## ONE Simple Thing

A NEW LOOK AT THE SCIENCE OF YOGA AND HOW IT CAN TRANSFORM YOUR LIFE

### **EDDIE STERN**

FOREWORD BY DEEPAK CHOPRA



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### FOREWORD

#### BY DR. DEEPAK CHOPRA

IT SEEMS PECULIAR on the face of it that the mind is a problem, and even more peculiar that the mind is a problem for the mind. But the evidence of mental suffering is rife in modern society (one statistic reveals that Americans who are on a long-term regimen of antidepressants has doubled since 2010, and millions more are on long-term medication for anxiety). Any solution that might end mental suffering would be greeted with wild hope and relief—or so you would think.

It's possible for the mind to get so lost in itself that a person's very identity becomes confused, conflicted, and obscured. When Rumi asks, "Who am I in the midst of this thought traffic?" he speaks for every modern person. The sheer chaos of the mind is frightening, and finding an end to suffering by diving into oncoming thought traffic doesn't work.

Eddie Stern's insightful, wide-ranging, and at times eloquent book on yoga takes an optimistic view of how mental suffering can end. He doesn't focus only on the aspect of yoga as healing. There is ample treatment in these chapters of the underlying philosophy of yoga, its universality around the world, its potential for helping the poor and outcast who are gripped by the worst kind of suffering, including prison populations. But healing through "one simple thing," the regular, dedicated practice of yoga, is the essence of his message.

To accept healing is difficult, and mental healing the most difficult of all. Rumi confronted a mind filled with teeming, seemingly random thoughts, and our mental landscape today, distracted by video games, social media, and the Internet, would be totally foreign to medieval Persia or ancient India. Yet Rumi and every other fully conscious person who has waked up knows that people will spend a lifetime choosing to be in denial, afraid of their own impulses and desires, driven by those same impulses and desires, totally convinced that the darker aspects of the psyche must be suppressed, and deeply embedded in social conformity.

When William Blake walked through the streets of eighteenth-century London, the "marks of weakness, marks of woe" he saw in the passing crowd were the result of "mind-forg'd

manacles," a haunting phrase that I have kept in the back of my mind for three decades. When the mind functions as both jailer and prisoner, finding an end to mental suffering seems incredibly difficult. Even motivating people to try is daunting.

Eddie Stern, with his long experience as a yoga teacher and lecturer, understands everything about motivating his students and prospective students. On a personal level, this may be the most persuasive part of this book, beginning with careful bridge-building from the long-ago India of the *rishis* to the modern secular world. Yoga currently rides a crest of popularity, but trends are fickle, and Stern knows that unless there is more than regular yoga class, unless there is a complete vision of yoga's potential, there is a real risk of yoga becoming a passing phenomenon.

The underlying vision rests on yoga as union, which means overcoming the divided self. Separation is the opposite of union, and the ultimate separation, which has affected all of us, is the mind in separation from its essential nature. You can approach the issue from many angles, as this book skillfully does. A kidney, heart, or lung cell is already unified in its natural state. Cells don't doubt their existence. They function holistically and offer us a model for life as a flow of energy and intelligence. So the connection between mind and biology forms a strong theme in Stern's teaching about yoga.

One can also focus on other distressing signs of separation, in troubled relationships, social discord, and all manner of self-destructive behavior, including addictions and preventable lifestyle disorders that people exacerbate rather than helping themselves to heal. Yet in the end, it is the self divided against

itself that yoga fundamentally addresses. The mind would not be its own enemy except for the divided self; the body would not be abandoned as a thing to be ignored, shunned, or ashamed of (except for those gifted with superb and beautiful bodies, and even they must face the specter of time and aging).

One of the most important tenets of yoga is that the level of the problem isn't the level of the solution. As long as we remain inside the state of self-division, we are dominated by it. There are only three attitudes one can take to mental suffering: put up with it, fix it, or walk away from it. Unfortunately, all three are doomed to failure—and for the same reason. The mind that attempts to put up with suffering, fix it, or escape from it is the very mind that has been split by the state of separation. A fragmented mind is like Humpty Dumpty, whose fall is misunderstood. All the king's horses and all the king's men can't repair a broken egg, no doubt. But Humpty Dumpty can't put himself together again, which is the real problem.

Yoga solves this dilemma by asserting some home truths that are then carried out through the practice of yoga and meditation. I've already given the first one, that the level of the problem is never the level of the solution. Here are the other home truths, as I understand them:

The level of the solution is consciousness, which in its very nature is whole, complete, and undivided.

Consciousness, being the source of creation, is always present in its pure, whole form.

When the mind experiences its source in pure consciousness, solutions dawn, not through the effort to end suffering

but through the state of wholeness itself—no outside agency, motivation, or thinking is required.

The body, brain, mind, and universe are different modes of consciousness. Each mode is self-regulating, and so is the whole. A cell has the capacity to keep itself alive and thriving, in a state of perfect balance. The same is true at every level of Nature.

When self-regulation fails, the underlying cause is loss of contact with wholeness. By experiencing pure consciousness, self-regulation is restored. This returns body, brain, mind, and universe to their unified state.

I know that using yoga to return the universe to its natural state seems unbelievable, and the claim is too vast to explore in a page or two. But when yoga returns us to our source and allows us to experience the awakened state, there is no alternative but for reality itself, which we dub the universe, to shift along with everything else.

For all its current popularity, yoga in India is entangled in mind-numbing intricacies, philosophical controversy, endless wrangling over the ancient texts, competing teachers and systems—on and on. I deeply admire Eddie Stern for bringing clarity and compassion to such an unholy mess—the future depends on such clarity and compassion. Taken altogether, this book is the gentlest and most accessible way to embrace yoga in all its potential. Insofar as humans have infinite potential—another home truth about consciousness—yoga unfolds a field of possibilities that would otherwise be closed to the divided self. Stern never lets us forget our untapped potential, which may be the core lesson of his teaching and his life.

### ONE SIMPLE THING

### INTRODUCTION

IN THE SPRING OF 2010, a researcher and physical therapist named Marshall Hagins came to visit me at my yoga school in SoHo, in New York City. He wanted to see if I would be interested in designing a yoga protocol for a scientific study to examine whether yoga could have a positive impact on prehypertensive conditions in African Americans. Twenty-two years earlier, I had bypassed college, opting instead for travel to India, and had spent the better part of the years since returning

to India, studying, practicing, and reading everything on yoga that I could. I was quite comfortable with yoga, but I was clueless regarding even the basic tenets of science. Here was a very smart person sitting in front of me, thinking I knew something and asking for my help. So, with or without scientific knowledge, I of course said "Yes!" Little did I know that this meeting would shift my focus within yoga away from studying and memorizing ancient texts and toward investigating what makes yoga work so well.

Why was it that a person with back pain, another with hypertension, another with poor digestion, others searching for meaning in their lives, could all walk into the same yoga class, do the same basic thing, and walk out not only feeling better but feeling like what was troubling them, or the condition that they had, was improving? How, by doing one simple thing, one generalized yoga practice, were people able to reduce stress, ease body pains, improve cardiovascular function, reduce diabetes medication, feel happier, get angry less often, and improve their sleep and digestion? Somehow, given the opportunity, the body knew how to correct imbalances. And even more interesting, it was apparent that the yoga poses didn't even have to be done "well" or "right" for these positive effects to happen; whether someone is stiff or flexible, thin or heavy, sick or healthy, yoga seems to work. I had an inkling that it had something to do with the nervous system, but I was not sure what. So I began to read, to speak to doctors, and to investigate.

This book is largely the result of that investigation (that, along with thirty years of yoga practice). In my discussions with doctors, I learned about the Western presentation of the nervous system. I was already familiar with what the yogic texts had to

say about the nervous system and could look for correlates, make conjectures, and then discuss those correlates with the doctors. I would always check to see if they felt that what I was saying sounded valid, and slowly the ideas presented in this book became refined. I looked into the amazing research that has been and is still being conducted by Dr. Stephen Porges, Dr. Shirley Telles, Dr. Bethany Kok, and many others. I refer to their work throughout this book to shine a light on how science understands yoga to be an effective practice for nervous system self-regulation.

Two burning questions were developing in my mind as I studied.

- 1. Where do consciousness and biology meet? Does consciousness reflect itself through our biological makeup, or is our biology actually consciousness manifesting itself? We are human beings, after all, and the yogis used the body (which is biological) to journey inward toward "deeper" levels of consciousness. Therefore, it would follow that the body and consciousness are somehow linked.
- 2. Is happiness a physiological experience? That is, by seeking to discover who we truly are through yoga practices that use the body, breath, and mind, can we find a deep, lasting inner peace and happiness that exist in our physiological makeup? It seemed to me that because we use the body in every aspect of yoga, happiness cannot be simply a mental construct, but is *integral to our physical makeup and can be*

found in the inner mechanisms of our bodies. Perhaps transcendence lies beyond the realm of the body, but what of simple happiness and the ease of knowing who you are? Happiness as a mental construct seems to be an impossibility. We can't hold a thought in our minds for more than a second or two. So how can we mentally hold on to happiness? Happiness perhaps exists somewhere deeper. In the Hindu thought systems, happiness is equated not with pleasure, but with meaning or purpose. It is not happiness we are after, but the experience of our own essential being. We are seeking ourselves. Is this experienced in our physiology? Or are the mind and body a continuum, so there is an integrated experience of being because there is no distinction between body and mind?

These questions are largely my jumping-off point. And, as it happens, the nervous system is an integral and key component in examining them. The ancient yogis taught that the science of yoga is not about the perfection of postures, but perfection of the body-mind-spirit relationship, so that one can understand the deepest mysteries of being. Their teachings, and the teachings of my South Indian guru, impelled my journey and my continuing fascination with these topics. What follows in this book are explorations into yogic ideas and scientific research on the underlying neurobiological mechanisms that help explain how and why yoga has such a positive overall impact on our bodies, our minds, and the world, and how we can find happiness, meaning, and purpose in it.

o n e

### WHAT IS YOGA?

IF THERE IS A SPIRITUAL practice that has been mocked, lampooned, and stereotyped in the West, it's yoga. And why not? Western yogis are easy to make fun of. With our top-knots, expensive leggings, chia seeds, smoothies, yoga mat bags over our shoulders, extended retreats, crystals, namaste-ing, om-ing, and sitting cross-legged everywhere, if you want to make fun of us, there is plenty of material to pick from. A couple hundred years ago, yogis in India were also mocked

and denigrated, during the time of the British occupation and by the early travelers who had never seen anything like them before.¹ Accounts as early as the one in 1689 by John Ovington describe the "painful and unnatural postures" of the ash-smeared, philosophical mendicants known as fakirs, a name for the Persian ascetics who were lumped into the same category as the Hindu yogis. The armed and highly organized ascetic order of the Naga Sannyasis² presented a violent challenge to the hegemony of the East India Company, and from the mid-1700s to the early 1800s the Naga Sannyasis and Muslim fakirs staged uprisings and attacks against the East India Company in Bengal, which eventually led to big crackdowns on all ascetic organizations.³

The fact that Westerners lumped the Nagas, fakirs, and yogis of more gentle orders together into the same category of dangerous and violent ascetics is perhaps one reason that yoga fell out of vogue in India in the 1700s and 1800s. However, even if the yogis were considered to be dangerous, as well as filthy, lying scoundrels (and there are examples of this view even today), the practice and philosophical tenets of yoga somehow made it through this rocky period in India and found a resurgence with Sri Krishnamacharya,4 Swami Sivananda,5 and yoga's journey to the West in the late 1800s. As of 2014, with Prime Minister Narendra Modi, an avid promoter and practitioner of yoga, at the helm of India, the birthplace of yoga has certainly begun to pull its own weight in yoga again.6 Modi's suggestion of an International Yoga Day to foster global harmony and inner and outer peace was sponsored by every country represented at the United Nations, and has helped India

reclaim its place of primacy in the world of yoga. Although some may say that India never lost touch with yoga, in the late 1980s I spent a lot of time traveling from North to South India looking for yoga teachers, and found relatively few of them. In 1990 there were only two or three yoga schools in Mysore—at present, there are close to fifty. Mysore is now considered to be one of the yoga capitals of India, and it is largely due to the influence of Pattabhi Jois. The yoga landscape in India has changed dramatically.

Yoga arrived in America in the 1800s and has been largely assimilated into our culture. Though Americans studied yogic texts at the beginning—Ralph Waldo Emerson loved the *Bhagavad Gita*—few actually practiced yoga. However, in the short span of a little more than two hundred years, millions upon millions of people across all walks of life have begun to practice yoga—in 2017 an estimated 36 million in the United States alone did some form of yoga—and not just by those who are on a spiritual path. It is practiced by children in schools, the elderly in chairs, people who are incarcerated, those who suffer from PTSD, patients in hospitals, and folks who just have a lot of stress in their lives. Yoga provides solace, free of discrimination.

And yet it's also important to acknowledge that in the United States, at present, we find ourselves in the midst of a very real clash of cultures. In the 1960s we had East meets West, and the hippie movement, as a generation of youth tried to free themselves from the shackles of wartime austerity and restrictive nuclear-family ideals. As I have watched the yoga scene grow over the past thirty years, it's now more like West gobbles up the

East, and the free-form embrace of spirituality has veered into a head-on collision with consumerism—exactly the opposite of what yoga was supposed to promise and deliver. India, especially under Prime Minister Modi, has begun to reclaim yoga as part of its cultural heritage, which indeed it is. But in the meantime, the West has adopted yoga as one of its own children, and yoga in the United States has adapted to life here in unusual ways, including the secularization of a contemplative practice.

It is hard for me to separate the ancient Indian—or Hindu culture from yoga practice, and I am not sure that turning a contemplative, mystical practice into a completely secular fitness regime is a good idea. Once you remove the contemplative aspect of yoga from its practice, can it truly be called yoga anymore?8 On the other hand, yoga has proven itself to be beyond religions, and beyond religious beliefs, and that is readily seen in the people from a variety of religions and the non-religious who practice yoga because it calms their mind, reduces stress, and makes them more internally clear. A pastor who practices with me uses the time when he does deep breathing at the end of his practice to contemplate his Sunday sermon; a rabbi uses his practice to find a quiet space that his spoken prayer does not give him. The Judeo-Christian traditions all have mystical branches, wherein a direct relationship with the divine is sought, but the mystical branches are often seen as fringe movements. The Eastern traditions made no distinction between the world and the sacred. Yoga, ritual, and the earth were all seen as one; they were mystical to the core. Today we often forget that there is a difference between religion and mysticism, dogma and contemplation. And that is precisely where yoga excels. It is easy-access

mysticism. It is instantly contemplative, usually from the first time you lie down and rest deeply after practice.

While some elements of yoga are deeply entwined in the Hindu tradition, others are not. There are hints in the ancient texts that, as a practice, yoga transcends culture, time, place, and what we now call religion. While yoga is indeed from India, and rooted in Hindu thought systems, yoga has proven itself to be extremely adaptable, and is practiced on every continent by people from varied backgrounds and different cultural perspectives. The remarkable thing about that is that of the millions who are practicing yoga with regularity, many have very similar results: we feel better, are more clear-headed, are healthier, and in many cases have a deeper sense of purpose. This is a hint to what the basis for the Hindu tradition, called the Eternal Way, or Sanatana Dharma, was before it was called Hinduism. Beyond deities or reincarnation, Hinduism is concerned with the idea that every being has an essential purpose, and that we should strive to live our lives in such a way for that purpose to be fulfilled. It is from this vantage point that I view yoga.

So many things in the world divide us, such as politics, religion, sports teams, and all of our personal opinions, ideas, and judgments. It is rare to find something that connects us. Yoga is one of those things, and it has the ability to help us transcend partisan distinctions because it has clarity of mind, compassion, empathy, kindness, love, and caring as its base—these are all mental states and emotions that transcend religion, distinction, and things that set us apart from each other. They are things that connect us, or remind us of our connectivity, and not the things that divide us. Of course, in the marketplace,

we do not always see this reflected, but when it comes to the results that people experience from yoga, the benefits are largely the same. I find that extremely interesting, and it is one of the things that led me to ask, What is the underlying mechanism that makes yoga work for so many different people, almost regardless of the type of yoga that they practice?

### THE WORD YOGA

The word yoga has several meanings. Among them are "union," "concentration," "a path," and "relation." The word itself comes from the verbal root yuj, which means "to yoke or join" and is why the word yoga is most commonly associated with the idea of union. The ancient Sanskrit grammarian Panini wrote that there were two ways of defining the word yoga, depending on usage. The first is *yujir yoge*, which describes the action of joining or yoking—for example, the joining of an ox to a cart. In the earliest teachings of the ancient Sanatana Dharma canon, called the Vedas, this was the sense in which the word *yoga* was used. But for yoga practice, which was classified as a spiritual discipline in later years during the Upanishadic age (800–500 B.C.E.), the correct derivation is from yuj samadau, which means, roughly, that yoga is a special type of concentration, called samadhi. 10 Samadhi means "absorption," and it is a natural tendency of the mind to become absorbed in things, whether thoughts, objects, work, ideas, a love interest, or goals. When it comes to absorbing the mind in spiritual pursuits, the mind is said to take on the form of that which we are contemplating, and eventually, that deep level of absorption leads to the insight

and experience of our true nature. In the deepest level of samadhi, one gains knowledge of one's inner being, or self.

#### CONCENTRATION

Around twelve hundred to two thousand years ago, a sage (rishi) named Patanjali collected the existing teachings on yoga and systematized them in a form known as sutras. The sutra form of authorship means that the author did not create a system and write an original work, but compiled the teachings, practices, and methods that already existed, collecting or codifying them under one heading. There are six philosophical schools in Hinduism, and each has sutras that contain their teachings. <sup>11</sup> For yoga, the text is called *Patanjali Yoga Sutras*, and it contains 196 sutras. A sutra is a short sentence, the few words of which have a much larger meaning. Commentaries given on the short forms by other sages and saints fill in the details and elaborate on the finer points of what the sutra is actually saying, because more often than not, they are quite hard to understand at face value.

Patanjali explained in his *Yoga Sutras* that *samadhi*, the highest state of concentration, is a technical term for the mind's innate ability to become absorbed in its object of contemplation. Patanjali's is not the only presentation of yoga, but it is indeed one of the most complete. Other presentations of yoga that came after Patanjali have different end goals, but all of them have one thing in common, namely, the idea that in order to achieve your goals, you need to be able to focus your mind. Therefore, Patanjali defines *yoga* in the second sutra of his book as the ability to selectively eliminate all extemporaneous thoughts or movements

that occur in the mind and to choose where you want your mind to be, or where you want to focus it.<sup>12</sup> As my Sanskrit teacher Vyaas Houston has said, the Yoga Sutras serve as a road map for inner consciousness. These short, concise aphorisms, which are packed with meaning, lead us through deeper and deeper levels of our mind, consciousness, and reality. Many of the teachings contained within the sutras—several of which will be discussed in this book—are amazingly relevant to us even today. Why is this so? It's because, I think, that the mind we have today is no different from the minds that people had two thousand, or even five thousand, years ago. We suffer, we struggle, we experience joy and desire, and we question, we investigate. The quest to know ourselves, to question who we are and what we are doing here is not new to us; it is in fact a part of us to question like this, and it is this impulse that drove people to create systems of yoga thousands of years ago, and is the same impulse that drives so many to practice it today.

The earliest commentary on the *Yoga Sutras* was written by the ancient sage Vyaas (a different Vyaas than my Sanskrit teacher). In his commentary, he discusses how the mind has five basic patterns, or states.<sup>13</sup> We can clearly see that these five patterns have not really changed at all in two thousand years. The first two states are not conducive to yoga practice, but the last three are. However, it is only the last two states that are conducive to samadhi, or complete absorption. The states are:

- 1. Restless
- 2. Stupefied

- 3. Distracted
- 4. One-pointed
- 5. Completely restrained

A person with a restless mind will never want to practice yoga, because he or she cannot remain focused for any length of time. The mind jumps from here to there, never staying fixed for even a moment, like having attention deficit disorder. I know plenty of people with ADD who are very productive and successful people, but they struggle to do yoga consistently, and sometimes find that meditation practices like Transcendental Meditation (TM) are easier for them. A person with a stupefied mind is obsessed with their problems, and ruminates, turns, and dwells on them. We've all had the experience of a problem, conflict, heartbreak, or disappointment becoming the only thing that we can think or talk about, sometimes to the point where our family or friends will want to shake us and yell "Get over it!" The stupefied mind has a hard time doing any type of contemplative practice, or doing anything at all, for that matter, except obsess about its own problems. Obsessive-compulsive disorder is an extreme example of a problem of the stupefied mind.

The distracted mind, as odd a description of a spiritual practitioner's mind as it may be, is the state of mind of most of us who come to learn yoga. We are able to concentrate for short periods of time, but then we revert back into distraction. This is a state of mind that almost all yoga practitioners are familiar with: we can stay focused for a bit, but then our mind wanders off. The act of catching the mind after it has wandered off, and

returning it to the place of our choosing, is one of the basic activities that we are training ourselves to do in yoga practice, and this is doable even with a mind prone to distraction. This is because one of the hallmarks of the distracted mind is that it can be calm at one moment, and then restless at another moment. The state of change that occurs in distraction is also the state that teaches us how to begin harnessing the power of attention—we get the opportunity to work on catching the mind when it becomes restless. People with this type of mind know that they need to do yoga or meditation because they have experienced both calmness and distraction, and would like to strengthen their ability to be in a calmer, more relaxed state. That is why it is said that the mind of the person who comes to yoga is predominantly in this third state, the distracted state. If you identify yourself as a person whose mind easily gives in to distraction, then I have some good news: you're the perfect candidate for yoga!

The final two states of mind—one-pointed and completely restrained—are the states that samadhi can occur in. "We should bear in mind," said Swami Hariharananda, "that our mental weakness is only our inability to retain our good intentions fixed in the mind; but if the fluctuations of the mind are overcome, we shall be able to remain fixed in our good intentions and thus be endowed with mental power. As the calmness [of mind] would increase, that power shall also increase. The acme of such calmness is Samadhi." I particularly like this quotation, because this idea is clear: yoga is not about screwing the mind into a fixed state of focus, or the body into a complicated pose; it is about calmness and filling the mind with a natural state of goodness. It is a natural, underlying characteristic

that has been covered up by too much thinking. Sometimes when I sit and meditate, I don't do anything but sense or feel for that natural state of goodness within me. Like many people, I judge myself pretty harshly; I prefer criticism over compliments because I would rather improve myself to the point of perfection, and hearing what was good just gets in the way of what needs to be fixed. But not everything needs to be fixed; it's okay to sometimes just let things be. So when I sit and feel the natural goodness that is inside of me, a feeling of calm does indeed automatically come to me. It's soothing because, from this point of view, goodness is not something that we strive to be or become; it is something that is already there. We just have to allow it to be a little more present.

In the last two states of mind on Vyaas's list, the one-pointed and completely restrained states, the deepest experience of samadhi occurs, also known as the "state of yoga." In the onepointed state of mind, you can rest your attention on any object that you choose to contemplate—whether it be your breath, a mantra, or something else—for as long as you wish. That is no easy feat. It is hard to keep the mind resting on one thing for literally even a few seconds. In the completely restrained, or arrested, state of mind, there are no thoughts, no fluctuations, and no object separate from yourself to hold your mind to. Subject and object cease to exist, leaving non-localized consciousness as your only experience. Everywhere you look, listen, hear, smell, or touch, there is only consciousness. In the deepest states of samadhi, there are no longer any objects; only the subject remains. It is called *vishesha*, or that which is left over, after all the changing objects of the world no longer color our experience. This is sometimes referred to as "unity consciousness."

### YOGA AS A PATH

The South Indian yoga master Sri K. Pattabhi Jois wrote that the word *yoga* has several meanings. Among them are "relation," "a means," "union," "knowledge," "matter," and "logic." <sup>15</sup> He was unique in defining the practice of yoga according to one of Patanjali's sutras, 2.26, which states that yoga is an *upaya*, a path. <sup>16</sup> What kind of a path is it? One that brings to an end the confusion of the mind, via a special type of mental discrimination that leads toward self-knowledge, a discrimination that allows us to distinguish awareness from the movies of our lives, thoughts and desires that are projected onto its screen. Yoga practice, therefore, is the means of liberation from conditioned thinking.

Jois writes:

For now, let us say that the meaning of the word yoga is upaya, which means a path, or way which we follow or by means of which we can attain something. What then is the path we should follow? What or whom should we seek to attain? The mind should seek to attain what is best... the way of establishing the mind in the Self should be known as yoga.<sup>17</sup>

The idea of upaya is intricately linked with the sense of relation that Jois lists first in his definition of yoga. For, by doing the yoga practice, and the related contemplative practices, we gain an intimate relationship with our body, breath, mind, emotions, and sense of purpose. It is this intimacy with ourselves that leads toward self-confidence and comfort with who we are and what we are doing here. This naturally leads to the deeper and most important question that we eventually end up asking ourselves: Who am I beyond the idea that the sum total of who I am is my body, my emotions, thoughts, or memories? These are our main questions in life: Who am I? What am I doing here? My ninth-grade English teacher, Mrs. Jane Bendetson, posed these questions to our class as the most important questions that we could ever ask ourselves, and added to them, What should I do next? These questions are, in fact, the only thing I remember having learned in high school.

Yoga first and foremost is a practice. The yogis considered that we should practice yoga in the same way, or with the same importance, that we brush our teeth each day. Through practicing yoga asanas (postures) and breathing, as will be discussed in each chapter of this book, we clean our body internally, and strengthen the muscles, bones, internal organs, nervous system, mind, and emotions. A little bit of practice goes a long way; we don't have to practice for hours on end every day, to the point of exhaustion. All we have to do is make sure that doing a little bit of practice each day becomes a priority in our lives, and that we do so until practice becomes a habit, a regular part of our daily routine, or a part of the ritual that makes up the rhythm of our life. Any practice, whether spiritual, physical, or artistic, only begins to pay off when it is done with regularity and sincerity. One of Patanjali's most quoted sutras, 1.13, is on this very point:

### Sa tu dirgha kala nairantarya satkara sevito drdha bhumih.

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We become grounded in practice when it is done uninterruptedly, for a long time, with devotion.

Perhaps more important than the idea of discipline is what discipline is creating. The neuroscientist and psychologist Rick Hanson has written about this at length in his book *Hardwiring Happiness*, where he describes the difference between mental states and mental traits. We are often the victims of our mental states: anger, jealousy, judgment, revenge, laziness, apathy, boredom, desire; and at times we act on these states, and identify with them. But these states are transient; they come and go. Still, they are liable to repeat themselves more often when we act upon them. By doing a regular practice, we begin to create an underlying mental trait of awareness, which is more dependable and more open than the changing states. Through our practice we develop within us a trait of awareness that is calm, has perspective, and can help us to pause so that we do not get swept away by overwhelming emotions.

Developing strong mental traits, then, is the true goal of a dedicated practice. Patanjali does not define practice as being really great at doing yoga postures; he defines it as a means to creating an underlying mental trait of awareness that leads toward insight. The changing *states* are what Vyaas was referring to when he spoke about the distracted mind, and one of the first things that yoga gives is the ability to observe the changing states without getting lost in them. Many have expe-

rienced that after practicing yoga for even a short time, they get angry less often, or catch themselves before speaking without thinking of the repercussions of their words. This is because the underlying trait of awareness is starting to become as pronounced, if not more so, than the changing states.

### SADHANA, THE MEANS

As with many of the yogic ideas, and many Sanskrit words, one word will lead to another word that fleshes out even more subtleties of meaning. Yoga practice has a special word associated with it, *sadhana*, which describes the techniques or practices that we use to move toward self-knowledge, awareness, or liberation. *Sadhana* is often translated as "spiritual practice," and the purpose behind spiritual practice, usually, is liberation from suffering—which is liberation from identification with everything that is other than awareness. Sadhanas are the means that we use to identify with a sense of awareness within, and to remove the coverings of confusion, narratives, and longings that prevent us from being who we truly are.

A. G. Mohan, an influential yoga teacher from Chennai, said a wonderful thing about the different layers of meaning and experience that in the Hindu tradition have been compared to the peeling of an onion. This analogy is very often used to describe the layers of spiritual practice: you keep peeling and peeling the layers of identification away until there is nothing left but consciousness. "But," Mohan points out, "who is the one who has peeled the onion? The one who peeled the onion does not disappear as well." Sadhana is the peeling of the onion;

the one who has peeled the onion is the impulse within us to know.

Sadhana is a commitment to making our spiritual goals, in particular, a priority, and making time for them. A spiritual goal can be:

- \* Practicing yoga
- \* Practicing meditation
- Practicing kindness, gratitude, or forgiveness
- \* Living a balanced life
- \* Keeping our minds calm and accepting
- Serving those in need
- Living a contemplative, thoughtful life
- \* Practicing patience
- Becoming a better listener

If we say we want any of these things but are not taking active steps to actually do them, then we can't really say that we want them. If I say that I want to be more meditative in my life, but I don't make the time to practice meditation every day, then perhaps I do not really want to be meditative. The things that we actually spend time doing are the things that we want, and sometimes the goals or ideas we have are not real—they are just ideas that sound pretty good to us. In sadhana, it's important to figure out, What is it that I really want? And if I do really want that thing, then I'll spend time doing it. It's as easy as that.

Don't worry about not doing things you don't really want to do. If you say that you want to meditate but you never do it, then you probably don't want to meditate. If you accept that you don't want to meditate, then you won't feel bad about not doing it, and you can cross it off your list of things that you think you want to do—stuff that other people do that sounds like a good idea but, when push comes to shove, is not for you. Then you can replace it with something that you really do want to do. Sometimes we do actually want to learn or practice something, but we find it hard to make time for it—if that is the case, then you need to learn to be more disciplined, and to put up with a little hardship. In Sanskrit, this is called tapas. That is where satisfaction, success, and even excellence come from: overcoming the obstacle of either getting started or finishing something to completion. Knowing what you want is sadhya, or the goal; the path we travel to get there, the upaya, is sadhana.

As Timothy Ferriss says in his book *Tribe of Mentors*, "Life punishes the vague wish and rewards the specific ask. After all, conscious thinking is largely asking and answering questions in your own head. If you want confusion and heartache, ask vague questions. If you want uncommon clarity and results, ask uncommonly clear questions." These following three words lay out the concrete plan, or road map, of spiritual practice:

- 1. sadhya: forming our goal
- 2. *sadhana*: our practice, which is the means of accomplishing it
- 3. *upaya:* sticking to the path

The goal that we choose does not necessarily need to be liberation. The goal could simply be to move our bodies for thirty minutes a day for health reasons; it could be to meditate for seven minutes a day to calm our minds; it could be to chant a mantra 108 times to express devotion. The goal we choose should be attainable; otherwise we will get discouraged. If you can pick a small, attainable goal and reach it, then little by little your goals can become more subtle. For example, a goal of getting less angry, or not getting annoyed by small things. This will begin to happen naturally when you establish yourself in a daily discipline.

There is another definition of upaya that I quite like, and that is the one that is used in Jyotish, or Vedic astrology. An upaya in astrology is a remedy that the astrologer gives to someone who has a dosha, or defect, somewhere in their chart, that is causing them trouble or creating an obstacle in their lives. The astrologer may suggest to them that they repeat a particular mantra, wear a certain color, feed a particular type of animal, all on a specific day of the week, for a certain period of time, in order to remove this defect. Such an upaya is a remedy as ritual to remove an obstacle. In yoga, the biggest obstacle we have is an undisciplined mind that is attached to thinking about stuff all the time, that is attached to our opinions, judgments, and ideas, which lead us to create false identifications: I'm a Democrat, I'm a Republican, I'm a vegan, I'm an Ashtanga yogi, I'm an Iyengar yogi, I'm a bad person, I'm a great person. All of these are just thought patterns that we, for some reason, have chosen to believe. The practices of yoga, specifically the eight limbs of Ashtanga Yoga, are the remedies that we use to remove the defect of these created perceptions that bind us to a false sense of self, a

sense of self that does not bring satisfaction or happiness, or fulfill our inner purpose as individual human beings. Yoga removes the defect of a mind that is attached to its own rightness.

So, to sum up our exploration of the word *yoga*:

- \* Yoga comes from the verbal root yuj, which means "to yoke, or to join."
- It indicates a special type of concentration, where our minds become completely absorbed in the object we are focusing on.
- \* Yoga is an upaya, a remedy for alleviating identification with ideas and objects other than our inner awareness.
- \* Relation in yoga refers to the relationships we have with our bodies, emotions, thoughts, memories, and inner sense of self and purpose.
- \* The meditative practices of yoga reveal our innate goodness.
- \* Yoga addresses the three most important questions that we can ask ourselves in our lives: Who am I? What am I doing here? What should I do next?

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### THE EIGHT LIMBS

ASHTANGA YOGA LITERALLY MEANS the yoga of eight limbs, or parts, enumerated by the sage Patanjali. Though dating texts is a challenge due to a lack of record keeping in the ancient Indian philosophical traditions, the most recent agreed-upon dates when Patanjali wrote his text are around 200 C.E. In the Indian wisdom traditions, counting or enumerating different practices and groups of things is common; the eight limbs of yoga, the four Vedas, the 108 Upanishads, the twenty-

four categories of experience, and so forth. Enumerating things helps to keep our mind organized, so we have some guidance or focus when thinking about abstract ideas. The eight limbs have traditional meanings associated with them, but in this book I take a slightly lighter and more contemporary approach. The literal translation of Sanskrit words can be cumbersome, and literalism does not always help us progress or transform, or even to understand what a word is supposed to indicate. Much of the Sanskrit canon is written in allegory form. Translations cannot be done by dictionary alone, and this is where a lot of confusion about the meanings of the Vedas, the Upanishads, and Hinduism in general gets created.

Ideally, what we are looking for in a spiritual practice is transformation, not rigidity. In this book I discuss the eight limbs of yoga in relationship to the conscious choice we make to engage with our growth, honesty, discipline, and transformation. When looked at through this lens, the eight limbs become a way for us to check in with all of our levels of engagement, from the level of the world and the people around us to the way we relate to our inner being. After all, experiencing the world is one of the primary ways that we know we are alive; we live in a world that is interconnected, interdependent, and vibrantly diverse. If we live only in our own thoughts, we become cut off from experience, where we actually live.

The classical eight limbs look something like this:

 Yama—ethical codes of non-violence, truth, non-stealing, sexual restraint, and noncovetousness

- Niyama—personal observances of cleanliness, contentment, austerity, repetition of mantra, and surrender to God
- 3. Asana—the practice of postures
- 4. Pranayama—the practice of breath control
- 5. *Pratyahara*—withdrawal of the contact of the senses with the objects of the world
- 6. Dharana—sustained concentration
- 7. *Dhyana*—uninterrupted meditation
- 8. *Samadhi*—the experience of a non-difference between the seer and the seen

While these are accurate translations, and while it is important to be aware of the use of these technical terms, it's also quite important for us to understand, as the "end users" of the practice, how these limbs can act as guides. How do I take responsibility of myself as I engage in a spiritual practice? How do I apply the limbs so that I can transform, so that I can soften my rough edges? With that idea in mind, the eight limbs can be viewed through a lens of consciously choosing alternative behaviours, and look something more like this:

- 1. *Yama:* I consciously choose to make my interpersonal interactions thoughtful, loving, and respectful.
- 2. *Niyama*: I consciously choose to dedicate myself to my spiritual practices and disciplines.

- 3. *Asana:* I consciously choose to take care of my body and mind through practicing postures.
- 4. *Pranayama:* I consciously choose to regulate and balance my breath and nervous system through breathing practices.
- Pratyahara: I consciously choose to pay attention to the awareness that lies below and is the power behind my sense organs.
- Dharana: I consciously choose to direct my focus and attention, and to refocus myself when necessary.
- Dhyana: I consciously choose to move my mind toward absorption in my objects of focus and attention.
- 8. *Samadhi:* I consciously choose to shift my perception toward an experience of unity consciousness.

Regarding the first limb, ethical codes can sometimes cause mental rigidity, and have a variety of interpretations that are not always clear. However, it is important to have boundaries, and the yamas specifically help us set healthy boundaries, but we also have to make sure we are not imposing something on our psyche that we are not capable of living up to—and which then causes us to feel worse. I think that, in our day and age, it is better to take personal responsibility for adhering to these limbs in ways that are sustainable and suit our lifestyles. We can be creative with them; the only thing we have to check,

once in a while, is whether or not we are being authentic with them. If we are not, usually someone will point that out to us!

The first five limbs describe observances and physical practices, and the last three describe inner experiences of deep levels of concentration and absorption. The eight limbs as a whole are defined as practices that remove the impurities that cloud our field of consciousness and lead to deep levels of discrimination, which culminate in spiritual liberation from the bondage of our conditioned minds. The goal of yoga as presented in the *Yoga Sutras* is the discrimination of the seer from the seen, the distinction of the experiencer from that which is experienced, of subject from object, so that our awareness rests within its own self, and does not get lost by identifying with the changing nature of the world. This is what is called freedom in the yogic tradition.

Historically, India has been a land of oral tradition, and even today it still is in many ways. The teachings of yoga are varied, are sometimes contradictory in detail, and differ depending on location. North Indian yoga practices, for example, are quite different from South Indian practices. Patanjali gathered the teachings that were being used in his time and earlier, and put all of the teachings together in a systematic manner.

In each of the following chapters, I will discuss various ideas related to these limbs, including scientific discoveries, psychological insights, physiologic structures, and spiritual references from texts. The first chapters focus on foundational information about the first four limbs of Ashtanga Yoga, and the second half of the book dives into science. My hope is that by the time you reach the end of this book, you will be left with a well-rounded understanding of the inner mechanisms of yoga, one that uses

tradition as its base and contemporary language and scientific findings to sense its expanding relevance in today's world. Yoga is a contemplative practice—it arose from the mystical traditions of India in order to give human beings a framework for experiencing who we are and what we are doing here on this small little planet floating in space. However, the place where contemplation occurs is in our bodies, and so that is where we will begin.

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## THE PRACTICE OF POSTURES

PRACTICALLY SPEAKING, WHEN IT COMES to trying to figure out who we are and what our purpose is, our body is an obvious and easy place to start. Easy because we can see our body, we can feel it, and we can put it into different shapes. Sometimes starting with our body can be as simple as sitting down in a cross-legged position and doing nothing but breathing and listening. As children, we played with our bodies very freely, moving about, putting ourselves into different

positions, standing on our shoulders or doing cartwheels—I remember standing on my head against a wall when I was five, just to turn upside down. My best friend in elementary school used to do backbends, out of the blue, that were advanced yoga poses—somehow they came naturally to him. Kids love to do backbends and spin around in circles. We express ourselves through our bodies and through movement, and movement wires our nervous system (neurons) and our brain. We are born with pretty much all of the neurons that our brains need to function, though it is true that we also grow some new neurons later in life. Our neurons begin to wire themselves to each other as we grow and develop. Each new movement that an infant learns to do creates a pathway in the brain, which also reflects how information is processed in the brain.1 Our first movements include learning to lift our head and neck, roll over, crawl, and eventually walk. Many of these movements occur in yoga practice as well, and can help reinforce through our body how the brain processes information, which it does in the following directions:

- Back to front across the motor cortex, translating thought into action
- Up and down, from the bottom to the top of the brain, for emotional processing
- Side to side, through the corpus callosum, for comprehension

In yoga practices we find up and down and forward and backward movements in the sun salutations; in standing postures there are side-to-side movements; in seated poses and back-bending poses you also go up and down—when we decide that we need to look at our lives through a new lens, moving our bodies into new shapes will help to change our perspective on ourselves and life because we are directly using our bodies to influence the way we process incoming information; our worldview can easily be altered by putting ourselves into postures. Through neuroplasticity—or the ability of our nerves to wire together in a myriad of ways as we learn new things—we create pathways that lead us to have insights about our body, our emotions, our thought patterns, our relationships, and, most important, our sense of self. It's more than likely that this is what the yogis did when they began experimenting with postures, and that they did it with innocence, curiosity, and sincerity.

Concentration does not mean screwing the mind into a fixed state of focus, and the practice of postures does not mean forcing the body into complicated poses: both are about achieving calmness and filling the mind with a natural state of goodness, uncovering a natural, underlying trait that has been covered up by too much thinking. Postures, when done in a calm manner, help us toward this goal, because the mind and the body are not two separate things but one continuous process. The body, in yoga, is a manifestation of the mind. Our thoughts, feelings, and emotions are felt, held, and expressed through our bodies. We can see on someone's face if they are happy or sad; we can see in someone's posture whether they are feeling dejected or confident. Feelings and mental characteristics that we think of as existing in the mind exist equally

in the body, just as two thousand years ago, mental states were assigned to organs and other tissues. Hippocrates is credited with developing the theory of the four humors, which, though rejected by modern medicine, is still sometimes used to describe psychological states (melancholic, phlegmatic, choleric, and sanguine). Both Ayurveda, the Indian science of medicine, and traditional Chinese medicine have similar theories. Organs, emotions, thought patterns, and temperament are interconnected. By working with our bodies, we work with the mind, heart, and emotions at the same time.

The practice of yoga postures, called *asanas* in Sanskrit, is found in yoga texts from as long as two thousand years ago. The word *asana* is made up of two parts: *as*, "to sit," and *ana*, "breath." To do an asana is to literally sit with your breath, or to sit in a special way and breathe. When you sit with your breath, you sit in awareness. While the universe is a mystery, our bodies are equally mysterious, so it's natural for our body to be the first and most obvious place to begin an inward investigation into the great mystery of who we really are and where awareness exists within us. A famous verse from the fourteenth-century yoga text called the *Hatha Pradipika* is one of the earliest sources that says postures are the first and perhaps best place for new students to begin their inward journey:

Hathasya prathamam gatvad asanam purvam uchyate kuryat tadasanam sthairyam arogyam changalaghavam. 1.20

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