SUPERNORMAL

SCIENCE, YOGA, AND THE EVIDENCE FOR EXTRAORDINARY PSYCHIC ABILITIES

DEAN RADIN, PhD

FOREWORD BY DEEPAK CHOPRA

AUTHOR OF ENTANGLLED MINDS AND THE CONSCIOUS UNIVERSE
Purchase a copy of
SUPERNORMAL
at one of these retailers:
The strange thing about the paranormal—or the supernatural, the miraculous, and all other synonyms—is that no matter how often you prove it, it remains unproven. There have been hundreds of studies on clairvoyance and viewing at a distance, arising from age-old experience. Invariably, as Dean Radin patiently explains in this book, the experiments indicate that the experience of reading someone else’s thoughts, seeing a faraway event, or anticipating the future is real. Ever since science demolished faith as a way of knowing reality, facts are supposedly supreme, and when the same fact is repeatedly shown to be true, that is enough to change accepted reality. So why, in this case, have facts proved helpless?

The answer is complex, subtle, and yet as common as any ingrained prejudice. Facts don’t change minds as often as they confirm what the mind insists on believing. Therefore, the path from faith to facts is much more fragile than we like to think, and along the way are crouching adversaries—hidebound beliefs, stubborn biases, ad hominem attackers, skeptics who know in advance that X cannot be true, and the most elusive of adversaries, collective consciousness. Mass opinion can stop an unwelcome fact in its tracks, which has happened for centuries when miracles, wonders, magic, and the paranormal have been too uncomfortable to confront. Behind the cliché that you create your own reality there is a shadow: If you don’t create your own reality, it will be created for you.
FOREWORD

For this reason, Radin’s discussion of supernormal abilities, which were first explained in a systematic way in an ancient Indian text known as the Yoga Sutras of Patanjali, walks a double line. He presents the amassed evidence for all kinds of “superpowers” while nudging us persuasively to look at why something can be proven and unproven at the same time. This double track is the only sensible way to get people to change their minds, adhering to the familiar adage “A man convinced against his will is of the same opinion still.” Any number of controlled studies have demonstrated that when people are presented with facts that contradict their firmly held beliefs, they tend to ignore the facts; even more perversely, a sizable percentage of people will become more confirmed in their beliefs the more contravening facts you present.

The grassroots spiritual movement tagged generically as the New Age firmly divided society into believers and nonbelievers in all kinds of matters that Radin covers, and he is mature in approaching hot-button topics as a peacemaker, not another divisive voice. That’s a fortunate stance. When science already has ample evidence about phenomena that are firmly excluded from the official picture of reality, winning acceptance requires a grasp of human psychology. The art of persuasion is subtle, but it is also based on everyday experience:

Why prove to a man he is wrong? You can’t win an argument, because if you lose, you lose it; and if you win, you lose it. You will feel fine. But what about him? You have made him feel inferior, you hurt his pride, insult his intelligence, his judgment, and his self-respect.

This piece of practical psychology, written decades ago by Dale Carnegie, becomes relevant to the paranormal once you substitute the word scientist for man in the first sentence. The reason that facts are secondary in proving the validity of superpowers is that science, like any human enterprise, is overseen by individuals who have a stake in what they do, and that stake includes pride, intelligence, judgment, and self-respect, as Carnegie grasped.
In *Supernormal*, Radin calms our nerves and our prejudices at the same time, which levels the field. He is willing to call the path of yoga, which is held to develop supernatural abilities, “legendary,” but he also fixes his stern gaze on science’s self-contradiction when it refuses to accept findings that were arrived at through impeccable use of the scientific method. As he wryly notes, if science is to change in the direction of a new reality, teeth grinding has to lessen over time.

But why a new reality and what does it have to do with levitation, clairvoyance, invisibility, and many other claims that Patanjali made? The simple answer is that the old reality has worn itself out. In a chapter devoted to the Eightfold Path of Science (a play on the Eightfold Path of Buddhism), Radin looks at the principles that modern science is based upon and shows, quite accurately, that many were exploded by the quantum revolution a hundred years ago, and others have been steadily weakened. Once time and space were no longer absolutes, once physical objects were reduced to whirling clouds of energy and cause and effect turned into a game of probabilities instead of certainties, there was a radical shift in how reality is perceived.

This shift is amazingly consonant with the ancient seers of India, and for forty years quantum concepts have been woven into spiritual concepts, with voices ranging from a physicist like Fritjof Capra to a spiritual luminary like the Dalai Lama confirming the parallels. Radin adds his voice to a veritable chorus but with restraint. His talent lies in returning to basics and finding common ground. Well aware that few people outside the specialized field of ancient Indian studies will know of the *Yoga Sutras*, and who will blink to see Sanskrit terms like “sidhhi” and “samyama,” he travels adeptly between common experience (especially psi experiences of clairvoyance and subtle intuition) and the arcane of mysticism. The goal is to persuade the reader, not against his (or her) will but with willing cooperation. “Remember when X happened to you? Well, the same thing was known to the seers of yoga and has been shown to be valid in the laboratory.”

Radin’s aim isn’t to make his own version of reality the right one. Instead, he wants to show that there are more choices than people
generally realize, and some of those choices add greater power to the
mind, increase the potential for uncovering greater insight, and even-
tually turn the cliché of “You can create your own reality” into a living
experience. Radin doesn’t proselytize about which version of reality
anyone should choose, but in his evenhanded way he is also insistent
that some realities that seem outlandish to science, such as the reality
where a person can levitate, are not ridiculous, superstitious, or igno-
rant. Hundreds of observers have recorded in private diaries, public
statements, and sworn oaths that they saw Joseph of Cupertino levitate
(among the many levitating Catholic saints, this seventeenth-century
figure was alive almost fifty years after the death of Shakespeare), and
Radin makes note of it without apology or second-guessing.

Yet this book isn’t a wonder-working checklist from the past. It
goes beyond the worldview in which miracles are unquestioned and
the opposing worldview, in which miracles are preposterous, to find
reconciliation. To some extent, the judgment of Solomon is involved—
both sides have something to say and something to learn from each
other. (Reconciliation was on Einstein’s mind when he made his fa-
mous comment, “Science without religion is lame, religion without
science is blind.”) Clearly that’s not good enough, because reality
stares us in the face, and we must relate to its actuality. Endless argu-
ments over how to model reality—for science and religion are merely
models—are digressions.

With that in mind, Radin doesn’t lose sight of the radical mystery
that reality poses, not just to mystics but to hard-nosed realists among
the quantum pioneers. In the book’s closing pages, two stark state-
ments of fact are quoted. The first comes from Max Planck, who origi-
nated the quantum revolution:

I regard consciousness as fundamental. I regard matter as de-
rivative from consciousness. We cannot get behind conscious-
ness. Everything that we talk about, everything that we regard
as existing, postulates consciousness.

xiv
Planck felt that he was stating a fact that couldn’t be evaded (which turned out to be a poor prediction of how powerful evasion can be). Since Patanjali and all the Vedic seers espoused consciousness-based reality, Radin has subtly turned the tables. It’s not yoga’s job to prove that consciousness is the foundation of all experience; it’s science’s job to prove that it isn’t. Such proof is far from forthcoming. But Radin optimistically points out that a new generation of scientists, less liable to grind their teeth, is steadily coming to terms with consciousness as a factor that cannot be set aside, evaded, wished away, or treated with contempt.

To support his optimism, Radin quotes another quantum pioneer, Wolfgang Pauli: “It is my personal opinion that in the science of the future reality will neither be ‘psychic’ nor ‘physical’ but somehow both and somehow neither.” In other words, the issue is not either/or, but both/and, a point that this book emphatically declares. To take consciousness seriously is a step in the evolution of science, one that extends the “spooky” nature of the quantum world. Spookiness isn’t going away; neither are the world’s wisdom traditions. Two camps of visionaries, from the distant past and the fringes of the present, are advancing on us. Their message is about the conscious evolution of humanity, and as this perceptive book shows, when the two camps of visionaries merge, nothing will ever be the same.
CHAPTER 1

Introduction

Begin at the beginning and go on till you come to the end; then stop.
—Lewis Carroll

We begin with a simple question: Was Buddha just a nice guy?

Did Buddha’s teachings thrive because he was more attractive or charismatic than most, or because he was a great teacher and a tireless advocate of the poor? Or—and here’s the core question we’ll explore in detail—was it also because he was an enlightened being with profound insights into the nature of Reality, and because he possessed supernatural abilities?

We might ask the same questions about Jesus, Moses, Mohammed, Milarepa, or a host of other historically prominent figures associated with special illumination, wisdom, or grace. Did these people just sport great tans and know how to work a crowd, or did they understand something genuinely deep about the human condition, and our capacities, that is not yet within the purview of science?
If it’s too touchy to ask such questions about religious icons, then we may consider a more contemporary figure: The Dalai Lama regularly hosts discussions between scientists and Buddhist monks. Do the Western scientists who compete for a coveted slot at those meetings secretly believe that he’s a backward country bumpkin, and they’re just humoring him long enough to get their photo taken with a famous Nobel laureate so they can post it on their Facebook page?

Given the glowing praise about those meetings in books and articles authored by no-nonsense science journalists, and a growing list of collaborators hailing from Harvard University, Stanford University, the University of Zürich, the Max Planck Institute for Human Cognitive and Brain Sciences, and many others, it doesn’t seem so. But the Dalai Lama takes reincarnation and the legendary yogic superpowers (the siddhis) seriously. He’s claimed to see some of them in action, like oracles who accurately divine future tendencies. What does he know that most Western-trained scientists studiously ignore? Could the superpowers actually be real? If so, why haven’t we read about them in science magazines?

Such questions have been debated by scholars and by ordinary people for millennia. In modern times, for the most part science has ignored or denigrated the mere possibility of superpowers because such abilities are not easily accommodated by Western scientific assumptions about the capacities of the human mind. It is also sidestepped because any answer offered is guaranteed to seriously annoy someone. If you say yes, “Buddha was just a nice guy,” then Buddhists will hurl epithets at you. They may do this in a kind and compassionate way, but you will still have to duck. If you say no, “Buddha was something more,” then you will have to dodge objects thrown with equal gusto by both scientists and devotees of other religions. As a result, for the sake of safety the question is usually left unanswered.

There will always be some who are not satisfied with this soft deflection. Cynics feel intense discomfort when questions are raised about the possibility of “something more.” They shout accusations
of voodoo science, and they form posses to stop what they regard as ominous tides of irrationality from heading our way. Their concerns, bristling on the edge of hysteria, are not without justification. The promise of something secretly powerful, beyond the mundane, has been responsible for untold scams, conspiracies, and witch hunts throughout history. Civilization embraces superstitions and ignores rationality at its peril, so a legitimate case can be made that strenuous protection of hard-won knowledge is necessary.

But here’s the rub: It is precisely because civilization must advance beyond superstition that we are obliged to carefully explore our inquiry about the existence of supernormal abilities. The answer is relevant to basic scientific assumptions about the nature of human potential, to the relationships among science, religion, and society, and without hyperbole, to the likelihood that humankind will continue to survive.

In addition, all the nervous fussing one hears about the need to combat superstition, the wringing of hands about looming threats to rationality—such behavior positively drips with emotion, and that presents its own cause for concern. As British psychiatrist Anthony Storr wrote in Feet of Clay: A Study of Gurus, “Whether a belief is considered to be a delusion or not depends partly upon the intensity with which it is defended, and partly upon the numbers of people subscribing to it” (p. 199). When it comes to the possibility of superpowers, many are energetically engaged in either strident offenses or frenzied defenses, adding precious little reason to the debate.

But something new can now be brought to the discussion: empirical evidence. Laboratory data amassed over many decades suggest that some of what the yogis, mystics, saints, and shamans have claimed is probably right. And that means some of today’s scientific assumptions are probably wrong.

If you can’t stomach the thought that what you’ve learned in school might not be completely correct (in spite of the fact that textbooks are regularly revised), then rest assured: This does not mean that all the...
textbooks must be thrown away. Sizable portions of the existing scientific worldview are quite stable and will remain accurate enough for all practical purposes for a long time.

But it does mean that some of our assumptions, including a few fundamental ideas about who we are and the way the world works, are in need of revision. The newly developing worldview suggests, for example, that it is no longer tenable to imagine that the universe is a mindless clockwork mechanism. Something else seems to be going on, something involving the mind and consciousness in important ways.

After reviewing a substantial body of scientific evidence demonstrating that yoga can significantly improve physical health, New York Times journalist William Broad wrote in *The Science of Yoga*:

> While the science of yoga may be demonstrably true—while its findings may be revelatory and may show popular declarations to be false or misleading—the field by nature fails utterly at producing a complete story. Many of yoga’s truths surely go beyond the truths of science. Yoga may see further, and its advanced practitioners, for all I know, may frolic in fields of consciousness and spirituality of which science knows nothing. Or maybe it’s all delusional nonsense. I have no idea.9 (p. 222)

Does science really know *nothing* about the more exotic claims of yoga? By the end of this book we’ll have discovered that Broad didn’t dig deep enough. We actually do know a few things.

**Escape to Reality**

Many ancient teachings tell us that we have the capacity to gain extraordinary powers through grit or grace. Techniques used to achieve these supernormal abilities, known as *siddhis* in the yoga tradition (from the Sanskrit, meaning “perfection”2, 5), include meditation, ec-
Introduction

static dancing, drumming, praying, chanting, sexual practices, fasting, or ingesting psychedelic plants and mushrooms. In modern times, techniques also include participation in extreme sports, floating in isolation tanks, use of transcranial magnetic or electrical stimulation, listening to binaural-beat audio tones, and neurofeedback.

Most of these techniques are ways of transcending the mundane. Those who yearn to escape from suffering or boredom may dive into a cornucopia of sedatives and narcotics. Others, drawn to the promise of a more meaningful reality, or a healthier mind and body, are attracted to yoga, meditation, or other mind-expanding or mind-body integrating techniques.

Transformative techniques are potent, and like any power they are seductive and rife with pitfalls. Yoga injuries can occur when enthusiasm overcomes common sense.\(^\text{9}\) Meditation can lead to extreme introversion, depression, or spiritual hedonism.\(^\text{10}\) But the human need to transcend the humdrum is formidable and easily overrides caution. We see this in two of the more popular transformational techniques available today—alcohol and tobacco. These two mind-altering substances are tightly integrated into the economic engines of the modern world. The average household in the United States spends more just on tobacco products and its paraphernalia than on fresh fruit and milk combined, and more on alcohol than on all other nonalcoholic beverages combined.\(^\text{11}\)

The World Health Organization estimated that in 2007 the societal cost of alcohol-related diseases, accidents, and violence was over $200 billion a year in the United States alone.\(^\text{12}\) The purchase cost of alcohol was even greater, estimated at nearly $400 billion a year in 2008.\(^\text{13}\) There is a similar statistic for tobacco.\(^\text{14}\) The formidable human desire to escape, just considering these two products alone, costs society trillions of dollars a year. If we included the costs associated with the use and abuse of stimulants and recreational drugs, gambling, and the entertainment industry, the total expense is staggering, a sizable proportion of the world’s economy. Humanity seems desperate to escape.

With banks and stock markets on an uncertain roller-coaster ride
at the beginning of the twenty-first century, escaping outward has become too risky and too expensive for most people. What about escaping inward? Rarified minds tell us that they have seen something beautiful and glittering in our depths, something that promises a dramatic advancement in human potential. After seriously setting out on that path, most esoteric traditions say that we will eventually encounter genuine extraordinary phenomena, including the acquisition of supernormal powers.

**Yoga Superpowers**

Classic yoga texts, such as Patanjali’s *Yoga Sutras*, written about two thousand years ago, tell us in matter-of-fact terms that if you sit quietly, pay close attention to your mind, and practice this diligently, then you will gain supernormal powers. These advanced capacities are not regarded as magical; they’re ordinary capacities that everyone possesses. We’re just too distracted most of the time to be able to access them reliably.

The sage Patanjali also tells us that these siddhis can be obtained by ingesting certain drugs, through contemplation of sacred symbols, repetition of mantras, ascetic practices, or through a fortuitous birth. In the yogic tradition, powers gained through use of mantras, amulets, or drugs are not regarded with as much respect, or considered to be as permanent, as those earned through dedicated meditative practice.

The promise of these superpowers has little to do with traditional religious faith, divine intervention, or supernatural miracles. As Buddhist scholar Alan Wallace says,

In Buddhism, these are not miracles in the sense of being supernatural events, any more than the discovery and amazing uses of lasers are miraculous—however they may appear to those ignorant of the nature and potentials of light. Such con-
TEMPLATIVES CLAIM TO HAVE REALIZED THE NATURE AND POTENTIALS OF CONSCIOUSNESS FAR BEYOND ANYTHING KNOWN IN CONTEMPORARY SCIENCE. WHAT MAY APPEAR SUPERNATURAL TO A SCIENTIST OR A LAYPERSON MAY SEEM PERFECTLY NATURAL TO AN ADVANCED CONTEMPLATIVE, MUCH AS CERTAIN TECHNOLOGICAL ADVANCES MAY APPEAR MIRACULOUS TO A CONTEMPLATIVE.20 (P. 103)

YOGIC WISDOM DESCRIBES MANY VARIATIONS OF THE SIDDHIS. TODAY WE’D ASSOCIATE THE ELEMENTARY SIDDHIS WITH GARDEN-VARIETY PSYCHIC PHENOMENA. THEY INCLUDE TELEPATHY (MIND-TO-MIND COMMUNICATION); CLAIRVOYANCE (GAINING INFORMATION ABOUT DISTANT OR HIDDEN OBJECTS BEYOND THE REACH OF THE ORDINARY SENSES); PRECOGNITION (CLAIRVOYANCE THROUGH TIME), AND PSYCHOKINESIS (DIRECT INFLUENCE OF MATTER BY MIND, ALSO KNOWN AS PK).

FOR MOST PEOPLE, PSYCHIC ABILITIES MANIFEST SPONTANEOUSLY AND ARE RARELY UNDER CONSCIOUS CONTROL. THE EXPERIENCES TEND TO BE SPORADIC AND FRAGMENTARY, AND THE MOST DRAMATIC CASES OCCUR MAINLY DURING PERIODS OF EXTREME MOTIVATION. BY CONTRAST, THE SIDDHIS ARE SAID TO BE HIGHLY RELIABLE AND UNDER COMPLETE CONSCIOUS CONTROL; AS SUCH THEY COULD BE INTERPRETED AS EXCEEDINGLY REFINED, WELL-CULTIVATED FORMS OF PSYCHIC PHENOMENA.

THE MORE ADVANCED SIDDHIS ARE SAID TO INCLUDE INVISIBILITY, LEVITATION, INVULNERABILITY, AND SUPERSTRENGTH, ABILITIES OFTEN ASSOCIATED WITH COMIC BOOK SUPERHEROES. ALL THESE ABILITIES ARE ALSO DESCRIBED IN ONE FORM OR ANOTHER IN SHAMANISM AND IN THE MYSTICAL TEACHINGS OF RELIGIONS. IN FACT, MOST CULTURES THROUGHOUT HISTORY HAVE TAKEN FOR GRANTED THAT SUPERPOWERS ARE REAL, ALbeit RARE, AND SURVEYS TODAY CONTINUE TO SHOW THAT THE MAJORITY OF THE WORLD’S POPULATION STILL FIRMLY BELIEVES IN ONE OR MORE OF THESE CAPACITIES.21

MAINSTREAM SCIENCE IS NOT SO SURE. MANY SCIENTISTS AND SCHOLARS TRAINED WITHIN THE WESTERN WORLDVIEW REGARD SUCH POWERS NOT AS SUPERNORMAL CAPACITIES OF THE HUMAN MIND, BUT AS SUPERSTITIONS USED SOLELY TO PROMOTE RELIGIOUS FAITH.22
Who’s Right?

Who’s more likely to be correct about the siddhis—the world’s wisdom traditions or today’s scientific orthodoxy? We will explore this question not by recitation of amazing stories, or by analysis of religious arguments, or by examination of case reports (although we will look at a few). Rather, we’ll concentrate on controlled experimental evidence published in peer-reviewed scientific journals.

We will find that the scientific method is so powerful in discerning fact from fiction that a strong argument can be made in favor of some genuine siddhis. This is an example where scientific evidence trumps previously held assumptions, and it’s also a demonstration of the power of science to pull itself up by its bootstraps and to change from within.

This is not to say that this evidence has been warmly embraced. All organized holders of knowledge, whether in scientific or religious contexts, strenuously resist change. We will explore this resistance as well, as it will help us understand why we are only vaguely aware of our true potentials.

What’s Ahead

Our approach to this topic is summarized in Figure 1. It shows two basic epistemologies, or ways in which we can know the world—the mystical and the scientific. The mystical includes intuitive and non-rational ways of knowing, such as gut feelings, hunches, visions, and dreams. The scientific involves rational knowing that manifests in three primary forms: (1) empirical, including observation and measurement; (2) theoretical, development of explanatory models; and (3) debate, which includes the skeptical attitude and vigorous deliberations that help maintain the vitality of scientific inquiry.

Figure 1 shows the mystical overlapping science because, like sci-
Introduction

ence, mystical experiences have been repeatedly observed, modeled, and debated. Unlike science, mystical experiences have been reported for millennia, far longer than the few centuries of scientific history.

Figure 1. Ways of knowing.

The gray spot in the center of Figure 1 is a place where all methods of knowing overlap. That’s the scintillating boundary between the subjective and the objective, the mystical and the scientific. That’s where we’re headed.
Purchase a copy of

SUPERNORMAL

at one of these retailers:

amazon.com
Barnes & Noble Booksellers
Google Books
iBookstore
IndieBound