

THE SCIENTIFIC AND SPIRITUAL IMPLICATIONS OF PSYCHIC ABILITIES

Russell Targ and Jane Katra, PhD

Russell Targ is a physicist and cofounder of the Stanford Research Institute's investigation into psychic abilities. A prolific author, he pursues extrasensory perception research in Palo Alto, Calif, and publishes special editions of classic books in consciousness research. **Jane Katra** holds a doctorate in health education and works as a spiritual healer and "immune system coach," writing and taking part in consciousness research. She has taught nutrition and health classes at the University of Oregon and therapeutic touch at Lane Community College in Eugene, Ore.

Since ancient times, spiritual teachers have described paths and practices that a person could follow to achieve health, happiness, and peace of mind. Considerable recent research has indicated that any sort of spiritual practice is likely to improve one's prognosis for recovering from a serious illness. Many of these approaches to spirituality involve learning to quiet the mind rather than adhering to a prescribed religious belief. These meditative paths include the mystic branches of Buddhism, Hinduism, and Christianity; Kabbalistic Judaism; Sufism; and many others. What is hinted at in the subtext of these teachings is that as one learns to quiet his or her mind, one is likely to encounter psychic-seeming experiences or perceptions. For example, in The Sutras of Patanjali, the Hindu master tells us that on the way to transcendence we may experience all sorts of amazing visions, such as the ability to see into the distance, or into the future, and to diagnose illnesses and to cure them. However, we are told not to get attached to these psychic abilities—they are mere phenomena standing as stumbling blocks on the path to enlightenment. In this article, we describe the laboratory evidence for some of these remarkable phenomena and their implications for science, mental health, and peace of mind. (Altern Ther Health Med. 2001;7(3):143-149)

What do the spiritual healer, the mystic, and the scientist all have in common? The answer is that they are all in touch with their interconnected and nonlocal mind. In my (R. T.'s) work with remote viewing research at Stanford Research Institute, we observed the inflow

of information that is the hallmark of psychic perception. We also saw an outflow of intention that plays a part in facilitating distant healing. Our purpose here is to show that the inflow and the outflow reside on either side of the quiet mind, and that self-awareness can arise between these 2 flows. We have also noticed that narrowly focusing on phenomena, and the seeming omniscience available from extrasensory perception (ESP), may be just a trap that prevents us from discovering who we really are and what we should be doing. However, as my coauthor Jane Katra and I describe in *The Heart of the Mind*,¹ we are confident that whenever any one person demonstrates an ability beyond the ordinary, it can be seen as an inspiration to the rest of us, as an indication of an immense and still largely undeveloped human potential.

The scientific and spiritual implications of psychic abilities illuminate our observation that we live in a profoundly interconnected world. The most exciting research in quantum physics today is the investigation of what physicist David Bohm calls "quantum-interconnectedness," or nonlocal correlations.² It has been demonstrated repeatedly in laboratories around the world that quanta of light that are sent off in opposite directions at light speed maintain their connection to one another, and that each little photon is affected by what happens to its twin, many kilometers away.^{3,5} This surprising coherence between distant entities is called nonlocality. In writing on the philosophical implications of nonlocality, physicist Henry Stapp of the University of California, Berkeley, says that these quantum connections could be the "most profound discovery in all of science."⁶

Psychic abilities and remote viewing are demonstrations of our personal experience with such nonlocal connection in consciousness. Mind-to-mind connections that transcend our ordinary understanding of space and time give us expanded awareness, which is entirely consistent with life in a nonlocal world. This connection is what physicists mean by nonlocality. To the healer, it gives rise to what Larry Dossey⁷ refers to in his book *Reinventing Medicine* as Era III healing of a distant patient through the intentionality of the healer. Our knowledge of these remarkable abilities allows us to awaken each morning in wonder at the fact that our expanded awareness is not limited by either time or space. And it should have become clear to us by now that although we reside in bodies, there is more to us than skin and bones. Our quiet moments of self-inquiry can reveal what that "more" is.

Reprint requests: InnoVision Communications, 169 Saxony Rd, Suite 104, Encinitas, CA 92024; phone, (760) 633-3910 or (866) 828-2962; fax, (760) 633-3918; e-mail, alternative.therapies@innerdoorway.com.

REMOTE VIEWING

Stanford Research Institute (SRI) conducted investigations into the human mind's capacity for expanded awareness, also called remote viewing, in which people are able to envision distant places and future events and activities. For 2 decades, SRI's research was supported by the Central Intelligence Agency (CIA) and other government agencies. I was cofounder of this once secret program, which began in 1972. Our task was to learn to understand psychic abilities and to use these abilities to gather information about the Soviet Union during the Cold War. We have found from years of experience that people can quickly learn to do remote viewing and can frequently incorporate this direct knowing of the world—both present and future—into their lives.

Considering that these phenomena are thought in many circles not to exist, we certainly know a great deal about how to increase and decrease ESP's accuracy and reliability. Remote viewers can often contact, experience, and describe a hidden object, or a remote natural or architectural site, on the basis of the presence of a cooperative person at the distant location, or when given geographical coordinates or some other target demarcation, which we call an address. Shape, form, and color are described much more reliably than the target's name, function, or other analytical information. In addition to vivid visual imagery, viewers sometimes describe associated feelings, sounds, smells, and even electrical or magnetic fields.

Blueprint accuracy occasionally has been achieved in these double-blind experiments, and reliability in a series has been as high as 80%. For example, the authors recently achieved 11 hits out of 12 trials in such a series.⁸ With practice, people become increasingly able to separate out the psychic signal from the mental noise of memory, analysis, and imagination. Targets and target details as small as 1 mm can be sensed. Again and again we have seen that the accuracy and resolution of remote viewing targets are not sensitive to variations in distance. In 1984 I organized a pair of suc-

cessful 10000-mile remote viewing experiments between Moscow and San Francisco with famed Russian healer Djuna Davitashvili. Djuna's task was to describe where our colleague would be hiding in San Francisco. She had to focus her attention 10000 miles to the west and 2 hours into the future to describe his location correctly. These experiments were performed under the auspices and control of the USSR Academy of Sciences.

Ten years earlier, in 1974, my colleague Hal Puthoff and I carried out a demonstration of psychic abilities for the CIA in which Pat Price, a retired police commissioner, described the inside and outside of a secret Soviet weapons laboratory in the far reaches of Siberia with only the geographical coordinates of latitude and longitude for reference (ie, with no on-site cooperation). This trial was such a stunning success that we were forced to undergo a formal congressional investigation to determine whether there had been a breach in national security. Of course, no such breach was ever found, and we were supported by the government for another 15 years. As I sat with Price in these experiments at SRI, he made a sketch (Figure 1) to illustrate his mental impressions of a giant gantry crane that he psychically "saw" rolling back and forth over a building at the target site.

Data from our formal and controlled SRI investigations were highly statistically significant (thousands of times greater than chance expectation), and have been published in the world's most prestigious journals, including *Nature*, *Proceedings of the Institute of Electrical and Electronics Engineers (IEEE)*, and *Proceedings of the American Association for the Advancement of Science (AAAS)*.⁹⁻¹¹ The 20 years of remote viewing research conducted for the CIA is outlined in *Miracles of Mind: Exploring Nonlocal Consciousness and Spiritual Healing*, coauthored by Russell Targ and Jane Katra.¹²

One day, while we were working with Pat Price, he did not arrive for the scheduled experiment. So, in the spirit of "the show must go on," I spontaneously decided to undertake the

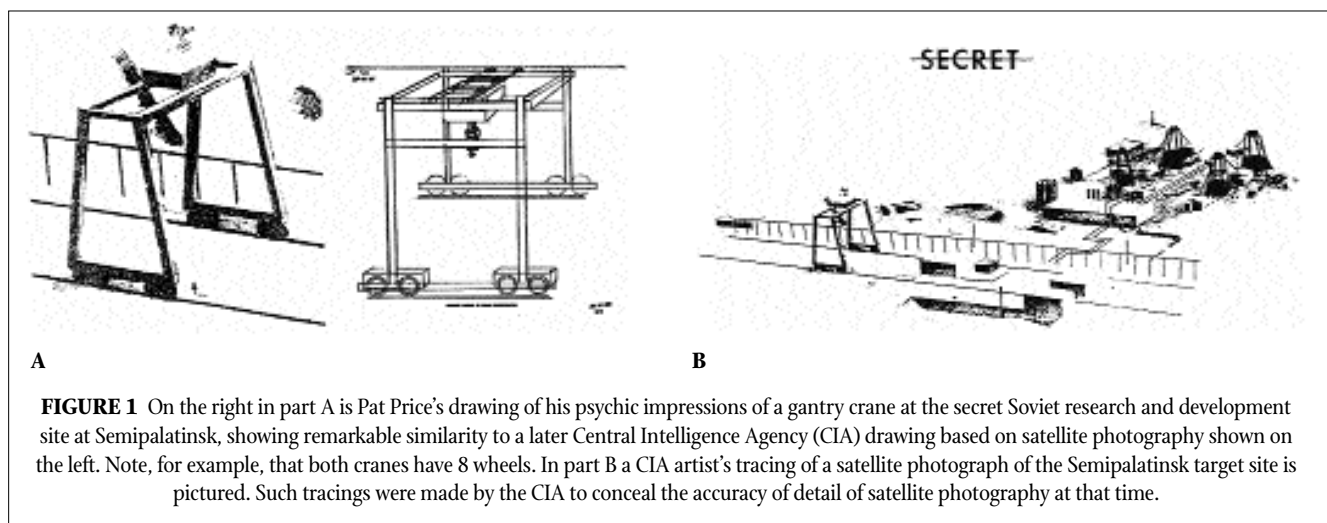


FIGURE 1 On the right in part A is Pat Price's drawing of his psychic impressions of a gantry crane at the secret Soviet research and development site at Semipalatinsk, showing remarkable similarity to a later Central Intelligence Agency (CIA) drawing based on satellite photography shown on the left. Note, for example, that both cranes have 8 wheels. In part B a CIA artist's tracing of a satellite photograph of the Semipalatinsk target site is pictured. Such tracings were made by the CIA to conceal the accuracy of detail of satellite photography at that time.

remote viewing myself. Before that, I had been only an interviewer and facilitator for such trials. In this series, we were trying to describe the day-to-day activities of Hal Puthoff as he traveled through Colombia, South America. We would not receive any feedback until he returned, and I therefore had no clues at all as to what he was doing. I closed my eyes and immediately had an image of an island airport. The surprisingly accurate sketch I drew is shown in Figure 2. What we learned from this trial is that even a scientist can be psychic, when the necessity level is high enough.

Recent research in areas as different as distant healing and quantum physics are in alignment with the oldest spiritual teachings of the sages of India, who taught that “separation is an illusion.” This concept suggests that there is no distance for consciousness, and that we have an intuitive inner knowledge of time and space. In fact, we now know that information from the future regularly filters into our dreams—one could fairly say that these precognitive dreams indicate that the future affects our past. In other words, our dream tonight may be caused by an event that we will experience at a later time, strongly violating our ordinary understanding of causality. In our work together as physicist and spiritual healer, we have been exploring how our mind’s ability to transcend the limits of space and time is linked to our now-documented capacity for distant healing.

We do not yet know the physics underlying psychic abilities. But researchers in the field of parapsychology agree on the undeniable observation that it is no more difficult to psychically describe a picture or an event in the near future than it is to describe such a target in the present, when it is hidden from view.¹³ It is as though our bodies reside in the familiar 4-dimensional geometry of Einstein’s space-time, while our consciousness has access to another aspect of this geometry that allows us to find a mental path of zero distance to seemingly distant locations. This is how a physicist expresses such an idea, while mystics for the past 3 millennia tell us from their experience that “separation is an illusion—and we are all one in spirit, or consciousness.” From experimentation in many laboratories, it is clear that we significantly misapprehend the physical nature of the space-time in which we reside. It is this knowledge, together with our experience, that drives our passion to understand and learn more about the universe and the transformational opportunities offered us.

Joseph Campbell is famous for teaching that our lives are fulfilled only when we “follow our bliss.” For Thomas Aquinas, this passion was pursued through conscious reasoning. He wrote that “[t]he ultimate human felicity is found in the operation of the intellect, since no desire carries us to such heights as the desire to understand the truth. Indeed all our desires for pleasure or for other things can be satisfied, but the desire to understand does not rest until it reaches God.”¹⁴ However, those who truly understand the truth of God tell us that God cannot be understood, only experienced.

DISTANT MENTAL INFLUENCE OF LIVING SYSTEMS

More than 30 years of investigations clearly show that one

person’s thoughts can affect the physiological functioning of another distant person. We do not yet understand the causal mechanism involved, but the results are indisputable, and have obvious implications for our ability to facilitate healing in others. This healing, whether in the laboratory or in a clinical setting, is considered to be nonlocal, because the efficacy of the healing or mental influence is independent of distance. We take for granted the calming effects that a mother’s gentle cooing has on her distressed infant, not really thinking about the effects of her soothing intentions. How do we know that our thoughts affect others? A significant body of research now exists demonstrating that one person’s focused intentions can directly influence the physiological processes of someone far away. “Do unto others as you would have them do unto you” takes on new meaning when you realize we are all truly connected, as the following research studies show.

Exciting experiments in the area of distant mental influence of living systems (DMILS) have been carried out by psychologist William Braud at the Institute of Transpersonal Psychology in Palo Alto, Calif, and anthropologist Marilyn Schlitz, research director at the Institute of Noetic Sciences in Novato, Calif.^{15,16} They have repeatedly shown that if a person simply attends fully to a distant person whose physiological activity is being monitored, he or she (acting as a sender) can influence the distant person’s autonomic galvanic skin responses. In 4 separate experiments involving 78 sessions, one person staring intently at a closed-circuit television monitor image of a distant participant influenced the remote person’s electrodermal (galvanic skin) responses. In these cases, no techniques of intentional focusing or mental imaging were used by the influencer. He or she simply stared at the “staree’s” image on the video screen during the 30-second trials that were randomly interspersed with control periods.

In these studies, Braud and Schlitz discovered something even more interesting than this telepathically induced effect on our unconscious system: they found that the most anxious and introverted people being stared at had the greatest magnitudes of unconscious electrodermal responses. In other words, shy and introverted people reacted with significantly more stress to being stared at than did sociable and extroverted people. Quiet introverts may possess, or have developed, a sensitivity of consciousness that others are less aware of. This experiment gives scientific validation to the common human experience of feeling stared at and turning around to find that someone is, indeed, staring at you.

We are all familiar with the idea of premonition, in which one has an intuitive apprehension of something about to happen in the future—usually something “bad.” There is also the experience of presentiment, wherein one has an inner sensation—a gut feeling—that something strange is about to occur. An example would be when you suddenly stop on your walk down the street because you feel “uneasy,” only to have a flower pot fall off a window ledge and land at your feet instead of on your head. That, of course, would be a useful presentiment.

In the laboratory, we know that showing a frightening picture to a person produces a significant change in that person’s

physiology. His or her blood pressure, heart rate, and skin resistance all change. This fight-or-flight reaction is called an “orienting response.” Researcher Dean Radin, at the Institute of Noetic Studies in Petaluma, Calif, has shown in his work that this orienting response is also observed in a person’s physiology a few seconds before the person views the scary picture. Although electromagnetic theory would describe this as an advanced wave, we believe this information arises directly from timeless nonlocal consciousness.

In balanced, double-blind experiments, Radin has demonstrated that just before viewing scenes of violence or sexuality, one’s body apparently reacts to defend itself against the oncoming insult or surprise. However, such strong anticipatory shock reactions did not precede the viewing of a picture of a wastebasket or a flower garden. Of course, fear is much easier to measure physiologically than is bliss. Here, it seems, a person’s direct physical perception of the shocking picture, when it occurs, causes him or her to have a unique physical response 5 seconds earlier. Your future is affecting your past. These intriguing experiments are also described in Radin’s comprehensive book, *The Conscious Universe*.¹⁷

DISTANT HEALING

From the dawn of history, certain individuals have been recognized as possessing special healing gifts. The pharaohs of ancient Egypt viewed healers as revered advisers. In fact, healers founded the world’s great religions: Gautama Buddha, Jesus of

Nazareth, and the prophet Muhammad all were gifted healers. The earliest Christians were primarily a healing community, and centuries before Jesus the Hebrew prophets Elijah, Elisha, and Isaiah were acknowledged healers. Moses is said to have healed many Israelites from serpent bites.

Medicine men and healing shamans throughout Africa, Asia, and the Americas held some of the most esteemed positions in their tribes. By contrast, the progression of Western thought has largely ignored the broad range of mind-to-mind healing that has worked in other cultures. With our reverence for Humanism and Reason, we have much to relearn about the role of consciousness in healing. Only now are we realizing the power of the mind to heal through the scientific method. In recent years, a number of pioneering experiments have explored the role one person’s consciousness may have on another person’s health.

In his 1993 book *Healing Research*,¹⁸ psychiatrist Daniel J. Benor, MD, examined more than 150 controlled studies from around the world. He reviewed psychic, mental, and spiritual healing experiments done on a variety of living organisms, including enzymes, cell cultures, bacteria, yeasts, plants, animals, and humans. More than half of the studies demonstrated significant healing.¹⁸

An important study by Fred Sicher, Elisabeth Targ, and associates describing healing research done at California Pacific Medical Center was published in the December 1998 issue of the *Western Medical Journal*.¹⁹ The article describes the positive

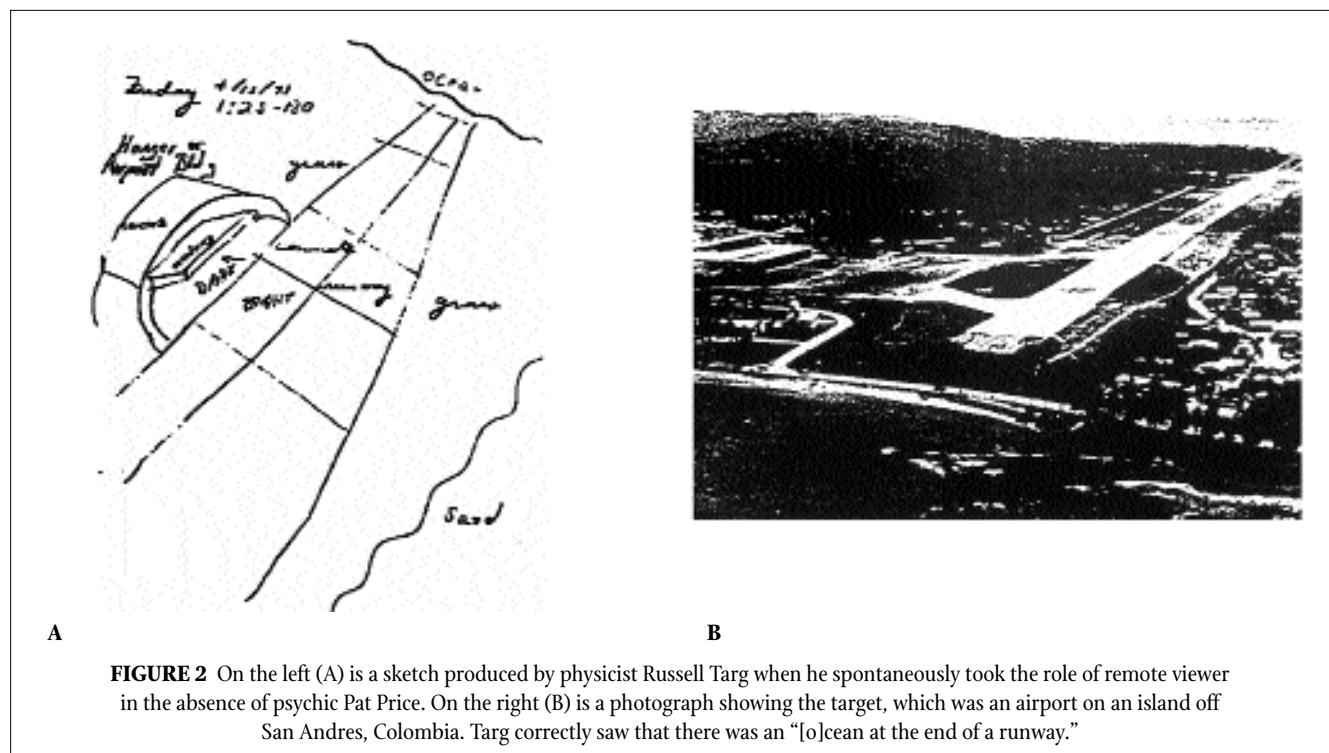


FIGURE 2 On the left (A) is a sketch produced by physicist Russell Targ when he spontaneously took the role of remote viewer in the absence of psychic Pat Price. On the right (B) is a photograph showing the target, which was an airport on an island off San Andres, Colombia. Targ correctly saw that there was an “[o]cean at the end of a runway.”

therapeutic effects of distant healing or intentionality on men with advanced AIDS.

In this mainstream medical journal, the researchers defined nonlocal or distant healing as an act of “mentation intended to benefit another person’s physical and/or emotional well-being at a distance,” adding that “[i]t has been found in some form in nearly every culture since prehistoric time.” Their research hypothesized that an intensive 10-week distant healing intervention by experienced healers located around the United States would benefit the medical outcomes for a population of patients with advanced AIDS in the San Francisco area.

The researchers performed 2 separate, randomized, double-blind studies: a pilot study involving 20 male subjects stratified by number of AIDS-defining illnesses, and a replication study of 40 men carefully matched into pairs by age, T-cell count, and number of AIDS-defining illnesses. The participants’ conditions were assessed by psychometric testing and blood testing at enrollment, after the distant healing intervention, and 6 months later, when physicians reviewed their medical charts.

In the pilot study, 4 of the 10 control subjects died, whereas all of subjects in the treatment group survived. But this result was possibly confounded by unequal age distributions in the 2 groups. In the replication study, men with AIDS were again recruited from the San Francisco Bay Area. They were told that they had a 50-50 chance of being in the treatment group or the control group. All subjects were pair-matched for age, CD4 count, and AIDS-defining diseases. Forty distant healers from all parts of the country took part in the study. Each of them had more than 5 years’ experience in a particular form of healing. They were from Christian, Jewish, Buddhist, Native American, and shamanic traditions, in addition to secular “bioenergetic” schools.

Each subject in the healing group was treated by a total of 10 different healers on a rotating healing schedule. Healers were asked to work on their assigned subject for approximately 1 hour per day for 6 consecutive days, with instructions to “direct an intention of health and well-being” to the subject to whom they were attending. None of the 40 subjects in the study ever met the healers, nor did they or the experimenters know into which group anyone had been randomized.

By the midpoint of the study, neither group of participants was able to guess at better than chance levels whether they were in the healing condition. However, by the end of the study, subjects in the healing group had many fewer opportunistic illnesses, allowing the healing group to identify itself—with significant odds against chance. Because all of the patients were being treated with triple-drug therapy, no deaths occurred in either group. The treatment group experienced significantly better medical and quality-of-life outcomes (odds of 100:1) on many quantitative measures, including fewer outpatient doctor visits (185 vs 260); fewer days of hospitalization (10 vs 68); less severe illnesses acquired during the study, as measured by illness severity scores (16 vs 43); and significantly less emotional distress. Dr Targ concludes: “Decreased hospital visits, fewer severe new diseases, and greatly improved subjective health supports the hypothesis of

positive therapeutic effects of distant healing.”

The editor of the journal introduced the paper with these thoughts: “The paper published below is meant to advance science and debate. It has been reviewed, revised, and re-reviewed by nationally known experts in biostatistics, and complementary medicine.... We have chosen to publish this provocative paper to stimulate other studies of distant healing, and other complementary practices and agents. It is time for more light, less dark, less heat.”

Two other studies of distant healing have been published in prestigious medical journals. In 1988, Randolph C. Byrd, MD, published a successful double-blind demonstration of distant healing in the *Southern Medical Journal*. The study involved 393 of his cardiac patients at San Francisco General Hospital.²⁰ And, in 1999, cardiologist William Harris and associates of the University of Missouri in Kansas City published a similar successful study with 990 heart patients. That paper appeared in the *Archives of Internal Medicine*.²¹

All 3 clinical experiments departed significantly from chance expectation. But the work of Sicher and Targ¹⁹ required less than one tenth the number of patients to achieve this significance. We attribute this greater effect size ($Z/N^{1/2}$) to the fact that Sicher and Targ worked with healers who each had more than 5 years of healing experience, whereas the others worked with well intentioned but much less experienced people. A detailed analysis of 23 clinical studies of intercessory prayer and distant healing recently was published by John Astin and colleagues in the *Annals of Internal Medicine*.²² An examination of 16 studies that they determined were adequately double-blinded showed an effect size of 0.4 for 2139 patients ($P < .001$). In addition, 2 excellent analyses of distant intentionality and distant healing studies have been published in *Alternative Therapies* by pioneering researchers Marilyn Schlitz and William Braud²³ and psychiatrist Elisabeth Targ.²⁴

Mindful of the nonlocal nature of our universe, Braud²⁵ recently conjectured that our healing intentions may achieve their goal by reaching backward in time to affect critical “seed moments” in alternate future pathways of the development of the illness. Braud suggests that these early moments may be more labile and hence more susceptible avenues of change in intercessory distant healing. This idea of backward causation is like the previously described experience of precognitive dreams, in which our dream in the night is ostensibly “caused” by the confirmatory experience that we typically have the next day. Modern physics seems to indicate that we live in a nonlocal spider web of space and time, where *both* the future and the past are tugging on the present.

Scientists do not yet clearly understand how the mind-stuff of one’s own intentions results in the contractions of one’s muscles. It remains a mystery how the invisible mind moves the physical body. But we do know that it is more powerful than we previously thought. Twentieth-century science has documented that our thoughts affect others; that we are all interconnected through our consciousness. We are not even alone in experiencing the effects of our own thoughts!

We are actually already hooked up to the psychic Internet—Jung’s “collective unconscious.” But the users are primarily those

who have learned to stop their thoughts and rest their attention. They are tuning in to access and affect the exchange of information.

WHY WOULD A SCIENTIST PRAY?

Today, many of us are searching for a comprehensible spirituality, one in which experience takes primacy over religious belief. We need not believe or take on faith anything about the existence of universal spirit, because the experience of God is a testable hypothesis, as we describe next. However, philosophical proof is not our purpose; rather, we have become aware that this experience is available to anyone seeking a spiritual life who also desires to remain a critical and discerning participant in the 21st century. We can include God in our lives without giving up our minds, if we can transcend our usual analytical thoughts and learn to become mindful. A scientist might pray or search for “the peace which passes understanding” as a way to experience the truth without conscious thought.

In his 1939 essay “Science and Religion,” Albert Einstein²⁶ suggested that we each have the potential for a greater awareness of truth than analysis alone can offer: “Objective knowledge provides us with powerful instruments for the achievements of certain ends. But, the ultimate goal itself, and the longing to reach it, must come from another source.”

Wisdom teachers throughout history have shown that the experience of God is possible without belonging to a church or following a religion, as long as one’s basic motive is to discover truth. Herbert Benson²⁷ recently proposed that we—our bodies and our brains—are “hard-wired for God.” By this he means that throughout the past 2500 years—from Buddha, Jesus, and the *Ba’al Shem Tov* (Israel ben Eliezer, the founder of Hasidic Judaism), to such poets as Rumi, Blake, and Emerson—mystics have shared a common experience that is actually available to us all. In the mystic paths, the *experience* of God is celebrated rather than the belief in God or the religious ritual. The Sufi poet Rumi shared his thoughts that arose after experiencing his own divinity:

*All day I think about it, then at night I say it.
Where did I come from, and what am I supposed to be doing?
I have no idea.
My soul is from elsewhere, I’m sure of that,
And I intend to end up there.*²⁸

Whenever we sit peacefully and quiet our mind, we have an opportunity to experience an oceanic connection with something outside our separate self. To many, that connection is experienced as an overpowering feeling of love, and it may well constitute part of our evolutionary process as a species.

This feeling of universal love, without any particular object, is often associated with the realization that we reside within an extended community of spirit enveloping all living beings. Such feelings of unbounded interconnected consciousness have been described by many as an experience of God. The gift of a quiet mind allows us to understand what it means to be in love, like

being immersed in loving syrup, as contrasted with being in love with another person. It is possible to reside in love (or gratitude) as a way of life. This experience is the source of the often heard expression that “God is love,” which in an ordinary context is easily dismissed as a simple cliché, or worse, as incomprehensible.

These oceanic, loving, peaceful experiences are examples of the compelling feeling of “oneness” that mystics have been urging us to explore for millennia. Jesus called this state of awareness “the peace that passes all understanding,” and a “kingdom which is not of this world.” Hindus call it “bliss,” or *ananda*. And Buddha called it a state of “no-mind,” meaning the absence of thoughts disrupting awareness of indivisible unity.

THE PATH OF SELF-INQUIRY

Early in the 20th century, 2 of the world’s greatest logicians, Ludwig Wittgenstein and Alfred Ayer, attempted to describe the physics and metaphysics of what can be known about reality. These Logical Positivists proclaimed that nothing meaningful could be said about God, because no experiment could be designed to either prove or disprove (verify or falsify) whatever one might say. But, by the end of their lives, both Wittgenstein and Ayer were willing to seriously examine the idea that the experience of mystics might actually be considered data—something observable in an experiment. In fact, in Wittgenstein’s last book, *On Certainty*, he gave primacy to experience over theory. This preeminent logician tells us: “The solution to the riddle of life in space and time lies outside space and time.”²⁹

For thousands of years, various wisdom teachers have presented a worldview to those who will listen. They have described a “sit down and be quiet” practice that is available for all to observe and experience. They then invite us to examine our experience and see if it corresponds to their teaching. Ultimately, this seems like an acceptably scientific, empirical approach to spirituality.

Thirty years ago, national US magazines proclaimed on their covers that “God is dead.” Today, we would say that God is neither alive nor dead, but rather manifesting as activity in consciousness—transcending and transforming one’s ordinary awareness. God is an active personal experience rather than a distant entity in the sky. Our 5 familiar senses bring us data of the material world, while filtering out and limiting our exposure to the wider, transcendent world of active awareness available to the quiet mind. The direction of our attention is the most powerful tool we have to transform our lives.

After centuries of academic bombast, we are finally coming to recognize how tentative so-called scientific “truth” really is. In a scientific world increasingly governed by so-called laws of “indeterminacy” (Werner Heisenberg) and “nonlocality” (John Bell) in physics, and “incompleteness” (Kurt Gödel) in mathematics, we are beginning to find room for the experience of God.

Philosopher Ken Wilber makes this point with great force in his book *Quantum Questions*.³⁰ He asserts convincingly that whereas physics will never explain spirituality, the spiritual realms may be explored by the scientific method: “The preposterous claim that all religious experience is private and noncommunicable is

stopped dead by, to give only one example, the transmission of the Buddha's enlightenment all the way down to present-day Buddhist masters (which allows it to be experienced and discussed today)."³⁰

Wilber describes 3 different but equally valid avenues of scientific empiricism: the eye of the flesh, which informs us about the world of our senses; the eye of the mind, which allows us access to mathematics, ideas, and logic; and the eye of contemplation, which is our window to the world of spiritual experience. None of these approaches suggest that we must embrace any body of dogma, or that we need to integrate Santa Claus into a scientific view of the modern world. They do, however, invite us to look beyond our thinking mind to discover who we are.

Although we cannot always control the events around us, we do have power over how we experience those events. At any moment, we can individually and collectively affect the course of our lives by choosing to direct our attention to the aspect of ourselves that is aware—and through the practice of self-inquiry, to awareness itself. Indian saint Ramana Maharshi³¹ taught that we can ask, "Who is aware?" and then, "Who wants to know?" The choice of where we put our attention is ultimately our most powerful freedom. Our choice of attitude and focus affects not only our own perceptions and experiences, but also the experiences and behaviors of others.

We conclude that the scientific and spiritual implications of psychic abilities are evident in the continually unfolding mystery of the space-time in which we live. And a quiet mind has the opportunity for experiencing itself as love that is timeless, eternal, and unseparated by our bodies.

References

- Katra J, Targ R. *The Heart of the Mind: How to Experience God Without Belief*. Novato, Calif: New World Library; 1999.
- Bohm D, Hiley B. *The Undivided Universe*. London, England: Routledge; 1993.
- Freedman S, Clauser J. Experimental test of local hidden variable theories. *Phys Rev Lett*. 1972;28:934-941.
- Aspect A, et al. Experimental tests of Bell's inequality using time-varying analyzers. *Phys Rev Lett*. 1992;49:1804-1907.
- Tittel W, Brendel J, Zbinden H, Gisin N. Violation of Bell inequalities by photons more than 10 km apart. *Phys Rev Lett*. 1998;81:3563-3566.
- Kafatos M, Nadeau R. *The Conscious Universe: Parts and Wholes in Physical Reality*. New York, NY: Springer Verlag; 2000.
- Dossey L. *Reinventing Medicine*. San Francisco, Calif: Harper; 1999.
- Targ R, Katra J, Brown D, Wiegand D. Viewing the future: a pilot study with an error-detecting protocol. *J Sci Exploration*. 1995;9:367-380.
- Puthoff HE, Targ R. A perceptual channel for information transfer over kilometer distances: historical perspective and recent research. *Proc IEEE*. 1976;64:329-254.
- Targ R, Puthoff H. Information transfer under conditions of sensory shielding. *Nature*. 1975;251:602-607.
- Puthoff HE, Targ R, May EC. Experimental psi research: implication for physics. In: *AAAS Proceedings of the 1979 Symposium on the Role of Consciousness in the Physical World*. Washington, DC: American Association for the Advancement of Science; 1981.
- Targ R, Katra J. *Miracles of Mind: Exploring Nonlocal Consciousness and Spiritual Healing*. Novato, Calif: New World Library; 1998.
- Dunne BJ, Jahn RG, Nelson RD. *Precognitive Remote Perception*. Princeton, NJ: Princeton Engineering Anomalies Research Laboratory; 1983.
- Aquinas T. Cited in: Mitchell S. *Meetings With the Archangel: A Comedy of the Spirit*. New York, NY: Harper Perennial Library; 1999.
- Schlitz M, LaBerge S. Covert observation increases skin conductance in subjects unaware of when they are being observed: a replication. *J Parapsychology*. September 1997;185-196.
- Braud W, Schlitz M. Psychokinetic influence on electro-dermal activity. *J Parapsychology*. 1983;47:95-119.
- Radin D. *The Conscious Universe*. San Francisco, Calif: Harper Collins; 1997.
- Benor DJ. *Healing Research*. Vol 1. Munich, Germany: Helix Verlag; 1992.
- Sicher F, Targ E, Moore D, Smith H. A randomized double-blind study of the effect of distant healing in a population with advanced AIDS. *West J Med*. 1998;169:356-363.
- Byrd RC. Positive therapeutic effects of intercessory prayer in a coronary care unit population. *South Med J*. 1988;81:826-829.
- Harris WS, Gowda M, Kolb JW, et al. A randomized, controlled trial of the effects of remote intercessory prayer on outcomes in patients admitted to the coronary care unit. *Arch Intern Med*. 1999;159:2273-2278.
- Astin JA, Harkness E, Ernst E. The efficacy of 'distant healing': a systematic review of randomized trials. *Ann Intern Med*. 2000;132:903-910.
- Schlitz M, Braud W. Distant intentionality and healing: assessing the evidence. *Altern Ther Health Med*. 1997;3(6):62-73.
- Targ E. Evaluating distant healing: a research review. *Altern Ther Health Med*. 1977;3(6):74-78.
- Braud W. Wellness implications of retroactive intentional influence: exploring an out-rageous hypothesis. *Altern Ther Health Med*. 2000;6:37-48.
- Einstein A. *Out of My Later Years*. Secaucus, NJ: The Citadel Press; 1956.
- Benson H. *Timeless Healing: The Power and Biology of Belief*. New York, NY: Simon & Schuster; 1997.
- Barks C. *The Illuminated Rumi*. New York, NY: Broadway Books; 1997.
- Wittgenstein L. *Tractatus-logico Philosophicus*. London, England: Routledge; 1974.
- Wilber K. *Quantum Questions: Mystical Writings of the World's Great Physicists*. Boston, Mass: Shambhala; 1984.
- Maharshi R. *Talks With Ramana Maharshi: On Realizing Abiding Peace and Happiness*. Carlsbad, Calif: Inner Directions Publishing; 2000.

CME TEST ANSWERS

Self-Assessment Answers

- (A) At 12 years out from the patient's breast cancer with normal follow-ups, the use of soy in her diet is probably fine. However, large doses of isolated isoflavones are probably unwise.
- (False) Essiac is widely used by many cancer patients but there is no convincing evidence that it is an effective "treatment" for any cancer.
- (A) Ginger has no historical or modern use as a partus preparator, nor has any evidence been presented to demonstrate activity against *Candida albicans*. Doses of 1000 mg per day have been shown to be safe in one clinical trial for the treatment of hyperemesis gravidarum. There is a theoretical concern that high doses of ginger may affect sexual differentiation, so it is wise to stay within the levels used in the clinical trials.
- (A and C) Clinical trials show that acupuncture can provide relief for chemotherapy-induced nausea; however, the benefit is limited because of the duration of relief compared to time taken for therapy. Ginger has been shown to be an effective anti-emetic; however, no clinical trials specifically examining its use in conjunction with chemotherapy have been conducted. There is no documentation demonstrating any effect of Essiac on chemotherapy-induced nausea, and Essiac does not contain ingredients that one would expect to exert such an effect. Echinacea may boost immune cells, but no evidence exists—either historical or recent—to support its use for chemotherapy-induced nausea.
- (A and D) Whereas "A" is technically correct, D is a much more appropriate answer, combining the technically correct with empathy and a demonstration of current knowledge and clinical trials. There is scant evidence that Essiac has cured many people of cancer, and whereas it is important to recognize and acknowledge intuition, many people make decisions relating to cancer out of fear rather than assessing all available information. Although it is true that there is a clinical trial under way, this does not necessarily mean that there is an expectation of benefit. It is entirely possible that the trial is being conducted on the basis of frequent usage within the population.
- (B) There is now sufficient evidence showing that St. John's wort is an effective antidepressant; however, when considering its use, it is necessary to consider the medications being taken concurrently. The effects of St. John's wort on the P450 system may affect the actions of the patient's chemotherapy agents. It is therefore essential to discuss the use of St. John's wort with the patient's oncologist to assess any potential conflicts. Whereas overall the side effect profile of St. John's wort is very good, when there is an interaction the results can be serious. Knowing this, it is probably not safe to use St. John's wort in combination with powerful drugs, such as chemotherapeutic regimens.