

HEALING, ENERGY, & CONSCIOUSNESS: INTO THE FUTURE OR A RETREAT TO THE PAST?

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ABSTRACT

Numerous controlled studies suggest that conscious intent can initiate helpful changes in a variety of organisms, including human beings, at great distances. These events appear to be genuinely nonlocal in nature. They do not yield to explanations based in classical concepts of energy, space, time, and causation. Classical models of distant healing, including the concept of "energy," must be reexamined. A new theoretical perspective, anchored in the nonlocal nature of human consciousness, may be necessary if we are to progress in our understanding of nonlocal healing events.

KEYWORDS: Healing, energy, consciousness

TIME AND HEALING

GRAVITY CANNOT BE HELD RESPONSIBLE FOR PEOPLE FALLING IN LOVE.
—Einstein

CAN ENERGY BE HELD RESPONSIBLE FOR HEALING?
—Dossey

FS. C. Northrup once observed that you may not know what an epistemology is, but you can't not have one. A world view is like that. We all have one—a tacit set of assumptions about why the world behaves as it does. One of the characteristics of a world view is that it usually goes unexamined. We don't question it because we generally feel we "know" how things work.

This is particularly true in healing.¹ Almost everybody has hidden assumptions about what is involved. For example, consider the word "healing." The "-ing" suggests a process. "Process" comes from words meaning "to go forward in time." Healing is wedded, then, to a belief and a feeling that time flows, that time is linear, and that it is comprised of a past, present, and future. In healing, people "get" better, and health is acquired. That is why most people believe that healing is progressive. When we strive for healing, we hope to "go" from a less well state to some healthier state that lies "out there" in the future. So healing, most people believe, is lodged in time.

But what is time? Richard Feynman, the Nobel physicist, was once asked this question. He said that although physicists work with time every day, they do not really know what time is. In his words, "[Time] is too difficult." Feynman mirrors St. Augustine, who said, "I know what time is—but when you ask me, I don't." Whatever the verdict of physics on the nature of time may prove to be, we ought to bear in mind the sober observation of physicist Paul Davies:

In the entire history of science, there has never been an experiment that shows that time flows.

ENERGY AND HEALING

What about energy? We seem to be on firmer empirical ground with energy than with time. Physicists tell us there are four main types of energy—gravitational, electromagnetic, and the weak and strong nuclear forces. These energies demonstrate certain characteristics: their strength dissipates with increasing distance according to the famous inverse square law, they can be shielded, they can be converted into matter, and so on.

There is a widespread tendency to equate one or more of these forms of energy with healing. The reason is that healing appears to entail some sort of work. If work was done, then energy *must* have been involved. Sometimes, however, even when healing has taken place, it is difficult to demonstrate this energy—therefore we call it elusive or *subtle*. But we “know” the energy had to be there, or else the healing could not have occurred. Therefore we tend to lump healing and energy together, and consign the lot to flowing Time—healing as an energy-based phenomenon acting into the future.

Today, this way of thinking passes for common sense and goes virtually unquestioned in “alternative,” “holistic,” or “energy” medicine. But there is a problem with this way of thinking. Today we are faced with hints on every side that the assumptions we make about energy, time, and healing don’t fit with the data. To put it simply, there is a mismatch between common sense and what we can demonstrate.

THE INADEQUACY OF “ENERGY”

Evidence that distant healing events may occur outside an “energy” model comes from several sources. Among them are: 1. Transpersonal imagery studies, 2. Distant EEG correlation studies, 3. Studies in distant diagnosis, 4. Distant or intercessory prayer, 5. Telesomatic events, and 6. Remote perception experiments.²

In addition, a sizeable body of scientific evidence in distant mental influence that is relevant to healing has been reviewed by psychologist William G. Braud, who states:

. . . there exist many published reports of experiments in which persons were able to influence a variety of cellular and other biological systems through mental means. The target systems for these investigations have included bacteria, yeast, fungi, mobile algae, plants, protozoa, larvae, insects, chicks, mice, rats, gerbils, cats, and dogs, as well as cellular preparations (blood cells, neurons, cancer cells) and enzyme activities. In human 'target persons,' eye movements, muscular movements, electrodermal activity, plethysmographic activity, respiration, and brain rhythms have been affected through direct mental influence.³

These studies in general assess the ability of humans to affect physiological functions of a variety of living systems *at a distance, including studies where the "receiver" or "target" is unaware that such an effort is being made.* The fact that these studies commonly involve nonhuman targets is important; lower organisms are presumably not subject to suggestion and placebo effects, a frequent criticism when human subjects are involved.

In addition to the review by Braud, two other major reviews of this field have been published in the past decade by researchers Jerry Solvvin and Daniel J. Benor.^{4,5} These reviews examine the results of more than 130 controlled studies of distant mental effects, approximately half of which show statistically significant results. Also, *The Future of the Body: Explorations Into the Further Evolution of Human Nature*, a scholarly, encyclopedic work by Michael Murphy, co-founder of the Esalen Institute, reviews many of the major research accomplishments in the field of mental healing and related fields and is an invaluable guide.⁶ Benor's four-volume work, *Healing Research*, will soon be available and will prove to be a landmark contribution.⁷

PROBLEMS OF ENERGY-BASED EXPLANATIONS OF DISTANT HEALING: VIEWPOINTS

In order to highlight the problems faced by energy-based explanations for this body of knowledge, I want to look at the comments of several researchers, clinicians, and observers. Some of these statements come from persons involved with actual healing; others are from researchers in the field of parapsychology. Parapsychologists have long been faced with the questions with which we are

beginning to deal in healing, because the question of how distant parapsychological events occur, and how information is “transmitted” at a distance, is similar to the question of how distant or remote healing occurs.

Brenda J. Dunne and Robert G. Jahn, of Princeton University’s Engineering Anomalies Research Laboratory, said recently in an article entitled “Experiments in Remote Human/Machine Interaction,”⁸

Returning to the theoretical issues, while there have been many attempts to interpret consciousness-related anomalous phenomena in terms of some physical form of information transmission, virtually all of these have explicitly or implicitly presumed a space/time reference matrix. *The demonstration of negligible attenuation of the empirical effects with distance, along with the precognitive and retrocognitive capacities, would seem to call this presumption into question, and specifically to preclude their attribution to any known form of field radiation, be it electromagnetic, geophysical, or even subtler physical vectors.* Rather, some more radical proposition seems unavoidable. [Emphasis added]

Glen Johnson, Chair of ISSSEEM’s State & Local Affiliates Committee, writing in ISSSEEM’s *Bridges*, said,⁹

Let’s just review our current situation as members of a national ‘subtle energies’ society. It would seem to be that if we are honest with each other as ISSSEEM members, we have to concede that:

1. We can’t say precisely what ‘subtle energies’ are (or aren’t) since we don’t have agreement on how to measure them.
2. We can’t specify the ‘mechanism’ underlying ‘subtle energies’ that might make them comprehensible within the prevailing scientific paradigm.
3. We can’t attribute a given therapeutic result to ‘subtle energies’ with certainty, and thereby rule out artifact or subterfuge.
4. Finally, we can’t say who has the necessary training, expertise or personal attributes to be called a legitimate ‘subtle energies’ practitioner.

Beverly Rubik, writing in *Noetic Sciences Review*, tells us,¹⁰

The evidence for therapeutic touch and other non-standard healing processes is too compelling for medical scientists to responsibly ignore. But how do we explain these phenomena? Evidence for biophoton and other electromagnetic emissions is suggestive, but the data do not account for all the anomalies associated with 'subtle energies.' Science does not have a good hold on the concept of subtle life energies—such as chi, prana, orgone energy, entelexy or vital force. . . I certainly would not equate it with electromagnetism at this point.

William G. Braud, writing about the problems with ELF (extremely low frequency) electromagnetic radiation as an explanation for distant healing events, states,¹¹

[ELF] would have to behave in highly unusual ways with respect to *time* in order to explain the time-displaced mental effects that have been observed in certain experiments. . . [ELF fields] would have to carry more information than they could appear capable of carrying. . . They would have to be encoded by the subject's brain (or other bodily processes) in ways that we do not understand and for which we have no known mechanisms. Therefore, an ELF-mediated carrier [as an explanation for distant healing effects] remains, while not entirely impossible, a highly implausible hypothesis.

Again, Robert G. Jahn, Brenda J. Dunne, and Roger D. Nelson, of Princeton's Engineering Anomalies Research Laboratory:¹²

The literature of psychic research abounds with attempts to transpose various physical formalisms [to account for these effects]: electromagnetic models, thermodynamic models, mechanical models, statistical mechanical models, and others. . . Although these comprise an interesting body of effort, none of them seems fully competent. . . Indeed, it appears that no simple application of existing physical theory is likely to prevail. In order to encompass the observed efforts, a substantially more fundamental level of theoretical model will need be deployed, *one which more explicitly acknowledges the role of consciousness in the definition of physical reality.* [Emphasis added]

Charles Tart has expressed a similar point of view:¹³

. . . psi phenomena [among which distant healing can be included] are manifestations of mind that have resisted all attempts to reduce them to known physical forces, or straightforward extensions of known physical forces. I exempt some of the speculations on the frontiers of quantum physics to explain [these events] as “straightforward” extensions of physics. These ideas are controversial even in physics *per se*. They involve such a radically different view of what is “physical” that they should not be lumped in with the old materialistic physics, and, quite important from a scientific view, have not shown any notable degree of success in our understanding and controlling [these] phenomena.

What do some of these extensions of modern physics look like? As a single example, here is a proposal from Andrei A. Berezin, a Russian physicist working at the Princeton’s PEAR Lab:

An extension of the Heitler-London theory of paired spin interaction, along the lines of the Jahn-Dunne quantum mechanical representation of consciousness/environment interactions, can accommodate such anomalous phenomena as non-local and atemporal effects in both remote perception and human/machine experiments, as well as gender-based differential yields and “bonded” pair cooperators effects. This model proposes that consciousness influence on a physical process is realized through the physical vacuum, wherein every elementary act of virtual particle transformation is described by two coupled Schrödinger equations. By establishing a state of spin resonance with the physical system it addresses, consciousness creates short-time negentropy states in the vacuum which can produce measurable anomalous physical effects. This process is termed “negentropy resonance,” and is sufficiently universal in nature to make such consciousness phenomena ubiquitous in the universe, with time and space reduced to scaling factors.¹⁴

Cutting-edge speculations such as these are often used to justify the belief that “subtle energy” mediates distant healing—something lurking in the background, something difficult to detect, but something that will be described at some point in the future. There is something to say for this point of view. Surely physicists have not yet exhausted nature’s inventory of energies, and we can expect them to discover other forms in the future. However, to imply that

these developments will restore an energetic basis to distant healing is by no means obvious. When most people assert this belief, they seem to imagine these future energies as some rarefied form of electromagnetism. This image reflects a yearning to restore the world of healer and healee, subject and object, and a connecting thread uniting them through space and time. But if they are to account for our observations in distant healing, future energies cannot behave like electromagnetism, because distant healing appears to be a nonlocal event and electromagnetically mediated phenomena are not. Currently, therefore, the idea that we shall one day explain distant healing as a result of subtle electromagnetic forces seems to be a form of promissory materialism and mostly a matter of faith.

How about the idea that some sort of energy *must* be present in distant healing, or else there would be no effect at all? In the light of recent developments in fundamental physics, the logic of this line of thinking is by no means obvious. Physicists working at the quantum level have recognized a class of phenomena that is said to be nonlocal. These events are said to be “unmediated, unmitigated, and immediate.” One can examine the work of physicists John Clauser, John Stewart Bell, and Alain Aspect for the theoretical and experimental evidence supporting these phenomena. The existence of these events has been established by many experiments over the past two decades, and today nonlocal events are considered factual beyond reasonable doubt. They imply that things can apparently happen in this strange world without the intervention of any conventional form of energy.¹⁵

When nonlocally correlated events occur between distant entities, it is as if the entities and any intervening “mechanism” are simultaneously enveloped in an all-at-once process. Because there seems to be no energetic signal passing between the distant entities involved, the distant entities and the mechanism of interaction behave as a single unit, as if they are in some sense united and “one.” This leads to one of the most radical features of nonlocal events: they seem to be *acausal*. In the words of parapsychology researchers Daryl Bem and Charles Honorton:¹⁶

In brief, Bell's theorem states that any model of reality that is compatible with quantum mechanics must be *nonlocal*: It must allow for circumstances in which the results of observations at two arbitrarily distant locations can be correlated in ways that are *incompatible with any causal mechanism*. [Emphasis added]

The fact that nonlocal, acausal events happen at the subatomic level does not mean that they necessarily happen at the macroscopic level where healing is observed. But, as we yet cannot say what the process of “healing” really is and is not, we cannot be sure that it is fundamentally *not* a subatomic process that is somehow amplified biologically, in which case nonlocal subatomic events might indeed be occurring. At the very least, the similarity of *nonlocal subatomic* events and *distant healing* phenomena should encourage us to look for connections between these two types of events. And the presence of nonlocal events in physics should divest us of our tendency to assume that all observable events must require some sort of electromagnetic signal or energy in order to happen.

LeShan has devoted much attention to how healing happens. Although he is speaking here about psi in general, these comments apply also to distant healing. LeShan’s observations are crucial and are quoted at length:¹⁷

We have worked very hard to arrive at some sort of an answer to how information could get from one consciousness to another. In spite of our attempts, in spite of the fact that we have had men and women of very high ability, training and dedication spend great time and energy on the problem, we have not the ghost of an idea of how to find a solution. It is part of the faith of science that if serious people work for a long time on a question and cannot find an answer, then they are asking the wrong question. The question of how information is transmitted across a space between two consciousnesses has been the central question of parapsychology, the focus around which we have designed many of our experiments and towards which we have directed much of our speculation. From the viewpoint of modern science it is a false question. It assumes the presence of space between consciousnesses. It assumes that consciousness is bounded and delimited in space. Neither of these assumptions is valid.

Let us be clear about this. . . The brain exists in space and is bounded in space. How information travels from one brain (or one computer) to another is a legitimate question. The brain and consciousness, however, are in different realms of experience and questions valid in one realm are not necessarily valid in another. . . It is legitimate to ask how information travels from one brain to another, not, however, to ask how it travels from one consciousness to another. . .

In the Realm of Consciousness, spatial location and spatial distance do not exist. [Emphasis added]

We are dealing here with a subtle, but very important point. Questions that may legitimately be asked, and statements that may be made, when an entity is considered from the viewpoint of one realm of experience have no meaning when the entity is considered from the viewpoint of another. It is legitimate to ask if a block of steel is harder than a block of lead. It is not legitimate or meaningful to ask if the atoms of which they are composed are harder in the steel block than they are in the lead one. It is legitimate to say that the block of steel may be either stationary or in motion. It is not legitimate to say that the electrons in the atoms of the block may be either stationary or in motion. Similarly, it is legitimate to say that the brain of an individual is located at such and such a place and bounded in such and such a way. It is not legitimate to say that the mind is located at such and such a place or bounded in such and such a way.

Parapsychology [as well as modern science in general] has been operating under the assumption that consciousness is in the brain, and that therefore the problem of distance is a real one. There is certainly no question today of the relationship of brain and mind. Four ounces of alcohol will affect the brain and then the mind. Psychological stimuli can affect the brain and alter its chemistry to a marked degree. Nevertheless, the two kinds of effect, resembling each other. . . as much as a telephone number resembles a subscriber, are not the same. They cannot be validly dealt with in the same way or explained in the same metaphysical system.

And then there's the possibility that "healing" may be so complicated we will never understand it. This is implied by the well-known remark by researcher Emerson Pugh:

If the brain were so simple we could understand it, we would be so simple we couldn't.

None of these observations calls the actual fact of healing into question. It's still there, in spite of our ignorance about *how* it happens. We need not fall into an experiential crisis just because we don't know how distant healing works. It is refreshing to recall that, in medicine, it is not particularly damaging to

say that we don't know how a therapy works. When penicillin was discovered, we didn't have a clue *how* it worked. But we knew *that* it did so. So it is with distant healing. In science, the explanation frequently comes later.

As further antidote for any depression the reader may be falling into as a consequence of the absence of any explanation for these events, it may be therapeutic to recall a comment from C. D. Broad, from his "Lectures on Psychical Research" in 1962, and which still applies:¹⁸

And anyone who at the present day expresses confident opinions, whether positive, or negative, on ostensibly paranormal phenomena, without making himself thoroughly acquainted with the main methods and results of [this] careful and long-continued work may be dismissed without further ceremony as a conceited ignoramus.

A PSYCHOLOGY OF ENERGY

Why are we so intent on preserving "energy" as a necessary ingredient in all observable phenomena, when there are some areas in science that seem to be giving it up? There appears to be a "psychology of energy"—a set of emotional tendencies to hang on to the vocabulary and the concepts of 18th- and 19th-century physics to explain all phenomena. This is nothing new. In the nineteenth century there was a "psychology of ether." Scientists were infatuated with the notion that light must propagate by being carried along by some sort of substance called "ether." For most physicists, it was unthinkable that the ether could not exist. Even when this idea was disproved by Michelson and Morley, physicists had great difficulty giving it up.

Many researchers and practitioners are piqued when their "energy model" of healing is questioned. They frequently say, "I *know* energy is involved. I feel heat in my hands and tingles in my body. Sometimes my patient feels the same thing." Some seem to believe that if you question "energy" you are implying that these experiences are fabrications or are imagined, and that what they do is a sham. I emphasize that *none* of these internal, personal experiences are in doubt; these felt experiences are almost certainly explainable in terms of energy-based bodily processes. These phenomena can be viewed as the local manifestations of prior, nonlocal events. Our goal is not to cast doubt

on these local processes, but to question how the healing effect gets from the healer to the healee, sometimes across vast distances.

I had an opportunity to see the “psychology of energy” in action in preparing these remarks. When asked for a title of this lecture, I submitted “Healing, Energy, and Consciousness.” Yet in the brochure the title was changed to “Healing Energy and Consciousness”—all commas deleted. Now, I am thankful for all the help I can get, but this modified title conveys a position that is *opposite* the main point of the lecture. Why the change? I believe in the existence of anomalous events in nature, so I admit that it is possible that the title changed itself spontaneously, perhaps as a reminder from the cosmos that I am on the wrong track. But a more likely explanation is that the title got changed as a consequence of the “psychology of energy”—the belief on somebody’s part that surely Dossey must have *meant* “healing energy,” since, after all, that’s what our Society officially stands for.

This is not a serious criticism; I offer these remarks gently. After all, it is not hard to understand why people are attached to “energy.” One understandably wants to hang on to the concept. We feel at home with it; it is an old friend who has served us well. But surely there comes a point in the process of redefining energy—of saying, in effect, “it’s energy that doesn’t behave like energy,” or “it’s energy we can’t detect, so it’s *subtle* energy”—that the term becomes so diluted that it is misleading to continue using it.

THE SMALL-IS-BEAUTIFUL SYNDROME

Philosopher Stephen E. Braude, of the University of Maryland, past president of the Parapsychological Association, in his 1991 Presidential Address, described the “small is beautiful” way of thinking among researchers in parapsychology. His comments apply also to the field of healing:¹⁹

One symptom of parapsychology’s obsessive and parochial allegiance to the methods of physics is the tacit acceptance of what I have called *the small-is-beautiful assumption* . . . , according to which there are no primitive or unanalyzable observable phenomena or lawlike regularities; primitive phenomena appear only at the level of the very small—for example, the subatomic, neurological, or biochemical level, and never (say) at the level of behavior. . .

Many (if not most) human capacities and abilities have no analysis in terms of lower-level processes and mechanisms. . . . That is no more cause for alarm than in other branches of science where unanalyzable phenomena are countenanced as a matter of course. . . . In a nutshell, mechanistic analysis of those phenomena rest on deeply nonsensical presuppositions concerning the nature of properties generally and mental states in particular. . . . In fact, because these phenomena are unanalyzable, there is no answer to the question of *how* they work. *That* they exist and work, and *that* certain regularities obtain, are brute facts of nature.

Braud is pointing out a way of thinking that goes like this: If something happens, it necessarily must be analyzable in terms of fundamental, deep-rooted causes: “small is beautiful.” However, for some phenomena *there is no “small.”* Thus, it may be that in distant healing *there is no “subtle”* when it comes to energy.

THE POWER OF NOTHING

A great many events in the universe happen as a consequence not of *something* such as energy, but as a result of *nothing*, as Gregory Bateson pointed out over thirty years ago. If you doubt the power of nothing, try *not* filing your tax return for a year or two. There is no subtle energetic signal passing between you and the computers of the Internal Revenue Service making their red lights go off—yet this event is real and undeniable to those who have tried this experiment for themselves.

In the field of healing, we have become bewitched by classical physics and classically oriented physicists, the high priests of the small and the subtle. We need to break the spell, as J. B. Priestley, the English playwright and author, made clear.²⁰ (p. 68)

As to the question, how much one should defer to physics in thinking about parapsychology: remember how disastrously wrong Kelvin was in ruling out Darwinian evolution for thermodynamical reasons. . . . If parapsychological things *are* shown to happen, physics must eventually come to terms with the fact, not the fact denied for abstract physical reasons.

There is another danger with the small-is-beautiful infatuation: In searching for the small or the subtle, the temptation is always to put the phenomenon under the microscope to study the suspected subtlety, with the risk of extinguishing the phenomenon itself. Priestley again:²⁰ (p. 165)

Certain kinds of experience. . . cannot be scientifically tested, if only because they may not survive the conditions of such testing. Thus we may believe in telepathy, but that does not mean we are ready to make an appointment at the Psychology Department's lab to prove it. And because we cannot be telepathic to order, that does not mean we have been bamboozled by a few coincidences. And it is no use the positivist telling us we are making meaningless statements, because what is meaningless to him may be deeply meaningful to us, and, after all, our real life is inside us, not inside him. The danger of this test-in-the-lab outlook is that it encourages the assumption that anything untestable by scientific method—falling in love, for instance—is unreal.

NONLOCAL MIND: AN ALTERNATIVE TO “ENERGY”

There appear, then, to be forms of distant healing in which energy appears to be not only undetectable but entirely absent. However, all forms of distant healing seem to have one thing in common: *they are related to consciousness*. We therefore would appear to be on safer ground to propose *consciousness instead of energy as the foundation of these events*.²¹

What sort of model of consciousness would we have to construct that would permit distant, anomalous healing? Such a model would have to be *nonlocal* in nature.

The idea prevalent in contemporary science is that mind and consciousness are entirely *local* phenomena—*i.e.*, they are localized to the brain and body, and confined to the present moment. From this point of view, distant healing cannot occur in principle, since the mind cannot stray outside the here-and-now to actually cause a remote event. Studies in distant mental influence and mental healing, however, challenge these assumptions. As we've seen, these experiments suggest that the mind can bring about changes in far-away physical

bodies, even when the distant person or organism is shielded from all known sensory and electromagnetic influences. Moreover, the strength of the effect does not appear to attenuate with spatial separation. The temporal barrier can also be violated: information can apparently be received by a distant person, at global distances, *before* it is mentally “transmitted” by the sender.²² *These events, replicated by careful observers under laboratory conditions, suggest that there is some aspect of the psyche that is unconfined to points in space, such as brains or bodies, or to points in time, such as the present moment.* In sum, these events point toward a nonlocal model of consciousness.²³

A nonlocal model of consciousness implies that at some level of the psyche there are no fundamental spatiotemporal separations between individual minds. If so, at some level and in some sense, there may be unity and oneness of all minds—what Nobel physicist Erwin Schrödinger called the One Mind.²⁴

In a nonlocal model of consciousness, therefore, distance is not fundamental but is completely overcome—in which case the mind of the healer and healee are not genuinely separate but in some sense united. “Distant” healing, thus, becomes a misnomer; and, because of the unification of consciousness, the patient, in some sense, may be said to be healing him/herself.

Offering nonlocality as the bedrock of mental healing merely shifts the question of “mechanism:” instead of asking how mental healing occurs, we now find ourselves asking how nonlocality happens. Currently no one knows—not even the physicists whose many experiments have established it as experimental fact in modern physics. The failure to understand how something happens in science, however, is not a particularly damaging admission. At the turn of the century, scientists were unable to explain a very common event: sunshine. An explanation of *how* the sun shines had to await the development of nuclear physics. In the meantime, the lack of an explanation hardly annulled the fact that the sun did indeed shine.

Nonlocal mental models imply, of course, “action at a distance,” a concept which science has abhorred since Galileo. The intellectual indigestion surrounding this idea may be changing. The term “action at a distance” appears actually to be coming back into the scientific lexicon—evidenced by an article in 1993 in *Scientific American* on the subject of quantum optics with the interesting title, “Faster than Light?” and with the caption, “Experiments in

quantum optics show that two distant events can influence each other faster than any signal could have traveled between them". In this article, "nonlocality" and "action at a distance" are used synonymously.²⁵ However, whether or not *quantum* nonlocality is a possible explanation or rationale for *biological* or *mental* nonlocality is a question for future research.²⁶ In any case, the fact that nonlocal events are now studied by physicists in the microworld suggests a greater permissiveness and freedom to examine phenomena in the biological and mental domains—such as mental healing—that may possibly be analogous.

THREE PROPONENTS OF NONLOCAL MIND: JOSEPHSON, HERBERT & SHELDRAKE

Nobel physicist Brian D. Josephson of Cambridge University has suggested that nonlocal events do occur in the biological world in addition to the quantum domain. He proposes that human ways of knowing, particularly our capacity to perceive patterns and *meaning*, make possible "direct interconnections between spatially separated objects. . ." ²⁷ Josephson suggests that these interconnections permit the operation of "psi functioning" between humans, currently denied possible in biomedical science.²⁸

Physicist Nick Herbert, in his book, *Elemental Mind*, has proposed that consciousness is primary and fundamental in nature, as deeply embedded in the universe as light and electromagnetism. Our failure to recognize the ubiquitous nature of consciousness is, according to Herbert, largely a failure of the imagination. He states:

One of the major mistakes of the medieval philosophers was their underestimation of the size of the physical world. This cozy earth, the seven celestial spheres, plus Dante's concentric circles of hell: that was the full extent of the universe in the medieval imagination. No one at that time even dreamed of other solar systems, let alone galaxies like dust in a vast room billions of light-years in diameter. I believe that modern mind scientists are making this same medieval mistake by vastly underestimating the quantity of consciousness in the universe. If mind is a

fundamental force in nature, we might someday realize that the quality and quantity of sentient life inhabiting just this room may exceed the physical splendor of the entire universe of matter. . . I confess that I do think that consciousness will turn out to be something grand—grander than our most extravagant dreams. I propose. . . a kind of “quantum animism” in which mind permeates the world at every level. I propose that consciousness is a fundamental force that enters into necessary cooperation with matter to bring about the fine details of our everyday world. I propose, in fact, that mind is elemental, my dear Watson.²⁹

One of the boldest models of how such an “elemental mind” might actually manifest in the phenomenal world has been advanced by Cambridge biologist Rupert Sheldrake in his well-known hypothesis of formative causation, morphic resonance, and morphic fields. Sheldrake’s model, first advanced in 1981, is an attempt to explain how a mind that is nonlocal can manifest locally, displaying itself in physical ways. By relying on interacting fields, (many types of which are already acknowledged in contemporary science), Sheldrake’s model offers an option to the more usual view of spirit-matter dichotomy, whose adherents imagine “mechanical matter and ineffable spirit interact[ing] in some kind of quasi-miraculous way.”³⁰ Sheldrake’s theories have the distinct advantage of being testable and are therefore falsifiable. To date, there is an increasing amount of evidence in their favor.³¹

Sheldrake’s hypothesis contains an attractive quality of “street validity,” a term coined by anthropologist and parapsychology researcher Marilyn Schlitz. Most people intuitively believe in *gradations* of consciousness—humans are more conscious than animals, which are more conscious than microorganisms, whose degree of consciousness exceeds that of a rock, and so on. (This point of view is essentially the idea of *hierarchy*, which is embodied in many of the world’s great spiritual traditions.) Sheldrake’s theories capture this time-honored, street-smart idea. Although he sees intelligence at every level of the cosmos, and, like Herbert, believes that this intelligence was there to start with, some entities are more intelligent, complex, and conscious than others by virtue of the differences in the organizational fields that constitute them.

HEALING QUALITIES OF HEALERS

What qualities in the healer (the “sender” or “agent” in parapsychological experiments) are important in facilitating distant healing? Researcher William G. Braud has listed several:³²

1. Relaxation and quietude
2. Attention training
3. Imagery and visualization
4. Intentionality and strong positive emotions

I want also to emphasize the role of empathy, caring, compassion, and *love* in the healer. There are several reasons:

1. The testimonials of psychic healers throughout history emphasize these qualities. They tell us that the ability to heal at a distance is more than mere technique; one must *care*.³³ (p. 107)
2. Experiments involving distant EEG correlations suggest strongly that the experience of empathy has certain physiological correlates in individuals who are spatially separated from each other.³⁴
3. The telesomatic case histories also involve correlated feelings and sensations, and occasional physical changes, between distant individuals who are empathic with each other. Although these are “just” sporadic occurrences and cannot be compelled to happen in the laboratory on command, there are at least two reasons they deserve our attention: (1) they are exceedingly common, and (2) the internal consistency of these cases is very strong.² (pp. 50-53)

Stanley Krippner, in his research in spiritual/anomalous/distant healing, has identified a characteristic inner attitude which seems necessary for the success of healers: a decrease in robust effort, an enhanced sensitivity toward inner events, and an absorption that allows a “surrender” to the healing process or to the healee. Such terms as empathy, selfless love, sympathy, and compassion are often used to describe the way healers relate to the person in need. In

addition, Krippner states that many healers describe a sense of overcoming dualities in the healing process. They speak of combining will and surrender, inner and outer sensations, and rational and nonrational cognition. Some even speak of melding or “becoming one” with the patient.³⁵ This state is virtually identical to “Type I” healing described by LeShan.³³ (p. 106)

Although few studies of anomalous, spiritual healing have examined the inner experience of the healers themselves, these qualities may be very important. They may be part of the initial conditions that must be established for distant healing to occur. They may help explain why it is difficult for successful healers to heal on command, and why they uniformly maintain that distant healing is not “just technique.” The inner emotional state of the healer may also figure in the failure of skeptics and cynics to replicate these phenomena, particularly under sterile, contrived, and hostile experimental conditions.

THE UNCONSCIOUS MIND IN HEALING

The extreme variability of the healing landscape is perhaps a clue that the unconscious mind of the healer may be centrally involved. Charles Tart has pointed out that there are strong unconscious fears of, and negative reactions to, “strong psi” even among positively oriented, pro-psi believers. Tart has stated,³⁶

I have seen behavior among scientific parapsychologists that suggests these implicit fears exist to varying degrees among them also. For example, I once asked some of my colleagues in parapsychology to do a belief experiment by accepting a pill from me that would make them completely receptive telepathically, knowing every thought and feeling of whoever was within a hundred yards. The effect was defined as permanent and as having no antidote. No one was willing to take the hypothetical pill!

Similar fears may operate unconsciously to some degree in all healers. What if distant healing worked all the time? Imagine what might happen if only a *single person* on the planet had this power. He or she could cause immense social chaos. Economic dislocations could be profound, owing to the total disruption of the pharmaceutical-industrial complex. He or she could generate mass unemployment as health care workers were no longer needed. Physicians

and surgeons would have to find something else to do. The various schools of psychology, which exist largely to minister to the sick and suffering, would no longer be needed. The major world religions, which derive a major part of their legitimacy and power from the presence in the world of pain and suffering, would be shaken to their foundations. Would someone who claimed this power to heal at a distance be likely to survive very long? One can imagine that the likelihood of assassination of such a person would be very high.

Unconscious fears may explain why many people find it more convenient to study distant healing from a rather detached point of view. Thus we can admire the courage of people like Lawrence LeShan and Daniel Benor, who, in addition to studying healers, have become healers themselves.

In his studies of healers, LeShan identified two different methods of healing, which he called Type I and Type II.³³ (p. 106) In Type I healing, the healer does not have to be on site. He or she feels completely united with the heelee. The Type I healer does not try to do anything or make something happen, but connects fully with the heelee in compassion, empathy, and caring. In Type II healing, on the other hand, the healer retains a sense of separateness from the patient, and must be on site. Touching frequently occurs. The healer tries to give or impart something to the patient. Why the difference? LeShan hypothesizes that unconscious resistances in the Type II healer may prevent him or her from coming together in an experiential unity with the patient in a way that bridges space and time. This unconscious resistance manifests in the need to be on site, to do something physical.

There may also be external physical factors affecting the effectiveness of distant healing. Stanley Krippner, Marsha H. Adams, Erlandur Haraldsson, and Michael A. Persinger, working in four different laboratories, have reported a statistically significant relationship between the status of the Earth's geomagnetic field and various ESP phenomena such as remote viewing and dream ESP content.^{37,38} I do not know of any research looking at the correlations of geomagnetic fields with distant *healing* phenomena, but this appears to be a promising area of investigation.

We are free to imagine an endless number of additional physical variables which might influence distant healing. Some might seem trivial—*e.g.*, what the healer

had for breakfast, or how much sleep she had the night before. But how do we really know what is trivial and what is not?

And what about ordinary psychological variables of the healer, such as simple boredom? What about unconscious factors such as racial, gender, religious, or ethnic biases? Is the healer equally adept in the distant healing of heterosexuals and homosexuals? Hispanics, Blacks, Asians, and Caucasians? Men and women?

What about the healer's interpersonal relationships? Jahn, Dunne, Nelson, and colleagues at Princeton's Engineering Anomalies Research Laboratory have found that couples who have an emotionally bonded relationship score dramatically higher in influencing at a distance the output of a random event generator. Does emotional closeness with a "significant other" affect one's ability to exert a healing influence on a distant individual? In view of the Princeton work, this would seem to be a promising area to investigate.

HEALING QUALITIES OF HEALEES

What qualities in the healee (the receiver, the percipient, etc.) are important for nonlocal healing events to happen? Here we are in something of a muddle.

1. Studies by Krippner and Ullman at Maimonides Dream Laboratory suggest that nonlocal mental events can happen when the "receiver" is unconscious and in the REM (rapid eye movement) phase of sleep.³⁹ This implies that some of the mental qualities that facilitate the reception of distant influences are completely outside our awareness and may be beyond conscious control.
2. It is frequently said that the healee must somehow "cooperate" with the healing attempt or "let it happen." Yet, numerous double-blind studies in humans, such as by cardiologist Randolph Byrd and researcher Daniel Wirth,⁴⁰ show that the healee need not know that the distant influence is being applied to him or her. Even if outside the awareness of the recipient, the effect "gets through" nonetheless.

3. Most impressive are the scores of studies in remote influence involving so-called lower organisms—bacteria, fungi, rats, mice, and so on.⁴¹ These organisms can be made healthier when the distant “healer” adopts a caring, compassionate attitude. The microorganisms presumably are not conscious in any conventional sense and do not “want” healing or “let” it happen. Presumably they are not subject to the effects of suggestion and expectation (placebo effects). This suggests that distant healing effects can occur with little or no facilitation on the part of the recipient. This point of view is supported by LeShan’s findings.³³ (pp. 120)

Curiously, belief in the efficacy of healing of this kind does not seem to be a factor. Our results seem to be as good with skeptics as they are with believers.

Although we can identify a few factors in the healer and healee that may influence distant healing, we are largely in the dark about how or why healing happens. Let us not forget:

1. Many healing events occur spontaneously and unbidden. No particular psychological state of the healee has ever been identified that encompasses all these strange happenings.
2. Some of the most radical and sudden healings occur completely outside conscious awareness, evidenced in particular by so-called “healing dreams,” in which dire physical illnesses are dreamt to disappear, and are absent on waking. How is the *unconscious* to be analyzed?² (pp. 71-74)
3. Healings do *not* invariably correlate with a person’s level of spiritual attainment. Healing happens not only to saints and mystics, but to spiritual reprobates as well. This means that one cannot use some sort of *transcendental template* in analyzing who gets healed.² (pp. 13-36)

NEGATIVE NONLOCAL EFFECTS

There is a widespread assumption that distant healing efforts exert either a positive effect or are neutral. But the evidence—laboratory, anecdotal, and

anthropological—suggests there is also a negative side to these phenomena. Microorganisms can be negatively affected by mental intention in the laboratory: one can increase *or decrease* the growth and mutation rates of bacteria.⁴² From a theoretical perspective, these events may have relevance to human life. Many human biochemical processes are identical with those in microorganisms. If these processes can be negatively influenced at a distance in lower life forms, we might suspect the same possibility in humans.

Almost all pre-modern cultures believe in distant, nonlocal, negative psychological effects. These events are not classic voodoo-type hexing, which is a *local* not *nonlocal* event. In classic hexing, the hexed individual is informed of the hex and cooperates with it, occasionally dying. Distant, nonlocal, negative events are exemplified in the *ana-ana* or “death prayer,” which is indigenous to the Hawaiian Islands. In this event, the victim person is “prayed to death” at a distance, outside his awareness, by the kahuna shamans. They believed that the factor that made the victim susceptible to these malevolent, distant events was *guilt*.⁴³

LOCAL FACTORS IN HEALING

Dr. Jeffrey S. Levin, an epidemiologist at Eastern Virginia Medical School, has written brilliantly on how religious practices can act locally to promote healing. Among these explanations:⁴⁴

1. Many spiritual belief systems require certain austerities which are healthful—precautions about diet, smoking, alcohol, and so on.
2. Many healing events are embedded in a social support network for the faithful. Various studies confirm the healing properties of a rich, complex social support system.
3. Belief that one will be healed may trigger various healthful effects in various body systems, setting in motion the kind of mind-body events studied currently by, for example, psychoneuroimmunologists.
4. Being in the actual presence of a healer may foster a sense that one is loved or cared for, which can be healthful.

5. The physical preparations for healing, such as preliminary fasts, meditations, or abstentions, may be healthful.

In addition to the work of Levin, the contributions of David B. Larson, M.D., also stand out in this field. Larson, Matthews, and Barry have assembled *The Faith Factor: An Annotated Bibliography of Clinical Research on Spiritual Subjects*, which is a compilation of hundreds of papers dealing with the influence of religious practices on health.⁴⁵ David B. Larson and Susan S. Larson have also published an independent study seminar for the use of health professionals in introducing religious and spiritual concepts in their dealings with patients: *The Forgotten Factor in Physical and Mental Health: What Does the Research Show?*⁴⁶

These local explanations, however, do not exclude nonlocal possibilities. In fact, local and nonlocal factors can exist together in any particular healing event. For example, if a healer attempts to heal through prayer at a distance, and if the heelee suddenly feels a change in her body, this may trigger various psychological and physiological responses in the heelee that may be superimposed on whatever effect the healer generated at a distance.

LETTING NEWTON'S GHOST REST

Many people believe that it is satisfactory to retain the term "energy" in distant healing if we acknowledge we are using it only as a metaphor. But the problem is that "energy" won't *stay* a metaphor. It creeps back into literalness and has a way of taking over. What begins as a metaphor is suddenly something we expect to show up on our detection devices, if only we can make them sensitive enough. Thus, "energy" as a metaphor seems not only inaccurate but pernicious.

Another problem with "energy" is that it engenders conflict with skeptics and cynics of distant healing. To speak of some form of energy that catalyzes distant events, but to be unable to provide any evidence for it, whips the skeptics into a frenzy. Their efforts to actually obstruct and demolish serious contributions to this field are well-known. Those who tout energy-based explanations of distant healing, but who are unable to corroborate any such energy, are to a certain extent the architects of much of this abuse and should not be surprised when it occurs. In dealing with skeptics, it would be far better, in view of our

current knowledge, to acknowledge that *we simply do not know* how distant healing occurs. This is not an admission of ineptness, nor is it a confession that healing does not happen.

Let us allow Newton's ghost to rest, therefore, and resist the temptation to dress all our models of healing in classical garb.

HEURISTIC CONSIDERATIONS

In designing a model of how healing happens, how should one proceed?

Perhaps one should begin with observations that appear *most* anomalous, those which appear most difficult to explain, and build one's model to accommodate them—not build a model to explain ordinary, commonplace events and try later to squeeze the most anomalous or “outrageous” events into *that* model.

At the turn of the century, physicists could not fit certain phenomena into the Newtonian model. They were faced with “limit cases”—events that took place when great distances or near-light speeds were concerned. They tried to force these observations into Newton's view, but this was impossible. When physicists revamped their theories to fit the new observations, a new physics—the quantum-relativistic view—was born.

Anomalies shape theory. Therefore, knowing ahead of time that they exist in healing, we could save ourselves a lot of trouble by addressing them first, not at the end of the line.

SUMMARY: PROBLEMS WITH “ENERGY” IN HEALING

In summary, the following problems arise when currently known forms of energy are employed to explain distant healing:

1. “Energy” is inconsistent with empirical observations in the *laboratory*; because the term suggests qualities and features that cannot be demonstrated (dissipation with distance, shieldability, and so on).

2. The term “energy” suggests qualities and features of distant events that don’t conform to happenings in *life*—as a typical example, the experience of the woman who knew *precognitively* that her child was *going* to drown, and rushed home to save her. No currently known forms of energy appear capable of mediating such events, which are commonplace.
3. The term “energy” wedds us to pictures of the world that are dualistic and causal. Dualistic models are problematic in the subatomic world of nonlocality, and they are also incompatible when consciousness manifests nonlocally, as in distant healing phenomena. It may also be of interest that such models conflict with the precautions against dualism in many great spiritual traditions.
4. The term “energy” engenders no end of conflict with skeptics and cynics of distant healing phenomena. The fact that we cannot demonstrate distant healing energy allows them to say, “I told you so; this entire area is a fabrication; something must be wrong with your data because you can’t demonstrate this ‘energy’ you’re talking about.”
5. The term “energy” is in conflict with a nonlocal model of consciousness, which appears necessary to account for empirical observations in distant healing and related anomalous areas.

SPIRITUAL CONSIDERATIONS

In many wisdom traditions, spiritual understanding involves cultivating a way of being that emphasizes “going beyond dualism”—ceasing to experience one’s self as an isolated entity occupying a specific point in space and time, with the rest of the world “out there.” In the higher reaches of this experience, the sense of a separate self and ego disappears, and one realizes there is no one who *could* “send” energy or healing—because the distinctions between self and other evaporate.

It may be that our preference for an energy-based explanation for all types of healing may reflect our longing for a world of duality—a world in which there must be subjects-verbs-objects, healers and healees, and a connecting thread

such as “energy” between the two. Dare we question this longing? Dare we suggest that our beliefs about the primacy of subjects and objects, healers and healees, and the presumed energies which connect them, are a “fall into dualism,” about which many wisdom traditions caution?

Dualistic assumptions are built into science itself: the scientist investigating a world “out there.” Thus it is hardly surprising that our scientific approach to analyzing distant healing has generated an image of separate objects (healers and healees) who must somehow be connected by energetic signals, subtle or otherwise. A proposal of this paper is that, in events such as distant healing where consciousness is involved, the assumption of dualism is wrong.

Why? Nonlocal models of consciousness are inherently incompatible with dualism. A mind that is nonlocal is in some sense infinite in space and time, because *a limited nonlocality is a contradiction in terms*. Nonlocal consciousness is omnipresent, present everywhere, which means that it in some sense envelopes healer and helee simultaneously. As such there is no necessity for to “travel” or to be connected to the helee via energy, gross or subtle. Nonlocal minds do not require “connecting threads” of any sort: the connections are intrinsic and do not have to be established. This implies that the attempt to install “subtle energy” as the Holy Grail of distant healing is unnecessary.

The evidence favoring a nonlocal, nondual model of consciousness in healing involves two vectors. One is actual laboratory evidence, as we’ve seen. The second, mentioned above under “Healing Qualities of Healers,” is the experience of healers of uniting or “becoming one” with the person in need, and feeling that oppositional categories also unite: will and surrender, inner and outer, and rational and nonrational.³⁵ (p. 201) This is nondualism writ large—nondualism erupting not only in laboratory experiments but in human experience as well.

As we have seen, healers often describe love as an essential factor in healing. Could this be a clue that consciousness is a nonlocal phenomenon? Love involves a coming together—a willingness to abandon an isolated sense of the self and unite experientially with someone else. There is growing evidence that this capacity can affect the physical world. In a variety of experiments, Princeton’s PEAR Lab has emphasized “some form of *resonance*, or bond, or sharing of identity between operator and machine, percipient and target, or

two operators, that facilitates information transfer between the consciousness and the random system."⁴⁷ Jahn and Dunne state:

[S]uccessful strategy for anomalies experimentation involves some blurring of identities between operator and machine, or between percipient and agent. And, of course, this is also the recipe for any form of love: the surrender of self-centered interests of the partners in favor of the pair."²¹

Here we have striking *experimental evidence* that love is more than an emotion, more than a metaphor, more than a romantic feeling lodged locally in the brain and body. Love allows the consciousness to manifest nonlocally—to reach out in space and time and literally shape reality.

There are many spiritual implications of a nonlocal model of consciousness. As mentioned, nonlocal models of consciousness point to an aspect of the mind that is infinite in space and time. A mind that is *infinite* in space is omnipresent; and a mind that is infinite in time is immortal and eternal. This quality of the mind has been recognized by the great wisdom traditions since time immemorial. In the West it has commonly been called the soul; in the East, Buddhists have referred to such a quality as Buddha nature. Whatever the term, the key realization is that something about us is more than brains and bodies; in some sense we are imperishable and immortal.

UNDERSTANDING DISTANT HEALING: A MATTER OF HEART

Nonlocal healing may be a "state-specific" science, in Charles Tart's terminology, meaning that the inner experience of the investigator determines to a large extent what he/she can see. Investigating this field is more than an exercise of the intellect. It involves more than clever experimentation and intrepid analysis of data.

In order to engage genuinely in this field, perhaps we shall have to learn to experience and feel the world in a nonlocal way. Many spiritual traditions have prescribed ways of doing this. These paths invariably involve relinquishing the sense of self and becoming absorbed in a greater reality that knows no

boundaries in space and time. Thus we read in the New Testament, “He must increase, but I must decrease” (John 3:30); from Hinduism “Atman and Brahman are one”; and from Buddhism, the insistent reminder that the ego is illusory. In fact, many spiritual injunctions can be regarded as exercises in nonlocality. Typical is this example from the *Corpus Hermeticum*, dating back at least two thousand years:

Unless you make yourself equal to God, you cannot understand God: for the like is not intelligible save to the like. Make yourself grow to a greatness beyond measure, by a bound free yourself from the body; raise yourself above all time, become Eternity; then you will understand God. Believe that nothing is impossible for you, think yourself immortal and capable of understanding all, all arts, all sciences, the nature of every living being. Mount higher than the highest height; descend lower than the lowest depth. Draw into yourself all sensations of everything created, fire and water, dry and moist, imagining that you are everywhere, on earth, in the sea, in the sky, that you are not yet born, in the maternal womb, adolescent, old, dead, beyond death. If you embrace in your thought all things at once, times, places, substances, qualities, quantities, you may understand God.⁴⁸

Scientists frequently cross into this territory experientially. When they do, they often describe going beyond subject-object dualism and relinquishing the “I.” Thus, we hear Buckminster Fuller exclaiming, “I seem to be a verb!” And we see physicist David Bohm’s attempt to use language in the *rheomode*—a way in which subject and object are enveloped into a single, seamless movement.

SUBTLE ENERGY OR SUBTLE CONSCIOUSNESS?

There was once an argument among the gods over where to hide the secret of life so men and women would not find it. One god said: Bury it under a mountain; they will never look there. No, the others said, one day they will find ways to dig up mountains and will uncover it. Another said: Sink it in the depths of the ocean; it will be safe there. No, the others objected, humans will one day find ways to plumb the ocean’s depths and will find it easily. Finally another god said: Put it inside them; men and women will never think of looking for it there. All the gods agreed, and so that is how the secret of life came to be hidden within us.

Perhaps we would be on firmer ground to refer to distant healing as a manifestation of “subtle consciousness” rather than of “subtle energy” because consciousness, not any known form of energy, seems to be the irreducible factor that is required for these events to occur.

Why do we prefer “energy” over “consciousness” as an explanation for distant healing? We seem to want something that will deflect our energy detectors, if we can only make them sensitive enough. Perhaps one day we shall succeed in detecting subtler forms of energy. But it appears unlikely that a form of subtle energy will emerge that will send us back to a space-time matrix in healing. Any future form of subtle energy must be compatible with *nonlocal* manifestations of consciousness, because these are simply the stubborn facts of nature that have been confirmed in both life and lab.

Let us assume that in the future we *will* discover a form of subtle energy. What might it be like? If it genuinely facilitates the nonlocal manifestations of consciousness, it must in some way be similar to consciousness. It might even be unitary with consciousness, or the same thing as consciousness. In which case our search for subtle energy may turn out to be a search for consciousness, which in many ways is the most subtle entity imaginable.

When we become as comfortable exploring the world of consciousness as we are with probing the world of energy, we may realize that our quarry all along was not subtle energy but consciousness itself. Perhaps when we come face to face with the subtle energy we so earnestly seek, we shall be peering into our own minds.

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