THE “NATURE” OF BUDDHISM: 1
A SURVEY OF RELEVANT LITERATURE AND THEMES

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Abstract
This paper is a review of the scholarly conversation relating Buddhism to environmental issues, primarily in the United States. Topics of particular concern include important scholarly benchmarks in the field, and the nature of Buddhist ethics. Also considered are the relationships between Buddhism and other schools of thought that have been important in thinking about nature and the environment. In particular I focus on Deep Ecology and related philosophies, Buddhism and Christianity in Process thought, and the relationship between Buddhism and the natural sciences. I outline current practices performed worldwide by people who self-identify as Buddhists that clearly demonstrate environmental consciousness, sometimes actively participating in environmental movements in efforts to resist globalization and, often, Westernization. In the end, this survey perspective illustrates that there is no monolithic Buddhist tradition, but rather a substantial number of adapted (and adapting) Buddhisms.

Keywords: Buddhism, nature, ecology, environmental ethics, Eco-Buddhism, globalization; Buddhism and science; Process philosophy; deep ecology

Introduction

When environmental consciousness coalesced into a variety of loosely related movements in the United States it included, almost from the very beginning, a Buddhist identity. Besides launching a thousand Christian ships with his claim that the Judeo-Christian creation myth was largely responsible for the ecological crisis, Lynn White, Jr (2003 [1967]) also set afloat a significant number of Buddhist boats with

1 Although one reviewer suggested that the title use the term “environment” rather than “nature”, I chose to keep the admittedly overbroad and general term “nature”. While both terms have their appeal and their drawbacks, (e.g., “nature” is considered too vague and ill-defined by many environmental scientists), the value in keeping “nature” in the title is to indicate that the Buddhism and nature conversation has been interested not only in what is encompassed under the rubric of “environment” (what surrounds humans) or “ecology” (scientifically measurable interacting “systems”), but also questions of what is “natural” and what is not, and how these determinations are made.
his suggestion that Zen Buddhism might be a particularly “eco-friendly” religion. Because blame for the environmental crisis is traditionally aimed at Western conceptual institutions, including the oft-related evils of patriarchy, dualism (or at least an unhealthy eschatological escapism), and unchecked consumption, Asian traditions and philosophies seem, for many, to offer a possible alternative worldview. Some scholars suggest that Asian philosophies are inherently non-dualistic because of their (arguably) “both/and” worldviews, in contrast to the now much-maligned, hard-line distinction between subject and object more common in Western thought. As such, these worldviews, it is sometimes assumed, can instruct Westerners in the construction of a more eco-friendly perspective.

However—as has been frequently pointed out—it is not necessarily advisable to extract conceptual resources from another tradition and uncritically attach them to existing Western beliefs (Larson 1989). But however critical one might be of the appropriation of Buddhist concepts of nature by Western environmentalists, there is no denying the growth of Buddhist-oriented environmental movements in both North America and Buddhist-dominated regions of Asia. There is now a growing literature, in particular on Asian environmental resistance movements, from both Asian and Western scholars. Many of these are authentic grassroots efforts, ignited and sustained by local populations and ideals. Others retain a grassroots character by building local participation into social and eco-justice efforts with the help of external NGOs; still others represent something closer to a top-down strategy, initiated and largely funded by Western NGOs or other interest groups.

In any case it seems clear that there are some environmentally-oriented discussions and movements that are distinctly Asian and Buddhist, some (here in the United States, for example) that are obviously Buddhist but not Asian; and some that clearly represent a blending of Buddhism with elements of other religious traditions. It should become clear in this survey that people from widely divergent walks of life with varying practices and worldviews self-identify as Buddhists. The exploration of Buddhism and nature is still expand-

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2 There is a large body of literature on the appropriation of cultural symbols and concepts that I cannot review here. Callicott and Ames’ edited volume (1989), in which Larson’s chapter appeared, provides an interesting example of Western scholars exploring Asian concepts of nature.
ing and changing, and no definite future is yet clear. It is my hope that in this paper I can provide a skeletal outline of how the field has evolved since the early 1890s, a characterization of the most important conversations occurring within the field, and a tentative speculation about future developments, given the trajectory of the literature.

Part I of this paper will survey the evolution of the scholarly conversation on Buddhism and environmental issues, primarily in the United States, beginning in the late nineteenth century. My somewhat arbitrary point of departure for this discussion is neither the first appearance of nature themes in Buddhism, nor the first encounter between Buddhism and the West. I focus instead on the Japanese presentation of what was essentially a distinctively rational and institutionalized Buddhism at the World’s Fair in 1893; this, I claim, raises the question of what is (or is not) an “accurate” or “pure” Buddhism. I then trace some other transmissions of Buddhism to the West, highlighting the emerging English-language literature on the relationship between Buddhism and nature.

This short history should bring us up to the contemporary conversation surrounding Buddhism and environmental issues. The paper will then pay particular attention to Japanese and East Asian influences on the Buddhism and nature dialogue. I do not intend to imply by this, however, that they were the only, or the most powerful, influences shaping various Buddhisms, nor that they are more eco-friendly than other Buddhist streams.

Part II details some of the important scholarly benchmarks since the exploration of Buddhism and nature began. These were important in laying the foundation for the later discussions of Buddhism and nature. Beginning in Part III, I will move from a chronological treatment to a topical one. There is obviously a variety of different ways in which such material might be divided up; I adopted the following approach.

The first broad area of review concerns the debate over Buddhist ethics (part III). The modern environmental movement in the West has often been framed by Western concepts of ethical engagement with the nonhuman world. There is, therefore, much discussion around the question of whether it is possible to derive an environmental ethics from Buddhism. The applicability of the term “ethics” to the way that values are conceived and acted upon in Buddhism is problematic, but work on the distinctiveness of Buddhist ethics
continues. I will begin by providing a brief survey of the literature that deals with theories of ethics. I also review applied Buddhist ethics, including some Buddhist publications that address the ethical aspects of globalization, and Buddhist social and environmental resistance to globalization. Environmental resistance movements are numerous and widely variable in their practice, so ethics is one area of inquiry that could be foundational for any comparative or cross-cultural environmental discussion.

Section IV reviews some of the relationships between Buddhism and other schools of thought that have been important in thinking about nature and the environment. I focus on Deep Ecology and related philosophies, Buddhism and Christianity in Process thought, and the relationship between Buddhism and the natural sciences. Those who identify with Deep Ecology frequently claim that Buddhism has been important in forming their deep ecological worldview, and that both Buddhist philosophy and Deep Ecology question the idea of discrete, bounded selves. Process philosophy, drawing on the organic philosophy of Alfred North Whitehead, is also being adapted to provide a common ground for the engagement of Buddhism, Christianity, and the environmental sciences. Process thought provides a picture of the cosmos that is amenable to Christian and Buddhist philosophies, as well as concomitant with the current state of science. And Buddhism’s historical association with rationality continues today in its strong association with science. Some scholars argue that the Buddhist belief in the interconnectedness of the material world provides a contact point with holistic interpretations of ecology and the new physics. The holistic nature of some readings of scientific ecology, it is often assumed, create a natural consonance with Buddhism.

It is important to note that many of the “debates” reviewed in this paper, including the authenticity of Western Buddhisms, the applicability of Western terms such as ethics to Buddhist thought, or the presence of environmental themes in Buddhist traditions, occur only within philosophy and religious studies departments. Popularizers

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[3] The “new physics” is a term often used to describe the state of the field of physics since the advent of subatomic physics just before the beginning of the twentieth century. The inherent indeterminacy of quantum mechanics, and the discovery that even subatomic entities are primarily “empty” space have inspired a number of religious or spiritual responses in Asia and globally.
of Buddhism have no qualms about discussing various aspects of the moral life, their relationship to globalization, or nature themes. In the end, it should be clear that Buddhism is, at bottom, a highly adaptable tradition, and has always been so. The wide variety of shapes that it takes on the ground may recommend against monolithic approaches to the study of Buddhism and nature. It seems that encouraging a multitude of explanatory categories in the study of Buddhism in general, particularly in relation to nature, may be the most promising path for continuing inquiries into “nature” in Buddhism.

I. The Evolution of Buddhism and Nature—1890s to the Present

Japan’s exhibit at the 1893 World’s Fair included a portrait of its religion, Buddhism, which was systematized and rationalized for the purpose of presentation to the “highly rational” Western world powers (Snodgrass 2003). This somewhat inaccurate but nonetheless highly visible representation of “Eastern religion” was an early Buddhist seed planted in the Western imagination. This particular expression of Buddhism contained no explicitly ecological bent, but it certainly reflected Japanese national pride. Daisetz Suzuki, the first to bring any serious attention to Buddhism as an environmentally-friendly tradition, maintained a strong pride in his native Japan, but also sincerely hoped that his work on Zen philosophy might provide some important insights to those in the West (Humphreys, in Suzuki 1970). Suzuki’s first work in English, published in 1907, was Outlines of Mahayana Buddhism (1963), a careful treatment of Mahayana philosophy; while perhaps his most famous work, An Introduction to Zen Buddhism, was published in 1934 (1963). But his perspective on nature runs throughout his impressive published corpus:

It is not a sense of identity nor of tranquility that Zen sees and loves in Nature... To seek tranquility is to kill Nature, to stop its pulsation... Identity is also a static condition and decidedly associated with death... Let us destroy all such artificial barriers we put up between ourselves, for it is only when they are removed that we see into the living heart of Nature and live with it—which is the real meaning of love. (1963: 490-491)

Only a brief sample of his writing is given here, but it is undeniable that Suzuki was the primary instrument for the transmission of
a naturalistic Zen Buddhism into the popular culture and moral imagination of the United States during the middle part of the twentieth century.

Interestingly, the North American outgrowth of Suzuki’s Buddhism, popularized in books such as Jack Keroauc’s *The Dharma Bums* (1958), incubated in the same counter-cultural streams that birthed environmental movements in the United States. It was in these popular books that the co-evolution of Buddhism and environmental consciousness captured the public imagination. By the time environmental consciousness coalesced into a movement, or more accurately, several loosely related movements in the 1960s, Buddhism was already being hailed as a potential correction for the shortcomings of Western worldviews.

Lynn White, Jr’s thesis (2003 [1967]) that Western Judeo-Christian traditions bear heavy responsibility for the ecological crisis was a key ingredient in bringing Christianity into environmental discourse. But, at the same time, White endorsed the Buddhist worldview as a potential corrective: “The beatniks, who are the basic revolutionaries of our time, show a sound instinct in their affinity for Zen Buddhism, which conceives of the man-nature relationship as very nearly the mirror image of the Christian view” (2003: 35-36). But White immediately commented that he was dubious about the possibility of applying Buddhism to a culture steeped in Western values.

Not all were so skeptical about Buddhism’s viability in the Western world. Gary Snyder was one of the “beatniks” White mentioned, and as the historical referent for the protagonist of Keroauc’s *The Dharma Bums*, he gained notoriety as a colorful writer and Zen practitioner. Snyder began publishing in the 1960s (1965; 1966; 1969), but *Turtle Island* (1974) truly propelled him into the public eye. Snyder’s work exhibited reliance both on the promise of Native American wisdom and also the wisdom of Zen Buddhism (combined in works such as his well-known “Smoky the Bear Sutra” [1995]). He advocated what he termed an “earth sangha”; a transnational association of shaman-monks advocating earth activism through a brotherhood of earthly beings (Barnhill 1997).

Moving to the present, other important figures in developing a sense of concern within Buddhism for environmental issues include

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4 Keroauc had an affinity for Zen Buddhism, and many other Buddhisms exerted an influence on the public imagination.
the Dalai Lama and Thich Nhat Hanh. The Dalai Lama, as the central figure of Tibetan Buddhism, part of the Vajrayana tradition, has long been a proponent of eco-friendly thought and action, and has also played a significant role in shaping global environmental concern (1998; 2001; 2002). Thich Nhat Hanh, an exiled Vietnamese monk whose advocacy of environmental activism includes the use of nonviolent direct action, also explicitly draws on nature themes in his writings and talks (1988; 1997; 1999; 2000; 2004). Thus, there are many Buddhisms present within Western environmental consciousness, and many Buddhist streams that feed environmental philosophies and activism.

Though these positive presentations of the interconnection between Buddhism and nature were powerful, some scholars of Buddhism have cautioned against the appropriation of Buddhism for ecological ends. These critics argue that claims of “green” Buddhisms either single out particular texts at the expense of the larger tradition, or simply read contemporary environmental concern into texts written at a time when such concepts were nonexistent. The sheer volume of work produced in the last ten years alone, and the public support of environmental aims by high profile Buddhists such as the Dalai Lama and Thich Nhat Hanh, to some extent muffle the protests of those who consider the idea of eco-Buddhism to be inappropriate, or its translation into other (particularly Western) contexts unwise. But even those who demand more careful scholarship with regard to Buddhism and nature (Harris 1997; Schmithausen 1997) in the end believe that Buddhism can support at least what might be called a strong anthropocentric environmental ethics (Norton 1984). The majority of work in this area suggests that “Buddhism and Nature” is a topic that excites many, and that exploration of it will continue to gain momentum.

II. Important Scholarly Benchmarks: Conferences5 and Publications

One of the first and most important conferences on Buddhism and nature—organized by Stephen Rockefeller—took place in Middlebury,  

5 I am grateful to an anonymous reviewer for suggesting that I include important scholarly conferences.
Vermont in 1990. Participants in the conference essentially argued that religious belief, and particularly Buddhism, could play a prominent role in combating environmental destruction. As a product of this, Rockefeller edited a book entitled *Spirit and Nature* (1992), drawing on the themes represented at the conference. A second important series of conferences, held over more than a decade, was hosted by The Center for the Study of World Religions (CSWR) at Harvard University; these produced some of the most important scholarly publications to date on world religions and ecology. The Forum on Religion and Ecology, spearheaded by Mary Evelyn Tucker and John Grim, also grew from these conferences. The Buddhism meeting convened in 1996, and the *Buddhism and Ecology* volume (discussed below) was published in 1997. While the range of this impressive volume is limited only to main streams of Buddhism, it still represents one of the first framings of how Buddhism can influence environmental conversations.

Central publications in this area have taken a variety of forms. Some key publications are in survey-style. Notable here is Schmithausen’s “The Early Buddhist Tradition and Ecological Ethics” (1997) and Martin Baumann’s survey of recent studies of Western Buddhism (1997) and his global history of Buddhism (2001).

Other important work stems from collaborative book projects. One of the first of these was Alan Hunt Badiner’s volume *Dharma Gaia: A Harvest of Essays in Buddhism and Ecology* (1990). The book is broken into six parts: “Green Buddhism”, “Shifting Views of Perception”, “Experiencing Extended Mind”, “Becoming Sangha”, “Meditations on Earth as a Sentient Being” and “A Call to Action”. This significant work brings together important elements of Buddhist ethics, contemporary science, sources for activism, problems with development, and practices for increasing awareness of the value of nonhuman nature.

The volume *Buddhism and Ecology*, edited by Mary Evelyn Tucker and Duncan Ryuken Williams (1997—derived from the conference mentioned above), was another benchmark in the conversation relating Buddhism to nature. This impressive book has sections that deal specifically with Theravada Buddhism in Thailand, Mahayana Buddhism in Japan, Buddhism and animals, Zen Buddhism, American Buddhism and community, applications of Buddhist ideas, and theoretical and methodological issues. Most of the contributors were practitioners, and the editors recognized the limited nature of these
inquiries since, as they admitted, “There is no ‘Buddhistic’ element to each cultural worldview but rather a diversity of perspectives that might all legitimately be identified as Buddhist” (1997: xii). These practitioners, perhaps, take a rather narrow view, investigating the presence of “green” themes in Buddhist literature and practice, or noting instances where Buddhist teaching is translated into environmental activism, rather than, for instance, paying attention to anthropological or sociological perspectives, or assessing the empirical environmental impacts of Buddhist practice.

Another important volume is Stephanie Kaza and Kenneth Kraft’s Dharma Rain (2000). This collection of Buddhist writings is noteworthy for its vast range, including selections from traditional Buddhist texts and ancient and contemporary interpretations of the teachings of the Buddha to commentary on globalization, population and consumption, environmental activism as Buddhist practice, choosing what to eat, contemporary challenges, and spiritual practices. The list of contributors is extensive, but it includes such noteworthy Buddhists as the Dalai Lama, Thich Nhat Hanh, Sulak Sivaraksa, Prayudh Payutto, Joanna Macy, Rita Gross, Philip Kapleau, John Daido Loori, William LaFleur, and Robert Aiken.

These important works hint at the extensiveness of the territory that has been covered to date in conversations on the relationships between Buddhism and nature. While many of these scholarly benchmarks have been central in moving their respective academic fields toward greater awareness of environmental issues, it is probably safe to say that the public imagination has been influenced more by high-profile public figures such as the Dalai Lama, Robert Aiken, Philip Kapleau, Thich Nhat Hanh, and John Daido Loori. Their creation of environmentally-concerned Buddhist “public personas” highlights the growing need for Buddhisms to adapt to the globalizing world, and part of this evolution is the growing array of moral issues addressed by these Buddhisms.

### III. Buddhism and the Moral Life

Buddhism, in some form or another, is now practiced worldwide, and thus must contend with a wide variety of moral issues unique to particular cultures, as well as common ethical challenges raised by globalization. Here I will briefly review the debate over the possibility
of constructing a Buddhist ethics, the distinctive shape of Buddhist ethics, and the importance of applicability in any Buddhist ethics.

Philosophical Ethics

Several scholars argue that the globalizing Western economic understanding of humans as individualistic rational actors is inherently dominionistic, and manifests in environmentally destructive behaviors (Loy 2000). Several foundational concepts inherent to Buddhism have been noted as potentially constructive and corrective for this Western philosophical tradition that views subjects as discrete, bounded, self-interested beings. Harold Coward argues "that a recovery of our collective sense of self-identity, to at least balance our current bias toward seeing ourselves as atomistic, isolated choosing individuals, is essential for an ethical analysis of the population/consumption/ecology problematic" (2000: 43). Coward suggests that Westerners need to learn to operate as though the communal “we-self” rather than an “I-self” is the primary ethical agent.

One such conceptual corrective is the Buddhist notion of patīcca samuppāda, or dependent co-origination. Joanna Macy, a Western practitioner of Theravada Buddhism, was one of the first to interpret early Buddhist texts as indicative of a fundamentally interconnected, radically relativized process of mutual causation for a Western academic audience. She stated that the uniqueness of Buddhist ethics "resides not in the values they present so much as in their logic and provenance—their rootedness in a vision of relativity, and the degree to which they are empowered by this relativity, that is, the dependent co-arising nature of reality" (1979: 38). This notion of interconnectedness is frequently cited by other authors who claim that an emerging holistic worldview that meshes with natural sciences tells us the same thing: that we live in a world of inter-subjectivity (Ingram 1997: 76). This broadened view of human dependence on other subjectivities underpins Buddhist ethical formulations.

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6 Once again, this “debate” occurs only within the Academy, and as a reviewer pointed out to me, most of the high profile Buddhist leaders associated with environmental consciousness readily speak the language of ethics and morality without regard for the precision hairsplitting characteristic of scholarly conversation. So this debate is constrained to a few people, relative to the number of practicing Buddhists worldwide.
Another unquestionably important ethical concept present in all Buddhisms is *ahimsa*, the dictum of consciously avoiding harm to any other subjectivity. This particular form of non-violence has been used to protect both flora and fauna, and also provides fuel for social justice activism (Inada 1989; Rockefeller 1997: 317-318; Chapple 1997: 137; Callicott 1994: 64, 66). The notion of *anatman*, or the doctrine of no-self, has also been pointed to as a good conceptual basis for a more holistic, inter-subjective perspective, a broadened purview that is important for an environmentally sustainable lifestyle.

While each of these terms deserves a more adequate treatment, space prevents explanation of them as they have been related to environmental issues and consciousness. But it is clear that these various philosophical and conceptual underpinnings of Buddhism have proved to be extremely important in the evolution of Buddhist environmental consciousness. There is still some academic disagreement, however, on whether Buddhism is properly interpreted as having ethical import. Critics claim that Buddhist philosophy cannot properly be described with the language of ethics, since ethics derives from a distinctly Western conception of the person and its relationship to the non-human world. Despite these scholarly concerns, academic discussions of Buddhist ethics have been growing in number and scope.

Perhaps one of the best introductory texts here is Peter Harvey’s *Introduction to Buddhist Ethics* (2000), a careful treatment of the roots of Buddhist ethics, and related values and moral issues. This is a good starting point for understanding Buddhist ethics, and is foundational for many of the issues raised in this section. The electronic *Journal of Buddhist Ethics*, established in 1994 (http://jbe.gold.ac.uk/index.html) is also an important location for articles in Buddhist ethics in general and Buddhist ethics and the environment in particular—including articles by some of the authors discussed below. The journal divides its material into ten subject classifications, one of which is “Ecology and Environment”, reflecting just this increasing scholarly interest in Buddhist environmental ethics.

Damien Keown (1992), in particular, has been instrumental in the development of academic Buddhist ethics, as the publication of his edited volume *Contemporary Buddhist Ethics* (2000) demonstrates. In this book, Keown gathered essays reflecting the roots and sources of Buddhist ethics (two chapters), and that provide applied ethical perspectives on a variety of controversial issues (six chapters). These
contemporary issues include human rights, ecology, abortion, euthanasia, and business practice. As the bulk of literature on Buddhist ethics suggests, applicability is of primary importance. Keown’s (2000) heavy emphasis on current applied ethical themes represents one example of this. Another example is Padmasiri deSilva’s *Environmental Philosophy and Ethics in Buddhism*, concerned ultimately with the translation from philosophy to activism. This sort of Buddhist ethics is not overly theoretical; rather, as deSilva states, “co-evolving theory and practice . . . is the Buddhist way of ethics and environmental ethics” (1998: 180). According to many Buddhist activists, the ethical theory is secondary to the intention and the act-in-itself.

Along with his emphasis on Buddhism’s potential contribution to applied ethics more generally, Keown has also argued that a Buddhist ethics can be treated, in a comparative context, as being loosely Aristotelian and flexibly teleological. This association of Buddhism with a kind of virtue ethics has been quite widely pursued. James Whitehill, for instance, argues that Buddhist ethics can best be translated for a Western audience in terms of the virtue ethics tradition. Further, he suggests, besides promoting a greater acceptance of Buddhist ideas, Buddhist ethics may provide some much needed correction to the way that virtue theory is normally understood in the West (1994: 13-16). Donald Swearer (2000), a well-known Buddhist scholar, argues that the Buddhist virtues of voluntary poverty and benevolence are central to overcoming unhealthy attachment to the self and to cultivating compassionate regard for others, virtues that are presumably central to environmental consciousness. Most recently in the Buddhist virtue ethical tradition *Buddhism, Virtue, and Environment* (2005), a volume edited by David Cooper and Simon James was published. This book attempts to work through more systematically some of the philosophical characteristics of a Buddhist virtue ethics.

But there is still disagreement about the manner in which these Buddhist ethics are constructed. Some of these academic discussions essentially represent ontological disagreements. For example, Schmithausen (1997), contra Macy, insists that early Buddhist texts do support the notion of co-arising, but not of mutual causal dependence. Likewise, Lewis and Amstutz (1997) argue that any concept of an ethics that assumes a *telos* (flexible or not), goes against the central Buddhist notion of *anatman* (no-self).

In addition, although positive presentations of the interconnection
between Buddhism and nature have been powerful, in ethics as elsewhere, many scholars have cautioned against an overly optimistic appropriation of Buddhism for ecological ends. Ian Harris, in particular, has nudged the newer generation of eco-Buddhist authors toward a more cautious consideration of whether Buddhism is innately eco-friendly (1994; 1995a). For Harris, the asymmetrical causal relationships implied by the brand of *paticca samuppada* (dependent co-arising) advocated by uncritical Western scholars inserts a unidirectional temporal connectedness of cause and effect, which implies emergent purpose in what is an inherently dysteleological system (and thus one unsympathetic to these forms of virtue ethics, at least). He also argues that many of the environmental efforts undertaken in the name of Buddhism often do not have a distinctly Buddhist character, privileging instead one particular aspect of Buddhist teaching at the expense of others (1997). (Of course, this is one place where ethnographic research detailing personal commitments to particular belief systems and practices would be most helpful.)

These debates about Buddhist ethics in general, and Buddhist virtue ethics in particular indicate just how contested interpretations of the same texts and traditions can be. Harris, as mentioned above, has been quick to point out that Buddhism is fundamentally dysteleological (1994; 1995a). In agreement, Lewis and Amstutz propose that since, at least in the Shin tradition, an involuntary existential leap occurs at the threshold of enlightenment (1997: 145), then “it is impossible to refer to that end as teleological or as ultimately amenable to a process of rational organization, and thus as ethical or value-oriented” (148). For these critics, the usual shape of a virtue ethics (at least an Aristotelian version) depends upon a development of character toward a *telos* of some kind. In contrast, many Buddhists strive toward *anatman*, or no-self, which involves shunning worldly attachments and the harmful accoutrements of personality rather than actively cultivating an individual character.

Finally here, I should note one other recent contribution to the field of Buddhism and environmental ethics: Simon P. James’ *Zen Buddhism and Environmental Ethics* (2004). James’ agenda is specifically the refutation of four recent objections to the notion that Zen might help to construct a Buddhist environmental ethics: 1) that Zen is amoral; 2) that Zen is anthropocentric; 3) that Zen cannot accommodate the concept of intrinsic value; and 4) that Zen is irredeemably
otherworldly (127). James is also able to perform the delicate work of treating Zen with Western philosophical categories while accommodating Zen’s acknowledged “aphilosophical” bent.

What is clear from this discussion is that Buddhist ethics, whatever they are conceived to be, draw their character from particular cosmological and social commitments, and as such, are not completely amenable to Western philosophical categories. But for the purposes of comparative work, the discourse of ethics still seems to be one of the most promising places for cultivating cross-cultural cooperative ecological efforts.

Lived Ethics and Animal Ethics

The idea of “lived ethics”—those ethical statements and theories directly applicable to everyday life—is important to many Buddhist practitioners, and they occupy a significant proportion of the literature relevant to Buddhism and nature. One particular question here concerns how far the philosophical concepts that underlie respect for other beings (both flora and fauna) actually emerge as “lived” behaviors. This question is particularly relevant to the area of animal ethics.

Historically, animals play a role in several Buddhist practices and sacred texts. Contemporary treatments of animal ethics include Christopher Chapple’s and Duncan Ryuken Williams’ contributions to the Buddhism and Ecology volume (1997) edited by Tucker and Williams. Drawing on the Jataka tales, stories that depict the Buddha incarnated as a number of different animals, Chapple suggests that ethological studies that demonstrate high levels of intelligence in animals provide a new scientific paradigm that makes the attitudes toward animals in the Jataka tales more credible. Williams challenges critiques of eco-Buddhism by highlighting medieval Japanese rituals centered on releasing animals into the wild, which he says provides historical support for Buddhist animal liberation.

Dharma Rain (2000) contains more material on animals. There is a short piece from the Cullavagga concerning love for animals, and entire sections entitled “Defending Sentient Beings”, and “Choosing What to Eat”. The former section contains interviews with John Seed and Joanna Macy, co-founders of the Council of All Beings, as well as a short article noting some of the incongruities between eating meat and being Buddhist. The latter section incorporates several
essays on vegetarianism, compassion, and interconnection, and their impact on Buddhist dietary choices.

Keown’s edited volume (2000) also contains an article on animal rights authored by Paul Waldau. Waldau argues that the Buddhist notions of mindfulness and compassion can be deployed to generate a concept of rights for all living creatures, though he notes that such positive aspects of the tradition can and should be complicated by its often negative view of animals, and hierarchical placement of humans above them. Waldau—who is director of the Center for Animals and Public Policy at Tufts University and holds a joint appointment in the departments of religion and veterinary medicine—has authored several other important articles on animals and religion. Perhaps his most important works are the book *The Specter of Speciesism: Buddhist and Christian Views of Animals* (2001), a comparative look at animals in these traditions, and the much anticipated *A Communion of Subjects: Animals in Religion and Ethics* (2005), co-edited with Kimberly Patton.7 The latter does not focus exclusively on Buddhism, but promises to provide some additional insights to the Buddhism and animal ethics conversation.

Norm Phelps’s *The Great Compassion: Buddhism and Animal Rights* (2004) is a powerful book written by an activist and Buddhist practitioner. The central aim of this book is to explore “why—once we have put aside the very appetites and customs that Buddhist practice is intended to help us overcome—the Buddha’s teaching leads us to the realization that we must always strive to harm no sentient being, human or nonhuman, whether or not it is in our selfish interests to do so” (2004: xv). In Phelps’s eyes, mindful eating is not about the meat-eater, but rather about the animals to be killed for the meat-eater (2004: 24). In short, adding to the suffering of other beings is not consistent with the Buddhist injunction to ease suffering wherever possible.

*Ethics and Globalization*

So far, I have touched on several different sorts of ethics: theoretical ethics, environmental ethics, “lived” ethics and animal ethics.

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7 For a commentary and overview of this book, see a recent issue of *Earth Ethics*, Vol. 12, No. 2 (Fall 2004).
There are also a number of works that address the relationship between Buddhism and nature through the moral questions raised by globalization and its accompaniments, economic and cultural homogeneity. Globalization has been defined in many ways, but here I use it broadly to refer to the increasingly complex cultural interactions that result from the engines of free trade, development, and global access to communications media such as the internet.

A precursor to such work on globalization was E.F. Schumacher’s *Small is Beautiful: A Study of Economics as if People Mattered* (1973). This seminal work addressed the problem of production, resource consumption, and “third world” development. A more recent study of Buddhism and economics by Helena Norberg-Hodge continues this tradition. She provides an alternative vision of the good life through Buddhist economics in “Buddhist Engagement in the Global Economy” (1997). Her work discusses the ways in which engaged Buddhists resist the erasure of cultural diversity, and proposes that a Buddhist economics may provide the tools for localized alternatives to the global economy.

Amare Tegbaru’s article “Local Environmentalism in Northeast Thailand”, in Arne Kalland and Gerard Persoon’s anthropological study of grassroots environmentalism *Environmental Movements in Asia*, provides a useful study of Buddhist-influenced environmentalism by suggesting that local grassroots groups also maintain interesting transnational relationships. She argues that “local environmentalism is a mixture of, on the one hand, indigenous Buddhist concepts, ideas, and, on the other, ideas about natural resource use imported through Western ‘experts’ and contacts with Thai environmental activists” (1998: 173). Tegbaru suggests that, at bottom, these ideas and agendas may ultimately conflict, but that these transnational relationships allow Thai environmentalists to mount a stiff resistance to unexamined national decisions that affect the well being of indigenous populations.

Kaza and Kraft’s *Dharma Rain* (2000) also provides a significant contribution in this area. The broad section headings “Globalization, Population, and Development”, “Environmental Activism as Buddhist Practice”, and “Challenges in Buddhist Thought and Action” contain articles that represent a wide range of engaged Buddhist practice, from social and political activism, to nuclear protest and population concerns. Rita Gross authored the pieces on Buddhism, population
and consumption for both *Buddhism and Ecology* (1997) and *Dharma Rain* (2000a), and her similar contribution to one other volume, *Visions of a New Earth* (2000b), also deserves mention. Stephanie Kaza has also edited an important volume entitled *Hooked!: Buddhist Writings on Greed, Desire, and the Urge to Consume* (2005), which assembles a wide range of Buddhist practitioners who focus on the juxtaposition between Buddhist concepts of impermanence and the now global consumer culture. Similar criticisms of the prevailing paradigm are provided by Buddhist activist Sulak Sivaraksa (1992; 2000a; 2000b; 2002; 2005), who issues a harsh critique of neoliberal capitalist agendas, and argues that globalizing economic structures cannot provide the paradigm recommended for the Buddhist good life. Noting that corporations cause a great deal of suffering while avoiding the possibility of legal recourse, he points out that “unlike (neoliberal) capitalism, Buddhism respects and upholds the primacy of all sentient beings—not of noncorporeal corporations” (2002: 48) (thus linking work on globalization to work on animal ethics, as considered in the previous section). It is, Sivaraksa feels, his duty as a Buddhist to resist neoliberal capitalism since it “prizes the accumulation of profits over human well-being and environmental sustainability,” and “as such, it is criminal and hence definitely not the way to regulate or organize the global society” (2002: 47). Other important works by Sivaraksa that challenge the global hegemony of capital accumulation include *Seeds of Peace: A Buddhist Vision for Renewing Society* (1992), and *Conflict, Culture, Change: Engaged Buddhism in a Globalizing World* (2005).

Macy, whose claims for the interconnectivity of the physical world have been especially influential in bringing the Buddhist environmentalist message to the West, has also addressed the problem of development in Southeast Asia. Her *Dharma and Development: Religion as Resource in the Sarvodaya Self-Help Movement* (1983) broke new ground by bringing engaged Buddhist social and environmental activism into the Western academic purview. Her later publications relate this notion of dependent co-arising to living systems theory, particularly her book *Mutual Causality in Buddhism and General Systems Theory: The Dharma of Natural Systems* (1991).

In order to combat the rising environmental and social costs of development, many grassroots Buddhist movements have attempted to draw on their religious convictions to slow or halt destruction of their particular locales. For example, Susan Darlington recounts the
Thai practice of ordaining trees in order to protect them from the pressures of development (2000; 2005). These rituals draw much support from local villages, highlighting “the acceptance of this adaptation of a Buddhist ritual to sanctify the forest and thereby protect it,” even though it limits the villagers’ access to the trees (2000: 196). The villagers believe it is their duty as Buddhists to adapt their religious beliefs to current crises.

Having reviewed the myriad ways that nature figures in the moral calculus of the Buddhist tradition, I would now like to turn to the next topic mentioned above: emerging influences on Buddhist environmental thought.

IV. Connections Between Buddhism, Nature, and other Philosophical Schools of Thought

To begin, it may be helpful to return to the World’s Fair of 1893, where Japan, in presenting itself to Western political powers, constructed a façade of a very pragmatic Buddhism compatible with modern science (Snodgrass 2003). Buddhism has retained its reputation as a rational tradition, and this concern with reason and applicability led toward an intensifying encounter between Buddhist philosophy and some approaches to philosophy of science. The environmental movement, too, has been concerned with creating alliances with science to legitimate its ecological claims, so this may prove to be a fruitful contact point for relating Buddhism and nature. In addition, because the environmental crisis—if indeed there can be said to be such a thing—is a global phenomenon, the solutions must be cross-cultural, making comparative religious studies a particularly important field. Here I will review some of the literature connecting Buddhism to Deep Ecology, Process-influenced Christianity, and the natural sciences.

Deep Ecology and Related Philosophies

As suggested earlier, Joanna Macy claimed that a reciprocal hermeneutic between early Buddhism and contemporary systems theory constitutes a “Dharma of Natural Systems”, which is the “the philosophic basis and moral grounding for the ecological worldview emerging in
our era” (1991: xii). Macy and John Seed, both Buddhists, co-founded the Council of All Beings, an activist program that draws on Deep Ecology. Similarly, in *Dharma Gaia*, Alan Hunt Badiner notes that our Western cultural worldview “seems to be giving way to an interrelated, intercausal universe similar to the world described in Native American wisdom, Buddhist philosophy, and modern physics” (1990: xvi). Several articles in *Dharma Gaia* draw on Lovelock’s Gaia hypothesis or explicitly mention the role of Buddhism in overcoming a scientific mindset that assumes all entities are discrete, bounded, and unrelated, something also questioned within Deep Ecology.

Arne Naess, the father of Deep Ecology, assumes that Buddhism is one of the religious/philosophical frameworks that can feed into the Deep Ecology platform (2003). In fact, he maintains that Buddhism and Deep Ecology have a special affinity for each other: “The history of Buddhist thought and practice, especially the principles of non-violence, non-injury, and reverence for life, sometimes makes it easier for Buddhists to understand and appreciate deep ecology than it is for Christians” (2003: 271). Warwick Fox quotes Robert Aiken fondly, and suggests that the Zen worldview resonates with the mystical unity that is at the bottom of a truly Deep Ecology (2003: 255).

Other work on Deep Ecology and Buddhism includes Daniel Henning’s book *Buddhism and Deep Ecology* (2002). This is an important contribution to this growing conversation from a scholar with over a decade of experience working with Buddhist communities in the tropical forests of Asia. In an interesting and less direct correlation between Deep Ecology and Buddhism, Thomas Weber (1999) draws convincing connections between Gandhi, the philosophical foundations of Deep Ecology, Buddhist economics, and peace research. Weber argues that Naess was long an admirer of Gandhi, and, learning from Gandhian ethics, proposed that self-realization is based on the proper recognition of the place of humans in the cosmos. (In this, Naess and Schumacher [see above] share a common foundation, since Schumacher based his Buddhist economics in part on Gandhian ethics).

Buddhism, then, has been importantly influential on work in Deep Ecology. But there is also a significant body of literature that interprets Buddhism through the lens of Process Philosophy, and usually, alongside Christianity.
Buddhism and Christianity in Process Thought

Though there is a distinct dearth of material concerned with Process thought and only Buddhism (without Christianity), one existing center for Process Studies in Japan and plans for several more throughout Asia promise to remedy that gap in the literature. The Australasian Association for Process Thought maintains close ties with the Center for Process Studies at Claremont Graduate University, and their 2002 conference on Whitehead and China demonstrates the growing interest in Process thought in Asia. Here, I will only consider a sample of the major voices and approaches that use a Process approach to interpret Buddhism in an ecological context.

While not all of the authors discussed directly address the scientific underpinnings of Process philosophy, a particular interpretation of the fundamental entities and relationships that create our “reality” underlies all of Whitehead’s thought. These authors, then, are drawing on a particular cosmological vision that was created explicitly for the purpose of producing a philosophy that was concomitant with contemporary science.

Paul Ingram’s “The Jeweled Net of Nature” argues that all Western scientific and theological responses to the ecological crisis should reflect three common principles: 1) holistic unity; 2) interior life movements; and 3) organic balance—that all events are bipolar processes that aim toward balance (1997: 74). The Process perspective is one that can embrace the scientific paradigm, but also, Ingram suggests, favorable comparisons can be drawn with Shingon Buddhist cosmology. This comparison, Ingram boldly asserts, can “energize an already evolving global vision through which to refigure and resolve the current ecological crisis” (1997: 72). (It should be noted, though, that Process thought assumes a causal theory contrary to Schmithausen’s (1997) and Harris’ (1994) interpretations of early Buddhism’s understanding of causality. So Ingram’s interpretation of Process is certainly not applicable to all Buddhisms.) Ingram’s Cross Currents article, “On the Wings of a Blue Heron” (1999) also uses Process thought and the notion of interdependence as a common ground for engaging Buddhism and Christianity, and a biocentric environmental ethic.

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Once again, Ingram draws on versions of Christian theology and Buddhist ideas that are understood within a scientific-ecological worldview; indeed, science here contributes to the shape of the Buddhist and Christian theological agenda.

Jay McDaniel embraces both Buddhism and Christianity through Process thought. His book *Living From the Center* (2000) draws on both Buddhist ideas and Christian theology to construct a “cosmology for centered living” by breathing with the earth, letting it provide the rhythm for human lives. He is inspired by a scientific cosmology, Christian theology, and Buddhist thought. Though McDaniel has published widely, one other notable contribution along these lines is his “Double Religious Belonging: A Process Approach” (2003). According to McDaniel, Process thinking is a bridge for greater understanding between Buddhists and Christians, allowing each respectively to internalize the ancient wisdom of the other.

One of the reasons that Process theologians and Buddhists are attracted to each other is that their visions of divine action are amenable. In neither tradition is divine action, or the Buddha-nature, assumed to “occur” in such a way that it suspends the laws of nature. Also, both are intensely concerned with human freedom. Such Process interpretations assume that divine action and knowledge, whatever shape it does take, is not omniscient, but rather limited to the present experiential event. For example, Gene Reeves (2001) compares the cosmology implicit in the Lotus Sutra with Process theology, paralleling the trinity of God, creativity, and process, with the triplet of Buddha, Buddha-nature, and Dharma.

*Buddhism and the Natural Sciences*

As I mentioned above, it is particularly important in today’s political climate for environmental activists to marry their claims about ecological degradation to hard science. In addition, religious scholars and theologians find it increasingly important to create portraits
of their tradition and theology that cohere with the state of contemporary science. Indeed, in *Earth’s Insights*, Callicott maintains that what he calls the “postmodern scientific paradigm” provides a cross-cultural medium that allows for communication across the culturally-varied, religiously-motivated ecological ethical systems reviewed in his book (1994: 185-209). Postmodern science, he claims, provides the common language through which various traditions and diverse communities can communicate. If this is the case, then we should expect the breadth of engagement between Buddhism and contemporary science to expand. There are already some suggestions that this is happening, with increasing numbers of scholars considering the potential for cross-cultural conversation through scientific exploration.

Badiner’s *Dharma Gaia* (1990) contained several articles examining contemporary science through a Buddhist lens. Joanna Macy’s article “The Greening of the Self” reviews contemporary science’s challenge to “old assumptions about a distinct, separate, continuous self . . . showing that there is no logical or scientific basis for construing one part of the experienced world as ‘me’ and the rest as ‘other’” (1990: 58). Hayward (1990: 64-74) uses cognitive science to suggest that the perceptual capacities of humans fit with the Buddhist view that experiences produce a reality that is not reducible to its constituent parts, or to mere neurophysiological functioning (1990: 73). Instead, mindful living leads us to the truth about reality, namely that there is no discernable “self” that exists as separate from the rest of the experiential world. David Abram (1990: 75-92) also concentrates on perception, showing that “the discovery of a unitary, self-regulating biosphere . . . completely undermines the classical account of perception upon which each of the separate sciences, until now, has been based” (1990: 90). He uses the Gaia principle as an illustration of the emerging holistic perceptual paradigm.

Alan Wallace’s volume *Buddhism and Science: Breaking New Ground* (2003) is further evidence of this growing intersection of interests. This book contains sections on the historical context of the relationship between Buddhism and science, Buddhism and cognitive science, and Buddhism and the physical sciences. Wallace’s book also includes a chapter by the Dalai Lama, highlighting the infiltration of ideas from contemporary science into popular as well as academic Buddhasms. Another volume, this time featuring the Dalai Lama, specifically addresses the interface between contemporary cosmology and physics, and Buddhist thought and practice. Edited by Arthur
Zajonc, *The New Physics and Cosmology: Dialogues with the Dalai Lama* (2004) brings His Holiness together with five of the world’s most renowned physicists, as they discuss the current state of cosmology and physics against the backdrop of Buddhist belief. This book promises to continue the ushering in of a greater attentiveness to the relationship between Buddhism and science in academic and popular literature.

Further explorations of Buddhism and science include Lai Pan-chiu’s (2002) fascinating look at “Buddhist-Christian Complementarity in the Perspective of Quantum Physics”, where Pan-chiu notes that some Christian theologians have pointed to interpretations of the hypostatic union (the supposedly simultaneous human and divine character of Jesus) as being parallel with the quantum mechanical notion of complementarity (see for example Kaiser 1976). Complementarity essentially refers to the peculiar property of subatomic particles that allows them to simultaneously embody the characteristics of a wave and a particle. Pan-chiu asks whether it is productive to look at the relationship between Buddhism and Christianity in the same way. In the end, he notes that the Buddhist-Christian relationship can be viewed as a loose sort of complementarity, but also points out that in quantum mechanics the simultaneous embodiment of two distinct states essentially exhausts all usable knowledge about the particle, while Buddhism and Christianity together cannot exhaust all possible knowledge of the single ultimate reality to which they, and other religions, point (2002: 160).

This is a productive example of a critical use of the philosophy of physics to provide workable analogies for how human cultures relate. While quantum physics is not a discipline usually directly relevant to the moral lives of laypeople, its extremely illogical and apparently holistic character have made it a tempting topic for many environmentalists seeking fodder for the moral imagination (see for example Callicott 1985; Zimmerman 1988). A popular book entitled *The Quantum and the Lotus: A Journey to the Frontiers Where Science and Buddhism Meet* (Ricard and Thuan 2001), written by a French Buddhist monk and a Vietnamese astrophysicist, provides an interesting attempt to address questions on the border between the physical and metaphysical, looking through a Buddhist lens. These academic forays and highly popular publications on the relationship between Buddhism and physics promise to energize further publications in these areas in the near future.
Interestingly, compared to their Buddhist counterparts, some Christian scholars have been more thorough in their embrace of scientific theory.10 Perhaps this is because the philosophy that drives contemporary science is largely Western, and thus is more easily reconciled with Western religions. Or, it could simply be a blind spot in this survey, since it is not possible (linguistically, at least for this author) to review resources written in Asia. It is also possible that Buddhist scholars in Western universities have not yet fully embraced the rich possibilities for continued intersection between Buddhism and science, with or without Christianity.

**Conclusion**

I began this survey, somewhat arbitrarily, with the Japanese exhibit at the 1893 World’s Fair because I thought it a fitting portrait of the different ways that cultures posture, interpret, and interact, all considerations in the transmission of Buddhisms that have now gone global. Even in considering how to explore the evolution of the conversation relating Buddhism and nature, I faced a number of choices about how far into the past to journey, whether to include reviews of general terms that have been used to support respect for non-human life, terms like *ahimsa* (non-violence) and *anatman* (no-self), or a more in depth analysis of a term only briefly mentioned here, *paticca sammupada* (dependent co-arising). There is a significant amount of literature already on these topics, including more thorough discussions in some of the materials mentioned above, and in a few other works listed in the bibliography. I was concerned here, after providing a short and skeletal history, with reviewing broad areas of contemporary academic debate that have been spurring on the complexifying conversation on the relationship between Buddhism and

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10 The best recent work, the result of the efforts of both scientists and theologians, is the series co-published by the Center for Theology and Natural Sciences at the Graduate Theological Union in Berkeley, and the Vatican Observatory, on the subject of Scientific Perspectives on Divine Action. This five volume series, by chief editor Robert John Russell, is highly technical in places, and therefore not accessible to all readers, but provides the sort of in depth engagement that can provide fruitful dialogue between various religious beliefs and theologies. The volumes are listed in the bibliography.

This survey is intended to be a representative review, not an exhaustive report on the breadth of the conversation relating Buddhism and nature. Certainly there are plenty of works that “mine” the ancient Buddhist texts, and search traditional practices to find evidence of ecological consciousness. Harris (1995; 1997), Schmithausen (1997) and others alerted scholars to the error of imagining that any Buddhist before the twentieth century was in any meaningful sense concerned about the environment in general and an “environmental crisis” in particular. But what is apparent is that there are today practices performed by people who self-identify as Buddhists that clearly demonstrate environmental consciousness, sometimes actively participating in environmental movements in efforts to resist globalization and often, Westernization. If anything, the broad categories used to frame the conversation relating Buddhism and nature here highlight the irreducible complexity of Buddhist traditions. What should become clear to us from this distance, from this survey perspective, is that there is no monolithic Buddhist tradition, but rather a substantial number of adapted (and adapting) Buddhisms.

In the end it certainly looks like, at the very least, future ethnographic, anthropological, and sociological investigations of the impacts of engaged projects are sorely needed to work through the ways in which various Buddhisms translate into particular practices, explicitly addressing how and to what extent their investigations are about Buddhism. And if we continue to find at the roots of these religions not unity, but diversity, then our labels for them will have to change as well. Knitting them all together under the heading of Buddhism seems to undercut the very thing that makes local religious action efficacious: its local flavor. It is perhaps then the case that in the future we shall need to reassess how we are organizing our investigations into these traditions, favoring a variety of related explanatory religious, sociological and ethnographic categories (not just comparative religious or environmentalist lenses), rather than the monolithic monikers of the world religions.

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98

LUCAS JOHNSTON


