Buddhist Philosophy and the Ideals of Environmentalism

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Abstract

I examine the consistency between contemporary environmentalist ideals and Buddhist philosophy, focusing, first, on the problem of value in nature. I argue that the teachings found in the Pāli canon cannot easily be reconciled with a belief in the intrinsic value of life, whether human or otherwise. This is because all existence is regarded as inherently unsatisfactory, and all beings are seen as impermanent and insubstantial, while the ultimate spiritual goal is often viewed, in early Buddhism, as involving a deep renunciation of the world.

Therefore, the discussion focuses mostly on the Mahāyāna vehicle, which, I suggest has better resources for environmentalism because enlightenment and the ordinary world are not conceived as antithetical. Still, many contemporary green ideas do not sit well with classical Mahāyāna doctrines. Mahāyāna philosophers coincide in equating ultimate reality with 'emptiness,' and propose knowledge of this reality as a final soteriological purpose. Emptiness is generally said to be ineffable, and to involve the negation of all views. An important question is how to reconcile environmentalism with the relinquishing of views.

I consider several prevalent themes in environmentalism, including the philosophy of 'Oneness,' and other systems that are often compared with Buddhism, like process thought. Many of these turn out to have more in common with an extreme view that Buddhism seeks to avoid, namely, eternalism. I attempt to outline an environmental position that, like the doctrine of emptiness, traverses a Middle Path between eternalism and nihilism.

I conclude by proposing that emptiness could be regarded as the source of value in nature, if it is seen in its more positive aspect, as 'pliancy.' This would imply that what Buddhist environmentalists should seek to protect is not any being in its current form, nor any static natural system, but the possibility of adaptation and further evolution.

Contents:

Abbreviations

A	*Anguttara Nikāya*
BCA	*Bodhicaryāvatāra*
D	*Dīgha Nikāya*
Dhp.	*Dhammapada*
HV	*Hastavālanāmaprakaraṇa*
M	*Majjhima Nikāya*
MA	*Madhyamakāvatāra*
MMK	*Mūlamadhyamakakārikā*
MRK	*Mahāratnakūṭa Sūtra*
MSA	*Mahāyānasūtralaṅkāra*
MV	*Madhyāntavibhāga*
MVB	*Madhyāntavibhāgabhāṣya*
Nico.	*Nicomachean Ethics*
PE	*Principia Ethica*
PPH	*Prajñāpāramitā Hṛdaya*
S	*Samyutta Nikāya*
Sn	*Sutta Nipata*
SP	*Saddharma Pundarīka*
Sv	*Sukhāvatīvyūya Sūtra (Shorter)*
SV	*Sukhāvatīvyūya Sūtra (Longer)*
T	*Tractatus Logico-Philosophicus*
TK	*Triṃśikākārikā*
TSN	*Trisvabhāvanirdeśa*
Ud.	*Udāna*
Vin.	*Vinaya Pitaka*
Vism.	*Visudhimagga*
VK	*Viṃśatikākārikā*
VN	*Vimalakīrti Nirdeśa*
VPP	*Vajracchedikā Prajñāpāramitā*
VV	*Vigrahavyāvartani*

Declaration

I confirm that no part of the material contained in this thesis has been previously submitted for any degree in this or in any other university. All the material is the author's own work, except for quotations and paraphrases, which have been suitably indicated.

The first section of chapter 1, "The Charge of Speciesism," has been published as "Buddhism and Speciesism: on the Misapplication of Western Concepts to Buddhist Beliefs," in *Journal of Buddhist Ethics* 15: 215-240.

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Introduction: Why Buddhism and the Environment?

This dissertation examines the relevance of Buddhism *vis-à-vis* the current environmental crises. Since the 1986 "Assisi Declarations," it has become common for representatives of the world's faiths to pledge their commitment to the conservation and protection of nature (WWF, 1999). Furthermore, theologians and religious leaders around the world have sought to establish the environmental saliency of their respective doctrines and other articles of faith, as well as to demonstrate the ecological soundness of their practices. Among these, Buddhists have been particularly vocal in expressing their affinity for environmental issues.

Discussion about the alleged environmental credentials of Buddhism harks back at least to the nineteen-sixties; one of the first mentions in an academic context appeared in Lynn White's seminal paper on "The Historical Roots of our Ecologic Crisis." White made an important hypothesis there, that would serve as a foundation for the nascent field of environmental philosophy; he suggested that the way people treat their environment depends largely on their conceptions of themselves, of nature, and of the relation between the two, in short, on their 'worldview,' and he also implied that these beliefs often arise as a corollary to religious faith. White, in fact, denounced Christianity as "the most anthropocentric religion the world has seen" and he then proposed Buddhism—in particular, the 'beatniks' ' version of Zen—as an example of an alternative, ecologically sounder worldview (White 1967, 1203–1206).

The American 'beat' counter-culture, which involved an experimental attitude towards religion and spirituality amongst other things, began in the nineteen-fifties as a radical reaction against the conservative values of the time. The Western disaffection with Christianity, however, had started well before that and, in the nineteenth century, became severe enough for later historians to speak of a 'crisis of faith.' Generally ascribed to the conflict between science and a literal reading of the Bible (particularly, the Book of Genesis), the Victorian crisis was also compounded by the Church's efforts to suppress the new theories of Darwin, say, or of Lyell, so that the wide gulf that was perceived between reason and faith led to the rejection of Christianity in many

intellectual circles (Brooke 1991, 270). Meanwhile, Buddhism was just beginning to be discovered by Western scholars, who, from the very start, were impressed by its relative compatibility with the new scientific worldview. Consequently, certain aspects and readings of Buddhism were emphasized above others, for example, the rejection of a Creator God, the affinity with Darwinian evolution, and the interpretation of *kárma* as the law of cause and effect (McMahan 2004, 900).

The alleged compatibility with science and reason, however, was only one of the qualities that attracted westerners to Buddhism; besides appealing to empiricists and rationalists it also found adherents from the opposite end of the philosophical spectrum. Idealists such as Schopenhauer, Romantics like Thoreau, the composer Wagner, and the artist Van Gogh all acknowledged the influence of Buddhism upon their work and thought. For various reasons, then, in the nineteenth century, westerners began to take an interest in the Buddhist faith, and in 1880, Henry Steele Olcott and Helena Petrova Blavatsky became the first Europeans to take refuge formally in Theravada Buddhism (Batchelor 1994, 269). Only a few years before, they had founded the Theosophical Society, which, although lacking, perhaps, in academic rigor, and taking a rather eclectic approach to spirituality, was commendable, at the time, for initiating the *practice* of Eastern spirituality in Europe, rather than just intellectual study.

Contemporary environmentalism also has its roots in the nineteenth century, for instance, in Thoreau's Romantic proposal of a "back to nature" approach, and therefore, arguably, Buddhism and environmentalism have been linked in the West from the very start.[1] It was not until the nineteen-sixties, however, that environmentalism was established as an international movement, with the first global conference being held in 1972. That same year, the Norwegian philosopher Arne Naess coined the term 'Deep Ecology,' to draw attention to the spiritual dimension of the reform in practices and attitudes that the ecological crises required, and he too, in some places, made an explicit connection with Buddhism (Naess 1986, 2). The same decade saw the publication of Fritjof Capra's *The Tao of Physics* (1976) and James Lovelock's *Gaia* (1979), both of which contributed to the discourse about a new, holistic paradigm that, allegedly, was to

[1] Sponsel and Sponsel (2003, 363) argue, in fact, that Buddhism contributed significantly to the development of Western environmentalism.

replace the old mechanistic one. Much of this discussion was based on the parallels that holists perceived between twentieth century science and Eastern philosophies, including Buddhism. Again, these comparisons were not entirely unprecedented, but drew heavily upon the earlier intuitions of physicists like Heisenberg and Bohr (Scerri 1989, 688).

In short, the connection between Buddhism and environmentalism has a history that stretches back over a century at least, and there is a complex set of relations between contemporary science, ecology, and Buddhism. An important reason for this, of course, is the heterogeneous nature of Buddhism itself, as well as, to a lesser extent, that of environmentalism. Despite this, the green credentials of Buddhism were mostly taken for granted until the nineteen-nineties, when Ian Harris (1991, 1994) and Lambert Schmithausen's (1991, 1997) critical accounts appeared. Owing to these, "eco-Buddhism," or "green Buddhism"—which I define as any expression of Buddhism that is also concerned with environmental problems—today also includes a rigorous and discerning branch of philosophical study. In what follows, I shall draw upon Donald Swearer and Ian Harris's categorization of different approaches within green Buddhism in order to place this study within a context. Then, in the final part of this chapter, I shall provide a quick outline of my main arguments.

An Overview of Buddhist Environmentalism

Harris sorts the plethora of publications on Buddhism and the environment into four categories (1995, 176–180), whereas Swearer, writing ten years later, has five groups (2005, 2); their classifications, however, only partially correspond with each other. The largest group is made up of those works they both classify as "eco-apologist" and which mostly involve a rather uncritical acceptance of the green credentials of Buddhism, or else an equally cursory endorsement of ecological principles by distinguished Buddhist teachers. Swearer calls this 'the majority view' and places several well-known anthologies, like *Dharma Gaia* and *Dharma Rain* within this group (2005, 4). Although these collections are certainly valuable as sources of inspiration for practising Buddhists and environmentalists, most contributions tend to be rather thin on philosophical content,

and therefore, in this thesis they will only be referred to occasionally as representations of popular eco-Buddhist thought.

Similarly, this study will not feature any of the reports on present-day responses to environmental degradation, such as the much-publicized tree-ordination ceremonies and other "engaged Buddhist" activities that are popular in countries like Thailand and Sri Lanka, and that are labelled "eco-justice" by Harris and "eco-contextualist" by Swearer. One reason is that despite their wealth of practical ideas, it is uncertain whether any of the rituals recorded in these accounts would work were they to be transplanted into Western countries. In any case, fascinating as they might be as descriptions of non-European cultures, these documents are not usually very philosophically interesting, and, as with the eco-apologists, instead of discussing the relation between Buddhism and environmentalism, they simply tend to assume their compatibility.

This thesis aims to contribute to the literature that Harris calls "eco-traditionalist," and Swearer "eco-constructivist." As these terms suggest, works in these categories attempt to build an authentically Buddhist environmental philosophy from canonical texts and other accepted sources. A key feature of these writings, of which Harris's and Schmithausen's are representative, is that they tend to delve deeply into various philosophical issues, such as whether Buddhism can accommodate a concept of nature as intrinsically valuable (Schmithausen 1991, 12–21), whether the doctrine of 'the precious human life' combined with the negative portrayal of existence as an animal implies anthropocentricism (Harris 1991, 105–107), and what the moral status of plants and trees is (Harris 1991, 107–109, Schmithausen 1991, 4–8). Of course, the main problem that this approach faces is that the origins of Buddhist doctrine are separated from contemporary environmental issues by two and a half millennia, and therefore, one risks the charge of anachronism in trying to bring the two traditions together. Moreover, Buddhist philosophy is rooted in Indian thought, whereas environmentalism is primarily based on Western concepts and presuppositions, and, as we shall see in the next chapter, care must be taken not to read Buddhist doctrine through an inappropriate conceptual framework.

Naturally, some authors deny altogether the viability of an authentic Buddhist environmental ethic; Harris appears, at times, to belong to this group of philosophers,

which Swearer calls "eco-critics."[2] Some of Schmithausen's work fits in here too[3] but the most damaging critique I have come across so far is Paul Waldau's depiction of Buddhism as a speciesist religion (2002). Waldau's work will be the topic of the first part of the next chapter, where I shall argue that his reading is precisely the sort of misconstrual that arises when one appraises Buddhists beliefs against a Western background.

Two more types of eco-Buddhist discourse remain to be considered. The first is that termed "eco-spirituality" by Harris, which comprises the views of deep ecologists who also happen to be Buddhists, such as Joanna Macy,[4] as well as other writers who, like David Landis Barnhill,[5] focus on the similarities between the two fields. Although there are several variants of this position, in general, its exponents tend to endorse the holistic paradigm mentioned above. Eco-spiritualists relate environmental awareness to a metaphysical concept of "Oneness," and claim that the present ecological crises will only be resolved when humans learn to recognize their inseparability from the natural world. Therefore, one thread that is common to all versions of eco-spirituality is the idea that environmental problems stem from an inadequate worldview, a hypothesis that, as we have seen, was already present in White's ground-breaking paper. Unlike most of the claims of deep ecology and eco-spiritualism, which are rejected in chapter 4, this theme lies implicit throughout my dissertation.

Finally, a new approach that has already been widely endorsed, and that shows promising potential for further research, draws a comparison between Buddhism and ancient Greek virtue ethics, and establishes the green qualifications of the former based on its vision of human flourishing and well-being. The Buddhist version of 'the good life,' according to this view, will involve the possession of certain dispositions that lead one to act in an environmentally sensitive way. David E. Cooper, Simon James, and Damien Keown[6] fall within this class, which makes up a part of Swearer's category of "eco-ethicists." One of the main principles, here, is that it is wiser to search for environmentally relevant material within Buddhist ethics, rather than its metaphysics or

[2] See Harris 1991, 1994.
[3] See Schmithausen 1991, 1997.
[4] For instance, see Macy 1990.
[5] See Barnhill 2001.
[6] See Cooper and James 2005, Keown 2007.

worldview (Cooper and James 2005, 2). While I find this work highly compelling, and draw upon it in various places to support my own views, as I've already mentioned, I tend to believe with White *et al*. that the way one conceives the world and oneself will have a strong effect on what one does to one's surroundings and co-inhabitants of the earth, and that therefore, the examination of worldviews is an important part of environmental philosophy.

While I agree with deep ecologists that the way a person conceives her relation to the rest of the world will play a significant role in determining her attitude to nature, I also tend to endorse the claims, by Cooper and James, that a Buddhist environmental ethic does not require adherence to holism (2005, 5). In fact, a large part of this study falls within the 'eco-critical' class, although the final section in chapter 4 takes up a 'constructivist' approach. Perhaps one significant difference between my thesis and other Buddhist environmental philosophy is the importance placed, especially in the constructivist part, upon ecology, biology, and other sciences. Although I claim no expertise in these areas, I do attempt to interpret Buddhist doctrines in the light of contemporary scientific understanding of reality, which I presume readers will be more likely to accept than traditional Buddhist mythological explanations. I do not mean to suggest here, that theories such as special relativity, or evolution, are generally understood, only that there is a background acceptance that they are accurate descriptions of the world. I tend to think that it is pointless to worry about the environmental soundness of a traditional cosmology that, in general, has been superseded around the world, and one, which, in any case, many Buddhist leaders agree is dispensable.[7] On the other hand, any examination of green Buddhism needs to at least consider the issue of whether the core Buddhist doctrines can be reconciled with a scientific understanding of the world, as well as with environmentalist principles.

[7] The Dalai Lama, for instance, has repeatedly claimed that should Western science ever find anything that contradicts Buddhist claims "then we must accept the findings of science and abandon those claims (cited in Mansfield 2008, 23; see also Wallace 2003, 26, 388).

Outline of the Argument

Chapter 1 is an inquiry into whether Buddhism can accommodate an understanding of nature and natural beings as intrinsically valuable. I begin by examining the views of one of the most vocal critics of eco-Buddhism**,** Paul Waldau, who claims that the Pāli canon attributes nonhuman animals with a very low status and little moral significance. My defence against his charge of speciesism rests on the importance of appraising a tradition on its own terms, without incorporating concepts or presuppositions that are foreign to it, or expecting it to conform to principles that are extraneous. Waldau's critique, it will be seen, relies on his appropriation of the Kantian imperative to always treat every being that is worthy of moral consideration as an end in itself, and never simply as a means. Moreover, he seems to attribute moral considerability to a being depending upon its possession of certain traits, such as, intelligence or use of language. These principles, pervasive though they are in Western philosophy, do not belong in Buddhist doctrine, and therefore, Waldau's complaint about Buddhism's failure to apply them equitably to all species of animals, as well as humans, simply breaks down. In fact, Buddhism has often been singled out as an eco-friendly system of beliefs precisely because it extends moral concern to all living beings, regardless of their intelligence or any other traits.

The discussion is framed, next, in terms of the wider issue of whether Buddhism can accommodate a concept of natural intrinsic value, which is generally defined as the value that nature and natural beings have for their own sake, without reference to human desires or needs. Often there seems to be the assumption that unless we can locate such value in nature, environmental ethics simply cannot get off the ground.[8] *Prima facie,* the Buddhist doctrines about suffering and impermanence seem to imply a world-negating outlook, one that cannot be reconciled with the drive to conserve or protect the natural world, and similarly the doctrines of emptiness and not-self suggest there is no 'thing' in the world that can have intrinsic value. The second part of chapter 1 examines these doctrines, together with the related issue of whether attaining *nirvana* implies the transcendence of the natural world. I suggest that the negative value that is ascribed to the

[8] See for instance Harris 2001, 253; Schmithausen 1991, 12. For a contrary view see Cooper and James 2005, 4, 140.

world is not meant to be taken as an absolute truth and that ultimately, in Buddhism, nature, life, and beings cannot be said to have either positive or negative value.

In the third section of chapter 1, I argue for an alternative sense of intrinsic value, which is based, not on any property that beings may *have*, but on the decision that a Buddhist can make simply to value nature and beings for their own sake. In the case of living beings, this amounts to an aspiration for their well-being—that is, desiring wholeheartedly their happiness as well as helping them to attain it—and therefore, in this subjective sense, to value something intrinsically has affinities with the Buddhist virtues of love and compassion, or 'solicitude.' However, there are several problems with this approach to green Buddhism too, the most important being that Buddhists and environmentalists seem to mean very different things by 'well-being.' Moreover, the attempt to base environmental ethics upon a doctrine of universal love and compassion is subject to all of the objections that are often raised against animal welfarism.

These issues are taken up again in chapter 3, where the Mahāyāna interpretation of love and compassion is explored. Before that, in chapter 2, I provide an account of the main developments in Mahāyāna philosophy, with particular reference to its nondual identification of *nirvana* with *saṃsāra.* I argue that this equation opens up once more the possibility of Buddhist environmentalism; the path no longer involves the outright repudiation of the ordinary world of nature, and in fact, some schools, such as Pure Land Buddhism, even suggest that part of a *bodhisattva's* mission is to create a favourable environment for all living beings.[9] After a quick glance at the main sutric teachings of the Mahāyāna, I explore the philosophies of the Madhyamaka and the Yogācāra schools, arguing that there is less disagreement between the two than is generally supposed. I suggest, instead, that they both express the same 'truth' viewed from two different perspectives; the Yogācāra providing a more positive account than the Madhyamaka. The inadequacy of such statements, however, as well as the enormous cumbersomeness of putting Mahāyāna philosophy into words, will become manifest as we probe deeper into the works of Nāgārjuna, Asaṅga, and Vasubandhu.

[9] Many Buddhist teachers stress that the Pure Land is to be established on this very earth, and not in some transcendent realm, an idea that is also a consequence of the identification of *nirvana* with *saṃsāra.* Contemporary examples include Ven. Sheng Yen, founder of Dharma Drum Mountain, and Ven Hsing Yun, founder of Fo Guang Shan International, both based in Taiwan. See Chandler 2004.

One matter upon which these philosophers all agree is the inexpressibility or ineffability of ultimate truth, which is a consequence of one of the major pillars of Mahāyāna faith, the doctrine of emptiness. It will be seen that this doctrine is not to be taken as a straightforward claim about reality; rather, it amounts to the same thing as saying that there is no ultimate reality, apart from the conventional nature of things (Garfield 1995, 299, 331). Thus, the enlightened being does not grasp at the truth of any assertion and has overcome her attachment to all views, recognizing them as illusory. The classic Mahāyāna philosophers took pains to point out that this idea is the logical outcome of the historical Buddha's teaching on the 'Middle Way,' which is described as a 'Middle Path' between the extreme of eternalism and that of nihilism, and therefore, the search for a Mahāyāna form of environmentalism can be framed in terms of avoiding these two 'wrong views.' The main problem for green Buddhism, then, besides whether or not nature has intrinsic value, is how to validate it when one has renounced all views.

Chapter 3 explores one variety of Mahāyāna green Buddhism, referred to above as 'eco-spiritualism,' which, in some places, can be seen as a lapse into the extreme of eternalism. When assertions like those of holism, twentieth century physics, or the claims of deep ecology are grasped at as true statements about the world—especially, for instance, if "Oneness" is taken to be ultimately real—then this has little to do with Mahāyāna philosophy, and has more in common with eternalistic philosophies and religions, such as neo-Platonism, or Vedānta. Mahāyāna Buddhism, including the Hua Yen School, to which eco-spiritualists and deep ecologists most often appeal, does not speak about 'Oneness' as generally understood, but refers instead to 'totality.' Contrary to the claims of eco-spiritualists, rather than viewing the universe as essentially holistic, it emphasizes the relativity of wholes and parts, and instead of attributing ontological primacy to relations rather than things, it views both as interdependent, confirming that the universe can never be described exhaustively.

Yet, while much eco-spiritualist work rests on a misconstrual of Buddhism, there is a compelling case to be made for the idea of oneness as the *felt* experience of identification with other beings, an attitude which one adopts by taking the interests of other beings as one's own. As long as no attempt is made to explain this experience in terms of metaphysical views, this theme in deep ecology shows remarkable similarity to

the second pillar of the Mahāyāna faith, namely, the virtues of love and compassion (*maitrī* and *karuṇā)*. Following Śāntideva's account of the concept of *bodhicitta,* which involves the union of emptiness and compassion, I argue that identification (or love and compassion) can be based on a realization of the emptiness of the self and the other. In this way, we can avoid the problems which deep ecology faces when identification is based upon claims of some sort of identity between oneself and other beings. Nevertheless, there remain the difficulties that emerged in chapter 1, with deriving an environmental ethic from the virtues of love and compassion. The concept of *bodhicitta* will be seen to provide a partial solution; however, it cannot get around the main difficulty that the Mahāyāna negation of all views poses for green Buddhism.

The first two sections of chapter 4 continue with the critique of green Buddhism. I argue that the Buddhist Middle Way between eternalism and nihilism implies the emptiness of all those natural beings that environmentalists cherish and want to protect. At all levels of nature, from the gene up to the ecosphere, we find, not inherently existent things, but rather, impermanent and fleeting patterns of relations. This way of conceiving nature seems to coincide with that of the 'new ecology' of flux, according to which, what was once thought of as the 'balance of nature' in reality is just a myth. Therefore, to be attached to the existence of individuals or populations of organisms, species and communities, ecosystems, or the biosphere as a whole, is another manifestation of the extreme of eternalism, which the *bodhisattva* must avoid. Instead, Mahāyāna Buddhism recognizes all of these as transient collections of ephemeral phenomena, only conventionally thought of as 'things.'

The danger of such statements is that one might misinterpret emptiness as implying that these things do not exist at all, or else, as the claim that only change really exists and these ideas too can lead to a wrong view, this time, the extreme of nihilism. The relation between change and suffering is an important part of Buddhist doctrine and everyday life, and to become too involved in the negative aspects of the world could easily lead one to despondency or despair. For that reason, in the second part of chapter 4, I argue against the everyday view of change as something ultimately real, which sees time as unidirectional and pointing invariably towards the future, as described in the process philosophy of Charles Hartshorne. Following Nāgārjuna's deconstruction of time

and change, I show that whether one adopts the ordinary understanding of a time that flows from past to future, or else conceives time as a static 'block,' as in the four-dimensionalist theory of time, ultimately, both change and time are empty, and cannot be found as truly existent phenomena. Finally, I submit that nihilism is overcome when the *bodhisattva* realizes the emptiness of change and time and is able to transcend both.

The final part of chapter 4 is my own 'eco-constructivist' contribution to green Buddhism, and relies on an analogy between spiritual and biological evolution. As we have seen, the project of formulating a viable Buddhist environmentalism is hampered mainly by an understanding of emptiness as the negation of views, including the view of nature as intrinsically valuable. Therefore, relying on the Yogācāra's more positive account, I attempt to re-describe emptiness and impermanence as the very sources of value in nature. I introduce a concept—'pliancy'—which I use as a rough synonym for emptiness, and analogous to Buddha Nature, but which directs the focus onto the quality that allows living beings to evolve, that is, their capacity to change. Instead of conserving species or ecosystems as static and unchanging things, I argue that Buddhist environmentalism is better described in terms of realizing or actualizing pliancy, and protecting the future evolution of living beings. It is important, however, that one does not become attached to this concept or grasp at it as a final view.

To conclude, a few words need to be said about my general approach to the study of Buddhist philosophy. First, regarding terminology, I use Sanskrit throughout for the sake of consistency, unless, of course, the context requires Pāli.[10] Although from chapter 2 onwards I focus mainly on the Mahāyāna vehicle, I draw upon teachings from several diverse schools, including Madhyamaka, Yogācāra, Hua Yen, and Pure Land Buddhism, in order to locate elements that are relevant to Buddhist environmentalism. While I realize that this opens the door to the charge of eclecticism, I believe that the cost of departing from strict tradition is outweighed by the benefits of a heterogeneous approach, especially since none of the materials I make use of are contradictory, but are, rather, all mutually supportive.

Second, with regards to the charge of anachronism—that it is inappropriate to look for environmentally relevant ideas in a tradition rooted in classical times, when

[10] One exception is that I use the better-known term 'Theravāda,' rather than the Sanskrit *sthaviravāda*.

ecological problems were unheard of—I submit that the problem only arises if we insist on taking every teaching literally, without allowing for the different context, perspectives, and attitudes of the early Buddhists. Harris, for instance, reads the "pro-urban" and "anti-wilderness" messages in the Pāli texts somewhat inflexibly (2001, 249); whereas it is my belief that these notions are simply the outcome of the Buddha's and his contemporaries' situation, where nature was abundant, and certainly not threatened as it is today. Similarly, the wholly unecological descriptions of the Pure Lands (Schmithausen 1997, 29) merely reflect the preferences and values of the times and place, where things like gold and jewels were prized more highly than jungles, wild animals and so forth. Therefore, we need not be concerned that there are no animals in the textual accounts of Sukhāvatī; instead, perhaps, we are free to revise our conception of a Pure Land in light of our environmental values. In short, that is, to enable us to locate elements of Buddhist doctrines that might be useful in our current ecological situation, we must be willing, as Schmithausen put it, to "accommodate [Buddhism's] heritage to the new situation by means of explication, re-interpretation, re-organization, or even creative extension or change" (Schmithausen 1997, 6).

Chapter 1: Buddhism and the Value of Nature

Our values, it is often said, are at the heart of our relationship to nature. This chapter will begin to examine the worldview and value-systems that are transmitted through Buddhist doctrines, focusing mostly on the collection of scriptures in the Pāli canon. As these are generally accepted by all traditions, they can serve as a rough sketch of 'Buddhism' for the while.

I will be examining, in particular, the value that is ascribed to individual living beings, specifically the alleged difference in the way humans and other animals are treated. In 1967, Lynn White's paper was pivotal in introducing a criticism that today is commonly brought forward against the Judeo-Christian worldview, concerning the way in which humans are set apart from all the other living beings in the world, which are seen as having been explicitly created for man's instrumental use (White 1967, 1205). Since then, Buddhism too has come under a similar charge of setting a wide gulf between humans and all other animals, and of regarding the latter as having less value and moral worth. A full-fledged version of this argument can be found in the work of Paul Waldau, which constitutes, perhaps, one of the most significant criticisms of green Buddhism.

The issues raised by Waldau and other critics of green Buddhism expose several underlying assumptions and expectations which, I shall argue, need to be brought out and examined for their compatibility with Buddhist doctrines and beliefs. I argue, in section 1, that Waldau makes several assumptions that stem from Western and Christian philosophy, and which do not appear anywhere within Buddhist doctrine. Yet, why should we expect environmentalism, and, furthermore, a *Buddhist* environmentalism, to correspond to a Western or Christian version? I argue instead, that one must be wary of importing uncritically standards and principles from foreign systems of thought and expecting Buddhism to comply with them, and then criticizing it for not being able to account for these cherished concepts. I suggest that it is more productive to search for ecologically relevant material within the tradition itself, and in further chapters, I argue that Buddhism does have its own conceptual resources that could fruitfully be applied to environmental matters.

In this chapter, however, I continue to explore the issue of whether Buddhism can accommodate a concept of 'value in nature,' turning, in the second part, to the implications of some basic doctrines for our ideas about and treatment of nature in general.[11] Although some of these militate against the sort of positive evaluation of nature that the environmentalist wants to give, I argue that there are other, deeper reasons for doubting whether natural beings and objects can be said to 'have' value according to Buddhism, which will emerge as we consider the doctrine of not-self. Closely connected to the teaching on interdependent-arising, and perhaps a 'seed' form of the doctrine of emptiness, which becomes more pronounced in the Mahāyāna, in the doctrine of not-self we encounter the beginnings of idea that no determinate statements can be made about certain aspects of reality, that will be ultimately true. Of course, this applies to both the statement 'nature has value' as well as 'nature does not have value.' Perhaps, if the Buddha had been asked about it, the question of whether the world has value would have been another that he famously refused to reply.

In the final part of this chapter I approach the issue from another angle. Instead of asking about whether nature 'has' value, in the Buddhist worldview, I ask about whether and how it can *be* valued. Value, as I define it here, relies on the relation between valuing subjects and the things they value, and need not be construed as an objective property of things. This opens the way to an understanding of value that has much in common with the Buddhist virtues of love and compassion, and with certain environmental philosophies based on a reverence for life. Moreover, value can be construed in such a way that other living beings, both individual animals and plants, as well as collective wholes like ecosystems, can be thought of as valuers; they value their own well-being to the extent that their activities are driven by an attempt to preserve themselves in certain states and not others. The chapter will close with an examination of an environmentalism that is based upon these.

[11] I use 'nature' in a very general sense to mean the sort of things valued by environmentalists. However, this is not intended to exclude automatically all human made objects. Further on, I will argue against construing the nature-culture divide dualistically.

1 The Charge of Speciesism[12]

Paul Waldau, in *The Specter of Speciesism; Buddhist and Christian views of Animals*, argues extensively that Buddhism, like Christianity, values humans and human life more highly than other animals and their lives. Many environmentalists consider such positions to be partly responsible for the ecological crisis, as they imply that what is done to nonhuman beings has little or no moral significance and open the way to the devastation of nature for human purposes. Waldau's argument is a major challenge for anybody attempting to bring Buddhism and environmentalism together and represents a serious critique of green Buddhism, whether of the apologist or constructivist sort (see p 5–6).

The charge of speciesism consists of the objection against granting moral considerability to humans and not to other animals. I will begin this section by outlining Waldau's general argument, starting from his definition of speciesism. It will be seen that this definition is too restrictive and does not correspond to the way the term is generally used, and that, in any case, Waldau fails to establish that Buddhism is speciesist according to this definition. More importantly, though, throughout the book, Waldau makes several assumptions that do not appear to accord with Buddhist doctrine. These include the idea that beings are morally considerable if they possess certain traits, an idea that has often appeared in Western philosophy. Waldau charges Buddhism with speciesism because it fails to include beings with these characteristics within the moral circle, but he does not show that Buddhism determines the moral worth of beings based on whether or not they possess these characteristics. Without this added premise, however, his argument cannot work.

I will then go on to look at the specific claims that Waldau makes about the Pāli texts. The first is that these contain references to the instrumental use of animals, along with an awareness of the harm to these animals that this involves. Because the Pāli texts do not condemn these uses, Waldau argues that they must therefore accept them and that consequently, Buddhism must be speciesist. I will argue instead that the Pāli texts seem to contain a tension between acceptance of instrumental use and advocating restraint.

[12] Previously published as "Buddhism and Speciesism: on the Misapplication of Western Concepts to Buddhist Beliefs." *Journal of Buddhist Ethics* 15: 215-240.

More importantly, however, Waldau has once again relied on an unexpressed premise that may not fit with Buddhist doctrines; namely, the Kantian imperative never to treat morally considerable beings only as means to an end. The conclusion that Buddhism is speciesist will only follow if it is shown that Buddhism accepts this maxim and yet allows some morally considerable beings to be used solely as means while prohibiting it for humans. The Pāli texts however, contain references to the utilization of humans, too, and therefore, Waldau's charge once again rests on a misapplication of Western ideas.

Waldau's second claim is that the Pāli texts describe humans in a more positive light than other animals, which once again, betrays their inequitable evaluation. I will identify two ways in which this is the case, and refer to them as separate value-systems. I will argue that in the first, where the lives of humans are simply seen as easier, or as more pleasant than those of other animals, the charge of speciesism does not apply. As long as the higher evaluation of humans is merely a description of the merits or positive aspects of existence as a human being, it does not amount to speciesism, as there is no implication about the way other animals are treated, nor does it suggest that this is less important, as a moral issue, than the way humans are treated. The Buddhist teachings about higher and lower rebirths, on the contrary, seem to contain an inherent injunction to treat all beings well, and thus cannot be speciesist as Waldau claims.

However, in the second value-system, which sees humans as better able to follow the teachings of the Buddha, the merits of human existence do have implications about their moral worth. In a few excerpts from the canon, there is the suggestion that an offence committed against a human being is considerably more serious than the same offence committed against another animal, and here, I concede that Waldau's charge of speciesism is correct. These implications, however, appear in very few places in the canon, and the second value-system is significant not because of its speciesist undertone, but because it reveals a more far-reaching problem for green Buddhism, namely that the kind of value afforded to any form of life is always instrumental. Beings and their lives are valued, that is, not for themselves, but for the sake of something higher, namely the

possibility of attaining *nibbana*,[13] and this, it could be argued, is something completely different from the natural world, and from ordinary beings' lives.

Several authors maintain that it is difficult to establish an environmental position without recourse to the notion of the intrinsic value of nature, where life *per se*, human or otherwise, is what is valued. It is often pointed to, in fact, as one of the major problems for anyone seeking to establish the environmental credentials of Buddhism. I conclude this section by suggesting that instead of appraising the environmental character of Buddhism by seeking ideas comparable to Western concepts—for example, by expecting to find a Buddhist counterpart to 'the intrinsic value of nature'—it might be more fruitful to evaluate the tradition on its own terms, drawing upon its own conceptual resources that could gainfully be applied to our ecological problems.

Speciesism and the Marginal Cases Argument

Waldau defines speciesism as "the inclusion of all human animals within and the exclusion of all other animals from the moral circle" (Waldau 2002, 38). An animal that is included in the moral circle is regarded as morally considerable, and the way it is treated is considered a moral issue. This usually means that its essential concerns and interests are recognized and protected, and for Waldau, this amounts to having its life protected, as well as its freedom from captivity, instrumental use, and infliction of harm (2002, 38–39).

Waldau's definition appears unnecessarily restrictive, as speciesism does not necessarily have to involve the exclusion of *all* other animals from the moral circle. Someone who valued the lives, well-being, and freedom of all primates, say, both human and nonhuman, and yet treated all other creatures instrumentally, would not be speciesist under his account. To appreciate the inadequacy of this understanding of speciesism, we can compare it to a similar account of racism, with which the former was originally meant to be analogous. Peter Singer, who made extensive use of the concept in

[13] I use the Pāli term here in order to differentiate the early Buddhist idea of enlightenment from that of the Mahāyāna. As will become clear in later chapters, the following claim and much of the argument in this chapter, applies only to the former concept; in the Mahāyāna, *nirvana* is generally understood as inseparable from this world and from everyday life.

philosophical discussion, drew a parallel between the two, claiming that the speciesist is someone who gives preference to the interests of his own species, just as the racist gives preference to the interests of his own race (Singer 1998, 31). Although it is generally true that racists tend to be prejudiced against *all* races other than their own, a Caucasian man, say, who included Asian people, Hispanic people and other races within the moral circle, but discriminated against black people, would normally be considered just as racist. Similarly, a speciesist could be someone who includes humans and *certain* other species within the moral circle but excludes others. Waldau's definition, then, appears incomplete or simply not wide enough; it does not encompass all the positions that could be considered speciesist. The reason for his restricting condition is somewhat unclear and it will be seen below that it does his argument no favours.

Aside from his restrictive definition, Waldau generally appears to be following Singer, and a significant part of his book focuses on the reasons for including certain animals in the moral circle. Singer argues that if *all* humans are morally considerable, as is usually thought, it must be because of some characteristic they all share. Yet, the only characteristic shared by all humans, including marginal cases such as intellectually challenged people, is also held by *some* other animals at least. Thus speciesism, for Singer, is the exclusion of these animals from the moral circle, despite their having the same characteristics that are deemed to make humans morally considerable (Singer 1998, 37–38). I shall refer to this as the 'marginal cases argument.'

Waldau makes use of this argument too (2002, 26). He devotes an entire chapter to a description of the characteristics that, in his view, make an animal morally considerable, arguing that there are certain "valued" traits that are shared by humans and some other animals too. These include the use of language, interaction, and communication, familial relations and social groupings, social norms and expectation, complexity in individuals, intelligence, self-awareness, intentionality, and tool-making (Waldau 2002, 67–87). When attributed to humans, these characteristics are that which, in many accounts, render them morally considerable. Waldau seems to be saying that because many other animals possess these characteristics, they *too* ought to be morally

considerable. Buddhism, he claims, does not always include these animals within the moral circle, therefore, it must be guilty of speciesism.[14]

Waldau's Misappropriation of Western Ideas about Moral Considerability

Waldau's argument does not work for two reasons. First, by his own definition he must show that Buddhism excludes *all* other species from the moral circle and not just the ones with the characteristics he has picked out, which he calls the "key species." This is a point that he acknowledges (Waldau 2002, 155).

Second, and more importantly, the argument will not work because Waldau needs to show that Buddhism too values those characteristics he has selected, and that it includes or excludes animals from the moral circle depending upon whether they possess these characteristics or not. He does not do this, however, and it is my belief that the idea does not occur within Buddhist doctrine at all, but belongs, instead, to Western ethics. Throughout the history of Western philosophy, as is well known, characteristics like language, intelligence, and rationality were singled out as the essence of what it is to be human, and consequently believed to be that which renders one morally considerable. A range of theories and principles were set up about how beings with these qualities, that is, other people, were to be treated. Aristotle, for instance, defined man as a rational being, and developed an account of the good life from this premise (*Nico.* 1098a 13–15).

Moral considerability, therefore, was assumed from the outset to belong primarily or exclusively to human beings; indeed, it was granted at first, only to free, adult males. Eventually, the class of the morally considerable was gradually widened, and today,

[14] Clearly, Waldau's understanding of speciesism corresponds to what others have termed "indirect" or "qualified" speciesism, which, unlike "direct" or "bare" speciesism, seeks to justify its exclusion of other animals from the moral circle, based on other reasons than mere species membership. Of course, if these reasons can be shown to be valid, then the charge of speciesism fails; speciesism occurs when the reasons that one gives for taking some animals to be morally considerable and not others are themselves based on an indefensible preference for human-like qualities. In this respect, Waldau's own position can be seen to be somewhat speciesist, as all of his "valued" characteristics seem to belong, primarily, to humans. Dr. Simon James has pointed out that we need not see it this way; bees, for instance, seem to be more sociable than humans (personal communication). Still, we can ask with Paul Taylor, why we should value sociability, language, or intelligence over the "speed of a cheetah, vision of an eagle or agility of a monkey" (Taylor 1998, 79; on the distinction between direct and indirect speciesism see Waldau 2002, 33–35).

philosophers and policy-makers, at least, generally include all people and perhaps some other animals too. Recently, it has been argued that the only quality that ought to influence the way we treat other beings is sentiency, that is, the capacity to feel pleasure or pain. In other words, Western philosophical discourse still focuses, at times, on the characteristics of a being that make it morally important, and a being tends to be deemed such precisely *because* it is rational, or sentient or whatever characteristic is believed to confer moral considerability.

The Pāli texts, on the other hand, do not seem to make any connection between moral considerability and the possession of specific qualities. In the *Karaṇīya Mettā Sutta*, for example, we read:

> Whatever living creatures there may be,
> Without exception, weak or strong,
> Long, huge or middle-sized,
> Or short, minute or bulky.
>
> Whether visible or invisible,
> And those living far or near,
> The born and those seeking birth,
> May all beings be happy! (*Sn* 146-147)

This *sūtra*, which is widely quoted on the Buddhist virtues of love and compassion, reveals that concern for others' welfare is not limited merely to members of this or that species, nor does it depend on their having certain characteristics. In fact, the text suggests precisely that moral considerability has nothing to do with characteristics at all. Rather, the moral circle is extended to "whatever creatures there may be without exception," in other words, to all beings, whether long, short, far, near and, one might add, whether or not they are rational, intelligent, language users, social animals, and so on.

The tendency in Buddhism, then, is to throw as wide a net as possible and to extend concern for all, independently of what they are like, and this can be inferred, too, from the pervasive use, in canonical texts, of catchall terms like "all living beings" to denote the object of a moral act.[15] Lambert Schmithausen argues that originally the term

[15] For instance, see *D* 4; *M* i 47; *A* v 264; *Dhp.* 131–132.

'living beings' was believed to include plants, seeds, water and even earth as well as humans and animals. The moral circle was eventually narrowed in order to render Buddhism more practicable (Schmithausen 1991, 5–6). Later on, when the teachings had spread to China and Japan, the idea that sentient beings *alone* were the proper recipients of benevolence appears to have been considered something of a limitation. A long debate ensued about whether plants, trees, and even non-living objects were capable of attaining enlightenment, that is, whether they could be considered to possess the seed of Buddhahood. It seems that the trend was to argue in favour of widening the class of sentient beings, and consequently, the moral circle (La Fleur 1973, 95).

Therefore, Buddhism takes a very different approach from the Western one, which, from the outset, differentiates beings that are morally considerable from those that are not, and defines the class of the former rather narrowly. Buddhism seems to start, instead, by assuming that all beings are morally significant, and, arguably, only allows exceptions to be made as a matter of expediency. It seems unlikely, moreover, that it is the possession of any particular characteristic that renders a being worthy of love and compassion, or else, that it deserves to have its life and well-being protected, *because* it is living, sentient, or whatever. The main concern does not seem to have been what the creature was like. Instead, the focus seems to be on what one is capable of, or else, how far one could reach out to others.

In sum, an important objection can be raised to Waldau's general approach. It relies on a misappropriation of the Western idea that moral considerability depends on the possession of certain characteristics, an idea that simply does not appear anywhere within Buddhist doctrinal themes. If the idea of a moral circle can be applied to Buddhism at all, it will probably be very different from that in the Western tradition. Waldau overlooks this point, and he imports uncritically an idea from Western ethics into Buddhism, which he then criticizes for failing to apply it consistently. Yet, without showing that Buddhism, too, bases moral considerability upon certain characteristics, Waldau cannot conclude that it is speciesist. That is, he needs to show that Buddhism too appeals to those valued traits in determining whether a being is morally considerable or not. Nowhere does he do this, and in his discussion of what makes an animal morally

considerable there is no reference to Buddhist thought at all (2002, 59–87). I have suggested that this line of reasoning is, in fact, foreign to Buddhism.

Waldau's Specific Claims against Buddhism

1) The instrumental use of animals

So far, we have examined the notion of moral considerability in Buddhism, which, I have argued, takes a very different form (if it exists at all) from that found in Western philosophy. Perhaps a closer look at Waldau's case is now warranted. One of the main criticisms that emerge throughout the book is that he finds, in the canonical texts, an acceptance and subtle promotion of the instrumental use of some animals even though there is an awareness of its negative consequences for these animals (2002, 147–148). The suggestion, then, is that Buddhism is speciesist because it accepts the harmful instrumental uses of other animals (2002, 154–155).[16]

Waldau focuses particularly on elephants. He argues that although the Pāli texts seem to recognize the harm that is inflicted on domesticated elephants, they do not question the assumption that it is acceptable to use them. Rather, he says, they seem to uphold the tradition of owning elephants as property, trading or giving them away, and using cruel practices to "break" them (2002, 122). For example, in the *Dhammapada,* the Buddha proclaims: "Now I can rule my mind as the *mahout* controls the elephant with his hooked staff" (cited in Waldau 2002, 121). Again, in the *Dīgha Nikāya* we read: "E'en as an elephant, fretted by hook, dashes unheeding curb and goad aside..." (Waldau 2002, 128). These examples, and all the similar ones that Waldau provides, are cited to show that Buddhism accepts the instrumental use of elephants and the harm inflicted on them. Moreover, Waldau claims that because elephants are praised when they are tame rather than wild, Buddhism not only accepts but also promotes this utilization (2002, 131–132).

[16] The examples in the texts are only *suggestive* of speciesism, Waldau claims, because his definition requires that Buddhism exclude *all* animals from the moral circle and not just some (2002, 155). Again, one wonders why Waldau chose to use such a narrow definition.

Waldau acknowledges that the Buddha's First Precept may be supposed, *prima facie,* to go a long way towards protecting the lives and interests of all beings (2002, 137–138). However, the precise meaning of the First Precept, also known as the doctrine of *ahiṃsā*, has long been debated. In its most popular interpretation, the precept entails only abstention from killing, yet in its strictest version it is an injunction against all forms of harming others (Schmithausen 1991, 11). Still, as Waldau points out, there are places in the texts where it is suggested that the precept protects only humans, and even, perhaps, only those who are followers of the Buddha (2002, 145). Besides, it is unclear which type of action the precept covers; it is usually assumed to exclude only deliberate acts of killing or harming, and the extent to which care is taken not to injure other beings has varied widely over different Buddhist communities (Harris 2000, 115).

In all likelihood, these inconsistent interpretations may be a result of the fact that, for lay people, especially farmers, cowherds, and so on, it is difficult to refrain totally from harming other beings. One may point out here that the utilization of elephants and other animals was simply unavoidable during the times of the early Buddhists, where machinery was unavailable. It is hard to imagine any pre-modern society doing without the use of animals for farming, travelling, and other daily activities, all of which would require some degree of harm to them. As Schmithausen has observed, there is a conflict in Buddhism between, on the one hand, the instrumental use of animals that was necessary for everyday life, and, on the other, the restriction against killing or harming other beings, which only seemed to be an option for monks. This tension was not resolved in early Buddhist societies, even when the First Precept was interpreted fairly liberally (Schmithausen 1991, 4–9).

Waldau seems to criticize Buddhism for failing to do enough to challenge the methods and technology of agriculture, animal husbandry, transport, and so on, which were available in the Buddha's times. Buddhism, he claims, simply coexisted with daily, obvious harms to nonhumans (2002, 155). Yet, it can be pointed out that despite the textual references to circumstances in which animals are harmed, Buddhism does propose an improvement in the way animals are treated, as is evidenced by the First Precept. It is likely that the examples Waldau points to are merely descriptions of the world as it was at the time, and do not necessarily imply approval. I suggest that Buddhism does make a

serious effort to influence positively the way animals are treated and that it does not totally accept their instrumental use, as Waldau claims. Rather, as Schmithausen has shown, there seems to be more of a *conflict* between the demands of Buddhist morality and the necessary utilization of animals at the time (Schmithausen 1991, 4).

There is, however, a more significant flaw in Waldau's argument, which, once again, involves the appending of certain Western assumptions onto his reading of Buddhism. Waldau, as we have seen, finds several examples where the utilization of animals appears to be condoned. Even if this does show that Buddhism approves of this utilization, as he claims, and not merely that there is conflict, as I have suggested, his argument about speciesism assumes that Buddhism agrees with the Kantian maxim that morally considerable beings ought never to be treated only as means. To derive the assertion that Buddhism is speciesist because it depicts other animals being used instrumentally, Waldau also needs to show that Buddhism specifically expresses disapproval of the instrumental use of humans. This is a common idea in Christian and Western ethics but may not appear in Buddhist ethics.

On the contrary, the *sūtras* and the *Jātaka Tales*, which are the main sources for his examples, also contain several stories about slaves. The Bodhisat himself (i.e., the Buddha in his previous lives) appears as a slave in no less than five *Jātaka* stories (Rhys Davids 2004, 246) and similarly the *Nikāyas* make several mentions of the practice of keeping slaves.[17] Here too, there is an awareness of the harm that is inflicted upon them, such as we find in the *Kakacupama Sutta.* We are told that Lady Videhika "grabbed hold of a rolling pin and gave her [Kāli, a slave-girl] a whack over the head, cutting it open" (*M* i 125; Thanissaro's translation). Just like the examples about elephants cited above, this story contains a reference to the instrumental use of humans, as well as to the harm that is inflicted upon them. By citing these examples, I do not mean to suggest that Buddhism approves of slavery, but rather, that Waldau's argument about speciesism fails, as there are textual references both to humans and to other animals being used instrumentally. It seems that in referring to the utilization of beings to their detriment, the Buddhist texts are merely describing the world as they found it, neither condoning nor condemning this instrumental use, whether of humans or otherwise.

[17] For example, see *M* i 125, *M* ii 62; *D* i 60; *D* i 72.

To ask whether Buddhism approves of this instrumental use is, again, to look for Western concepts—and perhaps even specifically modern ones—in an ancient, Asian tradition. Unless we uncover such hidden assumptions, we could be prevented from judging the tradition on its own merits. So far, then, we have identified two ideas foreign to Buddhism, which Waldau introduces unwarily into his critique. These are the ideas (1) that moral considerability depends on the possession of certain characteristics and (2) that humans, as morally considerable beings in this sense, ought not to be treated as means. In the following, we will encounter a third Western concept, that of the intrinsic value of natural beings, which is given utmost importance by environmental philosophers.[18] I shall suggest that this notion is foreign to Buddhist doctrine as well, and this will emerge from discussion of Waldau's overall charge that Buddhism attributes greater value to human than to animal life.

2) The higher value of human life

Although Waldau recognizes the sense of continuity, in Buddhism, between humans and other animals (Waldau 2002, 138–139), there is a stronger tendency, he claims, to see other animals as decisively lower. In fact, he says, Buddhism lumps together conceptually all nonhuman animals into one group (*tiryagjana;* Pāli: *tiracchāno*), and affords them negative value, describing animal life as an unhappy, woeful existence (2002, 116, 94–95). Indeed, it is well-known that according to Buddhist cosmology, existence in the 'desire realm' (*kāmā dhātu)* is divided into six domains (*gati)*; the human and two types of godly existence (*devas, asuras)* form the three 'happy goings' (*sugati*) or 'higher realms,' while the domains of animals, hungry ghosts (*pretas*), and the hell realms (*narakas*) form the three 'unhappy goings' (*durgati)* or 'lower realms' (*apāya)*.[19, 20] The very terminology suggests, then, that human existence is worth more than that of other animals.

[18] For example, see Sylvan 1998.

[19] The terms *sugati* and *durgati* (Pāli *duggati*) are usually translated as, respectively 'happy' and 'unhappy' destinations, or, literally, 'goings.' Another term used for the latter is *apāya*, which Nyanatiloka translates as "lower worlds" (1980, 46), and the implication, therefore, is that the happy destinations are the higher worlds.

This emerges in several ways. First, the doctrine claims that human life, as a 'happy destination,' is better than that of animals because it is more pleasant and there is less suffering inherent in it. Second, human life is seen as a reward for previous moral conduct (*M* i 285) whereas rebirth as an animal results from a former life of misconduct and wrong views (*A* iv 247; *M* i 388). Therefore, according to Waldau, beings that currently find themselves in the animal realms are regarded as culpable and ignorant (2002, 141, 153). Finally, human life is especially valuable as a means to attaining enlightenment (*S* v 456; *S* iv 126). In fact, several places in the texts suggest that only humans can become Buddhas, and the *Vinaya* specifies that only humans can become monks (Waldau 2002, 139).[21] Thus, it would appear, as Waldau claims, that Buddhism deprecates animals, while elevating human life, which it regards as the "pinnacle of existence" (2002, 139–140).

There are several ways, then, in which Buddhism regards human existence as better; yet, I shall argue, they need not all affect the moral considerability of animals. One needs to distinguish between two ways in which a living being may be said to have value. The first is that which Taylor refers to as judgments about a being's "merit,"[22] and the second concerns its "inherent worth," which has also been termed its "moral value." Judgments of merit are those that attribute certain desirable qualities to beings. As examples of these, Taylor mentions intelligence, speed, and agility among others. A being has inherent worth or moral value, on the other hand, if its own good is valued; that is, if there is a moral commitment to it, and certain forms of behaviour and rules regarding the way it is treated are deemed to apply (Taylor 1998, 74, 80–81).[23]

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[20] Strictly speaking, the Theravāda offers slightly different accounts from that given here, which is the Mahāyāna portrayal popularized through the Wheel of Life diagrams. One Theravāda version leaves out the *asuras* altogether, resulting in five domains rather than six. Another system has eleven domains and places the *asuras* as a fourth lower realm, while humans and six types of *devas* form the higher realms. In any case, the main point being made here, that animals are regarded as being lower than humans, applies to whichever system is considered.

[21] Waldau acknowledges that, in some places, the texts suggest animals too can be enlightened; however, the overwhelmingly dominant idea, he insists, is that only humans can (2002, 139).

[22] Not to be confused with the Buddhist notion of merit.

[23] Although Taylor uses the phrase "inherent worth," it is evident that what he has in mind is something like 'moral value' or 'moral considerability.' Further on, the concept of 'intrinsic value' will be defined as the value that something has for its own sake, as opposed to 'instrumental value,' which is the value that a thing has for the sake of fulfilling some other purpose. In order to avoid confusion between intrinsic value and Taylor's "inherent worth" I will specify, each time, that what is meant is 'moral value.'

Inherent (or moral) worth appears to be entirely independent of a being's merits. Taylor demonstrates this by pointing out that humans are generally thought to have the same moral value, irrespective of their abilities. That is, we would not normally appeal to qualities like intelligence, wealth, or beauty to determine our moral attitude to another person; these features are thought to be entirely irrelevant. Even in class-structured societies, where people might be thought to have different levels of moral worth, once again, this has nothing to do with merit, but simply depends on one's birth (1998, 81). Therefore, the moral considerability of a person is independent of his merits, and to say that, for instance, a person is very intelligent, does not imply that what we do to him matters more that what we do to someone less clever.

The point is that, in most cases, Buddhism's higher evaluation of humans seems to make no claims about the lesser moral standing of animals and, therefore, it would appear to be irrelevant to the argument about speciesism. Speciesism, as we have seen, has to do only with moral considerability, and with whether animals are seen as proper objects of moral concern. In other words, what is relevant is the question of inherent or moral value. To describe humans as morally superior, more intelligent, their lives as more pleasant, and as having better prospects for *Dharma* practice, on the other hand, clearly involve descriptions of merits, and contain nothing that suggests we should treat them differently from other animals.[24] Sponberg makes a similar argument, claiming that in Buddhism, the point of "vertical" distinctions, that is, between the value of humans and that of animals, was not to establish a hierarchy of privilege and subjugation, and certainly not to justify domination of one class of beings over another (Sponberg 1997, 358).

Still, if we separate two threads in the Buddhist valorisation of humans, we will find that a connection between some of these qualities and moral considerability can indeed be drawn. One value-scheme is simply about the merits of a particular form of life, and has to do with the degree of enjoyment it provides and the moral character of the being in its past life. Here, although a human life is better than one as an animal, life as a

[24] It might be objected that to be morally considerable, one must possess a moral character, and that therefore, this particular merit has implications for inherent or moral value. However, few would want to claim, for instance, that young children, intellectually challenged people, and so on—who certainly cannot always be thought of as moral agents—have less moral standing than the average adult. Therefore, a person's moral character is one of her merits, and is irrelevant to her moral standing.

god is valued even more highly.[25] This is because, in Buddhist belief, the gods' lives are said to be pervaded with bliss and one is reborn there after having led a morally commendable life. According to this value-system, then, the gods are at the "pinnacle of existence" due to their previous moral action.

This doctrine directs Buddhist followers to act in accordance with what is prescribed as moral, that is, to follow the Five Precepts, and the first of these, as we have seen, sets respect for all forms of life as the main moral rule. Thus, this system of valorisation would appear to contain an inherent appreciation of the moral value of all beings. That is, to reach the pinnacle of existence, under this account, one needs to treat all other creatures well, no matter how lowly (*A* iv 245).[26] What is certainly *not* being said is that animals have less intrinsic or moral worth in Taylor's sense, or that this value-system justifies harsh treatment of them, as Waldau claims (2002, 153). That is, in this first value-system there are no implications of speciesism.

One could object, here, that an appropriate environmental stance will even reject this, and claim that in no way should animals' lives be considered worse, or lower, than those of humans. A dedicated animals-rights supporter, for instance, might be dismayed by an account that sees animal rebirth as punishment for one's misdeeds, that sees them as ignorant, or that assumes their lives cannot be as fulfilling as that of a human. Nevertheless, a position that tried to make all animals equal, not only in moral value but also in merit, would seem rather untenable. Although it may simply be arrogance that leads us to assume, for instance, that our lives are more worthwhile than those of our pets, we would still like to think of human life as better than that of a mosquito, say, simply on the basis of its duration. Similarly, we want to say that our intellectual capacities are better than those of apes. What needs to be borne in mind is that the things we pick out as a measure of value—self-fulfilment, longevity, intelligence, and so

[25] By "god" I mean here *devas* and not *asuras.*

[26] It has been argued, by Ian Harris among others, that Buddhist respect for other beings, including animals, appears somewhat self-interested, in that, it is cultivated, apparently for the sake of one's own ends (Harris, 1991, 107). Here, too, the motivation for acting morally towards other animals may similarly seem self-interested in that it is carried out for the sake of rebirth as a god, or at least, to prevent rebirth in the lower realms. The question is whether the Buddhist attitudes of love and compassion are beneficial to the recipients as well as practitioners. This issue will be examined in the third section of this chapter; here it will suffice to point out, as Schmithausen does, that the promise of reward for ethical acts does not make the act self-interested. Rather, it is simply another thread in the discourse for motivating people to act ethically (Schmithausen 1997, 17).

forth—are our subjective choices, and that on other criteria, such as Taylor's examples of speed or agility, the merits of other animals are greater than ours.

Thus, although Waldau's apprehension at the Buddhist depiction of animals as lower beings can be understood, the alternative, an egalitarian outlook that disallows comparisons altogether, hardly seems attractive either. Neither is it required, if it is kept in mind that the negative evaluation of the merits of animal existence in Buddhism is entirely different from its judgments of moral considerability, which are properly sought in the First Precept and the doctrine of *ahiṃsā*, and are usually regarded as covering all forms of sentient life. There are no grounds, from evaluations of merit, to draw conclusions about moral worth.

The second value-system, however, reveals that there is, sometimes, a connection with moral considerability after all. Here, what is valued mostly is not enjoyment, but opportunity to encounter and realize the *Dharma.* Humans have the most of it; they are neither distracted by pleasurable activities, as the gods are, nor are they overwhelmed by a life of torment, as in the lower realms (*S* iv 126). The lives of animals and worldly gods contain too much and too little suffering respectively and do not provide opportunities for Buddhist practice; they must first be reborn as humans for this. In fact, despite their blissful existence and, perhaps, their morally commendable lives, the gods are seen as deluded and destined for rebirth in lower realms (*S* i 133). Therefore, we find a different type of evaluation altogether here, which has nothing to do at all with contentment, nor with being a reward for previous moral conduct. Rather, the criterion this time is opportunity for enlightenment, and from this perspective, it is humans, rather than the gods, that are the pinnacle of the rebirth system (Waldau 2002, 139).

At first sight, this second system of evaluation would seem to be about the merits of human existence again, rather than its moral worth, and it does not appear to have any direct implications of speciesism. Yet, the *Vinaya* code proposes expulsion from the order for a monk who kills a human deliberately, in contrast with the mere confession that is required when a monk kills an animal (Waldau 2002, 124). Moreover, if the human killed is an *arhat,* or, even worse, a Buddha, these are thought to be such heinous crimes that only rebirth in hell could follow (*A* iii 146). This might suggest, then, that the discrepancy rests on the greater moral worth of the murdered human being, based on her relative

proximity to the enlightened state, and it would seem, after all, that this judgment of merit does affect moral considerability.

According to this account, then, in Buddhism, a being that qualifies for moral considerability (if this notion exists within the tradition at all[27]) is one for whom there is a likelihood of encountering the *Dharma* as well as its actual realization. Insofar as humans are the only candidates for this and animals excluded altogether, then there is speciesism, as it implies that what we do to humans (and especially to *arhats* and to Buddhas) is more important than what we do to other animals. It seems that, at least concerning this doctrine about the precious human life, Waldau's charge is correct, and he has indeed identified a problematic area for green Buddhism.

Schmithausen has written on this matter too, however, he sees less cause for concern, and argues that the teachings about the low status of animals could easily be "de-dogmatized" for ecological reasons, and "relegated to their specific didactic contexts" (Schmithausen 1997, 30). Perhaps this would involve their reinterpretation, so that the emphasis is solely upon the "preciousness" of the opportunity that comes with human life, and makes no implications about our treatment of animals. In any case, it must be stressed that there are very few places, in the texts, where a contrast is made between killing animals and humans, and in the overwhelming majority of cases, the Buddha speaks out against killing in general, and recommends cultivating love and compassion for all living beings, regardless of species. Still, another, more serious difficulty arises for green Buddhism from all of this, as I will go on to show.

Buddhism and the Concept of Intrinsic Value

An implication of the foregoing discussion is that Buddhism does not recognize any intrinsic value in the natural world, a theme that will be explored more fully in the next section of this chapter. Within the context of environmental philosophy, besides having to do with moral considerability, the concept of intrinsic value also suggests that something

[27] There is the possibility that, as suggested above, the notion of moral considerability does not appear within Buddhist doctrine, and that the act of killing a human or a Buddha is worse than killing an animal, not because animals have less moral value, but for some other reason, say, the nature of the act itself.

is valued for its own sake (Sylvan 1998).[28] Yet, from the second type of value described above, it emerges that in Buddhism, human life is merely valued for its proximity to the enlightened state, and it is not any particular form of life or even any individual living creature that is valued as such, but always a future Buddha, or, at least, the possibility that one may appear. This is a far cry from the way environmentalists think of natural beings, and certainly not what we mean when we say that people and other creatures are morally considerable, and that what we do to them matters. For environmentalists, it is *this* person, animal, or species that is valued, and not a future, improved state of them.

The point can be made about both value-systems in fact. Buddhism evaluates beings differently, as we have seen, in dependence upon various criteria. When the focus is upon pleasure, rebirth as a god is best, however, this pales in significance when contrasted with the opportunity to encounter the *Dharma*, which is what is really valued in the second scheme. Nowhere, therefore, is any being's life regarded as precious *in itself*, or for its own sake, and, one assumes, if another form of life were to develop in a world that was more delightful, or more favourable for attaining enlightenment, this would consequently be more highly esteemed.[29] The very fact that the gods are at the pinnacle of existence when the ultimate end is pleasure, whereas human life is considered more precious as an opportunity for enlightenment reveals that neither gods nor humans are valued for their own sake.

Therefore, any value ascribed by Buddhism to human life is of an instrumental kind. The final goal of all existence is liberation from the ordinary world of *saṃsāra*, which includes, of course, both the animal and human worlds, and thus, there is a negative evaluation not just of animal life, as Waldau believes, but of all life in general. As Schmithausen observes:

[28] The term 'intrinsic value' has been used in several ways in philosophical discourse; I postpone a detailed examination of these until the third section of this chapter. For now, I will use 'intrinsic value' to mean, as well as moral value, the value that a thing has for its own sake, as opposed to instrumental value.

[29] In fact, later Mahāyāna thought introduces rebirth in the Pure Land, which is neither human, nor godly, but outside the desire realm altogether. This type of existence is described as extremely blissful, and, once born there, a being is assured of reaching Buddhahood eventually. According to Pure Land Buddhism, then, the value of human existence is insignificant in contrast with rebirth there. In the final chapter of this dissertation, the notion of a Pure Land will be seen to provide a befitting premise upon which to build a green Buddhist philosophy.

> In the canonical texts of Early Buddhism, all mundane existence is regarded as unsatisfactory, either because suffering prevails, or because existence is inevitably impermanent... Nature cannot but be ultimately unsatisfactory, for it too is marked by pain and death, or at least by impermanence...Therefore, the only goal worth striving for is Nirvāṇa, which [is] entirely beyond mundane existence (Schmithausen 1991, 12).

Schmithausen agrees, then, that neither animals nor human beings are afforded ultimate value in the Buddhist analysis. Although they are not to be killed, as this is precluded by the First Precept, ultimately, it would be better if there were none. "On this level then," he goes on, "there is little motivation for the conservation of nature" (1991, 16). This problem, which will be the topic of the following section, seems to present a serious difficulty for anyone seeking to relate early Buddhism to contemporary environmentalism. A view that falls short of seeing anything of intrinsic value in life would appear to be a rather unsatisfactory basis from which to develop an environmentalist position, and the concern to protect nature appears unfounded on this account.

Whether this is a serious problem for green Buddhists depends upon the possibility of finding other doctrinal grounds for concern for the natural world. If any can be found, it seems unlikely that they will correspond exactly to Western concepts and assumptions, as, I hope, has emerged in this section. We have already seen that there may not be a concept of moral considerability, or of treating morally considerable beings as ends, and now it has emerged that there might not be any idea of life as intrinsically valuable in Buddhism either. In fact, to search for this kind of concept of value in Buddhism might even be an anachronistic attempt to locate a modern notion in an ancient system of thought.[30] While I agree that great care is required not to read into Buddhist doctrines ideas that are foreign to it, or to expect it to live up to the standards of other, modern systems of thought, there are also reasons, I think, not to give up the search for value just yet. This is because, although the ancients may not have discussed moral value explicitly, it might still be possible to locate an implied system of values in their thoughts. This, in fact, will be my task for the rest of this chapter.

[30] I owe this insight to Prof. David E. Cooper (personal communication).

Should the outcome of our search be negative, however, we will have to ask whether this might stem from a misguided attempt to fit inappropriate Western categories onto a Buddhist framework, that is, whether, by asking the wrong questions, we might be preventing an authentically Buddhist environmental philosophy from emerging out of the tradition itself. In following chapters, I hope to show that Buddhism has its own conceptual resources that can be applied to ecological issues, including an alternative notion of value to that utilized by most environmental philosophers.

Summary

In this section, I have tried to disentangle various hidden assumptions from Waldau's charge of speciesism. These were the ideas that rationality, language, and other "valued characteristics" are what make a being morally considerable; that morally considerable beings ought not to be treated as means; and that humans, at least, are morally considerable in this sense. All of these belong properly to Western ethics, and if they do occur in Buddhism, this needs to be demonstrated clearly. It is my belief, in fact, that these ideas are quite alien to Buddhist doctrine.

Waldau's general argument fails, it was seen, because it assumes that Buddhism determines moral considerability based on whether a being possesses certain valued characteristics, and this assumption is gratuitous. In fact, the texts suggest that Buddhism extends moral considerability to all living creatures, regardless of their qualities. Waldau's preference for mental and human-like traits may be one that is widely shared, yet it is not necessarily present in Buddhist doctrine.

The examples that Waldau cites where animals are used instrumentally do not support his claims either; for the conclusion about speciesism to follow, he has to show that Buddhism specifically condemns the instrumental use of morally considerable beings. Even if the presence of such references to the instrumental use of beings does entail acceptance of these practices—which seems rather unlikely—because the texts contain stories about human slaves too, as well as domestic animals, it seems that there is no speciesism.

The final problem considered was that, in the Buddhist cosmological scheme, humans are valued more highly than other animals. As long as the value rests simply on the merits of human existence, such as enjoyment, intelligence and so on, no implications of speciesism will arise. Yet when the advantages of human existence suggest, as the *Vinaya* code does in a few places, that humans have more inherent or moral value than other animals, then, to an extent, Waldau is correct; Buddhism, does contain speciesism. It implies that what is done to a human being is more important than what is done to another animal, because human life is a better opportunity to transcend *saṃsāra.*

Nevertheless, if one follows this argument to its logical conclusion, what is discovered is not just speciesism, but something far worse for environmentalists. This is the fact that, in early Buddhism at least, ultimately no being, human or animal, is valued for its own sake. If Buddhists seek to align their faith with current ecological awareness then, it appears they cannot avail themselves of the concept of intrinsic value as it is normally understood. However, I concluded by suggesting that it may be more fruitful to seek to derive ecological principles and ideas from the doctrines of Buddhism itself.

2 Does Nature Have Intrinsic Value on the Buddhist Worldview?

The previous section ended on a rather negative note for green Buddhism. We saw that although Buddhist cosmology appears to regard highly some realms and some forms of life, in particular, the heavens and the human world, this is not based upon any appreciation of these beings or environments *per se*; rather, they turned out to be valued instrumentally, as means of satisfying the desire for pleasure, or, at best, for the opportunity to attain *nirvana*. Other writers have brought up similar concerns; Damien Keown, for example, notes that, in Buddhism, there is a "negative presupposition" about the value of nature, and he suggests that, according to its traditional beliefs, "the eventual destruction of the environment is... exactly what we should expect" (Keown 2007, 97). The problem of natural disvalue, as we have seen, presents an obstacle for green Buddhism, as, on this worldview, concern about the protection of nature appears rather awkward to motivate or defend.

In this section, I will continue to examine the issue of whether Buddhism can accommodate a concept of 'value in nature.' I will consider some basic doctrines, primarily the teachings about the "Three Marks of Existence" (*trilakṣaṇa),* which are held in common by all vehicles and schools. Briefly, the Marks of Existence are suffering (*duḥkha*), impermanence (*anitya*), and not-self (*anātman*), and, as we shall see, all three suggest that the concept of value, as it is usually interpreted in the West, cannot be ascribed to nature. In fact, we shall encounter three objections to green Buddhism, which are based upon the Three Marks, and which have to do with the evaluation of nature. It will emerge, however, that two of these critiques are unfounded; they are most likely to result from a misinterpretation of Buddhist doctrine.

The first objection is the straightforward claim that Buddhism ascribes negative value to the natural world and to ordinary life. To understand why this allegation might arise, we will need to examine the first two Marks of Existence, namely, suffering and impermanence. Some writers, like Schmithausen in the passage cited above, believe that these characterizations amount to a negative portrayal of nature; yet, we shall see that there is no consensus on the matter, but that rather, a variety of positions exists about

whether Buddhism regards nature as having positive or negative value, and whether this value is something objectively real or not.

The second objection raised by eco-critics follows from the idea that, according to Buddhist teachings, the only thing worth striving for is liberation from *saṃsāra*. Therefore, I shall go on to examine this concept, and to ask what *nirvana* entails, in order to determine exactly what it is that Buddhism, allegedly, sets up as the sole locus of value, in contrast with ordinary life in the natural world. On some interpretations, *nirvana* involves complete transcendence of the ordinary world, and consequently, this renders Buddhism susceptible to the charge of being too 'world-rejecting' to be able to provide grounds for an environmental philosophy.

Occasionally, *nirvana* is not interpreted in this way, and is taken, instead, to be compatible with continued existence in this world. In the next chapter, we shall see that Mahāyāna Buddhism explicitly states that *nirvana* must not be understood as being starkly opposed to the natural world of *saṃsāra*. Therefore, the charge of being 'world-rejecting' does not seem to apply in this case. This chapter though, will be concerned with Theravāda philosophy, which, arguably, continues to regard the ultimate goal of Buddhism and samsaric life dualistically, and to conceive of *nirvana* in terms of complete transcendence of the natural world. Sometimes it is believed that attaining *nirvana* implies the total extinction of the liberated person after death, otherwise it is held that he will be reborn in some otherworldly realm. Yet, as we shall see, there are difficulties with all of these interpretations.

A more complete account of *nirvana* will need to take into consideration the Third Mark of Existence, the teaching on not-self. In brief, this doctrine suggests that there is no permanent or substantial entity that lies behind the constantly fluctuating elements that are constitutive of that which we call a person, and which are known, in Buddhism, as the Five Aggregates (*skandhas*). This implies, then, that the liberated person does *not* continue to exist in the world after liberation, yet this is because what we refer to as that 'person', or the so-called 'self,' did not exist as was supposed from the very outset. For the same reason, it is also incorrect to say both that he is annihilated and that he is reborn in some other realm after death. In other words, *nirvana* clearly cannot

involve complete transcendence of the natural world in any of the senses outlined above, and, consequently, the second objection about Buddhism's 'world-rejecting' nature fails.

The notion of value in nature is also compromised by the doctrine of not-self. The third objection we shall encounter argues that for a thing to be ascribed value seems to require the idea of that thing as a fixed, static entity, which is precisely what the doctrine negates. It will emerge that Buddhist doctrine does not take as final any view about the value—positive or negative—of a natural being and therefore, the first objection that was raised, that Buddhism ascribes negative value to nature, appears to be unfounded too. The problem of value for green Buddhism reduces to the third and final critique we encounter; that Buddhist doctrine of not-self is incompatible with the ascription of either positive or negative value to natural beings.

Suffering, Impermanence, and the 'Negative Value of Nature' Critique

Buddhism's portrayal of the world as a place of "suffering, decay, death, and impermanence" (Holder 2007, 114; citing Schmithausen) features in many works by eco-critics, who claim that it poses a serious problem for green Buddhism. In brief, their argument, as we have seen, is that because of the emphasis on the undesirable aspects of natural phenomena, Buddhism cannot motivate an environmental ethic. I shall refer to this first objection to green Buddhism as the 'negative value of nature' critique. Those who raise this issue generally invoke the first of the Three Marks of Existence, *duḥkha*, which also features as the First Noble Truth, and is variably translated as "painful, disagreeable, ill, entailing suffering" (Schmithausen 1997, 10) or, generally, as "unsatisfactoriness" (e.g. Harris 2000, 125). Throughout the rest of this thesis, I shall use "suffering" as a shorthand term to refer to all these aspects of *duḥkha.*

J. Baird Callicott discusses the suffering that pertains to biological and natural processes, in particular, to the necessity that all creatures inflict some measure of discomfort upon others to survive (1987, 123). In a similar vein, Schmithausen states that in Buddhism, eating the weak and killing is "deeply abhorred"; yet, he also points out that the less violent aspects of nature cannot claim ultimate value either, and this is due to their impermanent nature (Schmithausen 1997, 10–11). Therefore, *duḥkha* is intimately

bound up with the Second Mark of Existence, *anitya*, or impermanence, as is manifest in the textual allusions to death and decay, and in particular, to the inevitable destruction of the natural world. We shall encounter these ideas again in chapter 4, where suffering and impermanence will be related specifically to natural evolution.

Of course, not all authors subscribe to the view that Buddhism paints this negative picture of nature and mundane existence, and even some of the harshest critics of green Buddhism are careful to qualify their statements where necessary. Schmithausen, for instance, emphasizes that Buddhism contains diverse "strands" and he juxtaposes the negative portrayal of nature against what he refers to as the "hermit strand." This includes those passages from the *Songs of the Elders* (*Thera-*, *Therigāthā*), which portray the forest-dwelling monks' and nuns' appreciation of the beauty of wild animals, of the solitude they enjoy in the wilderness, and which portrays some natural beings as standards of spiritual perfection, such as, for instance certain long-standing trees (Schmithausen 1991, 18–20). In like manner, Bilmoria (2001, 2) believes that far from portraying nature negatively, the Buddha was responsible for shifting perception away from the "fearful, warring natural forces," which his contemporaries tended to discern, and onto the "benign disposition" of nature instead.

Nevertheless, the most frequent reply to the negative value critique is that this negative value is not something that exists objectively or "out there" in the world, but rather, it has to do with the way we experience that world. Cooper and James, for instance, suggest that *duḥkha* cannot simply be equated with the "ordinary suffering" of, say, old age or death; instead, they claim that it is "one's take on [that] experience" (2005, 69; citing Kupperman). The suggestion is, therefore, that any phenomenon, including apparently negative ones like death, and indeed, the entire natural world *itself*, is neutral in value. Padmasiri De Silva similarly suggests that rather than being a problem with the world, *duḥkha* indicates "a disharmony in the self-society-nature matrix," which can be likened to a "thinking disorder." The eco-crisis is one expression of this, he says, and Buddhism, as a diagnosis and cure for the disorder, generates the "ideal human-nature orientation" and can go a long way towards the solution of our ecological problems (De Silva 1998, 30–34). All this suggests, therefore, that the problems we

discern in nature have mostly to do with our own perception and our reaction to it, and can be removed by working on our own minds.

Other authors, however, disagree with this outlook. John J. Holder, for instance, emphasizes that *duḥkha* and other attributes of reality are not to be understood as entirely subjective phenomena, such as "mental events." Rather, suffering involves both the world and the experiencer, and arises, he says, "in the interface between a sentient being and the world such a being experiences." Thus, it has "metaphysically *objective* as well as *subjective* features" (Holder 2007, 120). It is true, he goes on, that the Buddha equated suffering with "whatever is experienced" and that he never suggested that the world is suffering "in and of" itself (2007-121). Holder, therefore, summarizes Schmithausen's mistake as having overstated the objective part of *duḥkha* at the cost of its subjective aspect, thereby turning it into "a Buddhist condemnation of the world" (Holder 2007, 120–121). Yet, in Holder's view, Buddhism *does* make a claim about the world itself; it attributes nature with *positive* value objectively. "Nature has a profound value in early Buddhism," he claims, "as it is through natural means that one makes spiritual progress" (2007, 116).

De Silva too, in some places, suggests that nature has positive value in the Buddhist worldview, and this time it is the Second Mark, impermanence, that lies at its source. That this value has a subjective aspect is clear; at times, he seems to think that it originates entirely from the one who experiences impermanence. "[T]he rhythms of nature, of change, transience, the falling of flowers and the changing colours of the leaves" he argues, could only "heighten one's appreciation of nature" (De Silva 1998, 43). Yet, he also seems to suggest that nature has value objectively, for example, as a "remarkable resource for the kind of pedagogy the Buddha evolved" (1998, 44). Arguing against the popular belief that Buddhism views nature as an illusion, he claims that in its impermanence, a monk can discern "metaphors of a most profound truth" (1998, 42–44). In Japan, this developed into a form of art that both celebrates and laments the transient beauty of nature (cf. James 2004, 73). Impermanence, that is, seems to be an objective part of the world, there to be discerned, and not merely a 'thinking disorder' like *duḥkha*.

To sum up, two contrary claims have been proposed as replies to the negative value critique. The first is the argument that Buddhism portrays nature as having positive

and not negative value. The second accepts that nature is valued negatively, but argues that this value must not be understood as something that exists objectively in the world. Instead, *duḥkha* is understood to have to do, mostly, with the way we experience the world. There is also a third position, which accepts this experiential quality, but insists that, on the Buddhist worldview, value has an objective element as well as a subjective aspect, and thus, this position re-opens the possibility of there being either positive or negative value in nature objectively. Below, I shall argue, against this view, that Buddhism cannot make any ultimate statements about objective value in the world, whether positive or negative.

Nirvana and the 'World-Rejecting Critique'

So far, I have outlined various positions on whether Buddhism can be said to find value in nature or else whether suffering and impermanence imply an outright condemnation of the world. One way of answering this question is by looking at what it is that Buddhism values unequivocally. Unfortunately, there are no indisputable answers here either, for although no one would deny the claim that Buddhism values *nirvana*, it is not altogether certain what this entails, other than, of course, liberation from *saṃsāra*. As we shall see, once again, there is a range of interpretations; some of them have existed since the Buddha's times, while others have a distinctively modern (and perhaps Western) flavour.

When first encountered by Western scholars, the term *nirvana* was interpreted, literally, as 'extinction,' and, at the time, a significant thread in Buddhist hermeneutical studies concerned the question of whether half the world's population could really "yearn for extinction" as a final end (Welbon 1975, 134). In the context of environmental philosophy, one might wonder whether this concept is compatible with the aims of conservation, or else, precisely the opposite of what environmentalists wish for individual beings and collectivities like species. It is widely accepted today, however, that whatever *nirvana* is, it does not involve the total annihilation of the enlightened person (see below).

The implication of this would seem to be that the enlightened person must go on existing in some way. Some authors seem to think that attaining *nirvana* can be done in this life and in this world. Holder for instance, emphasizes that the Buddha reached

enlightenment while continuing to interact with the impermanent things of this world, and to experience the suffering of old age, sickness, and death. Thus, in his view the Buddhist goal involves "a way of living in this (natural) world; it is not an escape from it" (Holder 2007, 122–123; brackets in original). In general, Mahāyāna Buddhism categorically states that liberation is not to be found anywhere other than in this very world; according to its highest teachings, there is no ultimate difference between *saṃsāra* and *nirvana*. Yet, according to Bhikkhu Bodhi, a prominent commentator on Buddhism, for the Theravāda this "borders on the outrageous." He stresses that the duality between suffering and liberation is an essential aspect of the Buddha's teaching, and that it is precisely the antithesis between *saṃsāra* and *nirvana* that makes the quest for the latter so vital (Bodhi 1994, 2).

Interpreters of the Theravāda insist that in order to overcome suffering—and because, being impermanent, life and this world must someday be left behind—Buddhist monks and nuns must aim at complete detachment from the world. The consensus among eco-critics appears to be that this soteriological aim involves the outright rejection of nature, and that, for this reason, it is entirely incompatible with an environmental ethic. Harris provides the clearest example of this way of thinking. He claims that, for early Buddhism at least, *nirvana*[31] is thought of as being entirely "outside the world" and liberation is attained only through letting go of it completely, in his words, through "escape from the bonds that tie us to *saṃsāra*," and not, as authors such as Holder or De Silva imply "through some fundamental restructuring of existence" (Harris 2001, 236; 2000, 123). For these reasons, he and others charge Buddhism with being "world-denying" or even "world-loathing"[32] (Callicott 1987, 123; Harris 2001, 236) and this constitutes the second, 'world-rejecting' critique. The objection this time is that Buddhism's soteriological aim of complete detachment from the world and its implied rejection of nature are impossible to reconcile with an environmental philosophy. To cite Harris again, there is nothing in the world, he claims, "which can be said to possess any inbuilt meaning or purpose" and consequently, "[t]here can be no Buddhist justification for the fight to preserve habitats and environments *per se*" (Harris 2001, 253). In a further

[31] Or, better, *nibbana*.
[32] Clearly, the latter charge cannot be correct, since hatred, as one of the mental poisons, is supposed to be eliminated altogether by the *arhat.*

chapter, we will see how taking this attitude to an extreme can result in nihilism, a wrong view that Buddhists need to avoid.

It is not only eco-critics, however, who interpret *nirvana* in this way. Cooper and James agree with Holder that upon one interpretation of *nirvana*, namely as the "cessation of suffering," this *was* attained by the Buddha during his lifetime and in this very world. However, they contrast this goal with another, more ultimate aim—the Buddha's final *nirvana*, or *parinirvana*—which was attained after his death. This concept, they claim, is ineffable; it is "resistant to full, literal description," and "cannot be fully communicated to anyone not already 'in' it" (Cooper and James 2005, 71). Both *parinirvana* and *nirvana*, in fact, are "temporally and conceptually remote"; that is, as well as being inconceivable, to most practicing Buddhists, *nirvana* is something they believe can only be attained after countless future lives (Cooper and James 2005, 71). Throughout this dissertation, I shall continue to use the term *nirvana* in this sense, to refer to the *ultimate* soteriological aim of Buddhism. One may add that *nirvana* is sometimes even conceived of as being spatially remote, perhaps lying in some other world beyond this universe. In short, it is arguably the case that, insofar as it is the goal of Buddhists,[33] *nirvana* has little to do with ordinary life in this world, and consequently, it can give rise to the 'world-rejecting' objection raised by eco-critics against green Buddhism.

One might suppose that if *nirvana* does not occur in this world and does not involve extinction either, it must entail some sort of continuation of the person in another realm, an escape from *saṃsāra* to an 'other-worldly' plane of existence, beyond impermanence and suffering. This would seem to be the import of a well-known passage in the canon, where the Buddha claims:

> There is, *bhikkhus*, an unborn, an unbecome, an unconstructed, an unconditioned, without which, *bhikkhus*, the resultant born, become, constructed, conditioned could not be known (*Ud*. 80; Thanissaro's translation).

[33] Cooper and James follow Keyes's and Collins's suggestion that *nirvana* is only the "official *summum bonum*" of Buddhism, and that for most followers it is not the central aim. Instead, other concerns occupy centre space, such as a good rebirth, and perhaps, even rebirth in paradise (Cooper and James 2005, 72–73).

At first sight, this passage would seem to imply a separate ontological realm, something analogous perhaps to Plato's Forms, or else, some sort of paradise in which enlightened beings are born once they have escaped this world.

In sum, we have seen that several replies could be given to the question of what exactly *nirvana* entails; these are, briefly, the person's continued existence in this world, in some other world, or else, her total extinction. The first of these seems incompatible with Theravāda doctrine, the other two appear world-denying, and raise difficulties for green Buddhism. None of these interpretations of *nirvana* is correct, however, and to understand why, we will need to examine the Third Mark of Existence, the doctrine of not-self.

Nirvana and the Doctrine of Not-Self

The problem of how to interpret *nirvana* is not a new one; the Pāli canon contains several accounts of the same question being put to the Buddha. In the *Aggivacchagotta Sutta*, for instance, the issue is framed using the classical Buddhist tetralemma (*catuṣkoṭi*), which considers four alternatives that together are deemed to encompass all possible replies. There are the views that the enlightened person 1) exists after death, 2) does *not* exist after death, 3) both exists *and* does not exist after death, or else 4) *neither* exists *nor* does not exist after death. The Buddha answers to all these possibilities, that he does not hold this view (*M* i 484–485). When Vacchagotta enquires further, the Buddha states that these positions are all

> a thicket of views, a wilderness of views, a contortion of views, a writhing of views, a fetter of views. [They are] accompanied by suffering, distress, despair, and fever, and [they do] not lead to disenchantment, dispassion, cessation; to calm, direct knowledge, full Awakening, Unbinding [i.e., *nirvana*] (*M* i 485; Thanissaro's translation; inserts mine).

In other words, it seems that the Buddha advises his followers not to concern themselves with whether *nirvana* means extinction or continuation in this, or in some other world, because preoccupation with this matter is not conducive to attaining *nirvana*. In itself, of

course, this reply does not rule out any of the possibilities, and to understand what the Buddha means, we will need to look at some other answers he gives to the question.

In two similar texts, the *Anuradha Sutta* and *Yamaka Sutta* (*S* iii 109–119), the issue is examined in depth. Yamaka believes that the enlightened person is annihilated at death; Anuradha, on the other hand, believes that there must be a fifth possibility besides the four outlined above; that is, while the Buddha cannot be described in any of the four alternatives of the tetralemma, still, after death, he can be described in some other way. The answer they receive is the same. The notion of 'Buddha' is analysed into five basic constituents, or aggregates (*skandhas*), which are generally rendered as form (i.e., the body), feelings, perceptions, mental fabrications (or volition), and consciousness. Although the argument here is about the Buddha (*Tathāgata*), other *sūtras* make it clear that the Five Aggregates are the basic constituents of all individuals, and that the argument is about the concept of self (*ātman*).

One might believe the self to be any of these aggregates, or else, to be somehow related to them; yet, upon further examination, they are all found to be "inconstant, stressful, and subject to change" (*S* iii 118; Thanissaro). Modern interpreters of the not-self doctrine like to point out that the body is constantly undergoing different processes; old cells are dying and being replaced, the blood is continuously circulating the body, and the breath inhaled and exhaled. This implies that if one were the body, then Siddhārtha the new-born baby, say, would be very different from Siddhārtha the adult.

Similarly, feelings, perceptions, and the other mental aggregates arise and fade away, replacing each other in quick succession. The *Mahānidāna Sutta* explains why this is significant. To someone who believed that the self was somehow linked with her feelings, for instance, the Buddha explains that at any one moment there might be a feeling of pleasure, at another a feeling of pain, and at a third moment a neutral feeling might arise. All of these are mutually exclusive, in the sense that a feeling of pleasure cannot possibly exist at the same time as a feeling of pain.[34] Again, all of the aggregates, the *sūtra* goes on, are "inconstant, fabricated, dependent on conditions, subject to passing

[34] Even though some experiences might contain a mixture of pleasure and pain, still, Buddhism holds that these must arise successively in the mind stream, and that, as one's meditation deepens, one becomes aware that no more than one *dharma* (the class of all momentary phenomena, to which the mental aggregates belong) can be present at any one moment (Bodhi 1998, xvi-xvii).

away, dissolution, fading, and cessation" (*D* ii 66–67; Thanissaro). Thus, if that person identified her self with a particular feeling, once that feeling has ceased then she too must have perished. We generally think of a person, however, as stable, fixed, and unchanging, something substantial, perhaps, to which the aggregates belong. This is what we mean when we refer to them as *my* body, *her* feelings, and so forth.

The doctrine of not-self explains that this way of thinking is mistaken, that there is no fixed self behind the ever-changing aggregates. To return to the *Anuradha* and *Yamaka Suttas,* none of the aggregates in isolation can properly be called the Buddha, they claim; he is not the body, or any other aggregate, precisely because of its impermanence. The Buddha cannot be said to be *in* his body (nor the body in the Buddha), although, at the same time, he certainly is not anywhere other than where his body is, or independent from his body. The same argument can be made for all of the other aggregates considered in isolation.

The most plausible account, it seems, takes the Buddha to be the sum of all his aggregates. However, the composite made up of the body, feelings, perceptions, and so forth is also inconstant and fluctuating, as well as multifarious, whereas, as we have seen, we generally think of a person as a single, unchanging thing. On the other hand, clearly the Buddha cannot be anything independent or separate from the collection of his aggregates, as there is no way of recognizing him, other than through his body, his thoughts, feelings, and so forth. The conclusion reached, in short, is that the Buddha "can't [be] pin[ned] down... as a truth or reality even in the present life" and therefore, how can it be correct to say either that he exists or else that he does not exist after death? (*S* i 118; Thanissaro's translation)

Thus, to the question of what *nirvana* entails, the Buddha replies using the stock formula for meditation on not-self. He refuses to state categorically whether or not the self survives death because the inquiry is a misguided one that already begs the question, in that it assumes the existence of a permanent, substantial self. It assumes that there is something determinate that we call 'the self,' and yet, when we look carefully we find there is nothing that corresponds exactly with this concept. There are only transient phenomena that arise, stay for a short while, and perish, and we would not identify any of these as 'the self.' It is important to emphasize that the Buddha is neither stating that the

self exists nor that it does not; the point, rather, is about indeterminacy, that there is nothing that can be "pinned down" as the self, and that ultimately, it is inappropriate to state anything about it, either concerning its present life, or after death.

Of course, since at other times, the Buddha *does* speak about himself and about other people,[35] this cannot be the whole story, and, as we shall see in chapter 2, a correct understanding of Buddhist doctrine requires that one can distinguish between two levels of truth. Conventionally, it makes sense to speak of a person as a shorthand way of referring to a cluster of ever-changing phenomena that are related to each other through cause and effect. This is why the Buddha does not simply assert that there is no self. Ultimately, however, a person (and as we shall see, everything in the world) has no permanent, substantial identity, or, put another way, there is no essential core that lies beneath its transient properties, and this is why the Buddha does not say that there is a self. In fact, all statements are only conventionally true and ultimately, statements to the effect that 'the self exists,' or that 'the self does not exist,' are neither true nor false, but meaningless. Therefore, if one does make such statements, one must bear in mind that this is merely a conventional way of speaking.

This implies that whatever *nirvana* entails, it is certainly not the annihilation of something that previously existed, and it cannot involve extinction, as some eco-critics might fear. Neither does it entail the rebirth of the liberated person in some other-worldly realm. To reiterate, this is because that which we have been referring to as the self, or person, never existed in the way that is implied by the statements: 'the liberated person is annihilated after death,' or, 'he is reborn in another world.' Consequently, the second objection raised by eco-critics, that *nirvana* entails a world-rejecting philosophy, appears to be based on an incorrect understanding of what is meant by liberation from *saṃsāra.*

Yet, for the same reason, *nirvana* is not simply ordinary existence in the samsaric world either, that is, the Buddha is not to be understood as an ordinary person who exists in the world. It is said that to fully discern not-self and thereby attain liberation will bring about a complete transformation in oneself and one's perception of the world, as well as in one's way of being 'in' the world (e.g., *A* iv 53). As already noted, the Mahāyāna

[35] To take just a few examples, in *A* ii 61 the Buddha talks about husband and wife being reborn together, in *M* iii 20 he talks about "a person of integrity," (Thanissaro's translations) and in *D* ii 102 he talks about himself being "grown old, and full of years" (Rhys Davids's translation).

explicitly stresses the 'this-worldly' implications of the doctrine, by identifying *nirvana* with *saṃsāra*, whereas the Theravāda focuses on the 'other-worldly' aspect by stressing the transformation. In any case, although Buddhism sets *nirvana* as the ultimate soteriological goal, this does not amount to a straightforward or simplistic rejection of the natural world. However, there are further implications of the not-self doctrine that have bearing upon the notion of value, to which I shall now turn.

Not-Self, Renunciation of Views, and the 'Insubstantiality' Critique

As we have seen, the doctrine of not-self suggests that there is no determinate, permanent, or substantial entity that lies behind the ever-changing and unsatisfactory phenomena that make up a person. Cooper and James point out that this idea holds true for all types of organisms, and not just people. "Living beings," they write, "are not to be distinguished from the ephemeral events and states that, as it were, constitute their existence. Dogs and tulips, like people, are impermanent and 'not-self'" (Cooper and James 2005, 110). Some *sūtras* extend the doctrine to apply to everything in the world, claiming that all things, including inanimate ones, are "empty of a self or of anything pertaining to a self" (*S* iv 54, *M* iii 110–115).

There are two related implications of this that are pertinent to our discussion about value. The first is that this indeterminate and insubstantial view of things suggests that since there is no fixed substantial entity behind the collection of ephemeral phenomena that make up a 'thing,' then there is nothing that can serve as the locus of value, or that can be ascribed value. Or, to put it another way, since nothing determinate can be stated about any 'thing,' then neither can we say that it has nor that it does not have value. The second implication, then, is that the doctrine of not-self does not allow us to retain any final view.[36] Together, these make up the third objection that eco-critics raise, the 'insubstantiality critique.'

[36] Due to the ineffability of ultimate reality, and the relinquishing of all views, putting Buddhist doctrine into words becomes a rather complicated affair. All statements, including negatives like "there is no fixed entity" are merely conventional, and they too must not be grasped at as views.

Throughout this dissertation, a persistent setback for green Buddhism that we shall encounter is that the highest level of doctrine seems to advise practitioners to relinquish all their views. We have already seen that the Buddha regarded statements to the effect that a person exists or does not exist after death as "a fetter of views." This was only one of the questions that he famously refused to answer; others include whether or not the cosmos is eternal, whether or not it is infinite, whether the body and soul are the same, or independent (*A* v 186–188), and even the view "all this is pleasing to me" or "not pleasing to me" (*M* i 497–500; Thanissaro). The Buddha admonishes his listeners not to "insist firmly" or "adhere obstinately" to any views, that is, not to grasp at or cling to them (*M* i 499; Thanissaro; Nanamoli and Bhikkhu). Another *sūtra* explains further:

> Those skilled in judgment say that a view becomes a bond if, relying on it, one regards everything else as inferior. Therefore, a *bhikkhu* should not depend on what is seen, heard or cognized... Abandoning the views he had previously held and not taking up another, he does not seek a support even in knowledge. Among those who dispute, he is certainly not one to take sides. He does not have recourse to a view at all (*Sn* 798–800; Ireland's translation).

One must suppose that the same would apply to the view of the natural world as valuable, as well as to the view that it has negative value. Indeed, environmentalism seems to be replete with views, and, one might argue, amounts to a view in itself. It includes theories about what nature is, about the way we ought to treat natural beings, and our relation to nature, to mention just a few. Assumedly, to cling to any of these would also become a bond, and therefore, anybody who was serious about realizing the *Dharma* would at least have to question her adherence to certain causes, for example, to her belief in animal rights, or else, to a holistic type of eco-spirituality. As we shall see, this problem will re-surface frequently and will be one of the major difficulties we shall encounter throughout the appraisal of Buddhist environmentalism.

It may be objected, here, that Buddhism, too, contains several views, such as the view of reality as being marked by impermanence, suffering, and not-self, that is, the doctrine of the Three Marks of Existence, with which this section began. To reply adequately will require a more detailed examination of the doctrine of the Two Truths, which was mentioned briefly above. This is postponed until the next chapter, where we

shall encounter Nāgārjuna's explanation of how the conventional and ultimate levels of reality are related to each other.

For now, it shall have to suffice to point out that the Buddha often insists that he does not hold a view, and that he has not taught anything other than the Four Noble Truths; in short, that there is suffering, a cause of suffering, the cessation of suffering, and the path towards the cessation of suffering (e.g., *M* i 140). Lest one should be inclined to interpret this as just another view, the *Ditthi Sutta* points out that suffering is not to be grasped at either, rather, when one correctly discerns *duḥkha*, he also discerns the escape from it (*A* v 188). That is, it is not enough to stop at the belief that "all this is suffering," or worse, to grasp at it as a final truth. Rather, the point of practising the Buddha's teachings is to *overcome* that suffering.

Besides, it was suggested above that the doctrine about suffering is not meant to be read as a description of the world, but rather, it has mostly to do with the way we experience that world. Other authors have similarly maintained that the Buddha rarely spoke of anything objectively "out there" (e.g., Gombrich 1996, 80); his aim, instead, was to draw attention to psychological processes, and to reveal a way out of our 'thinking disorder.' This is why, in so many passages from the *sūtras*, he claims not to have taught anything other than the path from suffering to the cessation of suffering. Referring to the Buddha's silence on the "unanswered questions" cited above, Sue Hamilton claims that he deliberately transfers attention away from "cosmogonic and cosmological speculation," as well as from questions about the "nature of the self and the nature of everything else," and focuses, instead, on inwardness, and subjective processes. This is because the only world there is, she says, is the world of experience, and therefore, "the premise that there must either be or not be an external world is a false one" (Hamilton 1999, 74–83).

It would appear that the same can be said about so-called individual 'things' and natural beings too; as we have seen, the question of whether or not they exist is a misguided one. This brings us to the second part of the 'insubstantiality critique,' the problem that there is no fixed objective entity behind the transient phenomena we experience as a natural being, which can serve as the locus of value. Several writers have insisted that in order to ascribe value to a thing, we must be able, at least, to identify it as

an entity. Holmes Rolston, for instance, says that it requires the "pushy defense of individual integrity" that the Buddhist doctrine of not-self seems to negate (Rolston 1987, 184). If things like individual organisms, forests, or mountains cannot be pinned down, how are we to say that they are valuable?

Malcolm David Eckel makes a similar point, although he refers specifically to the concept of 'intrinsic value,' which will be examined in the following section. He says that this "seems to suggest precisely the substantial, permanent identity that the idea of no[t]-self...[is] meant to undermine" (1998, 65). Likewise Holder claims that the notion of value "depends on a metaphysical position that gives *independent, self-subsisting existence* to the beings or things valued," which early Buddhism rejects (Holder 2007, 114; emphasis in original). Finally, Simon James (2004, 84) cites Rockefeller's similar claim that intrinsic value requires "the existence of some fixed essence or permanent self in things." The import of these statements seems to be, again, that without the existence of an entity 'out there,' something that exists permanently and independently of our experience of it, there is nothing to which we could ascribe value.

Of course, the insubstantiality critique will apply to both the claim that nature has value as well as the claim that it has negative value. In other words, it defeats the first objection that was raised against green Buddhism, the idea that the doctrines of suffering and impermanence imply a negative portrayal of nature. If a thing needs the sort of fixed, objective identity that not-self negates in order for us to say that it 'has positive value,' then it will also need it to have negative value. The eco-critics' complaint about Buddhism's dismal portrayal of nature, therefore, turns out to be unfounded, as Buddhism views things in nature as being far too insubstantial for us to claim anything about the way they are objectively; any such statement amounts to "a thicket of views… accompanied by suffering, stress and despair…that do[es] not lead to Awakening" (*M* i 485; Thanissaro). It seems that, once again, we have defended green Buddhism from one charge—that its gloomy view of nature precludes an environmental ethic—only to discover another, potentially greater one. This is the charge that Buddhism's insubstantial account of reality means that nothing exists determinately in nature in such a way that it can be ascribed value objectively.

Much more can be said about this issue, and in the next section, I shall delve more deeply into the matter, after examining the concept of intrinsic value. Perhaps, though, one might argue that attempting to reconcile the concept of value with Buddhism is another example of the misapplication of Western ideas to Buddhist doctrine. In the previous section, we saw that Waldau appears to believe that a feasible environmental philosophy must rely on notions like moral considerability, treating beings as ends, and so forth. Holder has described this approach as "methodologically backward" in that it starts with a contemporary way of framing environmental ethics, and then tries to match it with the ancient texts (Holder 2007, 115). The attempt to locate the notion of value in Buddhism might appear similarly flawed; the interpretation of it as an objective property of things, it seems, does not cohere well with the Buddhist view of reality, and indeed, appears to be a philosophical construction that emerged out of Western traditional concerns and viewpoints. Fortunately, we do not need to think of value in this way, in order to have a workable notion for environmental ethics, and, as I shall argue in the next section, a concept of value as something subjective, and that rests entirely upon our attitude towards a being, is perfectly adequate for the purpose it needs to serve. Moreover, this sort of concept is available in Buddhist doctrine, and corresponds in an interesting way to the two main virtues that are cultivated by Buddhists, namely, love and compassion.

Summary

In this section, I began to examine in general terms whether Buddhism can accommodate a concept of value in nature, or whether the doctrines of suffering, impermanence, and not-self preclude this altogether. We saw that Buddhism lays particular stress upon the unsatisfactory aspects of existence as well as on its impermanence, which together contribute to a seemingly negative evaluation of nature. Some authors insist that according to the Buddhist worldview, nature can be said to have negative value objectively, and we referred to this as the 'negative value critique.' A second objection encountered was that because Buddhism only values *nirvana,* and because, whatever *nirvana* is, it involves the total repudiation of this world, Buddhism cannot be reconciled

with an environmental ethic. This was referred to as the 'world-rejecting critique.' After examining the doctrine of not-self, I argued that this interpretation of *nirvana* cannot be correct. Although, from one perspective, it is true that *nirvana* is completely different from ordinary existence in this world, this does not amount to a straightforward rejection of it, and therefore, the second objection fails.

We saw that according to the not-self doctrine, the Buddha cannot be said to exist nor can it be said that he does not exist, either in this life or after death. The same applies to the concept of 'self,' and to all individuals or 'things' in the world, whether human or non-human, animate or inanimate. Generally, we think of a 'thing,' a 'person,' or a 'being' as something permanent, substantial, and determinate; yet, in reality, any individual can be analysed into a collection of ephemeral phenomena, none of which corresponds precisely to that thing, or being. This means that although, conventionally, we do talk about individuals, ultimately, nothing determinate can be stated about any of them at all; they "cannot be pinned down.' This gave rise to the third objection, the 'insubstantiality critique.' The first part of this critique is that since nothing determinate can be said, we can never arrive at a final truth about anything, and indeed, the Buddha often advised his listeners to relinquish all their views. This advice would seem to apply to all the statements and views that are included in environmental philosophy; as we shall see, Buddhist philosophy can only accept these as conventional truths.

As a result, the 'negative value of nature' critique was dismissed; the indeterminate and insubstantial view of reality in Buddhism implies that, ultimately, nature cannot be said to have either positive or negative value. We were left, then, with the second part of the 'insubstantiality' objection; that there are no fixed or permanent entities which can be ascribed with value. That is to say, to talk of a being 'having value,' in Buddhism would have to depend upon the conventional statements and attitudes of people and any other valuers there might be. For this reason, in the final part of this chapter, instead of asking whether there are any objects that 'have' value in Buddhism, I will focus upon the way subjects perceive or ascribe value upon other beings, through cultivating an attitude of loving-kindness and compassion towards them.

3 Solicitude as an Alternative Way to Evaluate Nature

Thus far, I have examined the concept of value from the perspective of Buddhist doctrine, and the outcome has been somewhat negative. One reason for this is that the concept itself has remained unanalysed, and I have been working with a rather rough, common-sense understanding of value. This section will examine the issue from the angle of environmental philosophy, and will start by inquiring into what exactly is meant when philosophers ascribe intrinsic value to nature. It will emerge that there are several connotations of the term that are irrelevant or unnecessary for environmentalism, as well as others that are incongruent with Buddhist doctrine. My first objective, therefore, is to draw up a working definition of 'intrinsic value' that contains all the meanings required for an environmental ethic. I will then show that a corresponding concept can be discerned in Buddhist doctrine.

As we shall see, intrinsic value is defined in several ways. We already encountered, in the previous section, one interpretation that identified it with 'moral value,' a connotation that can be accepted without further discussion. Other senses in which the term is used include that of 'non-instrumental' or 'final value,' that is, the value that a thing or being has for its own sake. This is the only sense of 'intrinsic value' that may be required for an environmental ethic. However, this interpretation is often conflated with two other senses; there is, first, Moore's definition of 'intrinsic value' as the value that a thing has independently of its relations with any other thing, and second, 'objective value,' which somehow exists 'in' the object, independently of humans. Several authors have shown that the properties or entities valued by environmentalists cannot be thought of in either of these ways, and others have demonstrated that Buddhism cannot accommodate such concepts of value either.

The confusion often stems from the requirement that value be independent from humans. If this means being independent from human *interests*, then the definition of intrinsic value as 'non-instrumental' has already taken care of that. We shall see, in fact, that many philosophers who argue for objective value see it as emerging from what they term 'the good' of other beings, which is independent of human preferences. However,

value, I shall argue, can never be entirely independent of a subject that perceives. The terms 'good' and 'value' seem to be inseparable from some being's desires and preferences, even if they are independent of human interests. Therefore, the most appropriate way of construing intrinsic value, I shall claim, is by tying it to the welfare of living beings, and by interpreting it, not as a property that exists objectively and independently in something that *has* value, but rather, as an attitude or approach towards something that can *be* valued by a living being.

This opens the way for an understanding of intrinsic value that is closely related to two of the main virtues advocated by the Buddha, namely, loving-kindness and compassion. Buddhism construes these as the desire to foster well-being in those that are loved, and the aspiration to eliminate any suffering one might come across. Like other ethical systems that focus on the increase of well-being, such as utilitarianism and its subclass, animal welfarism, Buddhism aims to extend this love and compassion universally, to all beings that are proper recipients of such moral concern. Yet, this class is considerably wider in Buddhism than it has traditionally been for utilitarians, who generally seem to focus on 'charismatic megafauna,' and, typically "rank mammals above birds; birds above reptiles, amphibians, and fishes; and vertebrates above invertebrates" (Dunayer 2005, 14).

Still, an environmental ethic that is based on the Buddhist virtues of love and compassion is subject to several critiques. The most important of these is that when Buddhists wish for somebody or something's well-being they have something in mind that is very different from what environmentalists work to achieve. This can be understood better if we consider that environmentalists and conservationists generally want to preserve things as they are. Or, if they are working for change, then this usually involves restoration to a former state. The well-being that Buddhists work for, on the other hand, seems to suggest something completely different from the usual state of affairs. Whatever *nirvana* is, as indicated in the previous section, it cannot be ordinary health or flourishing in a biological sense. Sometimes, there even seems to be an implication, in the Pāli texts, that ordinary well-being is inimical to liberation. It is clear that, to work out definitively whether Buddhism is compatible with environmental concerns, we will have to understand better what liberation involves and how it is

attained. That project is postponed until we have opportunity to delve more deeply into Buddhist philosophy. In what follows, I turn to an examination of the concept of 'intrinsic value.'

The Meanings of 'Intrinsic Value'

The term "intrinsic value" has been used in several ways; often, unfortunately, diverse meanings are conflated and authors do not always define their use carefully. In this section, I will be examining some of the different interpretations of 'intrinsic value,' in order to delineate precisely which senses are required for a workable concept that can be applied to environmental values. In the next part of this section, I shall show how the concept of intrinsic value with which we are left is available in the Buddhist worldview.

1) Final or non-instrumental value

In environmental philosophy, 'intrinsic value' generally refers to the value that an object has that is independent of its value as a utility, and which is unrelated to the interests or preferences of human beings. Another term for value construed in this way is 'final value,' or, the value a thing or being has for its own sake. Intrinsic value in the sense of 'final value,' is revealed when the reasons we give for considering a thing, *x*, as valuable do not refer to anything other than *x* itself. This account, therefore, is contrasted with instrumental value, which is the value *x* has, not for its own sake, but for the sake of some other object, perhaps something valued intrinsically. Instrumental values are related to each other and to intrinsic ones; for instance, we might value our job, not for its own sake, but for the money that it brings, and again, we probably value that money for the sake of the things or services we purchase with it, for the sake of financial security, and so forth. In the first part of this chapter, I argued that life in Buddhism is valued instrumentally, for the sake of the enjoyment it brings, or as an opportunity to attain enlightenment. There has to be a place, though, where the question of why we value *x* must stop, and this usually occurs with happiness, or well-being, or some other quality or possession for which the question "why do you want that?" does not seem to have an

answer. It appears impossible to provide any further reason why we want to be happy, and therefore happiness is something that most people normally value intrinsically. Buddhism concurs, and expands on this; it is not just humans, claim the Pāli texts, but all living beings that desire their own happiness and well-being.

We have uncovered two implications of intrinsic value so far which need to be distinguished; there is, first, the value that something has for its own sake, and, second, the value it has independently of human interests. Clearly, these two are intimately related. If I value a turtle or a beach for their own sake, then I do not value them for the sake of the money I could make from selling the turtle's shell on the black market, nor do I value the beach merely for the well-being that I enjoy on it. Again, to value a human being as an end, means to value her independently of any use she could be to me. In this sense, then, intrinsic value is independent of human interests.

One might add that it is also independent of the interests of all other beings. We can understand how natural things, like turtles, beaches, and humans have instrumental value—which is yet independent of human interests—by looking at the role they play in the food or energy web or the ecological function they fulfil. Turtles, for instance, eat jellyfish, and therefore, there is a sense in which it might be said that turtles 'value' jellyfish. On the other hand, turtles might be thought of as valuable to the marine ecosystem, for their function in keeping jellyfish numbers down, while beaches, again, are valuable as habitat where turtles lay their eggs. Rolston draws attention to the "(nonfelt) interest in their well-being" of all living creatures, and as examples of this, he describes how trees send their roots deeper and deeper into the soil, ants scurry off with crumbs, while simple unicellular organisms, without a brain or spinal cord, are able to react to stimuli. All this shows that even where there is no mind, in the usual sense of the word, no consciousness, or subjectivity and no awareness of preferences or interests, in Rolston's words, "life still has its commitments, something it values...genetically based preferences" (Rolston 1988, 109).

It is important to note, as Jane Howarth has, that the capacity to fulfil an ecological function is in fact an instrumental value, and not an intrinsic one, and that anything else that could serve that purpose would consequently have the same value. For a thing *x* to have intrinsic value in the sense of non-instrumental value, then, *x* cannot be

replaceable (Howarth 2000, 162). This seems to be a minimum requirement if *x* is to be valued for its own sake. Since turtles could feed on something other than jellyfish, the latter cannot be thought of as intrinsically valuable with respect to this role. Similarly, we saw in the first section, that neither the heavenly realms nor human life are valued for their own sake, and if there were another form of life that was more pleasant, or conducive to attaining enlightenment, this would automatically be considered better, and Buddhists would aspire to be reborn there instead. This shows that there does not actually have to be an existent substitute for something to have instrumental value only. For example, although in reality turtles can only lay their eggs on beaches, in principle, artificial 'beach-substitutes' can be conceived at least, and perhaps they could even built; therefore, the value we confer on beaches for the sake of turtle conservation, is not intrinsic.

To say that something has intrinsic or non-instrumental value seems to suggests, then, that nothing else could have *exactly* the same value; this seems to be a second implication of being valued 'for itself,' in addition to the suggestion that there is no further reason for valuing it. Intrinsic value does not derive from any utility to humans or other living beings and is independent, in this sense, of the interests of humans and all other beings. There is another sense, however, in which intrinsic value is not entirely independent of the interests and preferences of living beings, as we shall see below.

2) Non-relational value

Often intrinsic value is taken to be 'non-relational' in the sense that G.E. Moore used the term, as the value a thing *x* has "independently of its relations with anything else" (cited in James 2004, 86). Of course, this is a very wide interpretation, and the definitions given above, of 'non-instrumental' value and of 'final value' may also be non-relational in this sense. If I value something for its own sake, independently of its relations to my interests or to the interests of any other being, then I might also value it independently of any relations it may have at all. Although, as we shall see, this interpretation of intrinsic value is not compatible with Buddhist philosophy, nor does it correspond to the way environmental values are usually understood, it is worth probing further into what it

entails. From further examination, it will emerge that the sorts of values environmental philosophers have in mind do depend upon some relations, in particular, their relations with valuers, and therefore, they are, in a way, dependent upon the very general interests and preferences of beings.

That this 'non-relational' interpretation of intrinsic value is not the sense that environmentalists have in mind has been demonstrated conclusively by Karen Green, who shows that environmental values have everything to do with the relations between living beings and other natural entities. As an example, she mentions the cane toad, which, as a living being, one might claim, is intrinsically valuable. At least, this seems to be the case when the toad exists in its natural habitat, where it forms part of a healthy, balanced ecosystem. In Australia, however, where it is causing havoc to the native species and habitat, it is held to have negative value (in Green's words "positive disvalue"). This shows, then, that the toad's value is actually instrumental, since the toad's presence is not valued in itself. What *is* valued intrinsically by environmentalists, according to Green's account, are properties such as rarity, uniqueness, diversity, and stability. These, as we can see from the case of the toad, are all dependent upon a natural being's circumstances; its relations with other beings, with inorganic matter, the surrounding environment, and so forth. If 'intrinsic value' is taken to be non-relational, then rarity, diversity, and all these other environmental values cannot be intrinsic values. Green takes this as a decisive refutation of the claim that environmental intrinsic values are non-relational ones (Green 1996, 35).

Furthermore, Buddhism cannot accommodate a concept of non-relational value in this sense. If intrinsic value is something a thing *x* has, independently of *x*'s relations with other things, then it is probably an intrinsic property of *x*, which belongs objectively to *x*, independently of any being who perceives or experiences *x*. We have already seen, in the previous section, how the doctrine of *anātman* suggests that beings and things are insubstantial, and precludes any determinate description of *x* that would account for its having this kind of intrinsic property. We also saw how the negative evaluation of the world that seems to be implied by the doctrine of *duḥkha* is intimately bound up with the subject's experience of that world, or even, his *take* on that experience. Simon James relates these ideas to the doctrines of emptiness (*śūnyatā*) and dependent co-origination

(*pratītyasamutpāda*), which we shall have opportunity to examine in detail in chapter 3. One of the implications of these doctrines, he claims, is that all properties are relational, and therefore, upon the Buddhist worldview there are no 'things' with intrinsic properties at all. Consequently, if intrinsic value is construed this way, it is incompatible with Buddhist doctrine. Fortunately, James goes on, also citing Green, environmentalists do not think of value in this way (James 2004, 84–87).

3) Objective value

James agrees that the most commonly-employed sense of intrinsic value in environmental philosophy is that of non-instrumental or final value, the value that *x* has for its own sake, or as an end in itself (2004, 87). The properties mentioned above, like diversity or stability, may be valued in this way, although it is often the case that they are valued for some further, overarching value such as life in general, or (sadly) monetary value. Those natural objects and living beings whose existence contributes to diversity or stability, if valued solely for these reasons, will be said to have instrumental value, whereas, if we value them for their own sake, then they have intrinsic value. The same applies to more ordinary, everyday values too; money, for instance, is usually valued instrumentally, as noted above, and yet, to a miser, it probably has intrinsic value, and is desired just for its own sake. The very same thing, therefore, could be valued intrinsically, instrumentally, or in both ways, and this seems to indicate that whether a thing, *x*, 'has' instrumental or intrinsic value rests, ultimately, with the person or being who values *x*, and that value itself is not a property that belongs, somehow, to *x*.

This point often appears to be overlooked. It is often thought that if a being 'has' intrinsic value, it must have it objectively, that is, independently of whether there is anybody or anything who values it or not. Several environmental philosophers have advanced this idea, and this probably stems from the concern to distinguish the intrinsic value of nature from the interests of human beings, in other words, to emphasize the value nature has irrespective of what human beings happen to prefer. Arne Naess, for example, states, as the first principle of his 'deep ecology movement': "The well-being and flourishing of human and non-human life on Earth have value in themselves

(synonyms: intrinsic value, inherent worth).” He then adds that the presence of this intrinsic value in a natural object is “independent of any awareness, interest, or appreciation of it by any conscious being” (Naess 1998, 196–7). Similarly, John O’Neill believes that intrinsic value is the “value that an object possesses independently of the valuations of valuers” (O’ Neill 1992, 120). Value then, according to Naess, O’Neill and other prominent environmental philosophers, is supposed to exist in the world whether or not there is anyone who perceives it, and thought to be a property or state that exists objectively in beings and natural objects.

Typical arguments for the objectivity of intrinsic value draw upon the notion of the ‘good of’ natural beings, that is, they rest on the claim that things in nature have their own ends and purposes, such as attaining a state of well-being, and that they are able to flourish, irrespective of whether this coincides with human interests and preferences, and regardless even of whether there are any human beings present who can perceive it. We have already seen how Naess identifies value with the well-being and flourishing of life. He and other holistic philosophers, including Rolston, and O’Neill, go on to claim that besides individual organisms, collective entities like species and ecosystems can also be said to have intrinsic value in this sense, in that they too can be said to do well or to do badly; they can be in states that are better or worse *for them*, and therefore they too can be said to have a good or goods of their own. O’Neill, for instance, writes:

> In order to characterize the conditions which are constituent of the flourishing of a living thing we need make no references to the experiences of human observers. The goods of an entity are given rather by the characteristic features of the kind or species of being it is (O’Neill 1992, 129).

In chapter 4, I will examine the concepts of natural kinds and biological species, as well as other collective wholes like ecosystems and communities, and it will be seen that they too can be subjected to the kind of analysis that we encountered in the doctrine of *anātman*, and seen to be insubstantial collections of impermanent phenomena, rather than determinate beings with “characteristic features.” This would suggest, as we have seen, that the construal of intrinsic value as some sort of property that belongs to that entity objectively cannot be reconciled with Buddhist doctrine. There are other reasons, however, for rejecting this definition, as I will go on to show.

The predicates 'valuable' or 'good,' seem inevitably bound up with our desires, preferences, and interests. In his *Dictionary of Philosophy*, Simon Blackburn, for instance, says that the verdict about *x* that it is 'good' has "some relationship to our ends or desires." Quoting Hobbes, he defines the good as "whatsoever is the object of any man's desire or appetite" (Blackburn 1996, 160). Although environmental philosophers, like O'Neill in the definition cited above, are careful to define a being's good or value in a way that does not refer to human desires or interests, and while it is true that the welfare of a living being is independent of these, still, this does not explain how we are to move from what appears to be a value-neutral proposition, namely, that some property is a 'characteristic' feature of a particular being, to the value judgment that it is 'good.' There are no grounds on which we can establish that *x* is "good for a being" without referring to a general preference for life, well-being, or flourishing, whether these are deemed to be human preferences or otherwise. In fact, any property or state that we normally label as "good," "well-being," or "flourishing," could be re-described, in theory at least, in value-neutral terms, as in O'Neill's definition of them as "characteristic," which does not always have implications of goodness or desirability.

This is, of course, merely a restatement of the "naturalistic fallacy" argument made by Moore, over a century ago, in his *Principia Ethica*, where he argues that goodness is a simple and indefinable quality. When someone is asked, "is this good?" according to Moore, "his state of mind is different from what it would be, were he asked, "Is this pleasant, or desired, or approved?" (*P.E.* § 13 ¶ 3) and the same applies to the qualities that environmentalists promote as the good, such as, "is this property characteristic of this kind of being?" or, "is this being flourishing, or healthy?" We can always ask, of any natural quality or thing identified as the source of value, whether it is, in fact, good, and why such things, or beings with such qualities should be valued intrinsically (Callicott 1985, 259). It seems that, if we insist on viewing value or goodness as an objective property of things, then we have to admit, with Moore, that this property is indefinable (*P.E.* §§ 10–13) and that we can say no more about it. Alternatively, we can retain the objectivity of goodness by regarding it as a non-natural or supernatural property or thing, and yet, it would seem that this solution, too, inhibits further analysis. Callicott describes this as a "desperately metaphysical" move, as a result

of which, he says, "the hope of moral persuasion based on rational discussion is aborted" (Callicott 1985, 260).

On the other hand, if we rely upon a general partiality of living beings towards life and well-being, we are able to give an account of value and of the good. Perhaps we could invoke something like that which Wilson described in his "biophilia hypothesis"; namely, that over the course of evolution, humans (and, possibly, other creatures) have developed an innate tendency to prefer life and lifelike processes, which compels us to cherish and protect living beings and to promote their welfare (Wilson 2003, 1; Kellert and Wilson 1993, 20–21). This tendency may be so deeply ingrained and instinctive that it is rarely observed or made conscious and explicit; instead, perhaps it has become a quasi-universal assumption that simply goes unnoticed. This may explain, then, why some philosophers hastily jump to conclusions about goodness, from premises about health, well-being, and characteristic features.

Callicott supports his argument against objective goodness by claiming that the word 'value' is used, primarily, as a verb and "only derivatively" as a noun. Valuing is an intentional act, he says, which is directed towards an object. It is something that subjects do, just like thinking, perceiving, and desiring, and this activity or subjective process is what renders a thing valuable. In his words:

> The intentions, the targets, of a subject's valuing are valuable, just as the intentions of a subject's desiring are desirable. If there were no desiring subjects, nothing would be desirable. If there were no valuing subjects, nothing would be valuable (Callicott 1995, par. 26–27).

"To prefer *x*" or "to believe *x* to be good," and the like might be interpreted in the same way as a description of a kind of behaviour towards that being or state *x*. Again, humans are not the only subjects capable of these kinds of intentional acts. If a simple organism like an amoeba, say, is able to distinguish between edible and inedible matter in order to sustain its life, we might say that the amoeba 'values' its life and 'prefers' to eat food.

Similarly, collective natural entities, such as ecosystems and possibly even species, might be said to 'value' their own well-being and states or properties that are constitutive of it; perhaps, dynamic stability, or internal diversity are among the latter. Complex wholes of these types also 'act intentionally,' insofar as they are able to respond

to internal and external stimuli in such a way that they return to a particular state, despite the influence of those stimuli. This emerges from the fact that, if these entities were simply acted upon by the stimuli, and accepted their influence passively, they would reach another, completely different state. Clearly, a related concept is that of "autopoiesis," coined by Maturana and Varela, which means "self-producing," and which distinguishes living beings from inert objects like stones (Sahtouris 1996, 329). The living system, unlike a stone, 'struggles' to continually re-make itself, to preserve its own being against the force of entropy, and for this reason, then, we can say that these entities 'act intentionally;' they 'prefer' to be in a particular state (such as low entropy, dynamic stability, or having internal diversity) and they 'value' those 'goods,' which will enable them to reach that state. Thus under this extended account of value, valuers need not be human, and the preferences on which value relies need not be conscious ones.

To sum up, claiming that something 'has' value is best explained not as a property of that thing, and this is because for whatever property we point to as being 'good,' or valuable, we can always question whether this is really the case. It seems that if we insist on seeing value or goodness as an objective property, then we must accept that it is ineffable. Otherwise, we could drop the requirement that value be non-relational, which as we have seen, is unnecessary for environmental values, and account for value instead, through the relationships between valuers and the things they value. Valuing, on this account, is a subjective process or an intentional act, which involves an attitude that is adopted towards some object. One values a thing intrinsically for the sake of that object itself, and not for the sake of any other purpose that could be fulfilled by something else. In its most basic form, value involves an innate tendency to cherish life, and a disposition to promote well-being. Instead of talking about an object's having value, it is, perhaps, more profitable to examine the way in which it *is* valued. In the next section, I shall show that this account of value appears perfectly consonant with Buddhist doctrines and bypasses the issues raised in earlier parts of this chapter.[37]

[37] Strictly speaking, the doctrine of *anātman*, as well as precluding talk of objective properties of things, does not regard valuers as substantial, or as having a determinate nature either, since both objects and subjects are said to be not-self. Still, as we saw in the previous section, the Buddha was highly concerned with experience and psychological processes. Although objects in nature as well as subjects who value are both not-self, it can be said that 'there is valuing,' in the same way as it was said that 'there is *duḥkha*';

Two Buddhist Virtues: Love and Compassion

The account of value I have given here has much in common with the Buddhist practice of generating loving-kindness (*maitrī*; Pāli *mettā*) and compassion (*karuṇā*). Buddhaghosa, the fifth-century commentator on the Pāli canon, characterizes loving-kindness as "devotion to the aspect of [others'] welfare," and claims, "It has the function of offering welfare" (*Vism.* ix.93; cited in Aronson 1980, 63). Similarly, compassion is concerned with removing the suffering of others, and "has the function of not enduring others' suffering" (*Vism.* ix.94; Aronson 1980, 63). To love or feel compassion for a being, then, seems to involve an intentional act or an attitude towards that being, as implied by the phrases "devotion to" its welfare, and "not enduring" its suffering. Both have to do, that is, with experience and are, in principal at least, independent of any intrinsic properties that being might have. Following Cooper and James (2005, 97), I shall use 'solicitude' as an "umbrella term" to encompass these two virtues.[38]

Ideally, according to Buddhist doctrine, solicitude is extended universally. In the first section of this chapter, the *Karaṇīya Mettā Sutta* was cited in support of the view that all living beings are worthy recipients of Buddhist love, no matter what they might be like. The traditional rationale for this can be found in the following passage:

> Searching all directions with one's awareness, one finds no one dearer than oneself. In the same way, others are fiercely dear to themselves. So, one should not hurt others if one loves oneself (*Ud*. 47; Thanissaro).

Albert Schweitzer, one of the first environmental philosophers, put the point in a remarkably similar way:

> Just as in my own will-to-live there is yearning for more life...and terror in the face of annihilation and...pain, so the same obtains in all the will-to-live around me...[Therefore,] It is *good* to maintain and cherish life; it is *evil* to destroy and to check life (cited in Callicott 1995, par. 48).

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namely, as an event that occurs in the interface between an (impermanent and insubstantial) subject and object.

[38] Cooper and James include a third virtue, empathic joy (*mudita*), with solicitude; however, I have chosen to limit the discussion to love and compassion because these involve the promotion of welfare, as will be seen.

Again, the focus is entirely on the experience of being "dear to oneself" or "yearning for more life," and the assumption that others must feel the same way. The concluding value-judgement and its ethical implications are held to emerge from these intuited 'facts' alone.

In the virtue of solicitude, therefore, it appears that there is a way to reconcile a belief in the 'value of nature' with Buddhist doctrines. Throughout this chapter, we met several reasons to dismiss this project; the concern with suffering seemed to suggest that life and the natural world are wholly unsatisfactory and of negative value, and that liberation from this world is the only thing worth pursuing. Furthermore, the doctrine of not-self suggested that value cannot exist as an objective property, because every 'thing' is too insubstantial to be described determinately as having objective properties. The virtue of solicitude, however, suggests that natural beings may be evaluated positively, under the Buddhist account, as long as the focus is on the way they *are* valued, that is, on the internal process or experience of loving beings and desiring their welfare. To value a being, in Buddhism, can be described in terms of love and compassion; these, too, are intentional acts which involve an attitude adopted towards some being, for the sake of that being itself, and not for some other purpose that could be fulfilled by something else. Moreover, they too involve the disposition to relate with life and lifelike processes and to promote and cherish health, flourishing, and well-being.

There are, however, a number of general difficulties with this concept, as well as with the attempt to base an environmental philosophy upon such an understanding of value. In the rest of this chapter, I shall give a general account of these and indicate, broadly, the direction in which their solution might lie. They will be taken up again in chapter 3, after an account of Mahāyāna philosophy has been given. This is because the Mahāyāna understanding of solicitude, in particular, when understood in the light of the emptiness of both the valuer and the valued, has important implications for environmental ethics, and can provide a partial solution to some of the difficulties brought up here.

To begin with some general critiques, the argument cited above, for extending love and compassion universally, is hardly watertight. It can be restated as: (1) I value my

own well-being; (2) others probably value their well-being too; (3) therefore, I ought to value the well-being of others. Put this way, it become evident that the inference from (1) to (2) is subject to all the difficulties raised by the problem of other minds, and the conclusion (3) raises the problem of inferring an 'ought' from an 'is.' It is unlikely, though, that either the Pāli excerpt or Schweitzer's argument was intended to provide an irrefutable argument and perhaps it is more profitable to think of this teaching as a recommendation that is based on a familiar experience, and not upon unassailable reasoning. In chapter 4, we shall encounter the same idea applied to the Mahāyāna understanding of compassion.

Still, there remain the usual objections against the relativist implications of deriving value from the subjective process of valuing. One reason many philosophers appear so keen to describe intrinsic value as an objective property of things is that they want to avoid the conclusion that no definitive statements can be made about the good. O'Neill, for instance, believes that the intrinsic value of the natural world can be discovered through science, through which one can also reach "grounds for accepting the authoritative status of *some* evaluative claims", in particular, those made by the practicing ecologist (1993, 162).

In reply, one might point out that, as we have seen, the alternative to a subjectivist understanding of value is a (putative) property about which we can never say anything, except that it is objectively real. This means that, in practice, whether we accept a subjectivist or an objectivist account, we are left with the same result; there can be no incontrovertible definition of good, and no way of making any authoritative statements about value. When this is taken into consideration, accepting the relativistic implications of our subjectivist account of value, while tying it to a universal disposition to favour life and health, appears more satisfying than insisting on regarding value as something objectively real, despite admitting that it cannot be known or discussed with certainty.

A third objection that might be raised concerns the fact that it is not living beings as such, that are valued on this account, but only a particular state of well-being, or flourishing. Somebody who held a Kantian view of intrinsic value, for instance, would tend to think value belonged to a (human) being *per se*, and not to her health or happiness. *Prima facie*, one might reply that a person or organism's well-being almost

certainly includes the existence of that person or being. David Cooper has mentioned one type of situation where it does not, and this involves the case where a being is deemed better off dead. Arguments for euthanasia, in fact, generally rely on the belief that it is in the interest of a person's well-being that he should no longer exist (Cooper, personal communication). Yet, when we make these types of claims, we do not mean, literally, that that person *is* better off once he is dead, for that would be an absurdity. If a being does not exist, then it is neither better nor worse off than it was before. This shows that in order for me to want you to *be* well, I cannot want your nonexistence; well-being seems to logically entail existence. That is, there might not be much difference, after all, between valuing the happiness of a creature and valuing that creature.

Still, our objector might add, if only certain states are valuable, and not beings-in-themselves, we might be led to the unpalatable consequence that what is done to individuals is unimportant, as long as the total amount of happiness in the world increases. In other words, it might be thought that sacrificing one individual for the greater good of the many is perfectly acceptable under this account. This argument has often been brought against utilitarianism and, insofar as Buddhism too is concerned with increasing happiness, it would seem to apply here too. Buddhism, however, contains the resources to circumvent this claim. There are numerous places in the texts where love and compassion and characterized as the wish that *all* beings be happy and free of suffering, for instance:

> May all creatures,
> all breathing things,
> all beings
> — *each & every one* —
> meet with good fortune.
> May *none of them* come to any evil (*A* ii 72; Thanissaro; italics mine).

Clearly then, harming even a single being could never be acceptable in Buddhism, even if, as a result, the general happiness in the world increased.

Yet, from the perspective of environmental philosophy, there is still a problem with valuing, not a being itself, but its happiness. As we shall see below, Buddhists and environmentalists have different ideas about what happiness entails, and therefore, the question arises whether the two are compatible. In the first section of this chapter, it was

argued that because rebirth as a god or as a human was valued, primarily, for the sake of attaining *nirvana*, or for the sake of the pleasure one enjoyed, then gods and human beings are not valued intrinsically, but only instrumentally. Similarly, this account suggests that if it is well-being that is desired, then ultimately, living beings, and especially those currently in the 'lower realms,' are not valued intrinsically after all.

A green Buddhist could get around this problem by 'bracketing' the theory of rebirth (which many contemporary Buddhists seem happy to do anyway) or else by defining value so that it involves a desire for a creature's well-being *in this very life*, and not a wish for it to attain an enlightened state in the future. In any case, it appears that to extend love and compassion for a being, in this limited sense, is the closest idea that we can find in the Buddhist texts to the notion of intrinsic value as used by environmental philosophers. I will now turn to some objections that can be raised against it.

Difficulties with Basing Environmental Ethics upon Solicitude

1) The charge of quietism

One argument that has often been brought against the feasibility of a green Buddhism based upon solicitude, is that while the texts are replete with passages on how to develop loving-kindness and compassion, they tend to suggest, generally, that what is important is merely the *wish* that all beings have happiness, and they seem to stop short of recommending any form of action in this respect. We are encouraged, in the *Karaṇīya Mettā Sutta*, for instance, to *think* "may all beings be happy," to "cultivate a limitless heart," and develop "good will for the entire cosmos" (*Sn* 143–152; Thanissaro). While all this is perfectly commendable, a sceptic might wonder whether Buddhist solicitude is actually of any benefit to its recipients. This is a charge that has often been brought against Buddhism, and which has several strands. In its most general form, it amounts to the claim that the Buddhist has "withdrawn from the world into a life of passive navel-gazing" (James 2004, 121). Simon James provides a comprehensive discussion of this

'charge of quietism,' in particular, as it applies to Zen Buddhism, and I shall have little to add to his and David Cooper's reply.[39]

James points out that the Chinese and Japanese traditions of Buddhism took up a more down-to-earth conception of spirituality, which did not shy away from manual work and productive labour. Consequently, he says, Zen Buddhism can adopt a spiritual approach towards any form of activity, including practical manifestations of love and compassion (James 2004, 120–123). Cooper and James refer to the *Sigalovada Sūtra* for examples of practical activity that the Buddha recommends. Aside from the usual recommendation to have benevolent thoughts, this text, they claim, contains several "positive calls" upon lay practitioners to work altruistically for the improvement of one another's lives (Cooper and James 2005, 54, 104–105). To this one might add that the Pāli texts describe other virtues (*pāramitā*), besides love and compassion, some of which, like generosity (*dāna*), might be construed as the active expression of solicitude. Finally, there are a number of stories that reveal the practical benefits of Buddhist virtue. In particular, we read about a king who cultivated loving-kindness in the forest for twelve years and later returned to his kingdom, to continue his practice and pass it on to his subjects.

> From that point on, love and kindness spread through every home and village, giving rise to a sense of friendship, fellowship, and cooperation that spread throughout the kingdom. There were no more wars with neighbouring kingdoms, and the people lived in happiness and peace (Dhammadharo 1958).

These examples show that, to some extent at least, cultivating loving-kindness and compassion does have an effect upon their targets.

Besides, as Harvey B. Aronson has argued, the early Buddhists, unlike we moderns, may not have automatically associated the cultivation of goodwill with positive action to promote welfare, and the Buddha might not have felt required to relate his teachings on love and compassion to those on altruistic activity. This is why, Aronson suggests, the two were generally discussed in separate contexts (Aronson 1980, 55, 64) and it might also explain why Buddhism has been charged with quietism, and why

[39] See James 2004, 106–126, Cooper and James 2005, 11, 53–56, 104–105.

contemporary readers do not always immediately see the practical benefits of developing love and compassion. Yet, when love and compassion are considered in the wider context of the Buddhist teachings as a whole, these doubts seem to disappear.

2) The charge of egoism

There is, however, a related though more serious charge than the previous, and this is that, notwithstanding the positive effects on recipients that developing solicitude may have, it remains, primarily, a somewhat selfish undertaking, in that it is motivated by a desire to attain liberation, and any benefits to others are merely incidental. Harris points out that, in the *Anguttara Nikāya* and Buddhaghosa's commentary on it, it is explicitly stated that all the benefits of generating loving-kindness accrue to the practitioner himself (Harris 1991, 106). We read that one who develops loving-kindness:

> sleeps in comfort, awakes in comfort, sees no evil dreams, is dear to human beings, is dear to non-human beings, gods protect him, fire, poison, and sword cannot touch him, his mind can concentrate quickly, his countenance is serene, he dies without being confused in mind and finally if he fails to attain arahantship here and now, he will be reborn in the brahma-world (*A* v 342; Thanissaro).

Schmithausen observes that the Buddhist virtue of loving-kindness, like the early Brahmanic concept of *ahiṃsā*, is motivated by the desire for self-protection, and serves the purpose of calming aggressive behaviour in others. Rather than a simple feeling of good will, he says, loving-kindness is intended as a way of forging alliances. Still, he says, arguing against Harris's claim, this does not imply that the genuinely ethical aspects of loving-kindness are annulled. Although it has several functions—including self-protection, liberation or reward in heaven, and purification of the mind—all of these are, he says, "simply another thread of the texture, another strategy for stimulating people to practise this kind of exercise." That the benefits for the meditator might form part of her motivation "does not mean that [such practices] have no impact upon the meditator's practical behaviour" (Schmithausen 1997, 15–17).

Cooper and James remain concerned, however, that it might be thought that "deep-down," Buddhism is egoistic, and this is because "the importance for anyone of

cultivating moral principles, virtues and attitudes—genuinely moral though they may be—is contingent upon, and hence subordinated to, an essentially self-directed enterprise of enlightenment or liberation" (Cooper and James 2005, 53). In response, they argue against the tendency to dichotomize between self- and other-regarding acts, and between inner cultivation and external behaviour. The doctrine of the Five Aggregates suggests that body and mind are "intimately connected," and that it is a mistake, therefore, to bifurcate between physical acts and inner states, or to suppose either can be developed to the exclusion of the other. It is also a mistake, they go on, to separate concern for one's own well-being from that of others; rather, these are "not even notionally isolable," and promoting the good of others forms part of the pursuit of one's own happiness (Cooper and James 2005, 54–55). Well-being in the Buddhist sense, it emerges, is not something that one can achieve alone; the *summum bonum* is defined as the *bonum commune*, "the good that can be possessed only by being shared" (Miller and Yoon 2000, 160). This, therefore, seems to refute the claim that cultivating loving-kindness is somehow egoistic.

3) Buddhist versus environmentalist notions of 'well-being'

From the preceding discussion, it emerges that Buddhists and environmentalists have completely different conceptions of well-being. As we have seen, for environmentalists, it is a natural and characteristic state of an organism or being, [40] comparable to what is ordinarily meant by happiness, health, and flourishing. In this everyday sense, one creature's welfare is not only conceptually isolable from that of another, but indeed, often at odds with that of some others. In the second section of this chapter, we encountered the suffering that results from the fact that a being must harm others to survive; it must kill to eat, compete for habitat, and so forth. Among humans, even a strict vegan depends on farming methods that necessarily harm living beings, and the most vigilant of Jainas—who wear masks to avoid breathing in microscopic creatures, and sweep the ground before them as they walk along, in order to avoid stepping on insects—must deprive another creature of food, water, or land just to stay alive. Yet, it was suggested above that

[40] Of course, all talk of organisms and creatures, here and throughout the dissertation, only refers to such beings conventionally.

the Buddhist conception of one's own good is not inimical to that of others, but rather, that it even entails the good of all others. This demonstrates, therefore, that when Buddhists talk about promoting well-being they must have in mind something quite different from, say, food, health, shelter, and the like. The question, then, is whether the Buddhist concept of 'well-being' can also include that which environmentalists seek to promote, or whether they are two completely different things.

The *sūtras* reveal, in fact, that what the Buddha means by 'real happiness' is greatly removed from the concerns of environmentalists. For example, one element that is certainly constitutive of well-being in this sense, and which environmentalists often equate with the good of a being, is physical health. Yet, the *Magandiya Sutta* (*M* i 501–513) explains that ordinary health, in the sense of "freedom from disease," is a very poor substitute for "true freedom," and that all physical sensations of pleasure are comparable to the kind of satisfaction that one obtains through scratching an itch (509–510; 507). The body, the Buddha says, is "a disease, a cancer, an arrow, painful, an affliction" and therefore the "foremost good fortune" is freedom from clinging to it (510; Thanissaro).

The "right outlook" concerning these matters is to view ordinary happiness as painful, painful feelings as a thorn, and neutral feelings as impermanent (*S* iv 207; Nynanponika). Indeed, in some places the Buddha appears to hold precisely the reverse view from the rest of the world about what constitutes happiness. He regards as "stress" that which everybody else—the *devas*, contemplatives and priests, royalty, and common folk—considers to be "bliss," whereas he considers as bliss that which to everybody else is stress (*Sn* 758; Thanissaro). Again, in the *Niramisa Sutta*, a distinction is made between worldly happiness, unworldly happiness, and "the still greater unworldly happiness;" the unworldly kind involves different degrees of meditative absorption. It is made clear that the 'highest' of these and the proper goal for a Buddhist practitioner is "unworldly equanimity," described in terms of freedom from all greed, hatred, and delusion (*S* iv 235; Nyanaponika). Therefore, the kind of well-being that environmentalists want to promote seems to be ranked very low in Buddhism.

In the second section of this chapter, it was argued that liberation has both a "this-worldly" aspect, and an "other-worldly" one, and that each is emphasized, respectively, by the Mahāyāna and the Theravāda vehicles. Therefore, the strong claim that the

Buddhist goal is entirely incompatible with 'well-being' in an everyday sense, only applies to the Theravāda school, if at all; the Mahāyāna does not support a concept of liberation that is entirely opposed to ordinary existence. There does remain the problem, however, that insofar as the Buddhist goal could be compatible with a reduction in physical comfort, with loss of health, or property, and even with the loss of life, the type of well-being the Buddha promoted is very different from that desired by environmentalists.

4) The predation critique

Perhaps green Buddhism would have better success if the focus were placed on compassion, instead of loving-kindness, and on the desire to alleviate suffering. Although, as we saw in the previous section, *duḥkha* too is not simply equated with ordinary suffering, it seems undeniable that it involves an element of this too, as it includes the suffering of sickness, old-age, and death. Therefore, even if Buddhists and environmentalists do not mean the same thing by "well-being," perhaps common ground can be found in their aim to reduce suffering.

Green Buddhism is not the only system of ethics that addresses environmental problems through this kind of principle, and it would appear to be subject to the same criticisms that animal welfarism is. Briefly, 'animal welfarism' can be characterized as the claim that "morality places some limits on how animals may be treated. [For instance,] [w]e are not to kick dogs, set fire to cats' tails, torment hamsters or parakeets" (Regan 1993, 41). During the 1980's and 90's, a controversy arose between certain 'holistic' environmental philosophers, including Callicott, Mark Sagoff, and Ned Hettinger, and animal welfarists like Singer and Tom Regan.[41] Critics of animal welfarism claim that concern about the suffering of certain sentient animals *alone* cannot help with the project of formulating an environmental ethic. There are two sides to the objection: the stronger critique is that animal welfarism is anti-ecological and the weaker claim is that it cannot provide sound environmental policies.

[41] For example, see Callicott 1980, Hettinger 1994, Sagoff 1984, Singer 1975, and Regan 1993. In his later work, Callicott takes a more moderate position that animal welfarism *can* be reconciled with environmentalism.

The stronger claim can be understood by considering the problem of predation. This is the suggestion that if morality amounts to reducing suffering, then we ought to reduce even that suffering that occurs in nature, and that is a consequence of the need of some animals to hunt and prey upon others. With respect to the Buddhist virtue of compassion, this might be thought to entail, likewise, a desire to put an end to certain ecological processes that appear cruel. Yet, the objection goes on, these are an essential aspect of nature, and to repudiate them shows a limited understanding of ecology and is not at all what one means by 'respect for nature.' In Callicott's words, "the doctrine that life is happier the freer it is of pain, and that the happiest life conceivable is one which is uninterrupted by pain, is biologically preposterous" (1989, 32).

Many philosophers who subscribe to animal welfarism have replied effectively to these charges, and in Callicott's later work, he admits that the divide between the two camps is not that great after all. He is prepared to accept, as part of an environmental ethic, attempts to reduce the suffering of domestic animals; however, he draws a line between these and wild nature, claiming that our duties to both differ widely. Our duties to wild animals, he says, are not to prevent their suffering, but, on the contrary, to preserve natural processes, and among these, eating and being eaten are fundamental (Callicott 1989, 56-57). That is, if we attempted to reduce suffering by forcing carnivores to adopt a vegetarian diet, from the perspective of an environmental ethic, this would be completely misguided.

Jennifer Everett denies that animal welfarism has these implications, yet the reasons she provides cannot be applied to the Buddhist stance. She claims, for instance, that predation has extensive benefits, primarily, that the ecosystem and most of the living beings within it flourish. These advantages, she claims, outweigh the suffering predation causes, and therefore, predation is morally acceptable (Everett 2001, 47–48). However, as we have seen, Buddhists do not have the same idea of well-being as animal welfarists or environmental philosophers do, to them happiness is another thing altogether from existence in nature. Predation, that is, does not contribute to the Buddhist's idea of ultimate happiness, and therefore, it would appear he cannot make this move.

Similarly, the attempt to discriminate between wild and domestic animals is not appropriate in Buddhism. Everett, like Callicott, claims that we ought to prevent the

suffering of beings, only insofar as this is appropriate to their nature, in other words, we ought to respect beings for what they are (Everett 2001, 54) To hunt or to be eaten constitutes part of what it is to be a wild animal; therefore, humans ought not to intervene in this case. Domestic animals, on the other hand, deserve our compassion and protection because it is part of their nature to live close to humans and to be highly dependent on us. Yet, as we have seen, the value Buddhism confers on beings has nothing to do with their nature or properties. Rather, all living beings are included in the moral circle, and are proper targets of loving-kindness and compassion, irrespective of their properties. At any rate, it seems arbitrary for a Buddhist feel compassion for a chicken, say, that was caught by a fox, yet not to worry about a deer, simply because they have different natures.[42]

5) The charge of vacuousness

This brings us to the second problem with attempting to base an environmentalist ethic on the desire to prevent or alleviate the suffering of living beings. The weaker argument that can be brought against green Buddhism based on compassion is that it cannot help us to decide upon a course of action in the case of competing interests (Keown 2007, 10). According to Nanamoli Thera, the ideal of loving-kindness is reached when there are no longer any "barriers" set between beings, that is, if one were faced with a compulsory choice, one could not choose to harm any one being, even though this would save another (Nanamoli 1987). This is the virtue of equanimity (*upekṣā*; Pāli *upekkha*), which, together with loving-kindness, compassion, and empathic joy (*mudita*), make up the Four Sublime Attitudes (*brahma-vihāra*). Buddhist solicitude, as noted above, is supposed to be extended to *all* living beings,[43] whether they are wild or domestic, rare or common, native or exotic. Yet, an environmental ethic, it is often claimed, is supposed to offer guidance on precisely these kind of matters; that is, it is meant to help us determine what

[42] Strangely, Harris interprets Buddhism as implying the very opposite; he says that "early Buddhism seems to endorse the notion of survival of the fittest...where the weak are at the mercy of the strong," and that it also accepts "the additional burden meted out to them by humans" (Harris 2000, 121). However, he reaches this conclusion in a similar way to Waldau, who assumed that the description of animal suffering in the Pāli canon implies its acceptance. I have argued against this claim in the first part of this chapter.
[43] Or, at the very least, it is extended to all sentient beings.

to do in cases where, for example, we must decide whether to cull an invasive species in order to protect an indigenous one (Schmithausen 1991, 35).

Barbra Clayton has also pointed out that extending solicitude to all living beings leaves us unable to decide on difficult cases, where some degree of suffering is unavoidable; for instance, ought we to stop testing medicines on animals, for the sake of those animals, or persist with it for the sake of those suffering with disease (Clayton 1999, 30)? Other examples of such "hard cases" include building a bypass, and curbing carbon dioxide emissions in poor countries, both of which involve inflicting a degree of discomfort on some, in order to benefit others (James 2004, 59, 106). Some environmentalists, writing about the Christian notion of *agape* (which for our purposes can be compared to *maitrī*[44]) have drawn attention to this problem too. We read that "love turns our attention to the necessity of tragic choices" but we are not told how these choices are to be made (Miller and Yoon 2000, 166).

In reply, it can be said that to see environmental ethics as exclusively concerned with such policy-oriented questions is to take an unnecessarily limited view. As Callicott has argued, the question of how to articulate the "philosophical grounding" of such policies is far more pressing (1987, 116; citing Hill). Similarly, Cooper and James suggest that this criticism applies to many other systems of ethics, besides Buddhism, and that there is no reason to suppose that an environmental ethic must provide us with a "decision procedure" to be applied to such issues (2005, 30, 144). Whether or not such replies are satisfactory will depend, of course, upon our expectations of green Buddhism.

6) Non-living and non-sentient beings

A final objection to consider is the claim that environmental ethics does not involve solely the attempt to promote well-being for certain vertebrates; there are non-sentient individual beings too, both living and non-living, which are of moral importance, and environmentalists also want to protect certain collective entities, like ecosystems, and communities, as well as abstract ones, such as, endangered species. Callicott argues,

[44] *Maitrī* and *agape* are similar in that both are extended universally, and both *confer* value on their object, rather than discovering it there, that is, both are independent of the properties of characteristics of the being that is loved (Bratton 1992, 15–16).

against animal welfarism, that its insistence upon sentience as the only characteristic relevant for moral considerability is as limited as the traditional argument that deems rationality to be *the* good. Environmental ethics, he says, is concerned for the disappearance of species of plants, as well as animals, and for soil erosion, stream pollution and the like (1989, 17–19).

The most serious problem seems to be that of accounting for our concern for species *as such*, for it is hard to see how an abstract entity (James 2006, 88) can be thought of as doing well or doing worse, nor is it evident that one could have compassion for *the* tiger, as well as actual, living tigers. Schmithausen provides one example in the Pāli canon where loving kindness is extended to "families of creatures," such as those having two, or four legs, claiming that this might entail an appreciation of species as such (1997, 19). However, he concludes that ultimately, "the value at stake…is the life and happiness of the *individual*, not the transindividual continuity of the species" (1997, 20).

In chapter 4, I shall argue that Buddhism regards all species as empty and that the attempt to protect their continued existence *per se* cannot be reconciled with Buddhist doctrines. Cooper and James seem to endorse a similar view. Citing Harvey, James claims that Buddhism cannot support saving the whale, but it does support saving whales (James 2006, 91) and in another work, he and Cooper attempt to justify an indirect concern for species based on the principle of non-violence, claiming that "saving a species is a natural corollary of saving individuals" (2005, 142). Be that as it may, the real problem emerges, as James points out, when conservationists promote the killing of members of one species in order to save members of another. For instance, in an attempt to save the red squirrel, the British public was advised to destroy grey ones, and one method recommended involved stamping upon their young. As argued above, Buddhism could certainly *not* condone this approach, and much less the obvious delight that many people took in accomplishing this task (see James 2009, 93–94). The First Precept, the doctrine of *ahiṃsā*, and the virtues of loving-kindness and compassion are meant to be extended universally, and one is not supposed to even wish harm on any being, even for a moment. Just as we saw with the distinction between wild and domestic animals, Buddhism cannot discriminate between beings on the basis of any characteristics or their

different 'natures.' In short, wherever there are competing interests, Buddhists cannot automatically favour one species, simply because, say, it is endangered.

Holder takes a similar indirect approach with respect to ecosystems, arguing that the prevention of suffering of individuals will bring about care for the ecosystems in which these beings flourish (2007, 22). One might suppose, *prima facie*, that it will also take care of the community. However, James argues, against this approach, that the flourishing of an ecosystem or community need not necessarily entail less suffering for its members (2006, 90). In any case, there might be another, more direct way to regard such collective entities as objects of Buddhist solicitude. Above it was suggested that eco-systems are also capable of 'valuing' their own well-being, to the extent that they display autopoietic 'behaviour.' Perhaps, then, we could describe a strip-mined mountainside, for instance, or a polluted river, metaphorically, as "suffering." If such systems can really act against external influences to maintain a degree of stability, or internal diversity, then we might be able to interpret compassion and loving-kindness towards these beings in terms of protecting such states. Further on, though, we will see that this conception of ecosystems is both out-dated and contradicted by the Buddhist world-view.

With respect to non-sentient living individuals, if we accept Rolston's account of their "non-felt interest in their well-being," then we can, at least, widen the class of proper objects of Buddhist solicitude to include these beings. Furthermore, one could point out that, originally, Buddhism held a remarkably wide notion of 'living beings' and that the term was not understood to restrict the class of morally considerable objects in the way that Callicott understands it to. As mentioned before, living beings, for the early Buddhists, included the four elements, rivers, soils, plants, and seeds (Schmithausen 1991, 5).

With the rise of the Mahāyāna vehicle, and especially in China and Japan, the question of whether apparently inanimate beings could be considered sentient became an important issue in Buddhist philosophy. Part of the reason for this, as we shall see in the next chapter, is that Mahāyāna Buddhism tends to collapse all distinctions and dualities, regarding them as empty. This can have important implications for green Buddhism and for all the objections against it that have been raised here, and therefore, the predation

critique, the charge of vacuousness, and the problem of non-sentient and non-living beings will be taken up again after I have given an account of Mahāyāna philosophy, to which the next chapter will turn.

Summary

In this section, I have concluded the discussion on whether Buddhism can accommodate an idea of nature as valuable. I began with an overview of what is generally meant by 'intrinsic value' and attempted to circumscribe the sense in which it is held to be required for an environmental ethic. I then argued that this concept is available in Buddhist doctrine, and that it corresponds, in an interesting way, to the virtues of love and compassion.

We saw that the main significance of 'intrinsic value,' as used by environmentalists, is that something is valued for its own sake, and, in this sense, it is independent of any being's interests or other purposes. Yet, the concern to define value independently from human interests has led many philosophers to describe it is as an objective and non-relational property of the valuable object. We saw that when intrinsic value is defined this way, it rules out most of the things that environmentalists want to protect. Moreover, Buddhism cannot accommodate this notion of value. From our discussion, it emerged that the same thing can be held dear either for its own sake, or else for the sake of something else, and this suggested that, rather than being an objective property of the valuable thing, value is dependent upon a relation between a valuing subject and the valued object.

Environmentalists are not often willing to take up this approach and typical arguments for value as objective rest on the idea that living beings have a 'good of their own,' which is characteristic state they would normally reach, and which is independent from any human who values it. I argued against this, suggesting that the move from describing a quality or state of a being as 'characteristic' to saying that it is 'good' involves a naturalistic fallacy. It seems there is no way of determining the good without invoking our general preference for life and well-being. Otherwise, if we insist on

viewing the good as objective, we must either admit that it is indefinable, or that it is a non-natural and ineffable quality.

The concept of intrinsic value I have used in this section, in short, is that of an experience, which involves an attitude adopted towards some being, for the sake of that being itself, and not for any other purpose that could be fulfilled by something else. It involves a disposition to relate with life, to prefer lifelike processes, and a tendency to promote well-being. We saw that the focus was not on value as a property or thing, and not on which things *have* value, but on *how* such things are valued. Besides, it is not only humans who do the valuing under this account; other organisms and autopoietic collective wholes can be said to 'value' to the extent that they respond to stimuli actively and tend towards certain states instead of others.

Turning to Buddhism, it emerged that the virtues of love and compassion have much in common with this idea of valuing. They too involve an experience of, or attitude towards, a being, and the desire and tendency to promote its welfare. Moreover, in Buddhism, love and compassion are meant to be extended universally, independently of any properties of their object. It was suggested that there is no conclusive argument for why one ought to extend solicitude to all living beings, and that it was simply based, instead, on the familiar experience of desiring one's own happiness, and the supposition that others want to be happy too. However, it emerged that there are several difficulties with this concept of value.

One problem is that Buddhists and environmentalists mean very different things by 'well-being.' Although this objection is not as strong as the 'world-negating' critique that was raised earlier, it too arises from the fact that Buddhism values *nirvana* above everything else, and, therefore, a Buddhist environmentalism that was based on a desire to promote ordinary, worldly happiness would seem to fall short of the motivation recommended by the Buddha. I suggested that we could refine the concept of 'valuing,' so that it involved a desire for the well-being of a creature in this very life. That way, we avoid ascribing mere instrumental value to a being's life while valuing only *nirvana* intrinsically. Clearly, though, this problem has not been resolved satisfactorily, and we will need to delve much more deeply into what is meant by *nirvana*.

We saw that the different ideas about happiness and well-being also impinge upon another objection, the predation critique. Unlike animal welfarists, Buddhists cannot defend their position by claiming that predation contributes to the overall welfare of the members of a community, since they have another understanding of what welfare involves. This means that the doctrine of love and compassion logically entails that Buddhists ought to be concerned about the suffering that occurs in wild nature, and that is a natural result of predation. Critics of animal welfarism suggest that this consequence is completely unecological.

Another problem with the doctrine of extending love and compassion universally is that it generally does not allow us to make the kind of decisions that environmentalists need to make. Buddhism cannot discriminate between beings on the grounds of their natures or properties, and therefore, it seems unlikely that it could condone killing members of invasive species, say, for the sake of an endangered one. I argued that on the account of value I have provided, even entities that are not normally considered living or sentient can be said to have interests and to desire their welfare, and pointed out that in its origins, Buddhism had a much wider concept of life than we have today. Perhaps, we could appeal to this understanding in our efforts to motivate an appropriate attitude towards nature.

Chapter 2: Mahāyāna Buddhism and Emptiness

Throughout chapter 1, we encountered a persistent setback for green Buddhism, namely, that only *nirvana* seems to be intrinsically valued on the Buddhist worldview. It is true that, to the extent that living beings are loved and shown compassion, one could say that they are valued in this way. Yet, even so, it is not clear that tigers, for instance, are valued for what they are, or that their welfare is desired for its own sake, and conservation of the tiger species cannot be regarded as a final aim. The ultimate and only legitimate goal in Buddhism, it seems, and the only type of well-being worth seeking, has to include liberation from *saṃsāra*. Until we have a clearer picture of what this involves, and until we can say with certainty that it is *not* antithetical to ordinary existence, it seems that the issue of the environment can only be regarded as peripheral to Buddhism, at best (Habito 2007, 133).

This chapter will address the question of what liberation entails from the perspective of the Mahāyāna vehicle. I suggested, earlier, that the later schools of Buddhism are more prepared to accept the 'this-worldly' aspects of enlightenment; in fact, one could even claim that they positively reject the 'other-worldly' interpretation of *nirvana*. Indeed, Mahāyāna Buddhism "cuts through" all dualistic concepts—including *saṃsāra* and *nirvana*, suffering and happiness, mundane and otherworldly—through its doctrine of universal emptiness. It has been suggested that this "can pave the way for a positive evaluation of earthly realities...and an appreciation of this earthly realm" (Habito 2007, 134–135).

The next task, therefore, will be to examine the main teachings of the Mahāyāna, which I will approach *via* an exposition of its two major philosophical schools, the Madhyamaka and the Yogācāra. One of my main purposes will be to show that, although there is a degree of innovation, the ideas expressed by Nāgārjuna, Asaṅga and Vasubandhu can be seen as the logical outgrowth of the Buddha's original teachings. Furthermore, my account will also emphasize the continuity between these two schools, instead of their divergences, which is often the focus of scholarly exegeses.

In the first part of this chapter, I will have little to say about environmental matters; I will return to that topic after my account of Mahāyāna philosophy. Before I begin the main argument, though, it will perhaps be helpful to say a few general words about Mahāyāna Buddhism.

Mahāyāna from Sutric Sources

The Mahāyāna is most accurately contrasted with the so-called 'Hīnayāna' in terms of a difference in motivation; that is, instead of having her personal liberation as an ultimate goal, the Mahāyāna practitioner's main concern is to reduce or eliminate the suffering of sentient beings.[45] Here, one must be careful about making disparaging insinuations; to suggest that non-Mahāyāna Buddhists are solely driven by a self-interested desire for *nirvana* is a serious distortion of these traditions. In the previous chapter, compassion was spoken of, along with loving-kindness and the other Sublime Attitudes, as one of the main virtues taught by the Buddha, and therefore, the desire for others' well-being was an important part of Buddhism right from the very start. Yet, sometime during the second century C.E., new *sūtras* began to appear whose protagonists were portrayed as having postponed their own enlightenment until every single living being is liberated too, giving rise to a major Mahāyāna innovation, the ideal of the *bodhisattva* (e.g. *SV* 28). Perhaps this was a response to a similar worry to that raised in chapter 1; namely, that the practice of loving-kindness and compassion could not be genuinely altruistic if undertaken for the sake of one's own spiritual progression.

[45] I use the term 'Hīnayāna' here, because I only want to make a conceptual distinction, and do not intend to make any comparisons between actual schools or practitioners of Buddhism. I am merely *defining* the Mahāyāna (as most Mahayanists do) as Buddhism motivated, primarily, out of concern for other sentient beings. Much has been written against distinguishing the Mahāyāna in this way, and there have been many attempts to show that compassion is as central in early Buddhism as it is in later forms (e.g. Aronson 1980, Ch. 1, 2; Cooper and James 2005, 59–60). I accept that this was true of Gautama Buddha, and indeed of many other Buddhists, past and present, who accept the *Nikāyas* alone. The way I use 'Mahāyāna,' therefore, has much in common with Paul Williams's construal when he writes that it is not to be thought of as a school, or sect, but as a vocation, distinguished from alternative spiritual movements or tendencies (Williams 2009, 3). It is also consistent with the recent idea that there is no clear dividing line between Mahāyāna and other schools of Buddhism, but that rather, these tend to blend into each other, both historically, and doctrinally (e.g. see Cohen 1995). 'Mahāyāna' therefore, when used in this sense, does not refer to any school, doctrine, or historical person, but only to a greater motivation.

A background assumption, against which this new motivation is set, is that it must be possible for all beings to attain *nirvana* eventually. In fact, the *Lotus Sūtra* downplays the distinction between different forms of Buddhism, extolling, instead, a concept of 'One Vehicle' (*eka-yāna*) through which the Buddha leads all beings to the "full ripeness" of enlightenment (*SP* 2: 52–54, 72; Kern 2007, 37–40). Nevertheless, despite its being available to all, *nirvana* is depicted, at times, as even more remote than was suggested in the Pāli canon. Universal enlightenment is not a goal that is realistically expected to be fulfilled at some time in the future; for instance, in one vivid passage, the *bodhisattva* Mañjuśrī explains that if countless Buddhas dwelt for countless *kalpas*, constantly ferrying living beings to *nirvana*, still, the number of beings to be liberated would not decrease (*MRK* 46; Chang 2002, 101).

The reason for this, of course, has to do with the doctrine of emptiness (*śūnyatā*), the second major innovation associated with the Mahāyāna. Although the Buddha did speak about emptiness, as we have seen, this teaching was not given a very prominent place in the Pāli canon, whereas with the Mahāyāna, emptiness and compassion together take centre stage. Emptiness may be understood as the logical extension of the doctrine of not-self (Chang 1991, 75). Kalupahana suggests that it was introduced to address a development that was perceived to be an erroneous metaphysical view that had arisen within Buddhist scholasticism. He reads Nāgārjuna, in fact, as a response to the Sarvāstivādins (Kalupahana 1996, 26),[46] who were involved, with other schools of Abhidharma, in a classification of all kinds of experience into momentary phenomena. The Abhidharma's project can be seen as the continuation of the Buddha's analysis of the self into the physical and mental aggregates, and the breaking down of the physical elements into atoms of fire, water, and so forth. The Ābhidharmikas remained faithful to the teachings to the extent that they regarded compound phenomena to be impermanent, suffering, and not-self. However, the Sarvāstivādins concluded that atoms and momentary phenomena, the ultimate constituents of reality (*dharma*), existed eternally

[46] Kalupahana argues that, in Nāgārjuna's times, the *bodhisattva* ideal and other specifically Mahāyāna doctrines had not arisen yet and therefore, he suggests that the early Mahāyāna was not a reaction to early Buddhism or the Pāli canon, nor to the Abhidharma as a whole, but only to Sarvāstivādin metaphysics (1996, 25).

with a determinate self-nature (*svabhāva*).[47] As Kalupahana has suggested, "No other conception could be more heretical in the eyes of the Buddhists who were avowed non-substantialists" (1996, 22).

The doctrine of emptiness (*śūnyatā*), then, can be understood as a reaction to scholastic metaphysics, yet the Sarvāstivāda was not the only target of Mahāyāna critique. Many *sūtras*, while retaining the Buddha's original teachings as a backdrop, also seem, in places, to contradict those very teachings. A well-known example of this occurs in the *Heart Sūtra*'s declaration that there is "no suffering, no cause of suffering," and so forth, for the rest of the Four Noble Truths; "no form, no feeling," or any of the Five Aggregates; "no sickness, old-age, or death" or any of the Twelve Links of Dependent Co-origination (*nidāna*) (*PPH*; Lopez 1990, 98). Of course, if everything in the world is empty, then this will include also those concepts that the Buddha introduced in order to lead his followers out of suffering. In this sense, therefore, emptiness can be seen as a radicalization of the Buddha's teachings or as a reflexive extension of their logical implications to those very same teachings. Perhaps this is why the content of Mahāyāna *sūtras* is rather perplexing, to put it mildly, and appears to contain several internal paradoxes. I shall be claiming that this is also due to the ineffability of ultimate reality.

One way in which the Mahāyāna explains these seeming contradictions is through appealing to a concept of expedient means (*upāya kauśalya*). Instead of preaching the same doctrine to all, the Buddha is said to have varied his teachings according to the dispositions, inclinations, and temperaments of his listeners (*SP* 3; Kern 2007, 59). The earlier doctrines, therefore, are regarded as a "clever device," aimed at those of lesser faculties, and intended merely to "put an end to [their] trouble" (*SP* 2: 66; Kern 2007, 39). The Buddha's talk of *nirvana* is compared, in fact, to a father's promising new toys to his children, in order to convince them to leave a burning house (*SP* 3: 70–72; Kern 2007, 61, 71). Preoccupation with enlightenment, therefore, is seen as another form of delusion, and in the *Mahāratnakūṭa Sūtra*, we read that Mañjuśrī does not seek it, nor does he urge sentient beings to seek enlightenment (*MRK* 15; Chang 2002, 177–178). In the *Diamond Sūtra*, we are told that in the Buddha's "unexcelled" teachings, "there is not the slightest thing that can be attained" (*VPP* 22; Patton n.d., 22).

[47] The concept of *svabhāva* will be examined in detail below.

Similarly, the *Vimalakīrti Sūtra* explicitly states that the aim of the *bodhisattva* is not to renounce *saṃsāra* or to seek *nirvana.* Instead, the focus is on nonduality, which involves "neither detesting the world nor rejoicing in liberation." Vimalakīrti's final 'comment' on nonduality is to keep silent; he declines to make any statement at all regarding ultimate reality. This is because the highest truth simply cannot be expressed (*VN* 9; Thurman 1976, 67–68), and here, then, is a paradigmatic example of the Mahāyāna depiction of the enlightened state as being beyond conceptuality. As Nāgārjuna emphasizes, this constitutes a return to the Buddha's original message, that is, to his advice to relinquish all views (*MMK* 27:30; Garfield 1995, 83).

It appears that, throughout the course of Buddhist history, proponents of various schools were liable to forget this advice, and to become attached instead to their own interpretation of the Buddha's teachings, attempting to establish it as *the* correct view. This resulted in the continual rise of new schools and interpretations intended to redress such mistakes, and to purge Buddhism of "certain metaphysical ideas that continued to creep into the teachings" (Kalupahana 1996, 1). We have already seen that one common mistake was to reify certain concepts that were originally intended only as didactic devices. The Yogācāra have often been misinterpreted as suggesting a reified view of the 'Mind' or the 'Buddha.' Nāgārjuna's writings, on the other hand, as well as the negative declarations of the *Heart Sūtra*, are particularly prone to a nihilistic misinterpretation. That is, while Nāgārjuna was concerned mainly with negating those concepts that other schools had mistakenly reified, Asaṅga and Vasubandhu returned to affirmation, reinterpreting, as they reaffirmed, the concept of *nirvana*.

Therefore, the Mādhyamika and the Yogācārin philosophies can also become objects of attachment, and misconstrued as wrong views. Yet, the fact that their doctrines appear to be poles apart, I will suggest, is merely a consequence of the inability of words to capture nondual experience, or to describe reality as perceived by the enlightened being. The best that can be achieved, it will emerge, is a Middle Path attained by avoiding two extreme views, which correspond to the two poles of any dualism. A more adequate interpretation, then, is to regard the Yogācārin and Mādhyamika philosophies as complementary, together bringing Mahāyāna thought to completion (Nagao 1992, 225). In what follows, I shall further develop this idea.

1 Nāgārjuna's Madhyamaka and the Focus on Negation

Nāgārjuna is one of the earliest systematic philosophers classified as a Mahāyāna Buddhist, and he is generally regarded as the founder of the Mādhyamika lineage. This school, it was suggested above, tends to focus on emptiness and on negation, in the style of the *Heart Sūtra*. Other *sūtras* that are held in high regard by Mādhyamikas, and considered to expound the highest teachings (as opposed to merely useful teachings employed as expedient means) include the *Vimalakīrti Sūtra* and the *Mahāratnakūṭa*. Yet, it has been argued that Nāgārjuna's main work, the *Mūlamadhyamakakārikā (MMK)*, is a commentary upon an older Pāli text, the *Kaccāyanagotta Sutta* (Kalupahana 1996, 5), which comprises a response to the question "To what extent is there right view?" The Buddha replies, in this *sūtra*, that there are two extreme positions to be avoided; these are, briefly, the belief in existence, and its contrary, the belief in nonexistence. The Enlightened One avoids making claims about either, and teaches *via* a 'Middle Way,' which is identified with *pratītyasamutpāda*, the doctrine of Dependent Co-origination (*S* ii 17; Thanissaro).

The term 'Middle Way' became a standard appellation for Buddhist doctrine, and parallel terms, like 'Madhyamaka' itself, were appropriated by most schools as they attempted to establish their position as the correct understanding of the *Dharma*. Yet, although Mahāyāna philosophy strove to remain faithful to the Buddha's Middle Way, I shall argue that the Madhyamaka can be understood as leaning slightly towards nonexistence, whereas the Yogācāra tend towards existence. Nāgārjuna emphasized negation, that is, his focus was mostly on avoiding the belief in existence. With the Yogācāra, on the other hand, the stress lay upon affirmation and the avoidance of the extreme of nihilism. I shall argue that the bias, in each case, is due to the impossibility of making claims that correspond precisely with ultimate reality. Both Mādhyamika and Yogācārin philosophers were aware of this, of course, and emphasized repeatedly that the highest truth cannot be expressed.

Nāgārjuna's aim, therefore, was to seek out the Buddha's original meaning, as can be seen from his frequent citation of the Pāli canon, and his emphasis on Dependent Co-origination. Yet the *MMK*, like the Mahāyāna *sūtras* examined above, contains many

declarations that might surprise a Theravādin, not least of all, the identification of *saṃsāra* and *nirvana*. We are told that,

> Whatever is the limit of nirvāṇa,
> That is the limit of cyclic existence [i.e. *saṃsāra*].
> There is not even the slightest difference between them,
> Or even the subtlest thing (*MMK* 25:20; Garfield 1995, 75).

To understand what this means, we will need to examine in more detail the doctrine of the Two Truths, which was briefly mentioned in chapter 1. It will emerge that whether one is 'in' *saṃsāra* or *nirvana* depends upon the way one experiences the world. A person who is deluded and trapped within cyclic existence grasps at a belief in the reality of the world and of its contents, and he is especially attached to belief in the existence of his own self. In Nāgārjuna's terms, it is said that he perceives all these as existing with *svabhāva.* Therefore, we will need to enquire into what exactly *svabhāva* means, and what it is that Nāgārjuna seems to be negating with the doctrine of emptiness. Briefly, I shall characterize *svabhāva* as the experience and conceptualization of a thing as existing independently, as something unitary and irreducible, and with a fixed essence.

I shall then go on to outline various arguments that are associated with the Madhyamaka refutation of *svabhāva*.[48] Besides arguing against *svabhāva* directly, Nāgārjuna's critique targets several philosophical concepts like causality, unity, and essential properties, as well as various Buddhist notions such as the Four Noble Truths, *nirvana,* and the *Tathāgata*. Yet, he does not intend to refute these altogether, but only to demonstrate that if we conceive of them in terms of *svabhāva*, such concepts cannot be rendered consistent, either with each other, or internally. For example, if entities existed with *svabhāva,* then they could never arise, or give rise to anything else; they could not change, or ever come to an end. Therefore, when we seek the *svabhāva* of a tree, say, we never find it, we find only its emptiness of *svabhāva*, or in other words, we find that there is nothing other than the collection of fleeting impressions we receive, nothing permanent underlying the fluctuating parts and properties that we tend to think of as 'inessential' to

[48] As Westerhoff points out, these arguments are not always explained fully by Nāgārjuna; instead many are quickly outlined or simply referred to very briefly. This is because the main purpose of these texts was to be memorized by students, whereas detailed explanations were left for the commentaries (Westerhoff 2009, 6–7). Therefore, what will be referred to as "Nāgārjuna's" thoughts relies heavily on the interpretation found in such commentaries, especially Candrakīrti's *Madhyamakāvatāra*.

the tree itself. Our regarding it as a 'hard-edged' individual has a lot to do, instead, with our language and other conventions.

On one level, then, the two truths amount to a distinction between conventional reality, where things appear with *svabhāva*, and ultimate reality, where they are seen as empty. Yet, a number of misunderstandings need to be clarified, each of which involves a reification of emptiness, or its misconstrual in terms of *svabhāva*. For instance, we might regard emptiness as some realm or reality that is completely independent of the ordinary world of conventional reality. Otherwise, we might conceive of the conventional and ultimate as involving two different perspectives on the same world, one held before and the other gained after enlightenment is attained. A third misinterpretation is to think that although an enlightened being perceives the two truths simultaneously, he perceives them as dual, apprehending the conventional and the ultimate as two different things. Nāgārjuna's emphasis that "there is not even the slightest difference" between *nirvana* and *saṃsāra* suggests that the two truths are wholly identified with each other. I shall argue, following Garfield and other authors, that to perceive the ultimate truth is to perceive the conventional *as* conventional, that is, to see the relation between the two truths.

One needs to be vigilant when it comes to describing ultimate truth, and talking about *nirvana*, as it is easy to be misled by words. In saying that there is no difference between ultimate and conventional truth, Nāgārjuna did not mean to imply that they are the same. It is often pointed out that both his and many of the Buddha's negations are "non-affirming," in that they do not imply any contrary or contradictory claim. This also explains why Nāgārjuna insisted that he has no position, and that he advances no view, in line, of course, with the purport of the *Vimalakīrti Sutra*. His objective, rather, was to follow the advice of the Buddha and completely relinquish all views.

To teach, however, both the Buddha and Nāgārjuna needed to resort to language, just like the *bodhisattvas* who spoke before Vimalakīrti's silence. There is no way of explaining what emptiness is, unless we first have a grasp of what perceiving *svabhāva* is like, and again, although an advanced *bodhisattva* like Vimalakīrti might experience nonduality immediately, for the rest of us it needs to be explained through the provisional setting up of a dichotomy. The Pāli canon, in fact, has often been regarded as containing

such provisional teachings that rely on the use of dualisms. The Buddha's discourse about truth and falsity seems to be a case in point; clearly, while there could be conventionally true as well as false statements, if ultimate reality is inexpressible, then, strictly speaking, it can be neither true nor false. That is, there can be no ultimately true statements.

Therefore, language itself is limited. It tends to promote a reified view of the world and its contents and suggests there is a parallel between the structure of our sentences and that of reality. For this reason, it also encourages a dualistic view, which can be reduced to the polarity between existence and nonexistence, or between affirmation and negation. This is one reason, then, why ultimate reality is ineffable. On the Mādhyamika account, the closest one can come to expressing nonduality is through the double negation, for example, the claim "nature is neither valuable, nor not valuable." Such a formula is also useful as a means of reducing attachment to one's views, and removing the urge to establish some claim as true. Nāgārjuna was aware, however, that the Buddha also affirmed existence whenever this was required to correct nihilistic inclinations in his listeners. In short, many of the Buddha's statements, including the distinction between conventional and ultimate truth, can be seen as soteriological devices, *interim* constructions, which, like Wittgenstein's ladder, are to be "thrown away," once they have served their purpose in taking us beyond them (*T* 6.54).

The Two Truths; *Svabhāva* and Emptiness

Nāgārjuna explains, "The Buddha's teaching...is based on two truths; a truth of worldly convention, and an ultimate truth." He goes on to claim, "Without understanding the significance of the ultimate [truth], liberation [i.e. *nirvana*] is not achieved (*MMK* 24:8–10; Garfield 1995, 68). It would appear, then, that he is setting a straightforward contrast between the way reality appears ordinarily, in *saṃsāra*, and the way it appears to enlightened beings in *nirvana*. Conventional reality (*saṃvṛti satya*) can be presumed to be the everyday experience of the ordinary world; it includes the environment in which we operate as individuals, and which is replete with all the varied living beings and things we encounter and talk about, as well as their complex relations to each other and to ourselves. To use Nāgārjuna's terminology, we can say that in conventional reality,

things seem to be endowed with *svabhāva,* a term variously translated as 'self-nature,'[49] 'self-subsistence,'[8] 'own-being,'[50] 'essence,'[51] 'intrinsic nature,'[52] 'substantiality,'[53] and 'inherent existence.'[54] Westerhoff argues that none of these traditional translations is able to capture the full meaning of *svabhāva,* and I shall be following his practice by leaving it untranslated throughout this thesis (Westerhoff 2009, 4).

Three general meanings of *svabhāva* can be distinguished, even though, as we shall see, they are intricately related to one another. First, there is the sense in which, ordinarily, a thing appears to us to exist *from its own side*, independent of any relations it may happen to have. These include relations with its causes, effects, and conditions, with subjects who perceive and conceptualize it, and with the name that is used to refer to it. To take an example, the oak in the garden, we assume, is truly there, and its existence is given, independently of whether we, or anyone else, experience it. We assume that whatever we choose to call it, it will always be that very same thing, that our naming of it does not affect its intrinsic identity. We also assume that it is completely independent from the wind rustling its leaves or the bird nest it supports. These are seen to be separate from the tree itself, and external to it; in other words, everything is perceived to have its own clear and distinct identity, and to be autonomous from everything else.

The tree is even held to be independent from those things that we know are necessary for it to exist, such as the acorn or the gardener who planted it (its causes), and the soil, sunshine, and rain that support its existence (its conditions). Although we know, intellectually, that the tree is dependent upon all these things for its existence, we regard it as independent to the extent that we are able to conceive of it separately. In fact, we actually *do* tend to conceive of it as such, superimposing a notion of something "unitary, permanent, and observer-independent," upon the collection of transient impressions that we receive (Westerhoff 2009, 49). That is, we tend to disregard the changes that the tree undergoes continuously—its growth, for instance, and being pruned—even though we are perfectly aware of them, and we similarly 'bracket away' the causes and conditions that

[49] Kalupahana 1996, 22.
[50] Chang 1991, 73; Burton 2001, 2; Tuck 1990, 54.
[51] Garfield 1995, 89; Nagao 1992, 212.
[52] Ames 2005, 1.
[53] Nagao 1992, 47; Kalupahana 1996, 84–85.
[54] Hopkins 1996, 392; Burton 2001, 2.

give rise to these changes—the gardener, rain, fertilizer—conceiving them as separate from the tree itself. Āryadeva likens this to the projection of the concept of 'snake' onto what is, in reality, a twisted rope (*HV* 1a–b; Tola and Dragonetti 1995, 9–10). Tola and Dragonetti explain that this is an "apparent knowledge" of something "unitary... existing in itself, [and] not depending on another entity for its existence" (1995, xxv). The first aspect of *svabhāva* suggests, in short, independence.

Once we correct our mistake, and perceive the rope as a rope, it might be thought that we have now attained true knowledge. Yet, Āryadeva maintains that this is as illusory as perceiving the rope to be a snake (*HV* 1c–d; Tola and Dragonetti 1995, 10). If we examine it carefully, we find that the rope is made up of threads, and that they are made up of smaller threads, and so on *ad infinitum*.[55] The second aspect of *svabhāva*, therefore, has to do with parts, both spatial and temporal, as well as with properties. While the first aspect suggested independence, the second calls to mind a simple, irreducible entity, something that cannot be subjected to further analysis. If we consider the tree once more, we might strip away its branches, its leaves, and its bark, and yet, we want to claim that no matter how many parts it loses, it is always the same tree. Similarly, properties such as height and colour are said to *belong* to the tree, which, therefore, must be something else. We consider it the same tree, despite the changes in appearance it goes through, such as turning red in autumn, or shedding its leaves in the winter. This shows that what we consider to be the tree itself must be something other than its inessential parts and properties; perhaps *svabhāva* consists of its essential ones, or else it is something that underlies these characteristics. In Western philosophy, it is sometimes referred to as the individual in which properties are instantiated.

The reader will have drawn a connection with the Buddhist analysis of self into the Five Aggregates. As mentioned above, the Ābhidharmikas carried on with this project, yet some ended up with an extreme 'wrong view'[56] when they claimed that the analysis stopped at the ultimately real, primary constituents of reality, namely, partless atoms and un-analysable moments of experience called *dharmas*. The Sarvāstivādins had argued that these *dharmas* exist with *svabhāva*, and therefore, *svabhāva* also has the

[55] The Mādhyamikas do not admit the existence of partless atoms (Tola and Dragonetti 1995, 10; Westerhoff 2009, 37). Their (possible) reasons will be examined below.
[56] From the perspective of the Mādhyamikas, that is.

connotation of being an ultimate existent, as opposed to compound phenomena, which are physical or conceptual constructs. Westerhoff characterizes this sense of *svabhāva* as something that "exists in a primary manner, unconstructed, and independent of everything else" (2009, 24).

These two senses of *svabhāva*, then, suggest an independent, and ultimate or irreducible existent. In terms of Candrakīrti's classic account, it can be said that together they constitute that which Westerhoff translates as "substance-*svabhāva*" (Westerhoff 2009, 23). There is a cognitive and an ontological dimension to these ideas, in that they combine a way of conceiving the world and its contents, with a belief in their ultimate and independent existence. The notion is somewhat similar, perhaps, to the ancient Greek concept of an underlying substance in which properties are instantiated and it too has the implication of absolute, permanent existence.

There is also an epistemological dimension to *svabhāva,* which determines the way we know objects, and enables us to tell them apart (Westerhoff 2009, 12). An independent, ultimate existent might be recognizable through an essential characteristic, and this is Candrakīrti's second aspect of *svabhāva*, translated as "essence-*svabhāva*" (Westerhoff 2009, 21).[57] Traditional examples are 'extension' for Cartesian matter or 'heat' for a fire-atom, and therefore, *svabhāva* in this sense is a property that a thing cannot lose without ceasing to be that very thing (Westerhoff 2009, 21). In our example, it might be said that the tree is essentially the plant with a single woody trunk that is growing here and now,[58] or that the acorn's power to bring about an oak is part of its essential nature. It is through essential properties that we recognize a thing for what it is and are able to refer to it in language and make statements about it (Westerhoff 2009, 23). Importantly, an essential property must be unchanging, and therefore *svabhāva* also has a sense of something that exists permanently, with a fixed nature.

Clearly, these three implications of *svabhāva* are intimately related to each other, and perhaps they can be summarized as saying that a thing exists independently, as

[57] Candrakīrti's third concept, absolute–*svabhāva*, will be examined in the next section, with the Yogācāra's re-affirmation of *svabhāva.*

[58] Westerhoff, however, points out that for Candrakīrti, the essence-*svabhāva* is not an individual essence (such as the socratesness of Socrates), but an essential property, that is, a property without which that thing would cease to be what it is, like heat is to fire, but which is also "sharable," in the way that all fires have heat as their essential property. In an individual, *svabhāva* is its "specific quality," which is a combination of all its essential properties (2009, 21–22).

something unitary and irreducible, and with a fixed essence. Grasping at a belief in *svabhāva* is the extreme of eternalism, or existence, of the *Kaccāyanagotta Sutta*; the belief that things exist inherently, and truly are what they are, an idea that is so tautological that it sounds rather absurd when expressed. Conventional reality then, is the world as it appears with *svabhāva*, in which we assume and grasp at the idea that we, and everything else around us, truly exist. As a Tibetan commentator puts it,

> ...all our everyday perceptions are tinged with this type of grasping. When we glance at our watch, for example, does it not appear to have its own independent, self-sufficient nature, over and above any relationship that may be said to exist between it and other phenomena (Gyatso 1992, 45)?

Ultimate truth (*pāramārtha satya*) is experienced when we are able to eliminate this grasping. It is generally equated with the doctrine of *śūnyatā,* or emptiness, and this, in turn, is described as the negation of *svabhāva* (Nagao 1992, 212; Westerhoff 2009, 12).[59] Nāgārjuna adopts a three-fold approach in his arguments against *svabhāva*. He appeals, first, to empirical experience, arguing that if one looks carefully, *svabhāva* cannot be perceived anywhere (Kalupahana 1996, 82, 84). Second, he demonstrates, using logic, that *svabhāva* is a self-contradictory concept (Bhattacharya *et al.* 1998, 89),[60] and finally, he argues that the belief in *svabhāva* goes against the Buddha's teachings (Garfield 1995, 91).

On this account, the well-known first argument in *MMK*, the "Diamond Slivers,"[61] appears rather strange, at first, as it seems to negate causation. The belief that "this being, that becomes...this not being, that becomes not" (*S* ii 28, 65; Macy 1995, 39) constitutes the very foundation of the Buddha's teachings, and plays an important role in the doctrines of Dependent Co-origination, the Four Noble Truths, and *Kárma* to name a

[59] The word 'usually' here indicates that this is not the position Nāgārjuna would adopt as a final stand.
[60] Indeed, it has been argued that Nāgārjuna *starts* with a definition of *svabhāva* that is self-contradictory, and that he is ultimately "battling dragons of his own creation" (Tuck 1990, 59; referring to Robinson's critique). While I agree that Nāgārjuna's *svabhāva* is self-contradictory, I also agree with Mādhyamikas that the notion is heavily relied upon in our conceptualization of the world. This can be seen in the way that philosophy (both Eastern and Western) always ends up going around in circles, so to speak, and that no thinker so far has been able to give an account of reality, which has not been contradicted by the perfectly valid arguments of another thinker.
[61] In fact, the argument is only summarized very briefly in *MMK* 1:1, it is only from the commentaries that we are able to flesh out Nāgārjuna's ideas. The commentaries also support claims about the centrality of this argument in Mādhyamika thought.

few. Moreover, causation seems to be given in experience, an empirical fact that most people would accept. The arguments Nāgārjuna sets out, however, are directed only towards a notion of causality that conceives of it as a relation between things with *svabhāva*, and later on, he will reaffirm the doctrine of Dependent Co-origination, linking it with emptiness itself.

Nāgārjuna's argument in the first verse can be summed up as the claim that there is no way of describing causation in a satisfactory manner if we assume that causes and effects exist with *svabhāva*. He demonstrates this using the *catuṣkoṭi*, a form of argument similar to the four alternatives discussed by the Buddha. To apply them to our example, the four options are: (1) the tree is caused by itself (i.e., the tree and the acorn are the same thing) (2) the tree is caused by another (i.e., the tree and the acorn are different); (3) the tree is caused by both itself and another (i.e., the tree and acorn are both the same and different); and finally, (4) the tree is caused by neither itself nor another (i.e., the tree was not caused by anything at all).

The first alternative cannot be accepted because if a thing were produced by itself, its production would be both "senseless and endless" (Hopkins 1996, 58). Some philosophers, in India as well as in the West, have affirmed that the effect exists in the cause "potentially"; in other words, the mature tree already exists, somehow, in the sapling and in the acorn. According to Nāgārjuna, this renders the notion of causality unsound—if the oak already existed in the acorn, what use would producing it be? Something simply cannot give rise to itself; if it exists then it has already arisen and cannot arise again. Otherwise, we would have to say that it was continuously arising, or giving rise to itself.

Yet, on the second alternative, where oak and acorn are regarded as two completely different things, which exist in complete independence from each other (as is implied by *svabhāva),* then there is no way that either could cause the other. The argument holds even if we regard the oak as being caused by something entirely different, such as the gardener. A well-known version of the argument in Western philosophy involves a similar concept of matter and mind as completely independent from each other, which gives rise to the problem of how a change in one could cause a change in the other. A further consequence is that if two completely separate and

unrelated things could somehow be cause and effect, then this would imply that anything could give rise to anything at all. For instance, we might plant an acorn, and end up with an orange tree! Clearly, there has to be some sort of relation between a cause and an effect. The third option, being a combination of the first two, is rejected for the same reasons (Hopkins 1996, 58).[62] The fourth amounts to a negation of causation altogether, and is refuted through experience, that is, through the fact that things *do* seem to be related through causality (Westerhoff 2009, 112).

What Nāgārjuna seems to be getting at, in brief, is that if we think of things as existing independently then they cannot be related to each other in any way, including through causal relations. Put that way, of course, this sounds like a rather trivial and tautological conclusion; clearly, if we define things as being independent, they cannot be related to one another. One has to keep in mind, however, a basic Mādhyamika (and one might say, Buddhist) premise; namely, that we *do* tend to conceive of things in this way. Despite knowing that they are produced by other things, we endow them with "own-being" and regard them as existing from their own side. This also explains why understanding the logical reasons for emptiness is not enough; there needs to be a "cognitive shift" so that we *realize*, as opposed to merely understand, the absence of *svabhāva* (Westerhoff 2009, 47).

The most common way of perceiving *svabhāva* occurs when we suppose objects to exist inherently, independently from our experience of them. Yet, Nāgārjuna asks, if such an object existed, independent of our seeing it, hearing it, and so forth, how could

[62] This might seem a little too quick, for saying that the oak and acorn are both the same and different, or else, say that the oak is caused by itself (the acorn) and another (the gardener) might seem like the most plausible account. Oak and acorn are different, to the extent that they succeed each other in time, and therefore, in reply to the objections against self-causation, we could reject the claim that acorn and oak are identical, and exist simultaneously. On the other hand, they are not completely separate and unrelated either, and therefore we can answer the objections against causation by another, by allowing them to be "the same" to the extent that they are different stages of the same entity and related as cause and effect. However, Nāgārjuna's concept of *svabhāva* cannot allow such complex individuals. An entity with *svabhāva* must be irreducible, and therefore, it cannot be divided into different temporal stages. If we choose one of these stages and call it 'the tree' then this must be independent from everything else, and cannot be related to the acorn stage. Moreover, its essential properties cannot change, so there cannot be one entity with *svabhāva* that is both tree and acorn. This shows, of course, that a tree cannot possibly be a candidate for *svabhāva*, and that the arguments are best applied to simple entities, such as atoms, or properties. In any case, though, when we think of things in terms of *svabhāva* we cannot posit causation between them, for *svabhāva* implies that they are independent, and cannot be related.

we possibly know about it (*MMK* 9:2–3)?[63] Here, he seems to be arguing for a two-way dependence between object and perceiver (*MMK* 9:5), and it has often been noted that Nāgārjuna generally tends to posit symmetric relations of dependence between things (e.g. Hartshorne 1970, 213). A well-known example is his suggestion that father and son are mutually dependent. Westerhoff explains that this relies on two different sorts of dependence relations; there is the existential dependence of the son on his father, and the notional dependence of the father, who would not be called a "father," without having had a son (Westerhoff 2009, 27–28). Similarly, we might say that we would not be perceivers, unless there was something we perceived. More will be said about this in relation to Hartshorne's critique of Nāgārjuna's use of symmetry.

Concerning the second aspect of *svabhāva*, which entailed existence as an irreducible, simple substance, it is likely that Nāgārjuna rejected the existence of these, based upon a well-known Yogācāra argument against the existence of indivisible atoms (Westerhoff 2009, 37). Briefly, the argument states that if a compound phenomenon, such as our tree, is made up of atoms, then those atoms must be placed next to one another to make up the branches, leaves, and so forth. Even if one atom does not actually touch any others, it needs to be surrounded by other atoms in all directions to make up a three-dimensional object. This implies that each atom must have a left side and a right side, as well as a bottom and a top, and a front and a back. Therefore, atoms are not irreducible after all, but can be divided, conceptually at least, into parts. Otherwise, if we state that atoms are 'point-like' and indivisible, then our compound phenomena would collapse into a one-dimensional entity (cf. Hopkins 1996, 373).

If we take *svabhāva* to be an individual underlying its properties (the second aspect of *svabhāva*) or else, an essential property characterizing the individual (the third aspect) we find that neither can be thought of as existing independently from the other. An atom of the tree's bark[64] does not exist without its properties, such as, being brown or being hard; it is impossible even to conceive of something existing without any properties whatsoever. Neither can properties exist without being instantiated in something (*MMK*

[63] One could reply here that we cannot possibly know *svabhāva* directly, that is, one might identify it with a sort of Kantian *noumenon*. However, we would then be going against the Buddhist teachings, as one of their main premises is that the Buddha is able to experience ultimate reality directly.
[64] Nāgārjuna's argument is about space, which as the fifth element, stands for all the others too.

5; 1–3); there is no 'hardness' or 'brownness,' without things that are hard and brown. In Garfield's words, "[T]o think of individuals and properties as existing independently and then somehow coming together to constitute particulars makes no sense" (1995, 150). Therefore, *svabhāva* cannot be a substance underlying its properties, for there are no property-less things.

Finally, there was the possibility of *svabhāva* being an essential property, a quality of a thing that it could not lose without ceasing to be that thing, such as heat is for fire. We have already seen that a property cannot exist without the individual in which it is instantiated. Moreover, if things had this kind of essential property, this would imply that nothing could ever change. If the tree had, essentially, five branches, say, then we could never saw one off; if atoms of bark were essentially hard, they could never decompose (*MMK* 15; 8–9). Westerhoff draws attention to two possible replies to this. The annihilationist claims that atoms with *svabhāva* do not change their essential properties; rather, what we experience as change, is actually the arising and fading away of a succession of atoms, which exist for a limited time with a fixed essence. The permutationist posits the same atoms with fixed essences, yet regards these as existing eternally. What appears to us as change is, in reality, a continual re-arranging of these atoms. Both arguments are subject to the same critique. Westerhoff asks what could be responsible for the arising and perishing of atoms in the annihilationist's' account, and similarly, we could ask about what causes the permutationist's atoms to move around and to form new arrangements. If this occurs in dependence upon causes and conditions, then, once again, we do not have an entity with *svabhāva*, but just another object which is dependently co-originated (Westerhoff 2009, 38–40). In short, Nāgārjuna employs several arguments to show that if one believes *svabhāva*, then nothing could arise or give rise to anything else, nothing could change, or ever come to an end either. Besides being at odds with everyday experience, this would also contradict the doctrine of Dependent Co-origination, and render the whole prospect of following the Buddhist path to liberation untenable (*MMK* 24: 20–32).

Nāgārjuna can be interpreted as saying that when we seek *svabhāva*, we never find it, we find only emptiness. When we look for a thing, conceived of as a substance or essence—the tree itself, underlying the appearance of its properties, or stripped down to

its essential part—we are never able to find it. Apart from the parts and properties we perceive, like the leaves and their colours, the number of branches, the width of its trunk and so on, which we recognize as highly unstable and which we tend to think of as peripheral to the actual tree, there is nothing else that can be called the tree. Ultimately, then, the 'things' that we experience, do not exist with *svabhāva*, but are all intimately related to each other, to the way we perceive them, to our language, and to our practices.

To put it another way, we *carve* our experiential field into 'distinct' objects; they do not exist that way prior to our experience of them, and our naming them. The reality we take for granted, therefore, where we see things existing with *svabhāva*, is a matter of linguistic and conceptual conventions, which we adopt in order to make sense of the world, and to be able to operate in it. Our activity requires, among other things, that we can agree on the way we distinguish objects, so that we can communicate about them. Yet, this does not imply that there truly are such static, independent, and unitary objects to which our words point; as we have seen, when we look for such entities, we cannot find them. Rather, so-called 'things' exist as referents of words only in dependence upon our actual thoughts and talk of them. Linguistic convention plays an important part in Nāgārjuna's characterization of the Two Truths, and more will be said about it below.

In chapter 15, we are told that "those who see [*svabhāva*]...do not see the truth as taught by the Buddha" (*MMK* 15:6). Grasping at *svabhāva* is one of the causes, according to the Buddhist view, of our incessant wandering in the realms of *saṃsāra*. In attributing more reality to the objects of our experience than they actually possess, as well as to ourselves as experiencing subjects, we tend to crave some things and to resist others. This leads to the cycle of rebirth, as described through the Twelve Links of Dependent Co-origination. The doctrine of emptiness is intended then, as "medicine for those consumed by the fever of *svabhāva*" (Schroeder 2000, 557) and serves as an antidote to our natural inclination towards reification. Practitioners are encouraged to meditate upon the emptiness of whatever it is that attracts or repels them, as well as the emptiness of their self, in order to reduce grasping at *svabhāva*, and the tendency to reify. Perceiving emptiness amounts to perceiving ultimate reality, and leads, eventually, to one's attaining *nirvana*.

The Nonduality of *Saṃsāra* and *Nirvana*

The phrase "meditation on emptiness," can be misleading if it is taken to imply that emptiness is somet*hing* upon which one meditates, and especially if this is regarded as yet another thing that exists with *svabhāva*. In his account of the experience of emptiness, Hopkins describes a yogi meditating on not-self, who "perceives an utter vacuity that is the absence of such an I, and he ascertains the mere elimination of the I that is negated...*with nothing positive in its place*" (Hopkins 1996, 63, 66; italics added). That is, it is important not to reify emptiness itself, which could occur in several ways. In the following, I shall try to set aside a few interpretations that have been rejected by Mādhyamika philosophers.

An unrefined grasp of emptiness might take it to imply that the conventional world of *saṃsāra*, in which things appear to have *svabhāva*, is merely a realm of deception, and thus not real at all. Our everyday beliefs about trees and selves, therefore, might be thought to be entirely false, products of ignorant and deluded minds. Emptiness, upon this misconstrual, is thought to be radically different, and regarded as a true reality lying behind (or beyond) the illusory world of appearances. It is reified to the extent that it is believed to be independent, ultimately existent, and to have a fixed nature. David Burton seems to think that this is the Mādhyamika's position; he reads them as sceptics, and as implying that there is an independent reality "that stands behind, as it were, the fabricated world of experience" (Burton 2004, 107). In fact, it is difficult to give an account of the doctrine of Two Truths and their relation to *saṃsāra* and *nirvana* without employing the appearances/reality dichotomy at times.

Yet, several writers have argued against this reading of Nāgārjuna. Candrakīrti suggests that it is as though, in reply to a shopkeepers' claim that she has nothing to sell, one replied, "very well, please sell me this nothing" (Huntington and Wangchen 2003, 29). The seeds of this critique lie in *MMK* 24, where we read,

> Whatever is dependently co-arisen
> That is explained to be emptiness.
> That, being a dependent designation,
> Is itself the middle way.

> Something that is not dependently arisen,
> Such a thing does not exist.
> Therefore a nonempty thing
> Does not exist (*MMK* 24:18–19; Garfield 1995, 69).

Emptiness then, as this passage explains, is not to be thought of as something that exists independently, for then it would be "nonempty" and a nonempty thing does not exist. Instead, emptiness is identified with "whatever is dependently co-arisen," in other words, with the ordinary phenomena of everyday experience, things that arise and perish. We are reminded of the *Heart Sutra'*s famous declaration that "form is emptiness, and emptiness is form," where 'form' stands for all of the Five Aggregates. That is, things as they appear in our ordinary samsaric experience of the world—our physical bodies and other material objects, our perceptions, feelings, and so forth—all these dependently co-originated things are emptiness, and emptiness is not anything different from them.

Perhaps we can understand what this means, if we consider that we only experience emptiness by relying upon the appearance of these dependently co-originated things, that is, we cannot look directly for emptiness itself, we cannot set out to find *it*. Rather paradoxically, one can only find emptiness by looking for the *svabhāva* of some object, and not finding it. This is, after all, what emptiness means, it is the lack of *svabhāva* of some phenomenon, and therefore, it is always the emptiness of this or that, that we find, and never emptiness as an isolated, independently existent phenomenon. Garfield points out that "understanding the ultimate nature of things is completely dependent upon understanding conventional truth...[it] just is understanding that their conventional nature *is merely conventional*" (1995, 299).

Consequently, this means that, ultimate truth, emptiness, is conventional too, since it cannot be found to exist independently. Therefore, although Nāgārjuna introduces the Two Truths as distinct, he eventually comes to identify them, and in fact, every dualism is ultimately collapsed in the Mahāyāna. Most important among these is the identification of *saṃsāra* and *nirvana*, yet, it is important to understand exactly what is meant by this. Garfield suggests that conventional truth and ultimate truth are the same entity characterized, conceived, or perceived in different ways. Given that *saṃsāra* is our conventional reality, and *nirvana* is reached when we have insight into ultimate truth,

then the very same world is *nirvana* or *saṃsāra*, depending on our perspective (Garfield 1995, 324–328).

This might be appropriate as a *conventional* description; however, it is not accurate from the ultimate perspective. In China, the Ch'eng-Shih school apparently held a similar view, which was derided by Seng Chuan as the "bobbing melon" interpretation (Lai 1980, 146). The idea behind this metaphor is that sometimes the melon is above water, corresponding to ordinary conventional reality. Through the power of meditation, enlightened beings are able, as it were, to 'push the melon below the surface,' and this corresponds to ultimate truth. Yet, this characterization of *nirvana* and *saṃsāra* as alternative perspectives seems unable to do justice to sense of identification expressed in *MMK* 25:20 where we read that there is "not even the slightest difference" between them. To say that they are the same world perceived in different ways seems to set up some sort of distinction; even though they are not conceived of as different worlds, it implies a difference in time, that is, a time before, when the world is perceived as *saṃsāra*, and a time after, when it is perceived as *nirvana*.

The same applies to the Ch'eng-Shih practice of 'departing and entering insight (into emptiness)' (cf. Koseki 1981, 459). It similarly implies that conventional reality and insight into emptiness arise in chronological sequence, and can be distinguished as two separate events, two perceptions arising in succession. One departs, so to speak, from the perception of things as having *svabhāva*, that is, from the ordinary world of *saṃsāra*, and enters a higher level of awareness where one realizes emptiness. Invariably however, if one is unenlightened, the experience fades and samsaric appearances arise again. Therefore, while this account does not posit two separate realms, there is still the suggestion of dualism, in that one perceives either emptiness, or the conventional world. The practice and the idea behind it were severely criticized by Chi-Tsang, who called it "departing one extreme and entering another." Since it involved dualism, it could not be the correct Mādhyamika understanding of the two truths (Koseki 1981, 459).

A more subtle account of the experience of emptiness is to suggest that while an ordinary being sees either conventional truth or else something like ultimate truth,[65] the Buddha sees both contemporaneously. This would appear to be the idea behind Chi-Tsang's notion of concurrent insight, (cf. Koseki 1981) and it also seems to be Garfield's final view, where he claims, "nirvāṇa is only saṃsāra experienced as the Buddha experiences it" (1995, 333). The suggestion, then, is that the Buddha experiences both *nirvana* and *saṃsāra* at the same time, that is, by experiencing the conventional *as* conventional, he experiences the ultimate. Care is required, however, not to construe this dualistically, that is, the claim that the Buddha sees 'both' truths, does not imply that there are two things put together, an ultimate reality added to a conventional one. This account still does not do justice to Mahāyāna nonduality. According to Aaron Koseki "concurrent insight is not a theory of combination or union, but the perception of identity and interdependency" (Koseki 1981, 460), that is, the Buddha experiences only one thing, the relation between conventional and ultimate truth. This is what Nāgārjuna means, perhaps, by stating that emptiness is in fact dependent co-origination.

To sum up, if conventional things, such as trees and selves, are perceived *as* conventional, as arising and perishing in dependence upon each other, this amounts to perceiving their emptiness. It is only when we fail to see conventional things for what they are, and we assume they exist with *svabhāva*, that opposition between the two truths arises, and either one escapes us. Thus, ordinary beings sometimes see conventional truths and take them for ultimate truths, assuming that the things they perceive exist inherently, and they find themselves in *saṃsāra*. Otherwise, they sometimes glimpse something like emptiness, which they take to be a separate realm, perspective, or else, a reality that underlies ordinary experience, and which also exists with *svabhāva*. The Buddha, on the other hand, in perceiving emptiness, sees conventional things in their ultimate nature, that is, he sees them as conventional and empty. He does not perceive anything different from conventional truth, nor does he perceive two things at the same time. Yet, I do not want to assert anything more about what the Buddha perceives as ultimate truth, for reasons that will become apparent.

[65] This is 'something like ultimate truth' or emptiness, because its own emptiness is not perceived. That is, it is conceived to be independent from the conventional, and one does not realize that it is the conventional nature of conventional truth.

The 'No-Thesis' Doctrine: Emptiness as a Soteriological Device

At this point, it might occur to us to ask why Nāgārjuna introduces the distinction between conventional truth and ultimate truth in the first place, if they are not different, and we might similarly wonder why the Buddha distinguishes *nirvana* from *saṃsāra*, if ultimately they are the same. As we shall see, this is due, in part at least, to the limitations of language, that is, to the impossibility of saying anything at all that corresponds precisely to ultimate truth. Emptiness cannot simply be affirmed because there is no way to express the idea without, at first, setting up a dichotomy between the conventional and the ultimate. Yet, Nāgārjuna warns,

> "Empty" should not be asserted.
> "Nonempty" should not be asserted.
> Neither both nor neither should be asserted.
> They are only used nominally (*MMK* 22:11; Garfield 1995, 61).

The central idea here, according to Garfield, is that all assertion can only be conventionally true and this includes, of course, all discourse about the ultimate nature of things (1995, 280). From the ultimate perspective, that is, nothing can be said at all, and this is because language itself seems to encourage reification and the belief in *svabhāva*. By demarcating individual objects and events in the experiential field, and applying names to them, it deceives us into believing that those things exist from their own side, independently of our conceptualization. "The very act of referring to an entity," explains Richard King, "necessitates its self-identity" (King 1994, 671). There is a natural tendency, in other words, to believe in the inherent reality of that which we name, and to assume that something ultimately real corresponds to our words, and matches our concepts. One example of this occurs when the phrase "this is empty" leads us to think of emptiness as something inherently existent. This is why Nāgārjuna claims emptiness should not be affirmed. The passage cited above, therefore, draws attention to the tendency of language to impose *svabhāva* on those aspects of reality carved up through our terms (Streng 1973, 32–33).

Westerhoff has referred to this as the "standard picture" of language which involves, besides the assumption that there is a "ready-made world" that exists

independently of our conceptualization of it, the further assumption that that there is a structural link between our language and the world (2009, 191). The organization of the world, that is, is thought to mirror that of our sentences, and since many of these amount to either an affirmation or else a negation, the standard picture of language tends to reinforce dualism. Almost everything we say can be reduced to a statement about existence or else about nonexistence.[66] In ascribing predicates to subjects, comparing things by identifying or differentiating between them, and making value judgments in positive or negative terms, we assume that the world shares this structure too. Yet, "the reality of the universe" is said to be "beyond this identification and differentiation, indeed beyond verbal description" (Cheng 1991, 27) and the purpose of the doctrine of emptiness, then, "is to eradicate the innate tendency of conceptual thought to construct reified notions of being (*bhāva*) and nonbeing (*abhāva*)" (Huntington and Wangchen 2003, 30).

It is often pointed out that emptiness is a "non-affirming negation," which means that it negates something, *svabhāva*, without affirming anything else. Whenever we negate something, we generally tend to think that the contrary must be true, for instance, if it is not cloudy, one assumes that the sun must be shining. The *catuṣkoṭi* serves precisely the purpose of emphasizing that this is not the case. In fact, all four alternatives, Hopkins explains, "are non-affirming negatives. They do not imply anything positive in their place...[and] do not serve as proofs of another thesis" (1996, 133). In negating all four alternatives, therefore, one has ruled out the possibility of any proposition being true. This is why Nāgārjuna tells us in the *Vigrahavyāvartanī* that he has sought to establish no thesis, and no "proposition" at all (*VV* 29; Bhattacharya *et al* 1998, 113). The best response, from the Madhyamaka perspective, is "the profound silence that 'roars like a lion'" (King 1994, 671).

[66] This would seem to be implied by the Law of the Excluded Middle, yet, a common objection points to vague or "fuzzy" concepts, where the line between being and not being is indeterminate. Clark shows that it is not just heaps and the like, which raise problems for our laws of logic, but indeed, most concepts do. As he puts it "the classes we employ in conversation are irreducibly vague: so even if there is something that 'being A' excludes, we usually have no definite idea what it is" (2008, 29). Yet, he goes on, "To mean at all we must exclude as well as assert: there must be some meaningful statement incompatible with something we meaningfully assert" (2008, 34). This seems to suggest that the use of language is inherently contradictory; its structure seems to imply a clear-cut distinction between a concept and its contrary, yet upon analysis, we find that no concept can be defined in such a way.

Importantly, in order to negate *svabhāva*, we need some familiarity with it, that is, we need to have some experience of what it would be like for the self or for things to exist in that way. Emptiness, that is, cannot be discovered without recourse to the conventional, since it simply *is* the conventional nature of what we had mistakenly supposed to exist with *svabhāva*. Moreover, emptiness cannot be taught without the use of language, which of course, is an important part of the conventional. Therefore, on the one hand, ultimate truth cannot be expressed in words, yet, on the other, it cannot be known without words. This is why most expositions of Nāgārjuna's work start with an account of *svabhāva*, and why Nāgārjuna could not have simply affirmed emptiness directly, but could only explain it through contrasting it with the conventional.

This also explains, perhaps, why there appear to be two very different accounts of what the Buddha taught, as suggested at the start of this chapter. The Mahāyāna, in general, accepts the older Pāli texts as well as most of the Theravādin commentaries on them. Yet, from their perspective, these are regarded as preliminary, expedient teachings for the untrained, as they involve the setting up of a number of dualisms, like happiness and suffering, *saṃsāra* and *nirvana*, the conventional and ultimate, and so forth. For the Mahāyāna these are preliminary stages in the realization of nonduality. As the *Vimalakīrti Sūtra* explains, nonduality involves the collapsing of these dichotomies, leading to a state of non-conceptuality. In Mañjuśrī's words "to know no one teaching, to express nothing, to say nothing, to explain nothing, to announce nothing, to indicate nothing, and to designate nothing—that is the entrance into nonduality" (*VN* 9; Thurman 1976, 73–77). Vimalakīrti's silence, therefore, is regarded as the highest expression of ultimate truth.

Importantly, this is not to suggest that anything we say is always false, or that our statements have no use whatsoever. The point being made is that ultimate truth or emptiness *itself* cannot be expressed in language, and that no statement can be made that will correspond to an ultimate truth. Conventionally, however, there are appropriate and inappropriate statements that can be made that are either true or false depending on whether they correspond with the facts or not. Mark Siderits draws attention to a number of notable excerpts from the canon to show that the Buddha believed that there are (conventionally) true and false statements, such as:

> When in fact there is a next world, one asserts the statement that there is no next world, that would be a false statement (cited in Siderits 1979, 492).

Therefore, it is clearly not the case that the Buddhist teachings render all our truth claims invalid or void; within the conventional realm and for conventional purposes the Buddha can and does distinguish between what is true and what is false.

The suggestion that ultimate truth cannot be expressed, and that Nāgārjuna does not affirm any proposition, might appear to jar with the account given above of emptiness as the negation of *svabhāva*. If the doctrine of emptiness simply affirms the proposition, "things do not have *svabhāva*" ultimate truth appears to be expressible after all. Yet, as we have seen, the negation of *svabhāva*, is not an expression of ultimate truth. It is only one expedient method for reducing the tendency to reify objects, and to grasp at their existence, which constitutes the extreme of eternalism. There is also the extreme of nihilism to avoid, that is, the belief that nothing really exists at all, or else, that everything will ultimately be annihilated. Due to its emphasis on negation, the Madhyamaka has often been interpreted as implying such a position. The "medicine" of emptiness, though, can perform two functions; it negates *svabhāva* when one grasps at existence, and it negates nonexistence if one happens to be a nihilist. Nāgārjuna tells us about this in chapter 18:

> That there is a self has been taught
> And the doctrine of no-self
> By the Buddhas, as well as the
> Doctrine of neither self nor nonself (*MMK* 18:6; Garfield 1995, 49).

In other words, emptiness negates both the inherent existence of the self as well as its inherent nonexistence, and it does the latter, apparently by affirming the self once again. As we shall see in the next section, the Yogācāra adopted this technique, and reaffirmed *svabhāva*. All this suggests, then, that none of the Buddha's claims can ever be taken as ultimate or final, and that he can preach any doctrine whatsoever in order to correct his listeners' mistakes. As one author puts it, the Buddha's method is to disparage anything

that sentient beings cling to and to extol the opposite as supreme (Liu 1993, 660). Emptiness then, is not just the negation of *svabhāva*, but also the negation of anything at all that one might become attached to and construct theories about; in short, it requires the relinquishing of all views. Rather than a theory of metaphysics, it is a soteriological device, aimed at reducing delusion, and the purpose of meditation on emptiness is to push the practitioner into a state of non-attachment, non-craving, and non-grasping.

It emerges, then, that a realized being is not bound to any one theory or idea. Rather, in order to eliminate his hearers' attachment to their views, the Buddha is able to affirm or negate any view whatsoever and bases the decision upon the dispositions and inclinations of his listeners. As one progresses towards ultimate truth, though, all views must be left behind. Perhaps, this is why the Buddha characterizes *nirvana* negatively, as the "unborn, unbecome, unconstructed, unconditioned," and so forth. Once again, these too are non-affirming negations and the Buddha does not imply their opposites, that is, he does not mean to suggest that *nirvana* is permanent or that it exists independently. Similarly, Nāgārjuna's claim that *nirvana* and *saṃsāra* are not different is not meant to imply that they are the same.

In sum, while Mahāyāna Buddhism retains the possibility of making true or false assertions there is a radical reduction in their import. All our beliefs must be relinquished in the quest for enlightenment, and we cannot rely on any fact as established. The aim is to reach a state where one does not abide anywhere, and does not settle down into any one formulation of truth, or grasp at any one particular view. In the *Majjhima Nikāya* too, we read that an enlightened person neither agrees nor disagrees with anyone, but goes along with what is being said in the world, without being attached to it (cited in Gombrich 1996, 16). Therefore, it seems that Madhyamaka and Pāli Buddhism might not differ so radically after all. As suggested by the parable of the raft, all statements and teachings must be set aside once they have served their purpose, and to cling to them would involve attachment to views (*M* i 135). The question with regards to our topic is whether we can reconcile Buddhist environmentalism with the relinquishing of views. Before I tackle that question, however, I would like to examine the second major school of the Mahāyāna, the Yogācāra.

Summary

Mahāyāna philosophy collapses the dualisms that were set out in the Pāli canon, and regards all teachings expressed by the Buddha and his followers as merely conventional truths. Being ineffable, ultimate truth is described only approximately and it is approached precisely through identification of one pole of a dualism with its opposite, or perhaps, through the negation of their difference. Nāgārjuna's method, in fact, is to negate the distinction between ultimate truth and conventional reality, by showing that neither can be thought of as independently existent, unitary entities with a fixed essence. If we conceive of reality this way, he argues, then none of our ordinary concepts and experiences can be made sense of; we cannot account for causality, change, or any sort of relation between things. Nāgārjuna's arguments, that is, are intended to address a common way of misconceiving reality, and to bring about a radically new way of experiencing the world and ourselves, which is what *nirvana* entails.

It was emphasized that this too is not to be reified, and must not be thought of as something fixed, or as entirely different from *saṃsāra*. Instead, it was claimed that emptiness just is seeing the conventional as such. Thus, Nāgārjuna comes to blur the distinction he had introduced between conventional and ultimate truth, and ultimately identifies one with the other. Experiencing ultimate truth involves the 'not finding' of the independence, unity, and fixed nature that we had attributed to reality.

Therefore, it is evident that Nāgārjuna's approach was to negate, and it was pointed out that such negations are different from ordinary negative sentences, which often imply their opposite. Nāgārjuna often emphasized that he advanced no thesis whatsoever, and that he subscribed to no view at all, and this coincides with the Buddha's advice, given in the *Kaccāyanagotta Sutta*, to avoid making claims about either existence or nonexistence. As we shall see in the next section, however, affirmation does have a role to play within Buddhism, which is vital when it comes to avoiding the two extremes and finding the Middle Path.

2 The Yogācārin Re-affirmation of Existence

Throughout its history, the Madhyamaka has often been interpreted nihilistically, as it is thought to render morality, and all goal-oriented activity, ultimately futile. If nothing truly exists, or, if we, along with everything else, will be completely annihilated someday, the argument goes, why should anyone bother to practice the Buddha's teachings? In environmental matters, nihilism includes the question of how to justify concern for nature, given a belief in the inevitable eventual destruction of the planet. More will be said about the moral implications of nihilism in chapter 4, where I shall distinguish separate threads in the argument and draw out their environmental implications. For the purposes of this chapter, nihilism will be defined as a tendency towards belief in nonexistence, which the Buddha denounced in the *Kaccāyanagotta Sutta*. One of its manifestations occurs when the teaching on emptiness, that is, the idea of all things as merely conventionally real, leads one to infer that nothing really exists at all. A second nihilistic view is the belief that dependently co-originated entities will eventually be utterly destroyed.

Nāgārjuna's philosophy was interpreted as nihilism even during his own lifetime, and in several places, he offers a response against such claims.[67] Yet, despite these efforts, his philosophy continues to be labelled nihilistic right up to the present. In a relatively recent account, we read that the Madhyamaka School reaches a "radical nihilist position," as it "denies the true existence, the existence as it appears, of the empirical reality" and suggests that "all beings and things, contingent by their own nature, which constitute the empirical reality, are unreal, non-existent" (Tola and Dragonetti 1995, xvi). By contrast, emptiness, the authors claim, "is the true reality," and it "*has been, is* and *will be* always there independently from our analysis" (Tola and Dragonetti 1995, xxii). It seems hard to reconcile claims such as these with Nāgārjuna's insistence that he defends no position, and they do not tally with his refusal to affirm either existence or emptiness.

[67] For example, *MMK* 24 is an extended argument against nihilism, where Nāgārjuna shows that, contrary to his opponent's charge it is belief in *svabhāva*, and not emptiness, that renders the Buddhist spiritual goal impossible to attain (Garfield 1995, 302–303). In *MMK* 15:7, 11, he refers explicitly to the *Kaccāyanagotta Sutta* and identifies as the error of nihilism, the view that "it existed before but doesn't now" (Garfield 1995, 224).

A similar misunderstanding lies behind some of David Burton's comments. He believes that

> [T]he knowledge-claim that all entities lack *svabhāva* entails nihilism (despite Nāgārjuna's advocacy of the Middle Path between nihilism and eternalism). Expressed very briefly, this is because...if there is nothing unconstructed *out of which* and *by whom/which* conceptually constructed entities can be constructed, then it is impossible that those conceptually constructed entities themselves can exist (Burton 2001, 4; insert and emphases in original).

As I hope to show in the following pages, this kind of view results from a lingering urge to establish the truth of some claim, and from a residual tendency to see things dualistically. On this understanding, an entity must either exist or not exist, and every statement must be true or false. Nāgārjuna, however, was concerned with overturning precisely this view of reality, and reducing the compulsion, in followers of the Buddhist Path, to conceive of reality always in terms of existence and nonexistence.

Nevertheless, Nāgārjuna's choice of terminology and methods do appear to lean towards the "nonexistence' side of the ontological debate, and to this extent, the Madhyamaka lends itself to a nihilistic reading. Emptiness, for instance, seems to be an inherently negative concept. Although Nāgārjuna uses the word in a very specific sense, it has a long history of use with multiple senses within Buddhism, some of which allude to nonexistence. [68] For instance, in the Pāli scripture entitled *Cula Suññatta Sutta*—a central Yogācārin text—emptiness is explained through the example of a forest being empty of villages and people, or again, space that is empty of earth (*M* iii 104–105; Thanissaro). Emptiness, in this context, is defined in terms of what is not there, and therefore, this might explain why later commentators interpreted it as nonexistence (Nagao 1992, 210). The generally negative connotations of emptiness are also amplified by the pervasive use of non-affirming negations. Since we are accustomed to thinking in

[68] Chang explains that the term was originally derived from the word for "swell," and therefore, he interprets emptiness as being "swollen" or "inflated," in the sense that something empty *appears* to be real and substantial, but is actually hollow and empty (Chang 1991, 60). "Swollen" and "inflated," however, also seem to have a sense of something being added, as in something that appears embellished, to be more than it actually is. Emptiness, then, could also mean that something extra appears, and this, of course, would be *svabhāva*.

dualistic terms, it is understandable that Nāgārjuna's negation of existence would be read as an affirmation of nonexistence.

It is often said that the early Yogācārins, with whom this section will deal, were reacting to this tendency towards a nihilistic interpretation of Mahāyāna Buddhist philosophy. They have been read, for instance, as a response to the "danger inherent in the doctrine of emptiness" (Nagao 1992, 214), and their purpose described as that of "correcting [the] misunderstanding of the meaning of śūnyatā...as unqualified nihilism," thereby rendering it "less frightening" (Willis 2002, 17). Unfortunately, this attitude risks downgrading the subtle and intriguing Yogācārin philosophy into mere expedient means, presenting it as an inferior version of the truth for those not ready to hear the highest doctrine, or as a teaching, as it were, for children caught in a burning house. Even more damagingly, it seems to elevate the nihilistic interpretation of the Madhyamaka into ultimate truth, and construes the Yogācāra as a sort of "sugar coating" to hide its unpleasant consequences.

On the other hand, if both schools are taken to represent definitive teachings, there appear to be several discrepancies between them, which are sometimes regarded as controversial (cf., Nagao 1992, 54; King 1994). Over the centuries, Madhyamaka and Yogācāra have tended to be polarized into two radically opposed positions, so that the standard account of the Buddhist Four Tenet System presents them as lying in contrast with each other. In fact, in many monasteries, Tibetan monks learn to refute the latter using standard Mādhyamika argumentation (cf. Hopkins 1996, 374–397).

In this section, I intend to emphasize the similarities, rather than discrepancies between the two schools, and to show how both philosophical systems allude to the same "truth," albeit viewed from different perspectives. This may appear surprising given what was said above. Yet Nāgārjuna, Asaṅga, and Vasubandhu all coincide on one particular point; namely, the ineffability of the highest truth. Any attempt to articulate ultimate reality, therefore, will necessarily miss its target, and this explains the discrepancies between the two schools. Every proposition, being merely conventional, will always appear to endorse either of the extremes, and while the Madhyamaka tends to fall on the side of nonexistence, the Yogācāra re-affirms existence.

I start with an outline of the central Yogācārin doctrine of the ineffability of ultimate truth and explain this with reference to the doctrine of Three Self-Natures (*trisvabhāva*). The generally positive flavour of Yogācārin thought will emerge in their reinstatement of *svabhāva* as ultimate reality, while their agreement with Madhyamaka can be seen in the belief that this cannot be captured with words. While Yogācārin philosophers seem reluctant, at times, to assert either existence or nonexistence, a central, although rather cryptic phrase in Vasubandhu's works talks about the existence, the nonexistence, and finally, the existence of that nonexistence. Therefore, as we also see in the doctrine of the Three Self-Natures, instead of using a dual system, like Nāgārjuna does with his Two Truths, the Yogācāra resort to a triad. I argue that in this way, the Yogācāra is able to bring out the positive aspect of the experience of emptiness; rather than making an ontological claim, the phrase is to be understood as emphasizing an encounter with ultimate reality.

I then turn to a common misinterpretation of the Yogācāra that construes them as idealists; as arguing for the reality of the mind, or for the nonexistence of external objects. I argue that this reading arises through misunderstanding Vasubandhu's arguments to be ontological claims, rather than instructions on how to realize emptiness. Vasubandhu, it has been argued, often sets up provisional constructs, which he then dissolves, and to grasp at these as implying either existence or nonexistence is to misread his intentions altogether. I hope to show that, in general, Mādhyamika and Yogācārin philosophy tend to cohere well, and therefore, if it is true that Nāgārjuna's thought is consistent with the Buddha's original message, as suggested in the previous section, it will also be true of the Yogācāra.

Yogācāra and the Ineffable Self-Nature

In the early Yogācārin texts, we often find the same sort of claims about the ineffability and indescribability of ultimate reality, which we encountered in Mahāyāna *sūtras* as well as in Nāgārjuna's works. For instance, Asaṅga states that reality is "above the categories of thought," that is, it "goes beyond...existence and nonexistence" (*MSA* 9.24; Shastri 1989, 20) and in a phrase that echoes Nāgārjuna, as well as several Pāli texts, we

hear that the Buddha did not ever teach anything (*MSA* 12.2; Shastri 1989, 20). Thus far, then, it appears that Yogācārin philosophers agree with the Madhyamaka that nothing can be said, properly, of ultimate truth, that our statements are always inadequate to express it.

The chapter on "Knowing Reality," in Asaṅga's *Bodhisattvabhūmi*, provides a cogent explanation of this claim. *Dharmas*, that is, the objects of our perception, do not correspond in a direct relation to the names that we use to refer to them; in fact, there is often more than one name for a single phenomenon. Therefore, if words are supposed to express the essential nature of a thing—and here Asaṅga has in mind its *svabhāva*—then that thing would have to have several essential natures. This is clearly impossible, as long as 'nature' is understood in terms of *svabhāva*.[69] Moreover, since there is no universal agreement about what a particular thing ought to be called, this further demonstrates that the relation between a thing's *svabhāva* and its name is merely a contingent one. This leads Asaṅga to conclude that the ultimate nature of things is inexpressible; words simply cannot point to it (Willis 2002, 158–160).

What strikes one immediately, from this account, is that Asaṅga adopts precisely the opposite approach to Nāgārjuna. While the latter appeared to negate *svabhāva* altogether, Asaṅga starts from the premise that it exists, but goes on to claim that it is inexpressible. This, I want to suggest, actually turns out to be saying the same thing. It will be recalled that Nāgārjuna did not categorically deny the existence of *svabhāva*; his final position on the topic is that a wise man does not say that it exists nor that it does not exist (*MMK* 15:10). Later Mādhyamika philosophers argued that when one looks for *svabhāva*, it is not found. Similarly, Asaṅga tells us that *svabhāva* cannot be captured with words, concepts, or thought; according to him, too, *svabhāva* is ineffable. Therefore, although one starts from a provisional negation of *svabhāva*, and the other from an affirmation, in the end, both concur that it cannot be expressed.

Yet, although it cannot be expressed, the key point to Asaṅga's chapter is that *svabhāva*, the true nature of things, is knowable. It seems, then, *svabhāva* takes on a new meaning here, and this corresponds to Candrakīrti's third definition, translated as

[69] The reader will recall that *svabhāva* has the sense of unity and irreducibility, whereas an entity with multiple essential properties can be divided, conceptually, into parts.

"absolute-*svabhāva*." Westerhoff explains that "*svabhāva* is both a mistaken ascription made by beings with deficient cognitive abilities *as well as* something that does not appear to such beings, [that is,] there are two different conceptions of *svabhāva* here" (2009, 41). Another way of putting it is to say that absolute-*svabhāva*, ultimate truth, or the real nature of things is their conventionality, that is, their lack of substance- and essence-*svabhāva*, their emptiness. Again, therefore, we have an example of the deeply nondualistic nature of Mahāyāna thought; it is not that there is a contrast between having and not having *svabhāva*; instead, the two are identified.

This would seem to suggest that absolute-*svabhāva*, the conventional nature of reality (that is, emptiness), must therefore exist. Certain phrases in the texts might be taken to affirm existence, yet, it is dubitable that Asaṅga and his half-brother and commentator Vasubandhu, would have adopted this as their final position, given the numerous declarations about ineffability and going beyond existence and nonexistence. Interpreting Yogācārin thought as an affirmation of existence, I will argue, results from an arbitrary focus on certain passages, which may have been intended as provisional constructs. Before focusing on the way Yogācāra has been misinterpreted, more needs to be said about what it is, exactly, that it affirms.

The Doctrine of *Trisvabhāva*

The starting point, for the Yogācāra then, is to determine how this ultimate, inexpressible reality is known. This is where their central theory, the doctrine of *trisvabhāva*, comes in. Reality, in their view, can be known in three ways; there is a "mentally constructed and therefore imaginary nature" (*parikalpita*), a "dependent, or relative nature" (*paratantra*), and a "perfected or absolute," consummated nature (*pariniṣpanna*). According to Willis, the first of these, the imaginary nature, corresponds to Nāgārjuna's conventional truth (Willis 2002, 18). Similarly, Nagao explains that the imagined is that which is perceived by deluded beings; through our cognitions, discriminations, and intellect, he says, we ascribe concepts, identities, characteristics, and so forth to an originally neutral, phenomenal world (Nagao 1992, 63). This is what gives rise to dualism, where, as Asaṅga puts it, we imagine that "this is this and not that" (cited in Willis 2002, 150). The

parallel between this account of the imagined nature, and that given in the previous section of conventional truth should be evident.

The consummated nature, on the other hand, is the perfected world of enlightened beings, which is purified from this false imagination, so that differentiations and dualisms disappear. Therefore, according to Willis, there is a rough equivalence with emptiness and *nirvana*, and with ultimate truth. In between the imagined and the perfected natures, acting as a bridge, there is the 'other-dependent' nature, which "account[s] for the practical passage to liberation by providing for the transition in awareness from conventional to absolute knowing" (Willis 2002, 18).

In *Trisvabhāvanirdeśa*, Vasubandhu explains the three natures as follows. That which appears, he says, is the other-dependent, *how* it appears to ordinary beings is the imagined, whereas the consummated can be described as the absence of how it appears in that which appears (*TSN* 2–3; Anacker 2002, 291). There is a highly intimate relation between the three natures, then; the consummated *is* the other-dependent freed of the imagined, and Vasubandhu says that realization of the consummated and other-dependent occur together. This follows, of course, from the fact that the former is simply the latter *without* the added element that constitutes the imaginary (Nagao 1992, 71). Therefore, it appears that, *pace* Willis, it is the consummated *together with* the other-dependent that correspond to Nāgārjuna's ultimate truth.

One might wonder why there are three natures in the Yogācārin system, instead of a dual system as in Nāgārjuna's Two Truths. *Prima facie*, there seems to be no point in adding a third nature to refer to the absence of the first in the second. To use an analogy, suppose we represent the other-dependent as a wine glass, and take the wine inside it to stand for the imagined, something that is added to the other-dependent.[70] Do we then need a third concept to refer to the consummated, which in this case, is simply the empty wine glass, that is, the other-dependent, without the imagined? Nāgārjuna's method did not require a third concept as he generally negated the added extra, the imagined *svabhāva*, or, in terms of our metaphor, he simply pointed out that the wine glass is free of wine. He also emphasized that emptiness, the wine glass being free of wine, is empty too, and must not be thought of as an independent reality, or as an ultimately existent

[70] The wine and glass analogy, although not the use I make of it here, is from King 1994.

entity. In the end, as we have seen, Nāgārjuna refused to affirm the existence of emptiness and of *svabhāva* and he refused to affirm their nonexistence too.

Asaṅga and Vasubandhu, instead, introduce a third concept, and, rather surprisingly perhaps, they affirm its existence. We frequently encounter statements about the existence of emptiness in Yogācārin texts, or, to use their terminology, it is said that the consummated nature, the absence of the imagined in the other-dependent, exists. A key phrase that is often cited in this context comes from Asaṅga's *Madhyāntavibhāga* and Vasubandhu's commentary on it:

> [E]verything is taught as neither empty nor non-empty
> Because of [1] its existence, [2] its non-existence, and [3] its existence
> And this is the Middle Path (*MVB* 1.2; Anacker 2005, 212).

The first and third lines are evocative of Nāgārjuna's *MMK*; it is mainly the second that requires clarification. The subject "everything," explains Vasubandhu, is the imagined nature, which (1) exists conventionally, to use Mādhyamika terms, and yet (2) does not exist independently, or with *svabhāva*. In other words, as we are told in *MVB* 3.3,[71] the imagined nature has both an existent and a non-existent quality to it; it exists somehow because dualistic appearances always arise, yet it does not exist as it appears to. That is to say, we *impute* the imagined or constructed nature onto reality, where we see independent objects and perceivers, absolute existents and non-existents, and so forth, and to that extent, they exist. Yet, the duality that we project does not (truly) exist there (Anacker 2005, 212).

So far, all this might sound like a rewording of the Two Truths doctrine. It is the final part of the statement, the third attribute of existence (3), which needs explanation. In fact, the term "existence of nonexistence" is a special feature of, even "the basic principle for," the Yogācārin interpretation of emptiness (Nagao 1992, 54, 57) and it has been commented upon extensively, both in ancient and modern times. Vasubandhu tells us that it refers to the existence of emptiness in the imagined, and of the imagined in emptiness

[71] Anacker translates this verse as "It's non-existent, and it is always; it exists, and yet not really; it's really existent and non-existent: in this way three own-beings [*trisvabhāva*] are assented to" (2005, 232).

(Anacker 2002, 212). Thus, there are two parts to the claim, which I shall be examining individually.

The first existence is that of "emptiness in the imagined." As we have seen, the Yogācāra equates emptiness with nonduality, or as Vasubandhu puts it, with "the non-existence of duality" (*MVB* commentary to 1.2; Anacker 2005, 212). Perhaps one might characterize this as the nonexistence of the way things appear to us, that is, the absence of dualisms of subject and object, 'is' and 'is not,' and so forth. *MVB* 1.2, therefore, suggests that this nonexistence of duality exists. *Prima facie*, this seems to suggest that, as Bhāvaviveka complained, hundreds of years after Vasubandhu, when the Yogācāra speak of 'the existence of emptiness,' what they refer to is the existence of an illusion (cited in King 1994, 676).

Yet, if we compare this verse to Anacker's translation of *TSN* 3, mentioned above, an interesting fact about the precise meaning of "nonexistence" as used in this context is revealed. In this verse, Vasubandhu has defined the consummated nature as the absence of "how it appears" in that which appears (Anacker 2005, 291). The term he uses to refer to this absence is "*avidyamāna*" (Anacker 2005, 464), which Capeller's *Sanskrit-English Dictionary* renders, straightforwardly, as "nonexistence."[72] However, the root of the word, '*vid*,' suggests, "to know," "notice," and "observe," among many other connotations, and is related to the well-known term *avidya*, or "ignorance." '*Vidyamāna*' is the passive present participle form, "being found,"[73] and the prefix '*a-*' renders the term into a negative. Anacker, therefore, translates *avidyamāna* as "the constant state of not being found" (2005, 291).

It would appear then, that as well as "nonexistence" or "absence," the concept that is being alluded to, here, is the positive *experience* of not finding. This differs from the concept of nonexistence in that, while it is hard to imagine what the "existence of nonexistence of duality" could mean, to talk about "the existence of the experience of not finding duality" seems to make more sense. Instead of affirming the existence of an illusion, as Bhāvaviveka supposed Vasubandhu was doing, a more plausible account is that he was emphasizing the experience of duality as illusory, stressing the need for an

[72] Online dictionary at http://webapps.uni-koeln.de/tamil/; Search item= "avidyamAna"
[73] Online dictionary at http://webapps.uni-koeln.de/tamil/; Search item= "vid," "avidya," "vidyamAna"

authentic encounter with emptiness. Once again, rather than an ontological claim about existence or nonexistence, such discourse amounts to a practical instruction for attaining knowledge of the consummated nature, and this would tie in perfectly with the expressed purpose of Yogācāra, which is evidenced by its very name.[74] In other words, what Asaṅga and Vasubandhu are saying, on this reading, is that the consummated nature is not merely the "arithmetical remainder"[75] of the other-dependent minus the added imagined nature that we ascribe to it, the wine glass without the wine, as it were. Rather, it is a familiarity with the deceptive nature of the imagined, or, the "constant state-of-not-being-found" (*avidyamāna*) of dualism, a state that is attained through the practice of yoga. This, of course, is the experience of emptiness.

Perhaps here we have found a significant reason for the introduction of the third nature. By negating *svabhāva* and emptiness, Nāgārjuna was unable to bring out the consummate aspect of ultimate reality; the Yogācārins needed a third nature to refer to the same idea that Candrakīrti alluded to through his description of absolute-*svabhāva* in positive terms. It is here, too, that we see how the Yogācāra was able to protect the Mahāyāna from nihilism. While the following is merely speculative, it seems reasonable to suppose that some Mādhyamika philosophers were guilty of a similar charge that Nāgārjuna had brought against certain Ābhidharmikas, of turning the *Dharma* into a dry philosophy. It often occurred throughout Buddhist history that its followers became attached to certain doctrines and their exposition, and it is likely that ordinary, unrealized scholars could become adept at negating the propositions of others, in the style of Nāgārjuna, and yet have no direct experience of emptiness. Without the experience of the enlightened state, it is probable that nihilism would ensue; as we saw, Mādhyamika reasoning tends to lean towards nonexistence. Thus, perhaps the Yogācārins saw their task as that of placing the emphasis on affirmation once again, and what they affirmed

[74] "Yogācāra" literally means "the practice of yoga," and it is well known that their focus was mainly on meditation and not philosophy (cf. Nagao 1992, 51–52). Anacker interprets Vasubandhu as being mainly "interested in the psychological processes which allow us to reach a state where 'the lack of own-beings [*svabhāva*] in events' is realized...[that is] in showing a path, conceived of in conventional terms, which leads to the abandonment of all mental constructions" (2005, 273). Nāgārjuna, on the other hand, may be characterized, perhaps, as interested in outlining the 'right view,' or rather, in explaining why this could only be the abandonment of all views. Therefore, although the distinction must not be interpreted too rigidly, it might be said that the former leans towards psychology and the latter towards philosophy.

[75] The terms is Nagao's (1992, 59).

was the actual experience of emptiness. In this way, they were able to protect the Mahāyāna doctrines from becoming a mere exercise in demolishing the views of others, and to set out, once more, the path to enlightenment, which starts precisely from the experience of emptiness on the first *bodhisattva*-ground (*bodhisattvabhūmi*).

The second part of the Vasubandhu's statement affirms "the existence of the imagined in emptiness." Thus while the first half constitutes a sort of affirmation of emptiness, the second is an affirmation of conventional appearances. As we have seen, Vasubandhu says that the imagined nature has both an existent and a non-existent aspect, and he explains that this is why things are neither empty nor nonempty (*MVB* 1.2; Anacker 2005, 212). In other words, this is another warning not to grasp at emptiness too tightly, for instance, by disregarding the imagined nature entirely, or conceiving it as absolutely unreal. The imagined too exists, he says, although not in the way it appears. A few writers have seemed to focus too one-sidedly on this affirmation of existence, forgetting that whatever is affirmed is said to exist in emptiness, and therefore not inherently. The next section turns to some of these misunderstandings.

Misinterpretations of the Yogācāra

The Yogācāra is generally construed as a form of idealism; it is believed to amount to a "mind-only" position, according to which only consciousness is ultimately real. Often, the discussion focuses on the question of which type of Western idealism—typically, metaphysical, absolute and epistemic idealism—corresponds most closely with the Yogācāra School (Trivedi 2005, 232). According to Alex Wayman, this is one of several well-established misinterpretations of the Yogācāra, which have been transmitted down generations for centuries (Wayman 1996, 447). There are two sides to this alleged Yogācārin view; the first is that only mind truly exists, the second is that external objects do not exist at all. Therefore, I will consider two separate charges; first, that in affirming existence of mind the Yogācārins are reificationists, and second, that their idealism implies a negation of the existence of external objects.

The basis for this reading of the Yogācāra lies in the *Daśabhūmika Sūtra*, which is held to be one of the basic scriptures of the Mahāyāna, and on which Vasubandhu

wrote an extensive commentary (Wayman 1996, 452–3). The *sūtra* contains an important statement usually rendered as, "This triple-world is mind only."[76] Wayman proposes that this phrase could have inspired a well-known statement by Vasubandhu, which is commonly cited as evidence of his idealism (1996, 452). Anacker translates it as follows:

> All this is perception-only, because of the appearance of non-existent objects, just as there may be the seeing of non-existent nets of hair by someone afflicted with an optical disorder (*VK* 1.1; Anacker, 2005, 161).

Vasubandhu is often taken to be implying, here, that external objects do not exist (at all) and that mind alone, or 'perception-only' truly exists (e.g., Feldman 2005).[77] Trivedi however disagrees; he suggests that, in this line, Vasubandhu is making an epistemological point and not an ontological one. "All this," he argues, does not refer to the external world; rather, it denotes "phenomena as they appear to us" (Trivedi 2005, 236).[78] Therefore, Vasubandhu's point, on this reading, is that unless we are accomplished yogis, we are never able to get out of our ordinary consciousness and the way it represents the world. There is a marked similarity between this interpretation and the philosophy of Kant, who argued that we are never able to go beyond a phenomenon or to reach the "thing-in-itself," the *noumenon*. As Trivedi points out, this does not entail a denial of the existence of objects; in fact, it says nothing at all about whether or not there is an external world. Trivedi cites the auto-commentary in support of this claim, where Vasubandhu explains that, "through determination of perception-only there is entry into selflessness of all events, and not by a denial of their existence" (Trivedi 2005, 236).

In other words, once more Vasubandhu is making a point about *praxis*, explaining that through recognizing *dharmas* for what they are, that is, by understanding phenomena to be "perception-only," we are able to realize their emptiness, or, to use his word, their "selflessness." Put this way, the issue of whether or not external objects exist

[76] Wayman disagrees with this interpretation, and prefers to translate the sentence as "whatever is a derivative of this world is mind only" claiming that the passage refers only to that which is added in ignorance, that is, the imagined nature (2002, 454).
[77] One must bear in mind that, for Buddhists, "perception" includes mental cognition, and therefore, "perception-only" refers to all kinds of conscious experience.
[78] Feldman, on the other hand, takes "all this" to mean "all (external) things in the world" (2005, 530–531).

is completely avoided and in fact, Vasubandhu is actually warning us against taking this approach. This, therefore, coheres with the interpretation given above according to which for the Yogācāra, as for the Madhyamaka, the highest reality is inexpressible, and the enlightened being avoids making claims about existence and nonexistence. The doctrine of "mind-only," or better, "perception-only," on this account, is merely a provisional construct intended as an aid to realizing emptiness. In a further text, Vasubandhu specifies that one must experience the emptiness of "perception-only" too (*TK* 25–27; Anacker 2005, 189).[79]

Vasubandhu explains, in these verses, that to grasp at the idea that "all this is perception-only," (and, one might add here, that this true of most idealists) involves a dualism; on the one hand, there is the object, perception-only, which one claims to perceive, and on the other, there is a subject who perceives the object. Thus, the idea is dissolved, as it is seen to involve another perception, and to be, consequently, "perception-only" (*TK* 27). The relation between this verse, and Nāgārjuna's doctrine on the emptiness of emptiness should be clear; both consist of a warning not to remain attached to any Buddhist doctrine, and a reminder that each one needs to be discarded along the way.

Vasubandhu makes his provisional case for perception-only by likening all experience to dreams, mirages, and other types of illusions. Joel Feldman reads the argument as follows: just as in dreams, we have perceptions of objects that do not exist, similarly, waking experiences are illusory because there, too, the objects do not exist. He objects that such arguments from illusion are "parasitical on veridical experiences" (2005, 532, 535), that is to say, in order to determine an experience as illusory we must have at least one example of something that is real. Feldman claims that Vasubandhu's conclusion, namely, that all experiences are illusory, nullifies his premise; if all experiences are illusory, then we have no experience of anything real, and yet, this is

[79] Anacker translates the passage as follows:

> As long as consciousness is not situated within perception-only
> The residues of a "dual" apprehension will not come to an end.
> And so even with the consciousness: "All this is perception only",
> Because this also involves an apprehension,
> For whatever makes something stop in front of it isn't situated in "this-only" (2005, 188–189).

required in order to recognize an illusory experience (2005, 535–540). Construed this way, of course, the argument is susceptible to the criticism Feldman levels at it.

However, Anacker suggests, in his introduction to this text, that Vasubandhu's alleged negation of the external object is, in actual fact, denying only a *perceptible* object. That is, to reiterate, we have a Kantian-style argument to the effect that we can never perceive the *noumenon*. "Since all experienced realities are equally without a perceptible externally existing reality," he writes, "the difference between illusion and reality falls away" (Anacker 2002, 159). In other words, Vasubandhu is denying the ability to know the external object, and not negating its existence, as Feldman believes. Thus, the argument takes on a completely different sense. What Vasubandhu is saying is that we cannot know whether the objects of our waking experience are any more real than those in our dreams; or again, that there is no way of establishing that the desk I see in front of me is real whereas the falling hairs seen by a person suffering from an ophthalmic disorder are not. In both cases, we cannot actually experience the *noumena*, and therefore, as long as 'real' is taken to mean "corresponding to a truly existent external object," the distinction between illusion and real collapses.

Anacker emphasizes that Vasubandhu sets up several provisional constructs, in the opening lines of his works, only to dissolve them at the end (2002, 2–3). "Perception-only" is not to be taken as an ultimate affirmation of consciousness, but as a device for experiencing emptiness, by reminding ourselves that whatever we perceive is, and can only ever be, our perception. Lest we become attached to "perception-only" Vasubandhu warns us that this idea too, is just that, an idea. Similarly, claiming that our experience is like an illusion is not to be taken as implying the nonexistence of external reality. Ultimately, neither Vasubandhu nor Asaṅga wanted to assert existence or nonexistence, and therefore, the questions of whether they affirm or negate the external world or the mind seem to be completely misplaced. Perhaps to these questions, the brothers might have responded in the same way as the Buddha, that is, by refusing to respond. Our insistence on wanting an answer points to our tendency to view things dualistically, to conceive of reality always in terms of existence and nonexistence. Yet, if ultimately reality is a non-conceptual, nondual, ineffable state, then clearly all questions about what exists and what does not exist are irrelevant.

To conclude, it might be said that, contrary to many interpretations, this reading of Mahāyāna philosophy has not found any irreconcilable differences between the Madhyamaka and Yogācāra. A standard Tibetan position, in this respect, regards Nāgārjuna as exemplifying the highest philosophical understanding, while the Yogācāra is held supreme in terms of instruction for meditation. This makes perfect sense, of course, considering that the Yogācāra's stated purpose is to set out the path, while Nāgārjuna's was to refute wrong views.

Summary

This section has argued that, in general, the Yogācārin philosophy coincides with the Madhyamaka, in that Asaṅga and Vasubandhu, like Nāgārjuna, believed in the inexpressibility of ultimate truth. While the Madhyamaka tends to focus more on a negative concept, the Yogācārins steered towards a positive account of emptiness. Given the belief in inexpressibility, however, neither of these is to be taken as a statement of ultimate truth, and Vasubandhu, just like Nāgārjuna and the Buddha himself, systematically dismantles his own constructions, so that all propositions about existence are eventually turned into ones about neither existence nor nonexistence.

Yogācāra thought starts from the premise that there is an ultimate reality, which is equated with absolute-*svabhāva*, and that this reality can be known. Yet, the fact that there are several words that refer to the same thing suggests that the true nature of all things cannot be captured with words. The true nature, of course, is none other than emptiness, which the Yogācāra explains through the doctrine of the Three Natures. Reality is described, in keeping with Buddhist doctrine, to have an other-dependent nature. It is generally known in its imagined nature, where we impute all sorts of concepts and dualisms onto our experience of the other-dependent nature. Enlightened beings, on the other hand, experience reality in its consummated nature, or as emptiness, which is explained as the other-dependent without the imagined aspect. It was pointed out that the other-dependent and the consummated are intimately related, and that they are realized together.

In bringing in a third nature in addition to the two truths, it was suggested that the Yogācārins are able to insulate Mahāyāna philosophy from nihilism. The other-dependent nature was compared to a wine glass, while the imagined nature was represented by wine, and by introducing, as a third concept, the consummated as the absence of wine, and by claiming that it exists, the Yogācārins provide room for a positive view of emptiness. What they affirm, I argued, is the actual experience of emptiness, the "constant not-finding of duality," and the experience of the imagined, which has both an existent and a non-existent quality to it. Importantly, nowhere is either emptiness or the imagined claimed to exist absolutely.

Finally, I argued against construing the Yogācāra as a form of idealism. I examined two implications of this view, that consciousness exists and that external objects do not exist. I argued that in those passages that are generally believed to support such an interpretation, Vasubandhu is making an epistemological and not an ontological point, and that they are to be regarded as provisional constructs. Thus, when Vasubandhu says "all this is perception only" what he means is that one can never get beyond phenomena to the *noumena,* and that, by meditating on this one realizes emptiness. Even the idea "all this is perception-only," is to be regarded as such—as only an idea—and not as something the meditator must grasp at. Similarly, the analogy between ordinary experience and illusion does not imply that external objects do not exist; Vasubandhu is only denying the possibility of knowing them. Since we can never know the external object, we cannot know whether our waking experience is any more real than our dreams, and the distinction between 'illusory' and 'real' as we generally understand these words collapses.

In short, it would appear that there is a great deal more consistency between the thoughts of Nāgārjuna, Asaṅga, and Vasubandhu than is often claimed. In general, both Mahāyāna schools agree on the ineffability of ultimate truth, the need to relinquish views, and the nonduality of reality. In the rest of this chapter, I will examine the consequences of these Mahāyāna Buddhist doctrines on environmental philosophy, and in particular, on the difficulties for green Buddhism that were identified in chapter 1.

3 Mahāyāna Environmentalism; a Preliminary Discussion

Clearly, we cannot expect to find material in Nāgārjuna and other ancient Buddhist philosophers, which is directly related to environmental issues, since these are a relatively recent Western concern. Nevertheless, the Mahāyāna worldview will have bearing on the possibility of establishing a green Buddhism, to the extent that it either supports or contradicts the assumptions of environmentalism. At the start of this chapter, it was argued that the key difference in the Mahāyāna is its identification of *nirvana* with *saṃsāra*. As we have seen, the Madhyamaka regards these as two different ways of perceiving reality, and yet, even this characterization suggests a modicum of dualism that Nāgārjuna would have rejected. It was said that the Buddha perceives conventional reality—that is, he perceives the samsaric world itself and not anything different from it—and yet he perceives it *as* a conventional reality, and in this way, he perceives its emptiness.

It would seem, then, that the Mahāyāna has the resources to respond to some of the main problems for green Buddhism identified in chapter 1; namely, that Buddhism is world-rejecting, that it attributes negative value to the natural world, and conceives of happiness and well-being in a completely different way from environmentalists. If the ordinary world of *saṃsāra* does not need to be abandoned entirely in order to reach *nirvana*, then it seems clear that these criticisms no longer apply. In order to attain nondual awareness, and to go beyond regarding *nirvana* and *saṃsāra* as opposed to each other, the status of *saṃsāra* as conventional reality needs to be reconsidered. This is because *nirvana* is reached precisely through the conventional world of dependent co-origination, and it is nothing different from that. In Mādhyamika terms, ultimate reality is the conventional nature of the conventional, or, as the Yogācārins would say, it is the same world of the dependent co-origination, seen without the duality we mistakenly attribute to it. Thus, the conventional realm would seem to be indispensable for the realization of the ultimate truth and the *bodhisattva* must experience the emptiness of ordinary phenomena in the world of nature, in order to attain enlightenment. Therefore, it cannot be correct to say that Buddhism is world-rejecting, or that it ascribes a negative value to nature.

For the Mahāyāna, *nirvana* is something that is attained in this very world, and nowhere else, and the duality between ordinary well-being and the highest happiness, suffering and liberation, this-world, and the other-world is dissolved. On this account, the Buddha's likening of physical health and well-being to suffering, and his discourse about seeking a higher form of happiness can be regarded as an example of expedient means, intended to reduce his listeners' attachment to worldly pleasures and as inspiration to seek a more spiritual fulfilment. Within the Mahāyāna, ultimately, there is no opposition between the enlightened state and the ordinary world, and if some texts seem to imply the contrary, this can be taken as a preliminary stage in the process of realizing their nonduality.

The identification between *nirvana* and *saṃsāra* becomes strongly pronounced in those branches of the Mahāyāna that focus on attaining rebirth in a Pure Land. Generally, this is conceived of as a place located "a hundred thousand million Buddha-fields from where we are... [and where] physical and mental pain are unknown" (*Sv* §6–7; Gōmez 2002, 16). Rebirth in a Pure Land is considered ideal for *Dharma* practice, in that eventual enlightenment is guaranteed. Moreover, these lands are described as places of astounding beauty, and perfectly suited to their inhabitants' needs, and, therefore, it becomes part of the *bodhisattva*'s aspiration to create a Pure Land for sentient beings to inhabit.

The introduction of Pure Land discourse is problematic for green Buddhism; it has been pointed out that these are hardly natural landscapes at all, and other than trees and plants made of precious metals and stones, the only living beings inhabiting them are highly evolved *bodhisattvas* and magical birds whose sole purpose is to inspire practitioners with their *Dharma* songs—hardly natural beings, that is (Schmithausen 1991, 16). There are no ecological relations, as ordinary food and other sources of energy are not required, while death, and the suffering it involves, do not exist in these lands either. Therefore, at a first glance, it seems unlikely that the environmentalist will be very impressed by the Pure Land teachings.

To respond to this critique, it seems plausible to suggest, first, that in classical India, when the idea of a Pure Land began to be formed, nature was not threatened in the way that it is today; instead, the reality was quite the reverse, and humans might have felt

a lot safer in cities. Besides, with forests, wilderness, and wild animals constituting a part of their everyday reality, it is unlikely that these things would have featured in their account of a heavenly realm. Indeed, it could be argued that the vision of a world decked in gold, silver, and jewels is comprehensible, given the value-system of the times, and it has often been argued that only when the West attained a degree of affluence did nature and its inhabitants begin to be valued intrinsically (e.g., Hollander 2003, 2). Therefore, there is no need to be too disturbed by the fact that there are no animals or other natural beings in traditional accounts of Sukhāvatī, the Land of Bliss; instead, these can be regarded as merely conventional descriptions of a reality that, strictly speaking, cannot be put into words, and today, we might feel compelled to re-describe the Pure Land in a more eco-friendly way.

Second, perhaps these aspects of the teachings might be regarded as expedient too, designed for those unable, for the time being, to see the inseparability of *saṃsāra* and *nirvana*. It must be noted that rebirth in the Pure Land is not the same thing as attaining *nirvana*, but constitutes, as it were, a sort of stepping stone to enlightenment. The portrayal of the Pure Land as a fabulous place—without the ordinary features of a landscape that make life difficult, such as steep mountain paths, rough terrain, and sheer cliffs, and without dangerous animals that threaten lives and livelihood—all these may be clever devices intended to encourage practitioners to aspire to attain that state. Perhaps they are designed for those of us who grasp at the idea of suffering as something real and truly existent in the world. This sort of belief renders us unable to see that, as expressed in the Zen tradition, "This very place is the lotus land [i.e., the Pure Land], this very body the Buddha" (Hakuin Zenji; cited in Kornfield 1996, 200).

Indeed, although in the *sūtras*, the Pure Lands are said to lie at an inconceivable distance away, this has not prevented Buddhist peoples from identifying them with places on this very earth. As is well-known, there are several legends that place Shambhala in the Himalayas, while Adam's Peak in Sri Lanka has been identified with the Copper-Coloured Mountain (Tib. *Zangdok Palri*), the Pure Land of Padmasambhava.[80] There are several mountains on the Indian subcontinent named "Potala" after Avalokiteśvara's Pure

[80] Others believe the Copper Coloured Mountain is in present day Afghanistan.

Land, as well as various buildings and other structures. Most prominent of these, of course, is the Potala Palace in Lhasa, Tibet, which used to be the Dalai Lama's residence.

The introduction of Pure Land discourse in Mahāyāna Buddhism, therefore, by bringing the soteriological goal of enlightenment back down to this earth, re-establishes a concern with place and environment. It is no longer the meditator sitting alone under a tree, or on a cushion, that forms the 'unit of *nirvana*,' so to speak; rather the emphasis is on universal enlightenment, and the aim is to create a place where this purpose can be fulfilled. This implies that, according to the Pure Land teachings, at least, the Buddhist soteriological goal *requires* that the environment be transformed into a better place. The notion of a Pure Land can be reinterpreted in terms of ecological health, or biological diversity; instead of imaginary birds reciting the *sūtras*, it can be emphasized how real natural beings embody the *Dharma*, by displaying impermanence, dependent co-origination, and so forth. In short, the Mahāyāna, as a nondualistic interpretation of the Buddha's teachings, reduces the weight of the charge that Buddhism is world-denying, or that it seeks to promote something very different from that which environmentalists want.

Yet, a further problem arises for green Buddhism, which was briefly mentioned in chapter 1. This concerns the contradiction in the attempt to reconcile any determinate system of values, principles, and beliefs—such as those that fall under the term 'environmentalism'—with the Mahāyāna practitioner's stated purpose of renouncing all views. Supposing our practitioner was concerned about the effects of climate change on the planet, the relentless rate of species extinction, deforestation, the food and water crises, and so forth, an important question arises regarding the way the doctrine of emptiness affects such concepts and beliefs. It has been argued that emptiness, or ultimate truth consists of a middle path between existence and nonexistence, and therefore, the next task will be to examine how this might be construed, in relation to such matters. It will be argued, in the following chapters, that in environmentalism too, there is the extreme of eternalism, where one grasps at a belief in the existence of natural beings with *svabhāva*, as well as an extreme of nihilism, where one infers absolute nonexistence, and draws conclusions from this about the meaninglessness of our lives and activity, including their effect on the environment.

Certainly, if there is grasping at environmental beliefs, for instance, if our green Buddhist considers them to be ultimately true, perhaps conceiving of the biosphere, ecosystems, species, and the like in terms of *svabhāva*, then clearly, we have an example of wrong view. Ecology is replete with dualisms, such as, stability and disturbance, exotic species and natives, health and disease, and to the extent that our green Buddhist perceives the environment in terms of such oppositions, it can be said that she perceives the imagined nature This would include, for example, grasping at the truth of the claim that an invasion of exotic palm weevils is decimating an indigenous plant. It also includes, however, the claim that there is no such thing as an exotic species, or, since the palm trees would have died anyway, the invasion does not matter. Perhaps enlightenment requires the delicate balancing act between knowing that these concepts are imputed, and yet knowing that the imagined also exists in a way. One must not be swayed by the belief in existence or by the belief in nonexistence, and most importantly, one must be prepared to relinquish any view that one might have.

As I hope has emerged from the section on Yogācāra, as well as relinquishing views, there needs to be the experience of emptiness, otherwise, we risk falling into nihilism. In the final chapter, I will attempt to re-describe a green Buddhism based on this experience. I will suggest that by realizing the emptiness of natural beings, we protect the possibility of future evolution, and safeguard the persistence of life on this planet. That is, the absolute-*svabhāva* of natural beings—and here, I include collective entities, such as an ecosystem, or the biosphere as a whole—their lack of essence- and substance-*svabhāva*, as Nāgārjuna pointed out, is precisely what enables them (and us) to change and to respond to changes in the environment. This ability is literally vital; it is what life is all about. It is only our delusion that makes us view things rigidly, and to want to pin things down as ‘this’ or ‘that.’ Therefore, if we follow the Yogācārin advice to *realize* emptiness, as well as reducing our attachment and aversion, which, arguably, are among the main causes of environmental degradation, we also permit nature to flourish, and to reveal its true nature. This, I would like to suggest, is one way in which the notion of a Pure Land can be re-described for our times.

Chapter 3: Oneness with Nature

We saw, in Chapter 1, that early Buddhism is not easily reconciled with environmental matters; the concepts required, particularly the idea of nature as intrinsically and objectively valuable, do not appear unequivocally in the canon. The Mahāyāna, with its nondualistic stance towards *nirvana* and *saṃsāra*, seems to imply better prospects for green Buddhism. Indeed, from the extent of literature on the subject, it would appear that the ecological soundness of the Mahāyāna teachings, as well as their applicability to contemporary environmental problems, is entirely unproblematic. In the following chapters, I will challenge this idea by appraising various concepts in Mahāyāna green Buddhism from the perspective of Mādhyamika and Yogācārin thought.

I will begin with the strand of eco-spiritualism that focuses on holism, referred to in the Introduction. This involves the belief that an appropriate attitude and conduct towards the environment—sometimes labelled 'deep ecology'—depends on having an awareness of the so-called 'oneness' of nature, or of the interrelatedness of all things. It is also believed that these realizations coincide with the goal of certain Mahāyāna teachings and practices. I shall attempt to disentangle the useful threads in this discussion from others that could be either a source or a result of the misconstrual of Buddhist doctrines. My general claim is that if oneness, or interrelatedness, is understood as a metaphysical theory, then it has very little to do with the Buddha's message; whereas, if it is the *felt* experience of oneness as identification with all beings with which deep ecology is concerned, then there are gainful parallels to be drawn. Particularly, it will emerge that the deep ecologist's notion of identification corresponds closely to the Mahāyāna understanding of love and compassion, and that this can provide a partial response to some of the difficulties that we encountered in chapter 1, regarding the possibility of basing an environmental ethic upon the virtue of solicitude.

1 Oneness as a Metaphysical View

The 'oneness of nature' is a popular idea in eco-spirituality, believed to figure predominantly in Eastern religions and to have been all but forgotten in the West. The idea of oneness is transmitted through the well-known image of Indra's Net, which is cited in many places as evidence of the convergence between the Buddhist view of reality and that of deep ecology.[81] Portraying an infinite net with a jewel at each node, the metaphor depicts the universe as a web of interrelated phenomena, where every being and every aspect of reality reflects—or even contains—all others within it. Thus, the feeling of separateness between oneself and the world, and between one being and another, is just an illusion, and to use an oft-repeated cliché, in reality 'all is one.'

Whether this idea appears in academic or in popular contexts, there is often an appeal to a 'new paradigm' in twentieth-century science, in particular, physics, which, is believed to reveal a similar idea of reality as interconnected, and therefore, to run parallel to the wisdom of ancient spiritual traditions. One of the earliest 'parallelist' works, Fritjof Capra's *The Tao of Physics*, draws on the intuitions of physicists like Heisenberg and Bohr to suggest that "the basic oneness of the universe is not only the central characteristic of mystical experience, but is also one of the most important revelations of modern physics" (Capra 1982, 142). This idea has cropped up repeatedly in environmentalism, in Buddhist studies, and in popular science, and there has been copious material published on these alleged parallels, by scholars in all these fields.[82]

In this section, I shall explore these alleged similarities, paying particular attention to three areas where there is said to be convergence. Both in Mahāyāna Buddhism and in deep ecology, it is held that there is first, an emphasis on oneness, and on wholes over parts, second, there is priority given to relations rather than things, and finally, there is the belief in the truth of assertions such as "everything is related to everything," or even that "humans are one with nature." In all three premises, however, there are major discrepancies with Buddhism, which, I shall argue, can lead to a deep misconstrual of the Mahāyāna if overlooked.

[81] For example; Barnhill 2001; Halifax 1990; Macy 1990; Zimmerman 2006.
[82] For example; Capra 1982; Mansfield 2008; Ricard and Thuan 2001; Wallace 2003;

The first inconsistency, I shall claim, is that in some places, deep ecology is likened to a form of eternalism, which is mistakenly thought to be a Buddhist doctrine. This occurs whenever there is reification of concepts like 'oneness,' 'wholes' or even 'relations.' More importantly though, as we saw in chapter 2, Mahāyāna Buddhist philosophers concur in rejecting or negating all views, and in attributing ineffability to ultimate truth. Therefore, I shall argue that insofar as the hypotheses of the new paradigm or the convictions of deep ecologists are asserted as ultimate truths, or developed into metaphysical theories, and especially if there is attachment to their veracity, then there is an important divergence from Mahāyāna Buddhism and its aims. It will be recalled that the Buddhist teachings were never meant to be taken as a theory about the world.

Thus, insofar as it purports to be a truer or more accurate scientific theory, the new paradigm appears to be at odds with Mahāyāna doctrine. Yet at other times, deep ecology is presented simply as an alternative perspective that one might adopt, and which brings deep and highly advantageous implications for the environment. In the second section of this chapter, I will delve into the affinities between the deep ecologists' notion of identification, and the Buddhist virtues of love and compassion. For now, however, I wish to emphasize the importance of not grasping at the truth of such views as the ubiquitous cliché "all is one."

Buddhism, Deep Ecology, and the New Physics: the Parallels

The founder and main proponent of Deep Ecology, Arne Naess, is credited with having written works of "paradigm-shifting proportions," where environmentalism is presented as a "deep-seated respect or even veneration" for nature, rather than merely self-centred concern for its instrumental value (Weber 1999, 350). Naess drew attention to "the feeling(s) of oneness that we can learn to feel in/with the environment" (Naess 2000, 20) and Capra characterized this feeling "as a sense of belonging, of connectedness to the cosmos as a whole." At times there is the suggestion, as Michael Zimmerman points out, that humans should regard themselves as mere parts of the living Earth, analogous to the organs of a living being, and far less valuable than the biosphere as a whole, sometimes referred to as Gaia (Zimmerman 2004a, 5). Often this new vision is said to be "spiritual

in its deepest essence" (Capra 1996, 7) and several writers have compared it to one or another of the ancient Eastern wisdom traditions or of hunter-gatherer societies.[83] Other writers draw a parallel with specifically Buddhist doctrines; a recent paper refers to Naess's work to show that there is an "intimate relationship" between Buddhism and deep ecology, present since the latter's very inception (Khisty 2006, 300).

As suggested above, there are three places where the convergences between Buddhism and deep ecology are said to occur. These are the focus on oneness and on wholes rather than on parts, the emphasis on relations between things as opposed to the things themselves, and the claim that through adopting this perspective, one attains a truer or more accurate description of reality. In what follows, I shall flesh out these claims individually and examine their implications. Then, I shall offer a critical assessment of each one.

1) Oneness and holism

In the early twentieth century, it seems that some physicists were rather taken in by the philosophical implications that were emerging from recent discoveries in their field. Einstein, for instance, spoke of the "delusion of separateness," and the need to "embrace all living creatures in the whole of nature and its beauty" (cited in Maxwell 2003, 259). Similarly, David Bohm wrote about the "unbroken wholeness," and Wheeler of the "participatory nature" of the universe (cited in Capra 1982, 149, 153). It is a debatable matter whether this new worldview was a direct implication of the discoveries of quantum mechanics, or whether the interest in Eastern religions and philosophies of some of these physicists—such as Heisenberg or Schrödinger—might have caused them to interpret the data the way they did. Whatever the case, it is certainly a fact that the last century saw the emergence of an alternative framework to classical Newtonian physics.

The old and rejected model is that of a mechanistic reality, where the world is viewed as "a plurality of discrete individual substances" (Matthews 1994, 9), that is, as

[83] Capra 1982, Maxwell 2003, Khisty 2006, and Wilber 1995 draw parallels between the new paradigm and 'spirituality' in general; while Scerri 1989 provides a critical review of this theme. Halifax 1990 deals specifically with shamanism, and Callicott 1989 with forms of spirituality found in hunter-gatherer societies. Finally, Wallace 2003, Mansfield 2008, and Ricard and Thuan 2001 are specifically about Buddhism and delve quite deeply into physics too.

single units that are held to be logically, if not actually independent. The traditional approach to science proceeds by dissecting, analysing, or otherwise breaking up the subject into parts, and the smallest of these—previously supposed to be atoms—are conceived as the fundamental units of reality. This approach is charged with leading to a fragmented worldview, where matter and mind are fundamentally divided and humans are believed to be discontinuous from the rest of nature. It is argued that, with the rise of science, during the Enlightenment, these beliefs gave humans the idea that they had "ultimate control and dominion over machine-like nature" (Oppermann 2003, 8) and a prevalent view in modern times, in fact, sees humanity as pitted against the natural world. In the explicit words of Bacon, man was to "dominate nature," "subdue her," and "make her a slave to his needs" (cited in Merchant 1998).

Those who subscribe to the new paradigm suggest that a holistic worldview is a more appropriate or accurate description of reality. On this account, any object is held to be more than the sum of its parts, as it has important emergent properties that cannot be reduced to the properties of its parts. A classic example posits consciousness as an emergent property of life, which can never be comprehended through dissecting a living being, simply because it is a property that emerges from the particular structure of and relations between that being's parts, such as the brain, spinal cord, and so on. The new paradigm, therefore, studies its subject, not in isolation, and not by breaking it up, but by looking at it in the context of its relations with other things, and by examining the relations of its parts to each other and to the whole.

A recent parallelist article, a review of the similarities between Buddhism, science, and ecology, claims that these "converge on a view of the universe that is fundamentally holistic." In this view, it goes on, "the essential nature of the universe is unbroken wholeness" (Maxwell 2003, 262). The author, Thomas Maxwell, relates this 'wholeness' to deep ecology's vision of the cosmos, to various spiritual and philosophical notions of 'the One' and finally, he even equates it to Nāgārjuna's doctrine of emptiness (Maxwell 2003, 260–267). Maxwell is not alone in drawing such connections. Another parallelist thinker, Brian Edward Brown claims that "an adequate environmental ethic must be grounded upon a cosmology capable of rendering the universe as a coherent

whole," and he proposes the notion of the "Cosmic Body of the Buddha"[84]—which, he says, is coextensive with the universe—to refer to this one holistic reality (Brown 2004, 890–893).

Another recent paper claims, "[The] Buddhist cosmological vision of interdependent causality, or 'Interbeing,' has developed into a robust ontological unity" (Khisty 2006, 299). The concept of 'interbeing' is borrowed from Thich Nhat Hanh, a Vietnamese Monk who also likes to draw attention to the deep ecological implications of Buddhism. To quote just a few extracts from his works:

> Our ecology should be a deep ecology—not only deep but universal...Life is one...When we look at a flower, for example, we may think it is different from "nonflower" things. But when we look more deeply we see that everything in the cosmos is in that flower. Without all of the nonflower elements—sunshine, clouds, earth, minerals, heat, rivers and consciousness—a flower cannot be (Nhat Hanh 2000, 86–87).

2) The emphasis on relations

The portrayal of the entire cosmos being contained within a flower brings us to the second issue on which Buddhism and deep ecology are said to converge; namely the priority of relations over things. Nhat Hanh's word 'interbeing' is his rendering of the Buddhist doctrine of interrelatedness—*pratītyasamutpāda*—a concept that has often been singled out as a source for Mahāyāna Buddhist environmentalism.[85] The deep ecologist's view of the world, according to Naess, is that of a "relational total field," in which beings are "knots in the biospherical net of intrinsic relations" (cited in Srivastava 2008, 144). There have been numerous references, in the literature of green Buddhism, to the resonances between this view and the image of the Jewelled Net of Indra (Srivastava 2008, 244; Zimmerman 2006, 307).

The idea here is that 'things'—individuals, or substances—are secondary to relations, and any concreteness they might appear to have is merely an illusion. Callicott elaborates upon the concept of a "relational total field," and explains that, according to

[84] This is his rendering of the Sanskrit term *dharmakaya.*
[85] For example, Khisty 2006; Srivastava 2008; Zimmerman 2006.

this view, organisms are merely "moments in a network of... relationships, knots in a web of life." So-called objects or entities, including individual organisms are, therefore, "patterns, perturbations, or configurations of energy." Moreover, on this account of reality, "the conception of one thing... necessarily involves the conception of others and so on until the entire system is implicated" (Callicott 1989, 109–110). Callicott goes on to quote the Buddhist poet, Gary Snyder:

> Eating the living germs of grasses
> Eating the ova of large birds...
> Drawing on life of living
> *clustered points of light spun*
> *out of space*
> hidden in the grape.

Deep ecologists and parallelists appear, at times, to use the word 'relations' in different ways, and in fact, in some places it might seem that several meanings are conflated. Occasionally, there are references to causal relations, as the phrase "knots in a web of life" suggests. Usually however, 'relations' is used in the specific sense of 'internal relations,' which they take to mean that the connections between things form those very things, as well as forming the identity of the whole that they make up. Maxwell, for instance, explains that the whole universe is reflected in the "fundamental internal nature" of each of its parts, and by the same token, each part plays a role in determining the fundamental nature of all other parts as well as that of the universe as a whole (Maxwell 2003, 262). Therefore, it appears that Maxwell has a concept of internal relations in mind. In Snyder's example, too, the grape is what it is, because of its relations with grasses, birds and so forth, all of which are said to be, somehow, *in* the grape. Similarly, Nhat Hanh's flower "cannot be" without sunshine, clouds, earth, minerals and the entire cosmos. Again, it is internal relations that are involved here and not merely external or contingent ones.

It will be recalled that the Mahāyāna doctrine of emptiness, which is often used interchangeably with dependent co-origination, is the idea that nothing exists independently, or with a fixed essence. Naess expresses this through the Sanskrit phrase

"*sarvam dharman nihsvabhavam*"[86] (2005, 121) which, although not referenced in Naess's paper, could easily be from Nāgārjuna's *MMK*. Nothing exists with *svabhāva*, or, as a recent formulation puts it, "in truth...nothing exists which we may call a solid, stable and unchanging 'thing'" (Srivastava 2008, 251). Brown too alludes to this view; "nothing exists," he claims, "in and of itself" (2004, 887) and both these deep ecologists specifically relate this idea to the Buddhist notions of *śūnyatā* and *pratītyasamutpāda*.

One of the implications of emptiness, as James has pointed out, is that all things are only internally related (2004, 91). Some parallelists maintain that contemporary physics establishes this as true, and that various experiments have shown that nothing exists with *svabhāva*, and that all things are internally related.[87] The EPR experiments, for instance, have shown that rather than being the smallest independent units, subatomic particles are intricately and inescapably bound together; interacting with each other instantaneously—that is, at a speed greater than that of light—without any information passing between them, even when placed at an infinite distance apart. Thus, it is said that particles exist the way they do because of their relationship with other particles, and several authors have noted the resemblance of this to the doctrine of dependent-arising (Mansfield 2008, 73–74; Ames 2003, 297). Similarly, instead of being separate substances, matter and mind have been shown to be intimately related to each other, to the extent that the kind of experiments a scientist conducts and the questions she asks will determine the results she finds, say, whether a 'wave/particle' will display wave-like or particle-like properties. Some philosophers of science have concluded that light and matter—that is, everything in the physical world—"have no intrinsic properties"; rather, the way they appear is now known to depend upon the observer. This has been compared to Yogācāra doctrine (c.f., Ricard and Thuan 2001, 86), that is, to their claim that we can never go beyond our experience of things, and that the world is "perception-only." There is no longer a clear divide between a subject and the object he studies, as was believed in classical physics, rather, the new paradigm suggests that "we can never speak about nature without, at the same time, speaking about ourselves" (Capra 1982, 79).

[86] Naess translates as "Every element is non-separate-self-existent" (1992, 121). Garfield might put it as, "Everything has no essence."
[87] See Mansfield 2008, 68-70; Ricard and Thuan 2001, 116.

Deep ecology recognizes the interrelatedness of all things and bases its environmental ethic upon this conception. One of the inferences that can be made from this view, as we have seen, is that humans are not inherently different from the rest of nature, but merely 'one strand in the web of life.' This would suggest that all forms of life are equally valuable, as they each play a vital role in determining the other's nature and that of the biosphere as a whole, and therefore deep ecology emerges as bio-centric or even eco-centric, rather than anthropocentric. Moreover, the deep ecologist's recognition of the intricate connections between all beings leads her to be more cautious in her dealings with nature, knowing that any action she takes will have consequences well beyond those she can predict. The implications of interconnectedness for environmental ethics will be examined in more detail below and in section 2 of this chapter.

3) The veracity of the new paradigm

The intentions of parallelist writers in bringing together such disparate traditions are not always easy to gauge. From the very start of their introduction to the West, Buddhist doctrines have been presented as precursors to modern scientific knowledge, as though the Buddha, in his meditations, reached an understanding of the world that anticipated Copernicus, Newton, and Darwin (McMahan 2004, 898). Fortunately, this naive idea has become peripheral today and most parallelist authors claim to be merely juxtaposing the two disciplines out of purely academic interest, simply 'exploring interesting connections'(Ricard and Thuan 2001, 2; Wallace 2003, 26). The strongest parallelist claim made today is that Buddhist philosophy can serve as a heuristic tool for filling in the gaps in our knowledge left by modern physics, or even as an aid for overturning our innate biases and preconceptions. For instance, it has been suggested that the insubstantial and relative vision of reality implied by the new physics—where particles of matter lack solidity and the world appears to be a product of the mind—can bring about feelings of "distress about losing ground." Buddhist meditation can do a lot to assuage these fears so that 'losing ground' is no longer problematic, but can even promote enlightenment (Bitbol 2003, 339).

Sometimes, there is the suggestion that the scientific veracity of the new paradigm is evidence of the accuracy of these supposedly Buddhist ideas, specifically the assertions about oneness and interrelatedness. I have already cited some authors on the 'reality' or 'facticity' of the new holistic paradigm. It appears that these writers seem to believe that the tenets of deep ecology and of the new physics are final and irrevocable truths, in Buddhist terms 'ultimate' realities. Weber, for instance, claims, "In the last analysis, all living beings are one" (1999, 353) and similarly, although Khisty acknowledges that, in the Mahāyāna, there is "no definite understanding of reality," that does not prevent him from claiming, further on, that the "Buddhist cosmological vision" is one of "robust ontological unity" (2006, 297, 299).

Often, parallelist writers explicitly deny that their purpose is to use science to prove the truth of Buddhist doctrines. Vic Mansfield, for instance, avoided doing so because he worried about what would happen later on when scientific knowledge changed, as it inevitably would someday. Would "the foundations of Buddhism tremble at every scientific revolution?" he asks (Mansfield 2008, 6, 66; 2003, 316). Despite this, it is hard to avoid reading, at times, some deeper motivation into his work. For instance, he often claims that Buddhism and science point to the same "true nature of reality" (2008, 13) or share an interest in the same "objective phenomena of nature" (2008, 17). In another work, the authors suggest that "science too [i.e. like Buddhism] has discovered that reality is nonseparable, or interdependent" (Ricard and Thuan 2001, 63; insert mine) and another paper suggests that both Buddhism and quantum mechanics "describe reality as a participatory universe." The author concludes by expressing surprise at the fact that, despite their diverse starting points, methods, and goals, they have produced some very similar ideas (Ames 2003, 301–302).

It would appear, then, that many parallelist thinkers seem to believe in the final and incontrovertible truth of their beliefs about interdependence, oneness and holism—very rarely is there recognition that in Buddhism, hypotheses about the world can never be more than conventional truths.[88] It will be recalled from the previous chapter that Mahāyāna Buddhism accepts no statement or view as ultimately true, and this, one

[88] Zimmerman is an exception to this, as shown by his assertion that "conceiving nature as a...totality...has some validity *as long as one makes no absolute ontological claims about it*" (2006, 315; italics mine).

assumes, would apply equally to statements about oneness or interrelatedness. In Nāgārjuna's words, neither existence, nor nonexistence can be affirmed, and not even statements about emptiness are to be asserted (*MMK* 15.10; 22.11). That is to say, any proposition we might make—such as "the universe is one" or "the cosmos is in the flower"—could never be ultimately true. Therefore, although we can speak of interdependence and oneness conventionally, and such statements *may* be useful for attaining ultimate truth, in the end, they are not to be taken for truths themselves; rather, they are discarded once they have served their purpose. This suggests that to the extent that parallelists are wedded to their views about oneness or interrelatedness and insofar as statements about these are taken to be final views about the way the world *really* is, there is deep incongruity with Mahāyāna Buddhism. The next part of this chapter will delve into these discrepancies.

Divergences between Buddhism and the New Paradigm

The new paradigm, as expressed in deep ecology and in physics, diverges from Mahāyāna Buddhist doctrine in two ways. First, it includes various beliefs that are clearly different from those that Buddhist philosophers held, but which are nevertheless sometimes attributed to those philosophers. As we shall see, the way that oneness or internal relations are sometimes described is incompatible with Mahāyāna philosophy and has more to do with eternalistic philosophies such as the Vedanta, or theism. Second, as mentioned above, parallelists tend to believe in their theories as absolute truths, whereas Buddhism ultimately rejects or negates all theories and views. In the following, I shall examine in detail these divergences and their implications for green Buddhism.

1) Oneness and the extreme of eternalism

Maxwell, as we have seen, relates Nāgārjuna's emptiness to the notion of the "essential nature of the universe" as "unbroken wholeness" and he identifies this with the neo-

Platonic "One" and with *Brahman, Allah*, and the *Tao*[89] (Maxwell 2003, 267). Similarly, Capra lumps Buddhism in with "all Eastern traditions," which, he says, "constantly refer to a basic oneness," an "ultimate, indivisible reality that manifests in all things"[90] (Capra 1982, 141–142). All this immediately jars with what was said in the previous chapter about Mahāyāna philosophy, especially the Madhyamaka School. Although some scholars have suggested that *experientially* the Vedic *Atman* and the Buddhist *śūnyatā* might amount to the same thing—in David Loy's words, they are "phenomenologically equivalent" (Loy 1986, 14)—philosophically, they are very different notions. When philosophers talk about the 'One' they generally have in mind an absolute, immutable Being; something that is more real than the everyday world of fluctuating appearances, and something which is often equated with a Divine Being. This is Matthews's understanding of the whole, which she describes as "the only thing that is really real" (1994, 68). Naess, too suggests that oneness actually exists and is "as real as any quantifiable environment" (2000, 20). Obviously, these concepts are modelled upon eternalistic or theistic notions—such as Spinoza's 'Nature,' or the Upanishadic *Brahman* or *Atman*—notions that the Buddha's Middle Path was intended to negate. As Simon James points out, "talk of self-existent Absolutes evinces a failure fully to appreciate the universality of the teaching of emptiness" (James 2007, 454).

The classical philosophers of Buddhism, such as Nāgārjuna, or Vasubandhu, seem to make no references to anything that is translated as "oneness," and indeed, few examples appear in the *sūtras* too.[91] A characteristic text that is appealed to in support of holistic theories is the *Avataṁsaka sūtra*, and in fact, this scripture and the Chinese

[89] It appears that Maxwell is basing his arguments on Coomaraswamy's contention that "Buddha...echoes the Hindu teaching that Atman, fully unveiled, is none other than Brahman, the Source of all existence" (cited in Maxwell 2003, 269). The unorthodoxy of this statement is evident and needs no further comment here.

[90] Capra claims that the Buddhist notion of Oneness, which in his view "is also called *Dharmakaya*," is similar to the Hindu notion of *Brahman* (Capra 1982, 110, 141). *Dharmakaya* is a concept that emerged much later in the history of Indian philosophy and is, in any case, usually rendered as "body of truth" rather than "Body of Being" as Capra has it (1982, 110). Moreover, the only way 'it' manifests in all things, as Capra says it does (1982, 141) is through the emptiness of all things. The word 'body' is only used metaphorically, and therefore, to talk of "it" as something that is "spiritual and material at the same time" is highly misleading, as it tends to reify emptiness. Sadly, Capra's whole approach is rather flawed, as he generalizes Eastern traditions as though they were all perfectly commensurate. Fortunately, western scholarship on Buddhism has increased in rigor since Capra's times, and is able to differentiate between the subtle nuances of diverse Buddhist schools.

[91] Capra cites a single verse from Ashvaghosha to support his case for Buddhism.

school of Buddhism that is based on it and that shares its name, that is, the Hua Yen, are the sources of certain images, such as the Jewelled Net of Indra, or Fa Tsang's analogous concept of a Hall of Mirrors, that are so often cited in support of parallelist's theories about oneness. Yet a pre-eminent contemporary commentator on the Hua Yen school, Garma C. C. Chang, uses the word "totality" rather than 'oneness' and offers a very different interpretation of this concept from those cited above.

Prima facie, the word 'totality' says nothing about whether the universe is 'one' or not, and indeed, Chang's description is more suggestive of plurality. He describes totality as an infinitely vast system of universes nested within universes, innumerable as the grains of sand in the Ganges. In his words:

> As a solar system contains its planets or a planet contains its atoms, a "larger" universe always includes the "smaller" ones, and, in turn, is included in a universe that is larger than itself. This system of higher realms embracing lower ones is envisioned in a structure consisting of "layers" extending *ad infinitum* in both directions (Chang 1991, 10–11; emphasis mine).

This classic metaphor posits a universe in every single grain of sand that exists upon this world and on every other world in this universe, which once again, occupies a single grain of sand in a higher-level universe and so on. There is, on the face of it, a significant resemblance between this image and Zimmerman's depiction of Gaia as a holarchy, that is, as a hierarchy of so-called 'holons'—systems which are both wholes in their own right, and also parts of other holons. Following Koestler, Wilber, and other systemic thinkers, Zimmerman describes reality as a pyramid, with "vast numbers of holons (subatomic particles) at the bottom level while each succeeding higher level—atoms, molecules, organelles, cells, tissues, organs, organ system, and the organism—has fewer instances." The highest level is identified with the all-inclusive biosphere, Gaia (Zimmerman 2004a, 6–7).

The ecological concept of holarchy, however, deviates significantly from the Hua Yen vision of totality. Zimmerman conceives of an all-inclusive whole, an uppermost level of reality, beyond which there is nothing further. Indeed, most deep ecologists and parallelist thinkers appear to hold this sort of postulate, as can be seen in their references

to "*the* One" or "the unbroken whole," (Maxwell) a "robust ontological unity," (Khisty) and a "cohesive reality" (Brown). Similarly, there is a 'bottom level' made up of subatomic particles, the "fundamental indivisible reality" (Capra), below which there is nothing else. The Hua Yen Buddhist totality, on the other hand, seems to have no corresponding concepts; rather, there is always an infinite number of universes all the way up, and an infinite number all the way down. This implies that *every* level of the hierarchy is both a whole in its own right and a part of another whole; in other words, there is no ultimately smallest part, and no all-encompassing whole either. The *Avataṁsaka sūtra*, and especially the popular section on the vows of Samantabhadra, strongly emphasize the notions of "infinite universes equal to the all the dust-motes in all the incalculable Buddha domains;" this phrase is repeated several times together with "endless spheres of space" and "countless realms of beings" (reproduced in Chang 1991, 118-196). This discrepancy has significant implications that weaken the parallelist thesis considerably.

Contrary to Maxwell, Brown, and Khisty's claims, Hua Yen Buddhism does not view the universe as "fundamentally holistic," nor does it conceive of its "essential nature as unbroken wholeness" or as a "robust ontological unity." There is no all-embracing level that can be compared to such a notion; in fact, there is not even anything that can be called '*the* universe' or 'the One.' Rather, any level of reality we examine turns out to be a part of something else and the emphasis, as we shall see, is not on holism but on the relativity of wholes and parts to each other. Therefore, Buddhism does not share the deep ecologist's or the parallelist's bias for holism, and to cling to the notion of oneness or wholeness is to adhere to a wrong view, which corresponds, as we have seen, to the extreme of eternalism.

In a partial segment of totality, such as Zimmerman's holarchy or deep ecology's Gaia, the terms 'higher' and 'lower' make sense, because there is the possibility of approaching a final upper or lower level, beyond which there is nothing further. If we mentally move 'upwards' from the level of organisms, say, towards the ecosystemic level, then this brings us closer to the uppermost level, Gaia, and therefore, it is reasonable to call the ecosystemic a "higher level" than the organismic. Similarly, to move from molecules to atoms is to move a step down because it brings us closer to the

lowest level of subatomic particles. Any universe is 'high' or 'low,' that is, only in relation to another, and therefore, because on the Hua Yen account, there is always an infinite number of universes in both directions, the terms 'high' and 'low' seem to lose their significance.

For the same reason, every aspect of reality can be seen either as a whole or as a part; nothing is intrinsically a whole or a part, in the way that Gaia and subatomic particles are, according to the new paradigm. Wholes and parts, that is, are relative to each other and the Hua Yen doctrine of totality, unlike the new paradigm, gives no precedence to either. To meditate upon the image of universes nested within universes *ad infinitum* would probably bring about a realization of the arbitrariness of our description of things as either wholes or parts, small or large, many or one. It suggests that reality can never be described exhaustively; ultimate wholes or parts are forever elusive and ungraspable, and indeed, empty of inherent existence.

Therefore, the weight given by the new paradigm and by parallelists to the "One," to "unbroken wholeness," or even their "holistic vision" simply do not apply to Mahāyāna Buddhism. Contrary to parallelist's claims, Buddhism does not give primacy to wholes, even if contemporary science does. As Steve Odin points out, Hua Yen Buddhism expounds a "simultaneous-mutual-establishment" of both the one and the many and does not reify either (Odin 1995: 72).

2) The emptiness of relations

Deep ecology and Buddhism were also said to overlap on the subject of interrelatedness, which, at first glance, seems remarkably similar to the doctrines of emptiness and dependent co-origination. As mentioned above, the word 'relations' is used in different ways and some commentators leave its meaning rather vague. Chang, for instance, has it that "inasmuch as one thing is—*at least in some manner*—related to all other things, it reflects them all" (Chang 1991, 125; emphasis mine). Other authors unequivocally state that the relations in question are *internal* ones; Maxwell, as we have seen, claims that the interdependence of wholes and parts is responsible for determining the "fundamental internal nature" of both (2003, 262). Oppermann makes the same point about ecological

relations; she maintains that humans are internally related to the ecosystems in which they participate, and ultimately to the entire cosmos too. She makes this inference from the discovery described above, of the close bonds that exist between subatomic particles, and their "instant communication" with one another (Oppermann 2003, 11).

The concept of internal relations, as Callicott explains, implies that what a thing is—in his words its 'essence'—is completely determined by that thing's relationships, and therefore, he goes on, it "cannot be conceived apart from its relationships with other things" (Callicott 1989, 110). This suggestion appears frequently in parallelist literature. Srivastava, for instance, claims that it is "impossible to have a notion of us as being ultimately 'different' or separate from anything else" (2008, 252) and as we saw above Capra held that we can never speak about nature without at the same time speaking about ourselves. Brown too claims, "Any element's...identity can be defined *only* as the expressive manifestation, the conditioned representation, of those other [related] elements" (2004, 887; insert and emphasis mine). Simon James regards this as a problem, in that the claim that all things are internally related makes it difficult to speak of things at all (2004, 91).

Despite the frequent appearance, in deep ecology, of the claim that we cannot conceive of things independently, further reflection will reveal that it is obviously false. No matter how many relations a thing may have, and how formative of its identity they might be, it will always be possible to conceive of that thing as existing independently. In fact, according to Buddhism, this is precisely the mistake that deluded beings make; they regard things as being separate and different, that is, as having *svabhāva*, whereas the reality is that all things exist interdependently. The use of the word 'reality' here, must be taken as conventional, just like any statement to the effect that '*a* is related to *b*," or even "all things are interrelated" cannot constitute a final truth. Ultimate reality, as was seen in chapter 2, is ineffable and no statement can ever be formulated that corresponds to it precisely. The fact remains, though, that it *is* possible to make conventional statements about things being interrelated as well as their being separate; indeed to make any statement at all requires that we can distinguish different things. Therefore, the claim that it is "impossible" to regard things as separate, or that an individual "cannot be conceived of" by itself, is highly implausible.

The difficulty arises because parallelist thinkers tend to interpret conventional statements about interrelations as ultimate truths. When this happens, all sorts of inconsistencies arise; as Nāgārjuna demonstrated, any attempt to characterize ultimate reality conceptually will eventually reduce to absurdity. Thus, if the internal relation between *a* and *b* were an ultimate truth, and their identities depended upon this relation so that, as parallelists claim, *a* and *b* cannot be conceived of independently, then we would not be able to say anything about them at all. If *a* represents humanity and *b* the environment, and we cannot conceive of one without the other, all the beliefs of deep ecologists—regarding, say, the effects of humanity's activities on the environment, our feelings of separateness, and whether we are "a part of" or "apart from" nature—all of these statements and questions would be impossible to formulate. Indeed, we would not even be able to say, "Let *a* stand for humanity and *b* for nature." Clearly one cannot grasp at the final truth of the statement "everything is internally related to everything," for if we do, then we cannot account for conventional difference, and we cannot say anything about individual things. Instead, reality becomes an undifferentiated block, where everything is exactly the same as everything else.

Conversely, if we took *a* and *b* to be ultimately different entities then we could not explain how things are related, which, clearly, they are "at least in some way." When we think of objects and individuals as being separate, each having their own identity, this is just our ordinary way of perceiving reality, which in Buddhism, amounts to ignorance—namely, grasping at *svabhāva*. Buddha, Nāgārjuna, as well as Capra and other parallelists agree that to conceive of things this way is a mistaken, though conventional, or traditional view of the world. Under this view, we *can* account for difference, yet we are mistaken if we take this difference or view to be ultimately true. As Nāgārjuna showed in *MMK*, if we take difference to be ultimately true, then we cannot explain how it is possible for things to relate to each other. If things are ultimately separate, then of course, they cannot be related. Garfield sums up the argument as follows: "it makes no sense" he says, "to think of [the] relations between entities...as any kind of relation between independent entities at all." Rather, for Buddhism, "these phenomena cannot be understood as the same, as different, or as neither" (Garfield 1995, 217).

To put it another way, some parallelists misapprehend the Buddhist doctrine of dependent co-origination by inferring from it only the emptiness of individuals or of things and concluding that relations are ultimately real—"more real" than beings or things. Nāgārjuna would certainly negate both beings and relations; that is, he would say that things are ultimately empty of inherent existence because they arise and perish in dependence upon each other and therefore, they can conventionally be described as related to each other. These relations however are empty of inherent existence too and propositions about them cannot be held as final. This is because we cannot explain relations whether we conceive of things as separate or as distinct.

To return to our example, we can affirm, conventionally, that human activity has an impact on the environment, which changes both in essential ways. Yet this sort of discourse is merely useful for explaining the world, and the emptiness of dependent-arising is the fact that there is "no more to it than that" (Garfield 1995, 122). Ultimately, humans are neither part of nor apart from nature; as we saw above, they are neither different nor the same, neither one nor many.[92] Our innate tendency to want to establish something or other as an ultimate truth or reality is precisely the problem that Buddhism wants to address.

The Utility of Parallelist Discourse in the Light of the Negation of Views

Some parallelists are keen to use science to support their views about oneness and relatedness, and appear to suggest that the findings of physics are evidence for the truth of the Buddha's claims. At least, this intimation seems to underlie some authors' fascination with the view of reality allegedly shared by Buddhism and physics. Yet, the Buddha's spiritual realization was not a scientific understanding of reality, and his teachings were never meant to become a theory about the world. The later Mahāyāna *sūtras* and philosophy were even more explicit about the rejection of all views.

[92] As Dr. Simon James points out, even this last formulation "neither...nor" would ultimately be rejected by the Madhyamaka (personal communication). All further statements to the effect that Mahāyāna Buddhism would accept neither x, nor y are to be understood as implying the negation of that conjunction too, and the ineffability of ultimate truth.

Therefore, there is a danger, in parallelist discourse, of reducing the Buddha's enlightened consciousness to a mere description of the world.

Several authors have commented on this matter. Zimmerman raises the issue that by itself, a scientific understanding of the connections between phenomena cannot bring about compassion (2006, 316). James draws attention to the ineffability of ultimate truth, and concludes that the world of ecological science cannot be the same as the world of a realized being, simply because the latter cannot be put into words (2007, 453). According to Ken Wilber, deep ecology fails to acknowledge the inner development that a person must go through before anything like 'oneness' can be experienced, and before she can truly attain the Buddha's realization of interrelatedness. In parallelism, what is essentially a spiritual experience is reduced to the theory that we are "just-parts-of-the-whole"—as if studying the relations between things could suffice to gain the depth of the realization that the Buddha had. The problem, Wilber goes on, lies not so much in whether we describe the cosmos as made up of individual substances or as a whole, neither on whether we focus on things or on relations. Rather, our delusion arises from our obsession with external reality, through which we have completely lost sight of our inner world, or "interiority," and ignored the subjective aspect of meaning and of value (Wilber 1995, 130–133).

In all fairness, several deep ecologists do focus on subjective processes, as we shall see in the next section. In fact, Naess, Devall, and Sessions do not place much importance on analytic argumentation, but rather, they simply invite readers to adopt the deep ecological vision as another way of viewing reality, a fresh outlook on the world (Yadav 2008, 238). The Hua Yen teachings also appear merely suggestive of a novel perspective; instead of making categorical assertions they seem to encourage an alternate vision of reality. For example, the wide use of the word 'reflection,' and the images of mirrors are reminiscent of Vasubandhu's metaphors of mirage, hallucinations, magical displays, and so forth. In chapter 2, it was argued that these metaphors are intended to make an epistemological point, rather than an ontological one—the key idea was that we can only ever see images, hear sounds, and feel sensations, and we can never directly apprehend any 'thing-in-itself.' It was also suggested that concern about whether this

implied the unreality of the world or the reality of 'Mind Only,' was irrelevant to the Buddhist Middle Path, which is beyond both being and non-being.

The Hua Yen doctrine of interrelatedness and the images of jewelled nets and halls of mirrors might be used constructively in an environmental context, as long as we do not grasp at the truth of statements like 'all is one' or 'everything reflects everything.' Instead of interpreting them as philosophical doctrines, one might use such ideas as a pattern or 'blueprint' for meditation upon dependent-arising. Rather than attempting to discern oneness through studying ecological relations, perhaps if we meditate on our connections with forests and farms, livestock, air, soil, and so on, as reflecting each other, like a magical display or a hall of mirrors, we might lessen our ingrained attachment to ourselves and to our own needs, and become better able to identify with others and adopt their interests as our own. Meditation on interrelatedness could help us realize how profound the impact of what we do is upon the rest of the world and how repercussions could be carried to an extent hardly imaginable. We might become more careful in our actions if we learnt to perceive a hurricane across the globe, say, as a reflection of our leaving the lights on when not needed.

Unfortunately, this sort of meditation could also have adverse effects on our approach to the environment. If we completely internalize a picture of reality as an infinite net of relations, we might be led to despondency, since on this view, there are an infinite number of causes and conditions for those aspects of the world that we perceive as problematic. Climate change, for instance, is the product of so many causes and conditions that to prevent it from happening, or even just mitigating its effects, has turned out to be a highly complicated affair. Moreover, our decisions too are affected by infinite other things so that we might begin to wonder whether we really do have the power or freedom to bring about a positive change. In addition, since the repercussions of what we do spread out infinitely into time and space, we can never really foresee all the outcomes of our actions with certainty. A recent example of this problem emerged with the introduction of biodiesel, which, at the time, appeared to be environmentally preferable to other fossil fuels, and its widespread use seemed like step in the right direction, ecologically speaking. Unfortunately, nobody foresaw all of its actual results, and consequently, there was increased hunger and deforestation in certain parts of the world.

The holistic view of the planet, especially the theory that sees 'her' as a single living being, Gaia, might render us less prepared to sacrifice any of her parts. For instance, if a stretch of rainforest is lost, we will no longer simply think of it as a few trees that are gone; rather, it will be perceived as the loss of a necessary and irreplaceable part of an organic whole, as valuable as life itself (Lovelock 1995, 226). Every seemingly insignificant bit of the natural world would then be invested with value it did not have under the traditional account, simply because it is now seen to be an indispensable part of a greater whole. Aside from the problematic implications this stance might have—such as implications of eco-fascism (Barnhill 2001, 78)—the Buddhist idea of totality also implies the converse of this view. This planet, Gaia, is also a mere grain of sand in an infinite series of universes, and this perspective seems to diminish our earth's value considerably, and also seems to reduce the import of our concern to save this particular biosphere.

Therefore, even when acknowledged as conventional views, the ideas that 'all is one' and 'everything is related to everything' do not necessarily bring positive implications for the environment. Indeed James has provided several examples of how such holistic views could be reconciled with attitudes that are downright eco-unfriendly (2007, 457). It seems oneness and interrelatedness alone cannot serve as a foundation for green Buddhism, and the Mahāyāna's 'ecological qualifications,' if they exist, must lie elsewhere. Before these ideas are ruled out altogether however, there is a second interpretation that I would like to examine—the idea of oneness, not as a metaphysical theory, but as a subjective way of relating to nature, namely, through identifying with all other living beings, including the "one-living-Earth," Gaia.

Summary

This section has examined the philosophical ideas of the 'oneness of nature' and the 'interrelatedness of all things.' In general, I have argued that as long as these ideas are taken as scientific or metaphysical theories they have very little to do with the Buddha's teachings, and I have suggested there are several discrepancies between these fields of knowledge.

The first idea that was supposed to be common to both Buddhism and deep ecology was that of the universe as fundamentally holistic, or as an unbroken whole. Sometimes, this concept of Oneness is closer to notions like Spinoza's 'Nature,' or the Hindu *Atman*, which Buddhism negates. The *Avataṁsaka sūtra* speaks about "totality" rather than 'oneness,' and this is interpreted very differently from deep ecology's concept. Here, we read about an infinitely vast system of universes nested within universes, which is more suggestive of plurality than oneness.

Moreover, deep ecological holism deviates from the Buddhist doctrine of totality insofar as it conceives of an all-inclusive, uppermost level of reality, and a bottom level made up of irreducible entities. The Buddhist vision of totality has no corresponding concepts; rather, there are always an infinite number of universes all the way up, and all the way down. This suggests that every level of the hierarchy is both a whole in its own right and a part of another whole, and the very concepts of 'higher' and 'lower' lose some of their significance. Contrary to parallelist claims, Hua Yen Buddhism does not view the universe as fundamentally holistic, nor does it conceive of its essential nature as unbroken wholeness. Buddhist imagery emphasizes, rather, the relativity of 'wholes' and 'parts,' and of 'one' and 'many' and suggests that reality can never be described exhaustively.

The second alleged convergence between Buddhism and deep ecology was the priority given to relations over things, an idea that seemed highly reminiscent of emptiness and dependent co-origination. Relations were said to be fundamental because it is the connections between things that form those very things as well as forming the whole, which they make up. Thus relations are defined as internal ones and this suggested, as many parallelists claim, that nothing can be conceived of independently of these relations. This proposition was found to be untrue; in our everyday speech and experience, we *do* conceive of things as separate and independently from each other all the time. The problem lies in parallelist thinkers' tendency to interpret conventional statements about interrelations as ultimate truths, which gives rise, as we have seen, to several contradictions. It was shown that we can either hold relations to be real, and then, we find ourselves unable to account for difference, or else we can hold difference to be real and then we are unable to account for relations. The Buddhist doctrine of emptiness

suggests that discourse about interrelatedness is merely conventional, simply useful for explaining the world and no more. Ultimately, things are neither different nor the same, and our compulsion to establish some truth as fundamental, or final, is one of the reasons for our delusion.

The idea that contemporary physics proves the truth of the doctrines of oneness and of interrelatedness was the third alleged parallel addressed. Deep ecology often deviates from the Mahāyāna by asserting the truth of its metaphysical or scientific theories, whereas Mahāyāna Buddhism takes all utterances to be conventional truths. Therefore, there is deep incongruity between the two whenever deep ecologists are attached to their views about oneness or interrelatedness and insofar as their statements are taken to be true descriptions of the world. There is danger in parallelist discourse of reducing the Buddha's enlightenment to a mere theory about the world.

Apart from all this, if we disregard claims about the veracity of this view, and restrict ourselves to experiencing oneness—as indeed several deep ecologists suggest—the similarities with Buddhism become more pronounced. The Jewelled Net image might be used constructively in an environmental context, to lessen our attachment to ourselves and to value more highly the Earth and all its denizens. Conversely, the image of reality as an infinite net of relations might lead one to a feeling of hopelessness about our ability to bring about positive change, and it could also suggest that this planet, as a mere grain of sand in a higher universe, is not all that significant.

In sum, the most salient element of the new, deep ecological paradigm is not any view or belief it includes, but its implications for how one might relate to the world and to other beings. It is here that most advantageous suggestions and repercussions for the environment probably lie. The next section will turn to the proposal that, as environmentalists, we ought to *identify* with all other living beings, and with the "one-living-Earth," or Gaia. I shall argue that this notion is highly reminiscent of the Mahāyāna Buddhist doctrines of love and compassion and that there is more benefit in drawing parallels here.

2 Oneness as Identification with all Sentient Beings

This section will continue to examine deep ecology and its affinities with Buddhism. I have argued, so far, that as long as there is an attempt to establish the theories of holism or of interrelatedness as ultimately true, then there is a deep incongruity between the two traditions, and this is because Mahāyāna Buddhism, including both its major schools of philosophy—that is, the Madhyamaka and the Yogācāra—ultimately negates all views and all propositions. Any description of reality, according to Nāgārjuna or Asaṅga, could only ever be conventionally true, and the *bodhisattva* must be willing to let go of all his favourite theories about the world in order to progress on the journey towards enlightenment.

Throughout this study, the negation of all views has constituted one of the main difficulties for formulating Buddhist doctrines in an ecologically sensitive way. Although Mahāyāna nondualism allows us to avoid the issues of negative value in nature and of world-rejection that were found to belong to early Buddhism, there is still the problem of finding suitable material upon which to construct an environmentally sound philosophy.[93] According to Mahāyāna Buddhism, there is only one thing worth attaining other than full enlightenment, namely, *bodhicitta*, which can be thought of as the combination of a realization of emptiness and of universal love and compassion. Realization of emptiness requires that all views be negated eventually, and therefore, to the extent that a Buddhist practitioner is attached to her ideas about the environment—and this includes all the assertions of deep ecology, such as "humans are one with nature" or "everything is related to everything"—she is impeded from attaining realization.

One might suggest that, although attachment to these views is an impediment to enlightenment, they might still be sufficient, conventionally, as grounds for environmentalism. In other words, while such statements are not *ultimately* true, and should not be taken as asserting anything about the way the world *is*, they could still

[93] Several authors, for example Keown 2005, Cooper and James 2005, have relied on Buddhist ethics for this purpose, in particular, conceived in terms of virtues like generosity (*dāna)*, nonviolence (*ahiṃsā)*, and so forth. While appreciating the significant value of this work, I feel inclined to include, as far as possible, the teachings on emptiness, in order to avoid the criticism that green Buddhism pertains to the conventional realm alone. For a compelling argument against this claim, however, see Cooper and James 2005.

serve to motivate concern for the environment, based on subjective processes. This section will deal with the consequences of taking such intuitions of oneness or relatedness as just that—as a *felt* experience, or psychological awareness—without grasping at the truth of any theories they might imply. I shall examine the interpretation of oneness in deep ecology, as a sense of 'identification' with other beings. This, clearly, has resonances with the notion of compassion in its broadest sense of feeling or even being with others. To suffer with others and to feel joy with them is perhaps the truest sense of 'being at one with the world'; it is not a description of a fact but of a feeling. It will emerge that the way identification is described in deep ecology is, at times, highly reminiscent of the Buddhist virtues of love and compassion, which we encountered in chapter 1. In both cases, there is a concern for the interests[94] and welfare of those beings that one loves or with whom one identifies.

I start, therefore, by examining the way in which deep ecologists describe identification as well as their reasons for recommending it. The case for taking others' interests as our own is sometimes bolstered with metaphysical assertions, and therefore, as was seen in the previous section, there is a major divergence from Mahāyāna Buddhism. At other times, though, deep ecologists deny that any rational grounds can be given for advancing identification, and, instead, they simply invite readers to adopt this practice through providing a rather loose description of what identification *feels* like. For this reason, there are several different definitions of 'identification' in the literature; sometimes it is based on a feeling of identity, at other times there is a sense of communality, and in some cases, it is even claimed that one needs to appreciate the *difference* of the other from oneself in order to appreciate fully his needs. There is also a technical sense, according to Arne Naess, to which all deep ecologists subscribe, and to which I shall limit my use of the term. 'Identification,' that is, will be used to refer the

[94] I use the terms 'interests' and 'needs' interchangeably, following Simon Blackburn's definition of the former as "Those things that a person needs, or that are conducive to his or her flourishing and success." Perhaps needs can be understood as being more fundamental than interests, and while it is true that "people may not desire or value what they need," as Blackburn suggests, I also subscribe to his claim that their "real interests might not be revealed by their immediate choices and preferences" (Blackburn 1996, 196–197). That is, whether or not they know it, a being's real interests coincide with what it needs. There is no space unfortunately to go into the question of how a *bodhisattva* would determine what a being's true interests or needs were. Following the discussion in chapter 1, interests and needs will be attributed to individual nonhuman beings, and collective entities, as well as to humans.

idea, mentioned in chapter 1, of taking other beings' interests as one's own. I shall appeal to Śāntideva to show how this might be grounded, not on any ideas about sameness or difference, but rather on a realization of emptiness, which, it is said, gives rise to compassion, and causes the *bodhisattva* to remain in *saṃsāra* for the sake of other beings (*BCA* 9:52).

I shall go on to ask whether the practice of identification, understood as extending love and compassion to all sentient beings, can be used to support an environmentally sound version of Mahāyāna Buddhism. In chapter 1, it was said that the problem of early Buddhism's negative evaluation of the natural world—the description of it as pervaded with suffering—could be resolved by taking solicitude as a subjective way of valuing nature intrinsically. In brief, one could simply *decide* to value nature and natural beings for their own sake, regardless of whether or not they 'possessed' intrinsic value objectively.

Finally, I shall take up once more the issues that we raised in chapter 1 concerning these themes and explore whether a specifically Mahāyāna understanding could solve the difficulties encountered. These included the problem that extending love and compassion universally cannot serve as a method for deciding against competing interests, and neither can it provide an ecologically sensitive approach. A second complaint was that suffering is a natural and intrinsic part of ecological relations, and therefore, to the extent that *bodhisattvas* aim at eliminating it altogether, their actions are unnatural and unecological. Lastly, we will also need to consider the possibility of applying solicitude to non-sentient and non-living beings, such as species, ecosystems, trees, and rocks, which are also objects of concern for the environmentalist.

Identification and Solicitude

Apart from theories about oneness and internal relations, what is held in common by all deep ecologists, according to Naess, is a way of *experiencing* nature "through which the interest or interests of another being are reacted to as our own interest or interests" (Naess 1995, 258–261). Warwick Fox describes this "central intuition of deep ecology" as a form of consciousness that does not perceive boundaries between oneself and other

beings (Fox 1984, 194). He too talks about identifying one's own good with that of others and claims that if one has a "wide, expansive or field like sense of self" then one will naturally protect the interests of this expanded self (1995, 217). Walking through a forest, say, I might embrace all natural surroundings and their inhabitants into my sense of what I am. Through identification, I will learn to adopt the needs of these beings as my own and to do everything I can to protect them.

To the extent that it is spoken of as a felt experience, an intuition, or an affect, the deep ecologists' account of identification sounds remarkably similar to the Buddhist practice of generating love and compassion. In chapter 1, the terms *maitrī,* loving-kindness, and *karuṇā*, compassion, were described in terms of the wish that a being has happiness and is free from all suffering. Several deep ecologists have drawn the connection between identification and love; Freya Matthews, for instance, talks about an "extended self-love" (1994, 149) and for Bill Devall too, we will naturally love, respect, honour and protect that with which we identify (cited in Fox 1995, 226).[95]

The point of identification, according to Fox, is to gain a "this-worldly realization of as expansive a sense of self as possible" (Fox 1995: 197) that is, to identify with an ever-widening circle of beings, until one finally embraces the entire cosmos within one's sense of identity. This brings us to a second important concept in deep ecology, that of the "expanded self" or the "ecological self," which is defined as the set of beings that a person loves, or else, as the entire scope of that with which she identifies, ideally, the entire cosmos (Fox 1995, 230). This will immediately bring to mind the Buddhist practice of extending love and compassion universally; that is, wishing happiness for every single being in all the infinite universes described in the previous section. In the Mahāyāna, it is based on a concept of 'the equality of self and others.' Śāntideva characterizes this as follows:

Since we are all alike in pleasures and pains,

[95] An interesting question, first brought to my attention by Dr. Simon James, is about what would happen if we did not love ourselves. Obviously, identifying with other beings is not going to enable us to love them, in this case. Assumedly, since deep ecologists speak in terms of "Self-Realization" this implies that, at the very outset, there must be, at least, a modicum of comfort with oneself, and any psychological problems that involve self-hatred would need to be sorted out before one could hope to reach Self-Realization.

I should guard all others as I do myself (*BCA* 8:90) [96]

This account of identification clearly belongs to the sphere of psychology; there is no longer the concern with describing external reality, which we saw in the previous section. Instead, the focus of deep ecologists, here, is on the way reality is experienced, with the suggestion being that it is not experienced as external at all, but rather, it is felt to be part of one's own self. In fact, Fox coined the term "transpersonal ecology," to relate his work to that branch of academic psychology that seeks to transcend the boundaries of the individual. This, therefore has already brought us closer to Buddhist concerns, and has avoided the problem raised in the first part of this chapter, concerning the inward- rather than outward-looking quality of Buddhist teachings.

The Grounds for Identification

When it comes to establishing *why* deep ecologists think we should adopt identification as an environmentally conscious practice, the similarities with Buddhism end. In many cases, the experience is said to emerge from our endorsing certain metaphysical views—specifically, the view of oneness and of interrelatedness, which were described in the previous section—and therefore, this version of identification would appear to be subject to the criticisms raised there. Matthews's claim that "identification is not simply psychological but grounded in a metaphysical fact" (Matthews 1994, 148) would not be accepted by Mahāyāna philosophers, for whom so-called metaphysical 'facts' are always to be negated. The same is true of Fox's description of identification as "a natural… response to *the fact* that we are intimately bound up with the world around us" (Fox 1995, 218; italics added).

As Matthews has rightly pointed out, it is not just the metaphysical facts of oneness and interrelatedness that deep ecology requires for its account of identification, but rather, it also makes assumptions about goal-directedness or teleology. The claim that we are all parts of an interconnected whole cannot by itself explain why we ought to love other beings or that whole; we also need to show that both the whole and all its parts have

[96] All excerpts from the *Bodhicaryāvatāra* are from Thurman's translation in Thurman 1996, 152–155.

a "good of their own," in the sense that they can occupy states that are better or worse *for themselves*, and therefore, they have interests and needs of their own. The biosphere as a whole, 'Gaia,' and all her parts too, that is, living beings, together with collective entities, such as ecosystems—all of these, according to deep ecologists, can be helped to further their interests and to secure their ends, or else, they can be harmed when prevented from fulfilling their goals (Matthews 1994, 152–154; O'Neill 1992, 128–131).[97] Mahāyāna Buddhism, on the other hand, could take these claims to be conventionally true at most. From the Buddhist perspective, to attempt to prove them conclusively would amount to delusion, or attachment to views, and would constitute an impediment to realization.

As mentioned above, sometimes, deep ecologists *do* abstain from trying to prove their tenets decisively and instead they merely propose identification as a way of experiencing the world. In some places, Naess emphasized that he was not attempting to establish the correctness of his approach, but rather, merely presenting it as a simple invitation (Naess 1998, 201–210). Fox too, in some places, suggests that his version of transpersonal ecology cannot be confirmed rationally, and he invites us, instead, to decide whether to take it up or not on other criteria such as its beauty, coherence, novelty, and so forth (Fox 1995, 216). In other words, deep ecologists occasionally seem to display little attachment to their theories and views and, to this extent, their ideas might be reconciled with Buddhism by taking them as conventionally and not ultimately true.

How Identification is Attained

Although identification could be grounded on conventional rather than ultimate truth, there remains the question of how this experience is attained. Here, again, Naess's philosophy and Buddhism coincide; first, awareness of suffering is described, in both

[97] One might object about the appropriateness of attributing needs and interests to beings such as animals, trees, or even forests. I shall follow John O'Neill here and claim that it is possible to do so, on the grounds that individual living things "are the sorts of things that can flourish or be injured" and therefore they can be said to have interests (O'Neill 1992, 129). Moreover, this also applies to 'higher-order' systems such as species or ecosystems, which are made up of living and non-living beings too. "It makes sense," O'Neill explains, "to talk of the goods of collective biological entities—colonies, ecosystems, and so on—in a way that is irreducible to that of its members" (O'Neill 1992, 131). It must be emphasized that all this belongs to the conventional realm in Buddhism, and that in any case, recognition of these beings' goods does not automatically imply that one ought to protect them (O'Neill 1992, 132). The subject of teleology in nature will be taken up again in the next chapter, where I shall deal with the question of purpose in evolution.

cases, as an inexhaustible fount of compassion, in Naess's terms, the "most potent source of identification" (1985, 264). Second, both in Naess and in Buddhism, love and compassion are said to stem from the recognition that other beings are just like us, in that they too want to flourish and be happy, and to avoid pain and suffering. However, in his 1985 paper, Naess proposed that there needs to be a sense of similarity—perhaps even identity—between oneself and that being with whom one identifies (1985, 262). John Seed takes it further, and interprets identification as the actual merging of identities, as in his statement "I *am* the rainforest" (cited in Devall 1986, 24; emphasis mine). Fox is not as extreme; in his view, the experience relies not on similarity, but rather, on a sense of *commonality*, that is, the experience of 'being in the same boat together,' and he explicitly denies that identification should involve actual fusion, or the absorption of one's identity into the whole (Fox 1995, 231).

Peter Reed challenges this account with the claim that it is because of the *difference* between natural beings and us that we show consideration for them. In other words, what is valuable in nature and deserving of our protection is its otherness—the fact that it is not like us—which is what gives rise to a sense of mystery and awe (Reed 1989). In his response, Naess welcomes this as an alternative to his own philosophy (Naess 1990, 186) and seems to drop the condition of similarity for the process of identification. He distinguishes the sense of 'identification' that involves "some kind of likeness or resemblance" from the "technical sense," which is shared by all deep ecologists, and which he defines as "a process through which the supposed interests of another being are *spontaneously* reacted to as our own interests" (1990, 187–188). It is this technical sense, he claims, which is important for deep ecology, and in fact, in this paper he maintains that we can even identify with something with which we are totally unfamiliar (1990, 191).[98]

It seems then, that there are several different ways in which 'identification' is understood within deep ecology; sometimes it is based on similarity or identity, at other

[98] This last point and Naess's reference to the "s*upposed* interests" of other beings shows that we do not need scientific accuracy to decide upon which states are good for a being and which ones are not. Rather, if we imagine some states to be against a being's interests, according to Naess, we *may* be justified in taking this to be the case. He proposes, as examples, an ugly building on Mount Fuji and dancing polar bears. Both of these instances, he says, involves the violation of a being's dignity, and can be thought of as jeopardizing their interests (1990, 189).

times, on difference. Yet, the definition that is most commonly accepted is identification as wanting and working for the good of those beings with whom or which we identify. In what follows, I shall restrict my use of the term to this technical sense alone, and I shall also use it interchangeably with 'love,' 'compassion,' or 'solicitude,' due to the close affinity, which, I have argued, exists between these notions. The thorny issue of whether or not identification requires sameness or difference, I shall argue below, emerges from the drive to establish some theory as ultimate truth, and it can be avoided if we base identification on a realization of emptiness instead.

Identification as *Bodhicitta*: Solicitude in Union with Emptiness

So far, I have argued that the deep ecologist's notion of identification is very similar to the Buddhist virtue of solicitude, in that both involve taking up the needs and interests of other beings as one's own. Yet, the reasons that deep ecologists propose in favour of doing this—whether as a rigid argument, or as a simple suggestion—have all been relegated to conventional truth, and are, therefore, ideas that a *bodhisattva* will eventually negate. The Mahāyāna Buddhist does not believe in the ultimate truth of oneness or interrelatedness, and neither is she committed to the ideas that other living beings are the same or different from us. The question will arise, therefore, why should a Mahāyāna Buddhist identify with other beings? On what will she base her love and compassion if not on either the sameness or the difference of other sentient beings to herself?

This has been a recurrent issue in this study—on what can we ground Buddhist environmentalism, given that emptiness will negate every view? In this chapter, I shall attempt to show how in Mahāyāna Buddhism, love and compassion are based upon emptiness itself. Emptiness and compassion are often spoken of as being 'in union' and this, I would like to suggest, can be thought of as an internal relation, in that these virtues and emptiness would not be what they are, without this relation to each other. The product of this relation is, of course, *bodhicitta*—the 'mind of enlightenment'—described as the wish to reach perfect enlightenment for the benefit of all sentient beings.

This implies that there are two ways in which solicitude can be understood. There is the relative sense, the wish that all beings have happiness, which I frame with the belief

in those beings as existing with *svabhāva*, for example, as being completely independent from myself. I might conceive of their happiness and suffering, in similar terms, that is, as ultimately real. In this relative form of solicitude, I see myself as an agent and I have a concept of these feelings and actions as 'mine.' There is usually the hope that I will succeed, or some other subtle vested interest, and even sometimes, a strong attachment to the outcome, which brings about pride or shame in what I consider to be 'my doing.' All of this, of course, belongs to conventional reality. *Bodhicitta*, on the other hand, is the *bodhisattva's* experience of love and compassion united with a realization of the emptiness of those 'beings' whose happiness he desires, of the '*bodhisattva*' himself and of the very 'happiness' that he promotes and the 'suffering' he prevents. There are no expectations and no attachment to the outcome in ultimate love and compassion. The question then, is how is *bodhicitta* generated? The salient issue seems to be that compassion must be combined with the realization of the emptiness of all concepts and beings.

A classic account of *bodhicitta*, an explanation of how to cultivate the mind of enlightenment, is found in Śāntideva's *Bodhicaryāvatāra* (*BCA* 8: 89–118; Thurman 1996, 152–155). Śāntideva begins, as we have seen, by contemplating the "equality" of all sentient beings with himself, in that nobody wants to experience suffering. Up to this point, he is using conventional arguments that could easily be found in deep ecology. He then goes on to suggest, however, that the way we designate suffering as our own or as belonging to others is somewhat gratuitous and unwarranted. Pain becomes unbearable, he claims, only because I identify it as "mine" (*BCA* 8: 92) and therefore, if I took up other beings' suffering as my own, if I "identified their pains as mine," they would become unbearable too. As there is no difference between my own suffering and that of others, Śāntideva goes on, I must help others just like I would help myself. "What's so special about me that I strive for my happiness alone?" he asks (*BCA* 8: 95).

He supports this argument through appealing to the emptiness of self. If it were reasonable to take into account only that suffering that affected us directly, he says, then there would be no point in worrying about our future well-being (*BCA* 8: 97–98). In other words, Śāntideva is denying, here, that there is a continuous self that endures throughout the course of a lifetime. Again, "the foot's pain is not the hand's" Śāntideva claims, and

he thereby negates the belief that a collection of aggregates makes up a single self (*BCA* 8: 99). In brief, "there is no possessor of pain" (*BCA* 8: 101–102), that is, there is no irreducible "I" and therefore, no reasonable grounds for differentiating between my suffering and yours. Consequently, Śāntideva proposes that *all* suffering without exception must be eliminated. The notion of identification with all beings emerges in the following lines:

> To abolish my own I must abolish all,
> Otherwise, I, like beings, must stay in pain (*BCA* 8: 103).

This clearly resonates with the deep ecologist's project of adopting the interests and needs of other beings as one's own. Śāntideva here has taken on the affliction of other beings, because his own 'pain' cannot be eliminated without eliminating that of all beings. It is only the habit of a lifetime, he suggests, that makes us identify with our particular body and our troubles, and he proposes that, with practice, we could come to regard others' bodies and problems as ours too (*BCA* 8:110–111). Śāntideva suggests that just as we consider our limbs to be inalienable parts of ourselves, we could learn to regard all sentient beings as the "inalienable limbs of life" (*BCA* 8: 113). Again, there is a striking resemblance between this idea and the deep ecologist's notion of an "expanded self."

Although the deep ecologists' concept of identification is very similar to the Mahāyāna Buddhist's idea of solicitude, as we have seen, the reasons for endorsing it, in each case, are completely different. The appeal to emptiness and to the fact that no self can be found anywhere allows the Mahāyāna Buddhist to avoid the problem of whether it is the similarity or the difference between us and other beings that allows and promotes identification. It also sidesteps the issue, which eco-feminists have brought up, of whether incorporating other beings into our sense of self is an appropriate way of relating to them, or if it is not, rather, simply arrogant of us to refuse to respect boundaries, and to assume that we know what every other being needs (Plumwood 1997, 178). Basing solicitude on emptiness, rather than on a feeling of identity, will also enable us to avoid the contradictions inherent in statements such as John Livingstone's, "all that is in the universe is not merely mine; it is *me.* And I shall defend myself" (cited in Plumwood

1997, 179). One might wonder, if I truly am the entire universe, from what do I need to protect myself? From the Mahāyāna Buddhist's perspective, all of these problems and contradictions arise because deep ecologists insist on viewing the self and other beings as possessing *svabhāva* and on wanting to establish what their relationship to each other is. Since neither the self nor the other can be found to exist inherently, in Mahāyāna Buddhism, 'they' can neither be said to be the same nor different.[99] Through basing identification on emptiness, we can also avoid the metaphysical discourse of holism and of interrelatedness.

In sum, basing identification on emptiness instead of on assertions of identity or difference allows us to get around some of the controversies and difficulties that arise in deep ecology. Yet, as we shall see, it only offers a limited way out of the quandaries that were brought up in chapter 1, where we first considered the possibility of establishing environmentalism on solicitude.

Difficulties with Basing Environmental Ethics upon *Bodhicitta*

1) Discriminating between competing interests

The most important problem that emerged from the discussion on solicitude, in chapter 1, was that promoting the welfare of all sentient beings indiscriminately could not serve as a basis for a sound environmental policy. Generating universal love and compassion cannot aid us to arbitrate between the needs of diverse beings, since it is *all* suffering that is to be eliminated under this account, no matter to whom it belongs. Similarly, not many issues in environmentalism can be settled directly by appealing to *bodhicitta*—whether it is a case of human interests versus those of nature, holistic priorities versus individualistic needs, indigenous species versus exotics—the *bodhisattva* is concerned to reduce suffering wherever it is found, and cannot discriminate on any grounds. Moreover, since promoting a being's needs very often involves harming another, the ecologically aware *bodhisattva* might find the task of eliminating all suffering rather hopeless.

[99] It will be recalled that, ultimately, the statement "neither the same nor different" is also negated, and the ideal answer, as in the *Vimalakīrti Sūtra,* would be to remain in silence.

Yet, insofar as she sees beings with competing interests, the environmentalist is being held sway by conventional truth. This means that if she decides to act in such a way that will benefit one party over the other, she can resort to conventional reasons to justify her decisions. She might decide to favour an indigenous animal at the expense of an exotic one, or to protect an endangered species even though this will deprive her fellow humans of some of their income. She might argue that the rarity or vulnerability of one party entitles them to her help. As long she remains aware of the conventionality of these reasons, perhaps this sort of discourse can be admitted. The *bodhisattva's* ultimate, nondualistic perspective, however, will collapse the dichotomies of human versus nature, whole versus part, self versus other, and so forth, and therefore, ultimately, she will perceive no competing interests and nobody being helped or harmed.

It is said, in Mahāyāna texts, that a *bodhisattva* who realizes emptiness is able to help all beings effortlessly, and he is better equipped to serve the needs of others, including those who are distant in space and time. This is because he is able to identify with all beings no matter how far away or how dissimilar they are to him, and he can take up their needs as his own, without the obstruction that samsaric beings face, of wanting their *own* happiness before anything else. Instead, the *bodhisattva* works for the 'greatest happiness of the greatest number,' and yet, unlike the utilitarian, he does not get involved in adjudicating between needs. His understanding of emptiness will reduce the strength of preconceptions or partialities, and the deeper his realization the broader his identification will be.

Finally, the *bodhisattva* can teach emptiness to certain beings as a highly effective remedy for all afflictions. A direct realization of the emptiness of self will automatically eliminate suffering, unlike the theories of deep ecology about our being "one strand in the web of life," which may or may not provide some comfort. In short, extending solicitude universally will not provide us with a specifically environmentally sensitive set of guidelines or prescriptions, nor can it provide us with any criteria to use in cases of conflict. However, combined with a realization of emptiness, what universal love and compassion *can* do is enable us to see through the biases and mistaken beliefs that generally lead us to make the wrong decisions, or even to do nothing at all, and it can facilitate the opening of our minds and hearts so that all sentient beings are allowed in.

2) The predation critique

A second objection against basing environmentalism on compassion was that suffering—in the form of death, disease, predation, and so on—is an inherent part of nature, and the attempt to eliminate it altogether is an outcome of an unrealistic, perhaps over-romantic view of nature that contradicts ecological principles. It was argued that if we followed our desire for the welfare of all sentient beings to its logical conclusion, rather than respecting nature, we would need to alter it radically; in particular, we would need to prevent animals from preying upon each other wherever we could. Some parables suggest that this idea is not as offensive to Buddhists as it is to some environmentalists, who would probably be dismayed by the uncharacteristic portrayal of certain animals in the *Jātaka Tales* and in other Buddhist stories, such as the snake that sheltered the Buddha from the rain, or the tiger that slept by Milarepa's side.

In the next chapter, I will argue that emptiness implies that there is no such thing as the "nature of a tiger," and in fact, several Buddhist stories suggest that, in the presence of an enlightened being, normally aggressive animals become submissive instead. All the same, although the predation critique is perfectly valid for one who displays *relative* love and compassion, such as the animal welfarist whose views were examined in chapter 1, it does not apply to *bodhicitta.* Since the *bodhisattva's* love is generated in union with emptiness, she does not infer any views, any 'oughts,' 'shoulds,' or 'musts,' and especially, she will not interfere with other beings' way of life. To desire the happiness of all beings, when beings and their afflictions are viewed as empty, will not logically *necessitate* any intervention on behalf of suffering beings. Someone who was under the grip of a deluded perspective, perceiving beings, suffering, and actions as real might believe that she had to put an end to all this misery. The *bodhisattva,* on the other hand, would ultimately perceive only emptiness.

Of course, this just shows, once again, that an environmentalist cannot appeal to *bodhicitta* or emptiness to support his environmentally motivated decisions. It points to the problem we have noted repeatedly, and which we shall encounter again below, that as long as it is interpreted as the negation of views, emptiness cannot be used to defend

environmentalism, rather, it seems to push our environmental concerns to the brink of nihilism.

3) Non-living and non-sentient beings

Through generating universal love and compassion, we might seem to extend concern over a considerably wide scope; yet, the final problem identified in chapter 1 was that it excludes numerous natural beings that are also valued by environmentalists, beings that are not normally believed to be living or sentient. It was suggested that, to the extent that some individuals and collective entities display autopoietic behaviour, they can be said to have a good of their own, and we show compassion for them inasmuch as we work to bring about that good. Of course, this requires quite a stretch in the meaning of terms like 'value,' 'good,' and 'compassion,' which not everybody might be willing to accept. In any case, it is unlikely that these arguments can apply to a species, which is an abstract entity.

In chapter 2, we saw that Mahāyāna philosophy involves a thoroughgoing dissolution of all dualities, which, it was said, could be reduced to the opposition between being and non-being. It is only to be expected, therefore, that the gap between living and non-living beings, and between the sentient and non-sentient, would also someday be bridged. This seems to have occurred first in China, where the Indian concept of extending solicitude to all sentient beings was held, by certain thinkers at least, to involve a narrowing rather than an expansion of the moral circle, in that it limited concern to those beings that were sentient only (La Fleur 1973, 95). William La Fleur has provided a detailed account of the debate in China and Japan regarding the types of beings that could become enlightened, including grasses and trees, and even rocks and shards, and for our purposes, one might include also ecosystems, species, communities and the biosphere. The question is relevant to our discussion because if a being can attain enlightenment, this would seem to imply that it can be considered sentient.

Chi-Tsang was first to regard trees and plants as capable of attaining enlightenment, followed in the seventh century, by Chan-Jan who claimed that even a single dust particle contained Buddha Nature. He seems to have been the first to

explicitly collapse the duality, when he asked "Who then is 'animate' and who is 'inanimate'?" (cited in La Fleur 1973, 96). Not everybody accepted this outlook, of course, and a question arose concerning the way non-living and non-sentient beings were supposed to attain enlightenment, given that they could not understand the teachings, meditate, and so forth. Clearly, this impinges upon our topic insofar as compassion is taken to include the wish that its objects become enlightened. If desiring the well-being of a forest, say, requires that the forest can attain Buddhahood, then it is not immediately clear that extending solicitude is applicable here.

Eventually, the idea emerged that Buddha Nature is already present and fully actualized, in sentient beings as well as in non-sentient ones, and that plants, trees and dust particles are fully enlightened from the start (La Fleur 1973, 106–107). In Japan, the idea of Buddha Nature was quickly taken up; however, it appears that a new dualism was set up, in that *natural* beings were perceived as Buddhas, but not human artefacts and common inanimate objects. Saigyō's poems, for instance, are all about mountains, willow trees, streams, cherry blossoms, and the like, which he regards as possessing Buddha Nature, or as somehow soteriologically meaningful (La Fleur 1973, 113). Therefore, it seems that in Japan, nature was seen as opposed to culture, or the human, and indeed, La Fleur reads Saigyō as attributing a subtle negative value to civilization (1974, 239).

This jars with La Fleur's statement, elsewhere, that the target of the Mahāyāna critique is "logic's penchant for chopping up the world into multiple, disparate, and easily lost pieces," including "the old distinction between sentient and insentient [that was] one of those ways of dividing up the world" (2000, 111–112). For Ryūgen, for instance, plants and trees became a paragon of Buddhist virtue, "expert practitioners at their own kind of zazen" (La Fleur 2000, 111). Yet, why not include a concrete slab too, which maintains its posture no less than a tree? Tibetan culture perceives impermanence, not just in cherry blossoms, and falling leaves, but also in the erosion of *stupas* and the wearing away of prayer flags in the wind. If all these things have Buddha Nature, or if they are soteriologically meaningful, the logical conclusion of Mahāyāna non-dualism is to accept that landfills, toxic waste and emissions, greenhouse gases, car traffic, and all other kinds of environmentally undesirable things have Buddha Nature too.

If *bodhicitta* truly embraces emptiness, then there will be no difference discerned between the living and the inanimate, and indeed, some deep ecologists have drawn similar conclusions. Naess, for instance, believes that we can identify with mountains and he claims, "One may broaden the sense of "living" so that any natural whole, however large, is a living whole" (1985, 263). The problem is, of course, that Mahāyāna philosophy gives us no grounds on which to discriminate, and to regard only mountains, trees, and rivers as having Buddha Nature is as dualistic as regarding only animals with a central nervous system as proper recipients for compassion or thinking that only human beings can have a good of their own.

To sum up, *bodhicitta* involves the negation of all views and therefore the *bodhisattva* is not tied to any particular thesis or claim. This has both constructive implications for environmental Buddhism as well as disadvantageous ones. It absolves the *bodhisattva* from the need to follow through all the logical implications of a universal love and compassion, such as the belief that one must endeavour to 'soften' the harsh aspects of nature. Emptiness can also serve as a method of cutting through conventional ideas, such as a rigid understanding of what constitutes sentience, and what sorts of beings can be said to have interests and needs. However, the emptiness of all our conceptions undermines our environmentalist beliefs, and this can result in nihilism. As long as emptiness is understood as negation, a *bodhisattva* has no resources, other than mere conventional ideas, for biasing her love and compassion in favour, say, of indigenous species rather than exotic ones, to prefer endangered animals to pests, or to regard a mountain as sacred, but not a landfill. If the duality between living and non-living beings is dissolved, then all sorts of undesirable things must be included in the class of proper recipients of love and compassion. In short, basing Buddhist environmentalism on the ideas of love and compassion, even when understood in the Mahāyāna sense of *bodhicitta,* is less than perfectly cogent.

Summary

This section has compared the deep ecologist's notion of identification to the Buddhist practice of generating love and compassion. I suggested that both amount to a way of

experiencing nature and living beings by taking their interests as our own. Identification and compassion result in a feeling of good will towards others, and both Buddhism and deep ecology recommend that we widen the scope of these to include the entire cosmos and all living beings.

I argued that, insofar as it relies on metaphysical ideas as grounds for identification, deep ecology is inconsistent with Buddhism, which regards all views as empty. Several deep ecologists, in fact, do not attempt to rationalize their case for identification, and instead merely propose it as an alternative way of relating to the world and to others. Still, there is disagreement between them upon whether identification requires a sense of similarity, of identity, or else a sense of difference, between oneself and those beings with whom one identifies. The Mahāyāna understanding of *bodhicitta*, on the other hand, avoids this quandary by basing identification not on sameness or difference, but upon the emptiness of all beings.

Śāntideva's *Bodhicaryāvatāra* contains an extensive elaboration on this concept. He suggests that since, ultimately, neither the self nor the other can be found to exist inherently, there is no valid reason for discriminating between the suffering of other beings and our own. Therefore, the *bodhisattva* simply promotes well-being, regardless of who it belongs to conventionally. The notion of *bodhicitta* provided a partial solution to the problems, outlined in chapter 1, with attempting to base an environmental ethic upon solicitude. Although the Mahāyāna understanding of ultimate love and compassion cannot be used to ground specifically environmentally motivated actions, applying it will reduce egoistic preconceptions and biases, and will enable one to broaden the range of their concern.

Chapter 4: Avoiding Extreme Views and Pliancy

So far, in this thesis, I have taken a mostly critical approach. I have argued that early Buddhism is too world denying to value nature intrinsically, and that its transcendentalist interpretation of enlightenment depreciates life and the environment. Although Mahāyāna Buddhism is not susceptible to these charges, as it locates *nirvana* in this very world, still, the negation of all views relegates environmental philosophy to a merely conventional type of discourse, and, therefore, to a secondary pursuit. If we ignore philosophical views and statements about facts and turn our focus instead onto 'interiority,'[100] that is, onto our subjective and conscious feelings and perceptions, then Mahāyāna Buddhism and some forms of environmentalism do appear to have quite a lot in common. In particular, the generation of love and compassion for all beings can be likened to the deep ecological notion of identification, which involves taking other beings' interests as our own. Yet, despite the shared concern for living beings' welfare, whenever any specific assertions are made—and that includes all propositions about ecology—they are ultimately negated, in the Mahāyāna, as conventional and delusional views.

The first part of this chapter will continue with the critical analysis of the alleged environmentally salient teachings of Buddhism. I shall invoke the doctrine of emptiness, understood as the negation of all views, to show what sort of ideas the Mahāyāna cannot accommodate. The first section will deal with the eternalist belief in permanent and unchanging things as it appears in scientific ecology and in the philosophy of biology and of the environment. The core concepts of the life sciences, such as the organism, ecosystem, species, and so forth, will be examined in the light of emptiness, and will turn out to be conventional designations, that is, names that are assigned to a cluster of changing phenomena rather than to any thing that exists independently, irreducibly, or with a fixed essence.

[100] The term 'interiority' is from Ken Wilber, who relates it to Whitehead's "prehension," Spinoza's "cognition," Leibniz's "perception," and the Mahāyāna's "Buddha Mind." In general, interiority is opposed to the 'external world,' so that "the within of things is *consciousness*, the without of things is *form"* (Wilber 1995, 109–112).

As we shall see, the Buddhist doctrines of impermanence and emptiness seem to coincide with the 'new ecology' of the twentieth century, which emphasizes nature's state of flux rather than stable equilibrium. Often, though, it is not just flux that we perceive in nature, but deterioration and decay; all beings appear to be 'trapped' in time as they inevitably proceed towards death or disintegration. If taken to an extreme, this view can lead to a pessimistic feeling of despondency, where we wonder why we bother about the environment, or indeed, about anything at all. The second section of this chapter will turn to this nihilistic extreme, and again, the remedy will be emptiness. I will examine several philosophical accounts and argue for the emptiness and conventionality of time, change, and causation. By realizing the emptiness of change, the *bodhisattva* avoids being overwhelmed by the suffering in *saṃsāra*.

Emptiness, that is, enables us to avoid nihilism in some ways; still, it is impossible to reconcile environmentalism with this doctrine when it is understood in the sense of the Mādhyamika negation of all views. For this reason, and also to offset further the charge of environmental nihilism, in the final section of this chapter, I will outline an interpretation of emptiness that is environmentally motivated, and which is based upon the Yogācāra's more positive construal. Once again, this has to do with interiority rather than with views about the world. It will be recalled from chapter 2 that in order to guard against a nihilistic misinterpretation of emptiness, to which Nāgārjuna's negative portrayal was highly prone, the Yogācāra affirmed "the *existence* of the nonexistence of nonduality," or simply, the "existence of emptiness." This was explained as the *bodhisattva's* actual experience of nonduality or emptiness, which arises together with the conceptual negation of views. A similar idea becomes central in the "third-turning of the wheel" phase of Buddhism, known as "Buddha Nature" (*buddha-dhātu*[101]) (Nagao 1992, 20; Macy 2000, 156), or as a pure and luminous, "clear light" mind (Reynolds 2000, 12).

The Pure Land *sūtras* and the doctrine of Buddha Nature suggest that when a *bodhisattva* realizes emptiness, it is not just his own consciousness that is affected but his

[101] A related concept is that of the 'Buddha seed,' *tathāgata-garbha*.

external reality too,[102] that is, the world around him becomes an expression of the enlightened mind, and all other beings reveal their Buddha Nature too. I shall argue, upon this basis, that there is an external complement to the Yogācārin positive aspect of emptiness; a quality that characterizes the outer world, and which I shall refer to as 'pliancy.' Defined as a sense of openness, flexibility, and receptivity to change, this quality belongs to natural beings in the same way that Buddha Nature belongs to consciousness; it is their 'true' nature but not always realized. The concept, like its synonym 'emptiness' and its analogs 'Buddha Mind' and 'clear light,' is only intended as a rough approximation of that ultimate ineffable reality, and like all concepts in Mahāyāna philosophy, it must not be reified or taken as a final truth. It is merely useful, I shall argue, for the version of Buddhist environmentalism that I shall offer here, which is modelled on the Yogācāra's avoidance of nihilism. In brief, I shall claim that there is a relation between the extent of realization in a Buddha or *bodhisattva's* consciousness and the nature of the world that surrounds him. When he realizes emptiness, a *bodhisattva* also realizes the pliancy of nature; these are, in fact, two terms for a quality that is essential for future evolution. Protecting pliancy in nature, besides being beneficial to the environment, is analogous to cultivating and strengthening the awareness of emptiness in one's consciousness. To realize and actualize emptiness as pliancy, in short, is a method for creating an ecological Pure Land.

[102] Clearly, the *bodhisattva* will also have to negate the 'inner/outer' distinction ultimately, so that, as stated by the *Vimalakīrti Sūtra*, he can "enter the Dharma door of nondualism." All talk of internal/external reality here, is merely conventional.

1 Overcoming Eternalism: the Emptiness of Beings

This section will look at certain controversies in biology and in ecology and will compare their philosophical implications to the extreme of eternalism, grasping at a belief in the existence of things with *svabhāva*. Beginning with the debate about the 'old' ecology of equilibrium and the 'new' ecology of flux, I will argue that the dispute corresponds each time to the opposition between, on the one hand, a realist commitment to the independent and unchanging existence of the objects concerned, that is, to *svabhāva*, and on the other, the collapse of this belief when their transient and relative nature is understood. As we have seen, the Buddhist Middle Way regards all objects as empty and impermanent, and emphasizes the way that all things exist in an intricate web of relations with other things. Another way of putting this is to say that all things are conventional and without inherent existence. Applied to scientific ecology, the doctrines of emptiness and impermanence suggest that things like organisms, species, and ecosystems are continually changing and unstable phenomena, highly dependent on other things, and that therefore they do not exist with *svabhāva*.

Contemporary ecologists and philosophers like to point out that whenever we look for constancy in nature we find change instead (Botkin 1992, 62; Gillson et al 2003). Mark Sagoff's portrayal of ecosystems as "transitory and accidental to nature" (cited in Partridge 2000, 80–81), for instance, appears to coincide perfectly with the doctrine of impermanence. Yet, the pervasiveness of change does not imply that these things do not exist at all, as Sagoff suggests, or that their existence is of no value. We fall victim to nihilistic thinking if we infer from emptiness that all forms of environmental change are equally acceptable or if we wonder whether the protection of these transient natural phenomena is worthwhile. In the final part of this chapter, I shall attempt to counter this extreme view by arguing that better and worse forms of natural change can be discriminated—welcome changes in nature, I shall argue, are those that permit further evolution and prevent stagnation. Consequently, I shall portray a version of environmentalism based on the idea that only those sorts of events that can safeguard the possibility of change are acceptable.

For now, though, I shall emphasize the importance of the doctrines of impermanence and of emptiness in Buddhism, the need to apply them universally, and especially to those concepts to which, as environmentalists, we are most likely to become attached. I shall attempt to show how many of our common ideas about nature are, in fact, delusional from the ultimate viewpoint, and I shall use the notion of emptiness to negate various concepts at all levels of nature, starting from the general idea of its 'balance.' The genome, the organism, the species and other taxa, the community, and the ecosystem will all turn out to be empty of inherent existence. In other words, all of these so-called 'things' are 'really'[103] fluctuating collections of transient phenomena that have no reality as svabhavic entities. In Buddhist terms, they are empty, dependently arisen, and conventionally designated 'things.'

The 'Balance-of-Nature' View and Eternalism

One of the oldest and most venerated themes in ecology, which began with Herodotus and which still informs popular imagination, is the "balance-of-nature" view, the idea that nature is a delicate equilibrium of interacting systems (Cuddington 2001, 465; Worster 1998, 364–366). Under this paradigm, the proper state of any natural system, whether a single organism or the entire ecosphere, is believed to be stability, and it is also thought that whenever its balance is upset, a system will return to this proper, stable state (Worster 1998, 366). Until recently, the scientific understanding of nature has emphasized equilibrium, even though the dynamic aspect was never totally ignored. That is to say, nature was never conceived of as perfectly static—it was known to involve various fluctuating elements—yet fluctuation was given limited importance and any disturbance to a system's stability was generally seen as a secondary phenomenon, caused by something that lay *outside* of the closed system.

Therefore, a consequence of the balance-of-nature view is the belief that any process of change occurring in a natural system will invariably tend towards a final goal, which is the proper and natural state for that system to occupy (Botkin 1992, 13; Worster

[103] 'Really' is in quotes because, ultimately, of course, even this statement is negated. Nothing can be stated, it will be recalled, that corresponds to ultimate truth.

1998, 389). A typical example of this kind of thinking is Frederic Clements's view of plant succession, according to which, when communities and ecosystems replace each other they always follow a predictable trajectory. A pine grove, say, replaces an aspen one, and eventually, the sequence reaches a "final resting point," in this case, an oak forest, which is called the "climax" or "homeostatic" stage and which is sustained indefinitely unless disturbed (Worster 1998, 71–72, 391). A similar account of stability was given by Eugene Odum, who believed that the relations between predators and prey worked as negative feedback mechanisms, keeping species populations mostly unchanged over the years. Odum conceived of the ecosystem as a relatively closed system that oscillated around a stable, fixed point and displayed more continuity than change. He held that the ecosystem would depart from that stable point only if it was 'invaded' by 'exotic' species, or disturbed by something 'foreign' to the ecosystem itself, such as fire or other human activity. In fact, Odum warned against anthropogenic disturbance of the "precarious balance" of nature and, in general, he took a strong stand in favor of preserving the landscape in as nearly natural a condition as possible (Worster 1998, 278, 368–369).

If one follows the 'balance-of-nature' paradigm through all of its implications, it appears to be founded on similar desires and assumptions as the extreme of eternalism. This, it will be recalled, requires and stipulates a permanent, unchanging reality that lies behind the world of shifting phenomena, sometimes conceived of as an immutable essence underlying the varying properties of a thing. Some versions of eternalism conceive of *svabhāva* as a logically independent entity, that is, as a thing that can be defined without reference to anything else. Often, eternalists display a strong attachment to those things that they consider as truly existent, and they frequently attempt to prevent them from changing, or else they deny the significance of this change.

Similarly, insofar as it emphasizes the *stability* of homeostatic systems, the 'balance-of-nature' view implies such a permanent, unchanging entity. Organisms, species, and ecosystems are believed to endure with relatively little change and to be relatively discrete, that is, they are conceived of as separate from anything outside of their borders. Of course, no natural system could be thought of as *absolutely* independent or separate, as all natural beings are related to others in some way. Yet under this paradigm,

there is a tendency to envisage such beings in isolation—as we have seen, they are described as *closed* systems rather than open ones and other factors are defined as 'external disturbances,' 'exotic species,' or 'invasives.'

Moreover, the idea that there is a "proper" or "natural" state for these systems seems to suggest that they have an immutable essence—that what they 'really are' is defined through fixed characteristics—even though disturbance changes their properties radically. Again, this is because fluctuation is considered negligible, not a proper or real part of the closed system. In sum, the balance-of-nature view resembles eternalism because it tends to portray permanent, independent and inherently existent natural objects, which possess definite and fixed characteristics. The affinities with eternalism become clear when ecologists, influenced by this paradigm, talk about the need to *preserve* such objects in their natural state, and to *protect* them from changing into something else. Their attachment to these things and their desire to preserve them, *as they are*, is evidence of an eternalist outlook.

According to several authors, the 'balance-of-nature' view has been superseded by the new paradigm of flux, or 'chaos ecology', which has been at the forefront of scientific ecology since the 1990's (Partridge 2000). Under this account, nature is made up of intrinsically fluctuating, *open* systems rather than closed, static ones and the emphasis is on disturbance and change rather than on equilibrium (Pickett and White 1985, xiii). What were previously called 'external' influences—exotic species, fires, and, sometimes, even anthropogenic influence—are now believed to belong *intrinsically* to nature; they are a *part of* the system they affect, and some are even necessary for the persistence of life (Botkin 2001, 261). This suggests that there is no one state that is the 'proper' or 'natural' one for any system, and that there is no oscillation around a fixed point, because there is no fixed, final resting point to be reached, and, therefore, no definite trajectory for nature to follow either (Botkin 2001, 261). Instead, all natural processes contain a considerable extent of "contingent variability" and this is true at all levels of the hierarchy, from the gene up to the biosphere (Pavé 2007). In short, the fluctuation of nature appears more like an aimless ramble than a journey towards a definite destination or an attempt to maintain a steady state.

According to Callicott, Buddhist doctrine ties in more neatly with this new ecology, as the emphasis on flux in the latter is reminiscent of the doctrine of impermanence. Both Buddhism and the new ecology view change as thoroughly pervasive, that is, both "fully embrace change...and abjure any desire for any state of being beyond change" (Callicott 2005, 22). Instead of thinking of a forest, say, as being 'really' an oak forest, that was damaged by fire and then invaded by pines, Buddhists and new ecologists just see impermanence and change, and view the 'forest' as emptiness, not 'really' any kind of forest at all. To negate eternalism, it will be recalled, one meditates on emptiness and on impermanence, and this, in ecology, can be applied to all levels of nature's hierarchical organization of systems within systems. The next section will outline emptiness as it applies to various natural objects, with a particular emphasis on species. I will argue that those objects that are normally the targets of conservation campaigns, ecosystems, species, individual organisms, and the like are all empty of inherent existence.

Emptiness of Natural Beings

In chapter 1, we encountered the argument of not-self, or emptiness of self, and saw that it can be applied to any nonhuman organism. Similarly, it can be extended to show that all natural 'individuals'—including genes, demes, species, communities and ecosystems[104]—are empty of inherent existence too. In this section, I shall outline some arguments for the emptiness of natural beings, and explain why contemporary science also suggests that ecological concepts must not be reified.

1) Individual organisms

The doctrine of not-self claims that when we break down, conceptually, the individual into its aggregates we find that the self cannot be found in any of these, either separately or collectively. In humans, the aggregates are traditionally listed as body,

[104] I use the word 'individuals' following Stephen Jay Gould's theory of macroevolution and punctuated equilibrium, about which more will be said below.

feelings, perceptions, will, and consciousness, although this list was never meant to be definitive, but merely to stand for everything that makes up an individual. In any case, individuals of other species will possess some, but perhaps not all of these aggregates, and for the purpose of this argument, it is unnecessary to establish precisely which ones they do possess. The point of the argument about not-self is that when we attempt to pin down exactly what an animal or a plant is, we find that we cannot point to any single part of it in isolation; a tiger, for example, is not its striped body, or its consciousness, and not its ferocity either. Rather, the tiger is supposed to include *all* of these qualities and aggregates.

We might think, then, that the tiger is just the composite of all these aggregates, the sum total of everything that is said to make it up. However, since all of the tiger's aggregates (its body, feelings, perceptions, and so forth) are constantly undergoing change, this implies that the tiger must be continuously changing too. Yet we usually think of the tiger *itself* as something stable, something that remains unchanged despite the changes that happen to its body as it ages, the changes in its feelings, in its perceptions, and so forth. Therefore, the tiger cannot be the same as the collection of its aggregates. Indeed, this also emerges from the way in which we refer to the latter as *the tiger's* stripes, feelings, perceptions, ferocity, and so on. This clearly suggests the tiger itself must be something else, something different, to which these things belong.

Yet, this cannot be true either, since the only way to recognize a tiger is precisely through its body, and the rest of its aggregates. Apart from these, that is, there is no tiger at all. This suggests that the concept is *imputed* by thought onto a group of constantly changing things; the tiger does not exist inherently but only as a name for a collection of ephemeral phenomena. The trouble with using the word 'tiger' in this way, however, is that we often make the mistake of thinking that there is something real to which it refers, some real substance which owns the aggregates, and which is therefore the real, truly existent tiger. Meditation on emptiness has the purpose of dispelling this illusion.[105] We analyse the tiger, or break it down conceptually, into all of its parts and when we realize that we cannot find the tiger in any of them, we have reached an understanding of its emptiness.

[105] For the classical Pāli loci of the discussion of not self, see *Sn* 22.1, *Sn* 22.59.

2) Species and other taxa

A similar argument can be constructed to demonstrate the emptiness of the concept of a species. Previously, from Aristotle's times to Leibniz's it was mostly held that

> [I]f we...knew things well enough, perhaps we would find for each species a fixed set of attributes which were common to all the individuals of that species and which a single living organism always retained no matter what changes or metamorphosis it might go through (Leibniz, cited in Mugnai 2005, 513).

In other words, species were conceived in terms of *svabhāva*, and it was supposed that they had fixed essences. Even today, many philosophers believe that species are "natural kinds," construed as "a class of objects defined by common possession of some theoretically important property" (Dupré 1981, 68). According to this view, all members of a given species are objectively alike in some way, and to determine an organism's species, one simply checks whether it possesses a particular trait or else a set of such traits. Hull claims, for instance, that "each species is distinguished by one set of essential characteristics" and that "the possession of each essential character is necessary for membership in the species, and the possession of all the essential characters sufficient" (cited in Okasha 2002, 196). A more moderate version of essentialism distinguishes species through 'clusters' of varying similarities rather than essential properties, yet some claim that these clusters are in fact nothing but essences, which, it is argued, do not have to be "neat and tidy" (Devitt 2008, 371).

Following Locke, Putnam and Kripke have distinguished between a 'nominal essence,' which corresponds to the essential characteristics of a thing, described above, and a 'real essence,' which, they explain, is what *accounts* for those characteristic properties. The real essence might be unknown as yet, but, according to this view, in principle it could be discovered by science (cited in Dupré 1981, 66–67). When applied to species, the real essence is thought to reside in the genome or in some other underlying genetic property, whatever is responsible for the species' characteristic qualities. As Dupré notes, the theory of real essences works very well in chemistry, where a substance's molecular composition is responsible for its external characteristics.

However, the theory cannot be extended to biology, and Putnam and Kripke's accounts do not correspond with biological facts (Dupré 1981, 66), as I hope to show below.

If anything like an intrinsic essence could be found for species and other taxa then this would contradict Nāgārjuna's doctrine of emptiness and vindicate eternalism, the belief in *svabhāva,* instead. The extreme of eternalism, it will be recalled, implies a permanent and eternal entity behind changing phenomena, or else an essential core that is independent of a thing's accidental properties and relations. If biological essentialism succeeds, if there is an essential intrinsic core to being a tiger, one that is independent of tigers' relations with other things, this would be a fatal blow to the doctrines of emptiness and of dependent–arising, as it would suggest that species membership is non-empty.[106] Recent discoveries and views about biological taxa, however, reveal an understanding that is not very different from that of Nāgārjuna.

One argument for the emptiness of species emerges from the theory of evolution. Since Darwin, it has been understood that all species are constantly metamorphosing, to some extent, and it is now known that evolution can happen in two ways. Sympatric species transform very slowly but steadily, resulting in radically different new species that emerge over the millennia. An allopatric species, on the other hand, transforms rapidly over a short period, after it branches off from an older ancestor and becomes reproductively isolated. Importantly, whether a species is allopatric or sympatric, it cannot have any single property whatsoever that is fixed eternally (Okasha 2002, 197–198). All properties of all species are subject to mutation at any time and therefore, species cannot have the immutable essence that is posited by eternalism.

Moreover, the boundaries in time between one species and another are vague (Sober 1980, 356; Dupré 1981, 90; Matthen 1998, 112) and there is no precise point, it seems, where one can draw the line between a species and its ancestor.[107] Rather, the way a lineage is split by taxonomists involves a certain amount of arbitrariness. An evident example of this emerges in the event where biologists agree that an act of speciation has occurred, in which case an individual organism will be said to change its species

[106] On the other hand, if species essences are relational—as I shall argue below—then this confirms the doctrine of emptiness, which draws attention to the internal relations between things.

[107] This point is less obvious in the case of allopatric species. If one accepts Gould and Eldredge's theory of "punctuated equilibrium," or Mayr's biological species concept, it appears that there *is* an objective 'line' to be drawn between a new species and its ancestor. I shall be considering these theories below.

membership during its lifetime (Okasha 2002, 206; Matthen 2009, 113). This clearly suggests that species membership is not a property that an organism has from its own side, but that it depends, instead, on the historical and conventional practices of biologists and taxonomists.

This does not preclude however, that once it is designated as such, an allopatric species might have an essence for that period of time during which it is relatively stable. As Gould and Eldredge suggest, when evolution is considered over a geologic time-scale, the emergence of allopatric species appears instantaneous and not gradual. The norm for most species is morphological stasis, and throughout most of their existence, very little change occurs. Metamorphosis only happens during speciation events, and then, it happens relatively quickly. If we consider evolution over a geological time-scale, therefore, it is easy to delineate one species from another (Gould and Eldredge 1972, 1977). Of course, this does not entirely refute the argument above, for we may insist on viewing evolution closer up, on a human time-scale, and from this perspective the fuzziness of the boundaries between species is evident.[108] However, from a geologic perspective, it might appear that species *do* have essences during the time in which they do not change, and this in turn, might imply a lesser degree of *svabhāva*.

Naïve essentialism is the claim that locates essences among the observable properties of an organism, that is, it posits a 'nominal essence,' which is disclosed in the phenotype. For example, if, among other things, an organism is striped then, according to this view, it can be identified as a tiger. Naïve essentialism about species, however, has been widely discredited since there is so much variation within the observable properties of members of any species that no (non-trivial) essential character or set of essential characters can be found which every member of that species will possess (Sober 1980, 379; Dupré 1981, 84; Okasha 2002, 196–198). Whether we think of essences as precisely defined or else as "clusters of similarities," essentialism can even be refuted *a priori*, through considering the case where an organism was born that looked nothing like its parents at all. Regardless of how monstrous it might appear, and even if it possessed none of the alleged essential properties, we would still want to say that it was a member of the

[108] It will be recalled that the Middle Path does not need to establish the truth of any statement. This is merely one argument for the emptiness of species.

same species[109] (Okasha 2002, 197). In other words, determining species membership upon the basis of observable properties cannot work at all.

According to Putnam or Kripke's view, as we have seen, it is the underlying, genetic microstructures that constitute the 'real essence' of a species and not its observable properties (cited in Devitt 2008, 345, 352). The tiger's phenotype and its essential characteristics are caused by its genome, or perhaps by some function at the genetic level, and therefore, the implication is that an organism is striped *because* it is a tiger, that is, because it possesses these micro-structural features, and not the other way around (Matthen 1998, 115). A species's 'real essence,' then, is that underlying genetic property that is causally responsible for its 'nominal essence.' According to this view, science will eventually uncover precisely what these underlying essences are, enabling us to 'carve nature at its (real) joints' (Okasha 2002, 195).

However, as I shall argue below, genes too are empty of inherent existence, and this will refute the idea of a real intrinsic essence for species. What a species is, instead, seems to have a lot to do with organisms' relations with each other, and their relations with the environment. Indeed, the very concept of species as understood today suggests that they are defined relationally (Okasha 2002, 199). There are three commonly accepted modern species concepts. The 'biological concept' classifies organisms into species through their reproductive relations; the 'ecological niche concept' looks at the relations between an organism and its environment, while the 'phylogenetic' account looks at their evolutionary history and common ancestry. These ideas are all subject to various difficulties[110] yet, the important point here is that they all posit a *relational* essence, that is, they determine species not through any intrinsic property[111] but rather, through the relations between organisms and their environment (Matthen 1998, 115; Okasha 2002,

[109] Below I shall argue that this too demonstrates the emptiness of species.

[110] The biological species concept leaves out asexual species and cannot account for hybrids (Dupré 1981, 86). The ecological niche and phylogenetic accounts are problematic in that both require an enormous amount of data to be collected before one could determine what species an organism belonged to. Moreover the phylogenetic account must resort to other criteria, usually phenetic or reproductive, to determine whether a speciation event has occurred (Dupré 1981, 89).

[111] Dr. Simon James points out that an intrinsic property could also be relational, for example, my arms being shorter than my legs (personal communication). Here I use 'relational' property (or essence) to mean a property (or essence) that a thing *x* has in virtue of a relation that holds between that thing, *x* and another thing, *y*, *which is not properly thought of as forming part of* x *in any way.*

202).[112] This then, seems to be perfectly consonant with the Buddhist doctrine of emptiness.

Many biologists agree that the designation of an organism as a member of this or that species is a conventional or historical matter (Kitcher 1984, 326–327; Okasha 2002, 193; Ereshefsky 1991, 98). Yet sometimes there is the suggestion that it is only our knowledge that is lacking—that in reality, species are real and there is an objective way of classifying organisms, which we have not yet discovered (Kitcher 1984, 330; Ereshefsky 1991, 100). Of course, we may someday find this to be true, we may yet uncover *the* 'gene' (or, more likely, the set of genes) for being a human or for being a chimp; yet on our current understanding of species and genetics it appears that all these concepts are empty, precisely because they are defined conventionally and historically.

With higher taxa, like genera and families, the conventional way we delineate these groups comes out even more clearly. It is well-known, for instance, that we call some creatures with eight legs "spiders" simply because of the way we have defined the word, just like we call "birds" those creatures with feathers, "mammals" those animals that suckle their young and so forth[113] (Dupré 1981, 79, 82). One might ask, as Dennett does, why we do not consider 'creatures with eyes,' or 'carnivore,' to be as important a classifier as 'warmblooded creature' (Dennett 1996, 37). If we think about alternative taxological systems, such as, the early Buddhist method, the arbitrariness becomes highly apparent. This system classifies animals according to their number of legs, putting birds and humans into the same category—completely illogically, it may seem. Yet the Linnaean classification of whales as mammals, rather than fish, appears just as unfounded if we are ignorant of the definition of these kinds. These classes, that is, are not real divisions in nature but correspond to our arbitrary way of slicing up the natural world—as Nāgārjuna would say, they are "dependent designations," "nothing more than the referents of words" (Garfield 1995, 305). In short, there are no inherently existent fish,

[112] Devitt claims that this is beside the point, that determining whether a group of organisms is a species does not tell us whether this organism is a member of species *x* or species *y*. His argument however seems to rest on the assumption that there are objectively, groups of organisms that can be picked out as species, which is precisely what (some versions of) the relational account of species are intended to refute.

[113] As Dupré notes none of these definitions is complete. Further conditions would need to be added to the definition of a spider, for instance, to exclude octopuses and to include spiders that had lost a leg, and so on. A truly necessary and sufficient definition would have to be very complex indeed (Dupré 1981, 79f).

birds, or mammals, rather these things are conventionally defined, and empty of inherent existence.

3) Genes and microstructural features

As mentioned above, several authors think that a 'real essence' will be found for species when their genetic make-up is better understood. Today, however, we know that there is considerable genetic variation within any single species, and conversely, that members of different species share the vast majority of their genes (Okasha 2002, 197). We know that genes are 'pleotropic,' which means that any single gene is responsible for more than one phenotypic character, and we also know that most phenotypic characters are, in turn, 'polygenetically influenced' that is, they are the result of more than one gene (West-Eberhard 1989, 254). In short, there is no one-to-one correspondence between an organism's genes and its observable properties and talk of 'the gene for blue eyes' or 'the gene for being human' is a fictional, shorthand way of describing a much more complex reality (Judson 2001). Perhaps, the most surprising discovery has been the considerable part played by the environment in the development of any organism.

Several studies have revealed that phenotypic plasticity, the ability of a single genotype to produce a range of diverse phenotypes, is a widespread phenomenon; a well-known example concerns goats with reduced forelimbs. The onset of this abnormality leads to their developing in a completely different way from other goats, that is, they become bipedal, and they also develop radical divergences "in everything from skeletal form to the organization of internal organs" (Kaplan 2008, 866). In fact, both morphological and behavioural plasticity are now known to be a "universal quality of life" (West-Eberhard 1989, 252), and the literature contains an abundance of examples of organisms that develop in a very different way from their conspecifics due to environmental circumstances. For instance, plants that are normally terrestrial will develop aquatic leaves when transplanted into water and vice versa. Indeed, the vertebrates' move from water to land in the Devonian period must have occurred within a single genome of lung-bearing fish (West-Eberhard 1989, 263–264, 267–268; see also Dennett 1995, 77–79; 1996, 264; Kaplan 2008, 865–870). This demonstrates, once again,

that an organism is the product of both its genes and its environment, that it has no fixed, immutable essence, but that in reality, it is a highly plastic being, empty of any inherent existence.[114] In the final part of this chapter, I shall refer to this quality as 'pliancy'.

The same idea is confirmed by the various 'genome projects,' which have sought to identify the genetic sequences of diverse organisms. Far from uncovering *the* gene for a particular species, the genetic make-up, say, of a modern human and that of a Neanderthal were found to be mostly identical (Green et all 2009) and the same holds for the genome of a human and of a chimpanzee; indeed, it is widely held that the difference between humans and chimps is not one of genetic material, but caused rather by different genetic expression during development (Cyranosky 2002, 912). In fact, despite scientists' detailed knowledge of genetic make-up of chimps and humans, they have still not been able to relate this to their knowledge of morphological differences between our closest cousins and us (Levinton 2001, 3). Instead, the surprising extent of similarity among the genomes of all species—including humans, flies, worms and even bacteria—has led scientists to argue for the "commonality of all life" and to stress, once more, the environmental input in determining what it means to be a member of a species (Pääbo 2001, 1220).

All these considerations would seem to imply, contra Putnam and Kripke, that there are no 'real essences' of species to be found among underlying genetic properties. It confirms the idea that organisms and species do not have immutable natures, but rather they are capable of changing radically, not only on an evolutionary time-scale, but also within a single lifetime. "The critical point never to omit," it has been claimed, "is that genes act in concert with one another [and] collectively with the environment" (Judson 2001, 769). That is to say, genes, phenotypes and the environment are all dependent on each other and there is no single, independent unit that we can call 'a gene.' Rather this concept too is an empty one—dependent upon conventions and with "a strong historical origin" in the way it is defined (Judson 2001, 769). Just as we saw with other natural systems, there is no *svabhāva* to be found within genetics.

[114] A consequence of this plasticity, known as the "Baldwin Effect," is that under some circumstances, beings can "hasten or guide the further evolution of their species" (Dennett 1995, 77). In the final part of this chapter I shall rely on this to draw an analogy between natural and spiritual evolution.

4) The universality of emptiness

The doctrine of emptiness, therefore, applies to systems at all levels of the natural hierarchy, all the way from the smallest unit of life, the genes, right up to the higher systems, the demes, communities, and ecosystems.[115] As we saw above, today these too are seen as "erratic and shifting" phenomena rather than integrated units. In the 1930's Henry Gleason had already debunked the idea of an ecosystem, claiming that these supposed 'units' were not cohesive at all but rather a temporary and adventitious mingling of species and abiotic features. In his words,

> Each separate community is merely one minute part of a vast and ever-changing kaleidoscope of vegetation, a part of which is restricted in its size, limited in its duration, never duplicated except in its present immediate vicinity and there only as a coincidence, rarely if ever repeated (Gleason 1939, 106).

Similarly, Michael E. Soulé writes, "the idea that species live in integrated communities is a myth" and, above, we saw that Sagoff describes ecosystems as "unstructured, transitory and accidental in nature" (cited in Partridge 2000, 79). Much has been made of the lack of real, solid borders in nature, and the arbitrary delineation of units by ecologists, biologists, and geneticists for their particular purposes (Fitzsimmons 1999, 24–25). The new paradigm of flux, as we have seen, focuses precisely on the lack of inherent existence of these natural systems and there is a clear resemblance between this idea and the doctrine of emptiness.

In short, all of the so-called 'individuals' of the life sciences are impermanent, constantly fluctuating, without a fixed essence, and highly dependent upon other things. There is no svabhavic entity that exists inherently, from its own side; rather, the boundaries between things are somewhat porous, in the sense that all natural beings tend to influence and to be influenced by one another. This relates, of course, to the holistic vision of oneness that was described in the previous chapter, the deep ecological and Hua Yen Buddhist portrayal of reality as made up of a web of interconnected beings. There, it

[115] I have not spoken about the emptiness of the ecosphere as one living unit, Gaia, which, some might claim, is the highest level of the natural hierarchy, because this was covered extensively in the previous chapter.

was emphasized that such theories and statements are not to be grasped at as final truths, and the same point can be made about all the theories and statements reported here. The purpose of this section has been to point to the emptiness of natural beings; it will be recalled, however, that all statements are merely conventional and cannot directly describe emptiness, which is ultimately ineffable.

Summary

In brief, the section has suggested that as environmentally concerned Buddhists, we cannot legitimately aim to protect the 'balance of nature,' simply because we understand that there is no such thing, and that nature is always in flux. When the emptiness of particular landscapes, endangered species, communities, and individual organisms is taken into consideration, they will no longer appear to exist inherently, and the desire to prevent them from changing will be recognized as eternalist grasping. The oceans, the rainforests, the atmosphere are merely fleeting and transient phenomena; just like tigers, polar bears, and whales they have no independent existence at all. This might seem to make climate change—whether anthropogenic or not—appear perfectly natural, just more impermanence, like deforestation, desertification, and so on.

A forest, for instance, is not fixed, independent, irreducible or unified; rather, it has always been changing and what we once called a 'disturbance'—an invasive species or a fire—we now known is a perfectly natural and integral part of that 'forest,' even though it brings about such a drastic change. There are no svabhavic entities in nature, but rather, everything is related to everything, and our habit of delineating parts of nature as single beings is merely a conventional practice. If we accept the Buddhist doctrine of not-self, we also need to accept that all living beings are collections of variable aggregates, and cannot be found to exist from their own side. The same goes for what we call a 'species'—it does not exist inherently, but is defined through its relations with other things. The "Bengali tiger," say, does not correspond to any real category 'out there,' and it has no fixed essence, either in its visible qualities or in its genetic make-up. The constant evolution of organisms implies there are no clear boundaries between one

species and another, and it also implies the inevitable loss of every single species at some point, although, from another perspective, there are no real species that can be lost.

In short, I have argued that to find the Middle Path in ecology is to recognize the conventionality and emptiness of all beings on all levels of the natural hierarchy, from genes up to ecosystems, and to let go of our attachment to their existence and our desire to prevent change. This can be extremely difficult because, as environmentalists, we tend to care deeply about these beings, and at the very least, we want to safeguard their future existence. On the other hand, emptiness must not be taken to imply the absolute nonexistence of all our cherished beings. Nor does it entail that there is no point whatsoever to our attempting to protect them. To draw this sort of inference would be to fall into the other extreme of nihilism, which involves negative emotions as much as theoretical views. The next section will outline this second 'wrong view' and explain how emptiness provides a remedy for this pessimistic outlook too. Finally, the third section will describe a positive version of Middle Way environmentalism.

2 Overcoming Nihilism: the Emptiness of Change

Impermanence featured heavily in the previous section, where we saw that all natural beings are in constant flux and constantly undergoing transformation. This section will explore the connections between time, change, death, and decay, thereby examining in more detail the correlations between impermanence and suffering, which were anticipated in chapter 1. It is possible, I will argue, to descend too far into a nihilistic state if the concept of change is reified.[116] At this extreme, the difficulty has to do with one's feelings and emotions, as much as with the intellect and philosophical views. The problem of *duḥkha* can appear insurmountable, and an aspiring *bodhisattva* could easily feel overwhelmed by all the suffering in the world and give into despair.

I will start, therefore, by examining the connections between impermanence and suffering, to determine how the everyday view of time and change results in a nihilistic attitude. The excessive preoccupation with suffering and the sense of hopelessness it might incur is a third aspect of nihilism, along with those encountered in the second chapter; the delusion of absolute nonexistence, or annihilation, and the sense of meaninglessness and purposelessness that this might bring about. To see through the illusion of change, I shall conclude, allows the *bodhisattva* to go beyond *duḥkha*, and to avoid becoming overwhelmed by suffering, or despondent about the continuous flux of nature.

By the 'everyday view' I mean to refer to a belief that time and change exist with *svabhāva*; that even if beings are not inherently real, as we saw above, time and change exist independently, irreducibly, and with a fixed essence. Generally, they are thought to be inherently asymmetric, where time invariably points to the future, and causation is

[116] I will use "change" as a catch-all term which includes causation, succession, becoming, motion and even time. The connections between these concepts seem rather evident and I do not think there is need to delve too deeply into the differences. For a recent account that sees time as "change in the abstract," see Corish 2009. According to this author, Einstein has shown that time is relative, rather than absolute, and thus "time requires something to happen, some change to take place, and where no such thing happens or takes place, there is no time" (Corish 2009, 230). The relation between time and change was understood also in antiquity, for example, according to Aristotle there cannot be time without change (cited in Corish 2009, 224). Similar views include Wittgenstein's, according to whom statements about the occurrence of changeless intervals are senseless (cited in Scott 1995) and Russell's who claimed that there could be no moment completely devoid of events (cited in Schlesinger 1970, 295). See also Leighton 1908; Shoemaker 1969.

intrinsically one-way. Charles Hartshorne and other process philosophers are representative of this view, and indeed, his and Whitehead's works have often been compared to Buddhism because of the way they both emphasize flux and change (c.f., Hartshorne 1975, Odin 1995).

I shall argue, though, that there is a fundamental difference, in that Buddhism does not reify change, but regards it as empty too. The everyday view of change and causality, as well as other, more sophisticated philosophical accounts, such as the theory of "four dimensionalism," will turn out to be conventional explanations and not ultimately true. I shall follow Nāgārjuna's arguments and outline the Madhyamaka's deconstruction of change, in order to show what is meant by its emptiness.[117] In short, it will emerge that we are unable to explain time or change as ultimately real, svabhavic entities.

A natural conclusion to draw from the unreality of change is to suppose that when the *bodhisattva* transcends the world of becoming, or *saṃsāra,* he enters a realm of eternal, immutable being. However, as will be recalled from in chapter 2, Mahāyāna Buddhism ultimately identifies *nirvana* with *saṃsāra* and does not conceive of it as a separate place, or even as an alternative perspective. In that chapter, we also saw the need for letting go of the propensity to want to affirm some proposition as ultimately true, and the Mahāyāna's aspiration of renouncing all views and philosophical positions. To that end, I shall conclude by attempting to draw out the implications of the emptiness of change while refraining, as far as possible, from asserting any definite statement.

Change, Suffering, and Nihilism

One of the central problems of philosophy concerns the relation of being to change, and perhaps this emerged from a basic anxiety about the impermanence of human existence. Confronted with knowledge of an ever-approaching death, many thinkers have grappled with the notion of nonexistence and have tried to understand what it could mean for something to come into or go out of existence. In ancient Greece, this question arose

[117] I say "attempt" here because ultimate truth is ineffable, and therefore anything that I say can only be an approximation of emptiness.

during the time of the pre-Socratics, when mythology was beginning to be questioned and the possibility was admitted that there might not be an afterlife at all. The discussion about the nature of existence and nonexistence leads naturally to the puzzle about change—a concept even harder to understand. Notwithstanding the law of excluded middle—which was understood long before Aristotle formalized it—change was seen to contain elements of both being and of non-being; in the way that a candle that has been bent, for example, both is and is not 'the same' as it was before (Hansson 2007). As Achille Varsi has succinctly put it, the philosophical problem of change lies in explaining how it is that although things change they somehow stay the same (Varsi 2005, 485).

Impermanence and suffering are closely linked, not only in philosophy but also in our ordinary, everyday experience. Facing changes in our lives often causes unease; many people tend to dislike or even fear any sort of disruption to what they are used to and try to hold on to things as they are. Yet try as we may, we always seem somehow trapped 'in' time, rushing headlong towards the inevitable—the death of those around us, and finally, our own. The extent to which this troubles us is proportionate to the weight of consideration that we allow it; most of us are content to ignore the problem for as long as we are able to, and yet we are all confronted with unwanted changes and death at some point. Even if we are lucky enough to enjoy a relatively comfortable life, the more we identify with other beings, as described in the previous chapter, the more unbearable their suffering becomes for us. In short, whereas life, wholeness, and order are universally valued, death, decay, and indeed time itself, as David Loy has pointed out, are problematic, and these are not merely philosophical problems, but constitute a 'basic anxiety' for us all. This is, of course, the problem of *duḥkha* all over again, which is a 'personal and immediate' problem that, one way or another, needs to be resolved during our lifetime (Loy 1986, 17).

As we saw in chapter 1, the Buddhist doctrines of impermanence and suffering are intimately related. *Anitya* is variously translated as "inconstancy," "impermanence," "disintegration," and so on, and therefore the concept is a negative one, suggestive of lack. The Buddha speaks about impermanence, mostly, as something that is useful to meditate upon, suggesting that if one learns to perceive change everywhere and at all

times, this will bring all sorts of benefits for this practitioner.[118] In the *Loka Sutta*, the Buddha describes the "cosmos" or "world" (*loka*) as "that which disintegrates," claiming that "insofar as it disintegrates it is called the world" (*S* iv 52; Thanissaro) and in the *Dukkha Sutta* this is directly related to "stress," in other words, the unhappiness and suffering that arises due to the impermanence in the world where nothing ever stays the same (*S* iv 259; Thanissaro). A typical account of samsaric existence runs as follows:

> Birth is stressful, aging is stressful, death is stressful; sorrow, lamentation, pain, distress, & despair are stressful... (*D* ii 305; Thanissaro).

Elsewhere, the connection between impermanence and distress is made more explicit:

> What do you think, monks—is form constant or inconstant?
> Inconstant, Lord.
> And is that which is inconstant easeful or stressful?
> Stressful, Lord... (*S* iii 138; Thanissaro; the same point is made about the other aggregates).

This harsh view of existence is echoed in a certain evaluation of nature that sees it as being 'red in tooth and claw.' A contemporary version is put forward by Holmes Rolston:

> The Greek word is "pathos," suffering, and there are pathologies in nature, such as the diseases of parasitism. But pathology is only part of the disvalue; even in health there is suffering. Life is indisputably prolific; it is just as indisputably pathetic, almost as if its logic were pathos, as if the whole of sentient nature were pathological... (Rolston 2003, 84–85).

For Rolston, natural processes amount to the "evolution of suffering" and he cites other thinkers who have similarly been struck by the evil that accompanies natural change. Darwin calls the process of natural selection "clumsy, wasteful, blundering, low and horribly cruel"; Williams refers to nature as a "wicked old witch" (cited in Rolston 2003, 79). In short, the history of evolution seems saturated with pain, due to organisms' developing all sorts of weapons and venoms in order to kill and devour each other. The unfolding of life always meets with a tragic end, and at the very best, an individual

[118] e.g., *S* iii 155–157; *A* iv 46–53.

escapes predation, disease, or starvation just to die, eventually, of old age. Things do not change further up the evolutionary tree; as the Buddha points out, human life is fraught with suffering too, and no matter how 'developed' our civilizations and cultures might be, it seems that lasting happiness continues to evade us. In short, the pervasiveness of change in the world, and the fact of impermanence cause a tremendous amount of distress, and the ubiquity of suffering in the world could easily cause one to despair.

The unease caused by this terrible aspect of *saṃsāra*, and the adversity and suffering it brings about is one facet of nihilism. It is related to a second theme, which was raised in chapter 2, namely, the problem of nonexistence, and the worry about annihilation. Of course, death is an example of annihilation *par excellence*, and its prospect can raise great fear in some. Finally, nihilism includes a sense of purposelessness; for instance, a belief in interminable change, without any form of design or destination, can cause us to wonder about the meaning of our existence, or indeed, that of the universe. In what follows, I shall describe these aspects of nihilism as they relate to environmentalism.

The Ecology of Flux and the Extreme of Nihilism

As we saw in the previous section of this chapter, the new ecology of flux and several contemporary trends in the philosophy of biology, suggest that the things that environmentalists cherish—the species, communities, and ecosystems they try to protect—are all concepts which we *impute* to reality, things that do not inherently exist. This was seen to correspond closely with the Buddhist idea of emptiness, which reminds us that it is we who "bundle things together in pursuit of cognitive economy and in ways otherwise reflective of our interests" (Siderits 2003, 96). Meditating on emptiness reveals that these things cannot be held on to for long; species, for instance, cannot be conserved forever, and many will eventually become extinct simply because they will evolve. Similarly, there is no 'precarious balance' to protect in an ecosystem, and the local populations and communities that conservationists value so highly are merely transient associations of phenomena, with nothing substantial behind them.

Thus, the Middle Path tells us that the things we value do not exist inherently. An easy and common mistake to make is to infer that they do not really exist at all, which is the first aspect of nihilism—the concern with nonexistence—and which, as another 'wrong view,' the *bodhisattva* seeks to avoid. When applied to ecology one might deduce from the idea that ecosystems are "fictions that exist in the heads of their creators, not on the surface of the earth" (Fitzsimmons 1999, 161) that the concept refers to nothing real in the world at all, and that therefore, it can readily be discarded. The Buddhist Middle Path however, also rejects the view of nonexistence, and instead of throwing out our concepts it recommends, as several ecologists do, that we keep in mind their conventionality, and continue to use them as heuristic devices that help us to understand and to talk about the world (Fitzsimmons 1999, 161).

The Middle Path between existence and nonexistence suggests that nothing can ever be completely destroyed—whether species, ecosystems or whatever—since there is nothing substantial behind these things, there is nothing that can be wiped out of existence. In Nāgārjuna's words;

> When no entities exist [inherently],
> There is no becoming or destruction
> (*MMK* 21: 8; Garfield 1995, 57; insert added).

Garfield explains that "(t)he empty cannot come to be or be destroyed simply because there is no basis for the predication" (Garfield 1995, 270). Of course, this does not mean that we cannot say, conventionally, that species become extinct, or that ecosystems are degraded. The point about their emptiness is intended to draw our attention to the conventionality of this mode of expression and to emphasize that what 'really' happens is that as relations change, so too do these so-called 'things' change.[119] Therefore, the Middle Path rejects absolute nonexistence and destruction, and posits instead, an ever-changing process of dependent-arising.

Naturally, this is not much consolation for the environmentalist; she is only too aware that, as forests are wiped out, for instance, they are converted into beef burgers, biodiesel, pollution and other products. The replacement of biodiversity by homogenous

[119] 'Really' here might be taken to mean ultimately; i.e. according to ultimate truth. Yet this is not accurate either, since ultimate truth cannot be expressed.

crops everywhere is not very reassuring, nor is the knowledge that if the bulk of species are lost, cockroaches and jellyfish will fill in the empty niches. Claiming that nothing is absolutely annihilated does not remove the difficulty of impermanence; that change appears, sometimes, to have a detrimental outcome. To become too preoccupied with the negative aspect of impermanence, especially if one succumbs to pessimism and despondency, is another aspect of nihilism.

The insubstantiality of our natural treasures and the seeming inevitability of their loss can lead one to question whether there is any point to environmentalism at all. If there is nothing that is 'solid' behind that which we want to protect, we might well be justified in asking ourselves why we bother. We might suspect that we could even be causing more harm than good in trying to impose our will upon the natural world and attempting to impede change. We may wonder whether there even is such a thing as an environmental good, or whether our efforts to locate it might not be misguided. This sort of reasoning can be extended to question all notions of value and amelioration and if carried to an extreme it becomes the third aspect of nihilism; the belief that there is no meaning or purpose to natural change, that there is no better or worse outcome and no value to be gained or lost whatever happens to the environment.

This is an especially worrying notion for the environmentalist, since it undercuts any attempt to influence the course of events. Leaving aside all considerations about suffering (human or otherwise), if, as the new ecology of flux claims, there is no particular state that is the 'natural' or 'proper' one for a system—the shape it would assume if left undisturbed—then it is hard to see how one could argue for the preservation of the system in any particular state. Since disturbance is fundamental to a system, a burnt forest, for example, cannot non-arbitrarily be described as worse than it was before, and assuming we think of human activity as natural,[120] it seems we have fewer reasons for thinking that clear-cutting it, say, amounts to environmental degradation. The problem is that if we "completely embrace change," and give up the idea that there might be better or worse change, it seems that no meaning and no purpose

[120] Several authors take this view. Sober, for instance, thinks that "what happens in nature is simply everything that happens" (Sober 1980, 379). The argument is that since humans are natural, then so is everything they do and the nature/culture divide is false one. In the previous chapter, it was suggested that Mahāyāna nondualism will dissolve even the dichotomy between nature and culture.

can be found anywhere. Indeed, some have seen this version of nihilism as a direct consequence of Darwin's theory (Sommers and Rosenberg 2003, 654).

The final section of this chapter will propose a way of distinguishing better from worse natural change, based on a positive interpretation of emptiness. First, however, I will go on to analyse the concept of change itself, and to argue that, according to Mahāyāna philosophy, this too is empty, and should not be reified. That is, to give in to nihilistic feelings because of the impermanence we perceive around us is another extreme view, and the remedy, once more, is an understanding of emptiness.

The Emptiness of our Intuitive Idea of Change

Impermanence and flux are central concepts not only in Buddhism, but also in process philosophy and indeed, several writers have commented on the similarities between these two traditions.[121] Process philosophy can be seen as the continuation of the ancient project of Heraclitus, which attempts to shift ontological primacy away from 'things' or beings and onto events, processes and creativity. To the extent that it views 'things' as unreal, process thought does seem to echo Buddhism, however, one divergence that is immediately apparent lies in their different evaluation of change. While for Buddhists change is a 'lack of permanence' and something negative that causes suffering, process philosophers put a positive spin on the concept through the terms 'creativity,' and 'process,' and sometimes even equate it with the divine (Hartshorne 1970, 10–12).

Charles Hartshorne refers to the process account of change and causation as the standard, "intuitive" understanding[122] (1970, 52, 213) and he explicitly contrasts it with the Buddhist version. Citing Nāgārjuna, he criticizes Buddhism for describing the relationship between past and future, cause and effect as symmetrical and interdependent, and here, the distinction between notional and causal dependency comes into play. As *concepts*, he says, it is true that past and future, cause and effect derive their meanings from each other (1970, 99), and therefore they are notionally interdependent. Yet in actuality, he says, we intuitively know that the present depends on the past but not on the

[121] E.g. Tanaka 2007; Kakol 2002; Devenish 2001; Eckel 1983; Inada 1974.

[122] Others point out that their account goes completely against the common opinion in granting concreteness to fleeting atomic events, rather than to individual beings (Buchler 1969, 593).

future. We believe that a cause will give rise to some kind of effect, but precisely *which* effect is, to a certain extent, indeterminate (1970, 2–3, 103, 213). Therefore, the future is dependent on the past, and the effect on the cause, but not vice versa. This construal coincides with ordinary understanding, Hartshorne says, in that it endows time and causality with an inherent direction, and regards change as invariably pointing towards the future. The main difference that he finds between process philosophy and the Buddhist doctrine of impermanence, is that the former is clearer on this asymmetry (1975, 407).

Indeed, it is true that we naturally think of causality and change as real because we compare the present to the past, which still 'exists,' somehow, in our memories. One implication of this view, therefore, is that reality is cumulative (Odin 1995; Hartshorne 1970, 105), containing, in a way, everything in the past up to the present moment (Hartshorne 1970, 118). The future, on the other hand, does not exist at all, according to this view, and each new moment that arises contains an element of novelty, so that what happens next is never completely predictable (Hartshorne 1970, 5–7). The similarity between this account and our ordinary understanding of change is quite clear. In what follows, I will argue that it is a merely conventional description, and that ultimately, change and causality cannot be found to exist inherently.

The discrepancy between our knowledge of the past and that of the future, according to Hartshorne, is not merely accidental, but has to do with the nature of time and temporality. Any deficiency in our memory is a result, he says, of our being "animal knowers, limited in perceptual and reasoning capacities." That is, we are liable to forget things, and make mistakes, yet theoretically, we could have complete knowledge of the past. Prediction and knowledge of the future, on the other hand, is "*in principle* incomplete," and this is due to the limitations of causal determinacy (1970, 105; italics mine). The fact that any process of change always involves some novelty means that we cannot extrapolate causal relations into the future, and that no matter how exhaustively we study present conditions, we will never be able to make predictions with complete accuracy. In other words, time and change are inherently asymmetrical; the past and present exist and can be known fully, whereas the future does not exist yet, and is to a certain extent unpredictable. The *svabhāva* of time and change, therefore, consists of this

direction and the element of novelty, which appear to exist independently, irreducibly, and with a fixed essence.

The question that immediately arises is how we can be justified in taking our memories of the past to be real, but not our anticipations and predictions of the future. Contra Hartshorne, Buddhism emphasizes that both the past and the future are unreal. "What is past is left behind [and] [t]he future is as yet unreached" claims the *Bhaddekaratta Sutta*, and it goes on to say that only the present moment can be clearly seen (*M* iii 187; Thanissaro). This suggests that there is no intrinsic difference between the past and future, and if the past can be fully known, it would seem that there is no reason why an omniscient mind that was aware of every present detail could not also make accurate predictions. I would like to suggest that perhaps it is only a conventional matter that we take our memories of the past to refer to something real but not our predictions or anticipations. Indeed, some people tend to live in the future and, disregarding their memories of the past, they build up expectations, which they project ahead or even in some cases, experience as present (Beck 1976, 60). At least one author believes that "it is the sense of the future, rather than of the past, which has been most important in the evolution of our civilization" (Shotwell 1915, 201). In short, one might raise doubts about the consistency of basing a theory of change and time upon memory while excluding altogether prediction and anticipation.[123] Hartshorne's asymmetry, on this understanding, is merely a conventional bias, and rather than existing independently, any novelty in an effect is completely dependent upon its causes.

As suggested above, Hartshorne believes that while the past is already definite, a future effect is only *partly* determined by its cause. Unfortunately, he never seems to succeed in explaining fully how something can both be determined *and* to an extent unpredictable. He maintains that every event is caused—whether a mechanical incident or an intentional human act—and he describes a cause as "a state of affairs, granted which something *more or less* like what happens subsequently was 'bound to happen,' or ...could safely have been predicted" (1958a, 794; italics mine). Indeed, most people do believe that more than one particular outcome is possible, or predictable, given a certain

[123] In his 1954 paper, Hartshorne explicitly says that one cannot hope to understand causality without relying on memory (1954, 482).

cause. If that were not true, then we would have no basis for thinking that our actions have any freedom at all.

The injection of novelty into causation, however, seems to undermine its very foundations. The question that arises is where this element of novelty, the unpredictable part of the effect, could come from. As Nāgārjuna might say, is it caused or uncaused? Hartshorne is clear—the effect's "final particular nature," he says, "does not come from anywhere, but rather it *be*comes" (1954, 497). It sounds then as if Hartshorne has introduced some random, uncaused element; indeed he puts it in those very words in certain places (1970, 318; 1963, 601). Yet this seems to dispose of the causal relation altogether, and renders his account susceptible to the second horn of Nāgārjuna's dilemma.[124] If the final, overall character of the effect does not come from anywhere, then it must be correct to say that it is not caused at all. That is, we seem to be left with an effect that is partly determined, yet with another part that is wholly random, and since this novel aspect can also make up a significant part of the effect, it seems that we are left with a process that is heavily stochastic. Yet, as soon as we introduce even the smallest random element, this seems to undermine causation altogether.

Elsewhere Hartshorne says that the novel part of the effect is "self-created" (1958b, 519). Nāgārjuna long ago pointed out the contradiction in such statements—the first horn of his tetralemma. If the effect does not exist before it arises then how can it create itself? And if it already exists, then why would it need to create itself again? (Garfield 1995, 116, 120) In short, it seems Hartshorne has not found a way around Nāgārjuna's arguments and the Madhyamaka's classic deconstruction of causality still stands. Whether we see an effect as existent in its cause or as non-existent, we come up with contradictions, and this clearly demonstrates the emptiness of causation, and that our use of causal language is merely conventionally appropriate and no more (Garfield 1995, 122).

[124] As Nagao points out, "in the final analysis, the tetralemma can be reduced to a final dilemma of being or non-being," (1992, 213) that is, the third and fourth alternatives are refuted with the refutation of the first two.

The Emptiness of Change and Time; Other Theories

One might reply to Nāgārjuna's argument by challenging the claim that there is a fundamental difference between past, present, and future, that is, by doing away with Hartshorne's account and our intuitive view of time. An alternative interpretation, in fact, is known as four-dimensionalism, and has also been attributed to some schools of Buddhism (Yao 2007). On this account, time exists as a whole "block"—a fourth dimension added to three spatial ones—and includes present, past and future without any distinction (Putnam 1967, 241, 247). In Buddhism, the realization of this state is referred to as "no time," "timeless time" or even, the "fourth time" and is described as a state attained by the Buddha upon realization of the sameness of, or lack of difference between the three times of past, present and future (Yao 2007, 516).[125] On this view then, there is nothing inherently special about the present, and it is no more real than the past or the future. Four-dimensionalism, that is, goes completely against ordinary experience, and therefore, it might be claimed, it is not a conventional view.

The Western philosophical version of this theory of time is sometimes put forward to account for the reality of change. According to this view, individuals and objects *perdure*, that is, they extend over time just as they do over space, so that they can be thought of as having a number of temporal parts (Varsi 2005, 485). The problem of change, the issue of how a candle, say, could be both bent at a certain time and straight at another, is resolved by saying that the part of the candle which is at time *t*1 is straight and another part of it is bent at *t*2 (Hansson 2007, 267). In this way, it appears that the candle's having contradictory properties at different times can be understood in the same way as, for instance, we could say that the candle was both blue and red; blue in one physical part and red in another (Clark 2008, 28). To take some environmental examples,

[125] Although Yao talks about "four-dimensional time in Buddhism," strictly speaking, what Buddhism refers to is not time as a fourth dimension, as in, say, Sider 2001, but a "fourth time," added to the three times of present, past and future. The "fourth time" is also referred to as "no-time" or "timeless time" and is the experience of time from the ultimate perspective of the Dharmakaya (Yao 2007, 516). That the number four appears in both appellations seems, at first glance, to be merely accidental. On the other hand, in both systems, the concept refers to the experience of present, past and future as indistinct—on the western account they all exist, whereas for Buddhism they all do not exist. Both seem to suggest, too, that the 'fourth time' or 'four-dimensional time' is a truer, more primordial or fundamental experience of reality, through which our ordinary experience of time flowing through the differentiated past, present, and future is revealed as an illusion.

we might say that a piece of forest changing into farmland can be conceived as an event spread over time that happens to a single entity, so that there are a series of states of the forest-farmland that differ from each other by degrees. An endangered species can similarly be thought of as an individual spread over time, and, since its numbers are decreasing, it will occupy less space in its later parts than it does in earlier ones.

According to this view then, Nāgārjuna and other Buddhists are wrong to say that the past and future do not exist *simpliciter*; rather, it is held that past and future events and objects 'exist' along with present ones, 'exist' that is, tenselessly—the word is used without reference to time or tense. Therefore, the arguments that Nāgārjuna brings against causality and change no longer apply, since both present and future, or cause and effect exist together. This view, which has affinities with the old Sāṃkhya view of an eternal *ātman*, is also said to be more consistent with Einstein's special relativity, where the distinction between present, past and future is not an objective fact, but is relative to observers' positions and velocities (Putnam 1967; Varsi 2005, 486).

Still, there are a number of problems with the view of four-dimensionalists. To begin with, their somewhat convoluted explanation of change goes against the common-sense supposition that someone or something is *wholly* present at any given time. One tends to believe, for example, that one is here 'as a whole' at this very moment (Hughes 2005, 465) and the idea that there is a part of the self which is left behind in the past or which stretches out into the future seems a little improbable.[126] Besides, claiming that the forest or species 'exist' tenselessly in the past does nothing to mitigate our grief or anger at their loss, precisely because we feel that past objects do not exist any longer. Of course, since the previous section argued that our everyday understanding of change was merely conventional, we cannot appeal to it here to refute four-dimensionalism. There are further reasons to reject four-dimensionalism, however.

Several authors have pointed out that the four-dimensionalist understanding cannot really account for change, rather "the universe seems to be an unalterable block" (Bottani 2005, 398) without any real movement or flux happening anywhere. McTaggart,

[126] This is a simplification of the discussion, which involves several highly detailed positions that have been elaborated over the years as theorists modified their views in response to criticism. My point here is that even if we take account of four-dimensional theories of time we are unable to discover change as an inherently existent reality. For a recent discussion, see the special issue of *Dialectica* 59(4).

for example, points out that if there is only one eternal and unchanging reality, then, there is no real change or time at all (cited in Hansson 2007, 267). Four-dimensionalism appears to be susceptible to the same argument Nāgārjuna brought against the Sāṃkhya theory of self-causation—that there is no real arising or production if the future already 'exists' along with the present and past. In fact, Nāgārjuna rejected both views of time:

> A nonstatic time is not grasped
> Nothing one could grasp as
> Stationary time exists... (*MMK* 19: 5; Garfield 1995, 50).

Kalupahana explains that 'nonstatic time' is the idea of the "flowing present," while 'stationary time' refers to "absolute time" (Kalupahana 1996, 278) and therefore the distinction seems comparable to that between three- and four-dimensional time.

The three-dimensional view is the intuitive idea that sees objects as extending across three spatial dimensions, yet lacking in temporal thickness. On this account, objects persist by *enduring,* that is, by being fully present at different times (Varsi 2005, 485). This view coincides, therefore with our everyday belief that objects that presently exist are somehow more real. Still, change cannot be found to exist from its own side even on this interpretation. In Nāgārjuna's words:

> If the present and future
> Did not exist [in the past],
> How could the present and future
> Be dependent upon it [i.e. the past]?
> (*MMK* 19: 1, 2; Garfield 1995, 50; inserts added)

Garfield explains: "By the time the present comes around, the past isn't around to give rise to it. And when the past was around, the present didn't occur" (Garfield 1995, 254–255). To return to our examples, the particular stretch of forest which formerly occupied a piece of present farmland is no longer there for me to say "it has gone" when I become concerned about its disappearance, and the same can be said for the red squirrels, say, which "were lost" when grey ones were introduced. What happens is that we *recall* the earlier objects and events and we ascribe the labels "predecessor," "object before it changed" onto them, as we hold them fixed in our minds. This shows that change is

dependent for its existence upon permanent phenomena; that is, we *project* change and succession over the series of moments which contain static phenomena, and no matter where we look, we cannot actually perceive anything changing. Change, that is, does not exist independently, or irreducibly.

One way to respond to this argument would be to say that, although it is true that the forest is not there after it has been changed into farmland, perhaps if we looked more closely and analysed the sequence of changes into smaller parts, we would find that the forest was still there when the first trees were cut down and that it *gradually* disappeared as it was turned into farmland, or again, that as the grey squirrels increased in population, they slowly wiped out the red ones which were still there when the invasion began. In this way, we might be able to insist on the reality of these events. We find, however, that no matter how deeply we analyse succession we are never able to explain how it is that *a* changes into *b*. Whether the change is a causal one or not, we find that we cannot isolate the point where it happens.

Let us say *a* exists at time *t*1 and *b* at time *t*2. The change, presumably, will happen somewhere in between—let us say at *t*1.5. The time between *t*1 and *t*2 has been divided into eleven points and at the first five (*t*1.0–*t*1.4) we find *a*, and at the last five (*t*1.6–*t*2.0) there is *b*. Yet, if we think of time as a continuum, then the point *t*1.5 itself—which is where we said that the change happens—can also be divided into parts, and it will be found that *a* exists at some of them, (*t*1.51, *t*1.52....) and *b* at others (*t*1.58, *t*1.59...). Or else, something that is a only slightly different from *a* will exist at the first few points and something a lot more like *b* will exist towards the end (Clark 2008, 27). Any point we identify as *the* place where the change occurs—again, say *t*1.55—can be similarly divided into parts, the first of which contain *a*-like things, the later parts *b*-like things. Westerhoff reads Nāgārjuna as claiming that there is nowhere we could point to and say (non-arbitrarily) that the change happened *right there* if time is a continuum rather, every point we isolate seems to contain a static thing[127] (Westerhoff 2008, 470).

Thinking of time as divided into discrete parts does not solve our problem either. If all there is between *t*1 and *t*2 is one indivisible moment, then there cannot be any

[127] Westerhoff's article is about the chapter on motion however as Garfield points out too, the arguments there are about change in general (Westerhoff 2008, 455; Garfield 1995, 93). Westerhoff, however, prefers to read it primarily as an argument about instantiation of properties, rather than change or motion.

change happening in it, since change requires temporal parts to occur (Westerhoff 2008, 463, 470). We seem to have to commit to the belief, then, that there is simply an abrupt switch from *a* at *t*1 to *b* at *t*2 and stop our explanation there.[128] At no point can we observe the change actually happening; rather we always have a series of moments with stationary objects onto which we impute change.

In the chapter on motion, Nāgārjuna makes a number of arguments, reminiscent of Zeno, to show that the beginning of motion is inconceivable, and the same could be said of any type of change (Garfield 1995, 129–130, 125). Westerhoff reads this as a denial of the claim that any point qualifies, independently of us, as the locus of motion; rather it is our decision to regard it as such, as "we split up the flow of events according to our cognitive needs" (Westerhoff 2008, 473). To return to our examples, I recall the forest occupying different states or different numbers of indigenous red squirrels at different times and from this, I infer that there has been a change. Indeed, it is hard to imagine what it would mean to understand change, other than as a series of phenomena that differ from each other. The emptiness of change, therefore, consists of the fact that it is dependent upon permanent phenomena, and can be reduced to a series of permanent phenomena. Emptiness makes pseudo-problems of the classical puzzles about change, such as Kant's Antinomies and Zeno's Paradoxes (Rychter 2009), yet it leaves us unable to explain change as an ultimate truth, and we are left with a conventional appeal to our experience of it.

Other writers agree that, unlike process philosophy, Buddhism does not view change or time as ultimate realities. David Loy for example shows how our ordinary understanding of change *requires* that there be something permanent; we can only see a thing move, he says, in relation to something that is stationary (Loy 1986, 16). Again, this shows that change is empty, since it depends upon stasis. It is not enough to understand the emptiness of objects, Loy claims, as their lack of inherent reality also implies the unreality of time. In Nāgārjuna's words, "all beings are impermanent, which means that there is neither permanence nor impermanence." Loy rephrases this as "to say that there is *only* time turns out to be equivalent to saying there is *no* time" (Loy 1986, 1, 19). The

[128] Many philosophers believe that this coincides with the view, from physics, that energy comes in packets It is held that quantum theory demonstrates that movement is discrete rather than continuous (Clark 2008, 27; Sheldon 1926, 143).

closest we can come to expressing ultimate truth, therefore, is to say that there is "nothing permanent, for everything is in flux; and ... no flux [because] there is nothing [permanent] to be in it [and with which flux may be contrasted]" (Loy 1986, 21; inserts added).

Kalupahana also discusses the Madhyamaka's deconstruction of time. "Past, present and future," he says, "[are] comparable to such concepts as above, below and middle" and thus Nāgārjuna insisted that they are unreal, because they are relative (Kalupahana 1974, 188). This point emerges beautifully in the *Avataṁsaka Sūtra,* where universes are related to each other so that a day and night in the realm of Amitābha is described as the equivalent of an entire *kālpa* in our realm of Śākyamuni (Lancaster 1974, 211). To meditate on the relativity of past, present and future brings about, as we have seen, an experience of "timeless time" or the "eternal present," and when one meditates on the emptiness of *that,* one is said to attain "the primordial state of total perfection ... completely beyond [any] limits" (Yao 2007, 514).

Overcoming Nihilism

To view change as ultimately real and interminable could easily lead to despair. Hartshorne, for instance, maintains that there is no end to the creative process; there must always be some sort of change happening, he claims, something or other must become something else, *ad infinitum* (1970, 14). In his words, "what is *objectively necessary absolutely* is that the creative process must produce and continue to produce creatures" (1970, 30; emphasis added). Rendered into Buddhist language, this would sound like he is saying that there is no escaping the cycles of *saṃsāra* and no way to stop creating *kárma*—that is, no enlightenment or *nirvana*. Beings are simply condemned to keep turning the wheel of becoming, from one birth to another, and, coupled with the bleak picture of life that was painted above, it would not be surprising if someone with this view were to fall into a nihilistic mood. Hartshorne seems to imply a similar view when he admits that, on his account, there can never be complete satisfaction of one's wants (1970, 66).

On the other hand, on the Buddhist account, one is able to transcend the realm of becoming, to go 'beyond' time and change, precisely by seeing their emptiness. Yao

suggests that the "very goal" of Buddhism, as he puts it, is to "see through the passage of time, and to realize the nature of reality, beyond the momentary and impermanent" (Yao 2007, 513). His use of the word "goal," however; is a little ambiguous; as he acknowledges further on, one of the ways of transcending time requires that we give up all thought of achieving goals, and, most of all, we give up hope of attaining spiritual accomplishments. We cut off clinging to the past, he says, as well as anticipating the future, and in that way, we remain in the present moment. This is not to be grasped at as a static moment, but a dynamic present, "a continuous effort and activity to maintain presence" (2007, 514). Once again, the word "effort" could be misleading, since, as many Buddhist masters reveal, and as Yao too is well aware, one of the key ingredients in 'remaining present' is the ability to stay fully relaxed (Yao 2007, 513).

In chapter 2, it was suggested that when it comes to Buddhist practice, the *realization* of emptiness, as opposed to philosophical understanding, the Yogācāra School was supreme. To view change, time or movement as empty, in Yogācārin terms, is perhaps, to see them as subjective or imaginary additions onto a phenomenologically neutral world. When a *bodhisattva* realizes the pure, consummated nature, reality without dualistic contamination, it is said that "all differentiations disappear" (Nagao 1992, 64). Therefore, time and change disappear too, since, as we have seen, both depend on, and emerge from the experience of differentiated phenomena. Importantly, this is not to be understood as an absolute negation of change. It is not accurate to say that time and change do not exist at all—conventionally, it is entirely legitimate for us to go on uttering statements about the past, and making predictions for the future, and we can also retain our belief in causation. Another misinterpretation to avoid is the idea that there are two realms, one with time and change, and another without. Rather, the consummated world is this very same world, only without the imagined additions, or where time and change are experienced *as* imaginary. It is "established anew by the enlightened sages," every time they realize the conventionality of the discriminations made in the everyday world of change (Nagao 1992, 63).

Realizing the emptiness of change allows the *bodhisattva* to overcome nihilism. It will be recalled that there were three facets to this extreme view; the concern with nonexistence and annihilation, a gloomy vision of the world and preoccupation with

suffering, and finally, a sense of the purposelessness of unending change. Regarding nonexistence, it has emerged several times throughout this dissertation that the Middle Way has no room for either absolute existence, or absolute nonexistence. A certain degree of existence in phenomena is necessary if we are to recognize their emptiness—it will be recalled from chapter 2 that emptiness cannot be cognized directly, but rather is dependent too; dependent, that is, on phenomena that arise and perish. This was referred to as 'the emptiness of emptiness.'

For this reason, perhaps, the grief that arises at the loss of someone or something that is held dear can be mitigated if it is understood that nothing in the world ever perishes completely. Individuals or objects do not exist inherently, and therefore they cannot cease to exist either; rather, what happens is that these so-called 'things' become other 'things.' The next section will consider some examples of environmental changes, in particular, extinction, which generally cause us distress. For the time being, we can consider whether the Buddhist teachings on death have anything to say to Westerners who may not believe in rebirth. It is not necessary to believe in past and future lives to see that an individual does not perish altogether when he dies; rather, parts of him live on in his works, offspring, and in other people's memories of him. Of course, this does not mean the individual is immortal; again, since he was always empty of inherent existence, it is not accurate to state either that he exists or that he does not, as the Buddha pointed out. Meditation on emptiness can lessen, perhaps, the semblance or sensation of loss that we naturally experience when bereaved.

Regarding the second facet of nihilism, the preoccupation with adverse or repugnant aspects of the temporal world, this sort of discrimination too could begin to wane once the emptiness of change is glimpsed. If one were contemplating the loss of an ecosystem or an indigenous species, for instance, one could mentally try to establish precisely *where* the change lay. Is it in the past forest? The future one? Is it in the present moment? Above it was argued that change itself could not be found anywhere; rather it is something we ascribe to reality. When we acknowledge our inability to find change, to "pin it down as a reality"—when we understand, for instance, that we cannot apprehend the forest's 'becoming-degraded,' or the population's 'dying-out'—we free up emotional energy that we had been wasting on worrying about this decline, and which we are then

able to redirect into useful work. We can then actually let go of the past, and question our expectations of the future. As we have seen, strict determinism is not true, and this means that any prediction has a tone of probability rather than absolute necessity. Rather than fearing or dreading future changes, we could instead work to bring about more desirable ones.

In Buddhist imagery, time is seen as the devourer of humanity—"Mara the dreaded evil" (Koller 1974, 206)—yet once the *bodhisattva* realizes time's emptiness, *duḥkha* is eliminated and the *bodhisattva* becomes the "devourer of time" (Koller 1974, 207). Kalupahana stresses that the *bodhisattva* does this by eliminating craving for existence or nonexistence, thereby putting an end to change (Kalupahana 1974, 183). "When time is understood to be a conceptual construct, with no real power," according to Koller, "one is freed from one's bondage to an inevitable death" (1974, 207). Obviously, it is not that one becomes immortal, but rather dying is no longer a worry (Kalupahana 1974, 183). Realizing that time and change are not real, therefore, also reduces suffering. In short, when the *bodhisattva* sees through the illusion of time, sickness, death, and other inimical characters of the natural world lose their fearsome aspect. "The terrible and productive aspects of time are [then] shown to be the same" (Lancaster 1974, 212).

It is important that we do not attempt to read a positive affirmation in what has just been said. To talk of the negative and positive aspects being "the same," for instance, is not, of course, an ultimate truth, but merely a conventional way of intimating an ultimately indescribable experience of the world. Since our negations are non-affirming, we must not assume the truth of the contrary of that which we have negated; to say that there is no change, ultimately, does not mean that there is permanence. Rather, we attempt to stay with the experience of the "unfindability," of change, which, in chapter 2, was equated with the Yogācāra's affirmation of the "existence of emptiness."

This endeavour could provide a direction to the everyday flux of arising and perishing phenomena, and could therefore overcome the third aspect of nihilism, the sense of purposelessness. Rather than attempting to find a purpose by positing a goal to be reached at the end of a process, instead we could achieve our purpose at every moment when we fulfil the 'goal' of remaining present at each moment, realizing the lack of *svabhāva* in the phenomena that arise and perish in our mind stream as well as their

fluctuation. Whatever samsaric experience arises, that is, we attempt to realize its emptiness. This could provide a meaning to our lives despite the incessant change that process philosophers have pointed out. We could use that very never-ending process itself to accomplish our ends at each moment. The same point was made at the start of the last century when Leighton spoke of the "time-transcending...experiences... [that are] constituted by the fulfilment of purposes," where every present moment is taken as a complete end in itself (Leighton 1908, 566). In the next section, I shall take up this theme again, where I shall relate it more specifically to environmental purposes.

Summary

While exploring the relations between time, change and suffering, it was suggested, at the start of this section, that to become too caught up with the unfavourable aspects of existence could cause one to fall into a nihilistic attitude, an extreme view that the Buddhist Middle Way avoids. Although Buddhism and process philosophy share an emphasis on change and flux, I argued that there was a fundamental difference, in that, unlike Hartshorne, Buddhism does not take change to be ultimately real. The process view of change coheres with our ordinary understanding of time and causality as having a direction, in the sense of pointing towards the future. The past is believed to be real and determinate, while the future is unreal and completely open. I argued that this was merely a conventional description of change, which arbitrarily relies on memory but excludes prediction and anticipation. The Buddhists hold, instead, that time is unreal and does not exist. This is because the past is no longer here, the future is not here yet, and the present is ephemeral, and does not linger even for the shortest moment. Hartshorne's arguments for the reality of the past as opposed to the novelty of the future, could not withstand Nāgārjuna's deconstruction of causality.

I then considered the theory of time as a fourth dimension. On this account, there is no difference between past, present, and future, rather, all objects and events at all times exist tenselessly. This appears to pose a challenge to Buddhist doctrine; however, we found that this view could not account for change; it merely posits an eternal unalterable block. Nāgārjuna, in fact, rejects both the three-dimensional and the four-

dimensional views of time, arguing that on neither account could change be found. This is because, no matter how deeply we analyse a stretch of time, we can never point exactly to where the motion or change is. Instead, we impute change onto a stretch of time; we perceive a series of differentiated events and conclude that there is change.

Finally, I drew out some implications for overcoming nihilism. The view that change is real and interminable could suggest that there is no escaping the suffering of *saṃsāra* and could easily lead one to despair. On the other hand, the Buddhist goal of transcending change and time, by giving up clinging to the past and future and relaxing in the present, enables us to overcome all three aspects of nihilism. Regarding the first problem of nonexistence and annihilation, since beings and change have no inherent existence, nothing can be absolutely annihilated. Meditating on this could lessen the grief of losing those that are dear to us. This has to do with the second aspect, the concern with the terrible nature of the impermanent world. By realizing that change cannot be found to exist inherently, we are able to reduce our emotional response and free up energy for useful work. We are then no longer in the grip of our dualistic ways of seeing things but can instead experience all phenomena that arise with equanimity. Finally, the third aspect of meaninglessness in a dysteleologic world can be overcome by making it our purpose to achieve this transcendence of time at each moment, making every moment an end in itself.

3 Emptiness as Pliancy

The previous section introduced a broad hypothesis regarding the *bodhisattva*'s avoidance of nihilism. Despite the pervasiveness of never-ending and goalless change in natural processes and in evolution, existence could acquire meaning when a *bodhisattva* makes it his purpose to realize emptiness at every moment. When he discerns the "constant fact of not finding" temporality, he will appreciate its nature as a conventional imputation, or as projection of the mind, and thereby impermanence will lose its fearsome and terrible aspect. Besides, the lack of a teleological goal lying ahead in the future is compensated through his having a purpose to fulfil at every moment. This section will illustrate, upon similar lines, a specifically *environmentally* motivated version of this purpose, which will also be based on the Yogācāra's positive interpretation of emptiness.

As we saw in chapter 2, some Buddhist philosophers, like Asaṅga and Vasubandhu, saw the danger of a nihilistic interpretation of emptiness that could arise if it was understood to involve only negation. For this reason, they turned to affirmation once more; apart from the negation of concepts and views, they affirmed the *existence* of the experience of nonduality that the realization of emptiness involves. That is to say, realization, on this account, is not just a matter of conceptually understanding the lack of *svabhāva* in things. Rather, one *perceives* that lack of existence, and thereby experiences its *existence*.[129] By maintaining a continuous presence and awareness of that experience, it was suggested that every moment could be imbued with meaning and with purpose.

I shall begin by describing an analogous sense of purpose to be found in nature and in natural beings. Clearly, everything that I shall say here will be merely conventionally true, if true at all, because all the natural beings I shall talk about are, ultimately, empty. Their emptiness is not just a conceptual negation of *svabhāva*, though, and, I shall argue, it appears as a positive quality too. This is Candrakīrti's absolute-*svabhāva*, which can be characterized as the fact that beings have no hard or fixed essence. Later on in Buddhism, and especially in China and Japan, it was conceived of as

[129] Of course, the Yogācāra could only affirm existence after they had established, as Nāgārjuna did, that emptiness was not to be understood in an eternalist sense as some kind of absolute existence.

Buddha Nature, or as clear and luminous mind. I shall argue that in the 'external world' this takes the form of a quality of *pliancy*, which I shall define as an openness at the heart of all beings, and a sense of flexibility and capacity for change. [130] The realization of emptiness brings this quality into light, and therefore, there is a link between the cultivation of inner qualities and wisdom, and the state of the external environment.

In some early *sūtras*, the connection between the state of the world and the spiritual and moral character of beings is made explicit. The *Aggañña Sutta* contains a well-known parable, which describes the progressive degradation of the natural world parallel to the deterioration in conduct and psychological make-up of its inhabitants. For example, when beings harvested only what they needed for the day, food was plentiful and grew easily; it became coarser, however, once beings started hoarding it greedily (*D* iii 90). Unfortunately, the message of this *sūtra* has generally been interpreted negatively, and reference is only made to the effect that moral degeneration has on the external environment (c.f., Harris 2007, 155; 2000, 123 De Silva 1987). I would like to suggest that it contains a valuable idea for green Buddhism, namely, that spiritual development and following the *Dharma* brings about welcome changes in the world around a practitioner, and that as the teachings become more diffused, the effect becomes greater still.

Pure Land Buddhism, for instance the *Sukhāvatīvyūha Sūtra,* suggests that the *bodhisattva* does not only work to increase his own and other beings' internal realization, but also strives to create an environment that is "completely free of evil, suffering and unhappiness...a veritable paradise"[131] (Gōmez 2002, 9). In chapter 2, it was argued that the traditional descriptions of these "Pure Lands" in terms of precious metals and stones, and brilliant colours could be regarded as expedient teachings—a rather naïve vision, perhaps, of environmental improvement. In any case, it is often emphasized that the *bodhisattva's* realization enhances both the inner mental world, as well as the outer natural world experienced by other beings. Masao Abe cites the Mahāyāna *sūtras*:

[130] It should be clear by now that this quality, absolute-*svabhāva* or Buddha Nature, is dependent on other factors, and therefore, not to be understood as a svabhavic essence.

[131] Although the classical Indian descriptions of the Pure Lands, such as Sukhāvatī, have been criticized for their ecological naiveté, the general point of this statement—that the *bodhisattva* works to enhance not just inner conscious realization, but also its external expression in his surroundings—is clearly evident from the descriptions of the *bodhisattva's* aspirations in these *sūtras*. For example, see Gōmez 2002, 69–76.

> Grasses, trees and lands: all attain Buddhahood ... Mountains, rivers and the earth totally manifest the Dharmakaya (Abe 1992, 50).

In other words, contrary to the objection raised in chapter 1, the Buddha's teachings increase both spiritual and natural well-being, and realization creates an environment that is both pleasing and well adapted to its inhabitants' needs.[132] This can also be discerned from the way that the state of natural phenomena is portrayed as hinging upon the circumstances of the *Dharma* in the traditional texts. The appearance of a Buddha and his teachings, for instance, is described as "dharma rain...that showers moisture upon all the dry and withered beings" (*Lotus Sūtra,* cited in Kaza and Kraft 2000, 45). The tone changes completely when it comes to describing the world during the degenerate age (*kali-yuga),* when the Buddha's teachings have all but disappeared. During this apocalyptic age,

> No rain falls in season, but out of season; the valleys are flooded. Famine and hail govern many unproductive years. Diseases, horrible epidemics, and plagues spread like wildfires, striking men and cattle ... fires, storms, and tornadoes destroy temples, stupas, and cities in an instant. (Padmasambhava; cited in Stanley, Loy and Dorje 2009, 44).

Therefore, there is a relationship between the level of realization, or the measure of wisdom that is present in a world—perhaps, the number of enlightened beings—and the nature of that world itself, and in fact, I would like to suggest that there is also an analogy between natural and spiritual evolution. As Nāgārjuna pointed out, if things were non-empty, nothing could change (*MMK* 24:20; Garfield 1995, 70) and therefore, *bodhisattvas* and natural objects are able to evolve because of their emptiness, which, in

[132] A good question, brought to my attention by Dr. Simon James, is whether realization affects the way the world is, or the way it is experienced. One might suppose that to the extent that there is realization of nondualism, there is no difference between the external world and one's conscious experience of the world. The Pure Land teachings suggest that those beings with enough realization (or devotion) will experience the paradise created by a Buddha, and in fact, they participate in its creation, whereas other beings remain stuck in hell or other samsaric realms, which are also of their own making. The same idea is also found in early Buddhism. According to Bhikku Bodhi:

> From the Buddhist perspective...consciousness and the world coexist in a relationship of mutual creation which equally require both terms. Just as there can be no consciousness without a body to serve as its physical support and a world as its sphere of cognition, so there can be no physical organism and no world without some type of consciousness to constitute them as an organism and world (Bodhi 2001, 5).

the case of natural beings, I will refer to as pliancy. Furthermore, they evolve by realizing and actualizing this emptiness at every moment. This, therefore, can be said to be the Buddhist environmentalist's 'purpose'—not to be understood as a final objective reached sometime in the future, but as one that is fulfilled at every moment. In this first part of this section, I shall flesh out the analogy between the ideas of purpose in natural[133] and in spiritual evolution.

Actualizing pliancy in nature, I shall propose, can be thought of as environmental improvement or at least as environment-friendly. This is because any intervention in nature that safeguards the pliancy of the beings involved is likely to be beneficial to those beings; it enhances their capacity for change, and increases the possibility of its further evolution. As I shall argue in the final part of this section, humans do most damage to nature when they limit evolvability. Through the realization and actualization[134] of emptiness and natural pliancy, the environmentally aware Buddhist will allow nature to unfold in a way that best serves its interests and those of natural beings. She will not attempt to stifle change or growth in nature, although she might try, as far as she can, to oppose that kind of change that ultimately leads to death and stagnation.

Emptiness, Pliancy, and the 'Goal' of Evolution

As long as we discount unpredictable events like meteorites or climate change, it would seem that certain tendencies can be discerned in the history of life on earth, and evolution

[133] In what follows, I use 'natural evolution' to mean evolution by natural selection, and I ignore other ways in which species evolve, such as through genetic drift. 'Evolution' is also restricted to mean the development and transformation of natural beings over time, and excludes geologic, climatic and other non-biological features.

[134] Nagao has pointed out the connection between "realization" and "actualization," in the sense of "to bring into concrete existence," in his discussion of the two directions' of the *bodhisattva's* activities. Ascent implies emptiness as negation—self-negation, or world-negation—through which the *bodhisattva* moves towards *nirvana*, whereas descent implies the affirmation, once more, of the natural world through the *bodhisattva's* compassion (Nagao 1992, 201–207). In the terms of this thesis, ascent can be carried to an extreme, and one would find oneself adhering to eternalism, as in belief in *ātman*, a theistic God, or even *nirvana* as a truly existent otherworldly realm. The *bodhisattva* negates these concepts, and reaffirms the ordinary world in order to begin the descent. To descend too far would take him to the extreme of nihilism, which the *bodhisattva* avoids through affirmation of the existence of emptiness and (re-)negation of *saṃsāra*. In his descent, the *bodhisattva* makes use of a new type of knowledge which is 'discriminative and worldly,' but which differs from ordinary knowledge in that it arises from nondualistic awareness (Nagao 1992, 204). Using this knowledge, the *bodhisattva* 'actualizes the truth' (i.e. emptiness or pliancy) in himself and in the world around him.

appears as though it has an objective. Of course, many will be uncomfortable with the idea of attributing purpose to something that is not conscious, yet there are also advantages to adopting what Daniel Dennett calls the 'intentional stance' with respect to evolution. Just as we can view machines or computer programs as fulfilling their aims, Dennett says, we can also interpret the processes of natural selection as "sensitive to rationales, making myriads of discriminating 'choices' and 'recognizing' and 'appreciating' many subtle relationships...selecting...*for one reason rather than another*" (Dennett 1998, 299; italics in original). For Dennett, that is, evolution and the process of natural selection can be gainfully described as though they possessed intentionality, thereby avoiding an enormous amount of cumbersomeness and unwanted detail in our descriptions of these processes. Besides, unless we adopt the intentional stance, certain patterns that allow us to understand these processes and to make predictions would remain hidden from our view (Dennett 1998, 316). To take an example, it would be hard to describe the dances of bees, without assuming that there is a purpose to their behaviour.[135] In the rest of this chapter, I shall follow Dennett in adopting the intentional stance with respect to evolution and natural selection.

If we want to ascribe to evolution some sort of purpose, surely we can say that it aims at ensuring the continuation of life. In other words, natural selection can be described as a process designed[136] to increase and maintain life—not in any specific configuration, of course—but in many and diverse forms. Indeed, several theorists have made similar attempts to identify an overall evolutionary trend, and proposals have included the following 'aims': increasing size, complexity and diversity (Carroll 2001, 1102), increasing "adaptability" (Hahlweg 1991, 441), and increasing "fitness" (Okasha 2008, 322). Gould coins the term "plurification" to describe his version of—in his words—the "goal" of natural selection, and by this, he simply has in mind a broad sense of "more-making" (Gould 2002, 611). Importantly, all of these theories attempt to identify the direction that evolution follows, with *everything else being equal.* The general idea, in short, is that considered exclusively, evolution can be said to aim at increasing the number and well-being of various living things.

[135] I owe this example to Professor David E. Cooper (personal communication).
[136] For more on how an object or process can be designed, without the implication of a conscious designer, see Dennett 1998, Allen and Bekoff 1995.

According to the theory of 'macroevolution,'[137] these 'things' include more than individual organisms, which are the sole units of natural selection in Darwin's original theory. In Gould's version, for instance, selection operates at six levels of the natural hierarchy—the complex arrangement of systems nested within systems—namely: genes, cells, organisms, demes, species and clades.[138] All of these, according to Gould, can be thought of as individual beings competing against others of their type. Or, to put it another way, these six types of unit can be considered to evolve through some sort of selection. Therefore, a certain amount of variation between individuals of each type is important, so that as a result of their interaction with each other and the environment, some of them will be fitter, or better adapted, than others are. Those that do well will have more 'reproductive' success, and in fact, at all six levels of the hierarchy there is some kind of mechanism for producing roughly similar copies of those individuals.

Genes, for instance, can be considered as units of selection in their own right, 'selfishly' competing against their alleles in order to proliferate copies of themselves in future chromosomes (Dawkins 1989, 36). Species are Gould's paradigmatic example of group selection, which he sees as analogous to the natural selection of organisms. Reproduction at this level consists of speciation events, with one species having as many 'offspring' as it has daughter species, to which, clearly, it will pass on some of its properties. This, therefore, is a species's version of "descent with modification," while extinction is the equivalent of the death of an organism (Gould 2002, 673–745). In brief, evolution is envisaged here as a multilevel process, with change and variation occurring at all levels of organization, from the genetic up to the ecosystemic.[139]

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[137] See, for example: Eldredge and Vrba 2005, Futuyama 1997, Levinton 2001, Okasha 2006, Williams 1992.

[138] In Gould's version, genes make up DNA, which is enclosed in cells, which collectively form an organism, and groups of organisms make up a deme. Added together, demes of the same type form a species, and several related species form a clade. An alternative characterization includes groups of diverse demes in a community, and adds this to abiotic features to make up an ecosystem.

[139] Gould briefly considers the possibility that communities and ecosystems might be units of evolution too, but he dismisses the idea because, as we saw above, ecosystems are transient and fluctuating aggregates, and not really individuals as he defines them (Gould 2002, 612–613). This paper has argued that the same applies to species and organisms and the doctrine of emptiness could be extended to apply to all of Gould's six individuals. The Buddhist Middle Path could accept Gould's hierarchical theory of macroevolution as a conventional truth about conventional 'individuals' and could also include ecosystems with Gould's other evolutionary units since they are no less 'real' than his individuals (see Fiscus 2001, 2002; Lekevičius 2006 on ecosystems as units of natural selection).

It is renowned fact that the continuation of life requires a high level of diversity (Pavé 2007, 190) and indeed, we have seen that variation between individuals of a type is essential for evolution to take place (Gould 2002, 609). Consequently, besides increasing volume or number, it appears that evolution is also inclined towards increasing variety, as evidenced by the emergence, from a single, common ancestor around 3500 million years ago, of roughly between 5 and 50 million species living today. It would seem that there is no limit to the potential diversity on earth (Benton 1995, 52), yet it must be emphasized that the tendency towards diversification is only manifest when other things are held equal. Actually, 450 million years ago, for example, there were twice as many Linnean classes of biota as there are today (Gould and Eldredge 1972, 110) and the fossil record reveals several periods of decline and mass extinctions, in particular, those events known as "the Big Five." However, these incidents are not a part of evolution *per se*; they have to do with geologic, atmospheric, and perhaps stellar conditions and processes rather than biological ones. In any case, they were followed, eventually, by periods of extraordinary rapid diversification (Pavé 2007, 196). Overall, then, the rate of speciation throughout the history of life has been described as "exponential" (Benton 1995, 54), and therefore, although drops in diversity are to be expected when all factors are taken into account, there does remain the tendency, other things beings equal, of evolution to go on diversifying. [140]

Evolution requires a wide range of variation at all levels of organization, so that organisms, demes, species, and any other units of selection there may be, can go on adapting to environmental disparities, both in time and in space. For this reason, diversity has been called a "life insurance" as it enables natural systems to survive environmental flux by making better use of their internal resources as well as those in their surroundings (Pavé 2007, 190, 194). It is important to emphasize that this diversity exists on multiple levels of organization. To cite from Pavé:

[140] According to the punctuated equilibria view, natural selection tends to preserve stasis rather than introduce innovations during normal periods of equilibrium. That is, the tendency to diversify is only present during periods of disturbance or perturbation, when changes in the environment trigger processes such as speciation events (Gould 1972, 112; Gersick 1991, 12). Therefore, strictly speaking, it is not correct to say that evolution *always* diversifies; however, it seems that if one takes into consideration the entire history of life, the disposition towards increasing variety of life forms will become evident.

> The diversity that is produced by this stochasticity *at all levels* (i.e., organisms, populations and species, ecosystems) of the hierarchical organization of the living world is essential in that it provides living systems with the possibility of surviving environmental hazards or allows them to better exploit the resources in their milieu (Pavé 2007, 193; italics mine, brackets in original).

Therefore, evolution tends towards increasing the number of living things as well as their diversity. Yet importantly, it is not number or diversity for their own sake that is being proffered here as the 'goal' of evolution, and neither is it diversity for the sake of the continuation of life. As I have already mentioned, the purpose that I want to establish is not a goal to be reached at the end of the process, but rather a motivation that directs every step of the way.[141] What I want to identify is *an aptitude for change*; the same concept that was espoused by others, as we have seen, through the terms "adaptability" or even "evolvability"(Hahlweg 1991, 441; Carroll 2001, 1107) and which was referred to in the first section of this chapter as 'plasticity.' It is the capacity for a system to answer to a new challenge that the environment presents—to be able to draw upon several internal resources and to have need of fewer external ones. It entails a widened range of available responses to variable conditions (Borvall and Ebenman 2008, 99; Romanuk et al 2009, 820) and a diminished reliance on particular elements (McCann 2000, 231). It is an improvement, in other words, in the ability of living things to survive, and in this respect, it can be thought of as a condition for evolutionary progress (Hahlweg 1991, 438).

This quality, which I have been calling 'pliancy,' is a condition for both natural and spiritual evolutionary progress. I use the term in its original Buddhist sense to include all the connotations of the Pāli *mudutā,* such as "elasticity," "resilience," "adaptability," "the capacity...to learn and unlearn ever anew," "to discard inveterate habits and

[141] Further on, I will argue that this goal or motivation is another name for the realization of emptiness. Conceiving of it as available at every moment seems brighter than the idea of a goal never reached, or one that is reached after countless aeons and lifetimes—which is sometimes the way the *bodhisattva*'s commitment is understood. Sheldon calls the notion of a goal never reached "the very essence of self-contradiction, disheartening and paradoxical" and claims that religion needs to posit a definite goal to be accomplished at a specific moment (Sheldon 1926, 153). Rather than envisaging this moment as lying far into the future, in another life or perhaps at one's death, I would like to follow Dōgen's suggestion that the Buddhist 'goal' is one that can be reached at this very moment and at all moments. In his words "(a)t all times he [the fully awakened individual] abides continually in the Buddha Mind, and there's not a single moment when he's not in the Buddha Mind" (cited in Zelinski 2000).

prejudices," "non-resistance," and the ability to "widen the boundaries of the so-called ego by admitting into it new elements from the world of non-ego" (Nyanaponika 1998, 73–74). Clearly, pliancy is a consequence or an aspect of emptiness, the fact that nothing exists with a fixed essence, but that rather, everything has a quality of malleability and plasticity. If this were not the case, then nothing would be able to change and therefore, pliancy or emptiness benefits natural systems and spiritual beings in enabling their evolution to proceed uninterrupted. The term 'pliancy' is used here, rather than emptiness, in order to pick out that positive quality of being changeable, apart from the negative sense of emptiness as lack of *svabhāva*. It can be conceived in terms of absolute-*svabhāva*, and Buddha Nature, and is an analogous quality to the 'clear light' mind; all these terms allude to a sense of openness and expansiveness.

The analogy between spiritual and natural evolution can be seen when one considers the importance of emptiness or pliancy for evolution to occur. When the experience of emptiness occurs in consciousness, one becomes better able to evolve spiritually; in fact, the *bodhisattva*'s journey through the ten *bhūmis* involves a deepening of this experience (Hopkins 1996, 98–99). As realization of emptiness is cultivated and strengthened, attachment to ways of life, material amenities and conceptual binds fall away, and as the *Paramatthaka Sutta* says, "abandoning what one had embraced, abandoning self, not clinging, one doesn't make oneself dependent, even in connection with knowledge" (*Sn* 796–803). Moreover, the range of viable reactions to samsaric events increase so that *bodhisattvas* do not repeat habitual patterns but can find new creative ways to respond to external stimuli. In Loy's words, rather than "settling down" or "getting stuck" in particular ways of thinking and acting, the *bodhisattva* is able "to move freely from one concept to another, to play with different conceptual systems according to the situation, without becoming fixated on any of them" (Loy 2008, 228).

To recap, both natural and spiritual beings evolve because they are empty, and this can be seen as a positive quality that I have termed pliancy, which includes first, an increased capacity for differential response, and second, diminished dependence on external resources. Pliancy is another conventional term for that ineffable quality which is the ultimate nature of beings, and described as their lack of any determinate essential

characteristic. As we have seen, the more of this quality a being has—or rather, in the case of humans, the more one *realizes* one has—the better one is able to evolve.

Conversely, extinction becomes highly probable when natural beings are stuck in old habits and ways of life, or reliant on specialized resources. As the theory of punctuated equilibria shows, the tendency for most beings is not to seek pliancy, but rather, to settle into periods of stasis, and rapid evolution occurs only under special conditions when systems are disturbed. Perhaps there is an analogy here with the way most people tend to become stuck in *saṃsāra,* and that it usually takes a particularly strong dose of *duḥkha*—a form of disturbance—to trigger spiritual evolution. In Buddhism too, rigidity and stagnation lead to countless rebirths in unfavourable places. In short, evolution seems to suggest that the optimal state for beings is one of flexibility and receptivity to change, and therefore environmentalists might endow their activities with purpose by actualizing pliancy, both in themselves and in other systems.

The Concept of Pliancy Refined

It might be objected here that this espousal of pliancy as a purpose amounts to a positive thesis or view of the sort that would be negated by Nāgārjuna. It is important to emphasize the conventionality of this concept, and that it is only intended as an 'expedient means' of overcoming a particular nihilistic thought, namely, that any form of environmental change is equally acceptable under the doctrine of emptiness. From the perspective of Mahāyāna Buddhism, I would like to suggest, this idea is wrong. Certain changes imposed upon the natural environment—such as the decimation of demes and species, or dumping toxic waste—seem comparable to murder, or to polluting the mind with anger or hatred. All of these are hindrances to further natural and spiritual evolution, and this is why the value of pliancy can be appreciated for the sake of developing both consciousness and nature. However, pliancy itself is ultimately empty too, and must not be reified.

Although it has been singled out here as the 'goal' of evolution, pliancy is not to be understood as a determinate characteristic that one might become attached to—like diversity or the balance of nature—as it says nothing specific about any fixed outcome

that we should seek to bring about. The concept can be used to discern better from worse change, in that more pliancy is preferred to less, as we shall see below. Yet, this must not be construed as a view to which one might become attached. Pliancy must not be reified, first of all, for as soon as we attempt to fix it down as some sort of 'thing' we lose its very meaning, which is openness, the capacity to change, and not being any fixed sort of thing.[142] Just like all the other 'approximate' terms of Buddhism—emptiness, Buddha Nature—it is a conventional term which only points at ultimate truth.

Natural evolution is open-ended and involves a considerable extent of stochasticity (Gould 1989, cited in Okasha 2008; 325; Pavé 2006, 2007) and, as we saw in the first section, there is no entirely predictable outcome of any natural process. There is no fixed, stable balanced state, or final resting point in any process, rather, all there ever is, is unending, directionless change. The concept of pliancy becomes useful in order to evaluate particular changes. Changes that protect or enhance pliancy are acceptable as they bring about more change or protect the possibility for future change.[143] This, therefore, gives the *bodhisattva* a motivation to act that does not fall into either of the two extremes, that is, she does not grasp at an idea of an natural object that exists with *svabhāva*, nor at an idea of its absolute nonexistence. At the same time, realizing emptiness injects a sense of purpose into her actions. To follow the Middle Path in environmentalism, therefore, will involve actualizing or increasing natural pliancy—that is, one will protect the possibility of further evolution at every level of the natural hierarchy, through realizing the emptiness of natural systems and their interdependent nature.[144]

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[142] If I become attached to pliancy, grasping at it as something to be protected or increased, I end up losing that very property, the flexibility and capacity to change, both in myself in that I am attached to one thing, and in my environment, which I am trying to fix down in a particular way. In the same way that emptiness is not to be reified but is simply the conventionality of things, so pliancy too cannot be reified but just is the capacity of things to change.

[143] One could object, here, that I am committing a naturalistic fallacy; that is, deriving an 'is' from an 'ought.' Although the mistake is evident insofar as one is concerned with logic, in environmental ethics, there does seem to be the general supposition that if we could find out what nature's ways are, then it would be good—indeed, we ought to—follow those ways. In this paper, I follow King in suggesting that some aspects of Buddhist ethics are derived from natural law (King 2002). However, the main thread of my argument does not depend on any statement about the way nature is, as will be seen below.

[144] The focus on pliancy that I have offered here has some affinities with Fox's theory of responsive cohesion (Fox 2006) in that both place absolute value on the fact of relatedness and flexibility. Fox however makes many categorical assertions about what sort of relata are to be taken into account, whereas I have attempted to follow the Madhyamaka by not laying down, as far as possible, any determinate views.

A second misunderstanding to avoid is to read the argument here as some form of naturalistic ethic, implying that humans ought to protect pliancy because that is the way nature is. As I have suggested above, most of the time nature is precisely the opposite of pliant, in that it tends to settle into a static state of equilibrium and to resist all further forms of change.[145] Beings—humans, especially, but all other beings too—tend to become overspecialized and heavily dependent upon particular resources, that is, they tend to seek stasis rather than pliancy. Therefore, the main theme here is not a naturalistic ethic; rather, this version of environmentalism is based upon an alternative interpretation of the doctrine of emptiness. As well as the negation of all environmental views, emptiness involves a positive experience, and what I have tried to do is to ground environmentalism on this facet of emptiness, claiming that welcome environmental changes are those that result from or manifest this positive quality of emptiness.[146]

To sum up the argument, there is a quality in nature I have called pliancy, which is an aspect of Buddha Nature and synonymous with emptiness. This quality is what allows a natural being to evolve biologically, just as emptiness allows consciousness to evolve spiritually. All beings have it in some measure, yet, in the usual state of affairs, they do not realize it, and through our delusion, most of us grasp at its opposite, *svabhāva*. The deeper a being's realization of emptiness, the more pliancy it will display and the more easily its natural evolution will proceed. The argument might work the other way, too, so that the more pliant a natural being is, the easier its spiritual evolution will be. The salient point is that just as a *bodhisattva* cultivates the realization of emptiness in his consciousness, he also protects and promotes pliancy in nature, as emptiness's 'external' counterpart. To do so will encourage the evolution—both spiritual and natural—of other beings, and, as I shall argue below, will have beneficial effects on the environment too.

[145] This seems to be an outcome of the second law of thermodynamics too, which, as Huw Price puts it is "the theory which brought with it the crucial notion of *equilibrium*—the state toward which a system tends, when left to its own devices" (1996, 24).

[146] Of course, beings with little pliancy, such as concreted areas or polluted rivers, are also empty, in the same way that a mind that is clouded with attachment or anger is empty. Some states—of the natural world, and of our minds—that contain more pliancy can evolve more easily, and perhaps, can allow beings to deepen their experience of emptiness.

Environmental Conservation and Pliancy

Above, I suggested that pliancy can be used as a criterion by which environmental improvement is distinguished, conventionally, from deterioration or degradation, so that our acceptance of pervasive impermanence does not have to imply that all forms of change are alike in value nor do we have to perceive all natural change as detrimental. Any change that results in more pliancy can be thought of as an improvement, more natural, and better attuned to evolution and to the Middle Path. Conversely, environmental change that results in more rigidity can be considered to be harmful, as it is more likely, eventually, to result in extinction (Hahlweg 1991, 443). Botkin clarifies the issue pithily when he calls attention to our present conundrum:

> [We can] either preserve natural processes and therefore preserve life in the long run or preserve a single condition and either threaten the persistence of life or else substitute a great amount of human intervention for natural, dynamic processes (Botkin 2001, 261).

Likewise, Soulé highlights the difference between death and the "end of birth." He suggests that the reason we should be worried about the current rate of extinction is that it threatens to break off evolutionary processes that have persisted for millions of years (cited in Myers and Knoll 2001, 5389). Both these conservationists, that is, are drawing attention to the need to safeguard the possibility for certain processes to occur, to protect the future evolution of natural systems, rather than any single system in any single state. It is what I have called 'pliancy,' and what others call "evolvability" or "adaptability"—and which, I have argued, is another facet of emptiness—that is to be protected according to the new ecology.

This suggests a different course for efforts in conservation than has traditionally been pursued. Rather than trying to protect current biodiversity, or stability, it has been argued that effort should be made to protect "the active processes of contemporary evolution" (Erwin 1991, 757). Many conservationists have stressed the need, not to protect this or that precise phenotype of any particular species, but rather to maintain the possibility for evolutionary adaptations to persist, and for new species to arise (Myers and Knoll 2001, 5390). Unfortunately, there is no agreement on precisely what this would involve. Some suggest, for instance, that endemic species are already on their way to

natural extinction and that the pliancy that we ought to protect today occurs mostly in the "widespread, even weedy species" that we generally tend to ignore (Erwin 1991, 757). Others insist on the very opposite, namely, on the importance of preserving local specialized populations so that interactions can continue to coevolve at the species level, thereby maintaining the cycles of extinction and colonization that are a necessary part of evolution (Thompson 1996, 302). In any case, there seems to be consensus that we need "a concerted attempt to overcome our intuitive propensity to equate stasis with stability; [viewing] stability [as] being desirable, [and] change being resisted" (Brooks et al. 1992, 57). This is precisely that which the Buddhist doctrines of impermanence and emptiness recommend, and the same idea that I have tried to render in terms of pliancy.

Several implications can be drawn from this. First and most obviously, it is important that a measure of diversity is protected at every level—from the gene to the ecosystem—not for its own sake, but for the sake of pliancy and further evolution. Variability in fact has become an important measure of the extent of human influence *and* a foundation for ecological management of ecological systems, such as lakes and natural parks (Landres et al, 1999, 1180–1186). To preserve diversity increases the chances that some form of life will continue to thrive in the region, no matter what sort of disturbances arise. Similarly, genetic variation within a population is another central concern, more important than population size, since it impinges on the required population necessary to retain evolutionary potential (Franklin and Frankham 1998). Populations with uniform gene pools are unable to adapt or to evolve and therefore a wide range of genetic variation within a species is preferable to having organisms with identical genetic codes, no matter how 'enhanced' these might be, since any future change in conditions will require an enormous amount of human input to ensure their perpetuation.

To preserve the pliancy of ecosystems we need to make sure that that they are not turned into isolated and static entities but are able to respond to changing conditions, such as variation in climate patterns or invasions by 'exotic' species. This suggests that natural parks and other protected areas need to be connected with corridors, and some have suggested that this is vital if we want to prevent great extinctions in the future (Erwin 1991, 752). Some biologists have also spoken against various popular conservation programs, such as relocation programs to preserve local populations that have become

fragmented. This fragmentation, they claim, is what initiates speciation events (Brooks et al. 1992, 57). In short, although the science may be poorly understood at this stage, there is widespread assent to the need to study and protect evolutionary potential rather than stasis, and this concurs with the Buddhist Middle Path that does not cling to the current state of affairs, but accommodates change as a pervasive and natural phenomenon. Nonetheless, the Middle Path does not accept any kind of environmental change, but rather, it seeks to preserve the capacity of natural entities to go on evolving.

Summary

In this chapter, I have argued that emptiness and impermanence can be viewed as those very qualities that endow nature with value. Synonymous with Buddha Mind, they are the very factors that allow the evolution of life to take place; it is the pliancy of all beings, at all levels of the hierarchical organization of nature, which allows them to change into something else when the conditions require it. As we saw in the beginning of this chapter, no natural being exists with a fixed, immutable essence; rather, its nature is determined by its relations with other things. For this reason, beings are always susceptible to change, and every aspect of the natural world is impermanent.

The impermanence of nature can take on an abhorrent appearance if we equate it solely with death and disintegration. Yet there is also a positive aspect to it, which is the openness at the heart of all beings, their capacity for evolution. Although none of the things we cherish will last, and despite their changing, sometimes, in ways we do not like, we need not accept any kind of development. Instead, by drawing an analogy between spiritual and natural evolution, we can conceive of emptiness in positive terms as pliancy—analogous to Buddha Nature's luminosity, or purity.

Evolution occurs through the realization and actualization of these qualities. Natural evolution aims at insuring the continuation of life, and at all levels of the hierarchy, we can discern, conventionally, various individuals, each evolving through some process of selection. The continuation of this process requires a high degree of diversity at all levels of organization, and therefore, protecting diversity is an important aspect of conservation. Besides diversity, though, pliancy involves the capacity of a

system to respond in a new way to a new set of challenges and to be in need of few external resources. The possession of these qualities enables a natural system to continue evolving in the same way that realizing emptiness allows beings to evolve spiritually.

Conversely, the more beings are stuck in old habits or reliant on specialized resources, the less likely evolution becomes and the greater the chance of extinction. Therefore, one can describe a Buddhist environmentalism construed as protecting the pliancy of natural objects. This will suggest a change in conservation policy, so that rather than protecting static natural objects, one is concerned with safeguarding, instead, the possibility of future evolution. Processes will be deemed more important than particular beings, and the emphasis will be on preventing rigidity or stagnation.

It is important that this idea be taken as a merely conventional view, set out in rough and approximate terminology. 'Pliancy' is merely a means of describing absolute-*svabhāva*; a quality in nature that results from its lack of substance- and essence-*svabhāva*, and which is, ultimately, inexpressible. While the traditional texts talk of transforming the world into jewelled trees and Dharma-preaching birds, I have tried to set out a more ecologically realistic vision of how a *bodhisattva* creates a Pure Land through his realization of emptiness. The environment is enhanced, and the Pure Land created, I have claimed, when the emptiness of all beings shines through.

Conclusion: Middle Way Environmentalism

I would like to wrap up the discussion by gathering some of the more positive results that have emerged throughout this thesis, most of which appeared in chapters 3 and 4. Chapter 1, it will be recalled, ended on a rather negative note. Although, to a certain extent, we were able to dismiss the claim that Buddhism depreciates nature, and despite having found an alternative way of conceiving intrinsic value that coincides with Buddhist love and compassion, we were still unable to formulate a satisfactory environmental ethic. The main reason for this is that some forms of Buddhism seem to value *nirvana* above everything else, which makes it difficult to find a basis for motivating concern for anything mundane. Indeed, promoting ordinary, physical well-being or, indeed, any of the other features of life and aspects of nature that environmentalists revere is hard to reconcile with the intention to renounce the world.

For this reason, chapter 2 turned to Mahāyāna philosophy, which, in its doctrine of emptiness, upholds a thoroughgoing nondualism that deflates even the distinction between *nirvana* and *saṃsāra*. Green Buddhism becomes feasible again because the ultimate soteriological goal is conceived as attainable in this life on Earth. Indeed, some later forms of Buddhism stress that this very world has all the elements required to be experienced as a Pure Land. Two major schools of Mahāyāna philosophy were described; the Madhyamaka, which portrays emptiness mainly as negation, and the Yogācāra, which, I argued, focuses on the more positive fact of not finding the object of negation.

Chapter 3 turned to an investigation of Mahāyāna green Buddhism, where I rejected a popular eco-spiritual conception of 'Oneness,' in favour of a notion of 'totality.' Instead of holism, the Jewel Net of Indra metaphor was interpreted as emphasizing unqualified relativity, with no fundamental or ultimate level of reality. Rather like a Necker Cube, perhaps, our focus can flip back and forth between parts and wholes, individuals and relations, bringing either to the fore.

It was suggested that the implications of totality for environmentalism are both positive and negative. To relate the discussion to a contemporary ecological issue, such as climate change, eco-spiritualists make much of the way that, to paraphrase Nhat Hanh, we could learn to perceive broken ice shelves, water shortages, and species loss, say, in

an automobile. It was argued that focusing on the intricate relations that are involved in this group of phenomena (assuming that we can, someday, achieve a satisfactory understanding of these) might either serve as an aid to thwarting their effects, or else, their complexity might discourage us from even attempting to do something about the problem. However, the more we familiar we become with nondualism, and the wider our vision grows, it is likely that we will no longer perceive anything as inherently negative. Notwithstanding clichés about every crisis presenting an opportunity, from the perspective of emptiness, reality is neither positive nor negative. Therefore, to return to our conventional perspective, tackling our patterns of over-consumption, for instance, might be seen as a chance to heal psychologically, instead of an unpleasant burden that we feel obliged to take up (Stanley and Stanley 2009, 231). Of course, from the perspective of emptiness, it is neither of these inherently.

Moreover, through meditating on totality, it is likely that we will become accomplished at taking in a wider picture of reality than the partial and fragmented vision our normally egotistic mind allows. This is now known to diminish our craving and attachment; we are filled with a sense that nothing is lacking, precisely because we feel that we participate in everything (Groth-Marnat 1992, 271–272). It was suggested that a fruitful way of conceiving of totality involves recognition of the inseparability between oneself and other beings, based on an experience of not finding any self that can be separated from others. It was argued that this will result in a sense of identification, which is at least as successful as the belief in metaphysical oneness at prompting the *bodhisattva* to take up the interests of others as his own. Therefore, the understanding of totality seems to retain all of the positive implications that oneness involved.

While we may learn to see the Earth and its inhabitants as an integrated, unitary body, the view of totality reveals that it is as legitimate to regard our planet as a mere speck of dust in a much larger universe. This can act as an important affective counterbalance, so that we avoid becoming overwhelmed by our cause, or too attached to our planet. Some might object that this sounds like a rather lacklustre commitment, and that what the environment needs, at this juncture, is people who are ready to stand up for their ecological principles. The *bodhisattva*, though, is strongly committed to creating a Pure Land wherever she may happen to be, and this is not a belief that can ever be

falsified, simply because it is beyond the duality of true and false. She regards every tiniest part of reality as imbued with Buddha-Nature—the miniature ecosystem that revolves around a pitcher plant, say, or a single unicellular organism—is regarded as a universe in its own right. Therefore, the view of totality does not in any way diminish the value that a Mahāyāna Buddhist might attribute to this Earth or any single part of it. Importantly, in giving priority neither to wholes nor to parts, the problem of eco-fascism is circumvented and the green Buddhist can avoid altogether the accusation that concern for the health and flourishing of the greater whole might result in the rights and interests of the smaller individuals being trumped (c.f., Zimmerman 2004b).

In chapter 4, it was shown that the Mahāyāna Buddhist has a different conception of natural beings from other people, who tend to view the world as made up of a number of static things. In all likelihood, familiarity with emptiness will cause one to let go of the desire to save *the* whale, or *the* rainforest, at least insofar as this involves a propensity to 'freeze' these entities, as it were, in their current state, an approach that is now known to be counterproductive. I argued that the fluctuating, 'kaleidoscopic' nature of natural beings, their emptiness and consequent evolvability, can be regarded as the source of their value, perhaps as part of their Buddha Nature. Protecting, or conserving them, therefore, is not so much a matter of preserving their existence or enabling them to increase in number; instead, I suggested that a more worthy goal is to allow them to develop and unfold. I proposed that we understand emptiness in a positive way to involve a form of pliancy, and that realizing or attaining this quality could be seen as the goal of evolution.

Still, if the *bodhisattva* is beyond time, then the goal of evolution, spiritual and natural, is probably already attained, or else, perhaps it is re-accomplished at every moment. This, therefore, can provide a powerful argument against the objection, raised by Harris, that Buddhism's view of interminable change is unable to account for any sense of purpose. Instead, I suggested that *bodhisattvas*, including aspiring ones, can inject purpose into every single moment by realizing emptiness. With regards to the external world, when we realize the emptiness of an entity, we will naturally protect its pliancy and its capacity to evolve.

In short, although Buddhism does not appear to provide any direct answers to our environmental worries, it is likely that if more people put its teachings into practice, this would have an appreciable beneficial effect on nature. Among environmental philosophers, a common postulate is that more is required, at this stage, than a simple technological fix; that our situation requires a major upheaval in our worldview and system of values, and that we need to reconsider our understanding of ourselves and our relation to nature. I have argued that Buddhism contains various resources that could be fruitfully put to use for this purpose.

References

Abe, Masao. 1992. *A Study of Dōgen: his philosophy and religion.* Ed. Steve Heine. Albany: State University of New York Press.

Allen Colin and Mark Bekoff. 1995. Biological Function, Adaptation, and Natural Design. *Philosophy of Science* 62(4): 609–622.

Ames, William L. 2003. Emptiness and Quantum Theory. In *Buddhism and Science: Breaking New Ground,* ed. B. Alan Wallace, 285–302. New York: Columbia University Press.

———. 2005. 46. The Notion of *Svabhāva* in the Thought of Candrakīrti. In *Buddhism: Critical Concepts in Religious Studies*, ed. Paul Williams, vol. IV Abhidharma and Madhyamaka, 1–15. Oxon: Routledge.

Anacker, Stefan. 2005. *Seven Works of Vasubandhu: The Buddhist Psychological Doctor*. Delhi: Motilal Banarsidass.

Aristotle. 1934. *Nicomachean Ethics.* Vol. 19 of *Aristotle in 23 Volumes.* Translated and edited by H. Rackham. London: William Heinemann Ltd. http://www.perseus.tufts.edu/hopper/text?doc=Perseus:text:1999.01.0054 (accessed June 24th 2010)

Aronson, Harvey B. 1980 *Love and Sympathy in Theravada Buddhism.* Delhi: Motilal Banarsidass.

Barnhill, David Landis. 2001. Relational Holism: Huayan Buddhism and Deep Ecology. In *Deep Ecology and World Religions: New Essays on Sacred Ground,* eds. David Landis Barnhill and Roger S. Gottlieb, 77–106. Albany: SUNY Press.

Batchelor, Stephen. 1994. *The awakening of the west: the encounter of Buddhism and Western culture.* Berkeley, CA: Parallax Press.

Beck, Aaron T. 1976. *Cognitive Therapy and the Emotional Disorders.* Madison: Internalional Universities Press.

Benton, M.J. 1995. Diversification and Extinction in the History of Life. *Science,* New Series 268(5207): 52–58.

Bhattacharya, Kamaleswar, E. H. Johnston and Arnold Kunst. 1998. *The Dialectical Method of Nāgārjuna: Vigrahavyāvartanī*. Delhi: Motilal Banarsidass.

Bilmoria, Purushottama. 2001. Buddha, fifth century BCE. In *Fifty Key Thinkers on the Environment*, ed. Joy A. Palmer, 1–7. London: Routledge.

Bitbol, Michel. 2003. A Cure for Metaphysical Illusions: Kant, Quantum Mechanics and the Madhyamaka. In *Buddhism and Science: Breaking New Ground,* ed. B. Alan Wallace, 326–361. New York: Columbia University Press.

Blackburn, Simon. 1996. *Oxford Dictionary of Philosophy*. Oxford: Oxford University Press.

Bodhi, Bhikkhu. 1994. Dhamma Non-Duality -1. *BPS Newsletter* 27(2):1–9.

———. 1998. Introduction to *Abhidhamma Studies*, by Nyanaponika Thera. Boston, MA: Wisdom Publications.

———. 2009. Does Rebirth Make Sense? *Access to Insight*. http://www.accesstoinsight.org/lib/authors/bodhi/bps-essay_46.html. (accessed April 12, 2010)

Borvall, Charlotte, and Bo Ebenman. 2008. Biodiversity and persistence of ecological communities in variable environments. *Ecological Complexity* 5(2): 99–105.

Botkin, Daniel. 1992. *Discordant Harmonies: a new ecology for the twenty-first century*. New York: Oxford University Press.

———. 2001. The Naturalness of Biological Invasion. *Western North American Naturalist* 61(3): 261–266.

Bottani, Andrea. 2005. Introduction, *Dialectica* 59(4): 381–400.

Bratton, Susan P. 1992. Loving Nature; Agape or Eros? *Environmental Ethics* 14(1): 3–25.

Brooke, John Hedley. 1991. *Science and Religion: Some Historical Perspectives.* Cambridge, U.K.: Cambridge University Press.

Brooks, Daniel R., Richard L. Mayden and Deborah A. Mc Lennan. 1992. Phylogeny and Biodiversity: Conserving our Evolutionary Legacy. *Trends in Ecology and Evolution* 7(2): 55–59.

Brown, Brian Edward. 2004. Environmental Ethics and Cosmology: A Buddhist Perspective. *Zygon* 39(4): 885–900.

Buchler, Justin. 1969. On a Strain of Arbitrariness in Whitehead's System. *The Journal of Philosophy* 66(19): 589–601.

Burton, David. 2001. *Emptiness Appraised: A Critical Study of Nāgārjuna's Philosophy*. Delhi: Motilal Banarsidass.

———. 2004. *Buddhism, Knowledge and Liberation: A philosophical study.* Aldershot: Ashgate.

Callicott, J. Baird. 1980. Animal Liberation: A Triangular Affair. *Environmental Ethics* 2(4): 318–324. Reprinted in *In defense of the Land Ethic: Essays in Environmental Philosophy*, J. Baird Callicott, 15–39. New York: SUNY Press.

———.1985. Intrinsic Value, Quantum Theory, and Environmental Ethics. *Environmental Ethics* 7(3): 257–275.

———.1987. Conceptual Resources for Environmental Ethics in Asian Traditions of Thought: A Propaedeutic. *Philosophy East and West* 37(2): 115–130.

———. 1988. Animal Liberation and Environmental Ethics: Back Together Again. *Between the Species* 4: 163–169. Reprinted in *In defense of the Land Ethic: Essays in Environmental Philosophy*, J. Baird Callicott, 49–61. New York: SUNY Press.

———. 1989. *In defense of the Land Ethic: Essays in Environmental Philosophy*. New York: SUNY press.

———. 1995. Intrinsic Value in Nature: a Metaethical Analysis. *The Electronic Journal of Analytic Philosophy* 3. http://ejap.louisiana.edu/EJAP/1995.spring/callicott.1995.spring.html (accessed 15th July 2010)

———. 2005. The New New (Buddhist?) Ecology. http://www.hds.harvard.edu/cswr/resources/print/dongguk/callicott.pdf (accessed November 4, 2009).

Carroll, Sean B. 2001. Chance and necessity: the evolution of morphological complexity and diversity. *Nature* (409): 1102–1109.

Capra, Fritjof. 1976. *The Tao of Physics: An Exploration of the Parallels between Modern Physics and Eastern Mysticism*. London: Fontana. (Reprinted in 1982, London: Flamingo).

———. 1996. *The Web of Life: A New Synthesis of Mind and Matter.* London: Flamingo.

Chandler, Stuart. 2004. *Establishing a Pure Land on Earth: the Foguang Buddhist Perspective on Modernization and Globalization.* Honolulu: University of Hawai'i Press.

Chang, Garma C.C. 1991. *The Buddhist Teaching of Totality: The Philosophy of Hwa Yen Buddhism*. London: Pennsylvania University Press.

———. 2002. *A Treasury of Mahāyāna Sūtras: Selections from the Mahāratnakūṭa Sūtra*. Delhi: Motilal Banarsidass.

Cheng, Hsueh-li. 1991. *Empty Logic: Mādhyamika Buddhism from Chinese Sources*. Delhi: Motilal Banarsidass.

Clark, Stephen R. L. 2008. Deconstructing the Laws of Logic. *Philosophy* 83: 25–53.

Clayton, Barbra. 1999. *Ahimsa*, *Karuna* and *Maitri*: Implications for Environmental Buddhism. *Ecumenism* 134: 27–31.

Cohen, Richard S. 1995. Discontented Categories: Hinayana and Mahayana in Indian Buddhist History. *Journal of the American Academy of Religion* 63(1):1–25.

Cooper, David E. and Simon P. James. 2005. *Buddhism, Virtue and Environment.* Aldershot: Ashgate.

Cuddington, Kim. 2001. The "Balance of Nature" Metaphor and Equilibrium in Population Ecology. *Biology and Philosophy* 16: 462–479.

Cyranosky, David. 2002. Almost Human. *Nature* 418: 910–912.

Dawkins, Richard. 1989. *The Selfish Gene.* Oxford: Oxford University Press.

Dennett, Daniel. 1996. Granny versus Mother Nature—No Contest. *Mind & Language* 11(3): 263–269.

———. 1998. *The Intentional Stance.* London: MIT Press.

De Silva, Lily. 1987. The Buddhist Attitude Towards Nature. In *Buddhist Perspectives on the Ecocrisis (Wheel* 346), ed. Klass Sandell. Kany, Sri Lanka: Buddhist Publication Society.

De Silva, Padmasiri. 1998. *Environmental Philosophy and Ethics in Buddhism.* London: Macmillan.

Devall, Bill. 1986. Wilderness. *The Trumpeter* 3(2): 22–24.

Devenish, Phillip E. 2001. The Lotus Sutra and Process Philosophy. *Buddhist–Christian Studies* 21: 119–122.

Devitt, Michael. 2008. Resurrecting Biological Essentialism. *Philosophy of Science* 75: 344–382.

Dhammadharo, Lee. 1958. *The Power of Good Will*. Translated by Thanissaro Bhikku.

http://www.accesstoinsight.org/lib/thai/lee/goodwill.html
(accessed 18th July 2010)

Dunayer, Joan. 2005. From Speciesism to Equality. *The Vegan*. (Summer 2005): 14–16.

Dupré, John. 1981. Natural Kinds and Biological Taxa *The Philosophical Review* 90(1): 66–90.

Eckel, Malcolm David. 1983. Emptiness and the Historical Process: A Historian's Response to the Image of Mahāyāna Buddhism in the works of John Cobb and George Rupp. *Buddhist–Christian Studies* 3: 7–19.

———. 1998. Is There a Buddhist Philosophy of Nature? In *Philosophies of Nature: The Human Dimension*, eds. Robert S. Cohen and Alfred I. Tauber, 53–69. Dordrecht, the Netherlands: Kluwer Academic Publishers.

Eldredge, Niles and Elisabeth S. Vrba. 2005. *Macroevolution.* Chicago: Chicago University Press.

Ereshefsky, Marc. 1991. Species, Higher Taxa, and the Units of Evolution, *Philosophy of Science* 58(1): 84–101.

Erwin, Terry L. 1991. An Evolutionary Basis for Conservation Strategies. *Science* 253(5021): 750–752.

Everett, Jennifer. 2001. Environmental Ethics, Animal Welfarism and the problem of Predation: A Bambi Lover's respect for Nature. *Ethics and the Environment* 6(1): 42–67.

Feldman, Joel. 2005. Vasubandhu's Illusion argument and the Parasitism of Illusion upon Veridical Experience. *Philosophy East and West* 55(4): 529–541.

Fiscus Dan. 2001. The Ecosystemic Life Hypothesis I: Introduction and Definitions. *Bulletin of the Ecological Society of America* 82(4); 248–250.

———. 2002. The Ecosystemic Life Hypothesis II: Four Connected Concepts. *Bulletin of the Ecological Society of America* 83(1); 94–96.

Fitzsimmons, Allan K. 1999. *Defending Illusions: federal protection of ecosystems.* Oxford: Rowman & Littlefield Publishers Inc.

Fox, Warwick. 1984. Deep Ecology: A New Philosophy of our Time? *The Ecologist* 14(5, 6): 194–200.

———. 1995. *Towards a Transpersonal Ecology: Developing New Foundations for Environmentalism.* Devon: Resurgence Books.

———. 2006. *A Theory of General Ethics: human relationships, nature and the built environment.* London: MIT Press.

Franklin, I. R. and R. Frankham. 1998. How Large must Populations be to Retain Evolutionary Potential? *Animal Conservation* 1:69–73.

Futuyama, Douglas J. 1997. *Evolutionary Biology*. Sunderland: Sinauer Associates Inc.

Garfield, Jay L. 1995. *The Fundamental Wisdom of the Middle Way: Nāgārjuna's Mūlamadhyamakakārikā.* New York: Oxford University Press.

Gersick, Connie J. G. 1991. Revolutionary Change Theories: A Multilevel Exploration of the Punctuated Equilibrium Paradigm. *The Academy of Management Review* 16(1): 10–36.

Gillson, Lindsey, Michael Sheridan and Dan Brockington. 2003. Representing environments in flux: case studies from East Africa. *Area* 35(4): 371–389.

Gleason, H.A. 1939. The Individualistic Concept of the Plant Association. *American Midland Naturalist* 21(1): 92–110.

Gombrich, Richard. 1996. *How Buddhism Began: The Conditioned Genesis of the Early Teachings*. London, Athlone Press.

Gōmez, Luis O. 2002. *The Land of Bliss: The Paradise of the Buddha of Measureless Light; Sanskrit and Chinese Versions of the Sukhāvatīvyūha Sutras*. Delhi: Motilal Banarsidass.

Gould, Stephen Jay. 2002. *The Structure of Evolutionary Theory.* Cambridge, Massachusetts: Harvard University Press.

Gould, Stephen Jay, and Niles Eldredge. 1972. Punctuated Equilibria: an alternative to Phyletic Gradualism. In *Models in Paleobiology*, ed. Thomas Schopf , 82–115. San Francisco: Freeman, Cooper and Company.

———. 1977. Punctuated Equilibria: The Tempo and Mode of Evolution Reconsidered. *Paleobiology* 3(2): 115–151.

Green, Karen. 1996. Two distinctions in Environmental Goodness. *Environmental Values* 5(1): 31–46.

Green, Richard E. *et al*. 2009. The Neanderthal genome and ancient DNA authenticity. *The EMBO Journal* 28: 2494–2502.

Groth-Marnat, Gary. 1992. Buddhism and Mental Health: A Comparative Analysis. In *Religion and Mental Health*, edited by John F. Schumaker, 270–280. New York: Oxford University Press.

Gyatso, Lobsang. 1992. *The Harmony of Emptiness and Dependent-Arising*. Delhi: Library of Tibetan Works and Archives.

Habito, Ruben L.F. 2007. Environment or earth sangha: Buddhist perspectives on our global ecological well-being. *Contemporary Buddhism* 8(2): 131–147.

Hahlweg, Kai. 1991. On the Notion of Evolutionary Progress. *Philosophy of Science* 58(3): 436–451.

Halifax, Joan. 1990. The Third Body: Buddhism, Shamanism and Deep Ecology. In *Dharma Gaia: A Harvest of Essays in Buddhism and Ecology*, ed. Allan Hunt-Badiner, 20–38. Berkeley, CA: Parallax Press.

Hamilton, Sue. 1999. The 'External World': Its Status and Relevance in the Pali Nikāyas. *Religion* 29: 73–90.

Hansson, Tobias. 2007. The Problem(s) of Change Revisited. *Dialectica* 61(2): 265–274.

Harris, Ian. 1991. How Environmentalist is Buddhism? *Religion* 21: 101–114.

———. 1994. Causation and Telos; The Problem of Buddhist Environmental Ethics. *Journal of Buddhist Ethics* 1: 45–56.

———. 1995. Getting to grips with Buddhist Environmentalism. A Provisional Typology. *Journal of Buddhist Ethics* 2: 173–190.

———. 2000. Buddhism and Ecology. In *Buddhist Ethics*, ed. Damien Keown, 113–135. Surrey, U.K.: Curzon Press.

———. 2001. Attitudes to Nature. In *Buddhism*, ed. Peter Harvey, 235–256. London: Continuum.

———. 2007. Landscape Aesthetics and Environmentalism: Some Observations on the Representation of Nature in Buddhist and Western Art. *Contemporary Buddhism* 8(2): 149–168.

Hartshorne, Charles. 1954. Causal Necessities: An Alternative to Hume. *The Philosophical Review* 63(4): 479–499.

———. 1958a. Freedom Requires Indeterminism and Universal Causality. *The Journal of Philosophy* 55(19): 793–811.

———. 1958b. Whitehead on Process: A Reply to Professor Eslick. *Philosophy and Phenomenological Research* 18(4): 514–520.

———. 1963. Real Possibility. *The Journal of Philosophy* 60(21): 593–605.

———. 1970. *Creative Synthesis & Philosophic Method*. La Salle, Illinois: The Open Court Publishing Co.

———. 1975. Whitehead's Differences from Buddhism. *Philosophy East and West* 25(4): 407–413.

Hettinger, Ned. 1994. Bambi Lovers versus Tree Huggers: A Critique of Rolston's Environmental Ethics. *Environmental Ethics* 16: 3–20.

Hollander, Jack M. 2003. *The Real Environmental Crisis: Why Poverty, Not Affluence, Is The Environment's Number One Enemy*. Berkeley, CA: University of California Press.

Holder, John J. 2007. A suffering (but not irreparable) nature: environmental ethics from the perspective of early Buddhism. *Contemporary Buddhism* 8(2): 113–130.

Hopkins, Jeffrey. 1996. *Meditation on Emptiness*. Somerville, MA: Wisdom Publications.

Howarth, Jane. 2000. Neither Use nor Ornament: A Consumer's Guide to Care. *Environmental Ethics: An Introduction with Readings,* ed. John Benson, 161–170. London: Routledge.

Hughes, Christopher. 2005. More Fuss About Formulation: Sider (and me) on Three- and Four-Dimensionalism. *Dialectica* 59(4): 463–480.

Hunt-Badiner, Allan. 1990. *Dharma Gaia: A Harvest of Essays in Buddhism and Ecology*. Berkeley, CA: Parallax Press.

Huntington, C. W. Jr., and Namgyal Wangchen. 2003. *The Emptiness of Emptiness: An Introduction to Early Indian Mādhyamika; Madhyamakāvatāra*. Delhi: Motilal Banarsidass.

Inada, Kenneth K. 1974. Time and Temporality: A Buddhist Approach. *Philosophy East and West* 24(2): 171–179.

James, Simon P. 2003. Zen Buddhism and the Intrinsic Value of Nature. *Contemporary Buddhism* 4(2): 143–157.

———. 2004. *Zen Buddhism and Environmental Ethics*. Aldershot, UK: Ashgate.

———. 2006. Buddhism and the Ethics of Species Conservation. *Environmental Values* 15: 85–97.

———. 2007. Against Holism: Rethinking Buddhist Environmental Ethics. *Environmental Ethics* 16(4): 447–461.

Judson, Horace Freeland. 2001. Talking about the Genome: Biologists must take responsibility for the correct use of language in genetics. *Nature* 409: 769.

Kakol, Peter. 2002. A General Theory of Worldviews based on Mādhyamaka and Process Philosophies. *Philosophy East and West* 52(2): 207–223.

Kalupahana, David J. 1974. The Buddhist Conception of Time and Temporality. *Philosophy East and West* 24(2): 181–191.

———. 1996. *Mūlamadhyamakakārikā of Nāgārjuna: The Philosophy of the Middle Way*. Delhi: Motilal Banarsidass.

Kaplan, Jonathan. 2008. Evolutionary Innovations and Development Resources: from stability to variation and back again. *Philosophy of Science* 75: 861–873.

Kaza, Stephanie and Kenneth Kraft., eds. 2000. *Dharma Rain: Sources of Buddhist Environmentalism*. Boston, MA: Shambhala.

Kellert, Stephen R 1993. Introduction to *The Biophilia Hypothesis.* eds. Stephen R. Kellert and Edward O. Wilson, 20–27. Washington, DC: Island Press.

Keown, Damien. 2005. *Buddhist Ethics: A Very Short Introduction.* Oxford: Oxford University Press.

———. 2007. Buddhism and Ecology: A Virtue Ethics Approach. *Contemporary Buddhism* 8(2): 97–112.

Kern, H. 2007. *The Lotus Sutra: Saddharma-Pundarika*. Forgotten Books. http://www.forgottenbooks.org/info/9781605061238 (accessed 2nd August 2010)

Khisty, C. Jotin. 2006. Meditations on Systems Thinking, Spiritual Systems and Deep Ecology. *Systemic Practice and Action Research* 19: 295–307.

King, Richard. 1994. Early Yogacara and Its Relationship with the Madhyamaka School. *Philosophy East and West* 44(4): 659–683.

King, Sallie B. 2002. From Is to Ought: Natural Law in Buddhadasa Bhikku and Phra Prayudh Payutto. Journal of Religious Ethics 30(2): 275–293.

Kitcher, Philip. 1984. Species. *Philosophy of Science* 51(2): 308–333.

Koller, John M.1974. On Buddhist Views of Devouring Time. *Philosophy East and West* 24(2): 201–208.

Kornfield, Jack, ed. 1996. *Teachings of the Buddha*. Boston, MA: Shambhala Publications.

Koseki, Aaron K. 1981. The concept of practice in San-lun thought: Chi-Tsang and the "concurrent insight" of the two truths. *Philosophy East and West* 31(4): 449–466.

LaFleur, William. 1973. Saigyō and the Buddhist Value of Nature Part I. *History of Religions* 13(2): 93–128.

———. 1974. Saigyō and the Buddhist Value of Nature Part II. *History of Religions* 13(3): 227–248.

———. 2000. Enlightenment for Plants and Trees. In *Dharma Rain: Sources of Buddhist Environmentalism,* eds. Stephanie Kaza and Kenneth Kraft, 109–16. Boston, MA: Shambhala.

Lai, Whalen W. 1980. Further developments of the two truths theory in China: the Ch'eng-shih-lun Tradition and Chou Yung's San-tsung-lun. *Philosophy East and West* 30(2): 136–161.

Lancaster, Lewis R. 1974. Discussion of Time in Mahāyāna Texts. *Philosophy East and West* 24(2): 209–214.

Landres, Peter B, Penelope Morgan and Fredrick J. Swanson. 1999. Overview of the Use of Natural Variability Concepts in Managing Ecological Systems. *Ecological Applications* 9(4): 1179–1188.

Leighton, Joseph A. 1908. Time, Change and Time-Transcendence. *The Journal of Philosophy, Psychology and Scientific Methods* 5(21): 561–570.

Lekevičius, Edmundas. 2006. The Russian Paradigm in Ecology and Evolutionary Biology: Pro et Contra. *Acta Zoologica Lituanica* 16(1): 3–19.

Levinton, Jeffrey S. 2001. *Genetics, Paleontology, and Macroevolution.* Cambridge: Cambridge University Press.

Liu, Ming-Wood. 1993. A Chinese Madhyamaka Theory of Truth: The Case of Chi-Tsang. *Philosophy East and West* 43(4): 649–673.

Lopez, Donald S., Jr. 1990. *The Heart Sutra Explained: Indian and Tibetan Commentaries*. Delhi: Sri Satguru Publications.

Lovelock, James E. 1979. *Gaia: a New Look at Life on Earth.* Oxford: Oxford University Press.

———. 1995. *The Ages of Gaia: a biography of our living earth.* Oxford: Oxford University Press.

Loy, David. 1986. The Mahāyāna Deconstruction of Time. *Philosophy East and West* 36(1): 13–23.

———. 2008. Awareness Bound and Unbound: Realizing the Nature of Attention. *Philosophy East and West* 58(2): 223–243.

Macy, Joanna. 1990. The Greening of the Self. In *Dharma Gaia: a harvest of essays in Buddhism and ecology*, ed. Allen Hunt-Badiner, 53–63. Berkeley, CA: Parallax Press.

———. 1995. *Mutual Causality in Buddhism and General Systems Theory: The Dharma of Natural Systems*. Delhi: Sri Satguru Publications.

———. 2000. The Third Turning of the Wheel. In *Dharma Rain: Sources of Buddhist Environmentalism*, Eds. Stephanie Kaza, and Kenneth Kraft, 150–160. Boston, MA: Shambhala.

Mansfield, Vic. 2003. Time and Impermanence in Middle Way Buddhism and Modern Physics. In *Buddhism and Science: Breaking New Ground*, ed. B. Alan Wallace, 305–320. New York: Columbia University Press.

———. 2008. *Tibetan Buddhism and Modern Physics.* West Conshohocken, PA: Templeton Foundation Press.

Matthen, Mohan. 1998. Biological Universals and the Nature of Fear. *The Journal of Philosophy* 95(3):105–132.

———. 2009. Chicken, Eggs, and Speciation. *Nous* 43(1): 94–115.

Matthews, Freya. 1994. *The Ecological Self:* London: Routledge.

Maxwell, Thomas P. 2003. Considering Spirituality: Integral Spirituality, Deep Science and Ecological Awareness. *Zygon* 38(2):257–276.

McCann, Kevin Shear, 2000. The diversity–stability debate. *Nature* 405: 228–233.

McMahan, David L. 2004. Modernity and the Early Discourse of Scientific Buddhism. *Journal of the American Academy of Religion* 72(4): 897–993.

Merchant, Carolyn. 1998. The Death of Nature. In *Environmental Philosophy: From Animal Rights to Radical Ecology,* eds. Michael E. Zimmerman, J. Baird Callicott, George Sessions, Karen J. Warren, John Clark, 277–289. Upper Saddle River, N.J. Prentice-Hall.

Miller, Craig and Hong-Key Yoon. 2000. Morality, Goodness and Love: a Rhetoric for Resource Management: *Ethics, Place and Environment* 3(2): 155–172.

Moore, George Edward. 1903. *Principia Ethica*. New York: Prometheus Books. http://fair-use.org/g-e-moore/principia-ethica/ (accessed 18th July 2010)

Mugnai, Massimo. 2005. Leibniz on Substance and Changing Properties. *Dialectic* 59(4): 503–516.

Myers, Norman and Andrew H. Knoll. 2001. The Biotic Crisis and the Future of Evolution. *Proceedings of the National Academy of Sciences of the United States of America* 98(10): 5389–5392.

Naess, Arne. 1985. Identification as a Source of Deep Ecological Attitudes. In *Deep Ecology,* ed. Michael Tobias, 256–270. San Diego CA: Avant Books.

———. 1986. The Deep Ecological Movement: Some Philosophical Aspects. *Philosophical Inquiry* 8:1–2.

———. 1990. Man Apart and Deep Ecology: A reply to Reed. *Environmental Ethics* 12: 185–192.

———. 1998. The Deep Ecological Movement: Some Philosophical Aspects. In *Environmental Philosophy: From Animal Rights to Radical Ecology,* ed. Michael E. Zimmerman *et al,* 193–211. Upper Saddle River, N.J: Prentice-Hall.

———.2000. *Ecology, Community and Lifestyle.* Trans. David Rothenberg. Cambridge: Cambridge University Press.

———. 2005. Reflections on Gestalt Ontology. Ed. Alan Drengson. *The Trumpeter* 21(1): 119–128.

Nagao, Gadjin M. 1992. *Mādhyamika and Yogācāra*. Trans. and ed. L.S. Kawamura. Delhi: Sri Satguru Publications.

Nanamoli, Thera. 1987. The Practice of Loving Kindness (*Metta*) as taught by the Buddha in the Pali canon. *The Wheel* 7. Kandy, Sri Lanka: Buddhist Publication Society. http://www.accesstoinsight.org/lib/authors/nanamoli/wheel007.html (accessed 18th July 2010)

Nhat Hanh, Thich. 2000. The Sun My Heart. In *Dharma Rain: Sources of Buddhist Environmentalism*, eds. Stephanie Kaza and Kenneth Kraft, 83–91. Boston, MA: Shambhala.

Nyanaponika, Thera. 1998. *Abhidhamma Studies.* Boston, MA: Wisdom Publications.

Nyanatiloka, Mahathera. 1980. *Buddhist Dictionary: Manual of Buddhist Terms and Doctrines*. Kandy, Sri Lanka: Buddhist Publication Society.

Odin, Steve. 1995. *Process Metaphysics and Hua Yen Buddhism: A Critical Study of Cumulative Penetration vs. Interpenetration.* Delhi: Sri Satguru Publications.

Okasha, Samir. 2002. Darwinian Metaphysics: Species and the Question of Essentialism, *Synthese* 131(2): 191–213.

———. 2006. *Evolution and the Levels of Selection*. Oxford: Oxford University Press.

———. 2008. Fisher's Fundamental Theorem of Natural Selection—A Philosophical Analysis. *The British Journal for the Philosophy of Science* 59: 319–351.

O'Neill, John. 1992. The Varieties of Intrinsic Value. *The Monist* 75: 119–137.

———. 1993. *Ecology, Policy, and Politics: Human Well-Being and the Natural World*. London: Routledge.

Oppermann, Serpil. 2003. Towards an Ecocentric Postmodern Theory: Fusing Deep Ecology and Quantum Mechanics. *The Trumpeter* 19(1):7–35.

Pääbo, Svante. 2001. The Human Genome and our View of Ourselves. *Science* 291(5507): 1219–1220.

Pandey, K. C., ed. 2008. *Ecological Perspectives in Buddhism*. Delhi: Readworthy Publications.

Partridge, Ernest. 2000. Reconstructing Ecology. In *Ecological Integrity: integrating environment, conservation and health*, eds. David Pimentel, Laura Westra, Reed F. Noss, 79–97. Washington: Island Press.

Patton, Charles. n.d. *The Diamond Perfection of Wisdom Sūtra*. http://reluctant-messenger.com/diamond_sutra.htm (accessed 2nd August 2010)

Pavé, Alain. 2006. By way of introduction: Modeling living systems, their diversity and their complexity: some methodological and theoretical problems. *Comptes Rendus Biologies* 329: 3–12.

———. 2007. Necessity of Chance: Biological Roulettes and Biodiversity. *Comptes Rendus Biologies* 330(3): 189–198.

Pickett, Stewart T. and P. S. White. 1985. *The Ecology of Natural Disturbance and Patch Dynamics.* London: Academic Press.

Plumwood, Val. 1997. *Feminism and the Mastery of Nature.* London: Routledge.

Price, Huw. 1996. *Time's Arrow and Archimedes' Point: New Directions for the Physics of Time*. New York: Oxford University Press.

Putnam, Hilary. 1967. Time and Physical Geometry. *The Journal of Philosophy* 64(8): 240–247.

Regan, Tom. 1998. Animal Rights, Human Wrongs. In *Environmental Philosophy: From Animal Rights to Radical Ecology*, ed. Michael E. Zimmerman *et al*, 41–55. Upper Saddle River, N.J: Prentice-Hall.

Reynolds, John Myrdhin. 2000. *Self-Liberation through Seeing with Naked Awareness: an introduction to the nature of one's own mind: a terma text by Guru Padmasambhava*. Ithaca NY: Snow Lion Publications.

Reed, Peter. 1989. Man Apart: An Alternative to the Self-Realization Approach. *Environmental Ethics* 11: 53–69.

Rhys Davids, Thomas William. 2004. *Buddhist Birth-Stories*. Delhi: Winsome Books.

Ricard, Matthieu and Trinh Xuan Thuan. 2001. *The Quantum and the Lotus: A Journey to the Frontiers where Science and Buddhism Meet.* Trans. Ian Monk. New York: Three Rivers Press.

Rolston, Holmes, III. 1987. Can the East help the West to Value Nature? *Philosophy East and West* 37(2): 172–190.

———. 1988. *Environmental Ethics: Duties to and Values in the Natural World*. Philadelphia: Temple University Press.

———. 2003. Naturalizing and Systematizing Evil. In *Is Nature ever Evil? Religion, Science and Value*, ed. William B. Drees, 67–86. London: Routledge.

Rychter, Pablo. 2009. There is No Puzzle about Change. *Dialectica* 63(1): 7–22.

Sagoff, Mark. 1984. Animal Liberation and Environmental Ethics: Bad Marriage, Quick Divorce. *Osgoode Hall Law Journal* vol. 22(2): 297–307.

Sahtouris, Elisabet. 1996. The definition of Life. In *Gaia in Action: Science of the Living Earth*. ed. Peter Bunyard, 328–332. Edinburgh: Floris Books.

Scerri, Eric R. 1989. Eastern Mysticism and the Alleged Parallels with Physics. *American Journal of Physics* 57(8): 687–692.

Schmithausen, Lambert. 1991. *Buddhism and Nature: The Lecture Delivered on the Occasion of the EXPO 1990. An Enlarged Version with Notes*. Tokyo: International Institute for Buddhist Studies.

———. 1997. The Early Buddhist Tradition and Ecological Ethics. *Journal of Buddhist Ethics* 4: 1–74.

Schroeder, John. 2000. Nāgārjuna and the Doctrine of "Skilful Means". *Philosophy East and West* 50(4): 559–583.

Sciberras, Colette. 2008. Buddhism and Speciesism: on the Misapplication of Western Concepts to Buddhist Beliefs. *Journal of Buddhist Ethics* 15: 215-240.

Shastri, Yajneshwar S. 1989. *Mahāyānasūtrālaṅkāra of Asaṅga: A Study in Vijñānavāda Buddhism*. Delhi: Sri Satguru Publications.

Sheldon, W.H. 1926. The Spirituality of Time. *The Journal of Philosophy* 23(6): 141–154.

Shotwell, James T. 1915. The Discovery of Time. *The Journal of Philosophy, Psychology and Scientific Methods* 12(8):197–206.

Sider, T. 2001. *Four-Dimensionalism: An Ontology of Persistence and Time*, Oxford: Clarendon Press.

Siderits, Mark. 1979. A Note on the Early Buddhist Theory of Truth. *Philosophy East and West* 29(4): 491–499.

———. 2003. *Personal Identity and Buddhist Philosophy: Empty Persons.* Hampshire: Ashgate Publishing Limited.

Singer, Peter. 1975. *Animal Liberation: A New Ethics for Our Treatment of Animals*, New York: New York Review.

———. 1998. All Animals Are Equal. In *Environmental Philosophy: From Animal Rights to Radical Ecology*, eds., Michael E. Zimmerman *et al*. 26–40. Upper Saddle River, N. J.: Prentice Hall.

Sober, Elliot. 1980. Evolution, Population Thinking, and Essentialism. *Philosophy of Science* 47(3): 350–383.

Sommers, Tamler, and Alex Rosenberg. 2003. Darwin's nihilistic idea: evolution and the meaninglessness of life. *Biology and Philosophy* 18**:** 653–668.

Sponberg, Alan. 1997. Green Buddhism and the Hierarchy of Compassion. In *Buddhism and Ecology: the Interconnection of Dharma and Deeds*, eds., Mary Evelyn Tucker and Duncan Ryūken Williams, 351–376. Cambridge MA., Harvard University Press.

Sponsel, Leslie E., and Poranee Natadecha-Sponsel. 2003. Buddhist Views of Nature and the Environment. In *Nature across Cultures: views of nature and the environment in non-western cultures.* eds. Helaine Selin and Arne Kalland. Dordrecht, The Netherlands: Kluwer Academic Publishers.

Srivastava, Dinesh Chandra. 2008. Deep Ecological Consciousness and Pratityasamutpada. In *Ecological Perspectives in Buddhism,* ed. K. C. Pandey, 241–257. Delhi: Readworthy Publications.

Stanley, John, David R. Loy, and Gyurme Dorje, eds. 2009. *A Buddhist Response to the Climate Emergency.* Somerville MA: Wisdom Publications.

Stanley, John and Diane Stanley. 2009. Clarity, Acceptance, Altruism: Beyond the Climate of Denial. In *A Buddhist Response to the Climate Emergency*, edited by John Stanley, David R. Loy and Gyurme Dorje, 225–232. Boston, MA: Wisdom Publications.

Streng, Fred. 1973. The significance of Pratītyasamutpāda for understanding the relationship between Saṁvṛti and Paramārthasatya in Nāgārjuna. In *The Problem of the Two Truths in Buddhism and Vedanta*, ed. Mervyn Sprung, 27–39. Dordrecht, Holland: D. Reidel Publishing Company.

Swearer, Donald K. 2005. An Assessment of Buddhist Eco-Philosophy. Paper presented at the CSWR-Dongguk symposium on Buddhism and Ecology, Cambridge, MA. December 9-10, 2005. http://www.hds.harvard.edu/cswr/resources/print/dongguk/swearer.pdf (accessed May 13, 2010).

Sylvan (Routley), Richard. 1998. Is There a Need for a New, an Environmental, Ethic? In *Environmental Philosophy: From Animal Rights to Radical Ecology*, eds., Michael E. Zimmerman *et al*. 17–25. Upper Saddle River, N. J.: Prentice Hall.

Tanaka, Koji. 2007. In Defense of Priest—A reply to Mortensen. *Philosophy East and West* 57(2): 257–259.

Taylor, Paul W. 1998. The Ethics of Respect for Nature. In *Environmental Philosophy: From Animal Rights to Radical Ecology,* eds. Michael E. Zimmerman *et al*. 71–86. Upper Saddle River, N. J.: Prentice Hall.

Thanissaro Bhikku et al. *Access to Insight; Readings in Theravāda Buddhism.* http://www.accesstoinsight.org/index.html (accessed November 4 2009)

Thompson, John N. 1996. Evolutionary ecology and the conservation of biodiversity. *Trends in Ecology and Evolution* 11(7): 300–303.

Thurman, Robert A. F. 1976. *The Holy Teaching of Vimalakīrti: A Mahāyāna Scripture*. University Park, PA: Pennsylvania University Press.

———. 1996. *Essential Tibetan Buddhism.* New Delhi: HarperCollins Publishers India.

Tola, Fernando, and Carmen Dragonetti. 1995. *On Voidness: A study on Buddhist Nihilism*. Delhi: Motilal Banarsidass.

Trivedi, Saam. 2005. Idealism and Yogacara Buddhism. *Asian Philosophy* 15(3): 231–246.

Tuck, Andrew P. 1990. *Comparative Philosophy and the Philosophy of Scholarship: On the Western Interpretation of Nāgārjuna*. New York: Oxford University Press.

Tucker, Mary Evelyn, and Duncan Ryūken Williams, eds. 1997. *Buddhism and Ecology: the Interconnection of Dharma and Deeds*. Cambridge MA: Harvard University Press.

Varsi, Achille C. 2005. Change, Temporal Parts, and the Argument from Vagueness. *Dialectica* 59(4): 485–498.

Waldau, Paul. 2002. *The Specter of Speciesism: Buddhist and Christian Views of Animals.* New York: Oxford University Press.

Wallace, B. Alan, ed. 2003. *Buddhism and Science: Breaking New Ground.* New York: Columbia University Press.

Wayman, Alex. 1996. A defense of Yogacara Buddhism. *Philosophy East and West* 46(4): 447–476.

Weber, Thomas. 1999. Gandhi, Peace Research, Deep Ecology and Buddhist Economics. *Journal of Peace Research* 36(3):349–361.

Welbon, Guy Richard. 1975. *The Buddhist Nirvana and its Western Interpreters*. Chicago: Chicago University Press.

West-Eberhard, Mary Jane. 1989. Phenotypic Plasticity and the Origins of Diversity. *Annual Review of Ecology and Semantics* 20: 249–278.

Westerhoff, Jan. 2008. Nāgārjuna's Arguments on Motion Revisited. *Journal of Indian Philosophy* 36: 455–479.

———. 2009. *Nāgārjuna's Madhyamaka: A Philosophical Introduction*. New York: Oxford University Press.

White, Lynn. 1967. The Historic Roots of our Ecologic Crisis. *Science* 155(3767): 1203–1207.

Wilber, Ken. 1995. *Sex, Ecology, Spirituality: the spirit of evolution.* Boston, MA: Shambhala.

Williams, George C. 1992. *Natural Selection: Domains, Levels and Challenges*. New York: Oxford University Press.

Williams, Paul. 2009. *Mahāyāna Buddhism: The Doctrinal Foundations*. Oxon: Routledge.

Willis, Janice Dean. 2002. *On Knowing Reality: The Tattvārtha Chapter of Asaṅga's Bodhisattvabhūmi*. Delhi: Motilal Banarsidass.

Wilson, Edward O. 2003. *Biophilia,* Cambridge, MA: Harvard University Press.

Worster, Donald. 1998. *Nature's Economy: A History of Ecological Ideas.* Cambridge: Cambridge University Press.

WWF. 1999. *Religion and Conservation.* Delhi: Full Circle.

Yadav, D.N. 2008. Elements of Deep Ecology in Buddhism. In *Ecological Perspectives in Buddhism,* ed. K. C. Pandey, 231–240. Delhi: Readworthy Publications.

Yao, Zhihua. 2007. Four-Dimensional Time in Dzogchen and Heidegger. *Philosophy East and West* 57(4): 512–532.

Zelinski, Daniel. 2000. Dōgen's "Ceaseless Practice". *Journal of Buddhist Ethics* 7 http://www.buddhistethics.org/7/zelinski001
(accessed November 4 2009)

Zimmerman, Michael E. 2004a. Humanity's relation to Gaia; parts of the whole, or members of the community? *The Trumpeter* 20: 4–20.

———. 2004b. Ecofascism: An Enduring Temptation. In *Environmental Philosophy: From Animal Rights to Radical Ecology*, 4th ed., edited by Michael E. Zimmerman *et al.* Upper Saddle River, N.J: Prentice Hall Inc. http://www.colorado.edu/philosophy/paper_zimmerman_ecofascism.pdf (accessed 10th August 2010)

Zimmerman, Michael E. 2006. Heidegger, Buddhism and deep ecology. In *The Cambridge Companion to Heidegger*, ed. Charles Guignon, 293–325. New York: Cambridge University Press.

Zimmerman, Michael E., J. Baird Callicott, George Sessions, Karen J. Warren, and John Clark, eds. 1998. *Environmental Philosophy: From Animal Rights to Radical Ecology*. Upper Saddle River, N. J.: Prentice Hall.