicts: 5 . . . Twenty-six years after my coronation various animals were declared to be protected—parrots, mainas, aruna, ruddy geese, wild ducks, nandimukhas, gelatas, bats, queen ants, terrapins, boneless fish, vedareyaka, gangapuputaka, sankiya fish, tortoises, porcupines, squirrels, deer, bulls, okapinda, wild asses, wild pigeons, domestic pigeons and all four-footed creatures that are neither useful nor edible. [The identification of many of these animals is conjectural.] Those nanny goats, ewes and sows which are with young or giving milk to their young are protected, and so are young ones less than six months old. Cocks are not to be caponized, husks hiding living beings are not to be burnt and forests are not to be burnt either without reason or to kill creatures. One animal is not to be fed to another. . . . (Dhammika 1993)

Trade in endangered species, and driving species to extinction due to human destruction of their habitat, is now an international problem. The above edict has Asoka seeking to protect *members* of a range of species, but one can ask whether Buddhism has any particularly strong reasons for protecting *species* per se. Buddhist concern has always been for the suffering of any sentient being, of whatever species. In an eons-old world of change and impermanence, it is to be expected that species will become extinct

(though this is happening much more rapidly than usual at present). Nevertheless, each dying species consists of suffering individuals, and Buddhist concern should certainly focus on these. Buddhist principles might not strongly support saving "the" whale, but they support saving whales! It is unlikely that Asoka's edict was to prevent species extinctions, as such.

Where saving (members of) one endangered species involves killing members of another species, Buddhism would not be supportive. Moreover, classical Buddhist ethics would not, explicitly, see killing the last rhinoceros as worse than killing one when they were plentiful, or killing a cow, say. Although to deliberately kill a rhinoceros so as to try to end the species could be seen as worse, both because it would be a very destructive act and would offend many people. A world without a particular species is still the conditioned world of suffering beings. If the *human* species became extinct, then an opportunity to be born as a being capable of enlightenment would be lost—at least in this part of the universe. While the same could not be said of any other species (though East Asian Buddhism came to see all species, even plants, as having the "Buddha nature"), the higher animals at least are seen as capable of some virtue, so their loss would also hinder the spiritual progress of beings. Accordingly, for some animals, to kill one when one knows that this will push its species closer to extinction, even if this is not one's intention, can indeed be seen as a worse act than if the species were not an endangered one.

What of endangered species that it would be implausible to see as capable of any kind of virtue? Is it *worse* to kill a member of such a species, when one knows it is endangered, than a member of a similar non-endangered species? One can argue that this may contribute to reducing the biodiversity of an ecosystem, and thus the overall flourishing of the various kinds of being that are part of it. This argument has some force: we should not make it more difficult for other beings to live. Some might also argue that if the species goes extinct, then this would eliminate the possibility of life for future generations of that species, and so in effect "kill" many beings. However, from a Buddhist point of view, the beings that might have

later been reborn as members of that species would simply be reborn as members of other species. Moreover, prevention of birth is not the same as killing, otherwise contraception would be a form of killing!

One endangered higher species is the tiger, partly threatened by the traditional Chinese belief that eating parts of a tiger sustains virility. Thus tigers are still imported from the dwindling numbers of India and Bangladesh into Taiwan—supposedly as "pets." In 1986, it was reported that Buddhist leaders there planned to buy twelve such tigers to save them from being eaten at the Chinese New Year.

Other endangered species are various types of whales, which the Japanese are active in hunting "scientifically" in spite of a world moratorium on commercial hunting. Japanese whale-hunting can be seen as the product of several factors. The fact that Japan is an island has meant that the sea has been looked to as a great food-provider. The traditional preference for seafoods was probably also strengthened by Buddhist concerns over meat-eating, for fish are seen as a low form of life. With more powerful boats, and an increasing secularism, there has been much whale killing. To the average Japanese, killing a whale is no worse than killing a cow, though of course a pious Buddhist would not want to do either. Given the Buddhist concern for "all sentient beings," Japanese whaling, and the Japanese emphasis on memorial rites, it is perhaps not surprising that Buddhist monks sometimes carry out memorial rites for the whales killed by whalers (Hoshino and Takeda 1987:310). Kapleau reports one such in 1979, put on by a Zen temple, and with government officials and executives of a large whaling company in the audience (1981:46-50). Unfortunately, the service did not seem to contain any discouragement to whaling, but was more like a way to salve people's consciences. This is not even a case of unintentionally harming a group of animals, but intentionally doing so and then trying to compensate for it with a ritual bandage. Of course Japanese whalers would not want to cause the actual *extinction* of the species that they hunt—but sensitive and intelligent beings are deliberately killed, nevertheless.

Reducing Demands on the World's Resources

Escalating use of the world's natural resources, without sufficient recycling, both means that more and more land is used for dumping "rubbish," and future generations will have fewer resources. In the case of fossil fuels, over-use also contributes to global warming.

Buddhist values that seem relevant to this issue include those of contentment and the second lay precept, against "taking what is not given." While this directly relates to theft and cheating, one can also see its spirit as implying "not taking more than is one's due" from the world's pool of natural resources.

The *Vinaya* contains a striking example of "recycling": Ānanda refers to a monastic process in which old robes are made into upper coverings, old upper coverings into mattress coverings, old mattress coverings into ground coverings, old ground coverings into foot wipers, old foot wipers into dusters, and old dusters are shredded and mixed with mud to make a plastered floor (Vin.II.291).

Shared Responsibility

An issue relevant to the focus of this paper is that of shared responsibility. Environmental damage is generally the aggregate result of the actions of many people. We are all directly responsible for our own individual input into this process, and can certainly be seen as morally accountable for such actions that we now know are damaging in their effects. Is that all we are responsible for? No. Our actions may be influenced by the bad example of others, and in turn set a bad example for others. We are responsible for the example we set—note how the *Cakkavatti-sihanāda Sutta* sees shared effort in ethical action as uplifting society, and the story of Magha has him inspiring others to help improve the environment. Moreover, in Buddhism, actions can be by body, *speech* or *mind*. If we tell someone else to do something we know is harmful to beings in the environment, or are one of a group of

people who intend such harm,⁷ or speak in favor of such actions, or even mentally applaud them, then we are generating negative karma. An exception, though, would be if one is speaking of a case where greater benefit than harm comes—for example with fuel-hungry transport planes being needed to carry aid or help put out forest fires.

Relevant here is the Dalai Lama's idea of "Universal responsibility":

Concern for the environment is not necessarily holy, nor does it always require compassion. . . . Most of us are somewhat concerned about our own house, but not really compassionate about it. We keep it in order so that we can live and be happy. We know that to have happy feelings in our house we must take care of it. So our feelings may be of concern rather than compassion.

Similarly, our planet is our house, and we must keep it in order and take care of it if we are genuinely concerned about happiness for ourselves, our children, our friends, and other sentient beings who share this great house with us. If we think of the planet as our house or as our mother—Mother Earth—we automatically feel concern for our environment. Today we understand that the future of humanity very much depends on our planet, and that the future of the planet very much depends on humanity. But this has not always been so clear to us. Until now, you see, Mother Earth has somehow tolerated sloppy house habits. But now human use, population, and technology have reached that certain stage where Mother Earth no longer accepts our presence with silence. In many ways she is now telling us, "My children are behaving badly." She is warning us that there are limits to our actions.

Our ancestors viewed the earth as rich and bountiful, which it is. Many people in the past also saw nature as inexhaustibly sustainable, which we now know is the case only if we care for it. It is not difficult to forgive destruction in the past that resulted from ignorance.⁸ Today, however, we have access to more information. It is essential that we reexamine ethically what we have inherited, what we are responsible for, and what we will pass on to coming generations.

Clearly this is a pivotal generation. . . . Many of the earth's habitats, animals, plants, insects, and even microorganisms that we know as rare may not be known at all by future generations. We have the capability and the responsibility. We must act before it is too late.
(<http://www.tibet.com/Eco/dleco2.html>)

Is Environmental Concern Morally Obligatory or a Voluntary Positive Action?

From Buddhist principles, it is clear that we should not deliberately harm living beings and their supportive environment. It is also clear that to positively help living beings and their environment is a wholesome act. However, are such positive acts in any sense *obligatory*, such that *not* doing them is unwholesome? Are they simply for the noble few, whose actions can be admired by others, but not emulated—like Theravādin vegetarians, renunciant monks, heroic *Bodhisattvas*? For example, is driving a low-fuel-consumption car rather than a "gas-guzzling" one a noble voluntary good action, or avoiding a greedy, harmful, unwholesome action? Moreover, if one is doing *other* wholesome, karmically positive actions, is it acceptable to neglect actions that benefit the environment?

Here, the Dalai Lama's above point is relevant: looking after our environment makes sense even for straightforward pragmatic reasons: we need to look after our "home," and as we become more aware of what harms it, this knowledge should not be ignored, but used to modify our behavior. This hardly requires us to be *Bodhisattvas*, just to avoid stupid short-sightedness—i.e., a form of delusion. Once we lack factual ignorance of the harmful effects of our actions, it surely becomes an expression of spiritual ignorance to ignore this knowledge.

Building on this, voluntary positive action, for the benefit of all, is seen by Buddhists to generate karmic fruitfulness, which brings benefit and

happiness in the future. Complacently neglecting to do this makes little sense, whether or not it is an obligatory "duty." Moreover, a supportive environment is in some ways a pre-requisite for being able to do any other karmically positive actions.

We see, in fact, that in the *Upāsaka-sīla Sūtra*, failure to do some actions make up six of twenty-three grave offenses for a lay Bodhisattva (Shih 1994:80-83): for example not offering part of a new harvest to the three refuges or not looking after a sick person that one meets on a journey. In the *Brahmajāla Sūtra* code for *Bodhisattvas*, the forty-eight secondary precepts include ones against, for example: failure to take care of the sick; failure to liberate sentient beings; failure to make great vows. For the Mahāyāna tradition, then, it can be *obligatory* to do certain beneficial actions.

While this is often seen as something found only in the Mahāyāna, it is also found in the Theravāda. Its *Vinaya* has a passage where the Buddha finds a monk with dysentery that the other monks are not taking care of. The Buddha and Ānanda care for the monk, and the Buddha tells the other monks: "Monks, you have not a mother or a father who might tend you. If you, monks, do not tend one another, then who is there who will tend you? Whoever, monks, would tend me, he should tend the sick" (Vin.I.302). As an extension of this, one might say: "The biosphere, which is ailing, has no-one to look after it but its inhabitants, its members. Whoever would tend the Buddha should tend the biosphere."

So, Buddhist considerations urge that:

- we should not deliberately harm any living being;
- we should look after the biosphere-home that we share with other beings, by using our knowledge of unintended effects of our actions to modify our behavior;

- we should also act positively to benefit others beings, human and non-human, and enhance their supportive environment.

Notes

¹ This paper was first given at the "Buddhist Ecology and Critique of Modern Society," a joint seminar of the School of Oriental and African Studies, London, and Dongguk University, South Korea, at S.O.A.S., 17-18 February 2005.

² All *Vinaya* references here are to the Theravādin *Vinaya*.

³ For example, in the *Vinaya*, if a monk "enjoins (*āṇāpeti*)" another person to kill a human being, this is already an act of wrongdoing, as a step has been taken to effect an unskillful intention. It becomes a *Pārājika* offense for both parties once the murder has been carried out (Vin.III.53 and 75).

⁴ For example, Badiner (1990:61); Batchelor and Brown (1992:11, 35); Macy (1991); Sandell (1987).

⁵ In France, Thich Nhat Hanh has set up the international Tiep Hien (Inter-being) order of meditators and social/peace activists. Among the precepts of the order is, "Do not live with a vocation that is harmful to humans and nature" (Eppsteiner 1988:151, and see <http://www.iamhome.org/14mt.htm>). Nhat Hanh teaches his followers to use verses which remind them of their inter-relationship with the world, and their duties toward it. For example, when turning on a tap or drinking water, they should reflect:

Water flows over these hands

May I use them skillfully

to preserve the planet. (Batchelor and Brown 1992:106)

⁶ Harris develops his views in Harris (1994, 1995, 1997, 2000).

⁷ For example, in the *Vinaya*, collective guilt applies when a group of monks decide to steal some particular goods. All are guilty of a *Pārājika* offense even though only one carries out the actual theft (Vin.III.64).

⁸ This must of course refer to factual ignorance, not spiritual ignorance.

Abbreviations

Pali texts in their Pali Text Society editions:

A. *Āṅguttara Nikāya*

D. *Dīgha Nikāya*
 J. *Jātaka* with commentary
 M. *Majjhima Nikāya*
 S. *Samyutta Nikāya*
 Sn. *Sutta-nipāta*
 Thag. *Theragāthā*
 Vin. *Vinaya*

Bibliography

Badiner, Alan Hunt (ed.). *Dharma Gaia: A Harvest of Essays on Buddhism and Ecology*. Berkeley, California: Parallax Press, 1990.

Batchelor, Martine and Kate Brown (eds). *Buddhism and Ecology*. London and New York: Cassell, 1992.

Bendall, Cecil and W. H. D. Rouse. *Śīkṣa Samuccaya: A Compendium of Buddhist Doctrine*. Delhi: Motilal Banarsidass, 1971 (1st edition 1922).

Buddhist Text Translation Society (no date), *The Brahma Net Sutra*. Online. Available HTTP: <<http://www.purifymind.com/BrahmaNetSutra.htm>> (accessed 23 January 2007).

Cook, Francis. "The Jewel Net of Indra," in *Nature in Asian Traditions of Thought: Essays on Environmental Philosophy*, edited by J. Baird Callicott and Roger T. Ames, 213-230. Albany: State University of New York Press, 1989.

Crosby, Kate and Andrew Skilton. *Śāntideva: The Bodhicaryāvatāra*. Oxford: Oxford University Press, 1996.

Dalai Lama, His Holiness the. "Universal Responsibility and the Environment" (from *My Tibet—The Dalai Lama and Galen Rowell*). Online. Available HTTP: <<http://www.tibet.com/Eco/dleco2.html>> (accessed 23 January 2007).

Dhammika, Ven. S. *The Edicts of King Asoka*. Wheel Publication no. 386-387, Kandy, Sri Lanka: Buddhist Publication Society, 1993. Online on Access to Insight website. Available HTTP: <<http://www.accesstoinsight.org/lib/bps/wheels/wheel386.html>> (accessed 23 January 2007).

Eppsteiner, Fred (ed.). *The Path to Compassion: Writings on Socially Engaged Buddhism*. Berkeley, California: Parallax Press, 1988.

Harris, Ian. "How Environmentalist is Buddhism?" *Religion* 21 (1991), 101-114.

Harris, Ian. "Causation and *Telos*: The Problem of Buddhist Environmental Ethics," *Journal of Buddhist Ethics* 1 (1994), 45-56. Online. Available HTTP: <<http://www.buddhistethics.org/1/harris.txt>> (accessed 23 January 2007).

Harris, Ian. "Getting to Grips with Buddhist Environmentalism: A Provisional Typology," *Journal of Buddhist Ethics* 2 (1995), 173-190. Online. Available HTTP: <<http://www.buddhistethics.org/2/harris.txt>> (accessed 23 January 2007).

Harris, Ian. "Buddhism and the Discourse of Environmental Concern: Some Methodological Problems Considered." In *Buddhism and Ecology: The Interconnection of Dharma and Deeds*, edited by Mary Evelyn Tucker and Duncan Ryūken Williams, 377-402. Cambridge, Massachusetts: Harvard University Press, 1997.

Harris, Ian. "Buddhism and Ecology." In *Contemporary Buddhist Ethics*, edited by Damien Keown, 113-136. Richmond: Corson, 2000.

Harvey, Peter. "Vinaya Principles for Assigning Degrees of Culpability," *Journal of Buddhist Ethics* 6 (1999), 271-291. Online. Available HTTP: <<http://www.buddhistethics.org/6/harvey991.pdf>> (accessed 23 January 2007).

Harvey, Peter. *An Introduction to Buddhist Ethics: Foundations, Values and Issues*. Cambridge: Cambridge University Press, 2000. See p. 150-186 on "Attitude to and Treatment of the Natural World."

Hoshino, Eiki and Dōsho Takeda. "Indebtedness and Comfort: The Undercurrents of Mizuko Kuyō," *Japanese Journal of Religious Studies* 14 (1987), 305-320.

Huxley, Andrew. "The Kurudhamma: From Ethics to Statecraft", *Journal of Buddhist Ethics* 2 (1995), 191-203. Online. Available HTTP: <<http://www.buddhistethics.org/2/huxley.txt>> (accessed 23 January 2007).

Kapleau, Philip. *To Cherish All Life: A Buddhist View of Animal Slaughter and Meat Eating*. Rochester, New York: The Zen Center, 1981.

Keown, Damien. *Buddhism and Bioethics*. London: Macmillan, and New York: St Martin's Press, 1995.

Macy, Joanne. *World as Lover, World as Self*. Berkeley, California: Parallax Press, 1991.

Saddhatissa, Hammalawa. *Buddhist Ethics: Essence of Buddhism*. London: George Allen & Unwin, 1972.

Sandell, Klaus (ed.). *Buddhist Perspective on the Ecocrisis*. Wheel Publication no. 346-348, Kandy, Sri Lanka: Buddhist Publication Society, 1987.

Shih, Heng-ching Bhikṣuṇī. *The Sutra on Upāsaka Precepts*. Berkeley, California: Numata Center for Buddhist Translation and Research, 1994.

Suzuki, D. T. *Studies in the Lankavatara Sutra*. London: Routledge and Kegan Paul, 1930.

Suzuki, D. T. *The Lankavatara Sutra*. London: Routledge and Kegan Paul, 1932.

Tatz, Mark. *Asanga's Chapter on Ethics, with the Commentary of Tsong-kha-Pa*. Lewiston/Queenston: Edwin Mellen Press, 1986.

Thanissaro Bhikkhu. *The Buddhist Monastic Code*. California: Metta Forest Monastery, 1994. Online. Available HTTP:

<<http://www.accesstoinsight.org/lib/modern/thanissaro/bmc1/index.html>> and
Access to Insight website:

<<http://www.accesstoinsight.org/lib/modern/thanissaro/bmc2/index.html>> (accessed 23 January 2007).

Tsunoda, Ryusaku, Wm, Theodore de Bary, W. T, and Donald Keene. *Sources of Japanese Tradition*, 2 vols, New York and London: Columbia University Press, 1964.

Williams, Duncan Ryūken. "Animal Liberation, Death and the State: Rites to Release Animals in Medieval Japan." In *Buddhism and Ecology: The Interconnection of Dharma and Deeds*, edited by Mary Evelyn Tucker and Duncan Ryūken Williams, 149-165. Cambridge, Massachusetts: Harvard University Press, 1997.