WHITE PAPER XXV

The Sacred Buddha Relic Tour: For the Benefit of All Beings

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Abstract

An extraordinary worldwide tour of sacred Buddha relics is bringing a direct experience of Divinity to millions of people. Mystics have advocated meditation as the door of entry into spiritual realms. Scientific inquiry of meditation has demonstrated that 1) spiritually adept Buddhist monks have different brain structure and function compared with normal people and, 2) it takes thousands of hours of meditation to achieve neural transformation. These scientific facts come under scrutiny in light of the exceptionally high experiences of ordinary people at Buddha relic tours. The Buddha relics emanate energy, and information, that is, a special transmission outside of the scriptures, without dependence upon words or letters, and give direct first-person experience of unconditional loving kindness. The relics show that experience of a high spiritual state has the capacity to transmit a powerful and inspirational impact, more so than the linear process of conceptual reason. In this presentation we discuss the beginning stages of understanding high states of spirituality such as with Buddha relics. It is crucial to note that there is no Master physically present nor is there a nervous system that can be studied. Yet, inexplicably, the formless quality of consciousness such as loving kindness is encapsulated in the form of crystal-like relics. We show that simple electrical devices can be imprinted with the unconditional loving kindness essence of the relics by just being in the presence of the Buddha relics. The resulting relic-influenced energy/information host device demonstrates remarkable physical space conditioning properties that are measurable. These data provide dramatic examples of what is achievable for a directed human consciousness and also a framework for understanding spiritual realities such as loving kindness. This information will be important in future human life, but none may be more urgent than that involved in the alleviation of suffering in all its forms.

Background

"In September 2009 my world turned upside down (NJM). As I considered my stunning experience of the Buddha Relics¹, I realized that in actuality, my world was indubitably turning right side up! All my closely held notions about the brain being the seat of mind and what we term "awareness" or "consciousness" were severely tested. Fortunately, I received help from two unexpected sources: first, an emerging field of new physics called Psychoenergetic Science² and second, the new scientific field of experimental philosophy.³ Psychonenergetic Science examines the conditions whereby human intention can have measurable effects on material properties, and the reader is guided to the earlier white papers in this series for the experimental evidence.

Experimental philosophers ask fundamental questions like, "can a robot or an animal be aware?" Using methods of contemporary cognitive science, statistical analyses and so forth, experimental philosophers explore the sources of our own and others' philosophical intuitions. If we can get a better understanding of the psychology behind philosophical intuitions, we can have a better sense of which intuitions are worthy of our trust and which we should dismiss as unreliable or misleading."⁴

Finding the Mind in the Body³

Let's say you look around and see four things: a toaster, a goldfish, a human being and a printer cartridge (Figure 1). Looking at those four things, you might be able to distinguish all kinds of similarities and differences between them. However one distinction seems especially noticeable: some of those things have minds, while others do not. One would attribute a mind to the human being, perhaps also to the goldfish, but definitely not to the toaster or the printer cartridge.



Figure 1: which of the following items has a mind?

This acumen comes so easily to us that it is easy to take it for granted. But, if we stop to think about it for a moment, it starts to seem deeply puzzling. How exactly do people decide which things have minds and which do not? Somehow if we see a goldfish swimming in a bowl, and see a toaster popping up some toast, we immediately have the intuition that the former might have certain psychological states but the latter most definitely does not. How might we be doing this?

One traditional answer says that the process is relatively straightforward: we figure out whether something has a mind by checking to see what it *does*. So, let's look at the first 2 items again (Figure 2).



Figure 2: which of the following items has a mind?

The key thing to notice about the goldfish is that we can see it swimming around and responding to its environment in complex ways. Meanwhile, the toaster never seems to do anything interesting – all it ever does is make more toast. So, an obvious hypothesis would be that it is this *difference in behavior* that leads us to say that goldfish has a mind while the toaster does not.

This hypothesis has a great deal of intuitive appeal. There is something that seems deeply right about the idea that we attribute minds to objects based on their behavior. However, this idea has been challenged by experimental philosophy. Again and again in

studies like the one above, results seem to show that people's ordinary way of making sense of the world was radically different from anything we might expect to find in a purely scientific theory.^{5, 6} People's intuitions about whether a given entity has a mind do not appear to be based entirely on a scientific attempt to explain that entity's behavior. Instead, these intuitions seem to be influenced in a striking way by questions about whether the entity has the *right sort of body*.

The Tale of Two Bodies: Minds and Machines

What if the entity is almost exactly the same as a human being except it lacks a biological body, would people ascribe consciousness to it? The philosopher Bryce Huebner conducted a series of studies in which participants were asked to imagine a robot that has been designed to act like a person (Figure 3).⁷



Figure 3: Which of the following items has a mind?

Although the robot is presumably made of silicon and metal, it is described as behaving *exactly* like a human being on all possible psychological tests. The question now is what sorts of mental states people will be willing to ascribe to it. They are willing, for example, to say:

The robot believes a triangle has three sides or, The robot believes it has a head.

Strikingly, they are unwilling to say:

The robot feels happy when it gets what it wants.

In other words, people are reluctant to ascribe an entity such a robot as having a capacity for genuine feeling or experience. But notice the robot is described as behaving *exactly* like a human being in all respects, or situations. So any difference between the mental states we ascribe to it and the mental states we ascribe to a human being can't be understood in terms of an attempt to predict behavior. It must be that the body is playing some role here.

Something about the presence of our faces, our flesh, out biological nature, must be triggering people to think that we have phenomenal consciousness.³ Our ordinary attributions of consciousness (or mind) above all seem to be wrapped up in some fundamental way with an awareness of the body. If we turn our attention to the body and the brain in particular, neurosciences has been very fruitful and teaches us much about the correlates of human behavior, skills such as meditation and brain function.

Buddha's Brain



Over the past several years, His Holiness the 14th Dalai Lama has helped recruit Tibetan Buddhist monks for and encouraged research on the brain and meditation.⁸ The findings in these highly unusual and adept monks suggest that, over the course of meditating for tens of thousands of hours, the long-term practitioners had actually altered the structure and function of their brains.^{8,9} These alterations of the brain have been termed "neuroplasticity", a term used to describe changes that occur in response to experience. When the framework of neuroplasticity is applied to meditation, it has been suggested that the mental training of meditation is fundamentally no different than other forms of skill acquisition that can induce plastic changes in the brain.⁸ The Buddhist monks are the Olympic athletes of meditation.

Utilizing functional MRI of the brain, expert meditators with an average of 19,000 hours of practice showed stronger activation in areas such as dorsolateral prefrontal cortex (implicated in monitoring), visual cortex (engaging attention), and superior frontal sulcus (attentional orienting). It has also been shown that long-term Buddhist practitioners self-induce sustained electroencephalographic (EEG) high-amplitude gamma-band oscillations and phase-synchrony during meditation.¹⁰ Such synchronizations of oscillatory neural discharges are thought to play a crucial role in the constitution of transient networks that integrate distributed neural processes into highly ordered cognitive and affective functions and could induce synaptic changes.

Finding Consciousness in Objects Such as the Relics

With the neuroscientific evidence on the table, we can now return to our original question. We wanted to get a better understanding of the process people apply to determine which entities have minds and which do not. Let's look at the objects in the following pictures (Figure 4 and b): We can ask the same question: "do these items have a mind (or consciousness)?"



Figure 4 a, b: Do these objects have a mind? Notice the smooth pearl-like objects in the urn in picture a, and larger 3 pearl-like objects on the red velvet in the picture b.

What if you were told that these objects in figure 4 are the relics of the historical Buddha, also known as Shakyamuni Buddha? Does that influence your inclination? For the first author (NJM), a non-Buddhist, an incredible and life-altering experience occurred in the presence of the relics:

"Upon entering the monastery, I immediately felt an intense state of awareness, or Presence. It was as though the Buddha himself was present. The state was nonverbal, vast, and profound; it was exquisitely gentle and yet like a rock. There was a silence and a state of peace that seemed limitless. For me, the essence of time ceased to exist. My mind became quieter: for in place of the usual internal conversation was wonder; and curiosity had given way to amazement. I felt a tangible radiation of exquisite energy flowing from the relics to my heart center. It was highly private and personal, and yet conveyed an immense sense of Oneness or unity with everyone and everything. It had no counterpart in ordinary experience."¹

On a deeper and more subtle level, this experience was singularly transformative. Belief in God and the *experience* with God are profoundly different. The Buddha relics emanate energy/information, that is, a special transmission outside of the scriptures, without dependence upon words or letters, and give direct first-person experience of unconditional loving-kindness. The relics are showing that experiential knowledge of a high spiritual state has the capacity to transmit a powerful and inspirational impact, more so than the linear process of conceptual reason.¹¹ It is the power of the heart. It is vitally important to point out that there is 'no-body' physically present, nor is there a nervous system. Yet, inexplicably, the formless quality of evolved consciousness such as loving kindness is encapsulated in the form of crystal-like relics.

The Buddha Relic Tour Comes to the Manek Home (Ayodhya – Abode of Lord Rama)

The immensity of NJM's inner experience was such that she and her brother made the intention for the Sacred Buddha Relic tour to come to their family home in Southern California. Over 3 days in the summer of 2010 the Manek family hosted the Relic tour. NJM was once again given an opportunity to experience and confirm that which she had encountered 9 months previously in Minneapolis. As hundreds to thousands of people came through the home, and from the messages and e-mails subsequently received, it became clear that a shift of perception was occurring for the visitors (Figure 5 a-f)



Figure 5 a) Opening Ceremony

Figure 5 b) Shakyamuni Relic case



Figure 5 c) Visitors viewing Relics

Figure 5 d) Visitors Viewing Relics



Figure 5 e) Visitor being blessed

Figure 5 f) Children viewing Relics

- a) Opening ceremony on Friday July 30th, 2010. Sarlaben Rajyogar, head priest of the Los Angeles Hindu Temple is pictured bringing the Shakyamuni Relics to the altar room (Manek home living room). She is holding the stupa containing the Shakyamuni Relics above her crown chakra.
- b) The Relic case holding the Shakyamuni Relics is shown here. This is the first case in any tour and also holds the relics of Buddha's only son, Rahula, who was ordained into his fathers order and achieved enlightenment in his brief lifetime.
- c) Visitors viewing the Shakyamuni Buddha Relics. Notice that the visitor is using a magnifying glass for enhancement of the small relics contained in the Stupa's.
- d) A grandfather and grandson together at the case holding the modern Masters Relics.
- e) Visitors had the choice to be blessed by the Shakyamuni Relic on their crown chakra.
- f) Many children and family pets also attended the Manek home tour

For the visitors, their experiences were very personal, very powerful, and very meaningful; it did not matter what spiritual tradition they came from, if they regularly meditated or not, or if they even believed in a higher being. Many reported a feeling of deep peace, and others were overcome with tears. For some, physical ailments resolved. It did not seem important how serious or chronic the disease was, but the body healed. In following one of these cases with the treating physician, he shared that in his medical opinion, the resolution of the illness, which involved recovery of renal impairment and ceasing dialysis in an elderly diabetic patient, was unexpected. [personal communication, Dr. Cabebe, MD, Glendora, CA]. This gentleman remains well 18 months after the Relic tour at the Manek home.¹

Yet another opportunity presented itself to observe the Sacred Relics in Nairobi, Kenya where over 3 days (July 2011) an estimated 5000 visitors viewed the relics.¹² Again and again, people and children of all backgrounds and faiths expressed feeling peace and serenity as they visited the Relics. Many reported receiving intuitions about their life and the highest course of action in their particular life situations. It was as if a silent transmission was taking place.

The picture in figure 6 was taken by a professional photographer at a Relic tour in Santa Ana, California, July 2010 one week before the relics came to the Manek home. The picture was taken with a standard Canon professional camera at approximately 12:00 noon on July 25, 2010. The lights that are so clearly visible in the picture were not visible to the naked eye in the space of the temple. One can see a golden translucent light to the lower left of the picture, which then emerges into a strong band of luminescent orbs arching over the altar table. How is this image possible and how does it inform us of the nature of the space in the temple during the relic tour?



Figure 6: Photograph with permission and courtesy of Ms. Julayne Luu, Julayne Luu Photography, Midway City, CA; web address: <u>www.klphotostudio.com</u>.

All of the above exceptional spiritual experiences and healings of ordinary people at Buddha Relic tours leads to collapse of concepts, identifications and traditional (neuro-scientific) models of consciousness. An expanded reference frame is needed to understand what appears to us to be anomalous or miraculous phenomena.

Beyond the Brain: Mind Without a Body

In science the traditional investigative strategy to understand nature is usually to build on what we know and accept as scientific facts: this is the 'bottom-up' approach. Yet, on the other hand, to make any meaningful progress in understanding the Buddha Relics, we are confronted with the fact that there is no physical body and no nervous system to study. The Buddha Relics give us a stunning example of a quality of consciousness, unconditional loving kindness, contained in the form of a Relic, and without dependence on any physical entity such as a body! We can take the 'top-down' approach and ask: how can *formless* qualities of consciousness such as unconditional love be encapsulated in the form of the relic? A second question we can posit is: what are the set of conditions that promote healing in the body-mind-spirit? For both these questions, Psychoenergetic science came to the rescue.

Four Target Experiments that Spin Science on Its Head

Human beings that are highly inner-self managed can hold a focused thought – intentionfrom a deep meditative state for 20-30 minutes (Figure 7). This intention or information can be "imprinted" into a simple electrical device. The actual device is not all that important. Indeed, anything can be imprinted, but for standardization, an unimprinted device (UED) is used. Not only can properties of inorganic materials such as pH of water be changed in line with the intention, but liver enzyme activity (chemical potential) of alkaline phosphatase (ALP) can be augmented. The life cycle of a whole living system such as the fruit fly drosophila can be positively impacted and have also been target experiments.² The pH of water results have been replicated by others numerous times.

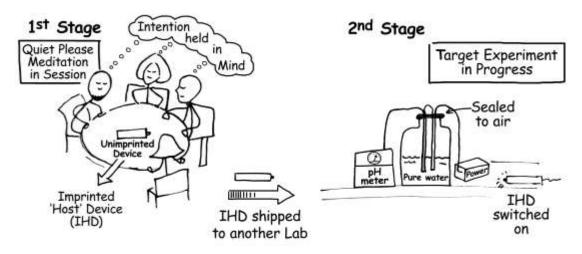


Figure 7: The 2-stage Protocol of the Target Intention Experiments²

Human Intention Raises The Symmetry States of the Physical Space.

The replication of the target experiments led to a startling finding: the laboratory space wherein the target experiments are conducted *itself* undergoes a fundamental change. The space becomes "conditioned" (Figure 8).²

The thermodynamics of a conditioned space are different than normal reality. Normally empty space, also known as the "physical vacuum" in Physics, has tremendous stored potential energy (see below). The physical vacuum also has unique levels or gauge states. Normal reality is at the atom-molecule gauge state and this is readily measureable as it is electric-charge based. On the other hand, the physical vacuum is devoid of electric-charge based particles by definition and in this sense it is 'invisible' to conventional and traditional measurement instruments. Tiller and colleagues have developed subtle energy detectors and they have found that any change in physical space characteristics can be quantified in a predictable and reproducible way.¹³ In many cases, the excess thermodynamic free energy of the experimental space was measured to *more than double* from its normally expected room temperature value due to this type of space conditioning to a higher electromagnetic gauge symmetry state.¹³

Everyday world experience teaches us that there is an impression (or signature) to each space in which we live and work and visit. Each space has its own 'feel' or level of conditioning. The bedroom of our house feels quite different than the kitchen or the den. Dramatic examples are the great cathedrals of Europe where, over centuries the space is conditioned to a very high degree by all the people who visit and hold prayerful intentions in such a space. This kind of sacred space feels very different compared with say, the space of a café.

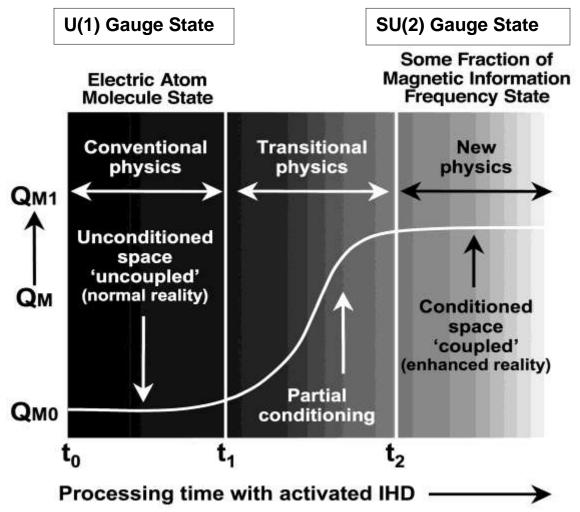


Figure 8: The time-evolution pattern of the intention target experiments. The measured property, QM, of a particular material (e.g., pH of water) is shown as a function of time (t) of exposure of the experimental space to the Intention Host Device (IHD). The measurement at t_0 is QM0, the value expected in the unconditioned space (normal electric charge-based U(1) gauge state on the left). After approximately t_0 to t_1 , between one and two months, the QM(t) data begin to change in a sigmoidal fashion, always in the direction of the specific intention, to a value close to QM1 ~ QM0 + Δ QM(intention). The SU(2) gauge is the "conditioned" state of physical reality wherein the effects of the IHD are observed.

The parallels between the Buddha Relics and Intention Host Devices

The relics literally 'store' loving kindness intention. They are wrapped in special containers, protected, and taken from city to city for the Buddha Relic tours. The intention host device that Tiller and his team utilize 'stores' the specific target intention from highly adept and inner-managed humans and imprinted from a deep meditative state. The IHD is wrapped in aluminum foil and protected in faraday cages to prevent leakage of information. Then the IHD is sent to a different laboratory in a different city for the target experiment to be conducted (Figure 9).

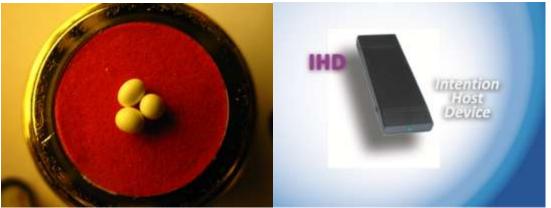


Figure 9: The similarities as information 'carriers' of the Shakyamuni Buddha Relics and the Intention Host Device (IHD)

Although we may not consider these objects, that is, Buddha relics and an IHD to have phenomenal consciousness, there is no doubt that an aspect of consciousness is imprinted into both kinds of objects. In the case of the Buddha Relics, over hundreds of years, reverential 'pumping' has kept these objects imprinted. If there is no respect or love, the relics disappear! [personal communication, relic custodians]. In a similar way, the IHD loses its imprint and becomes an unimprinted electrical device (UED) over a course of about 3 to 6 months. It is because the life of the IHD is approximately 6 months that experimental (quantitative) work can be undertaken to understand the underlying thermodynamics.

Is the Physical Space Where the Relics Are Displayed a Conditioned Space?

The relic tour at the Manek home was a unique opportunity for us (NJM and brother Raj Manek) to imprint several unimprinted electric devices (UED's), of the kind that Tiller and colleagues have utilized in their target intention experiments. There was no *a priori* decision to conduct experiments with the resulting Relic energy-imprinted devices (hereafter termed Relic-IHD's). The decision to imprint the UED's was because, then, the host family could have the essence of the Relic energy after the tour had left; furthermore, family members unable to attend the Manek hosted tour would have the benefits of the loving kindness energy via the Relic-IHD. The process of imprinting was simple. We placed 11 UED's within approximately 2 feet of the stored Buddha relics with the UEDs plugged into a wall socket and switched on for imprinting with the relic energy for the entire 3 days tour (approx. 72 hours). The imprinting process therefore, was passive. Then, at the end of the tour, as soon as the Buddha Relics were removed and stored for

transportation to the next city, the Relic-IHD's were unplugged, wrapped in aluminum foil and stored safely. Six months later one of the Relic-IHD's was provided to Tiller and colleagues to conduct a serious experiment to test the above hypothesis in an empty unconditioned and unused room (Casita) in the Tiller Scottsdale home. The following procedures were set up: a pure water pH-measurement system and, (2) a temperature, T_{AIR} , measurement system.¹⁴ Data on background conditions were recorded for 2 weeks and then the Relic-IHD was used for space conditioning.

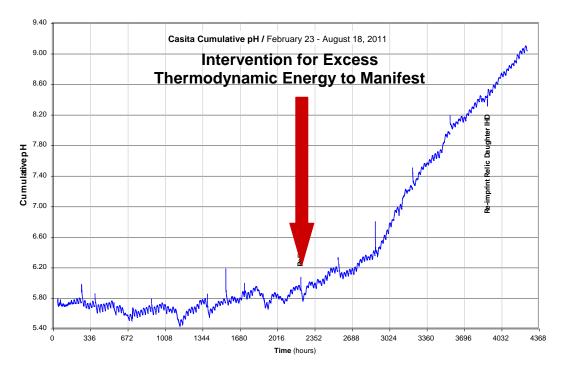


Figure 10: Cumulative pH water change associated with the Relic-IHD. Following the intention (red arrow) for the excess thermodynamic energy to manifest in the experimental space (Tiller home casita), the change in pH water subtle energy detector was robust over the following 2 months (see text).

Figure 10 presents cumulative pH-data measured in the casita between February 21 and August 18, 2011. During the initial period, only a very slow growth in pH(t) occurred. This slow result was unexpected and was all the more striking in that, subjectively, the physical space changes appeared to occur rapidly over a few hours at the Manek home relic tour. To make an analogy, in the span of a single afternoon, an ordinary living room's space changed to one such as in a high cathedral like Westminster Abbey (Figure 11).



Figure 11: The Manek Home Living Room and the Interior of Westminster Abbey

During this period, discussions occurred concerning the probable EM gauge symmetry state of the Relic-IHD. We recognized that one potential issue with the experimental set-up was that it was designed to detect the SU(2) gauge level conditioning by human intention. It was possible, therefore, that the space conditioning by the Relics is of a much higher gauge symmetry state than SU(2), but by how much is not certain. So we began to wonder if it was at so high a gauge level that its gauge state energies were too high to register on the measurement space and be accessible by the water pH-detector system.

Tiller and his team (including Jean Tiller) then took a crucial step to clarify what was being asked of the Relic-IHD via an intention statement. The relevant part of that intention statement was the following: "This IHD has been exposed for 3 days some time ago to the Maitreya Buddha Relics and thus has, to some degree, been information-entangled with that loving kindness essence. This loving kindness essence is thought to still reside with this particular IHD at some very high gauge symmetry level of nature and thus still retains a significant **excess** thermodynamic free energy per unit volume state relative to our normal U(1) gauge state. We respectfully request that this **excess** thermodynamic free energy aspect of this loving kindness essence be made manifest in this space so that we can experimentally measure its thermodynamic magnitude via the active pH, temperature and magnetic field sensors present in this space."¹⁴

The remarkable change in Figure 10 after ~2300 hours was very encouraging (Red arrow). In the following ~2 months, ΔpH increased by about +2.5 pH units or about 60 meV. In thermal energy terms, this number is very large. It would take an effective temperature increase of about $\Delta T_{eff} \approx +700^{\circ}$ C to produce such a thermodynamic energetic effect. To understand the underlying dynamics of the experimental results we have to turn to the Second Law of Thermodynamics.

Second Law of mody



(The scientific equivalent of Shakespeare) Shakespeare

The Second Law of Thermodynamics: Increased Coherence and Reduced Entropy of a Conditioned Space

The Second Law of Thermodynamics is one of the most fundamental laws in science. ¹⁵ Scientists trust the foundations of the Second Law implicitly. It has even been referred to as the scientific equivalent of Shakespeare.¹⁶ Every process and discovery in nature conforms to this law. All processes in nature are driven by a difference in thermodynamic free energy, G (for Gibbs free energy). The Second Law also tells us that in physical terms, over time a system tends toward maximal disorder, or entropy. And startlingly, *every* physical system must inevitably tend toward maximum disorder (entropy) and death.

The master equation of the Second Law is the following:

$$\mathbf{G} = \mathbf{PV} + \mathbf{E} - \mathbf{TS}$$
Equation 1

Here the P=pressure, V=volume, E=internal energy, T= temperature, and S=entropy, a measure of disorder. Thus, all the terms that can lead to changes of G, that is, ΔG , (P ΔV , V ΔP , ΔE , T ΔS , and S ΔT) are equally important for producing significant changes in our world. We can examine the results of the Relic-IHD space conditioning experimental results, and ask: do the results conform to the Second Law? Remember, this is a fundamental Law and to date there have been no observations in nature that violate it. If we then consider each of the terms in the right side of the equation, we can systematically determine where the contribution of the excess ΔG in a "conditioned" space is originating from. It was clear from the Buddha Relic tours and the Tiller home casita experiment that the excess ΔG does not have a significant contribution (if at all) from pressure changes within the space nor does the volume of the room change.

Turning our attention to internal energy, E, and temperature, T, terms, the temperature in the space of the Relic tours and casita did not change by more than $\pm 10^{\circ}$ C. A Δ T effective of 700°C would give rise to flames if it was internal energy (E) that was contributing. Internal energy was NOT the one. Therefore, the measured thermodynamic free energy change is probably due to a large **decrease of** thermodynamic entropy via an increased **coherence** in the strongly "conditioned" space. In other words, the excess Δ G is from a reduction in the disorder (entropy), or S term of the Second Law. It is known that entropy, S, and information, I, are intimately related. Any change in the magnitude of information, Δ I, is related to a change in entropy, Δ S, by *exactly* the same amount where:

$$\Delta S = -\Delta I \rightarrow \Delta G = -T\Delta S = T\Delta I \qquad \text{Equation } 2$$

The lessons we have learned from this study are:

- (1) Imprinting meaningful information of the Buddha Relics (loving kindness energy) onto a simple electrical device (IHD) via passive exposure to the Relics is possible,
- (2) Activating this Relic-IHD information to, in turn, imprint itself onto the space of a particular room (the Tiller casita) so that a *quantitative thermodynamic* measure of its energetic essence can be physically realized (Figure 10) is also possible,

- (3) Crucially, a verbal request from a deep meditative state by four humans appeared to be a necessary condition for this "imbedded loving kindness essence" to manifest itself in this way and
- (4) The physical space-conditioning by the Relic-IHD appears to be much stronger than that generated during the original target IHD experiments
- (5) Information in the context of these space conditioning experiments refers to the quality of loving kindness essence, the most powerful force in healing that humans 'experience. Information conversion is related to the change in entropy. Less entropy is more coherence these two aspects go together.

Harmony Between Science and Spirituality: What Information Theory Teaches Us.

The word *information* conjures visions of computers and hard drives and internet superhighways. We are in the midst of an information revolution.¹⁷ However, computer science is only a very small aspect of an overarching idea known as information theory.¹⁸ While this theory does, in fact, dictate how computers and telephones and other communication applications work, it does much much more than that. Information governs the behavior of objects on many different scales. It tells us how atoms interact with each other. Even the Second Law of Thermodynamics is, underneath it all, a law about information. The theories of relativity which describes how objects behave at extreme speeds and under the strong influence of gravity, is at its core a theory of information. Quantum theory, which describes the realm of the very small, or particles, is also a theory of information.¹⁹ Information is the underlying thread that connects all phenomena we see around us as well as give us a tantalizing glimpse of their origin. Our reality is ultimately made up of information, and information is more fundamental than energy.¹⁵ Human intention and consciousness not only manipulate information but also are a source of information. Crucially, information is the bridge between energy and consciousness. We can expand the well accepted relationship of matter and energy that Einstein derived via $E = mc^2$ to include information as follows:

 $Mass \leftrightarrow Energy \qquad (Einstein's derivation of mass energy equivalence)$

Mass \leftrightarrow Energy \leftrightarrow Information \leftrightarrow Consciousness²

The above relationship shows that the more adept humans become, the better they can use their gift of intention to influence energy and materials (mass). They can influence in a positive way, their physical, mental and spiritual health. These data provide dramatic examples of what is achievable for a directed human consciousness and also a framework for understanding spiritual realities such as loving kindness.

It's The End of the World as We Know it (and We Feel Fine!)²⁰

The Buddha Relics and the four target experiments that form the basis for Psychoenergetic Science prepare the way for a radical new reality for Human-kind. Let us recap what we know thus far from the space conditioning experimental work. The Buddhist Masters, through their spiritual qualities of unconditional love, and through intention (information) are able to imprint objects such as relics.¹ Relics literally house and transport the information of loving kindness; we have shown that this powerful information can raise the gauge symmetry of space.¹⁴ It appears that not only is thermodynamic potential of a higher internal symmetry of space available wherever the relics are, but also that the atom-molecules within the space are ordered *more coherently*. Equipment such as a camera can become sensitized and capture such images as seen in Figure 6. The physical body's acupuncture-meridian system is aligned powerfully in the higher symmetry state, which, in turn, influences the chemistry and cellular function to a restorative milieu. Essentially, the relics appear to set up a higher symmetry state, so a whole new reality opens up and becomes one in which the mind and emotion domains can perform physical and higher dimensional work. In understanding the importance of space, physics begins to explain the seeming miraculous. There is harmony between science and spirituality.¹

As a physician (NJM), I put forward some important theoretical implications of the science discussed above for the practice of medicine. In today's world, we generally function in the normal U(1) gauge symmetry state: Here, randomized control trials and conventional therapeutics, such as pharmaceuticals have a chance of working. The measuring instruments are also reliable. In the SU(2) gauge symmetry state (or conditioned space), where much of complementary medicine is practiced, double-blind trials have little chance of success because of non-space time connectivity between all parts of the system space, including the doctor, patient, and treatment, and therefore an increase in what appears as the placebo effect.²¹⁻²³ There are no fully satisfactory measurement systems for the SU(2) gauge symmetry state today; hence, clinical trials that are designed to assess efficacy of complementary medicine therapies are difficult to conduct.

We can also consider some practical clinical applications: Can we raise the symmetry of our medical clinics to a higher state and maintain that state of conditioning? We generally practice medicine using the "chemical medicine" system, whereby analysis of the chemistry state of the physical body is important and pharmaceuticals form our main therapeutics. Is it possible that in a higher symmetry state space our pharmaceuticals can begin to demonstrate different, more powerful, and *less harmful* potentials? Using the above scientific thought, we can begin to seriously consider energy medicine modalities such as Qigong and Tai Chi²⁴ as well as information medicine, which can powerfully help conventional care. These potential applications are not in the distant future.^{25, 26}

As we ascend the steps up from the biomedical model of medicine (chemical medicine) there is increasing power and thermodynamic free excess energy available for work (Figure 12). Within the human physical body is already present a higher gauge symmetry system which is the acupuncture meridian system. Higher still is the Chakra system. At the highest level is Spirit. From the Spirit level, there is a cascade of nourishing and healing effects down to the cellular level of the physical body. A block in any of these levels can potentially lead to imbalances and disease. It is important to remember that all levels are important. There is a place for pharmaceuticals, and there is a place for intention, as there is a place for Spirit. All build the infrastructure for a robust and vital human organism. Medicine must walk the line from chemical medicine, to energy medicine and to information medicine for the 21st century. All therapeutics, both

conventional and complementary and alternative medicine become richer with the informational aspect.

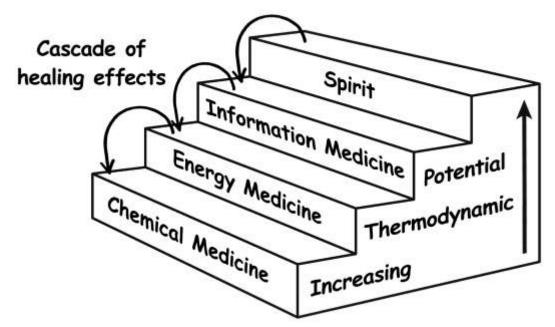


Figure 12: Proposed Model for the Thermodynamics of Medicine

Thermodynamics of a Sacred Space – Further Considerations and Observations

There is no agreed upon definition for the word "consciousness." As a starting point or conjecture we can say that consciousness is a byproduct of Spirit entering dense matter.² Spirit needs something to attach itself to. It can be the physical body, or it can be objects. What Tiller and colleagues have done is give thermodynamic expression to the phenomena of the Buddha Relics. The ground state has to be thermodynamic; from there we can begin to get to the underlying dynamics in a thermodynamic sense. It is also important to note that, usually, Nature does not allow excited states such as conditioned spaces, and they are *meta-stable*. These meta-stable states can manifest in a normal everyday space (like the Manek home living room), and over time this excited state can decay back to normal reality unless the space is kept 'pumped up'. The manifestation will be there so long as the humans keep pumping relative to the ground state. In this sense, one is stabilizing basically a meta-stable thermodynamically excited state which is against equilibrium Nature. To keep the space at the higher conditioned state (SU(2))gauge state) means that we have somehow slowed the kinetics of the transformation process so that it will exist for a long time. That is the *alchemical* thing that adept humans can do which does not belong in an unconditioned space (U(1)) gauge state) but is measureable in a conditioned space. Ultimately, more and higher meta-stable states become a reality and the new ground state from which even higher conditioning and gauge symmetry states are possible. These excited states are allowable in Nature when we change Nature to have these properties. Then the process is straightforward and understood that way.

Another important observation is that the Buddha Relics have an aspect of consciousness and one could even say that they have an innate intelligence. It is well

observed that relics multiply in reverential environments; they also disappear if kept in what we could consider 'unholy' places like trouser pockets! In this sense they are metastable. The Relics can light up, produce rainbows, or manifest more relics in sacred environments such as tours (personal communication, relic custodians). The non-verbal and silent transmission of loving kindness essence that is radiated by Relics is beyond space-time and they (Relics) are connected to Spirit. A dynamism enters from these higher dimensional intelligences through the Relics.

Another lesson learned from the Relic-imprinted IHD was that in order for the excess thermodynamic free energy essence to manifest in the Tiller home casita space, they had to *invite* it. Then the possibility to derive the **quantitative feature** of the space became accessible to the pH water measurement system. They had to *specify* what they (Tiller team) wanted. Their intention was heard and the Unseen could make a transformation from SU(20) (see below) to SU(2). The resonance in the Relic-IHD was pretty strong more than 6 months after the initial imprinting at the Manek home. In the Relic-IHD experiment, Tiller's team was able to get a *qualitative* and *quantitative* difference. It was essential to get a qualitative idea of how high the symmetry state the Relic-IHD set up before we could get a good quantitative result in terms of thermodynamic numbers. We cannot predict the actual quantitative result.

The Buddha Relics condition a space at a much higher gauge symmetry than SU(2). However, there are no suitable conventional measurement instruments available to access beyond the SU(2). By the Hawkins calibration technique²⁷, we estimated that the Buddha Relics function at a level of approximately SU(20). As we move higher in the physical vacuum states, we must take into account more factors to describe the possible states in the higher conditioned state. In a SU(N) level, we require N²-1 or 2²- 1 = 3 factors for N=2. In the SU(3) level, we require 3²- 1 = 8 factors which is Quantum ChromoDynamics or the **eight-fold pathway** with quarks (up quark/ down quark, and so forth). The colorful world of quarks and Quantum ChromoDynamics was awarded the Nobel Prize in 2004.²⁸ To put this into perspective, a level such as SU(20), requiring 399 participating particles to describe all the states! This is a long way down our evolutionary pathway.

The Map of Consciousness and Symmetry States of the Physical Vacuum: Are there Parallels?

We have been trying to connect the dots to let the hidden picture emerge and understand the dynamics of the seeming miraculous. The Buddha Relics are connected to the Source. As such, the individual human mind is like a computer terminal connected to a giant database. The database is human consciousness itself, of which our own consciousness is one individual expression, but with its roots in the common collective consciousness of all mankind. The unlimited information contained in the database has been shown to be readily available to anyone in a few seconds, at any time and in any place via the kinesiological test.²⁷ The database transcends space-time and all limitations of individual consciousness. The Hawkins map of consciousness has served an important bench-mark to understand levels of Truth or Love.²⁷ This logarithmic scale from zero to 1000 has a critical response point of 200. All attitudes, thoughts, feelings, and associations below that level of calibration make a person go weak. The level of 200 is the balance point between negative and positive influence. The second critical point is that from the high

400's (intellect) to the 500's. This means transcending the linear intellect paradigm and entering the non-linear paradigm of Love which is the 500's. By the 500 level, the happiness of others emerges as the essential motivating force. The Buddha Relics are at an astonishing consciousness level of over 950 to 980 as confirmed by utilizing the Hawkins' calibration technique.

The Buddha Relics-IHD and their ability for robust physical space conditioning properties opened up for us the parallels between the Map of Consciousness and the Symmetry states of the Physical space. It appears that above the crucial threshold at consciousness level 500, one enters the next rung in physical space - or conditioning – which is the SU(2) gauge symmetry state. As one ascends the levels of consciousness, the greater the power of Love, and the higher the gauge symmetry state of the physical vacuum, the more excess thermodynamic free energy is available! At consciousness levels >900, the physical space is at a much higher gauge state: our calibration shows it to be or the order of SU(20) or higher! This means that in a SU(20) gauge symmetry level, there are 20^2 -1= 399 individual factors that come into play! This work then opens up the physics (and thermodynamics) that underlie the Map of Consciousness and the parallels of symmetry states of the physical vacuum. This line of questioning expands on Quantum dynamics and the Heisenberg Uncertainty Principle (see Figure 13 below).

As a concluding remark concerning the physical vacuum, let us examine its calculated energy potential. The physical vacuum is very important in understanding the laws of physics, and provides us with a frame-work in which the world is embedded. It is only now being appreciated that the dominant energy in our Universe does not reside in normal matter or even dark matter or black holes. Rather, it is located in the physical vacuum ("empty space") located between the fundamental particles that make up the atoms and molecules. Quantum Theory has established this physical vacuum as a chaotic, virtual particle sea of boundless energy (energy density equivalent to approximately 10^{94} g/cm³) at the quantum relativity level. A number of this magnitude is difficult for us to grasp, but if we use Einstein's equation: $E = mc^2$ then, in practical terms, the energy contained in the vacuum portion of a *single* hydrogen atom can be calculated and found to exceed, by a trillion times, all of the energy of the planets, stars and cosmic dust combined to a radius of 15 billion light years!



Figure 13: In a plaza outside the European Organization for Nuclear Research (CERN) in Geneva, Switzerland stands a human size statue of deity Shiva.

The plaque has the following inscription:

Ananda K. Coomaraswamy, seeing beyond the unsurpassed rhythm, beauty, power and grace of the Nataraja, once wrote of it "It is the clearest image of the activity of God which any art or religion can boast of."

More recently, Fritjof Capra explained that "Modern physics has shown that the rhythm of creation and destruction is not only manifest in the turn of the seasons and in the birth and death of all living creatures, but is also the very essence of inorganic matter," and that "For the modern physicists, then, Shiva's dance is the dance of subatomic matter."

It is indeed as Capra concluded: "Hundreds of years ago, Indian artists created visual images of dancing Shivas in a beautiful series of bronzes. In our time, physicists have used the most advanced technology to portray the patterns of the cosmic dance. The metaphor of the cosmic dance thus unifies ancient mythology, religious art and modern physics."

Reference:

1. Manek NJ. Symmetry States of the physical space: an expanded reference frame for understanding human consciousness. J Altern Complement Med 2012;18(1):83-92.

2. Tiller WA. Psychoenergetic Science: A Second Copernican-scale Revolution. Walnut Creek, California: Pavior Publishing; 2007.

3. Knobe J. Finding The Mind In The Body. In: Brockman M, ed. Future Science Essays From the Cutting Edge. New York: Vintage Books; 2011:184-96.

4. Knobe J. Can a Robot, an Insect or God Be Aware? Sci Am Mind 2008;19:68-71.

5. Knobe J, Prinz J. Intuitions About Consciousness: Experimental Studies. Phenomenology and the Cognitive Sciences 2008;7(1):67-83.

6. Knobe J. Thought experiments. Sci Am 2011;305(5):56-9.

7. Huebner B. Commonsense concepts of phenomenal consciousness: Does anyone *care* about functional zombies? Phenomenology and the Cognitive Sciences 2010;9:133-55.

8. Davidson RJ, Lutz A. Buddha's Brain: Neuroplasticity and Meditation. IEEE Signal Process Mag 2008;25(1):176-4.

9. Lazar SW, Kerr CE, Wasserman RH, et al. Meditation experience is associated with increased cortical thickness. Neuroreport 2005;16(17):1893-7.

10. Lutz A, Greischar LL, Rawlings NB, Ricard M, Davidson RJ. Long-term meditators self-induce high-amplitude gamma synchrony during mental practice. Proc Natl Acad Sci U S A 2004;101(46):16369-73.

 Grace F. Beyond Reason: The Certitude of the Mystics from Al-Hallaj to David R. Hawkins. International Journal of Humanities and Social Science 2011;1(13):147-56.
Maitreya Project. 2012. Online document:

www.maitreyaproject.org/relicgallery/main.php Accessed June 20, 2012.

13. Tiller WA, Dibble WE. Toward general experimentation and discovery in conditioned laboratory and complementary and alternative medicine spaces: part v. Data on 10 different sites using a robust new type of subtle energy detector. J Altern Complement Med 2007;13(1):133-49.

14. Tiller WA, Tiller JE, Dibble WE, Jr., Manek R, Manek N. The buddha relics and evidence of physical space conditioning with unimprinted intention host devices. J Altern Complement Med 2012;18(4):379-81.

15. Vedral V. Decoding Reality. The Universe As Quantum Information. Oxford, United Kingdom: Oxford University Press; 2010.

16. Crease RP. The Scientific Equivalent of Shakespeare: The Second Law of Thermodynamics. In: The Great Equations Breakthroughs in Science From Pythagoras to Heisenberg. New York and London: W. W. Norton & Company; 2008:111 to 28.

17. Gleick J. The Information. A History, A Theory, A Flood. New York, NY: Vintage Books; 2012.

18. Aleksander I. Understanding Information, Bit by Bit. Shannon's equations. In: Farmelo G, ed. It must be beautiful Great equations of modern science. London and New York: Granta Books; 2003.

19. Seife C. Decoding The Universe. How the New Science Of Information Is Explaining Everything In The Cosmos, From Our Brains To Black Holes. New York, NY: Penguin Books; 2006. 20. Samantha-Laughton M. Punk Science. Inside the Mind of God. Winchester, UK and Washington, USA: O Books; 2006.

21. Manek NJ, Tiller WA. A new perspective on "the placebo effect": untangling the entanglement. Med Hypotheses 2011;77(4):614-9.

22. Tiller WA. On understanding the very different science premises meaningful to CAM versus orthodox medicine: part I--the fundamentals. J Altern Complement Med 2010;16(3):327-35.

23. Tiller WA. On understanding the very different science premises meaningful to CAM versus orthodox medicine: Part II--applications of Part I fundamentals to five different space-time examples. J Altern Complement Med 2010;16(4):507-16.

24. Wang C, Schmid CH, Rones R, et al. A randomized trial of tai chi for fibromyalgia. N Engl J Med 2010;363(8):743-54.

25. Kohane MJ, Tiller WA. Biological processes, quantum mechanics and electromagnetic fields: the possibility of device-encapsulated human intention in medical therapies. Med Hypotheses 2001;56(6):598-607.

26. Reed C. The Effect of Intention on Decreasing Anxiety and Depression Utilizing Intention Imprinted Devices. Bolivar, MO: Holos University Graduate Seminary; 2005.

27. Hawkins D. Power vs. Force. The Hidden Determinants of Human Behavior. Sedona, Arizona: Veritas Publishing; 1995.

28. Nobel Prize. 2012. Online document at:

www.nobelprize.org/nobel_prizes/physics/laureates/2004/press.html Accessed June 20, 2012