

# MEDITATING SELFLESSLY

Practical Neural Zen



James H. Austin, M.D.

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# *Meditating Selflessly*

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To my early teachers Nanrei Kobori-Roshi, Myokyo-ni, and Joshu Sasaki-Roshi for their inspiration and to all those whose countless contributions to Zen, and to the brain sciences, are reviewed in these pages.

Getting free of the conceit that 'I am' — this is truly the  
greatest happiness of all.

The Buddha  
(Udana 2:11; Pali Canon)

## Preface

The most important thing is not to be self-centered.

Zen Master Bankei (1622–1693)<sup>1</sup>

This is one more book of words about Zen. It is not your usual kind of “Self-help” book. Its major theme heeds Bankei’s advice to be *less* Self-centered. The final paragraph of the previous book advised you to drop all intellectual concepts that you might have developed from its earlier pages. Instead, where were you invited to turn? Toward that open awareness awaiting you on the cushion and the mat. Because Zen isn’t what *you* think it is. It’s what is revealed *when you learn to let go of your intricate thinking Self*.<sup>2</sup>

This book begins where that paragraph left off. Its title suggests how to redirect such a quest toward a more open awareness. *Meditating Selflessly* goes on to explore particular ways to practice. Most of its suggestions are addressed to readers who are already meditating or who might consider meditating in the future. Why is *practical* in the subtitle? Because these pages explore commonsense, empirical prescriptions. They’re intended to help meditators avoid endlessly reinforcing dysfunctional egocentricities.

*Why neural?* Neural acknowledges the term *neural Buddhism*. David Brooks coined this phrase in his *New York Times* article back in 2008.<sup>3</sup> Brooks was aware of the new wave of neuroscience research. He foresaw that it would go on to have significant cultural effects. Contributing to this research were “scientists whose beliefs overlap a bit with Buddhism.” This slender volume reflects only one small part of this new wave as it appears to one academic neurologist. The word *Zen* also occurs next in the subtitle because

the author has practiced in the tradition of this Buddhist school for some 37 years.

Today's spiritual supermarket offers many diverse styles of meditation. They are represented by teachers who describe their particular techniques in detail. This book comes from a different direction. While it often discusses useful methods ascribed to the Buddha, it highlights only particular techniques that seem practical when viewed through the lens of the latest *neural-Zen* perspective. Accordingly, these new proposals often reflect the covert ways that our normal brain's attention networks have recently been found to open up and process that vast other reality lying beyond the immediate grasp of our own egocentric Self.

Are such suggestions valid? Readers who wish to know more can consult selected samples of the most recent and most ancient research in the sections labeled "background." For your convenience, further information on many topics discussed here is also cross-referenced [using brackets] to pages in three earlier books. For example, you'll discover *Zen and the Brain* abbreviated in the text as [ZB: \_\_\_\_]. *Zen-Brain Reflections* is [ZBR: \_\_\_\_]. *Selfless Insight* is [SI: \_\_\_\_].

A series of "do's" and "don'ts" is scattered throughout the book. You can recognize each "*do*" because it is preceded by a bullet (•). The few "*don'ts*" in the text refer to disadvantageous attitudes or behaviors that might have negative consequences. They are preceded by an asterisk (\*).

A section at the end of the book collects all these *do's* and *don'ts* for a quick review. Both types of entries—• and \*—are presented as empirical suggestions. None is carved in stone. If a meditator were to view them as some kind of prescription, there always remains plenty of room for individual adjustments, including noncompliance.

- **Practicing doesn't mean you're obsessed with having to achieve perfection. Practice just means you're not perfect.**

On these pages, practice also means that we'll be going beyond mere Self-conscious thoughts and concepts to emphasize the benefits of actual repeated direct experience. Repetition is the operative word.

## Acknowledgments

I'm indebted to Phillip Laughlin at MIT Press for appreciating the need to bring this slender volume to the attention of the wider meditating and neuroscience communities. Again, my thanks go to Katherine Arnoldi Almeida for her skilled editorial assistance and to Yasuyo Iguchi for her artistic skill in designing the cover and icons.

I'm especially grateful to Lauren Elliott for her ongoing patience in deciphering my handwriting on multiple drafts of her excellent typing, and for helping to keep this manuscript organized as it expanded. Many thanks go also to James W. Austin, Scott W. Austin, Seido Ray Ronci, and Janice Gaston for their valued assistance in reviewing and commenting on the manuscript. I also thank Scott Great-house and Adam Newman for their skill in bringing the figures to fruition, and my calligraphy teacher, Tanchu Terayama, for the generous parting gift of his original calligraphy that included the *mu* (emptiness) character illustrated on the jacket cover.

In recent years, I have been privileged to share in the inestimable bounties of regular Zen practice with our sangha at Hokoku-an led by Seido Ray Ronci, in the activities of Show-Me Dharma, led by Virginia Morgan, and in those of the Dancing Crane Zen Center, led by Meredith Garmon. Gassho to all!

This book manuscript was prepared for MIT Press in 2010, shortly before a short manuscript was due for another publication, which accounts for some inevitable overlappings in their respective topics and contents. Accordingly, grateful credit is acknowledged to (1) Springer Science and Business Media for the inclusion of certain material from the chapter entitled The meditative approach to awaken selfless insight-wisdom, in S. Schmidt and H. Walach (Eds.) *Neuroscience, Consciousness and Spirituality*, Springer, 2012, in press.

## By Way of a Personal Introduction

The psyche is distinctly more complicated and inaccessible than the body.

Carl Jung (1875–1961)

I began the Zen training of my psyche and soma late. It began during a research sabbatical in Kyoto in 1974, when I was fortunate to meet an English-speaking Zen master. Nanrei Kobori-Roshi enabled me to begin Zen practice at Daitoku-ji, a Rinzai Zen temple.<sup>1</sup> Later in my practice there, while meditating one evening, my *physical* sense of Self vanished as I dropped into a state of deep internal absorption. During a second sabbatical from 1981 to 1982, I was privileged to continue Zen training with Myokyo-ni at the Zen Centre in London. En route to the second day of a retreat, as I happened to gaze casually off into the sky, my entire *psychic* sense of Self dissolved into a state of *kensho*.

How had meditative practices enabled these states to change my psyche and soma? In no way had any prior training as an academic neurologist prepared me to understand either experience. A period of reeducation began.<sup>2-8</sup>

Throughout the course of this research, these brief phenomena had already made one thing clear: they had involved *subtractions* of the Self. The sense of my body (my *somatic* Self) had been the first to drop off. Only years later had the Self of the *psyche* vanished briefly. The two subtractions of the Self were completely different. Different sets of inhibitory events seemed to have converged in the brain during each state. But how? It was plausible to relate most inhibitory events to the level of the thalamus, our gateway to consciousness far down in the center of the brain [ZB: 589–592].

By the time of the Mind and Life Summer Research Institute meeting in June 2006, substantial neuroimaging evidence had finally become available in ways that could support the model of a novel thalamic hypothesis for kensho. By then, position emission tomography (PET) and functional magnetic resonance imaging (fMRI) data had indicated which networks on the *outside* surface of the brain were serving our normal functions of attention. Moreover, these networks displayed more than an inherent capacity to react by shifting their activities up or down. Indeed, when they shifted, it would be into *reciprocal, seesaw relationships* with key regions chiefly on the *inside* surface of the brain.

Many of our more personalized functions were represented here, along the midline. Their networks expressed both the layered constructs of our psychic Self and its interactions with the details of the outside environment.<sup>9,10</sup> Zen had emphasized attention for centuries. Finally, it seemed that attention was turning out to have a pivotal role for meditators. At least in the fMRI data, attention regions correlated *inversely* with the regions related more to the Self.

Researchers had begun to evolve two other related sets of major distinctions during the first decade of this new century. One important set would distinguish between *top-down* attention and *bottom-up* attention. The second set would distinguish between *Self-referential* processing and *other-referential* processing. In this instance, “other” meant things in the other world outside us. Notably, the pairings in each category of brain function are to be viewed as *complementary*, not antagonistic. Indeed, they are almost like yin and yang. At the end of this book, a closing summary explains how these topics unfold in sequences. In the model proposed for kensho, these conceptual steps help clarify the ancient paradox: selflessness and insight-wisdom *co-arise* simultaneously.

Do we now know every fine detail of the signals that enable the attention networks to process various assigned tasks *and* to simultaneously diminish the Self? No. These are among the many key research issues awaiting further refinement.<sup>11,12,13</sup> Meanwhile, it seemed important to alert the meditating and neuroscientist communities to some practical implications of the information already available. And so these pages invite you to test these preliminary suggestions and to determine whether their basic principles are applicable to where *you* are right now on your own long-term path of meditative training.

No suggestions made here belong to any single spiritual tradition, doctrine, school, or system of philosophical belief. Instead, what you may glimpse are some of your brain's innate resources. These draw upon evolution's hard-won neural pathways that ensured survival. They tap into implicit instinctual capacities and the kinds of native intelligence that are of universal neurobiological importance. Nothing unique is proposed here. Some of it used to be called "horse sense."<sup>14</sup>

Readers had commented favorably on the short question-and-answer (*mondo*) chapters that summarized complex topics in each of the earlier Zen books. This volume expands this custom, inserting questions and answers frequently throughout the text. The next paragraphs provide a brief example of this simplified approach. They return to part of an interview conducted early in 2009.

*You've spent decades studying the relationships between Zen and the brain. What's changed during these years?*

A new field of meditative neuroscience has opened up. It shares contributions from both brain-based research and Buddhist scholarship. In the course of observing this major trend, my own understanding of Zen has gradually evolved. Also, as a practitioner, I've become aware of how many of my earlier, hard-edged,

overconditioned responses seem to have been “rounded off,” as it were.

*Is studying the brain of a meditating person now a legitimate field of scientific research?*

Yes. For millennia, diverse spiritual traditions have attested to the “fruits of meditation.” It’s reasonable to inquire whether objective findings support such alleged practical benefits. But research is worthwhile for another reason: we learn much more about the normal functions of both our brain *and* our body as soon as we seek to clarify how meditative training transforms consciousness.

*Can learning how to meditate help me improve my everyday personal performance skills and interpersonal relationships?*

Meditation is an attentive art. When we train our attentive capacities through regular meditative practices, we begin to develop enhanced degrees of emotional clarity and stability. These in turn help us to identify our own emotions and to realize how we can modify our behavioral responses in ways that are more adaptive.

Moreover, meditation is increasingly linked with a variety of health benefits. Examples include an improved ability to relax, lower blood pressure, and enhanced antibody responses to an influenza vaccination.

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