

# Examining Biological and Physical Correlates to Anomalous Healing

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## Abbreviations

EEG    Electroencephalogram  
fMRI    Functional MRI

A phenomenon is considered to be scientifically “anomalous” if it does not fit into the mainstream understanding of how the world is thought to work. That does not mean that the phenomenon is not real; it just means that it does not make sense to us. The problem may lie in our lack of theoretical understanding and not with the facts of the phenomenon. If it can be demonstrated that anomalous phenomena are valid and reliable, then it might be time to re-think our theoretical understanding (1).

In the case of healing, virtually all societies on record have identified individuals who appeared to have the ability to heal, and sometimes these people were awarded a special status within the culture. Often, this healing ability was associated with a spiritual discipline of some sort. Healers utilized various methods, including laying-on of hands, prayer, and induced altered states of consciousness, to name a few. The father of Western medicine, Hippocrates, referred to this healing as “the force which flows from many people’s hands” (2).

Even as the number of clinical cases greatly increased, the source and mechanism of healing evaded systematic

research. The late biologist Bernard Grad was a pioneer, and his work at McGill University provides the foundation for research into modern Western healing. In carefully controlled experiments, Grad found that selected healers could influence the germination of plant seeds, the growth rate of plants, and the curing of seeds that had been shocked by saline solution. He also measured the ability of healers to reduce goiter and to stimulate wound healing in mice (3–5). Since Grad’s initial work, there have been innumerable preclinical studies of healing. Some studies investigated the response of the effect of healing on a specific target such as enzymes, cells in the laboratory, fungi/yeasts, bacteria, plants, single-cell organisms, and animals that have been subjected to controlled study (6).

To say the least, Grad’s pioneering work was met with hostility, and he spent decades defending his voluminous data to critics, to his home institution at McGill University, and to all who would listen. Even though he was able to rigorously demonstrate healing, and no critic was able to fault his methodology, mainstream scientists could not be significantly swayed in the direction of acceptance. After all, what theoretical mechanism

could account for the wound healing effect of a healer's hands being placed around a cage of mice? Since his sympathetic audience consisted primarily of those already outside the scientific mainstream, his publications were limited to various parapsychological journals.

For a very long time after Grad's work, the defensive dialogue continued between researchers with rigorous, scientifically controlled data in support of healing and the scorn and theoretical impossibility of "skeptics," who are often really "debunkers" in disguise.

Fortunately, in recent years, there has been a significant increase in studies on healing. Several peer-reviewed journals are devoted exclusively to the burgeoning field of complementary and alternative medicine, including the *Journal of Alternative and Complementary Medicine*; *Alternative Therapies in Health and Medicine*; and *Explore: The Journal of Science and Healing*. These journals publish both preclinical and controlled clinical studies of healing on a wide variety of conditions. In addition, an increasing number of peer-reviewed journals that are not focused exclusively on complementary and alternative medicine are open to publishing controlled studies in these areas, such as the *Journal of Scientific Exploration*.

Virtually nothing is known about how the various methods of healing converge or diverge in terms of healing efficacy. Does Reiki, for example, produce similar results to Healing Touch, or to the healing method reported here? Also, there is no data to determine whether different healing methods have different mechanisms. Researchers have spent an inordinate amount of time and effort trying to demonstrate the "fact" of healing to the so-called skeptical community and too little effort looking for what might be termed the "secondary correlates" of healing, such as dose response curves, the combined effects of conventional and unconventional healing, the role of belief, and so on. Evidence in support of unconventional healing has been demonstrated by many controlled studies; future studies need to investigate the mechanisms by which the healing is actualized.

For over 35 years, I have been researching anomalous healing in both *in vitro* and *in vivo* models with a healing method that I developed (7, 8). My research agenda has looked at parameters of healing including distance and

dose, the physiological correlates of healing, and more recently an attempt to reverse engineer the healing effect so it is scalable and reliable as a conventional treatment.

My experimental protocol for testing "healing with intent" has been used in 16 *in vivo* cancer experiments, some on mice using standard models of mammary adenocarcinoma, methylcholanthrene-induced sarcomas, naturally occurring oncogenic tumors, immune-deficient nude mice, and innumerable other *in vitro* experiments on human leukemia and breast cancer cells (9-14). These experimental models have a long history of known predictable outcomes with conventional empirical research (8-10, 15). The variable of "healing with intent" was applied using a healing technique that I helped to develop (7). Volunteer healers, both students and faculty, were pre-screened to have no experience in alternative healing, nor were they in any way "believers" in the validity of alternative healing. Variations in many parameters were examined, such as distance, dose, and frequency of treatment; the subjective experiences of the volunteer healers; human physiological correlates using electroencephalograms (EEG) at a private lab, and functional magnetic resonance imaging (fMRI) carried out independently at 2 medical schools; and physical changes in the space adjacent to the healings (13, 16, 17).

The abridged summary of the results of these experiments include:

- Demonstration of a reliable full lifespan cure of cancer in experimental mice, including an apparent immunity to reinjection of the same cancer (8, 9).
- A dose response to healing. Some minimum amount of healing time is necessary to affect a cure. Interestingly, the only predictor of the aggregate speed of cure is the number of mice in an experiment, the quicker cures being associated with more mice being treated (10).
- Healing proceeds in a non-linear fashion, with sudden bursts of healing that resemble "phase transitions" (8).
- There is a fluid, measurable "resonant bond" between healer and healee. Successful healing is associated with "connection," and healing failure is associated with "disconnection" (9, 10).

- Healing has no relationship to distance. Healing appears to be fundamentally about “information” despite the popular belief that it is related to “energy.”
- The “storable” character of healing has been demonstrated in both biological and physical systems (14).

The results of the studies indicate that 1) healing is not related to conscious awareness, but is more akin to an autonomic biological response to need; 2) conscious intention and attention are quite dissimilar, and only fleeting intention is necessary for healing; and 3) intention itself may be *storable* in some form and can cause permanent changes in both biological and physical systems (7, 8, 14, 16). Hence, in addition to biological correlates, there are also physical correlates to healing (13).

The results of these experiments support Dunne and Jahn’s perspective that biology, more specifically than biological *need*, may be the driving force behind a great deal of what can be considered anomalous healing (16). In fact, the healee actually propogates healing by drawing upon the intention of the healer to stimulate the process. As with so many other biological processes, the driving force is need rather than conscious awareness.

How consciousness fits into all of this cannot be completely explained. A comprehensive definition of consciousness remains elusive, so a more useful conceptual model may flow from distinguishing between *intention* and *awareness*, the former being the dominant partner and the latter being optional at best.

By extension, my data strongly support the M5 conceptual model of Jahn and Dunne, which states that the mysterious “Source” will be the place where conscious intention and the anomalistic outcome in healing connect (18).

### **An Illustration of the In-vivo Experimental Model**

For the *in vivo* protocol, mice obtained from either the Jackson Laboratories or the National Cancer Institute were subcutaneously injected with at least 200,000 cancer cells (0.2–0.3 mL of H2712 mouse mammary adenocarcinoma tumor cells, 105 cells/mL), double the lethal dosage, in order to guarantee death would occur within 14–27 days, the published life expectancy subsequent to injection (9, 15).

The mice developed non-metastatic, externally palpable tumors that caused death either by crushing the internal organs, malnutrition, or both. A healing treatment was delivered by a volunteer healer who placed their hands on the outside of the cages and practiced the healing technique for a specific duration (7, 8).

Various experiments were done to test variables including individual treatment length, number of treatments, number of mice per treatment, and the distance of the healers hands from the cages, extending up to thousands of miles.

The mice treated with “healing with intent” techniques typically developed an encrusted blackened area on the surface of the tumor, followed by tumor ulceration, implosion, and then full lifespan cure. No mice went into remission spontaneously without receiving a healing treatment.

In mice, all stages of remission have histological evidence of viable cancer cells. Full cure is considered to be achieved when the mouse is completely free of cancer and is immune to subsequent injections of the same cancer for the rest of its life. The pattern in all the described *in vivo* and *in vitro* experiments had sudden shifts analogous to *phase transitions*. That is, in the early stages of healing treatment, neither the mice nor cell cultures showed a response to healing intention, until suddenly there were non-linear dramatic shifts in tumor (*in vivo models*) or cell growth (*in vitro models*).

### **Healing and the Sense of Connection: EEG data**

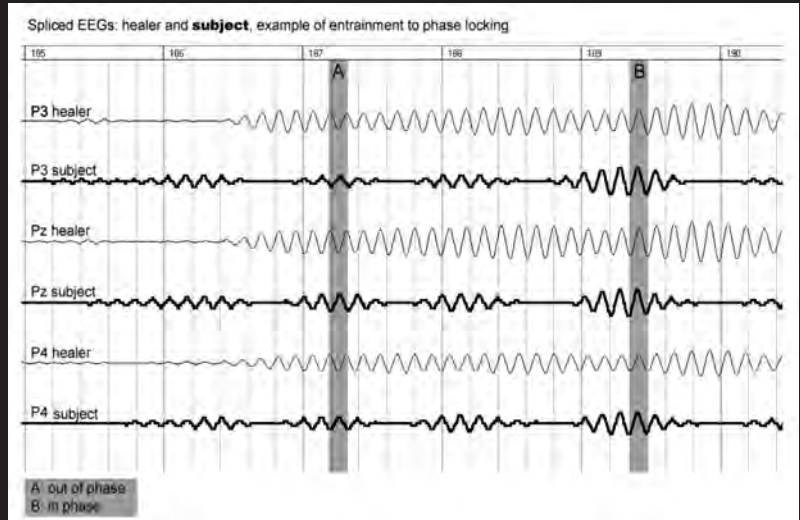
In addition to the anomalous healing in and of itself, there is an anomalous connection that can occur between subjects. Synchronized EEGs between a healer and subject showed the healer’s EEG data had harmonic frequency coupling across the spectra, followed by frequency entrainment effects with the healee, and then instantaneous EEG phase locking. These results suggest the presence of a connection between the healer and healee (**Figure 1**) (17). In addition to the apparent connection established at a distance, it is important to note that neither the healer nor healee were consciously aware of the connection. The healee had a need, the healer practiced the rapid imaging healing technique with only a passing intention to help, and the connection simply occurred.

## Healing and the Sense of Connection: fMRI Data

The possibility that healing with intent is associated with a specific location in the brain was in question. In order to use fMRIs to test his hypothesis, a “toggling” of healing intention into “on” and “off” states was required. To my skeptical amazement, this “toggling” was achievable under controlled conditions. A simple exploratory pilot study, done at the University of Connecticut and Thomas Jefferson Medical Schools, investigated the ability of healers to toggle healing intention by intending to “heal” and then to “not heal” during 45-second cycles while inside an enclosed fMRI (16).

Once it was determined that healing can be “toggled,” the mice and EEG studies described above were repeated with the “on” and “off” variable of healing intention. The results supported the toggle effect discovered by the fMRI study.

**Figure 1: EEG data illustrating the production of harmonic frequency coupling**



Waveforms in the 7.5 to 8 Hz frequency range from 3 parietal locations in both the healer and subject. Early in the sustained amplitude burst of the healer, the phase of the subject and healer do not match (A). The subject’s phase synchronizes with that of the healer as the burst from the healer continues (B). Note that the subject’s amplitude also approaches its maximum for the entire 11-min session. Given the greater amplitude of the healer’s waveforms, the entire waveform of the subject was amplified for clarity (50 vs. 15 microvolts/cm sensitivity).

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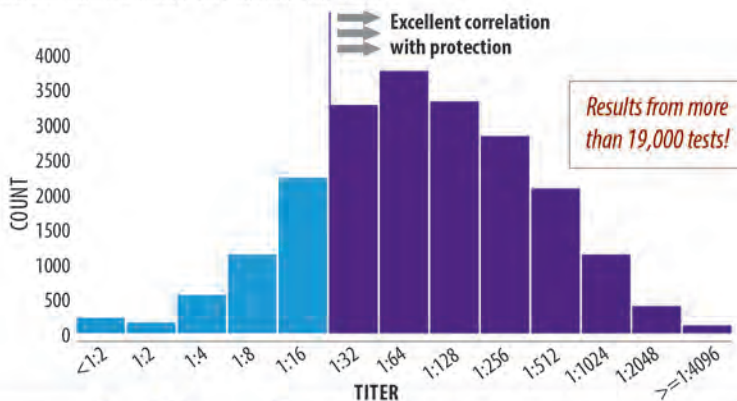
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An interesting modification to the protocol involved the healer standing approximately 25 feet outside the fMRI while a volunteer human healee was inside the fMRI. The healee had no specific intention and was instructed to simply lie inside the fMRI; the healer was cued to direct healing intention in an on/off cycle of 45 seconds each. Note that this experiment monitored the response of the healee. *The same basic pattern of on/off cueing in the brain of the healee was produced, indicating a brain connection across some distance. Once again, the healee's only task was to lie still inside the fMRI, and they had no conscious awareness that anything was out of the ordinary.*

### **Healing and Connection: The Control Problem and the Transition to Physical Correlates**

The previous sections indicate that bonding between spatially separated individuals is not necessarily a conscious process. Both the EEG and fMRI experiments showed that brains resonated with each other or autonomically responded to the stimulation of healing need, respectively. The bonding between individuals occurred without the conscious awareness (read "attention") of the participants, regardless of their "intention" to participate in the experimental protocols.

The persistent remission in the control mice is an interesting phenomena associated with the healing research and complicates our understanding of healing. The current interpretation is that "bonding" can occur between mice that were just briefly seen by volunteer healers and other mice that actually received healing treatment. Thus, members of a bonded mice system can receive the healing treatment given to an individual mouse within that system. Of equal importance, resonant bonds are apparently fluid, in that bonds can also be broken (9–12, 16, 17).

An experiment was designed to test the effect of healing on mice that had been injected with mammary adenocarcinoma that was expected to cause 100% fatality in mice. The mice were in 5 cages on a lab bench and were treated daily, for a specified length of time, by 5 volunteer students: 3 biology students, and 2 non-biology students. Control mice were in the same building, in a room about 50 meters away. The students treated their cages each day for a specified length of time, and they were told *not* to look for the room with the control mice. A second set of control mice were shipped to another city.

It should be recognized that the housing conditions of the mice that were shipped to another city may not have matched those at the originating site.

Several weeks into the experiment, the control mice in the building started to die within the expected timeline. When the biology students heard this, they defied instruction and went to find the control mice in the building, rationalizing that they would just briefly peek at them and then leave. When they found the control mice, the tumors had no blackened areas, ulceration, or indications of healing. The students observed the control mice for about 10 minutes and never went to see them again. But after their visit, the remission process began, and the control mice were eventually fully cured. Technically, the control group was tainted once the students found the control mice.

When the experiment ended, the mice treated by the non-biology students were cured, but the mice treated by the biology students had died. In the other room, the control mice were dying as expected until they were seen by the biologists, who apparently could not cure their own experimental group mice!

The question is this: if "connection" is part of healing as indicated by the data from the EEG and fMRI studies discussed, and if the biology students resonantly connected to the control mice to effectively cure them, then why were the biology students unable to cure their own mice? Furthermore, if the non-biology students were able to cure their mice, which were close to the biologists' mice and visible to the non-biologists, why was a resonant bond not made with the biology students' mice?

A hint comes from the student logs. Each of the biology students reported feeling self-conscious exposing themselves to ridicule by their peers for doing something as unorthodox as putting their hands around a cage of mice. The non-biology students had no such fear. Apparently, the subjective state of unease can break the resonant bond with the larger group. This particular state of consciousness, simply described as self-consciousness, may be an example of a multitude of mental states that could effect bonding.

An additional quirk to this experiment provides more evidence to support the effect that state of consciousness may have on the healing process. The experimental protocol

pushed some ethical boundaries because each of the 5 volunteer healers took a cage of mice home, and each of them was the only person to see and treat their home mice. *All of the home mice were cured.* Even the biologists were able to cure their mice at home, where, according to their own logs, the biologists were more relaxed. In their logs, they also report their excitement over the discovery of the control mice in the building. Presumably, that excitement may have caused a resonant bond between these mice and the larger group of mice treated by healing. It should be noted that environmental conditions were doubtlessly different at home than in the lab.

If anything approaching a generic “field effect” of healing exists, then the results do not make sense. If the non-biology students could heal in the lab, and the biology students’ mice were in the same vicinity, then a field effect would have compensated for the biology students’ apparent lack of healing ability in the lab. If it is possible for states of consciousness that “push away” to create physical and spatial boundaries that obstruct healing, then a generic field effect would not be responsible for resonant bonding problems between groups. In turn, models such

as morphogenetic fields, however applicable in general terms, might need consciousness as an intervening variable in specific instances (19, 20). Interestingly, if the resonant bonding phenomenon is not simply confined to healing but generally widespread, then a similar process may be involved in placebos (12). That is, sociological processes of group bonding and the formation or dissolution of boundaries may have more of an influence on placebo effects than psychological processes (10).

### **Changes in Physical Space Associated with Healing**

A few studies have reported magnetic field changes during bioenergy healing. In a pilot experiment, Margaret Moga and I examined magnetic field activity during hands-on healing and distant healing of mice with experimentally induced tumors. During the healing sessions, distinct magnetic field oscillations were observed adjacent to the mice cages. These findings were similar in appearance to those reported by Zimmerman (21). The magnetic field oscillations began at 20–30 Hz, slowed to 8–9 Hz, and decreased to less than 1 Hz, at which point the oscillations reversed and increased in frequency for an overall symmetrical appearance that



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resembled a “chirp wave.” The waves ranged in strength from 1–8 milligauss peak-to-peak and 60–120 seconds in duration. Current evidence suggests that bioenergy healing may have physical correlates that are detectable with DC gaussmeters (13).

During healing treatments, statistically significant deviations from chance output were produced by random number generators placed in the room containing the mice with cancer. *Output from the anomalous magnetic field and the random number generator suggest that information was being inserted into a physical system.* It is likely that these instruments were affected by physical correlates to healing rather than the healing information itself.

### Going Forward: Capturing Healing Information

Some recent experiments tested the possibility of recording the actual healing information seemingly produced in a healing session, and then playing back that recording to reproduce the healing effect without the presence of the healer (14).

Cotton was placed inside a solid steel, double-walled, electromagnetically shielded chamber (a) for 5 minutes to be “treated” with my healing method by 3 people. During this time, magnetic and electromagnetic signals were recorded using 4 types of sensors: 11 magneto-resistive 3-axis sensors (b); 2 antennas recording electromagnetic fields above 10 KHz; a geomagnetometer (c); and 2 custom-fabricated “Caduceus” coils designed to cancel out transverse electromagnetic waves. Each of the 38 analog signals was digitized by a 24-bit analog-to-digital converter (d) at 44.1 KHz, and then the incoming sensor signals were converted and saved by custom PC software into .wav audio format.

Windows Media Player (e) played the recording repeatedly for durations ranging from 5 minutes to 72 hours through 2 passive speakers (f) placed facing down on the top shelf of an incubator set at 37 degrees. There were 3 flasks with 100,000 cancer cells (MDA-MB-231) on the shelf directly underneath the speakers. The same protocol was followed for a control, but no recording was played, so the ambient background noise provided the control conditions.

For the purpose of screening, the cancer pathway of 168 genes were assessed with 2 assays of 84 genes each; the first assay could cross talk with cancer and the other

with immunity. A statistically significant change occurred in 68 genes after they were exposed to the recording at various time points (14). Most of these genes belonged to the cancer pathway assay, which suggests a possible anticancer effect from the recording.

It is important to note that we did not specifically demonstrate the healing properties of the recording. The transcriptional changes indicate that the recording may have had a biological effect on the cancer cells, but the therapeutic impact of the recording remains to be elucidated. An *in vivo* study on mice is currently in process.

In order to compare the relative strength of a “live” hands on treatment to that of a recording, we investigated whether the degree of expression of selected genes was differentially affected. Interestingly, the transcriptional changes associated with the hands-on method occurred earlier than with the recording. The amplitude of the change was much greater following the hands-on method than with the recording. These 2 observations combined suggest that some *information* may be lost in the process of recording and delivery of the healing. At this point it is unknown whether the playback of multiple recordings might compensate for the apparent weaker signal.

Among the interesting anecdotal observations reported by human “sensitives” exposed to the healing was their “feeling” that the recording continued to play even after it had been turned off. To test this, we placed cancer cells inside the incubator 3 days *after the recording had been turned off*, and found that the transcriptional changes in the cells continued to occur. This result was similar to the findings by Tiller on what he termed “conditioned space” (22).

### Signal Analysis of the Healing Recording

There are ongoing studies on the spectral and temporal effects of recorded healing. Spectral analyses of healing recordings covered the frequency range from below 0.1 Hz to about 20 KHz. The only frequencies associated with significant differences were below 20 Hz, and in particular below 5 Hz. Compared to control recordings, the 11 3-axis magnetometers used to record the activity had 1 data channel (y-axis) with significantly elevated spectral content in the frequency range 0.25 Hz to about 3 Hz. These elevations in spectral levels between the recording and control results were typically 6 dB or more,

and in some cases even 20 dB or more. The spectral differences in the very low frequency range from 2 independent magnetometers are illustrated in **Figure 2a-e**. It is extremely likely that the spectral and temporal output from the healing recording do not represent the actual healing “information” but rather physical, spatial, and temporal correlates to healing. This interpretation is analogous to

that of previous data on geomagnetic alterations in healing spaces, EEG and fMRI correlates, etc. which are also likely secondary indicators of a healing connection.

### Discussion and Conclusions

It should be apparent that many assumptions about the way we think the world works are challenged by the data

**Figure 2:** fMRI data contrasting “on” and “off” healing intention, with a control run.

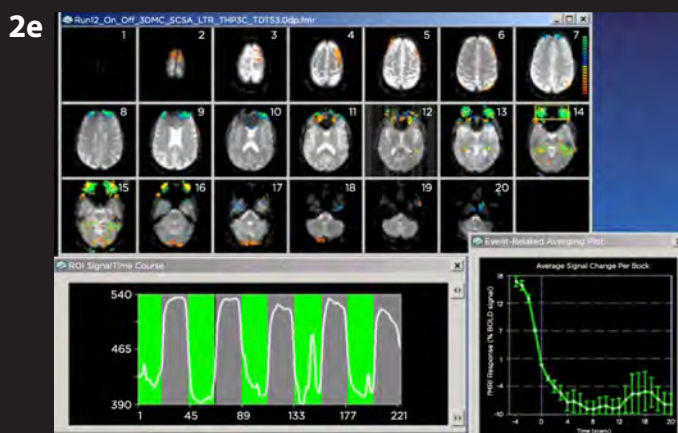
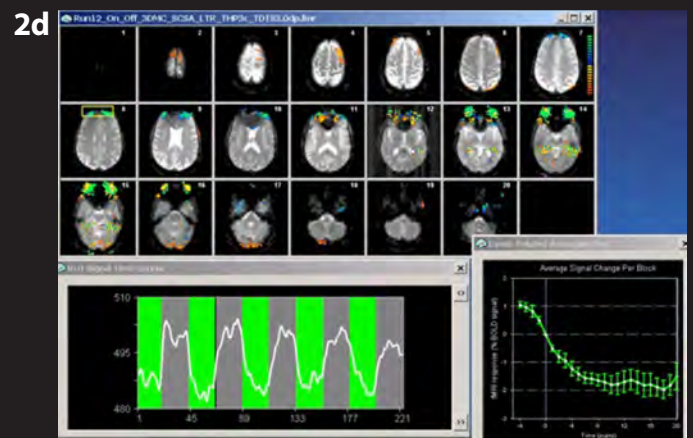
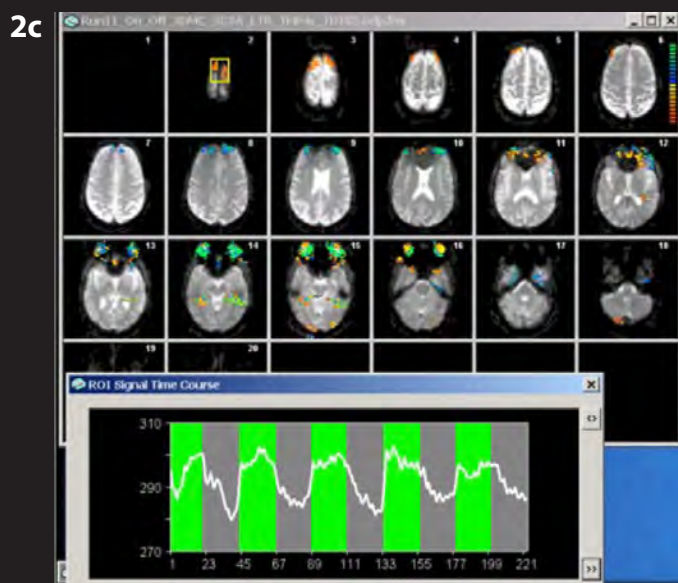
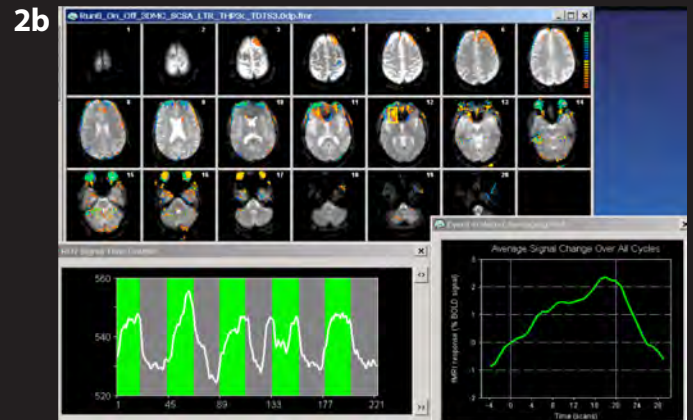
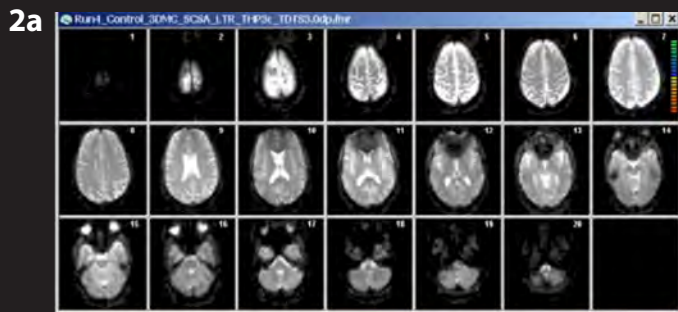


Figure 2a: Control Run – all images are standard fMRI output with each sequential image containing a downward moving slice of the brain. For example, the top row shows 7 successive slices of the top of the brain. No activation occurred during 45-second blocks of a key-pressing task without on/off cueing.

Figure 2b: fMRI data show widespread activation when healing is “on” (green) compared to when healing is “off” (grey). The right anterior inferior frontal lobe shows an ~3% signal increase and is highlighted as a region of interest.

Figure 2c: Anterior frontal lobes are highlighted at an inferior level as a region of interest over 5 periods that show an average ~3% decrease during “on” (green) conditions.

Figure 2d: fMRI data show widespread activation when “on” (green) compared to “off” (grey). Anterior frontal lobes are highlighted as the region of interest.

Figure 2e: Both eyes are highlighted as region of interest over 5 periods that show an average ~25% signal decrease during “on” (green) conditions.



collected from these experiments. It is likely that the biological and physical correlates to healing that have been examined only scratch the surface regarding what might actually be going on.

Several interesting patterns emerge from these data. First, there is a consistent theme of “need.” Mice which have a healing need will move to the left hand of the healer holding the cage of mice. Once they are completely cured, they no longer do this. Similarly, cells which have a healing need will transcriptionally respond to healing with intent whether that healing source comes directly from the hands of a healer or healing that may be stored in substances such as water, cell medium, or cotton. Cells that have no healing need exhibit no anomalous transcriptional changes when offered healing with intent. So, at a minimum, it can be posited that biological need is a crucial component in healing, and it may be the healee that instigates the healing effect.

Second, conscious awareness on the part of either the healer or healee may not be necessary to produce a healing effect. The extent or quality of consciousness on the part of mice or cells may be debatable, but there is little question it cannot parallel that of humans. Yet, mice in need of healing “know” to move proximate to a healing source; cells in need do likewise. Can there be serious doubt that these responses to healing are natural biological responses?

The volunteer healer logs vary widely in the extent to which they were consciously aware of anything associated with healing. Some occasionally felt some sort of “connection” with their mice, and some felt nothing at all to the point that they seemed not to understand the question regarding their feelings associated with healing. In multiple experiments, no association has been made between healing efficacy and subjective states of connection. So, it may be posited that a conscious awareness of healing or connection may be unnecessary for healing to take place.

Both EEG and fMRI data clearly indicate that some sort of biological connection actually does take place. At least in the case of healing humans, healer and healee go into harmonic brain phase locking without any neces-

sary conscious awareness that the healing phenomenon might be taking place.

While there can be high confidence that conscious *awareness* on the part of either the healer or healee is optional at best, the role of intention on the part of the healer is more problematic. That is, the simple act of putting hands around a cage, or attempting to “charge” materials for a healing experiment, signifies intention of some sort. That intention may be fleeting, and certainly separate from anything approaching either belief or sustained awareness, but, if action is taken to produce or test healing of any sort, there must be intention.

Connection can be seen as an autonomic response to need. An fMRI experiment found a significant brain response in the healer in response to *need*; *need* was defined as pictures and of cancerous animals in blinded envelopes. These blinded envelopes with pictures and hair samples of animals were placed onto the palm of healers and produced responses that were biologically similar to the brain changes that occurred when healers intentionally attempted to heal. If the envelopes placed into the palms of volunteer healers did not contain *need*, then no brain changes ensued. Again, there was no conscious awareness of whether an envelope had or did not have pictures of animals in *need*.

The common association between certain states of consciousness and healing is often associated with being “spiritual.” This likely has the temporal sequence inverted; instead of a “spiritual” sense of connection being necessary in order to produce healing, the data indicate that healing is more of an autonomic response to biological need. The subjective sense of spiritual connection is an optional consequence of that need. Since it is more likely for subjectively sensitive individuals to be drawn to healing, sensitivity can be mistaken as the source of healing. It turns out that subjectively less sensitive people can heal just as well without ever experiencing connection. Thus, conscious awareness of spiritual connection is optional.

That healing effects can be stored in materials to be used later is extremely suggestive that consciousness may have an associative technology. The data presented above on the apparent storage of healing in water, cell medium, cotton, and even in a recording, for its release when need is present, begs for future studies to attempt to unravel the

mysteries of healing. And, there is the additional possibility that this storage ability might be able to make healing more conventional and scalable.

Finally, the lack of an awareness of spiritual connection as a necessity on either the part of the healer or healee makes it likely that healing does not conform to models of psychokinesis, which support conscious intention as the operative agent. That is, healing outcome is not “willed” in the way that operators can bring about intended alterations and have healing follow their desires. Indeed, initial experiments assumed that if healing were to work, the mice that were treated shortly after being injected with cancer would avoid tumor growth altogether. In all cases, regardless of type of cancer, and regardless of how soon after injection treatment began, tumors grew before the process of ulceration and implosion commenced. The volunteer healers were successful in the outcome even though they were upset and concerned when their mice developed tumors. Certainly, the pattern and stages of healing do not conform to the wishes of the healers.

The data output from the experiments and the experiences of the healers do not conform to anything like

a direct psychokinetic effect. Instead, there is merit to thinking of healing as a non-directed outcome. This concept was proposed by Jahn and Dunne with their M5 model that explains consciousness-related anomalies with random event generators and remote perception studies (23). That model suggests that the conscious mind might not connect to the tangible physical world directly, but by way of a circuitous route involving unconscious processes and intangible physical mechanisms. Further speculation involves a timeless and spaceless “Source” in which the unconscious and intangible merge.

While a full examination of the application of the M5 model to healing is beyond the scope of this discussion, the actual healing techniques used in these experiments, as well as the subjective experiences of a selection of volunteer healers, were remarkably consistent with this model. This includes the speculative discussion of “Source,” which is directly discussed elsewhere (18, 23). A full explication of the usefulness of the model to understanding healing would actually and controversially minimize the importance of the conscious mind.

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Even as biological and physical correlates are discovered, the major question of the source and mechanism of action of healing remains, and the elucidation of the healing information remains hidden. Changes in the brain and to the physical space of the healing environment, etc. should be seen as secondary correlates to the healing. While interesting, these secondary correlates are not likely to yield sufficient data to unravel the primacy of the healing information. For example, the significant, but small spectral changes found in the healing recording could not account for the parameters of the gross phenomenon of healing. The mice experiments were replicated at 2 inches and 2000 miles, the latter obviously outside the range of possibility for such small spectral changes to cure cancer in mice. This is suggestive of an important distinction between “energy” and “information.” The biological and physical correlates that were observed are likely energetic signatures which are secondary correlates to the actual healing effect.

Healing itself can be seen to be “informational” in nature and presumably transmitted to the healee through an energetic process not yet understood. The analogy could be

made to a radio signal, which can be seen as an information packet riding on a power source; healing is the information or “message” packet, and the power source remains a mystery. Since healing apparently does not diminish with distance, that power source must be global in reach.

So many questions beg to be addressed. What is the nature of the healing information? Do different healing methods that produce different outcomes also produce different information packets? How does the healee “accept” the information? How is it stored? Do information packets have additive possibilities, for example, if played on multiple recordings? Or, with multiple applications do other emergent properties arise?

This list of questions can be expanded to the point of being overwhelming. We have obviously just begun to scratch the surface in our understanding of these phenomena. As the 20th century was the time during which the equivalence between matter and energy was found, perhaps the 21st century will be the time for the discovery of an equivalence between energy and information along with other undreamed of technologies and applications. 🌐

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### Endnotes

- a. Series 81 solid cell electromagnetically shielded chamber, ETS – Lindgren, Cedar Park, TX
- b. 3-Axis magnetic sensor hybrid HMC2003, Honeywell, Plymouth, MN
- c. Geomagnetometer: IDR-321, Integrity Design and Research, Essex Jct, VT
- d. Analog-to-digital converter: Motu 24ai. Motu, Cambridge, MA
- e. Windows Media Player, Redmond, WA
- f. Passive speaker: PCB4K, Pyle, Brooklyn, NY

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### References

1. Kuhn T. *The structure of scientific revolutions*. Chicago: U of Chicago Press, 1970.
2. Schiegl H. *Healing magnetism*. Germany: Hermann Verlag KG, 1983.
3. Grad B, Cadoret R, Paul G. An unorthodox method of treatment on wound healing in mice. *Int J Parapsychol*. 1961;3:5–24.
4. Grad B. A telekinetic effect on plant growth. *Int J Parapsychol*. 1964;6:473–498.
5. Grad B. A telekinetic effect on plant growth II experiments involving treatment of saline in stoppered bottles. *Int J Parapsychol*. 1963;5:114–133.
6. Benor D. *Healing research: holistic medicine and spirituality*. Research in healing. Vol 1. Germany: Helix Editions, 1992.

7. Bengston WF. Commentary: a method used to train skeptical volunteers to heal in an experimental setting. *J Altern and Complement Med.* 2007;13(3): 328–331.
8. Bengston W. *Hands on healing: a training course in the energy cure (CD audio set)*. Sounds True; 2010.
9. Bengston W, Krinsley D. The effect of the laying-on of hands on transplanted breast cancer in mice. *J Sci Explor.* 2000;14(3):353–364.
10. Bengston WF, Moga M. Resonance, placebo effects, and type II errors: some implications from healing research for experimental methods. *J Altern and Complement Med* 2007;13(3): 317–327.
11. Bengston WF. Spirituality, connection, and healing with intent: reflections on cancer experiments on laboratory mice. In: Miller L, ed. *Science and Spirituality*. New York: Oxford University Press, 2012.
12. Bengston W. Methodological difficulties involving control groups in healing research. *J Alter and Compl Med.* 2007;13(3):317–327.
13. Moga M, Bengston W. Anomalous magnetic field activity during a bioenergy healing experiment. *J Sci Explor.* 2010;24(3):397–410.
14. Beseme S, Bengston W, Radin D, Turner M, McMichael J. Transcriptional changes in cancer cells induced by exposure to a healing method. *Dose Response.* 2018;16(3):1–8.
15. Lerner LJ, Bianchi A, Dzelzkains M. Effect of hydroxyurea on growth of a transplantable mouse mammary adenocarcinoma. *Cancer Res.* 1966;26(11):2297–2300.
16. Bengston W. Some reflections on consciousness, intention, and healing, In: Dunne B, Jahn R, eds. *Being and Biology: Is Consciousness the Life Force?* Princeton: ICRL Press, 2017;101–118
17. Hendricks L, Bengston W, Gunkleman J. The Healing connection: EEG Harmonics, Entrainment, and Schumann's Resonances. *J Sci Explor.* 2010;24(4):655–666.
18. Jahn R, Dunne B. A Modular Model of Mind/Matter Manifestations (M5). *J Sci Explor.* 2001;15(3):299–329.
19. Sheldrake R. *A new science of life: the hypothesis of formative causation*. Rochester: Park Street Press, 1995.
20. Sheldrake R. *The Presence of the past: morphic resonance and the habits of nature*. Park Street Press, 1995.
21. Zimmerman J. New technologies detect effects of healing hands. *Brain/Mind Bulletin.* 1985; 10(2):20–23.
22. Tiller W. *Science and human transformation: subtle energies, intentionality and consciousness*. Walnut Creek: Pavior, 1997.
23. Jahn R, Dunne B. *Consciousness and the source of reality: the PEAR odyssey*. Princeton: ICRL Press, 2011.

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