



Meditation, Buddhism, and Science

Edited by David McMahan and Erik Braun. Oxford: Oxford University Press, 2017, 248 pages, ISBN: 9780190495794 (hardcover) £64.00; ISBN: 9780190495800 (paperback) £16.99; ISBN: 0190495790 (ebook) \$16.99.

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The title of the new collection co-edited by Buddhist studies scholars David McMahan and Erik Braun, read perhaps with “bare attention,” quickly informs the reader of the topics the book will examine: *Meditation, Buddhism, and Science*. The latter three words, “Buddhism and Science,” refer to a subject area unto itself that now holds enough scholarly material to be considered an academic sub-discipline. Scholars working within this sub-discipline have tended to take one of two major approaches. On one of these tracks, thinkers like Alan Wallace (2013) carry forward a long tradition of performing comparative exercises between Buddhist and scientific concepts that often yield findings of affinity. A second group of scholars, meanwhile, perhaps most prominently exemplified by Donald Lopez (2012), take a historical-critical approach and actually deconstruct the assumptions behind such comparative analyses. That McMahan and Braun add “meditation” to this phrase and, indeed place it as primary, is informative both of the state of the field and the editors’ perspectives on this field.

In their past work, both McMahan and Braun contributed to the study of the historical and social conditions that led popularizers to declare that Buddhist thought anticipates or is compatible with scientific truth. However, as they explain in their co-written introduction, investigations of “Buddhism and Science” seem to have entered a new phase wholly centered around meditation practices. Exegetes of the past may have been fascinated by the idea that Buddhist cosmographies of multiverses could be compatible with the latest theories of quantum physics, but today one finds a veritable explosion of scientific studies all focused on the subject of meditation practices. While a topic of interest to scientists in Europe and the U.S. as far back as the eighteenth century, a mass proliferation of scientific research on meditation is typically dated to the 1970s and has only exponentially increased in recent decades. McMahan and Braun explain that it was this intense interest in the neuropsychological analysis of Buddhist-designated meditation practices that ultimately inspired them to produce this volume.

One of the advantages of a collected volume like *Meditation, Buddhism, and Science* is that it offers the reader perspectives from multiple disciplinary locations.

The various contributors include Buddhologists, historians, philosophers, and ethnographers. Generally, however, they all belong to the world of what McMahan and Braun call “humanistic” scholarship. The editors explain this choice to be intentional, serving what is at least one of their central aims. For, among the diversity of perspectives one hears in this book, McMahan and Braun highlight in their introduction a “common thread” that runs throughout all of the essays:

If there is a common thread it is a concern that the scientific study of Buddhist and Buddhist-derived meditative practices has been too narrowly construed and often neglects social, cultural, and historical contexts. We hope that this volume exemplifies some of the ways that humanistic thought is essential to the study of meditative practices since, in our view, meditation in the laboratory can never fully account for how such practices function in the lives of practitioners in these complex social, cultural, and historical contexts. We do not mean to mount opposition to the scientific study of meditation, but we do hope to expand the conceptions of meditative practice often at work in such study, to question some of the presuppositions such studies sometimes embrace, and to elucidate the complex histories and cultures that surround these practices. (15–16)

If the book has a mission statement, it is the above. Though the contributors give voice to various specific points of focus in their individual essays, they all advance this shared critique that “the scientific study of Buddhist and Buddhist-derived meditative practices has been too narrowly construed” and each of the chapters endeavors to restore or uncover their “social, cultural, and historical contexts.”

Over the course of its ten chapters, the book is largely successful in achieving this stated goal, more “fully account[ing] for how such practices function in the lives of practitioners.” Most of the chapters accomplish this by, on the one hand, considering how meditation practices have historically been taken up outside of “the laboratory,” and, on the other, critically examining what scientists often bring into “the laboratory” with them when meditation practices are studied there. William Waldron’s paper, for example, (“Reflections on Indian Buddhist Thought and the Scientific Study of Meditation, or: Why Scientists Should Talk More with Their Buddhist Subjects”) follows through on McMahan and Braun’s above-stated intention to “question some of the presuppositions such [scientific] studies sometimes embrace” by uncovering scientists’ frequent assumption that meditation practices are designed to access inner “subjective” knowledge. Waldron then contextualizes this idea within long-standing debates about such knowledge among Buddhist philosophers. Drawing on her ethnographic research, meanwhile, Julia Cassaniti supports the book’s above-stated mission statement that the scientific study of meditation “has been too narrowly construed and often neglects social, cultural, and historical contexts” (“Wherever You Go, There You *Aren’t*?: Non-Self, Spirits, and the Concept of the Person in Thai Buddhist Mindfulness”—a chapter title that riffs on a well-known [and well-cited in this collection] book by mindfulness-popularizer Jon Kabat-Zinn). Cassaniti asserts that basic cultural understandings of what it means to be human always shape how communities approach meditation practices. She explicates differences between dominant U.S. understandings of

meditation with those of Thai Buddhist practitioners, the latter of whom view meditation practices as both granting insight into the notion of non-self and, even less familiar to communities in the U.S., gathering together the “multiple ‘spirits’” of which “the self or mind [is] made up” (141). David McMahan’s individually-authored contribution, meanwhile, opens the book and sets the stage. In this piece, McMahan more generally expands on the larger theoretical argument that it is, as he writes with Braun above, essential to bring context to the use of meditation practices that popularizers explicitly present as capable of being *decontextualized* from their historical frameworks (“How Meditation Works: Theorizing the Role of Cultural Context in Buddhist Contemplative Practices”).

Each of the chapters in *Meditation, Buddhism, and Science* thus offers much-needed context to the scientific study of meditation practices and provides persuasive arguments for the utility of such a contextualized approach. The book is highly successful in this regard and I can wholeheartedly recommend it for this reason alone. But there are many other reasons to recommend *Meditation, Buddhism, and Science* and it should be of interest to a wide range of readers. Both readers with a casual interest in this topic as well as established scholars in the field will find the book’s material extremely valuable. Each chapter is written in a clear and accessible manner that promises to open up the casual reader’s curiosity about the history of the meditation practices they are introduced to on their smartphone apps. Scholars in this field, meanwhile, will find stimulating and provocative essays that encourage them to think deeply about new ideas drawn not only from cognitive science and Buddhist philosophy, but cultural anthropology and critical theory.

Another characteristic of *Meditation, Buddhism, and Science* that makes it very much worth recommending is that many of the authors thoughtfully challenge dominant popular ideas about meditation in a way that should inspire conversation and debate. Thankfully then, none of the chapters unreflectively celebrate the scientific study of meditation practices. At the same time, just as laudably, none of the authors fall into the trap of polemically condemning these contemporary activities as inauthentic or unethical. This is likely because all the various authors possess both a healthy respect for and critical eye toward what McMahan and Braun call in their introduction, “the mindfulness backlash.” Many of the authors helpfully clarify the views of critical voices on recent discussions of the use and scientific study of meditation practices. But they also exhibit a desire to add nuance and balance to debates that can quickly become totalizing. The shared desire of the authors to hold this equanimous posture is one of a number of other additional common threads I discerned among the diverse chapters of this book.

Perhaps chief among these common threads is what precisely is meant by “meditation” when the contributors write of *Meditation, Buddhism, and Science*. One might imagine that a variety of meditation practices could be explored within the pages of a book with such a title. And many of the contributors do mention that a diversity of meditation techniques have been practiced in Buddhist communities. However, all the chapters almost exclusively focus their attention on what many go on to note are highly specific forms: contemporary versions of mindfulness meditation practices. These practices have been popularized and

scientifically studied primarily in the U.S. and Europe among communities made up predominantly of people of Anglo-European descent (though, as evidenced by Cassaniti's contribution and others, these practices have had influence on Asian communities as well). In the past, Buddhist studies scholars like Donald Lopez (2012) and Robert Sharf (2005) have analyzed what activities qualify to be classified under the English word "meditation." Pure Land visualization practices that laypeople have utilized for centuries across East Asia, for example, may not seem to qualify as meditational when compared to a particular normative image of meditation as an embodied activity that takes place sitting silently in the lotus position.

Furthermore, as McMahan and Braun's introduction notes, scientific experimentation has been conducted on a variety of different meditation practices. Many historical surveys highlight Herbert Benson's study of Hindu-associated Transcendental Meditation in this trajectory. Meanwhile, the prominent neuroscientist Richie Davidson still today hooks up monks, hand-picked by the Dalai Lama, to fMRI machines for the study of metta or lovingkindness compassion meditation practices. Despite this range of options, however, from its very first pages, this book appears to be singularly concentrated on the subject of mindfulness. McMahan and Braun's introduction opens with a review of the unquestionable popular excitement over the topic, then offers "a genealogy of mindfulness" (a genealogy that traces the roots of contemporary practices back to the turn-of-the-twentieth-century efforts of the monk Ledi Sayādaw to preserve Buddhist traditions in Burma/Myanmar in the face of colonial and imperial oppression).

Beyond the introduction, however, the focal point of all of the essays in this collection is a particular experiential state that is today referred to as "mindfulness." In fact, the contributors largely seem far more interested in this state of mindfulness than the practices that are meant to cultivate it, meditation or otherwise. There are, indeed, entire chapters that barely mention the word meditation, even as they discuss at length the proper way to conceptualize mindfulness. Evan Thompson's chapter ("Looping Effects and the Cognitive Science of Mindfulness Meditation"), for example, is almost solely concentrated on revising prevailing ways of describing a state of mindfulness. The chapter essentially consists of a well laid out argument, based in cognitive scientific theory, that "Mindfulness is Not in the Head" (51) even though, Thompson fears, cultural representations of neuropsychological imaging can often give this impression. Beyond Thompson's chapter, the other essays are so uniformly fixed on the topic of mindfulness that, as I was reading, I began to wonder if the book might have been better titled *Mindfulness, Buddhism, and Science*.

What does it tell us that this book is so focused on the subject of mindfulness? I would argue that the volume itself becomes evidence that, as nearly every chapter observes, "mindfulness mania is everywhere" (Thompson, 47). The sheer size of the ever-growing scientific literature produced on the culturally influential Mindfulness Based Stress Reduction (MBSR) program and other associated mindfulness practices could suggest that they are indeed the prime location to explore the intersections that contemporary communities imagine there to be between Buddhism and science. Again, the contributors to *Meditation, Buddhism, and Science* do not ignore the wide diversity of existing meditation practices beyond mindfulness practices. Nor do the

other meditation practices that have been studied by scientists go unacknowledged. But when these practices are mentioned, they are usually cited as points of contrast to contemporary understandings of mindfulness meditation.

This brings us to another common thread that weaves through the book. Continuing in the tradition of previous Buddhism and science studies, many of the chapters perform comparative analyses based on historical understandings of the Buddhist terms typically associated with the word mindfulness. A number of the contributors seem to share Waldron's goal of demonstrating "Why Scientists Should Talk More with Their Buddhist Subjects." Waldron, for example, moves through the history of Buddhist philosophical thought in order to contrast various Buddhist conceptualizations of subjective and objective knowledge with the assumptions of scientists studying meditation. The insights of Buddhist philosophy, Waldron believes, could help scientists deconstruct the "epistemological dualism" they set up "between distinctively objective and subjective ways of knowing" (109). Meanwhile, in her chapter "'Mind the Gap': Appearance and Reality in Mindfulness-Based Cognitive Therapy," Joanna Cook draws on her ethnographic observation of training MBCT therapists in England, to show that, for many scientists and the consumers of their research, "scientific investigation and meditative experience are framed as complementary endeavours" (122). Cook's research illustrates that it is not only scholars but also the communities they observe who participate in the comparison of Buddhist and scientific elements and, in some cases, for the same purposes. Scholars, however, seem especially invested in considering how to position contemporary mindfulness practices in relation to historical Asian Buddhist traditions. A previously published article by Robert Sharf concludes *Meditation, Buddhism, and Science* and plainly asks what seems to be an implicit question in many of the chapters that precede it: "Is Mindfulness Buddhist? (And Why It Matters)." Sharf examines the concept of bare attention, so frequently viewed as defining mindfulness today, and finds far from a total embrace of such an experiential state through the history of Buddhist communities.

Another common thread between the essays, then, is that most of the contributors seem to accept the assumption that the origins of today's mindfulness practices are Buddhist. The question then becomes how far, exactly, these practices may have strayed from their Buddhist sources. There is an unquestionable association between contemporary forms and Buddhist traditions to the extent that their practitioners regularly *make this association* when speaking of mindfulness. The developers of MBCT, for example, have long introduced their modality as having been derived from Buddhist sources (Segal et al., 2001). Meanwhile, the founder of MBSR, Jon Kabat-Zinn, has done as much as anyone to spread this narrative. He has famously explained his use of the word "mindfulness" as an "umbrella term" for "a universal dharma that is co-extensive, if not identical, with the teachings of the Buddha, the Buddhadharmā" (2011: 290) (Although, as Braun and other contributors note, Kabat-Zinn has also claimed that mindfulness is independent, transcendent perhaps, of the cultural particularity of Buddhist teachings).

Kabat-Zinn's presence in *Meditation, Buddhism, and Science* cannot be overstated. He becomes something of an origin point for many of the contributors in that

his understanding of mindfulness is repeated multiple times as an operational definition throughout the book. Contributors then move backwards, uncovering the layers of Buddhist derivation (or remove) beneath this definition. Kabat-Zinn's thought is the focus of Erik Braun's individually-authored chapter, "Mindful but Not Religious: Meditation and Enchantment in the Work of Jon Kabat-Zinn" in which he explicates how Kabat-Zinn has sought to align contemporary mindfulness practices with scientific epistemologies while simultaneously presenting them as accessing an enchanted existence that transcends any one religious tradition. But, beyond Braun's chapter, Kabat-Zinn is ubiquitous throughout the volume. By my count, no single figure is mentioned more often in the pages of this book than he. His name appears more than that of the historical Buddha himself, much less other Buddhist thinkers. His prominence in *Meditation, Buddhism, and Science* serves to further evidence the impact he has had in multiple social spheres as a source of the narrative that today's mindfulness descends from Buddhist origins. Braun's chapter and others flesh this narrative out, but tend to adhere to a genealogy of mindfulness that travels from ancient Buddhist thought to the Burmese Mahāsi method, to the German-born monk Nyanaponika's English language book *The Heart of Buddhist Meditation* (1954), to figures in the U.S. like Jack Kornfield who initiated what is often called "the insight meditation movement" (and who had teaching relationships with Kabat-Zinn). Of course, while contributing somewhat to the codification of this narrative, Braun and others in this book mention that contemporary definitions of the term mindfulness and its associated practices are influenced by what Braun calls a "mélange" (181) of sources. Not only are today's mindfulness practices inflected with elements from other twentieth-century Buddhist movements (such as the Thai Forest tradition and post-war U.S. versions of Zen), they have also been heavily shaped by what Braun calls a "distinctly American" "metaphysical religion" with recent varieties such as "New Age spirituality" (188).

All of this makes clear that, in both popular and scholarly conversations, some sources of today's mindfulness practices are emphasized over others and some narratives or genealogies of their development have taken hold. Perhaps an imaginary chapter entitled "Is Mindfulness Jewish?" would seem inappropriate in a book collection with "Buddhism" on the cover. But, as just one example, one could certainly explore what strands of Reform Jewish teachings are detectable in dominant understandings of the word "mindfulness", as most of the U.S. figures commonly viewed as responsible for popularizing it today (including Kabat-Zinn) belong to a generation of Post-Holocaust U.S. Jews.

In my own research examining the way that psychotherapists have approached Buddhist teachings and practices, I have been struck by the variety of narratives clinicians have told about the development of the therapeutic meditation practices they utilize, whether they be mindfulness techniques, Zen *koan* contemplation, or deity visualization practices. The psychiatrist Fritz Perls (another Jew, a refugee of Nazi-occupied Europe) was teaching some of the same U.S. communities that Braun references to "be here now" long before mindfulness was a familiar word to those communities. In fact, Perls did so while scoffing at colleagues for experimenting with then-popular Zen meditation practices. Most intriguingly, some clinicians' stories

for the development of therapeutic mindfulness practices widely diverge from the Myanmar-to-Massachusetts narrative. Psychologist Marsha Linehan, for example, founder of Dialectical Behavior Therapy (the most widely used mindfulness-based therapy by psychotherapists through the early 2000s), has stated that when she introduced “mindfulness skills” into her methodology she had no knowledge that the word mindfulness was associated with Buddhist traditions. She says that she adopted the term in designing her therapy because of its use in psychological scientific studies (interestingly, on memory). She hoped its scientific valence would help obscure the contemplative concepts she intended to incorporate into her modality (notably, not those of so-called insight meditation, but the Zen practices she was familiar with). Furthermore, having made mindfulness skills a central part of her treatment for borderline personality disorder, Linehan actively discourages the use of meditation practices to cultivate them. She instead includes alternative practices that she believes are better suited to her patients who can easily become flooded with intolerable emotion states when attempting to remain still and quiet. In this sense, Linehan may exemplify that, for the communities that employ mindfulness practices, what is of greatest importance is their utility—in this case, their positive or negative effects on the treatment of psychological disorders.

This may be the book’s strongest common thread. Nearly all of the contributors examine, to one degree or another, questions about what, exactly, contemporary communities use meditation practices *for* and *how* they imagine those practices achieve their effect. Many contributors mention the medical and psychotherapeutic usages of meditation practices in this regard. Beyond the above-mentioned MBSR and MBCT programs, Jeff Wilson’s chapter, “‘Mindfulness Makes You a Way Better Lover’: Mindful Sex and the Adaptation of Buddhism to New Cultural Desires,” examines the discourse surrounding the use of mindfulness practices to enhance sexual pleasure and performance. He contrasts these “worldly” aims with those of historical Buddhist communities who sought to “retreat from or conquer” (169) such desires. Cook, meanwhile, reports that the MBCT therapists she studies seek not only to assist people to decrease their depressive symptoms, but also gain insights into the nature of reality as distinguished from illusory appearances. Her findings align with Braun’s analysis of Kabat-Zinn who promises more than mere relief from chronic pain, but connection to an enchanted existence. Comparing contemporary and historical Buddhist aims of meditation is also the subject of William Edelglass’s chapter (“Buddhism, Happiness, and the Science of Meditation”). Edelglass examines notions of happiness as conceptualized in positive psychology and critically compares them with those of Buddhist figures like Nāgārjuna and Śāntidēva.

The book’s essays here forefront the idea that contemporary practitioners seek to fulfill very different aims (or what Wilson calls “cultural desires”) from those of historical Buddhist communities. This important social context, they argue, is often ignored in scientific, empirical studies of meditation practices that can seem to presume universal anthropological drives. The Buddhologist Donald Lopez (2012)

recently laid out a schema for examining scientists' current turn toward the study of meditation practices. He observes that

the assertions being made in this domain are qualitatively different from the assertion that the Buddha understood the theory of relativity. The claim here is that Buddhist meditation works. However, in order to understand the laboratory findings, such a claim requires that one first identify what is "Buddhist" about this meditation, describe what the term "meditation" encompasses in this case, and perhaps the most difficult task: explain what "works" means, especially in the context of the exalted goals that have traditionally been ascribed to Buddhist practice. (104–5)

The essays of *Meditation, Buddhism, and Science* may be less concentrated on Lopez's second directive here, but they are certainly interested in "identify[ing] what is 'Buddhist'" about mindfulness meditation practices. The chapters are most effective, however, when addressing Lopez's question of "explain[ing] what 'works' means." This is the driving motivation behind McMahan's "How Meditation Works," which opens by juxtaposing a "contemporary American female professional" (21) who believes "mindfulness meditation" works to foster greater personal fulfillment with "an ancient monk" (21) who uses a vast array of meditation techniques believing that they, for example, work to generate super-mundane abilities like teleportation.

McMahan and a number of the other contributors observe that contemporary communities employ meditation practices to address certain psychological diagnoses, but that those diagnoses are themselves socially constructed. Cassaniti's piece may most dramatically illuminate this as she shows that mental illness means something very different in Thai contexts than it does in the United States. After all, believing that one can communicate with the spirits of dead family members was considered by U.S. mental health workers always to be a sign of psychosis until the 1990s when the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* began to direct them to take cultural considerations into account when conducting differential diagnosis.

Of course, many of the contributors also note that both the cognitive sciences and today's dominant mindfulness meditation practices are often portrayed as revealing universal aspects of human being. All humans across cultures may share the same physiological functioning, the same set of organs, the same brain. If so, performing the same embodied actions might produce the same effects on the body, regardless of social or historical context. From this perspective, embodied practices appear to be neutral and value-free. If followed diligently, like a recipe, they always generate the same results. Scholars like McMahan and Sharf (e.g., Sharf 1995) have long observed there to be a search for a universal transcendent within meditative experience. Perhaps what *Meditation, Buddhism, and Science* best illustrates is that neuroimaging

the effects of meditation on the body and brain is only the latest iteration of this search for an experiential universal, liberated from particularity.

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