

Some Reflections on Consciousness, Intention, and Healing

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In their thought-provoking piece, “Is Consciousness the Life Force?”¹ Dunne and Jahn propose, among many other ideas, the possibility that

- Consciousness is inherently linked to the biological process of life itself
- If consciousness-related anomalies indeed prove to arise from an unconscious biological source, one would assume that such a correlation would serve a purpose advantageous to the development or survival of the organism
- The phenomena we term “anomalies” are mysterious primarily because they cannot be explained by any known physical model, but this well may be because they are not strictly physical...rather, they represent a domain where the objective physical world and the subjective experiential world overlap, and they hint at a connection to the primal Source from which all phenomena originate
- Their thesis is that the body, through the agency of the life force, may represent that intersection through a more direct connection with the Source than the mind, or at least the conscious mind...

For over 35 years, I have been researching anomalous healing, using both *in vitro* and *in vivo* models. My research agenda has looked at some parameters of healing such as distance and dose; the physiological correlates of healing; and more recently, the attempt to reverse engineer the healing effect to make it a scalable and reliable more conventional treatment.

Sixteen *in vivo* cancer experiments on mice have been conducted using standard models of mammary adenocarcinoma, methylcholanthrene-induced sarcomas, naturally occurring oncogenic tumors,

immune-deficient nude mice, and on an extremely aggressive cancer. These have been performed at eight different institutions, including four medical schools. In addition, innumerable in vitro experiments have been performed on human leukemia cells and human breast cancer cells, to name but a few.

The experimental protocol used in all of these experiments has been to take a “standard” mouse or cell model with a long history of conventional empirical research that has a known and predictable outcome,^{2,3,4} and to introduce the variable of “healing with intent” using a healing technique which I helped to develop.⁵ Volunteer healers, who have included both students and faculty, have all been pre-screened to be without any experience in alternative healing, nor were they in any way “believers” in the validity of alternative healing. Their healing experiences with me were the first of any kind for them. Variations in many parameters have been examined, such as distance and dose and frequency of treatment, as well as the compilation of the subjective experiences of the volunteer healers. Additionally, human physiological correlates have been examined using EEGs at a private lab, and fMRIs independently carried out at two medical schools.

The abridged summary of the results of these experiments include:

- The demonstration of a reliable full lifespan cure of cancer in experimental mice, including an apparent immunity to reinjection of the same cancer
- A dose response to healing, with some minimum amount of healing time being 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
- Healing proceeds in non-linear fashion, with sudden bursts of healing that resemble “phase transitions”
- A measurable “resonant bond” between healer and healee that is fluid, with successful healing being associated with “connection” and healing failure being associated with “disconnection”
- Healing appears to be fundamentally about “information” rather than “energy,” despite the popular use of the latter term.

Perhaps most appropriate for the following discussion on the place of consciousness in all this, healing appears to be unrelated to a particular conscious state of awareness on the part of either the healer or the healee, and healing can apparently be stored in both biological and physical systems. That is,

- Healing efficacy is not necessarily related to a particular state of mind, but rather appears to be more akin to an autonomic response to need
- There is a measurable resonant bond between the brains of the healer and healee that can be strengthened or weakened
- Cells transplanted from a mouse infected with cancer that has been treated by the healing technique can independently cure otherwise infected mice, without further healing with intent
- Water treated with healing with intent can reproduce the cancer cures in mice without further intervention on the part of a healer
- *In vitro* cancer cells treated with cell medium that has been “charged” with the healing with intent will result in a robust acceleration of growth
- *In vitro* cancer cells treated with “charged” cotton will undergo significant genomic changes related to immunology and inflammation
- A digital “recording” made of the act of charging cotton, when played to cancer cells, will produce significant genomic changes similar to that of charged cotton
- And finally, these apparent effects of healing, whether through healing with intent, charged cotton, or a recording, produce significant responses *only when there is a biological healing need present in the healee.*

My discussion will move in the direction of suggesting that (1) healing is not related to conscious awareness, but rather is more akin to an autonomic biological response to need; (2) conscious intention and attention are quite dissimilar, with only fleeting intention being the necessary component of healing; and (3) intention itself may be “storable” in some form, and can result in relatively permanent changes in both biological and physical systems.

The end result of the discussion will essentially be in support of Dunne and Jahn's perspective that biology, more specifically biological "need," may be the driving force behind a great deal of what can be considered anomalous healing. The healee will be seen to be the propagator of healing, 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 will be the "wild card." While anything approaching a comprehensive definition of consciousness remains past my pay grade, I will suggest that a more useful conceptual model flows from the distinction between "awareness" and intention," the latter being the dominant partner and the former being optional at best.

By extension, the thrust of my data will be in support of the M5 conceptual model of Jahn and Dunne,⁶ in that the mysterious "Source" will be the place which connects conscious intention and anomalistic outcome in healing.

An Illustration of the *In Vivo* Experimental Model

In the basic experimental *in vivo* protocol, mice are injected with a known dose of cancer sufficient to guarantee death within a specified interval. In the illustration below, mice obtained from either the Jackson Laboratories or the National Cancer Institute are injected with at least 200,000 mammary adenocarcinoma cells, double the lethal dosage. Published life expectancy has been found to be between 14 and 27 days subsequent to injection. Mice develop a non-metastatic externally palpable tumor that results in death either by the crushing of the internal organs or by mal-

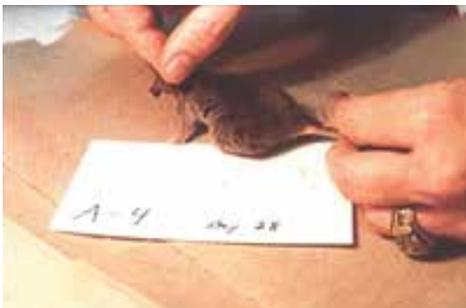


Figure 1 – An example of a mouse in the end stages of life

nutrition, or both. An example of a mouse very close to death can be seen in Figure 1.

Healing treatment of the mice generally involves the volunteer healer placing his or her hands on the outside of the cages and practicing the healing technique for a specified duration (see Figure 2). Individual



Figure 2 – A typical healing session, with the author serving as the healer

treatment length, number of treatments, and number of mice per treatment have all been part of various experimental protocols, including other variables such as distance of hands from the cages, extending to thousands of miles.

Those mice that have been treated by the healing with intent techniques typically develop an encrusted blackened area on the surface of the tumor, followed by tumor ulceration and then implosion to full lifespan cure (see Figure 3).

Histology indicates that at all stages of remission there are viable cancer cells in the mouse. When full cure is achieved, the mouse is completely free of cancer, and is further apparently immune to subsequent injections of the same cancer for its entire life.



Figure 3 – Illustration of the remission pattern

The sudden disappearance of the cancer can also be illustrated in Figure 3. The first and second pictures are spaced only six days apart. Sudden shifts, analogous to “phase transitions,” have been the pattern in all experiments, whether *in vivo* or *in vitro*. That is, in early stages of healing treatment, mice (and cell cultures) show no apparent effect of the healing intention, until suddenly there are non-linear dramatic shifts in tumors (*in vivo* models) or cell growth (*in vitro* models).

Figure 4 illustrates the sudden growth in cells in response to being grown in medium that has been charged with the healing with intent method. After the first week, there is no significant difference in cell growth between treated and untreated

medium. But in the second week there is a sudden burst in growth in cells grown in the treated medium.

After the first week, there is no significant difference between cells treated and untreated. After the second week, the cells grown in the treated medium are significantly stimulated.

Healing and the Sense of “Connection”: EEG data

In addition to the anomalous healing in and of itself, there is apparently an anomalous connection that can occur between subjects.

Synchronizing EEGs between the healer and subject indicate that the healer’s EEG data shows harmonic frequency coupling across the spectra, followed by frequency entrainment effects with the healee, followed by instantaneous EEG phase locking. These results suggest the presence of a connection between the healer and healee (see Figure 5).⁷ Of central importance, in addition to the apparent connection established at a distance, is that *neither the healer nor healee are consciously aware of the connection*. The healee has a need, and the healer practices the rapid imaging healing technique with only a passing intention to help. The connection simply occurs.

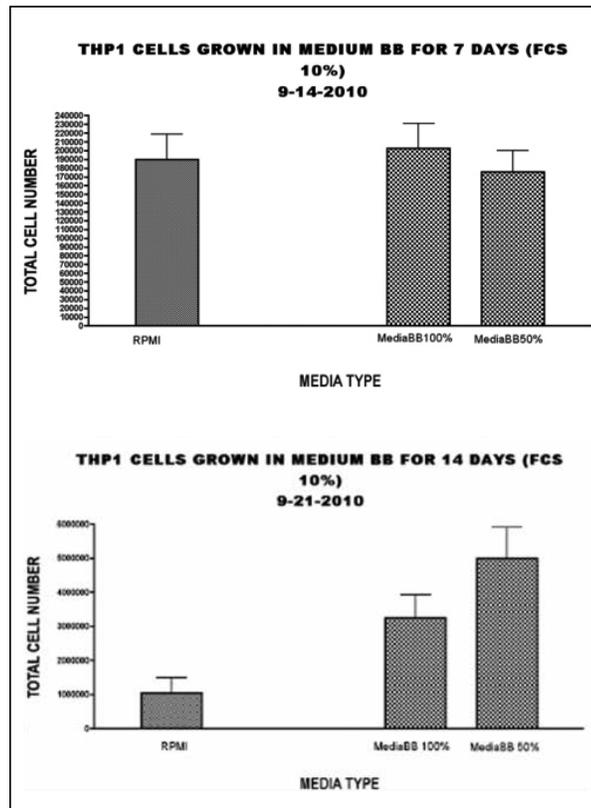


Figure 4 – a treated/not treated medium comparison of cell growth in human leukemia cells at one and two weeks

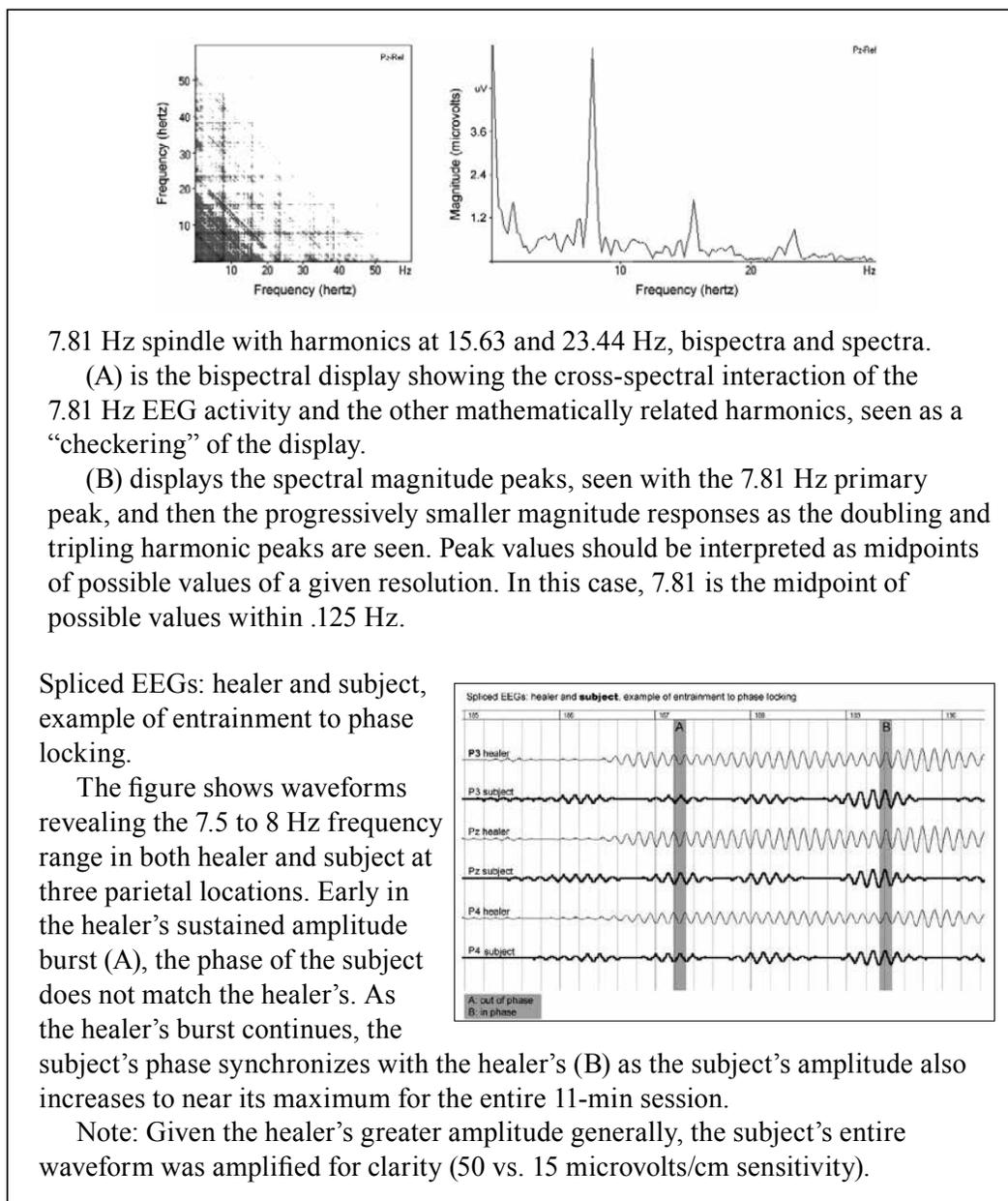
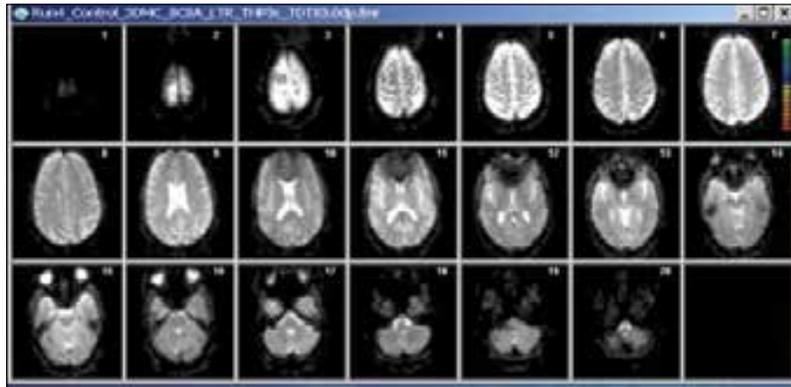


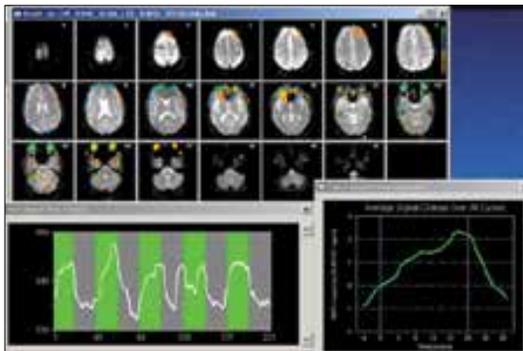
Figure 5b – Illustrations of the production of harmonic frequency coupling

Healing and the Sense of “Connection”: fMRI data

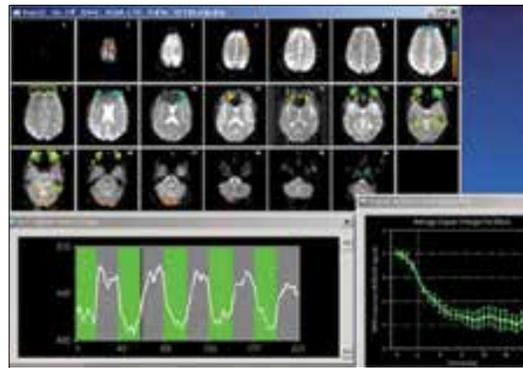
Research questions have included whether healing with intent might have a specific location in the brain. In order to gather data using functional MRIs, it would be necessary to produce a “toggling” of healing intention into “on” and “off” states. To my amazement, this was able to be done through conscious intent. At the University of Connecticut and Thomas Jefferson Medical Schools, an exploratory pilot study with a simple



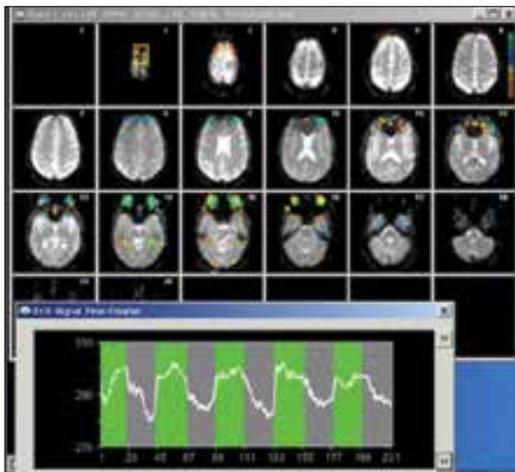
This is a control run with a key-pressing task without on/off cueing. It shows no activation when 45-second blocks were contrasted.



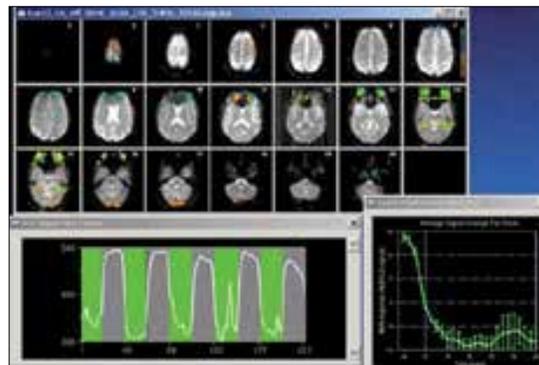
fMRI data show widespread activation when healing is “on” (green) as contrasted with “off” (grey). Right anterior inferior frontal lobe is highlighted as region of interest and shows ~3% signal increase.



Anterior frontal lobes highlighted at an inferior level on the region of interest. 5 periods are averaged showing ~3% decrease during “on.”



fMRI data show widespread activation when “on” (green) as contrasted with “off” (grey). Anterior frontal lobes are highlighted as the region of interest.



Both eyes highlighted as region of interest, and 5 periods are averaged showing ~25% signal decrease during “on” conditions.

Figure 6 – fMRI data contrasting “on” and “off” healing intention, with a control run

protocol had healers inside an enclosed fMRI intend to “heal” and then to “not heal” during 45-second cycles (see Figure 6) to see if healing intention can be toggled.

Apparently, healing can indeed be “toggled.” These results were reproduced by several people acting as healers, always contrasting “on” and “off” states of healing intention, using the same techniques as were applied to the mice and in the EEG studies.

An interesting modification of the protocol involved the healer standing outside the fMRI, approximately 25 feet from the fMRI, and a volunteer healee located inside the fMRI. The healee had no specific intention, and was instructed to simply lie inside of the fMRI. Here too, the healer was the one cued to direct healing intention in an on/off cycle of 45 seconds each, except this time the healee was the one being monitored. *The same basic pattern of on/off cueing in the brain of the healee was produced, apparently indicating a brain connection across some distance. Once again, there was no conscious awareness on the part of the healee that anything was out of the ordinary. The heelee’s only task was to lie still inside the fMRI.*

The third variant on the fMRI protocol involved the gathering of 10 pictures and hair samples of cancerous animals (there were dogs, cats, horses, and sheep) which were each placed inside of an opaque envelope. To serve as controls, an equal number of opaque envelopes were prepared that had only index cards inside of them. The envelopes were randomized, and in double blind fashion, were each placed on the left palm of volunteer healers who were lying in an enclosed fMRI. *Results clearly indicate that the brains of the volunteer healers “turned on” only when the envelopes had “need” expressed in them (pictures and hair samples of cancerous animals). This apparent activation in response to need essentially duplicated the results when the healers consciously attempted to toggle healing and non-healing in specified intervals. The brains “knew” when a need was present in the envelopes.*

Healing and Connection: The Control Problem

The previous sections indicated that bonding between spatially separate individuals is not necessarily a conscious process. In both the EEG and

fMRI experiments, brains apparently either became resonant with each other or autonomically responded to the stimulation of healing need. This bonding further occurred without the conscious awareness (read “attention”) of the participants, however much it was their “intention” to participate in the experimental protocols.

Among the more interesting phenomena associated with the healing research has been the persistent complication of control mice remissions. The current interpretation is that mice that are even briefly seen by the volunteer healers can somehow become “bonded” to the treated mice. The effect of this bonding is that a treatment to any mouse apparently can result in a treatment given to any mouse within the bonded mice system. Of equal importance, resonant bonds are apparently fluid, in that bonds can also be broken.

To illustrate, in Figure 7 (below), five cages of mice on a lab bench were treated by five volunteer students. Three of the volunteers were biology students, while two were not. The students were to treat their cages each day for a specified length of time. They were also told *not* to look for the room with the control mice in them. This control room was in the same building about 50 meters away. A second set of controls mice were shipped to another city.

Several weeks into the experiment, the control mice in the building started to die on schedule. 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. They found the control mice to be in similar state as shown in Figure 1 (above), without any blackened area or ulceration of the tumor. They stayed only about 10 minutes to observe. After their visit, the remaining control mice began the remission process to full cure, even though they were never again seen by the volunteer healers.

The end result of this part of the experiment found the non-biologists’ mice being cured, while the biologists’ mice died. The control mice were dying on schedule until they were seen by the biologists, who apparently couldn’t cure their own mice!

And so the problem is this: if “connection” is part of healing (see EEG and fMRI data above), and the biology students were able to resonantly connect to the control mice to apparently cure them, why couldn’t they

cure their own mice? Further, if the non-biologists were able to cure their assigned mice, and they were close to the biologists' mice, why wasn't there a resonant bond made with the biologist's mice?

A hint comes from their student logs. Each of them reported feeling self-conscious about whether they would be seen doing something so unorthodox as putting their hands around a cage of mice, thereby exposing themselves to ridicule by their peers. The non-biology students had no such fear. Apparently, the subjective state of unease can serve to break the resonant bond with the larger group. This particular state of consciousness, simply described as self-consciousness, might be one of a possible multitude of states which can unbind.

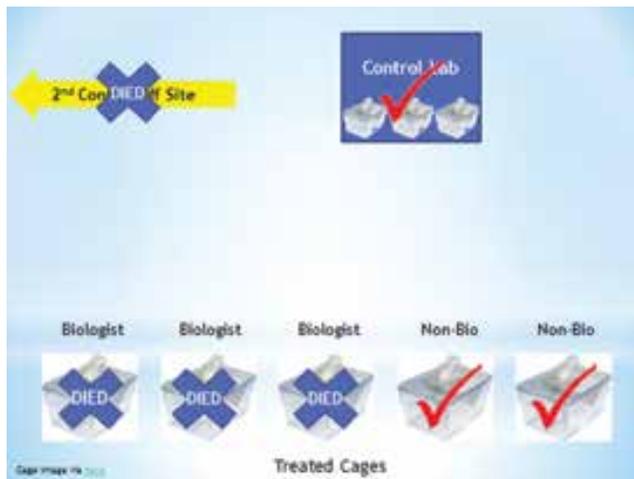


Figure 7 – experimental layout, with outcomes, of the lab setting

This can be further illustrated by an additional quirk to this experiment. The experimental protocol pushed some IACUC boundaries in that each of the five volunteer healers also 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 biol-

ogists were able to cure their mice at home, where they were, by their own logs, more relaxed. In their logs, they also report being excited by their discovery of the control mice in the building, which presumably served to resonantly bond with the remaining mice in the larger group.

These results don't make sense if there is anything approaching a generic "field effect" of healing. If the non-biologists could heal in the lab, and the biologists' mice were in the same vicinity, then a field effect would have compensated for the biologists' apparent lack of being able to heal in the lab. Apparently, states of consciousness which "push away" might serve to create boundaries which exclude healing.

The resonant bonding problem, then, isn't one of a generic field effect, but rather involves the interaction of consciousness to bound group



Figure 8 – apparent left-hand attraction in two different mouse models

membership. This would indicate that models such as morphogenetic fields,^{8,9} however applicable in general terms, might need consciousness as an intervening variable in specific instances.

Interestingly, if the resonant bonding phenomenon is more generally widespread and not simply confined to healing data, then a similar process may be involved in placebos.³ That is, placebo effects may be less explained by psychological processes, and more explained by sociological processes of group bonding and boundary formation and dissolution.

Need and a Biological/Behavioral Response to Healing in Mice

Among the curious phenomena that have been observed is the apparent response of mice to the healing environment. In Figure 2 was illustrated the physical placing of hands around a cage of mice. In all experiments, we have seen a preference by the mice to situate their tumors as close as possible to the left palm of the healer (see Figure 8). This occurs regardless of the orientation of the cage.

This left-handed attraction occurs regardless of the healer, or the type of cancer, *only so long as the mice have cancer*. Once the mice have been completely cured, they no longer have an inclination to move towards the left hand. If the pictures in Figure 8 were transformed into motion, it would appear as if the mice actually rotate their turns in their attempt to get the tumors as close as possible to the left palm, and they switch off after approximately 1 minute of minimum distance from that placement.

Healing and Need in Cell Cultures

Ordinary cotton obtained from a pharmacy (Figure 9) was “charged” by a volunteer healer for approximately 20 to 30 minutes. Charged and uncharged (control) pieces of cotton were then placed beside well plates with cells that have “need” and cells without need.



Figure 9 – Ordinary cotton treated with healing intent

Several growth experiments were done on bacteria cells without healing need, comparing the effects of “treated” and “untreated” cotton. There was no significant effect on cell growth (see Figure 10).

However, when human breast cancer cells with a healing “need” were exposed to the treated vs. un-

treated cotton, significant changes occurred in cell proliferation and migration (Figure 11).

Genomics performed on human breast cancer cells, comparing exposure to treated and untreated cotton, demonstrated significant changes in six genes if the cotton was

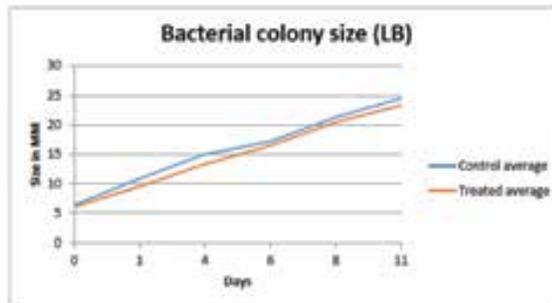
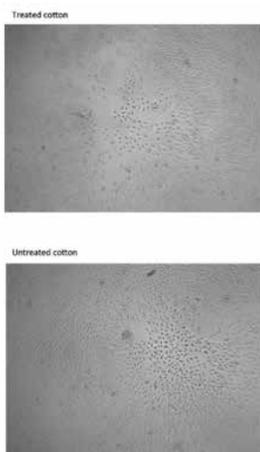


Figure 10 – *Proteus vulgaris* bacteria (luria broth agar) growth experiment of cells without healing need



Cotton treated cells demonstrated slower cell proliferation and migration

Figure 11 – Human breast cancer cell proliferation and migration comparisons between charged and uncharged cotton

charged, with strong suggestion of an additional two genes which may be of importance.

Interestingly, Raman spectra analysis failed to detect any difference between the charged cotton that had produced genomic effects, and uncharged cotton. The testing of other materials besides

Human Breast Cancer cells exposed to Energized Cotton (4 replicates)			
Gene Description	Gene Symbol	Energized cotton	P-Value
		Fold Change	
Caspase 9, apoptosis-related cysteine peptidase	CASP9	-1.241	0.017
E2F transcription factor 4, p107/p130-binding	E2F4	1.123	0.023
Heme oxygenase (decycling) 1	HMOX1	-1.310	0.034
Insulin-like growth factor binding protein 3	IGFBP3	1.151	0.016
Minichromosome maintenance complex component 2	MCM2	1.320	0.020
Protein phosphatase 1, regulatory (inhibitor) subunit 15A	PPP1R15A	-1.435	0.008
Serpin peptidase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member 1	SERPINF1	1.406	0.063
Vascular endothelial growth factor C	VEGFC	1.218	0.093

Figure 12 – Significant genomic changes in human breast cancer exposed to charged cotton

cotton included clear quartz, pink quartz, water, selenite, and cellulose, all with no detectable difference between “charged” and “uncharged.”

To date, only life in need seems to respond to charged materials. And so the interesting speculative hypothesis might be that *the detector for the difference between healing and non-healing might need to be both alive and in need.*

Some Concluding Thoughts

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

Second, conscious awareness on the part of either the healer or healee is not likely to be central 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 that they are unlike anything that parallels human consciousness. Yet mice in need “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; some felt nothing at all, the latter to the point that they seemed not to understand the question when asked to comment about feelings associated with healing. In multiple experiments, there has been no association between healing efficacy and subjective states of connection. And so it may be posited that a conscious awareness of healing may be unnecessary for healing to take place.

At the same time, both EEG and fMRI data clearly indicate that some sort of biological connection actually does take place. For one, at least in the case of healing humans, healer and healee go into harmonic brain phase locking, and do so without any necessary conscious awareness that the healing phenomenon might be taking place.

Yet, 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 becomes 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 in order to produce or to test healing of any sort, there must be intention. This intention is akin to the intention expended for many forms of action. I “intend” to walk down the street, but there is nothing approaching “belief” or sustained “attention.” Indeed, attentive walking will diminish efficacy. There must have been some intention to begin the walking, but the activity is driven not by sustained effort or attention, but by a letting go. The mastery of many skills, whether walking or healing, likely involves the transition from “mindful” attention to relatively “mindless” fleeting intention.

Connection can be seen as an autonomic response to need. Consider that in one fMRI protocol, blinded envelopes with pictures and hair samples of animals placed onto the palm produced significant brain response in the healer if “need” was present in those envelopes. These responses were biologically similar to the brain changes which occurred if the healer 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 any envelopes did or did not have any pictures of animals in need.

The commonly found association between certain states of consciousness and healing, often associated with being “spiritual,” 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 occurs more as an autonomic response to biological need, and the subjective sense of spiritual connection is an optional consequence of that need. Since more subjectively sensitive individuals are more likely to be drawn to healing, the mistaken association can be made that this sensitivity is the source of healing. It turns out that people who are less subjectively sensitive can heal just as well without ever experiencing connection. Conscious awareness of spiritual connection is optional.

That healing intention can apparently be stored in materials and later be used to stimulate healing effects is extremely suggestive that consciousness may have an associative technology. Data presented here on the apparent storage of healing in water, cell medium, and cotton, which can produce a future healing effect when need is present, begs inquiry into future studies that may help to unravel some of 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 necessity of awareness of spiritual connection 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 in, say, the theoretical output of random number generators. Volunteer healers may have “intended” healing in that they went through some training in a healing technique and placed their hands around cages, but there are no cases of these healers having healing follow their wishes. Indeed, initial experiments proceeded under the assumption that if healing were to work, then 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, sometimes very large, before the process of ulceration and implosion commenced. The volunteer healers were successful in the outcome; they were upset and concerned when their

mice developed tumors. Certainly, the pattern and stages of healing does 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 PK effect. Instead, there is merit to thinking of healing as a non-directed outcome similar to that proposed by Jahn and Dunne in their M5 model for explaining their consciousness-related anomalies with random event generators and remote perception studies.⁶ In that model is proposed the notion that the conscious mind might connect to the tangible physical world not 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 chapter, let me simply say that the actual healing technique used in these experiments,⁵ as well as the subjective experiences of a selection of volunteer healers is remarkably consistent with this model. This includes the speculative discussion of Source, which is directly discussed elsewhere.¹¹ I would add, however, that a full explication of the usefulness of the model to understanding healing would actually and controversially minimize the importance of the conscious mind.

Endnotes

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