"Provides convincing evidence."

—DEEPAK CHOPRA, MD

REALITY

A PHYSICIST'S PROOF OF PSYCHIC ABILITIES

RUSSELL TARG

Foreword by Stephan A. Schwartz, author of Opening to the Infinite

THE REALITY OF ESP

A Physicist's Proof of Psychic Abilities

Russell Targ

Foreword by Stephan A. Schwartz



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A Matter of Proof

In a book that claims to present proof, it is worth considering what proof means exactly. Russell Targ's version, which he presents in the preface of this book, is as follows:

Scientists usually define *proof* as overwhelming evidence, so strong that it would be logically or probabilistically unreasonable to deny the supported argument. Proof establishes knowledge or the truth of a conclusion—such as aspirin preventing heart attacks, in which case the evidence was so strong that the National Institutes of Health stopped the experiments to avoid killing off the untreated controls.

What I present here is not a mathematical proof but rather published experimental evidence from Stanford Research Institute (SRI) and from laboratories across the country. Based on all these decades of data, I believe it would be logically and empirically incoherent to deny the existence of *some kind* of human ability for direct awareness or experience of distant events that are blocked from ordinary perception, such experience being commonly known as ESP. I say this while fully recognizing that all scientific knowledge is provisional and never immune from subsequent revision . . .

Is the overwhelming evidence Targ requires actually present in this book? You will read it and make your own determination, but consider this assessment of just the remote-viewing work of which Targ himself was co-investigator with fellow physicists Harold Puthoff and Edwin May:

In 1995 the US Congress commissioned the American Institutes for Research (AIR), a not-for-profit think tank based in Washington, D.C. with a long history of work in human performance and close government ties, to assess the reality of remote viewing in research the US government had previously funded.

To make the assessment, AIR selected the nationally recognized statistics professor Jessica Utts of the University of California, Davis, and the well-known skeptic Ray Hyman, a psychology professor at the University of Oregon and a fellow of the Committee for the Scientific Investigation of Claims of the Paranormal (now the Committee for Skeptical Inquiry). Both had previously written on this topic and were notably sophisticated in the issues involved. Utts, in 1991, had already addressed the question that Congress was asking in a paper published in the journal *Statistical Science*.

AIR asked both Hyman and Utts to produce an independent report by a fixed date. Utts complied and submitted her report by the deadline. Hyman did not. As a result, he was able to see her report before writing his own; and the approach he chose to take, when he did write, was largely a commentary on her analysis. To compensate for this inequity, AIR allowed Utts to write a response that was incorporated into the final document submitted to Congress. It is in this unplanned form of exchange that the essence of the two positions is revealed. Utts's initial statement is remarkable for its clarity. She wrote:

Using the standards applied to any other area of science, it is concluded that psychic functioning has been well established. The statistical results of the studies examined are far beyond what is expected by chance. Arguments that these results could be due to methodological flaws in the experiments are soundly refuted. Effects of similar magnitude have been replicated at a number of laboratories across the

world. Such consistency cannot be readily explained by claims of flaws or fraud. The magnitude of psychic functioning exhibited appears to be in the range between what social scientists call a small and medium effect. That means that it is reliable enough to be replicated in properly conducted experiments, with sufficient trials to achieve the long-run statistical results needed for replicability.¹

In responding to Utts's report, Hyman wrote:

I want to state that we agree on many [other] points. We both agree that the experiments [being assessed] were free of the methodological weaknesses that plagued the early... research. We also agree that the ... experiments appear to be free of the more obvious and better known flaws that can invalidate the results of parapsychological investigations. We agree that the effect sizes reported ... are too large and consistent to be dismissed as statistical flukes.²

This acknowledgment is important because what Hyman is conceding is that the way in which the kinds of laboratory experiments described in the AIR report had been conducted, and the way in which they were analyzed, is no longer a matter for dispute. In other words, the nonlocal perception required to carry out a remote viewing successfully cannot be explained away as some artifact resulting from how the data were collected or evaluated.

Consider also that universities and labs all over the world are now using four different protocols experimentally, those protocols being Remote Viewing, the Ganzfeld, Random Number Generation Perturbations, and Presentiment. The results collectively, by protocol, each show a six-sigma effect. Basically, that means that the odds are one in a billion that the results could have occurred by chance. The importance of this statistic becomes clear when we realize that one in a mere *twenty* is the threshold of significance.

So, that being true, why doesn't everyone embrace the reality of ESP? The effects are, for instance, considerably larger than the effect size for 81 mg aspirin therapy.³ Millions of men take without hesitation a small aspirin on a much smaller level of evidence, while many of those pills takers, particularly if they are scientists, would dispute the reality of ESP, even though the evidence of its reality is much better established. Why is this? The answer of course, as Targ discusses, is that it is not facts alone that change minds, particularly when accepting change requires accepting a new world view.

Max Planck, one of the towering physicists of the twentieth century who became a Nobel Laureate in 1918 for his seminal work on quantum theory, said, in an interview published in the British *Observer*, October 25, 1931: "A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it." That is the blunt *realpolitik* view of a veteran scientific pioneer who, himself, faced harsh criticism when he first advanced the concept of quantum mechanics—an insight now fundamental to modern physics. As Planck learned in his own life, facts do not always change minds, even when they are overwhelming.

It is not that materialist scientists oppose ESP because the evidence is flawed. In many cases they don't even know the research. In her very fine book, *Science*, *God*, *and the Nature of Reality: Bias in Biomedical Research*, biomedical science Professor Sarah S. Knox of the West Virginia University School of Medicine clearly frames this issue:

Since [critics contend] there is no plausible mechanism within a materialist frame of reference to explain them, paranormal phenomena can't possibly be valid. This is the same reasoning that the learned men of Galileo's day used when they refused to look in the telescope. This attitude is nowhere more evident than in the number of scientists who

are willing to volunteer as "expert" commentators on television programs about paranormal phenomena, astonishingly undeterred and unembarrassed by their complete lack of knowledge concerning the existing experimental data. These "experts" smile condescendingly as they explain that the phenomena under discussion can be explained by chance occurrence, brain abnormality, etc., depending on the topic at hand. Since the belief that causality can only be found in matter reigns supreme, there doesn't seem to be any requirement that these "experts" support their claims with actual data. They need only introduce the possibility that the same outcome might have been achieved through some other means, to convince their naïve audience that it is all "hocus pocus."

Along with Ed May, I once debated with Daniel Dennett, a prominent critic of ESP research, at an event produced by ABC News for station news staffs and station managers. We debated along for about thirty minutes, with Dennett making dismissive and disparaging remarks to anything Ed or I said, but always in generalities. Finally I said to him: "Let's pick an experiment we both know, and you tell me what is wrong with it, and I will respond." Without a moment's hesitation he shot back in the most deliberately condescending act I have ever witnessed, saying, "You don't think I actually read this stuff, do you?" There was a moment's silence, then laughter began, first as giggles, then as chuckles, and, finally, as guffaws. It suddenly dawned on Dennett what he had said. He blushed and sat down, and left as soon as he could.

As the British Society for Psychical Research puts it, "Opposition to psychical research is often against its implications and not the quality of its evidence." 5

Physicist Douglas Hofstadter of Indiana University makes the materialist point very explicitly. Speaking of a recent ESP study conducted by Cornell University psychology professor Daryl Bem, which Targ

discusses at length, he said, "If any of [Bem's] claims were true, then all of the bases underlying contemporary science would be toppled, and we would have to rethink everything about the nature of the universe." This is the core materialist objection. It is not, however, the view of physicists as a group, although the deniers would have you believe it is.

Physicist Olivier Costa de Beauregard observes, "Today's physics allows for the existence of so-called 'paranormal' phenomena. . . . The whole concept of 'non-locality' in contemporary physics requires this possibility." Physicist Henry Margenau concurs, saying, "Strangely, it does not seem possible to find the scientific laws or principles violated by the existence of [psi phenomena]. We can find contradictions between [their occurrence] and our culturally accepted view of reality—but not—as many of us have believed—between [their occurrence] and the scientific laws that have been so laboriously developed."8

J. P. Schwartz, Henry Stapp, and Olivier Costa de Beauregard, writing in *Philosophical Transactions of the Royal Society of Biological Sciences*, give a sense of where they see science moving, and it is not consistent with the materialist view Hofstadter proposes at all:

Neuropsychological research on the neural basis of behavior generally posits that brain mechanisms will ultimately suffice to explain all psychologically described phenomena. This assumption stems from the idea that the brain is made up entirely of material particles and fields, and that all causal mechanisms relevant to neuroscience can therefore be formulated solely in terms of properties of these elements. Thus, terms having intrinsic mentalistic and/or experiential content (e.g. "feeling," "knowing" and "effort") are not included as primary causal factors. This theoretical restriction is motivated primarily by ideas about the natural world that have been known to be fundamentally incorrect for more than three-quarters of a century.9

Princeton physicist and philosopher of science Thomas Kuhn, generally acknowledged to be the leading philosopher and historian of science in the twentieth century, coined the term *paradigm*, by which he meant the philosophical and theoretical framework within which a scientific discipline builds its theories, laws, and generalizations and conducts the experiments that test those theories and formulations. A paradigm is, in essence, the worldview of the discipline; when a consensus emerges, paradigm is achieved, and that discipline becomes, in Kuhn's terms, a science.

In his classic book The Structure of Scientific Revolutions, Kuhn explains that those who are drawn to science and who become scientists are members of a special community dedicated to solving certain very restricted and self-defined problems, all of which are defined by the prevailing, accepted worldview or paradigm. He defines the power of paradigms in their character as "universally recognized scientific achievements [in a given field] that for a time provide model problems and solutions to a community of practitioners" [emphasis added].10 For scientists who are immersed in it, a paradigm is their worldview. Its boundaries outline for them both what the universe contains and, equally important, what it does not contain. The paradigm explains how this universe operates. But Kuhn recognized that paradigms can and should change, because eventually they simply fail to explain observed phenomena. In time, anomalies accumulate that the paradigm cannot encompass, and these inadequacies force the paradigm into crisis. Kuhn saw this process of change as revolutionary—not evolutionary—saying, "Successive transition from one paradigm to another via revolution is the usual developmental pattern of mature science."11

There is nothing theoretical about what Kuhn is saying. It has happened. In 1900, Sir William Thomson, admitted to British peerage as Baron Kelvin in 1892 and one of the most important physicists of the nineteenth century, is reported to have said in an address to the

British Association for the Advancement of Science: "There is nothing new to be discovered in physics now. All that remains is more and more precise measurement." But a mere five years later, Albert Einstein published his paper on special relativity, and the simple rules of Newtonian mechanics used to describe force and motion for more than two hundred years were quickly discarded. Why? Because Einstein's worldview better described the observed universe.

This sense of paradigm shift comprises the essence of Targ's book. He recounts the accumulated anomalies that cannot be subsumed within the old materialist paradigm, which looks something like this:

- The mind is solely the result of physiologic processes.
- Each consciousness is a discreet entity.
- No communication is possible except through the defined physiologic senses.
- Consciousness dwells entirely within the time-space continuum.

In contrast, the emerging consciousness paradigm, which now more accurately describes our world, looks like this:

- Only certain aspects of the mind are the result of physiologic processes.
- Consciousness is causal, and physical reality is its manifestation.
- All consciousnesses, regardless of their physical manifestation, are part of a network of life that they not only inform and influence but also are informed and influenced by.
- Some aspects of consciousness are not limited by the space-time continuum.

In the end, though, you will read Targ's proofs and make up your own mind, giving your weight to both facts and beliefs. If you come

down on the side of facts, then the real importance of what Targ is saying can come through. Planck wrestled with the issues Targ discusses and in the British newspaper *The Observer* of January 25, 1931 said, "I regard consciousness as fundamental. I regard matter as derivative from consciousness. We cannot get behind consciousness. Everything that we talk about, everything that we regard as existing, postulates consciousness."

This research, with all the proof Targ has assembled (and there is more, besides), suggests that all life is interconnected and interdependent. There is an aspect of human consciousness that exists independent of time and space that is susceptible to volitional control; and there is an interconnection between all life forms that must be understood if the universal impulse humans feel toward the spiritual component of their lives is to mature properly. This assertion is not just a scientific fact, it is a worldview. If you accept it, you will make different life choices. Targ's proof is a beginning, not an end.

—Stephan A. Schwartz Senior Samueli Fellow The Samueli Institute October 2011

Preface

Perhaps you are surprised that I assert *proof* in the subtitle of this book. Scientists usually define *proof* as overwhelming evidence, so strong that it would be logically or probabilistically unreasonable to deny the supported argument. Proof establishes knowledge or the truth of a conclusion—such as aspirin preventing heart attacks, in which case the evidence was so strong that the National Institutes of Health stopped the experiments to avoid killing off the untreated controls.

What I present here is not a mathematical proof but rather published experimental evidence from Stanford Research Institute (SRI) and from laboratories across the country. Based on all these decades of data, I believe it would be logically and empirically incoherent to deny the existence of *some kind* of human ability for direct awareness or experience of distant events that are blocked from ordinary perception, such experience being commonly known as ESP. I say this while fully recognizing that all scientific knowledge is provisional and never immune from subsequent revision and that we probably misconstrue the fundamental nature of ESP—and of space-time as well.

In 1905, Albert Einstein proved that even Newton's venerable laws of motion are incomplete and not immune to change. In 1921, the great logician Ludwig Wittgenstein concluded his crystalline *Tractatus Logico-Philosophicus* with the admonition that "the solution to the riddle of life in space and time lies *outside* space and time." And in 1964, theoretical physicist John Stewart Bell proved mathematically that the results predicted by quantum mechanics could not be explained by *any* theory that preserves our usual ideas of locality. I discuss this nonlocal connectivity further in the introduction. Finally,

Preface

statistics professor Jessica Utts, at the University of California Davis (UC Davis), began her detailed 1995 CIA-commissioned assessment of our SRI remote viewing research by writing, "Using the standards applied to any other area of science, it is concluded that psychic functioning has been well established. The statistical results of the studies examined are far beyond what is expected by chance. Effects of similar magnitude have been replicated in laboratories across the world."

If it is possible for facts alone to convince a skeptical investigator of the reality of ESP, then I believe this book should do it.

The written material here is new except for chapter 8 on distant healing, which is revised and updated from my earlier book, *Limitless Mind*. And while many of the photographs and their introductions from my personal participation in SRI experiments have been published previously, they have never been organized all together as they are here.

As the cofounder of the SRI remote-viewing program, I consider this book to be the soundest and most thorough summary that anyone is likely to write about the work we did in that pioneering investigation. My intention is to provide a source book for future researchers trying to find out why we were so successful in the early decades of that research.

I hope that readers will find this book to be new and inspiring. Since it is likely to be my last book on the subject, I have tried to make it strong, comprehensive, and unapologetic and to use all the best available data.

—Russell Targ Palo Alto, California October 2011 www.espresearch.com

Because I am now concluding my eighth decade as a sentient being, I am sorry to report that most of the people whom I sincerely wish to thank for their contributions to my work have already preceded me into a new and different realm. I hope they approve of my physical and metaphysical construal of the world they helped me to put together.

First and foremost, I want to thank my father, William Targ, editor and publisher extraordinaire—editor-in-chief of G. P. Putnam's Sons and publisher of Mario Puzo's *The Godfather* and of other authors such as Simone de Beauvoir, MacKinlay Kantor, and James T. Farrell. He had a lifelong interest in the fringes of the knowable—from stage magic to the teachings of Helena Petrovna Blavatsky, the founder of Theosophy, whose biography he published in 1980. He introduced these to me and encouraged me to explore them and everything else. And he kindled my interest in science fiction from his large and eclectic library. Many times he took me to see the world's most famous magicians, including Henry Blackstone, Sr. known as the Great Blackstone, and he got us front row seats so that I could be appropriately mystified by the miracles occurring on stage in spite of my very poor vision.

My first spiritual teacher, Mollie Walker Margliotti, was in charge of the drafting room at Columbia University, where I was a graduate student in physics in 1954. She encouraged me to look for *prana*, bursts of vital life-sustaining energy in the sunbeams shining through her thirteenth-floor loft in the Pupin physics building, but I never saw any. She also took me—her twenty-year-old protégé—to meet the luminaries at the New York Theosophical Society, where I met Dora Kunz, the famous spiritual healer, co-creator of Therapeutic Touch, and president of the society. And then, thirty years later, Mollie reached out to me

when I was in the hospital recovering from cancer surgery. She had just finished her PhD dissertation on the great Buddhist logician Nagarjuna, who wrote at the time of Christ. He is considered by many to be the second Buddha. He created a type of four-valued logic in which most things we believe are revealed as neither true nor not-true, in exact contradiction to Aristotle and in complete agreement with modern physics. His thought is the basis of my book *The End of Suffering*.

Shortly after joining Stanford Research Institute in 1972, I met Dean Brown, nuclear physicist, computer pioneer, mystic, and Sanskrit scholar. My beloved friend Dean introduced me to the ancient magic in *The Yoga Sutras of Patanjali*, which he translated, and to the transcendent and unique wisdom on emptiness, known as *sunyata*, described in the *Prajnaparamita* (teachings of Buddha). Dean introduced me to a world of mysticism and scholarship that I would never have found without him.

It was my daughter and fellow researcher, Elisabeth Targ, who showed me the light of the fourteenth-century dharma master Longchen Rabjam, who directly propels the reader, including me, into the experience of timeless awareness in his book The Precious Treasury of the Basic Space of Phenomena. This was my first experience of a direct transmission from any source. I am sorry to say that Longchenpa was Elisabeth's last gift to me. She was a psychiatrist and gifted researcher, publishing her groundbreaking and successful investigations into distant healing for her AIDS patients in The Western Journal of Medicine in 1999. Elisabeth tragically left us in July of 2002.

My most significant experience of a direct transmission has been the flow of loving awareness made available to me by my peerless teacher Gangaji. She is a renowned American spiritual teacher in the tradition of Ramana Maharshi. She has had a pivotal influence on my life through her strong emphasis on self-enquiry and hence finally accomplished an insuperable task: teaching a New York Jew to

be quiet—the kind of quiet described in *advaita vedanta*. Gangaji is not to be considered as necessarily supporting or agreeing with any spiritual of metaphysical ideas expressed in this book, except perhaps that self-enquiry is a good idea.

This book would not have been written were it not for the stimulating conversations I recently had with Dr. Leonard Levine, my study partner and best friend from high school and college and now a computer science professor at the University of Wisconsin, Milwaukee. After a sixty-year friendship, we became reconnected on the very sad occasion of the death of his wife, Marilyn Gordon Levine, who also happened to be my birthday mate. On the phone to me, Leonard expressed amazement that "after all these years you are still involved with that ESP stuff." He suggested that, if there were really something to ESP, why didn't I write a book for nonbelievers? I have attempted to do that here. Thanks!

I also want to thank my friend and colleague Dr. Jane Katra, with whom I wrote two previous books. Her insights and understanding have stimulated my treatment of many ideas in this book as well. And thanks, too, to Professor Elizabeth Rauscher for her major contribution to our formulation of the eight-space geometric model describing a space-time metric in which psychic phenomena might occur.

In addition, I wish to express thanks to my good friend and editor Phyllis Butler for editing my original manuscript so that I might submit it for publication, as well as to Sharron Dorr, my tireless and meticulous editor and publisher at Quest Books, for seeing me through the painstaking task of getting this complicated book ready for publication. I also want to acknowledge Quest's acquisitions editor, Richard Smoley, for his support in preparing this book and selecting it for publication.

Finally, it is with deep gratitude that I want to acknowledge the tireless support and significant encouragement of my loving and patient

wife, Patricia Kathleen. I am very grateful for her cheerful generosity in putting aside her brushes and oil paints from time to time to keep me well fed and well loved during the many months I was chained to my keyboard writing and editing this book.

I shall not commit the fashionable stupidity of regarding everything I cannot explain as a fraud.

—C. G. Jung

Why I Believe in ESP and Why You Should, Too

This book is about psychic abilities. These abilities—which we all possess—offer a spacious mind that can change your life and your view of reality. Buddhists and Hindus have known this truth since before the time of Christ. The scientific evidence for it is now overwhelming, and modern physics has the means and tools to embrace it. Such abilities have many names: Psi, metaphysics, clairvoyance, and ESP (extrasensory perception)—the last being most familiar.

This book is for people who don't believe in ESP, as well as for those who are already familiar with psychic experiences. I will not ask you to accept anything for which there isn't excellent evidence. As a laser physicist with forty years experience in psychic research, I am convinced that most people can learn to move from their ordinary, ego-based mind-set to a much more interesting perspective—one that is not obstructed by conventional barriers of space and time. Eighth-century Buddhists understood this meditative skill as moving from conditioned awareness to spacious or naked awareness. Who would not want to try that?

In this book, I will show you how to take some surprising steps in the direction of this skill. It is what we in the twenty-first century call remote viewing. This ability is about learning how to quiet your mind and separate the visual images of the psychic signal from the uncontrolled chatter of the mind. I describe the laboratory data, the military applications, and the personal experiences of many remote viewers. I also cover perspectives from Buddhism to quantum physics. However, I will not be talking about having faith or devotion; eating porridge at the feet of your guru is not required here.

My firm conclusion from decades of ESP research is that we significantly misapprehend the physical and psychological nature of the interconnected space-time in which we live. As I sit on my deck in Portola Valley looking out across San Francisco Bay, I feel that I can reliably experience the beautiful and spacious scene before me. But on reflection I realize that this conviction is unfortunately based neither on a complete perception nor a correct understanding of what I am viewing. The internalized perception of nature before me is created, obstructed, and obscured by mental noise.

Mental noise is the ongoing chatter in our mind, together with our desire to name and concretize everything we see or experience. The great psychic Ingo Swann calls this noise analytical overlay (AOL) and says it comprises memory, imagination, and analysis—all of which we use to color and reconfigure our sights and experiences. The idea is that we give everything we experience all the meaning it has for us. Our assumption is that the outer world has no meaning inherent to itself. This illusion is what Buddhists call maya or samsara—and it can cause a lot of unnecessary suffering. In fact, it usually does. It is this misperception that makes me want to write a book about questioning reality and examining our potential for nonlocal awareness regarding both time and space.

Remote viewing is not a spiritual path. However, living in a spacious and interconnected world such as I'm describing, one tends to be more open and compassionate than in a state of mind that is isolated and insulated. In exploring what physicists call our *nonlocal* universe, we begin to feel that the Buddhists have it right as they say again and again that "separation is an illusion," that all is connected. In this world of entangled or extended minds, compassion seems to me to be a natural conclusion. It's an idea whose time has come—teaching that when one person suffers we all suffer, because the data show that our minds are frequently telepathically connected to one another. And today, there are more than two million Google pages devoted to information about "remote viewing," so at least some people are catching on to the idea that it is not difficult to do.

When I was first working on the development of the laser, about fifty years ago, I read a well-known psychology text that dealt briefly with psychic abilities, which was already a passionate interest of mine. The book was called *Human Behavior: An Inventory of Scientific Findings*. With regard to my favorite subject it said:

The state of research in parapsychology can be summarized as follows: A small number of investigators, roughly thirty or forty, who have done a large number of studies, are convinced that there is such a thing as extrasensory perception (telepathy, clairvoyance, etc). Whereas, the majority of psychologists, *most of whom have not studied the subject*, are not convinced. [emphasis mine].¹

When I first read this analysis, I thought it was some kind of sardonic joke. But unfortunately, it still pretty well represents the view of much of the contemporary scientific community with regard to

psychic abilities. In this book I hope to remedy that situation with analytical statistical data and first-hand laboratory observations. Some people like to read about miracles. Others prefer double-blind, published experiments showing at least five standard deviations from chance expectation (meaning that a particular event would happen by chance less often than one time in a million). I am offering here a manifesto from my personal experience with *both* kinds of evidence for ESP, based on two decades of government-supported investigations at Stanford Research Institute (SRI). I cofounded this program with laser physicist Dr. Harold Puthoff in 1972.

I believe in ESP because I have seen psychic miracles day after day in our government-sponsored investigations. It is clear to me, without any doubt, that many people can learn to look into the distance and into the future with great accuracy and reliability. This is what I call unobstructed awareness or remote viewing (RV). To varying degrees, we all have this spacious ability. I do not believe that ESP has metaphysical origins. I believe that it is just a kind of ability we strengthen by expanding our awareness to think nonlocally. It will become less mysterious as more of us become more skillful.

For example, while working for the CIA program at our lab in Menlo Park, California, our psychic viewers were able to find a downed Russian bomber in Africa, to describe the health of American hostages in Iran, and to locate a kidnapped American general in Italy. We also described Soviet weapons factories in Siberia and a Chinese atomic-bomb test three days before it occurred and performed countless other amazing tasks—all using the ability that our colleague Ingo Swann dubbed remote viewing.

My background is in experimental physics, psychology, and, as a young man, stage magic. In the 1950s, I was a graduate student in physics at Columbia University and became a pioneer in the development of the laser. However, one of the reasons I didn't complete that

degree was that I was spending too much time hanging around the magic shops on Forty-Second Street, studying mental magic and ESP—all compelling pastimes for me. Since then, I have published more than a hundred refereed technical papers dealing with lasers, laser applications, and ESP research in some of the best scientific journals. In addition, I was a senior staff scientist and project manager for more than two decades at Lockheed Missiles and Space Co. and at GTE Sylvania, where I specialized in laser communications and atmospheric windshear measurements with lasers, seeing what no man had seen before.

As a mid-course correction between these two laboratories (Lockheed and GTE), I was cofounder of the above-mentioned ESP research program at SRI. This twenty-million dollar, twenty-three year program launched during the Cold War was supported by the CIA, NASA, the Defense Intelligence Agency, Army and Air Force Intelligence, and many other government agencies. We developed the psychic perception technique we called remote viewing, which proved to allow a person to quiet his or her mind of mental chatter and accurately describe and experience places and events blocked from ordinary perception by distance or time. We published our highly significant psychic findings in Nature,² The Proceedings of the Institute of Electronic and Electrical Engineers (IEEE),3 and Frontiers of Time: Retrocausation Experiment and Theory, published by the American Institute of Physics.⁴ Our research has been replicated worldwide. And remote viewing is so easy to do that it has become a cottage industry. Hundreds of people are teaching it. Many of them are from the Army Psychic Corps that we created at Fort Meade, Maryland, in the 1980s. (This has little to do with the recent film The Men who Stare at Goats—in which a goat is psychically killed—although in one of our experiments a healer did accidentally kill a hypertensive rat while trying to lower its blood pressure psychically at a hospital in San Francisco.)

My psychic career involved two further outstanding events: First, my little post-SRI research group, Delphi Associates, made \$120,000 by psychically forecasting for nine weeks in a row the direction and amount of changes in the silver commodity futures market—without error. This successful forecasting of "December Silver" made the front page of the Wall Street Journal⁵ and led to a NOVA film in 1983.⁶ The other notable success was that our SRI lab was the first to identify and name the kidnapper of San Francisco heiress Patricia Hearst, who had been abducted from her home in Berkeley. At the Berkeley police station, I stood with psychic policeman Pat Price as he put his finger on the face of a man his ESP chose as Hearst's kidnapper. He did this from a police loose-leaf mug book of hundreds of photos. He then told the police where to go to find the kidnap car. When the kidnapper and the car were confirmed the following day, I knew I had just seen a "miracle." In all of these cases—as I will describe as we go along—there is absolutely no chance that it was just our lucky day!

There are presently four classes of published and carefully examined ESP experiments that are independently significant, with a probability of chance occurrence of less than one time in a million. In the course of the book I will present the data for these explorations as it occurred in these four classes:

1. Remote Viewing: Princeton University Professor Robert Jahn (Dean of Engineering) and his associate Brenda Dunn oversaw two decades of remote-viewing experiments with Princeton students as subjects. Students in the laboratory were asked to describe their mental impressions of what they saw at a site where someone was hiding at a randomly chosen distant location. These remote-viewing students had to fill out a thirty-item questionnaire to quantify their perceptions in this game of psychic hide-and-go-seek. Their findings—spanning several years and comprising a series of 411 trials—showed

that it is no harder to remote view hundreds of miles in the distance than it is to describe a person around the corner. Furthermore, it is no harder to describe a randomly chosen hiding place to be selected in the next hour, day, or week than it is to describe a hidden event underway at the same moment. Modern physics would describe these phenomena as nonlocal, in that they are experimentally found to be independent of space and time. Nonlocality and entanglement, which were first described by Erwin Schrödinger in the late 1920s, are now hot research topics in modern physics. This intriguing phenomenon is explained very clearly and amusingly by Anton Zeilinger, one of the world's leading experimentalists in quantum optics, in his 2010 book, Dance of the Photons: From Einstein to Teleportation. Zeilinger writes:

Entanglement describes the phenomenon that two particles may be so intimately connected to each other that the measurement of one instantly changes the quantum state of the other, no matter how far away it may be.... This nonlocality is exactly what Albert Einstein called 'spooky'; it seems eerie that the act of measuring one particle could instantly influence the other one.⁷

Robert Jahn's highly significant results were published in the *Proceedings of the Institute of Electrical and Electronics Engineers (IEEE)* in 1982^8 as a replication of our original SRI remote-viewing experiments published in the same journal six years earlier. These data show odds greater than a billion-to-one (1.8×10^{-11}) against chance expectation, strong evidence for the existence of nonlocal mind..

2. Distant Mental Influence: In the 1970s and 1980s William Braud and Marilyn Schlitz carried out nineteen successful experiments in what they called Distant Mental Influence on Living Systems (DMILS).9 In these experiments, a precursor to other distant-healing experiments

supported by the National Institutes of Health (NIH), the researchers showed convincingly that the thoughts of one person can affect the physiology (heart rate, skin resistance, etc.) of a distant person in another laboratory. Braud was able psychically to calm or excite the physiology of a person hundreds of feet away. Marilyn Schlitz is now the president of the Institute of Noetic Sciences in Petaluma, California. Braud, who is now teaching at the Institute for Transpersonal Psychology (ITP) in Palo Alto, California, has published twelve of his highly significant formal experiments in an excellent book called *Distant Mental Influence*. 10

- 3. *The Ganzfeld*: Over a span of thirty years several researchers at five different laboratories here and abroad carried out telepathy experiments in which one person was in a situation of sensory isolation called the *ganzfeld*, which is German for "whole field isolation." This person was asked to describe his or her ongoing mental impressions of an interesting video clip being watched *by a friend* in a separate part of the lab. In a published meta-analysis of seventy-nine studies comprising hundreds of individual trials, the probability that the results of the experiments were chance was almost one in a billion (2 x 10⁻⁸), meaning that the isolated receiver was extraordinarily successful in describing what his distant friend was seeing.¹¹
- 4. Feeling the Future: Recently, Professor Daryl Bem at Cornell University carried out a series of nine precognition experiments. In this remarkable five-year study, he showed that the future can affect the past in surprising ways. That is, the elephant you see on television in the morning can be the cause of your having dreamed about elephants the previous night: Saturday morning's elephant caused Friday's dream. We call that phenomenon retrocausality. For example, students in Bem's experiments reliably favor and choose one of four possible pictures of people, even though they are shown that one only after they

have made their conscious choice, and even though the one shown has been randomly selected only after the students have chosen.

In 2010, Bem's sixty-page paper presenting his meta-analysis of these retrocausal experiments was accepted for publication.¹² This meta-analysis shows a statistical significance of more than six standard deviations from chance expectation (1.3×10^{-11}) , which equals odds of more than a billion to one against chance. I am entirely convinced by this analysis—and so is distinguished statistics professor Jessica Utts from the University of California, Davis. In all his experiments, Bem's one thousand Cornell-student participants find themselves making free choices, guided again and again by the material they will see or experience in the future—but only after they have made their selection. Many people believe that precognition is the dominant phenomenon in all psychic functioning. All of Bem's experiments have been carried out and published since the 1962 publication of the annoying *Inven*tory of Scientific Findings that I mentioned earlier. From his recent precognition experiments at Cornell and my own successful forecasting of silver commodity markets, it appears that we have the ability to expand our perceived "now" to include as much of the future as we choose to accommodate.

During one experiment at SRI, the psychic Pat Price did not arrive for the scheduled trial. In this series of ten trials, we were trying to describe the day-to-day activities of Hal Puthoff as he traveled through Colombia in South America. Price had thus far been describing churches, harbors, markets, and volcanoes. We wouldn't receive any feedback until Hal returned, so I had no clues at all with regard to what he was doing. But, in Price's absence, and in the spirit of "the show must go on," I decided to undertake the remote viewing myself. Until then, I had been only an interviewer and facilitator for such trials. So, this was in fact my first remote viewing.

I closed my eyes and immediately had an image of an island airport. The surprisingly accurate sketch I drew is shown below in figure 0.1. A photo of the airport site is shown in figure 0.2.

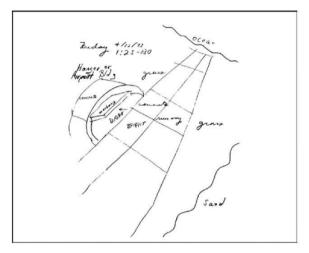


Figure 0.1. Sketch produced by physicist Russell Targ as a remote viewer in the absence of psychic Pat Price. Targ correctly saw and described "sand and grass on the right, an airport building on the left, and ocean at the end of a runway."



Figure 0.2. This photograph shows the target, which was an airport on an island in San Andres, Colombia.

What we learned from this trial is that even a scientist can be psychic when the necessity level is high enough. I am not making any claims for my own psychic prowess in this demonstration. If I have any ability in that direction, it is the same as that of anyone else who will sit in a chair and quiet his or her mind. Artists and musicians are generally much better at remote viewing than physicists or engineers, probably because the latter favor analysis, while artists are accustomed to using the nonanalytic right side of the brain—which greatly facilitates *psi*, a nonanalytic ability.

The term psi is derived from the Greek, Ψ (psi), the twenty-third letter of the Greek alphabet, and means "psyche" or "soul." Psi was coined in a parapsychological sense by biologist Bertold P. Wiesner and first used in print in 1942 by Robert Thouless. Parapsychologists prefer psi to ESP, because the term extrasensory perception implies the use of a sense that we don't normally have—an extra sense, whereas in actuality there is nothing extra about psi, even though it is often repressed and even though, in fact, it transcends our usual ideas of the limitations posed by time and space. Psi is a gift we all have. It represents an amazing and unique opportunity for spaciousness that I am happy to share with all who will join me in this great adventure.

I have a brilliant friend named Dan Kubert, now deceased, who was a great polymath and a retired Harvard math professor. He was for some years a shut-in because of his poor physical health, but he would call me several times a week to chat. A year ago he called to talk about a new proof for Fermat's Last Theorem—the subject of a book we had both read. I told him I was sorry but I couldn't talk with him that day because I was finishing a book I was reading for my book club. He immediately said, "That must be *Anna Karenina*"—a book which we had never discussed. I asked him why he named that particular book. He told me that, as soon as I mentioned I was reading a

book, he had a clear mental picture of the alluring Vivian Leigh as she appeared in the movie *Anna Karenina*. That was of course the book I was indeed reading. Dan was often startlingly psychic with regard to events in my life, both public and private. I attribute it to his very quiet lifestyle and his ability to focus his attention.

My point in telling this anecdote is that I believe each of us has the potential for vast psychic awareness that fills all of space-time. Not only does Hindu and Buddhist literature of the past two millennia describe the naturalness and availability of these abilities (see chapter 12), but also numerous laboratory experiments indicate that we have the opportunity to know anything upon which we fix our attention. In my experience and according to most other researchers, it appears that an experienced psychic can answer any question that has an answer. I cannot wait to see what the future holds when we fully open the doors of our perception!

When I say that I believe in ESP, it's not as if I am saying that I believe in life on other planets elsewhere in the universe, which, although a statistical probability, remains unproven. Nor is it like saying that I believe in the ideal of social democracy. For in this latter case—while I affirm the desirability of freeing people from fear, poverty, and injustice and the inalienable right of all people to food, education, and health care—I am aware that many educated people seem to think otherwise. I may believe them to be profoundly mistaken, but it's very hard to prove. To the contrary, however, when I say that I believe in ESP, it is as if I am saying that I believe in Maxwell's equations (relating electromagnetism and light), quantum mechanics, or lasers—all of which are surprising and hard to believe but nonetheless absolutely true and scientifically provable. Indeed, the experimental evidence for ESP from a century of research is so strong and overwhelming that reasonable people simply should no longer doubt its reality. That

powerful and undeniable evidence for extrasensory perception from laboratories around the world is the subject of this book.

For me, questioning reality and the exploration of psychic abilities is the essential next step in the greatest opportunity we have as a species—the evolution of consciousness.

I believe that we have completed our physical growth; our brains are big enough. I am proposing that transcending our own species is the next evolutionary step for us to take. We started first as animals looking for food; then we advanced to moderately self-aware humans trying to understand nature; and now we are finally ready to meet our destiny as beings aware of our spacious and nonlocal consciousness, transcending space and time and accepting the gift of psychic abilities. The suffering, wars, and confused search for meaning we are experiencing as a species are all manifestations of our inner selves sensing but not yet quite grasping our true nature. Our hardware is fine; it's our awareness of our psychic software that must be upgraded—and quickly, given the critical state of affairs. When we accomplish that, we will realize that, in consciousness, we are all one. That realization will make our stirrings of compassion feel much more natural than waging war and stealing from the poor.

In the next few pages I will sketch out what you will find in the rest of this book. Although there are more than a hundred active researchers in the Parapsychological Association, I have chosen to dwell principally on research for which I have a direct connection with the findings. That's not to slight anyone else's research. But over the years, what have convinced me are the miracles that I have personally seen in the lab, and so that's what I report on here. When we scientists get to see miracles often enough—week after week—we tie them up with a ribbon, call the package *data*, and publish it. I start with the origin of the SRI program on a wind-swept barrier island. And I end with

the best model I have for the physics underlying world-spanning psychic abilities.

My first chapter describes how the remote viewing program got started at SRI. It required the vision and imagination of Ingo Swann, the New York artist whose prodigious psychic ability spanned the solar system and helped develop our two-decade-long secret CIA program. At SRI, Swann taught us how to experience our psychic selves—our nonlocal awareness. He now lives in his spacious studio in New York City, surrounded by his extraordinary visionary paintings.

Chapter 2 describes my meeting at a NASA conclave on St. Simons Island with rocket-pioneer Wernher von Braun, astronaut Edgar Mitchell, and the NASA director Jim Fletcher. I had been invited to talk about Soviet research in parapsychology, and I took the opportunity to interest these luminaries in helping me initiate an ESP research program at SRI, where my friend Hal Puthoff worked, although there was not yet an ESP program in place. I had already built an ESP teaching machine, which I brought to the island. Von Braun scored excellently on the machine, and Mitchell encouraged Director Fletcher to give us some money to start our program. I proposed to teach astronauts how to get psychically in touch with their spacecraft. I further describe this program in chapter 5 and tell how the ESP Trainer became a free iPhone app.

Although it was Ingo Swann who taught us how to do remote viewing, it was the incredible psychic policeman Pat Price who identified Patricia Hearst's kidnapper and who later described a Soviet weapons factory and read Secret National Security Agency (NSA) files from a distance of 5000 km. Chapter 3 describes our work with Price and his remarkable exploits that drew the attention of the CIA, which funded our program for two decades.

My dear friend Hella Hammid was both a compassionate woman of the world and a hard-working *Life* magazine photographer. In

chapter 4, I explain how she joined our program as a "control" subject, after her promise that she had never done anything like psychic viewing. (The CIA wanted to see what inexperienced people could do with such psychic viewing.) For more than a decade, Hella turned out to be our most reliable practitioner, and I learned to teach remote viewing with her patient help.

After six years of research and applications at SRI, Army Intelligence wanted us to set up an East Coast Psychic Army Corps at Fort Meade, Maryland. In chapter 6, I describe the six inexperienced army volunteers to whom we taught remote viewing of distant locations. We accomplished this feat in one week each, with success at odds greater than one in ten thousand as compared with chance expectation.

The most successful remote viewer from Army Intelligence was Joe McMoneagle. He has written several books himself describing his prodigious, new-found psychic abilities. Chapter 6 illustrates some of his great successes in our program. Among many other things, Joe located a downed Soviet bomber in Africa and described the secret construction of a 500-foot Soviet Typhoon-class submarine in Russia. For his contribution to excellence in intelligence, Joe received a Legion of Merit award from the Army.

It is very difficult to *read* anything psychically, let alone stock-market numbers. But using "associative remote viewing," we were able to help a viewer forecast changes in the commodity market nine times in a row. Chapter 7 describes how we did this at odds of better than a quarter-million to one, eventually making \$120,000; I will also explain the procedure, so that you can do it (or at least try to do it), too.

William Braud pioneered laboratory research in distant mental influence. And my daughter, Elisabeth Targ, gained national attention for her successful medical research into distant healing of her AIDS patients. Chapter 8 covers a wide range of distant mental influences

from Elisabeth's compassionate healing to the Russian experiments in distant strangulation!

Everyone wants to know what survives bodily death. In chapter 9, I will set the stage and then tell you about two very convincing "ghost stories"—the subjects with which I had a peripheral connection and about the reality of which I am convinced.

How does it all work? Chapter 10 presents a physicist's view of psychic abilities. The evidence suggests that who we truly are is nonlocal eternal awareness, manifesting for a few years as a physical body in nonlocal space-time. I will present a comprehensive mathematical model of this nonlocal space-time that allows psychic functioning to occur, agrees with all the data, and does not generate any weird or nonexistent physics. This agreement holds true even as our nonlocal awareness transcends both space and time with equal ease.

This model should be contrasted with string theory, which is a model for subatomic physics that is presently hanging by a thread. String theory predicts that elementary particles are one-dimensional in extent, rather than zero-dimensional points in space. However, science is an empirical subject, meaning that all accepted theories must be based on evidence to support them. And after forty years of investigation by thousands of physicists, to date no version of string theory has ever made an experimentally verifiable prediction that could not be explained with another, simpler theory. By contrast, ESP rests on more than a century of experimental research from laboratories all over the planet. Thus, in my opinion, string theory is more airy-fairy than ESP.

Since starting the SRI program, I have been teaching remote viewing for almost forty years. I can hardly believe how successful the process is—worldwide—from fashionably dressed Italian women in Milan to American dowsers in bibbed overalls in Vermont. In chapter 11, I will offer simple instruction about how you and a friend can get

in touch with the part of your awareness that is psychic. I will tell you how to quiet your mind and learn to separate psychic signals from the mental noise of memory and imagination. You already have the ability—I'll help you use it.

Finally, chapter 12 will explore *naked awareness*, a term in Buddhism and Hinduism for that contemplative, meditative state most conducive to psychic experiences. The Buddhists and Hindus have known about all the psychic abilities discussed in this book for millennia. Centuries ago they described the power and importance of these abilities as part of a meditation practice or spiritual path—but warned us not to get attached to them. In this last chapter I will tell you about the spiritual as well as the scientific implications of psychic abilities, together with ethical implications of which we should also be aware.

The universe is not only queerer than we suppose, it is queerer than we can suppose.

— J. B. S. Haldane

Ingo Swann:

The New York Artist Whose Remote Viewing Spanned the Solar System

Why do I believe in ESP? Two of the main reasons come from my opportunities to sit with Ingo Swann in our laboratory in California. The first was when he drew pictures of a secret US cryptographic site in Virginia, and the second was when he gave a stunning description of a Chinese atomic bomb test three days before it happened, with only the geographic coordinates for guidance.

In the fall of 1972, Dr. Hal Puthoff and I started a psychic research program at Stanford Research Institute (SRI). We were both laser physicists born in Chicago in the 1930s, and we had both carried out research for a variety of US government agencies for many years. Our great partner and teacher in the SRI program was Ingo Swann, who was a uniquely creative and inspiring visionary painter from New York. He was also a remarkable psychic, whose wide-ranging investigations into little-traveled perceptual pathways allowed him to make important and astute contributions to our understanding of psychic abilities.

Ingo came to Hal's attention in early 1972 through recently published experiments in which Ingo was reliably able to raise and lower the temperature of thermistors (solid-state heat sensors) in distant

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thermos bottles. These experiments were conducted at the City College of New York by Professor Gertrude Schmeidler, whose most famous research showed conclusively that people who believe in ESP score slightly positively on ESP tests, while nonbelievers use their ESP to score slightly (but reliably) below chance. She coined the terms "sheep" and "goats" for believers and nonbelievers in this highly significant and often-replicated demonstration.

Ingo Swann's remarkable psychic ability enabled him to sit at his desk with us at SRI and describe distant MX missiles in their silos, a secret NSA listening post in Virginia, a future Chinese atomic bomb test, and the previously unknown rings of Jupiter, which he discovered psychically. It was Swann who introduced Hal and me—and the world—to what has become known as remote viewing. When I went to SRI in the fall of 1972 to start a research program with Hal, he had already carried out a remarkable psychic experiment with Ingo. In this trial, Ingo was psychically able to describe and perturb (affect) the operation of an almost perfectly shielded, super-conducting magnetometer buried in a vault in the basement of the Varian Physics Building at Stanford University. Swann was apparently able to increase and decrease the sine-wave decay frequency of a superconducting magnet that had been operating with perfect stability for more than an hour until Swann focused his laser-like attention on it! No one at Stanford was amused—particularly not the graduate student whose thesis depended on the stability of the system nor the navy, which was paying for it. This incident gave rise to the first of many governmental inquiries into our activities, especially regarding our ability to see or perturb things at a distance—things that were supposed to be secret, hidden or imperturbable—like superconducting gyroscopes on spacecraft such as the one employed in NASA's Gravity Probe B mission.

It is now forty years since that incredible experiment and the other ones alluded to above. I believe the perturbation of the magnetometer

Ingo Swann

was probably Ingo's doing, just as I have described it. However, as a life-long experimental physicist, I have seen all kinds of unexplainable and bizarre things happen, even to the best quality-controlled NASA space-ready systems. This phenomenon is called the brass hat effect. It is so well understood that many a general, in my experience, have come to expect failure upon their appearance in the lab! I personally had an ultra-reliable, high-power laser fail right in front of the general on delivery day. That's why my belief in remote viewing and ESP is not based on a single remarkable trial, but rather on hundreds of remarkable trials that we call an experimental series, conducted over decades. Our CIA contract monitor, Ken Kress, who was a PhD physicist, wrote up Ingo's activities at Stanford University and concluded his CIA report by saying, "These variations were never seen before or after Swann's visit." Of course, nobody publishes a scientific paper based on a single observation, and not surprisingly Hal and Ingo were not invited back to Stanford to try again.

Ingo and I are now both enjoying our seventy-seventh trip around the sun. This journey brings us together a least once a year when I visit New York City on my way to teach remote viewing at the Omega Institute in Rhinebeck, New York. It gives me great pleasure to get together with him near his home on the Bowery, enjoy a glass of wine, and reminisce about some of the amazing things we have done and seen. When I am sitting at a café with Ingo, I sometimes think of Jesus's assertion about "when two or more have gathered together in my name" as we recall the remarkable things that were accomplished in the SRI program. It was definitely a time of miracles.

And now, perhaps it is time for everyone to expand their awareness as Ingo and I and many others have learned to do. Our physical bodies and brains work excellently. I believe it is finally time for the human species to transcend the common conception of the limitations of space and time. *Nonlocal* or unobstructed awareness is unlimited

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by these ordinary constraints. We can experience nonlocal awareness when we come to realize that it is who we really are—our true nature. Time for another glass of wine.

In 1972 Hal and I began to investigate remote viewing in the way any physicist would—in controlled experiments. We put a laser in a box and asked Ingo to tell us whether it was on or off. We would ask him to describe pictures hidden in opaque envelopes or in a distant room. Ingo did all these tasks excellently, but he found them to be very boring. He told us many times that, if we didn't give him something more interesting to do, he was going back to New York and resume his life as a painter. (Ingo is a wonderfully talented visionary artist.) He said if he wanted to see what was in an envelope, he would open it—and to see into the next room, he would simply open the door. Since he could focus his attention anywhere in the world, he told us more than once, "These experiments are a trivialization of my ability!" So we developed more challenging tests for him. I show a contemporary photo of Ingo in figure 1.1.



Figure 1.1. New York artist and psychic, Ingo Swann, who taught us and the world how to do remote viewing.

Ingo Swann

In the actual chain of psychic events, Ingo taught us how do remote viewing, we taught the army, and the army taught the world. (In fact, Ingo coined the term *remote viewing*.) There are now more than a dozen ex-army men and women teaching remote viewing in the United States. We meet annually to talk about the latest developments in applied RV—investing in the stock market, looking for lost children, prospecting for treasure, etc.—at the conference of the International Remote Viewing Association (irva.org).

Project SCANATE

In response to Ingo's request for something more challenging than pictures in the next room, Hal asked a friend at the CIA to give him geographical coordinates of something interesting that Ingo might view remotely. The latitude and longitude were duly provided over the telephone to Hal—who, of course, had no idea where the coordinates were or to what they were related. Project SCANATE (Scanning by Coordinates) was based on Ingo's belief that he could describe any distant location, given only its coordinates!

Much of the laboratory procedures and findings that follow were first described in *Mind Reach*, a book that Hal and I coauthored in 1977 to offer a popular description of our early remote viewing research. Margaret Mead wrote the introduction for the book, pointing out that psychic awareness was not exactly a new idea for anthropologists who study and live with "primitive" people.

For the first SCANATE trial Hal and Ingo settled themselves in our clean and quiet workroom, and Hal recited the geographic coordinate numbers to Ingo. To begin the trial, Hal said to Ingo, "We have a target that needs a description." Hal wrote "Project SCANATE, May 29, 1973" on his notepad and started his tape recorder. This was the

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beginning of our "demonstration of ability" tests and the first scanning by coordinates. Hal writes of this episode:

Ingo closes his eyes and begins to describe what he is visualizing. Opening his eyes from time to time to sketch a map, Ingo says, "There seems to be some sort of mounds or rolling earth. There is a city to the north. I can see taller buildings and some smog. This seems to be a strange place, somewhat like the lawns you would find around a military base. But I get the feeling that there are some old bunkers around. It may be a covered reservoir. There must be a flag pole, a highway nearby, and a river to the far east. There is something strange about this place. Something underground. But I'm not sure." Ingo then draws a map (see figure 1.2).²

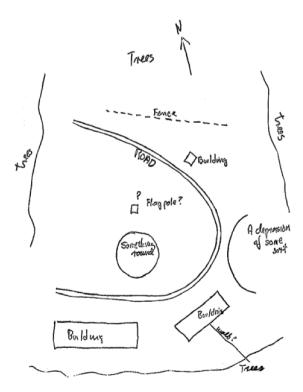


Figure 1.2. Drawing by Ingo Swann of East Coast target site, confirmed in every detail. The reward was our first contract.

Ingo Swann

Hal goes on to say, "Three weeks later, when we received a phone call from our challenger, we learned that, not only was Swann's description and drawing correct in every detail, but that even the distances, flag pole, underground bunkers, and directions on Ingo's map were correct." The target turned out to be a super-secret National Security Agency (NSA) listening post at the navy's Sugar Grove facility.

In chapter 3, I will describe how Pat Price was able to view the same target a day after Ingo had done so. Interestingly, the coordinates that had been given to Pat and Ingo were not for the facility, however, but actually for the CIA agent's vacation cabin a quarter mile over the hill from the NSA site. Yet Pat had not only viewed the facility instead, he had also been able to read the code words written on the file cabinets there. When the two CIA agents who came to investigate asked why he had so accurately described the "incorrect" location, Pat said, "The more intent you are on hiding something, the more it shines like a beacon in psychic space." (That should scare plenty of people.)

A decade later, I had an opportunity to describe this work to the USSR Academy of Sciences in Moscow. Tea cups shook in the lecture theatre when I told the assembled dignitaries that from our findings it appears that it is no longer possible to hide anything.

SCANATE into the Future

Thus Project SCANATE, created by Ingo Swann, was off to a successful start. During the twenty-year course of our SRI program, Ingo and the intelligence officers he trained described many operational targets for our government sponsors. One of the most striking was his detailed and completely correct 1975 viewing of a future but failed Chinese atomic-bomb test, identified simply from the geographic coordinates of latitude and longitude. All Ingo was told by the two CIA agents one Monday afternoon was, "We would like to know what is going

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to happen at these geographical coordinates this coming Thursday." I watched Ingo as he sketched his psychic view with colored pencils showing a line of trucks in the distance and a hemispheric pyrotechnic display of the failed bomb test, which he precognized and drew on that Monday—three days in advance of the actual test. The conflagration he described was the result of uranium burning in the air, not a mushroom cloud. We received our feedback from our contract monitor the next Friday and had a little celebration.

Teaching Remote Viewing

Ingo taught many army-intelligence officers how to do remote viewing. Having retired from the army, many of them now teach it to the general public, as I do. I teach it for the gratification of teaching something that students are really happy to learn. Because it is a natural ability and easy to learn, it's likely that a number of remoteviewing schools can show you how to do it. However, since none of them carry out double-blind trials or publish any information about their protocols, I contend that it's impossible to determine if any actual learning takes place—beyond just learning the process. This contention is the subject of an on-going, friendly conversation I have with the International Remote Viewing Association (irva.org).

I believe there is presently no evidence that there is any benefit to paying thousands of dollars to attend any such remote-viewing school—as compared with reading this book or Ingo Swann's wonderful book *Natural ESP*.³ But I could be wrong. The claims many of these schools make are confusing to the public, as implied by their very names—Controlled Remote Viewing (CRV®), Extended Remote Viewing (ERV®), and Technical Remote Viewing (TRV®), for example. Joe McMoneagle, who was one of the first, and by far the most successful of the army viewers, has also written an excellent book,

available

available

Ingo Swann

Ingo then started drawing the map shown in figure 1.4. The drawing correctly shows an island with many bays and inlets and a large mountain to the west, just where Ingo drew it. The lines on the drawing are from successive pieces of paper he required as his drawing became larger and larger. It took us two years to confirm the airstrip—which also turned out to be just where Ingo put it. The outstanding accuracy of Ingo's drawing ended our concerns about the hypothesis of doubters that Ingo had "memorized the globe." Based on his description of the secret NSA facility and the small airstrip and radar antennas on Kerguelen Island, we felt we could put this hypothesis to rest. But the real test would be to ask Ingo to describe something that was off the planet, where there are no possible maps to memorize. That was the nature of our next experiment.

By April of 1973 we were carrying out a wide variety of remote viewing trials with both Ingo and our newly discovered psychic police commissioner, Pat Price—whom I feature in chapter 3. Ingo had formulated clear ideas that our remote-viewing capabilities are limited only by the extent to which we can control and eliminate the mental noise that obscures the psychical signal. He felt that we all have the potential for *unobstructed awareness*, and he has devoted a good portion of his subsequent time to helping people experience that awareness, as I also have.

In order to access this awareness, however, we must first learn to recognize and quiet our "mental noise." One of the primary causes of this noise is the desire to name the things that we experience. Ingo was the first to elucidate, in contemporary signal-to-noise language, the problem of what he calls analytic overlay (AOL), which is his term for the tendency we have to name and try to grasp our initial psychic images. These initial fragmentary images are precious to us, as they are often the most descriptive thing that a new remote viewer is likely to see. But when the desire to name and thus make the images

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end of suffering. And, as you recall, it is also exactly what I teach beginning remote viewers. The idea is that an experienced remote viewer will have found comfort and peace of mind in shifting his focus away from his own ego and its gratification to more spacious realms instead. Remote viewing is not a religion or spiritual path, but that doesn't prevent us from discovering that our ego and its defenses are principle sources of our suffering. We notice that gaining awareness of our self can definitely change our experience of the story of who we think we are.

My experience is that suffering ends when I identify with my free and spacious nature, rather than with what I see in the mirror in the morning. The new idea here is that learning remote viewing can indeed lead to naked or timeless awareness—experiencing the universe without *naming* or grasping, just as Padmasambhava describes in his book.

From thirty-five hundred years ago the Hindu Vedas teach us that our awareness, or self (atman), is one with and unseparated from ultimate transcendent reality, the physical and non physical universe, or Brahman. We need experience no separation from any aspect of the universe in consciousness. More recently, the great physicist Erwin Schrödinger, who perfected quantum mechanics, has written in his thoughtful monograph What Is Life that the teaching that atman equals Brahman is the greatest of all metaphysical principles. He goes on to write about nonseparation: "Consciousness is a singular of which the plural is unknown. There is only one thing, and that which seems to be a plurality is simply a series of different aspects of that one thing produced by a deception (the Indian Maya). The same illusion is produced in a gallery of mirrors." You'll recall that psychic police commissioner Pat Price could see to Siberia from Menlo Park and that psychic artist Ingo Swann was able to describe the rings

Naked Awareness

around Jupiter before a NASA rocket arrived to provide certainty and confirm his perception.

This nonseparation in awareness is the meaning of the nondual *yin/ yang* symbol, which signifies among other things that in every male there is some female; in every black, there is some white. This worldwide symbol of nonduality arises from China in the fourteenth century BC. In the arena of ESP, we are primarily concerned with nonlocal mind. Very often when you make a distinction or a judgment, you are making an error. This is of course not a plea to give up all discernment.



Figure 12.1. The yin yang symbol is recognized worldwide as the earliest representation of nondual thought.

This nondual ontology is completely apropos for psi itself. I assert that ESP does not occur outside the realms of physics or normal reality. I reject the idea of the dualistic description of psi and consciousness as being outside of any possible physical description, just as the Buddhists reject defining super-knowledge as supernatural. Many people—including those who should know better—are more comfortable saying that psychic phenomena are dualistic (meaning that mind and body are fundamentally different) than they are saying, "I don't understand what is going on." We must learn to understand and internalize the nondual nature of what *reality* comprises. To put it simply, psi is a manifestation of our and the universe's nonlocal (nondual) nature. The steadfastly nondual Buddhist logician Nagarjuna, of two

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millennia ago, never tired of reminding us that most things are neither true, nor not-true.7 This is a high-level epistemological statement of our nondual nature. It is also contrary to Aristotle's famous teaching of the excluded middle, which teaches that nothing can be both true and not true. Sorry to say, Aristotle totally fails in the world of quantum mechanics. He taught that there is no middle ground. For example, a thing is either wood, or it's not wood. Of course, that makes a problem if the thing happens to be petrified wood. Similarly, we cannot usefully ask whether light is a wave or not a wave. However much we should wish it, that question has no answer. Light manifests both aspects; it is neither a wave, nor not a wave. Paradoxes appear when we are asking improperly formulated questions—questions that contain erroneous assumptions and paradoxes within themselves. Nagarjuna says that there cannot possibly be any paradoxes in nature; a seeming paradox only signifies our error in describing what we think we are looking at. Consciousness/mind is neither material nor nonmaterial; rather, it is multidimensional. Two thousand years after Nagarjuna, modern physicists would not say that Schrödinger's famous cat is neither alive nor not alive. They would equivalently say that the cat is in a superposition state of aliveness and not-aliveness—with exactly Nagarjuna's meaning. Schrödinger was well aware of Nagarjuna's fourvalued logic from his life-long study of Vedanta.

This spacious view of our consciousness is described in the metaphor of Indra's Net, which is a *holographic* description of *nonlocal awareness* from 200 AD. (In modern physics, the defining property of the hologram is that every tiny piece of the hologram contains a complete picture of the whole. A holographic picture of a three-dimensional object is usually a glass photographic plate comprising an interference pattern that will restore a complete three-dimensional image of the object when it, or a little piece of it, is illuminated with a laser.

Naked Awareness

In a nonlocal universe such as ours, the accuracy of our psychic awareness is found to be independent of space and time. Such spatial and temporal independence is what we mean by the *nonlocality* of the space in which we live. The idea of *entanglement* of separated quantum particles that were once together is now well accepted by physicists. Schrödinger first described this idea in the late 1920s. He saw it as *the* main difference between the new quantum theory and the old classical ways of describing nature. Entanglement has been elaborated upon by physicist David Bohm as "quantum-interconnectedness," which I described in chapter 10. In the Indra story, we are told that:

Far away in the heavenly abode of the great god Indra, there is a wonderful net which has been hung so that it stretches out indefinitely in all directions. In accordance with the extravagant tastes of deities, there has been hung a single glittering jewel at the net's every juncture, and since the net itself is infinite in dimension, the jewels are infinite in number. If we now select any one of these jewels for inspection, we will discover that in its polished surface there are reflected all the other jewels in the net, infinite in number. Not only that, but each of the jewels reflected in this one jewel is also reflecting all the other jewels, so that the process of reflection is infinite.9

This description of Indra's Net is what nonlocality looked like to the Buddhists around the time of Christ. We are the jewels in the net.

The Ten Buddhist Super-Powers (or Acceptances)

Patanjali was a Hindu philosopher and grammarian also living at the time of Christ. In his *Yoga Sutras*, he describes how we can get in touch with our divine nature by learning to stop our ongoing mental

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