

Buddhism & Science: A Guide for the Perplexed, by Donald S. Lopez, Jr. University of Chicago Press, 2008. 278 pp., hb. \$25.00/£17.50, ISBN-13: 780226493121; pb. \$18.00/£11.50, ISBN-13: 9780226493190 (2010); E-book from \$7.00 to \$18.00/£11.50–£17.50, ISBN-13: 9780226493244.

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In *Buddhism & Science: A Guide for the Perplexed*, Donald Lopez Jr. examines the historical development of what he terms the ‘discourse of Buddhism and science’ (25). Lopez defines this as a discourse about the compatibility of Buddhist teachings and modern science. Interest in the relationship between Buddhism and science has grown markedly during the last several decades. Many books and essays have been published on the topic, and notable Buddhist figures, such as H.H. the Dalai Lama, have entered into dialogue with practicing scientists from a wide range of disciplines. This interest has, in part, sprung from the popularity of the view that Buddhism does not conflict with science. In his book, Lopez, a respected scholar with a particular interest in both the development of modern Buddhism and the field of Buddhist Studies itself, demonstrates that this discourse is not a recent phenomenon. Rather, it has its origins in the nineteenth century, and its history has been influenced by colonialism, Christian and cultural missionary activities, and the scientifically sanctioned racism of the Victorian era.

While the majority of recent work written on the relationship between Buddhism and science has been devoted to the first-order articulation of that relationship, some scholars have begun to pay attention to the historical development of discourses about Buddhism and science. Lopez’s book provides an important addition to this field of study by highlighting the role that the discipline of Buddhist Studies played in the development of European *and* Asian discourses about science and Buddhism. In Lopez’s own words, ‘-[t]he Asian figures who participated most fully in the discourse of science and Buddhism turned not to their own traditions for their view of the Buddha, but to the European science of Buddhist Studies’ (36). Assuming this to be the case, Lopez is justified in mainly limiting his sources to those written in English and French, as well as Tibetan.

This book consists of a substantial introduction and five distinct chapters, each of which deals with a different issue and period of time. The five chapters are not tied together by a common narrative, but can be viewed as a collection of essays on a theme. Fortunately for the reader, this theme is carefully explained, and its historical context laid out in the introduction. There, Lopez covers much ground that is already familiar to the student interested in the development of modern Buddhism, both as a living religion and as an object of the European gaze. Lopez touches on the relationship between ideas about Buddhism in the West and the

Theosophy of Henry Olcott, the role of Angārika Dharmapāla in constructing a modern Buddhism, and the impact of the 1893 World's Parliament of Religions' transmission of knowledge about Buddhism. Many of the details are well known, but Lopez molds them into an enlightening narrative about the European construction of 'scientific' Buddhism. This chapter alone should be required reading for anyone interested in the topic of Buddhism and science.

Lopez lays out one of his more important contributions to the history of the relationship between Buddhism and science in the introduction. This is a periodization of 'Buddhism and science', in which he charts the changing definitions of what both 'Buddhism' and 'science' have meant in the West over the last 150 years (30–31). During the first stage of the 'discourse on Buddhism and science', Theravādin cosmology was compared with the modern heliocentric view of the solar system. Theravāda gave way to the esoteric Buddhism of Blavatsky and the Theosophists, which was associated with then-credible sciences such as mesmerism. After this came the philosophical Buddhism of the Orientalists, which was linked positively to a mechanistic view of the universe and the inexorable working of cause and effect. By the mid-twentieth century, Zen rose to prominence in Western comparisons with science — by that point most often represented by relativity and quantum theory — as the Buddhist school *par excellence*, before being supplanted by Tibetan Buddhism in the latter part of the century.

In the first phase of the 'discourse of Buddhism and science', which Lopez covers in the first chapter of the book, Buddhism was understood in the West to be the supposedly pure Theravādin tradition. Christian missionaries compared that tradition's geocentric cosmology (at least as regards our part of the universe) with the heliocentrism of modern astronomy. In his treatment of this issue, Lopez begins with Buddhists in Sri Lanka, and follows with a discussion of how a few Japanese and Chinese Buddhists also dealt with the conflict between heliocentrism and the Buddhist cosmology centered on Mt. Meru.

In the second chapter, Lopez analyzes how late nineteenth and early twentieth century discourses of race prevalent in the West were incorporated into discourses about Buddhism both there and in Asia. In the third chapter, he examines how science figured in the writings of two Tibetans: Gendun Chopel (1903–1951, on whom Lopez has already published one book) and H.H. the Dalai Lama.

In chapter four, Lopez focuses on the writings of two different yet related groups of Europeans who sought to speak for Buddhism in the nineteenth century: Theosophists (Henry Steel Olcott and A. P. Sinnett) and Orientalists (Brian Houghton Hodgson, Max Müller and Eugène Burnouf). He argues that, despite the disagreements they had with one another, this group as a whole was responsible for the construction of a Buddhism that was compatible with science (151). The fifth and final chapter of the book seems like an afterthought. It is much shorter than the other chapters and consists mostly of a detailed description of one type of Tantric meditation.

One of Lopez's primary goals in this book is to question the claim that Buddhism and science are inherently compatible. This, he argues, is a vast oversimplification, and whenever it has arisen the 'Buddhism' and the 'science' being discussed have both been constructed simplistically in order to support that claim (216). Because such claims have taken root in certain segments of our popular culture, Lopez does well to help us begin reflecting critically upon them. As a first look

at this issue, this book succeeds: it is not comprehensive with regard to any one Buddhist region or type of Buddhism but it does give a good overview to the issues involved.

Future work on the historical study of discourses on Buddhism and science will hopefully build on this foundation to examine areas not touched on in this book. Lopez does not deal in any substantial way with the comparison of relativity or atomic and quantum theory to Mahāyāna notions of emptiness (*śūnyatā*), nor does he touch on Buddhist reactions to theories of biological evolution. This last point would be particularly interesting to scholars of Christian/science interactions for whom Darwinism has been one of the most important scientific discourses.

One point on which this work falls short of being a completely successful prolegomenon to the historical study of Buddhist discourses about science is that it deals with only one such discourse. The book ignores important Buddhist criticisms of science. Ethical criticisms of Spencerian social Darwinism and philosophical criticisms of scientific materialism have both been important components of Buddhist views of science, and they should certainly be included in any account of what were actually the multiple discourses of Buddhism and science.

This book, while perhaps necessarily incomplete, marks an important moment in the study of discourses on Buddhism and science, and it will hopefully spur more critical reflection upon the contexts out of which those discourses have arisen, as well as on the evidence used to support them. There are, in fact, signs that this book may already be serving that role: the December 2010 issue of *Zygon: Journal of Religion & Science* includes three articles reflecting on this book and the questions it raises.