

Introduction

In an article entitled, "Final Impressions of a Psychical Researcher," published in October, 1909, less than a year before his death, the American philosopher and psychologist William James included the following:

We with our lives are like islands in the sea, or like trees in the forest. The maple and the pine may whisper to each other with their leaves, and Conanicut and Newport hear each other's foghorns. But the trees also commingle their roots in the darkness underground, and the islands also hang together through the ocean's bottom. Just so there is a continuum of cosmic consciousness, against which our individuality builds but accidental fences, and into which our several minds plunge as into a mother-sea or reservoir. Our "normal" consciousness is circumscribed for adaptation to our external earthly environment, but the fence is weak in spots, and fitful influences from beyond leak in, showing the otherwise unverifiable common connection.¹

A compelling poetical and metaphorical expression of this same notion is found, much earlier, in the writings of the 13th Century mystical poet, Jelaluddin Rumi, who wrote:

I've heard it said there's a window that opens
from one mind to another,
But if there's no wall, there's no need
for fitting the window, or the latch.²

The papers included in this book provide current empirical confirmations and elaborations of this widespread and enduring idea of nonlocal interconnectedness. Our Western scientific worldview maintains that we are isolated individuals who communicate and interact only locally, by exchanging information through our recognized senses and technological tools. However, carefully collected, but typically ignored, evidence suggests that James and Rumi were right—that beneath surface appearances, we are intimately and profoundly interconnected in our consciousness and our identity. This evidence comes from areas of psychology, parapsychology, consciousness research, and transpersonal studies. The purpose of this book is to present, interpret, and elaborate some of this evidence; to explore its implications for science; and to address its possible practical applications in our everyday lives and relationships.

Concisely stated, the evidence compiled in this volume indicates that, under certain conditions, it is possible to know and to influence the thoughts, images, feelings, behaviors, and physiological and physical activities of other persons and living organisms—even when the influencer and the influenced are separated by great distances

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in space and time, beyond the reach of the conventional senses. Because the usual modes of knowing and influence are eliminated in these studies, their success reveals modes of human interaction and interconnection beyond those currently recognized in the conventional natural, behavioral, and social sciences. Besides indicating areas of incompleteness and misapprehensions about such phenomena that exist in current scientific theories, these distant mental influence findings have important implications for our fuller understanding of consciousness, health and wellness, our typically untapped human potentials, and the spiritual aspects of our lives.

This book includes 12 previously published papers—each presented as a chapter—that provide empirical evidence for these distant mental influences. Besides providing evidence for the existence of these nonlocal influence effects, the papers describe what we have learned about the nature of these influences and the factors that make them more or less likely to occur. In this Introduction, I provide background and supportive information that will help contextualize and elaborate the content of the 12 chapters. My intention, as well, is to bring the research up to date, indicate how the reported studies have been replicated and extended (by myself and by others), and discuss the meaning, significance, and implications of this work.

The Background of This Research Program: “The Context of Discovery”

In 1938, the philosopher of science, Hans Reichenbach, distinguished two kinds of activities of scientists, which he called the contexts of “discovery” and “justification.”³ The latter, in which the scientist formally publishes results for peers—presenting, justifying, and defending them—is typically the only form of scientific activity that we hear about. The former—in which the work actually is inspired, conceived, planned, and conducted, and in which discoveries actually are made—is rarely, if ever, mentioned by scientists themselves or by those who discuss their work. In neglecting the context of discovery, one loses sight of the most interesting, creative, and human aspects of the scientific enterprise. The 12 chapters that follow originally were presented in the mode of the context of justification. In order to keep the two modes in balance, in this preliminary section, I’ll share aspects of the context of discovery in which this distant mental influence work originated and was carried out.

This research can be situated within the stream of psychical and parapsychological research. Such research concerns itself with ways in which we are able, under certain conditions, to obtain accurate knowledge about and influence events beyond the reach of our conventionally recognized senses, even at great distances through space and time. These ways of knowing and influencing events at a distance take the forms of telepathy (mind-to-mind communication), clairvoyance (accurate knowledge of remote events), precognition (accurate knowledge of future events), and psychokinesis (mind-over-matter effects or, better, direct intentional influences upon the physical world). These psychic experiences and events are collectively known as *psi*. Although these and similar experiences have occurred throughout history, in virtually all eras and cultures, they remain poorly understood even by those who experience them, and they have been greatly neglected—and their very existence often denied—by science.

My own interest in psychical events did not arise from any early or dramatic experiences of these things. Rather, this interest arose gradually as a form of intellectual curiosity. Temperamentally, I have always been drawn to unusual events—to unexpected exceptions—and psychical or paranormal events constitute one of the largest classes of exceptions.

I was not always favorably disposed toward these phenomena. There was even a period, during my graduate training in a very behavioristic university psychology department, when I was hostile to such experiences and lectured to my students about the problematical status and probable nonexistence of such things as telepathy, precognition, and so forth. The systems and theories of physics and of psychology in which I had been trained had no room for such processes or experiences. Once I completed my graduate studies and began my own university teaching career, however, my horizons began to expand, and I found myself wondering about the nonordinary forms of consciousness, out-of-body experiences, mystical experiences, and paranormal experiences that some of my students were mentioning to me and that I was reading about. To learn more about such experiences, I started reading the professional journals devoted to psychical research and parapsychology, and I began attending professional conferences in these areas. The more I learned, the more I became intrigued by these phenomena.

A graduate student and I designed a study to learn whether we could find evidence for telepathy during experimental sessions conducted while another person—the “percipient” in these experiments—was hypnotized. This early study, in which I played the role of “agent” or “sender,” yielded very accurate and dramatic results—even when the percipient and I were stationed on separate floors of the psychology building, in separate buildings, or in different parts of the city. For example, when I, as sender, was thinking about slow, happy music and about a piano, the distant, hypnotized percipient mentioned becoming aware of sheet music and a piano. When I put a glass of ice water to my neck, the percipient mentioned “hands around a glass ... shaking because it’s cold.” When I watched a small spinning merry-go-round device, the percipient mentioned “merry-go-round, spinning.” When I held my left hand over a candle flame, the percipient—many miles away—said, at that very moment, “flames ... little flame which spread out ... felt heat.” These are only a few examples of the kinds of accurate, time-locked correspondences that we observed, and these are representative of what happened in many of the sessions. The extremely accurate results of this study convinced me that it was possible for me to conduct fruitful studies in this area, and the findings led, ultimately, to a long series of research projects designed to uncover some of the factors that might facilitate or impede psychic functioning in the laboratory.

Because I happened to have a keen interest, at the time, in progressive muscular relaxation (as a technique for fostering physical and psychological health and well-being), I immediately wondered whether the strong relaxation component of hypnosis might have been an important ingredient in the success of these distant telepathy sessions. A series of formal experiments indicated that this indeed appeared to be the case. Percipients who relaxed their bodies deeply through the use of progressive relaxation

procedures performed more accurately in telepathy sessions than did nonrelaxed percipients. We also found that degree of psychic accuracy was related to degree of muscular relaxation, as measured through electromyographic recordings (in which muscle tension was monitored electronically).

We later expanded these studies to include a variety of techniques—other than or in addition to muscular relaxation—for helping percipients “relax” and quiet themselves at as many levels as possible. These techniques included using autogenic training exercises (self-suggestions for calmness and quietude, using phrases for physiological self-regulation) to reduce emotional and autonomic nervous system activity, sensory restriction techniques to reduce sensory distractions and induce perceptual quietude, exercises to reduce excessive logical and analytical thinking, meditation-like exercises to reduce excessive cognitive and mental activity in general, and exercises that helped reduce excessive effortful striving for success in these psychic tasks. The use of these various quieting techniques was, indeed, associated with increased accuracy in telepathy and clairvoyance tasks. These findings favored a view that, ordinarily, our psychic functioning might be inhibited by excessive bodily, emotional, and mental distractions—just as weak signals might be masked by too much noise. Reducing the interfering, distracting noise can allow us to detect formerly obscured signals. This view became known as the *noise-reduction* hypothesis or model of psychic optimization.⁴

As my colleagues and I were conducting these noise-reduction experiments, it became clear to us that, in addition to reducing noise, the techniques we were using were also freeing our percipients from various structuring or constraining forces and habits that ordinarily made it difficult for them to freely change or shift their minds and bodies in ways that could allow psychic functioning to occur. Lots of organized activities in our various bodily and mental channels can structure our thoughts, feelings, images, and bodily states in ways that tend to maintain or “freeze” them in their current forms and prevent them from changing easily and efficiently. For example, at this moment your mental activity is being held and occupied (structured and constrained) by the words on this page. It is difficult for your thoughts and other subjective activities to shift when they are being structured so well. If you were to close your eyes right now, and not think about what you were reading or about anything else in particular, it would be much easier for your thoughts, images, and feelings to be swerved or influenced by subtle psychic inputs that ordinarily might not be effective or even noticed. All of the techniques (mentioned above) that reduce noise in their various “channels” also reduce distractions, structures, and constraints in those same channels. When those structures are dismantled or melt away, the raw materials in those channels—ingredients, if you will, of thoughts, feelings, sensations, and images—have greater opportunities to be reorganized or restructured in ways that might allow them to carry useful psychic information.

The ideas in the previous paragraph led to a *lability/inertia* model of psychic functioning. A system possesses *lability* when it can freely change; lability is another name for *free variability*. A thin stream of smoke, curling from the tip of a stick of incense, is quite labile—easily swayed or influenced by the slightest breeze. The mind of someone sitting before a fireplace, idling, watching the dancing flames, and thinking of nothing in

particular, is a labile mind—one that is readily swayed by the subtlest wisp of thought or the subtlest suggestion. On the other hand, a computer marching its way through a predetermined program, and a mind that is deeply engaged in some attention-consuming mental task are not easily swerved from their very structured activities. Rather than being labile, such highly occupied computers and minds are characterized by *inertia*—they have strong tendencies to continue what they presently are doing and not doing; they are more resistant to change.

Another set of experiments indicated that systems rich in lability tended to yield greater psychic effects than those that were more inert. These findings applied both for percipients in receptive forms of psi—such as telepathy, clairvoyance, and precognition—and for the target systems for active forms of psi—i.e., the systems influenced through psychokinesis. A pattern was beginning to emerge: For telepathy, clairvoyance, and precognition, results seemed most accurate and successful if the percipient was characterized by a high degree of lability and if the agent (or target event) was characterized by a high degree of inertia. The opposite conditions—high inertia in the human influencer but high lability in the physical target system that one was attempting to influence—seemed to hold for the success of psychokinesis.⁵

While we were conducting these noise-reduction and lability studies, Helmut Schmidt, a theoretical physicist in our laboratory, was conducting a series of fascinating experiments involving psychokinesis effects using electronic random event generators as his to-be-influenced target systems. Psychokinesis work began in the 1940s, and the early psychokinesis (PK) studies employed mechanically random systems—such as tossed coins and bouncing dice—as the target systems that persons attempted to influence, mentally and at a distance. In the early 1970s, Schmidt provided the important technical and methodological innovation of introducing the electronic random event generator (REG) as the physical target system of choice for PK experiments. These REGs are similar to electronic coin tossers or dice throwers. Rather than mechanical randomness, however, the devices make use of truly random physical processes such as the decay of radioactive materials and thermal (heat) noise inside of electronic components. Radioactive emission is one of the most random processes known to contemporary science: The emission of individual particles from radioactive sources can be neither predicted nor controlled by any process known to science. Therefore, any devices driven by radioactive decay possess a high degree of indeterminateness or randomness. These devices—Schmidt's REGs—are excellent, sensitive targets for PK experimentation, and hundreds of REG-PK experiments have yielded significant and replicable PK results.⁶

As Schmidt was conducting his PK experiments with these inanimate (REG) target systems, I began to wonder if PK experiments with *living* systems might also be especially effective targets for PK research. Like the REGs, many animate systems also appeared to be characterized by a great amount of lability or free variability. Consider the many thoughts, images, and feelings that flit and course freely through our heads and hearts. The variability of our mental contents and processes are so well known that the restless activity of the mind has been likened to that of a drunken monkey (in yogic traditions) or to the flowing of a stream (in William James' famous metaphor of the

“stream of consciousness”). Many of our physiological processes and movements seem to have indeterminate, freely variable aspects; and it has been suggested that random, quantum-like events take place in the tiny synapses (spaces) between the neurons of our nervous systems. It seemed that the spontaneous activities of living systems might provide ideal targets for psychokinetic influences. In fact, there already were indications in the parapsychological literature that this might indeed be the case. Successful PK influences had already been noted in a variety of biological systems including bacteria, fungus colonies, cells, microscopic organisms, plants, animals, and certain physiological reactions of humans. It seemed a natural next step to repeat Schmidt’s PK experiments with labile living target systems.

Early Distant Mental Influence Experiments With Living Target Systems

A number of considerations converged to determine my choices of living target systems and the methods used to explore their susceptibility to distant mental influence. The animate target systems would have to be convenient and relatively easy to measure. Because of my growing interest in the possible relevance of psychokinesis to some forms of unorthodox healing, it would be useful if the chosen targets could have some relationship to biological processes relevant to physical and psychological health and well-being. I was familiar with many of the bodily processes being explored in the contexts of biofeedback and psychophysiological self-regulation research and practical applications, and so, the activities typically monitored in biofeedback and self-regulation studies and clinical work became possible target systems. These systems included brain waves, muscle activity, heart rate, blood pressure, and electrodermal activity (the changing electrical activity of the skin).

Years earlier, I had read and been greatly impressed by work on distant mental suggestion that had been carried out in the 1920s and 30s, in Russia, by Leonid Vasiliev and his coworkers. Vasiliev had published an account of his work in 1962, in Russian, in a book entitled *Experiments in Mental Suggestion*, and an English translation of this book appeared in 1963. In a series of careful experiments—quite sophisticated for that time, and even by today’s standards—Vasiliev’s research team was able to induce motor acts, visual images and sensations, sleeping and awakening, and physiological reactions (breathing changes, changes in electrodermal activity) in persons stationed at remote locations and shielded from all conventional interactions. In these studies, the influencers and influencees were separated by distances that varied from 20 meters to 1,700 kilometers. Often, iron-, lead-, and Faraday- chamber screenings were used to block out possible conventional sensory and electromagnetic mediators. From the time I first read Vasiliev’s (1963) monograph, I had been intrigued by his experiments and curious about whether it would be possible to replicate them. I was particularly interested in his experiments on remote mental influence of physiological activity. During this same early 20th century time frame, similar investigations were being carried out in other countries. There were French experiments on inducing hypnosis at a distance (by Joire, Gibert, Janet, & Richet), Dutch experiments on the remote influence of motor acts (by Brugmans at Groningen), hypnotic experiments on “community of sensation” (in which a sensory experience of the hypnotist appeared to be experienced by the hypnotized subject), and

international studies of telepathy and clairvoyance. I thought that the methods used in these Russian, French, and Dutch experiments could be modified and updated, and could be applied in the PK-on-living-targets studies that I was planning.⁷

For my first experiments on distant mental influence of physiological reactions, I chose to use electrodermal activity as the target response. These reactions—which involve changes in the electrical activity of the skin, due to changes in neural and sweat gland activity—are usually “unconscious”; they can be measured fairly easily and inexpensively (throughout these studies, my research budget was always quite limited); they, or similar reactions, had already been influenced in earlier studies by other investigators; and, because they reflected the degree of activation of the sympathetic branch of the autonomic nervous system—and, hence, were associated with bodily, emotional, and mental arousal—they had relevance to physical and psychological health and well-being. Electrodermal activity also had been studied extensively in contexts of biofeedback and self-regulation research.

In fact, biofeedback ideas played an important role in these first distant influence experiments. In all biofeedback experiments or clinical applications, one’s biological activity (e.g., heart rate, blood pressure, muscle tension, brain wave activity) is monitored, and one receives sensory feedback (usually in the form of changing meter readings, light changes, or sound changes) that corresponds to typically unnoticed changes in the biological activities. Biofeedback equipment provides new or augmented “conscious” information about internal, bodily events of which we usually are unaware and “unconscious.” Once we become aware of these activities (through the mediation of instrumentation), we can try various ways to deploy our will, volition, attention, and intentions in order to bring these previously “involuntary” activities under voluntary control. Once the techniques are mastered, the self-control methods can be internalized, and the monitoring and feedback equipment no longer is needed and can be discarded. This procedure can be accurately described as *autobiofeedback*, because one receives information about, and ultimately comes to influence, one’s own biological activity. The procedure also might be considered *closed-loop biofeedback*, because the person who receives the feedback and exerts control of the activity is the same person who generates the activity in the first place.

The first electrodermal distant influence experiment was arranged as a form of *allobiofeedback* (from the Greek *allos*, meaning *other*) or *open-loop biofeedback*. The design was such that the electrodermal activity of one person (the influencee) was monitored and recorded by means of a polygraph tracing; however, this feedback tracing was seen not by the person being monitored, *but by another person, who was stationed in a distant room*. The “other person” (the influencer) attempted to influence the first person’s electrodermal activity—using techniques that will be described later—mentally and at a distance, using the feedback for trial and error purposes and as an indicator of the success of various influence strategies. In other words, we wished to learn whether the loop or gap between the motor (output) generation of the biological activity, in one person, and the sensory (input) information and intentional aim, in another person, might

be closed or bridged psychically—through some form of interaction between the two separated research participants.⁸

For methodological purposes, we divided a long session into a large number of shorter segments. During some of these segments, the influencer attempted to mentally influence the distant influencee—with either calming (decrease activity) or activation (increase activity) aims. Other segments served as control periods in which no influence attempts were made, and during which the influencer attempted to think not about the experiment but about other, unrelated things. The different types of segments (influence versus control) were randomly interspersed. Of course, the influencee was “blind” as to the nature and timings of the influencing periods, and so, conventional self-regulation or conventional “placebo” effects could not account for any obtained results. The results could be evaluated by comparing the patterns of electrodermal activity during influence periods with those of control periods and assessing the differences using conventional statistical techniques. In the early experiments, the scoring was done manually, by measuring the polygraph tracings in a blind fashion (i.e., without knowledge of whether the tracings were for influence or control periods). In later experiments, the measurements were digitized and automatically evaluated by means of a computer.

Successful Outcomes

These remote influence experiments yielded positive results. In their initial form—as allobiofeedback experiments—the monitored persons’ own electrodermal activity levels differed, according to the intentional aims of the distant influencers. The influencees showed greater electrodermal activity during increase periods and less activity during decrease (calming) periods. Because all conventional influence pathways had been eliminated by the study design, the most reasonable interpretation of the positive results was that effective psychic interactions had occurred between the influencer and the distant influencee. In subsequent experiments, we repeated this basic experiment, with many variations. Overall, the results tended to be positive and reliable. We tried different physiological and biological activities as the measurable indicators of these remote influence effects, worked with many different people and types of people as research participants, tried different experimental designs, and explored several physical, physiological, and psychological factors that might influence the results. These investigations and their outcomes are detailed in the 12 chapters of this book. I will attempt to summarize the main things we learned from these studies a bit later in this Introduction. The bottom line conclusion of this work, however, is that one person’s mental processes (chiefly, one’s attention and intentions) are able to interact effectively with the bodily, emotional, and mental activities of another person—even when that second person is located at a distance in space (and, we will see later, even at a distance in time) and is beyond the reach of conventional informational and energetic influences. These findings have important implications for both science and for daily living, which we will explore shortly.

What's in a Name?

Over the years, we considered various names for the form of psychic influence that we were observing and studying. In a sense, the name one chooses for a phenomenon might be viewed as not very important. However, names can carry or suggest various meanings or associations which can be important, in that the names can reveal intentional or unintentional theoretical or practical interpretations—some desirable and useful, some undesirable and potentially misleading. I hope the reader will pardon a brief excursion into our naming adventures.

Allobiofeedback: This name fit the original design and findings. However, we eventually learned that for these influences to occur, feedback was not necessary. Feedback helped some influencers, but others did not use it, and still others found it disruptive. Most important, we found that here and in other contexts, successful outcomes could occur without the provision of the trial-by-trial, continuous feedback that was provided in these early studies.

Transpersonal imagery effect: We once used this term to emphasize that one's imagery (of the sort that often is used to influence biological activity in biofeedback and self-regulation experiments and applications) not only can influence one's own bodily and mental conditions and activities (personal imagery effects) but also can act beyond (*trans*) oneself to influence the bodily and mental conditions and activities of other persons (*transpersonally*).

Bio-PK: This term, short for *biological psychokinesis*, has much to recommend it, and it captures well our original aims in beginning this research. However, the term implies that the effects are truly influential ones, that a form of active psi (psychokinesis) is chiefly responsible, and that the participant who contributes most to the effect is the agent or influencer.

Distant mental influence: This is perhaps the most straightforward name for the process that we are exploring, and it is the name chosen for the title of this book. However, the name continues to imply that an active influencer plays the greatest role in bringing about the effects. Additionally, although the effects do typically occur at a distance, it also is possible for these effects to occur close at hand, although still in ways that our conventional understandings of physics and psychology would deem impossible—e.g., the effects might occur in nearby targets that are nonetheless well-shielded or protected in other ways from conventional influences.

Remote mental influence: *Remote* was once suggested as a better term than *distant*, in that it covers outcomes in which the target is remote and inaccessible not only because of its distance but also because it might be near but adequately screened from conventional access. Here, *remote* carries the meaning of *inaccessible through ordinary means*.

Direct mental influence: Both *distant* and *remote* suggest a true spatial or other effective separation between the human influencer and the target system. Although this seems to be true, at first glance, the two quotes (from William James and Rumi) at the beginning of this Introduction remind us that in a deep, profound sense, such separateness and isolation may be illusory, and that we may really be in much more direct and intimate contact with others and with all aspects of the world around us. *Direct* suggests an immediate, unmediated connection with the influenced target system—whether or not that target is at a distance or remotely situated. I am indebted to the late parapsychologist, Charles Honorton, for suggesting this simple name. Even this name, however, continues to imply an active, influential process, in which the agent or influencer plays the greatest role.

Direct mental interactions with living systems (DMILS): Although criticized for being inelegant and cumbersome, this is perhaps the most accurate designation for the processes being studied. Note that *direct* has been retained, but *interactions* has been substituted for the earlier *influence*. This substitution is made to remove the presumption or conclusion that the process is essentially an active, psychokinetic, influential one, with the influencer, again, playing the major role. *Interactions* suggests that other psi processes—such as telepathy, clairvoyance, and precognition—may be involved as much as, or even to a greater extent than, psychokinesis; that the influencee might play a much more important—and cooperative—role than is immediately obvious; and that in all of these experiments, we are left, ultimately, with correlations between influencer intentions and influencee activities. For such correlations or mutual co-arising, the term *interactions* seems more appropriate than *influences*. As these types of studies are being increasingly replicated and addressed by other investigators, this final name and its curious abbreviation (DMILS) are being increasingly used to designate this growing area of research.

Choosing Other Target Systems: Chance and Necessity

In addition to electrodermal activity, we explored various other human target systems in these distant influence studies. Other physiological activities included muscular tension, muscular tremor, unconscious muscular movements (ideomotor reactions), blood pressure, heart rate, and breathing rate. We also found that cognitive activities, such as the intensity of mental imagery and the ability to focus and concentrate one's attention, could be enhanced through distant intentional influence. In effect, these latter activities could be facilitated through a form of remote "psychic helping" by persons in distant locations.

Some have suggested that direct mental influences may be occurring at all times and as a matter of course within our own bodies, but these influences are so intertwined with other internal bodymind activities and are so common and familiar that they rarely are recognized as paranormal or unusual. Stated differently, these direct mental influence effects that seem so rare and unusual when observed outside of our bodies may also occur commonly and ordinarily within our bodies, and these may be part of, or essentially, our regular volitional activities. Crudely stated, if my mind moves your finger, we are filled

with surprise and awe and call this *psychokinesis*. However, if, through the same process, my mind moves my own finger, this is nothing other than business as usual, and we call this *voluntary action* or *intentional movement*. The physiologist, and Nobel laureate, Sir John Eccles went so far as to suggest that mind and brain might interact directly through the will's direct influence upon (and its "cognitive caresses" of) certain dynamic patterns of cerebral activity in the brain, and that critically poised neurons or synapses might be the locus of interaction between will and body in all normal volitional acts.⁹

In pondering these ideas, I began to wonder about the following: If my mind can influence my own brain, perhaps it can influence other neural or biological material, as well. Further, the degree to which my mind might continue to exert its influence on a distant target system could depend upon the similarity of that system to my own brain. Speculations such as these suggested two types of research programs: The first would focus on external living targets that might closely resemble brain tissue or neurons, and the second would focus on the possibility of continuing to influence cells, tissues, or biochemicals that had been freshly removed from one's body.

In considering the first strategy, it became clear that any telepathic interactions between two persons could be viewed as direct mental influences of one person upon the brain of the second person. Therefore, all instances of telepathically shared thoughts, images, or feelings might be special cases of distant mental influences of the type explored in the studies I am relating here. To test the idea that the most effective target systems for these influences might be other brains, other neurons, or materials similar to these, it would be useful to conduct experiments in which one might attempt to directly influence brain tissue, neurons, or other similar preparations that were maintained outside of the body. If one immediately puts aside the obvious difficulties of working with cultured human neurons, there still remain various biological preparations that possess similar characteristics. For example, there are giant neurons in simpler organisms (such as the large neural cells of the giant sea slug, *Aplysia*, and the giant axon of the squid) that could be studied. There are even plant cells and giant algae that exhibit electrical activities very much like those that occur in neural transmission. I spent some time investigating the possibility of using such preparations in my studies, but eventually dismissed these due to technical and logistical complexities. In the course of this research, however, I came upon another interesting electrical preparation that I was able to investigate successfully. This was the electric knife fish, *Gymnotus carapo*—a species of fish that inhabits the murky water of the Amazon river and emits weak electrical signals, apparently for navigational and food-finding purposes. By placing an electric knife fish in a small tank with metal plates on its sides, and properly instrumenting this system, we were able to use the amplified fluctuating electrical field of the fish as a feedback signal to human influencers in a distant room, and these persons were able to intentionally influence the fish and its electrical activity. We finally used the electrical characteristics of this fish simply as a convenient means of monitoring and quantifying the fish's spontaneous movements and orientation changes within its small tank. This, in turn, suggested that we might make use of the spontaneous movements of other intact animals as distance influence targets. We did conduct several experiments in which distant influencers were able to successfully

influence the locomotor activities of Mongolian gerbils (*Meriones unguiculatus*) running freely in activity wheels.

The second type of research program involved considering various biological materials that might be removed from the body, so that possible distant influences of these freshly-removed materials could be explored. The first choice, of such materials, would be nervous system tissue that had been removed and cultured externally (or cloned). At first, it might seem that such an experiment would not be feasible. However, a study of this type could be performed with the cooperation of a neurosurgeon and a team of neuroscientists. Brain tissue removed for medical reasons, which ordinarily would be discarded, might be artificially cultured and maintained, and the chemical or electrical activities of these cells could be used as indicators of the efficacy of distant mental influence. A problem with such a design is that the very tissue that might become available (e.g., samples from brain tumors) would likely consist of recalcitrant tissue that may not have been “cooperative” and appropriately responsive to the adaptive needs of the body, even in the tissue’s usual environment. Whatever may have led to abnormal growth of these particular cells might continue to resist intentional/volitional influences when externalized in the hypothetical design just described.

Apart from this seeming science-fictional approach, the next best biological target materials might be lymphocytes (white blood cells with important immune system roles, such as B-cells, T cells, and natural killer cells). Recent research has indicated similarities of neural cells and immune system cells, in terms of their neurochemical responsivity and signaling properties. However, the equipment and skills for measuring such cells, or their biological activities, are complex and were not available in our laboratory facility. Therefore, we considered a third best, and logistically feasible, material with which to work—osmotically stressed red blood cells (i.e., red blood cells placed in a solution in which the salt content was too low, compared to normal conditions). Red blood cells could be removed from volunteer participants, the blood could be placed in test tubes in a distant room, and the rate of destruction of these blood cells could be monitored by means of a spectrophotometer-computer system. The donors of these cells, at the distant location, could attempt to protect certain samples of these cells (compared with other, control samples) through their distant mental influence. Experiments of this type were conducted and were successful (see Chapter 3). In these experiments, the remote influencers attempted to mentally “protect” the red blood cells by visualizing the cells with intact, resilient membranes that resisted the osmotic stress, rather than bursting; color slides of healthy, intact red blood cells were available to the influencers, should they choose to use this sensory aid to enhance their protective mental imagery.

Eventually, we extended our distant mental influence work to include additional living target systems. Some of these were physiological processes (e.g., pulse rate, peripheral skin temperature, electromyographic activity [muscle tension of the frontalis—forehead—muscle group], breathing rate, blood pressure, muscular tremor, ideomotor reactions [subtle, “unconscious” movements]). Other processes were psychological—a distant person’s intensity of mental imagery, a distant person’s ability to concentrate and

control attention. Our work with these systems of human activity is described in the various chapters of this book.

Reaching Out, Mentally, To Touch Someone: Research on Remote Staring Detection

During the course of our experiments on intentional (directional) influences of the electrodermal activity of distant persons, we realized that remote *attention* was always confounded with these remote intention effects. Our influencers not only were contacting the influencees, mentally and at a distance, in order to encourage specific, directional changes in their bodily activities, but they also were always reaching out to the distant influencees with their attention. It was as though two types of mental “signals” were involved. The first was getting the influencee’s attention (simply by the influencer focusing attention on the distant person), and the second was a kind of mental instruction, suggestion, or request to perform a particular bodily activity. We wondered if reaching out to someone, mentally and at a distance, simply by thinking about or observing that person, might have its own direct influence on the distant person’s physiological activity. This reminded us of the familiar popular belief that it might be possible to gain someone’s attention by simply staring at them, unobserved, from a remote location. Experiments had been conducted by others to test this staring detection idea—with various degrees of scientific rigor and various degrees of success. We thought the measurement of electrodermal activity might provide an ideal way to measure the possible subtle influences of remote staring. An electrodermal indicator of the detection of remote staring provided a bonus: It was an unconscious activity, and we suspected that unconscious bodily activities might provide more sensitive indicators of psychic awareness than could the usual conscious, verbal, or imagery-based indicators that are so popular in parapsychological research. Therefore, we designed a study in which we would record possible changes in electrodermal activity of distant persons while they were being stared at, from a distant room, via a closed-circuit television system. During some periods (unknown to the staree), the distant influencer would stare intently at the staree’s image on a television monitor and attempt to mentally reach out to the staree and get that person’s attention. The staree’s electrodermal activity during sets of remote staring periods could be compared directly with other sets of interspersed periods during which such remote staring did not occur. These experiments were successful, and they are described in Chapters 7 and 8.

Major Findings

The major findings of our research on distant mental influence of the biological and psychological activities of other persons and of other living organisms may be summarized as follows:

1. Under certain conditions, it is possible for one person to effectively influence the bodily and mental activities of another person who is situated at a distance and shielded from all *conventional* sensory, informational, and energetic influences.
2. These distant influences appear to be *direct mental influences*, because they cannot be accounted for, in any obvious way, by conventional explanations. The experimental designs used in these studies effectively ruled out the following alternative,

conventional explanations of these effects: chance or coincidence, sensory cues, uncontrolled external stimuli, common internal rhythms, recording errors, motivated misreadings of records, conventional placebo effects, rational inference on the part of influencees of when influence periods were occurring, or errors due to progressive or systematic changes in the measured activities.

3. The effects occur when the influencer and the influencee (or influenced target system) are separated from one another by *distance* (as great as 20-25 meters) and by the walls and the closed and locked doors of their own and intervening rooms. Distances greater than 25 meters have not yet been explored in my own research (although much greater distances have been explored in other research projects; see below).
4. The effects may occur when the influenced system and the influence attempt are separated in *time*. In some studies, the to-be-influenced bodily activities occurred 35-40 minutes before the influence attempts were made (in a study conducted in 1993) and 1-7 days before the influence attempts (in a study reported in 1979).
5. A *wide range* of bodily and mental activities has been successfully influenced, mentally and at a distance. These activities include the spatial orientation of fish, the locomotor activity of small mammals, the autonomic nervous system activity of another person, the muscular tremor and ideomotor reactions of another person, the mental imagery of another person, a remote person's ability to concentrate and focus attention, and the rate of hemolysis of human red blood cells *in vitro*.
6. The ability to manifest these effects is apparently *widely distributed* in the population. Sensitivity to the effect appears to be normally distributed in the volunteers who have participated in our various experiments. Many persons are able to produce the effect, with varying degrees of success, including unselected volunteers attempting it for the first time. More practiced individuals seem able to produce the effect more consistently. There are indications of improvement with practice in some influencers.
7. Based upon overall quantitative and statistical results, the distant mental influence effects are *relatively reliable and robust*.
8. The magnitudes of the effects are *not trivial* and, under certain conditions, may compare favorably with the magnitudes of self-regulation effects. In some cases, results can be dramatic and are comparable to effects caused by physical stimuli. For example, an influencer's *imagining* of going into a room and shaking the influencee's chair has been accompanied by this identical experience, in the influencee, along with appropriate, dramatic physiological reactions.
9. Persons with a *greater need* to be influenced (i.e., those for whom the influence is more beneficial) seem more susceptible to the effect.
10. Immediate, trial-by-trial analog sensory *feedback is not essential* to the occurrence of the effect; intention and visualization of the desired outcome is effective. Successful distant influence strategies have included (a) attending fully to the person or system one wishes to influence, (b) filling oneself, as influencer, with strong images and intentions of the desired outcome, (c) producing the desired outcome conditions in oneself, using self-regulation procedures, and intending for similar conditions to occur in the to-be-influenced person, and (d) vividly imagining that the influencee is in a physical or psychological setting that would naturally produce the desired reactions. Sometimes, *gentle wishing* (a more effortless form of intending) seems more effective than effortfully willing the desired outcome to come about. In addition

to, or instead of, the more specific, process-oriented images and intentions just mentioned, the influencer may engage in *goal-oriented imagery* of a more general and overarching sort—i.e., images, visualizations, and intentions associated with a successful experiment outcome. These could include imagining the joy of the research personnel as they celebrate a positive outcome for a session or for the entire experiment, imagining a computer printing out significant findings, imagining reading a published report of positive findings of this session or this experiment, imagining how the outcome of the present session may contribute to the realization of some useful, health-related practical application of these principles, and so on.

11. The effect can occur *without the influencee's conventional knowledge* that such an influence is being attempted.
12. It may be possible for a person to *block or prevent an unwanted influence* upon his or her own physiological activity; psychological shielding strategies in which one visualizes protective surrounding shields, screens, or barriers may be effective.
13. Generally, our volunteer participants *have not evidenced concern* over the idea of influencing or being influenced by another person.
14. The effect can be *intentionally focused* or restricted to one of a number of physiological measures; it may also take the form of a generalized influence of several measures, if that is the intent of the influencer.
15. The living target systems can be influenced *bi-directionally*; i.e., their activity levels can be either increased or decreased.
16. The activity levels of at least some of the target systems (i.e., electrodermal activity, rate of hemolysis) and their susceptibility to distant mental influence appear to be associated with *geomagnetic field (GMF) activity*; i.e., the systems are more active and more susceptible to influence when the earth's geomagnetic field activity is more "stormy" than during more "quiet" GMF periods.
17. Distant mental influence, in the expected direction, seems more successful when the intentions and images of the influencer are focused *specifically on the desired target activity*, rather than directed toward the target in a more general or global manner.
18. *Attention alone* (fully focusing attention on the person or system in question) can influence the distant person or other living system, even in the absence of an intention for a directional change; this is best evidenced in the studies of physiological detection of remote staring.
19. Successful distant influence episodes sometimes are *accompanied by distant knowing*, as well; the latter can take the form of telepathic awareness of specific images that the influencer happens to be using.
20. The degree to which one is able to distantly influence others, or be influenced by distant others, has been found to be *related to various psychological characteristics*, such as one's ability to concentrate or become absorbed in what one is attending to, one's degree of introversion, and one's degree of social avoidance and distress, as measured by standardized assessment instruments.
21. These distant mental influence effects recently have been *successfully replicated* in other laboratories by independent investigators (see below).
22. The effect *does not always occur*. The reasons for the absence of a significant effect in some experiments of a series that otherwise is successful are not clear. We suspect that the likelihood of a successful distant mental influence effect may depend upon

the presence of certain psychological conditions, in both influencer and influencee (and perhaps even in the experimenter) that are not always present. Possible success-enhancing factors may include belief, confidence, positive expectation, and appropriate motivation. Possible success-hindering factors may include boredom, absence of spontaneity, poor mood of influencer or influencee, poor interactions or poor rapport between influencer and influencee, and excessive egocentric effort (excessive pressure or striving to succeed) on the part of participants. We suspect that the effect occurs most readily in influencees whose nervous systems are relatively labile (i.e., characterized by free variability) and are momentarily free from external and internal constraints. Perhaps fullness of intention and intensity or vividness of visualization in the influencer facilitate the effect.

Replications, Extensions, and Related Research by Others

Not all of our work in the area of distant mental influence is described, in detail, in this book. Some of our additional projects—e.g., remote influences on other persons' intensity of mental imagery—are cited in some of the review articles in this volume. In addition to our own expansion projects, our work has been replicated and extended by others. Some of these related projects are described in the reviews presented as Chapters 4 and 11. Still others have suggested and implemented refinements and improvements of this work.¹⁰

Recent developments in three related research areas deserve special notice. These are projects in the areas of presentiment, focused group consciousness, and distant healing and intercessory prayer.

The presentiment (pre-feeling) studies are closely related to the retroactive intentional influence work described in Chapter 12. In these studies—conducted chiefly by Dean Radin and Dick Bierman—participants are monitored for typically “unconscious” physiological reactions (heart rate, electrodermal activity, finger blood volume) before, during, and after sensory exposure to slides that have emotional or nonemotional content. Radin and Bierman have been finding that persons show different autonomic nervous system reactions to emotional and nonemotional slides, even *before* the slides are shown, and when the nature of the upcoming slide still is unknown (in conventional ways).¹¹ Although this presentiment effect usually is taken to reflect precognition (future-knowing) operating at an unconscious, bodily level, these interesting findings can just as well be interpreted as instances in which objective events (the presentation of the slide itself or the person's future *reaction* to the slide) may be acting backward in time to influence the person's physiological activity. Similar interpretations can be placed on Klintman's curious “time-reversed interference” effects described in Chapter 12. Indeed, all instances of precognition might be interpreted as the retroactive influence of future objective events upon the present or past mental activities of the persons who report these instances of future-knowing. Even if one takes the usual view of precognition—that one somehow reaches out into the future to access information about some yet-to-occur event (typically, some very meaningful, important, or disastrous event such as a railroad accident, the sinking of the *Titanic*, or the Aberfan mining disaster¹²)—then there

remains the task of bringing this encountered information *back into present knowing*, and so, a process of backward-going-in-time still must be involved even in the usual interpretation of precognition.

The research on focused group consciousness is chiefly the work of Roger Nelson and his colleagues.¹³ A number of electronic random event generators have been placed at many locations throughout the world—at the time of this writing, about 38 of these devices have been distributed—and their random activities are continually monitored. The remarkable finding is that at times during which there is an unusually strong degree of coherent or focused attention by large groups of people, the activities of these random generators deviate significantly from their usual baseline levels. The coherences of group attention to which the random generators are sensitive include such events as special moments during conferences or meetings, moments of widespread viewings of televised events (such as the funeral ceremony of Princess Diana, the announcing of the jury verdict of the O. J. Simpson murder trial, various New Year's Eve ceremonies, special moments during Academy Awards telecasts, etc.). Some of the strongest and most consistent departures of random event generators from their normal patterns occurred just before and during the two crashes of terrorist-hijacked commercial airplanes into New York's World Trade Center twin towers on September 11, 2001. In these and similar cases, there occur widespread (nonlocal) changes in the arrays of random generators and also indications of greater effects in the vicinities of the triggering events. One of the most straightforward interpretations of these effects is that events of great importance are associated with a greater alignment or coherence of attention of a large number of people, and the random event generators' activities shift in accordance with these enhanced instances of focused group consciousness. Thus, the findings may be related to—but are much more amplified instances of—the staring detection findings mentioned above. In the studies reported in Chapters 7 and 8, the focused, remote staring at one individual by another individual can be detected by a shift in the ongoing, freely-variable (quasi-random) physiological activities of the staree. In the group consciousness studies, the focused, remote attention of large numbers of individuals can be detected by shifts in the ongoing, freely-variable (random) activities of arrays of widely dispersed inanimate random generators. The most up-to-date descriptions and summaries of this group consciousness work are available on the Internet at <http://noosphere.princeton.edu/>.

Perhaps the most important related research and application is in the area of distant or nonlocal healing (including spiritual, psychic, mental, and “energetic” healings of others) and intercessory prayer (prayers said for the benefit or health of others). Although these practices have been carried out throughout history and in virtually all cultures, very little research attention has been devoted to these processes. Some of the earlier studies are reviewed in various chapters of this book. Near the turn of this century, there has been increased interest in studying the efficacy of distant healing and prayer. A number of reviews of such work recently have been published.¹⁴ Although the outcomes of the various studies are not always positive or consistent, the significant—and sometimes dramatic—effects reported in some of these studies provide promising indications of the potential effectiveness of these complementary and alternative healing techniques, and the overall results certainly suggest that it is important that additional work be carried out

in these areas. Among the more interesting of these recent studies are studies by Byrd and by Harris and co-workers (on efficacy of intercessory prayer for patients with coronary disease), and research by Sicher and co-workers (on efficacy of distant healing for patients with advanced AIDS).¹⁵ One of the most provocative recent reports is that of Leibovici, on efficacy of remote, *retroactive* intercessory prayer for large groups of patients with blood stream infections; here, the prayer intervention was performed 4-10 years *after* the infections.¹⁶ Distant healing and remote intercessory prayer findings are relevant to the topic addressed in this book in that distant mental influences, in the form of healing intentions, are involved in both nonlocal healing and intercessory prayer, and these healing intentions, especially if they are present in a large number of healers or pray-ers, may themselves play important influential roles in the positive results obtained in such studies.

What Does It All Mean? Explanations and Interpretations

The findings reported in this volume, along with other, related findings, demonstrate that persons can remotely influence other persons and other living systems in ways that cannot be adequately accounted for or explained by our dominant scientific models and theories. At the very least, these findings suggest that the theories, models, and understandings of macroscopic physics, physiology, neuroscience, and cognitive psychology are incomplete and in need of modification and expansion, if they are to adequately encompass and explain these distant mental influences and other similar, well-documented, nonlocal human interactions. The most challenging aspects of these distant mental influence findings have been succinctly characterized, by Larry Dossey, in three words: these interactions appear to be *unmediated*, *unmitigated*, and *immediate*.¹⁷ They are unmediated in that no presently known, conventional sensori-motor, energetic, or informational processes seem capable of serving as vehicles for these effects. They are unmitigated in that the effects do not seem to be importantly diminished by increasing spatial (or temporal) distances between influencer and influencee. They are immediate in that the effects seem to occur instantaneously (although this latter claim is difficult to assert with full confidence).

In attempting to understand these distant influence effects, three classes of models have been proposed. In *transmission* models, it is suggested that remote influence is accomplished through some physical or quasi-physical force that carries information from one locus to another through some channel or medium in a manner analogous to mental radio: There is transmission and reception of information, intelligence, or "energy." Such models have many difficulties. The mediating force has not been identified, nor has the "channel," nor do we know of any mechanisms through which the conscious intention of the influencer might be coded into or modulated onto the "carrier" then decoded or demodulated from the carrier at the remote influence site. The distant mental influence process does not behave as other forms of transmission (i.e., the four conventional physical forces: electromagnetic, strong nuclear, weak nuclear, or gravitational) customarily behave with respect to physical factors such as distance, shields, screens, amplifiers, attenuators, the nature of the influenced system or of the conveyed information (message content), or (perhaps most problematically) time. One of the leading contenders for possible physical carrier of distant mental influence (and

paranormal events, in general)—extremely low frequency (ELF) radiation—does have the required great traveling and shield-penetrating characteristics; however, its low frequency would not seem sufficient to carry rich and detailed information sufficiently rapidly to account for complex, detailed, and quickly occurring paranormal events, nor are we aware of any conventional mechanism through which the body or brain of an influencer might be able to encode intentions or other biological information onto ELF carrier waves.¹⁸

In *reorganization* models, nothing is posited to be transmitted from point to point. Rather, the "noise," randomness, or disorder already present in the to-be-influenced system is reorganized in a manner that creates the desired goal outcome and *appears* force-like. The process is one that is analogous to resonance, but without the typical mediators of familiar forms of resonance. The challenges facing such models are determinations of what precisely "feeds" the reorganization process at the target end and what precisely specifies the particular form the reorganization will take. Perhaps there are basic, axiomatic laws of the universe through which, under certain conditions, disorder in one area automatically becomes organized to match a strong, ordered pattern elsewhere, and perhaps distant mental influence is one particular manifestation of these more general laws. The latter may not yet have been "discovered" by conventional methods and theories of science, but they seem to have been known, through other methods, throughout history. The "nonscientific" knowledge of such laws can be glimpsed—sometimes, perhaps, only in distorted or partial forms—in various esoteric, magical, mystical, spiritual, and wisdom traditions.

In the third class of models, which could be called *holonomic* or *correspondence* models, nothing is either transmitted or reorganized. All information is already present throughout all parts of all systems, in some implicate or potential form, in a manner not unlike the complex interference patterns in which information is represented in a hologram. The problem then becomes one of accessing or manifesting a particular, desired outcome event as opposed to other potential events that might be latent (implicate) in the target system and in many alternative systems that *don't* exhibit the influence, specifying the grounds or fields that make all of this possible, and accounting for the creation of novelty within such target systems. How do the *intended* outcomes occur at some particular time and in some particular place or person, as opposed to a vast number of alternative possibilities? This puzzle is analogous to the quantum-mechanical *measurement problem* of how one particular event is manifested or realized, as opposed to others, when the wave function (spread throughout space and throughout time) is collapsed to yield a particular observation.

The second and third classes of models call to mind similar statements found in Jung's concept of synchronicity, in Leibnitz's monadology in which "monads have no windows" but nonetheless perfectly mirror one another, in the ancient Hermetic maxim, "As it is above, so it is below," in the Buddhist notion of mutual arising or dependent origination, and in contemporary parallels such as David Bohm's implicate and explicate realities, Rupert Sheldrake's morphogenetic fields, and similar constructs.¹⁹ Intimations of these principles may be found in the same esoteric, magical, and mystical systems and traditions alluded to previously.

There are two relatively unfamiliar areas of scientific thought that may hold promise for increasing our understanding of distant mental influence and related processes. These are the zero point field²⁰ and the eight-space metric.²¹ At the very least, they—along with the more familiar notions of nonlocality in quantum physics—can provide useful analogies or metaphors that can aid our understanding of these distant influence phenomena.

Distant mental influences can occur with great specificity and rapidity, and without the influencer's knowledge of, or use of, conventional, causal processes or mechanisms of action in bringing these about. This *goal-directed* feature of these findings suggests that, in addition to the well-known causal laws of nature, there may also exist a complementary set of teleological or teleonomic principles that can also govern outcomes and events, and such goal-achieving principles may be active not only in psychological, social, and cultural realms, but in biological, chemical, and physical realms, as well.

Three Caveats

The reader will recognize that we have been discussing primarily *physical* explanations and possible *physical* mediators. It may be unwise, however, for us to look to physics for explanatory tools. There is danger in hitching one's wagon to a particular star in physics: When that star blinks out of favor or popularity, so does one's explanatory wagon. Ultimately, it may be best for psychology, parapsychology, and consciousness studies to consider and develop their own explanations and posited "mechanisms" through which various psychological, parapsychological, and consciousness-mediated events and experiences come about.

As human beings, we seem predisposed to become very uncomfortable when confronting what appear to be *gaps* of any kind, and we experience a strong need to fill these gaps, even in ways that are less than adequate. This gap-aversion applies also to scientists, and it helps account for the great scientific resistance to early observations and concepts of action at a distance (exemplified by electromagnetic field phenomena and gravitational field phenomena). The two quotes, by William James and Rumi, at the beginning of this Introduction paradoxically free us from problematical gaps—by suggesting that what appear to be separate, isolated systems may be only illusorily or superficially so—and also indulge in their own gap-filling or gap-banishing by suggesting a deeper interconnectivity or intimacy among apparently unconnected events. I think it is important for us to keep these issues in mind whenever we invoke notions of deep interconnectedness in order to "explain" interactions of seemingly separated events. To use interconnectedness in a *descriptive* sense certainly seems appropriate for describing the covariation of distantly separated events. To reify interconnectedness as some deeply interpenetrating and joining medium, however, may be but another—and more subtle—form of gap-avoidance.

There is another area of potential reification of which we should remain aware. This is the exquisitely seductive tendency to reify the constructs of mind, consciousness,

intentions, and attention. An alternative to this tendency is to treat these not as nouns, but as gerunds. In doing this, we would be heeding William James' early reminder that consciousness is a function, an ongoing *process*, a *stream*, and we would be following Alan Watts' more recent, and picturesque, lead in speaking of *minding*, *consciousing*, *mattering*, *thinking*, *intending*, and so on.²² Throughout this volume, the reader will encounter language that suggests that mind, consciousness, thoughts, images, intentions, and prayers are doing things. It may be more accurate to use gerundive forms and to say that *minding*, *consciousing*, *thinking*, *imaging*, *intending*, and *praying* are associated with other gerunds: *moving*, *growing*, *increasing*, *decreasing*, *healing*, and so on. This would remind us that we are discussing complex, ongoing processes—dynamic systems having particular patterns. To the extent that brain and body (*braining* and *bodying*?) are facets of these processes, of course, their conditions would be expected to play important roles in these events and their possible outcomes. Indeed, apprehending “mental” processes in such a way—*minding*?—could allow us to better appreciate how physical factors such as changes in information, geomagnetic field conditions, and local sidereal time might become associated with differences in accuracy of psychic functioning, as some recent studies have suggested.²³

Implications and Possible Applications: A Cornucopia of Questions

In the chapters that follow, the reader will find several suggested implications and potential practical applications of these distant mental influence findings. Here, I depart from the usual presentational format and address these implications in the form of a series of questions.

- I intend to wiggle my finger, and the finger wiggles. This set of events typically is explained in terms of neuromuscular structures, chemicals, and electrical processes. But what if I intend to wiggle your finger, and your finger wiggles (which, in principle, is what the findings of this volume suggest is possible). In which ways might neuromuscular structures, chemicals, and electrical process enter into the production of that intention-wiggle relationship?
- If conventional anatomical, physiological, and physicochemical processes cannot completely account for distant mental influence effects, what does this mean for a worldview that insists upon these kinds of processes as the only possible causal agencies?
- If direct mental influence can occur at a distance, could similar processes be occurring—perhaps ubiquitously—within our own bodies? If so, what might be their implications for processes such as hypnosis, biofeedback, physiological self-regulation, placebo effects, psychoneuroimmunology effects, volitional actions, and memory?
- If direct and distant mental influences occur in the laboratory, might these also be occurring in everyday life?
- If your intentions are able to influence my reactions (or feelings, or thoughts, or images), what does this imply about where you end and I begin?
- What does your answer to the previous questions imply about the nature of our identities, as human beings?

- What do the findings of direct mental influence imply about our potentials as human beings?
- What might direct mental influence findings imply about some of the unusual events and experiences reported in spiritual and wisdom traditions (unusual feats, “miracles,” etc.)?
- If our intentions can play active roles in influencing, or even creating, various physical, physiological, and psychological changes and conditions, might our intentions also be able to play active roles in influencing or creating various social, cultural, or planetary conditions?
- Might our intentions play active roles in influencing or even creating spiritual experiences or even spiritual realms or realities?
- What might be the possible ranges and limits of events or experiences that might be susceptible to distant mental influence?
- What are the implications of distant mental influence research for our understanding of the nature of consciousness and the role of consciousness in the physical world?
- If distant mental influence effects are attributable to the direct action of consciousness, and if these effects occur nonlocally, does this imply that consciousness itself is nonlocal?
- If consciousness is nonlocal, does this imply that consciousness is omnipresent and eternal (immortal)?
- If consciousness is nonlocal, does this imply that consciousness is one—i.e., that, as the physicist Erwin Schroedinger suggested, “consciousness is a singular of which the plural is unknown; that there is only one thing and that, what seems to be a plurality, is merely a series of different aspects of this one thing, produced by a deception (the Indian MAYA); the same illusion [that] is produced in a gallery of mirrors”?²⁴
- In any dyadic (two-person) situation—e.g., health practitioner/patient, therapist/client, counselor/counselee, spiritual guide/spiritually guided, teacher/student, trainer/trainee—could the mental practice or realization, in the first member of each pair, of an intended outcome directly facilitate or help realize the same desired outcome in the second member of the pair?
- How might direct or distant mental influence best be used for purposes of facilitating health, well-being, and healing?
- If beneficial changes or conditions can be fostered through distant mental influence, could harmful changes or conditions also be fostered in similar ways?
- If our intentions can act retroactively—i.e., if our present intentions can influence the likelihood of occurrence of past events—what does this imply about our understanding of the nature of time?
- If our intentions can act backward in time, might they act even transgenerationally?
- If distant mental influence effects are real, why do they seem to occur so infrequently? *Do* they occur infrequently?
- If such effects are real, why do we know so little about them?
- If such effects are real, why has so little work been directed toward their exploration and study?
- Because these findings have implications for the nature of our identities and capabilities, while we are alive, what implications do these same findings have for the

possibility of human survival of physical death and the possibility of an afterlife existence, in some form?

Interconnectedness

For many, one of the major lessons of distant mental influence and related findings is that these findings suggest a deep and profound interconnectedness among people and also between people and all of animate and inanimate nature. Such a view can provide a corrective for the more apparent and more familiar view of persons and things as having separate, isolated essences and existences. Thomas Wolfe's "Every man is an island" is complemented by John Donne's "No man is an island." This interconnected view of things is, indeed, the view suggested by the James and Rumi quotes with which this Introduction began. It also is compatible with Henri Bergson's image of "our large body"—co-extensive with our consciousness, comprising all we perceive, reaching even to the stars—which, Bergson maintained, we commonly ignore in limiting our consciousness to our more familiar small body.²⁵ This view corresponds, also, with the Iroquois metaphor or reality of the "long body"—the greater, more extensive and inclusive "body" or self that we share not only with other persons, but also with all sentient beings and with all of inanimate nature.²⁶

Direct mental influences, and other paranormal events and experiences, may be our way of informing ourselves—through impressive and sometimes elaborate indicators—about the deeply interconnected and interrelated conditions in which we always participate, but which we too often forget.

What better way to dramatize to ourselves that we are truly one than to share—especially at great distances and in defiance of powerful conventional barriers—each other's thoughts, feelings, images, sensations, and reactions? And what better way to demonstrate that we are in intimate contact with all of reality than to touch and move things with our minds? Perhaps the apparent transfer of information and the apparent forces that we seem to see in [paranormal] functioning are not really what they appear to be. Rather, they may be quick yet effective and convincing indicators that are readily at hand (paths of least resistance, so to speak) when we wish to remind ourselves of our forgotten interconnections.

In general, [these] experiences may be self-created metaphors and dramatizations—extremely real and concrete teaching stories—that hold important latent meanings, lessons, and reminders that may have little to do with the more obvious literal and "informational" content [and "causal influence" aspects] of the experiences. It could be fruitful to ask ourselves: What is the real message, and what is merely the medium?

Experimental parapsychology reveals interconnectedness only indirectly. Its impact is primarily upon the intellect and is but a shadow of the fuller,

more direct impact of oneness felt and known in . . . mystical [and related] experiences.²⁷

The value of realizing the interconnectedness suggested or revealed by distant knowing and distant influence findings is not only its contribution to our better apprehension of the way things are, but also—some maintain—in the ethical and moral understandings and actions that may flow out of this apprehension. This is part of the message embodied in the Sanskrit motto *tat tvam asi*—*that thou art*. If I am deeply and profoundly interconnected with other persons or with nature, then in some important way, I am one with others and with nature. To harm others and nature is to harm myself; to be loving, compassionate, understanding, protective, and caring for others and nature is to treat myself in these benevolent ways. A greater appreciation of our connectedness with others can foster greater feelings of compassion than otherwise might be possible. Additionally, such interconnectedness can serve to remind us that our own thoughts, feelings, and actions can directly affect others and the environment, thereby increasing the likelihood of more responsible actions toward others and toward the world at large.

No doubt, we can treat one another with kindness, understanding, and compassion even if we were not profoundly and intimately interconnected in nontrivial ways. However, having direct experiences and knowledge of this interconnectedness—as revealed by distant mental influences and related work—can provide, for some of us, additional rationales and direct personal experiences that can support our love for other persons and all of nature and can, thus, enhance our ethical actions toward others and nature. So, it is with these possible beneficial consequences, as well as increased knowledge and understanding, in mind, that I offer the remaining chapters of this book.

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