

Institute for  
the Awakened Mind

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## Marc Gil & Liz Libbrecht Healing Session

Lyon, France – June 12, 2018

**Background:** The healing in this study was given by Marc Gil, M.D., a Geneva, Switzerland, physician who used Code Lemuria techniques to attempt to reduce shoulder pain reported by recipient Liz Libbrecht. Libbrecht, the co-founder of Quantum Way, a Parisian conference presenter, is a yoga, EFT, and mindfulness meditation practitioner who teaches in Lyon, France, and internationally.

**Abstract:** An eyes-open baseline on the healer and recipient was taken simultaneously on the Vilistus Mind Mirror 6 EEG, followed by a separate 38-minute recording which consisted of eyes-open and eyes-closed baselines and the healing work. Additionally, the healee's heart rate was monitored on a Blood Volume Pulse sensor. Four distinct high-frequency, high-amplitude gamma transfers from the healer stimulated gamma surges in the healee and accelerated her heart rate. After the session, the healer reported having felt heat stream down through his head and all around him, as is customary with his Lemurian healing techniques. He did not find any problems in the recipient's shoulders, but her gamma amplified when he worked on that area. He felt his hands tingle when he encountered an issue in her spleen, which he felt involved one or more members of her family. He worked on that issue about midway through the session, cleared the issue, and replaced it with a positive "egg," an energy shape employed in Lemurian healing.

The recipient was in deep meditation throughout the session, often without thoughts, and at times was unaware of her body. When the healer's hands were moving around her head and shoulders, she felt a sense of peace and a "massive energy." Delta amplitude bursts in both participants show empathetic and intuitive connection confirmed by them after the session: while Marc healed family issues lodged in Liz's spleen (without explaining his perceptions), she was meditating on and healing family members and ancestors. In the post-session discussion, she reported having felt a sense of abandonment which caused her to transmit healing energy to her family.

After the session, Liz reported that her shoulder pain had relaxed but persisted. During a follow-up interview three months later, in September, 2018, she reported that her shoulder pain had worsened,

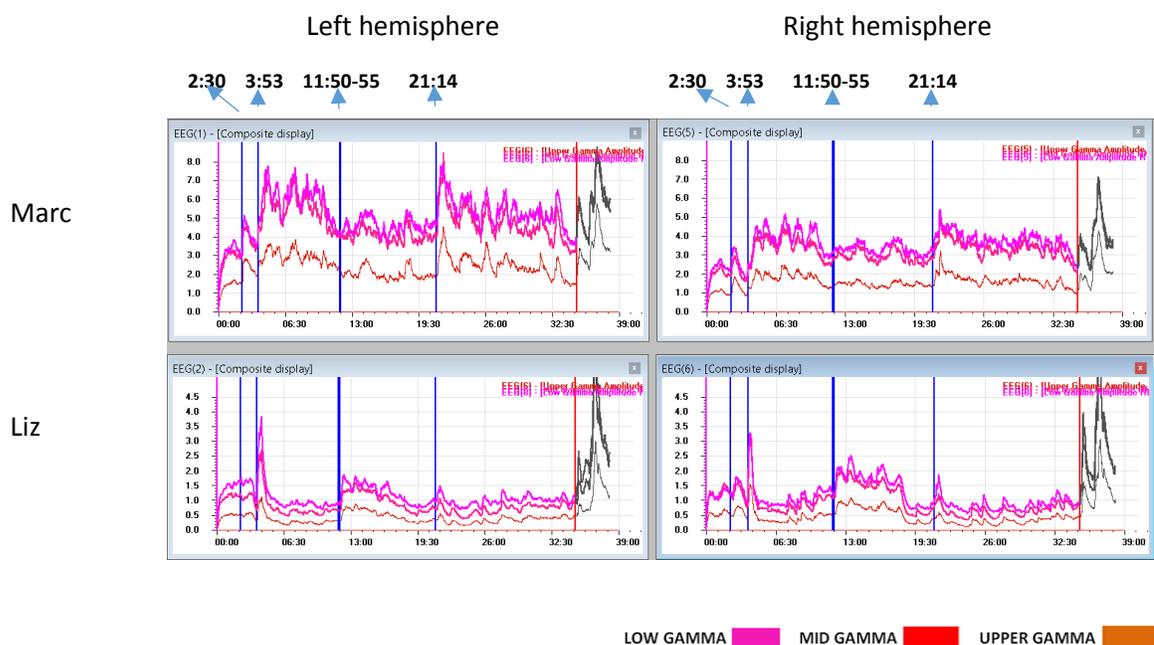
but acknowledged that she continued to exacerbate it with computer work. “Regarding my ancestors,” she wrote in an email, “I can't say, but perhaps something did happen, because I feel immense love and compassion and gratitude towards them, in spite of all the negatives—more so than before. Something has healed there. This is nevertheless also part of my own process of my heart opening wider and ego-weakening that was underway well before. But perhaps this session came at precisely a point where it was useful.”

The data appears to confirm this. As a result of Marc’s gamma transmissions, Liz’s brainwave categories increasingly synchronized with each other and with his. Healing likely occurred on multiple levels (at the least, emotional and subtle-energy) via resonance in their highly coherent low-alpha frequencies. Numerous alpha-theta crossovers in Liz’s 6Hz theta suggest that rewiring (neuroplasticity) occurred on the transpersonal level. Her high-amplitude Awakened Mind and Evolved Mind patterns, interspersed with powerful high-gamma flares, confirm that she received healing and in turn transmitted it to her ancestors. In addition, her gamma surges—arising in response to Marc’s gamma transmissions—suggest deep healing in her theta-delta and the rewiring of neural circuitry within her body-mind.

Composite displays show an inverse relationship in their brainwave amplitudes until the 20:40 to 33:18-minute healing segment, when their brainwaves suddenly synchronized and Liz began to meditate on her ancestors as Marc worked on her abdomen, spleen, and lower extremities. (Crown: 22:30-23:35.)

(Below) The vertical blue markers show low, mid and upper gamma transfers from Marc to Liz. Note also the inverse amplitudes, particularly at 11:50-55: Marc’s gamma decreases and levels off as Liz’s surges for several minutes. At 11:50 Marc moved his hands to her abdomen (spleen) and at 11:55 to her crown.

*Guide to markers:* 2:30 Marc at Liz’s crown; 3:53 Marc’s hand to the back of Liz’s upper shoulder; 11:50-55 hands above abdomen then crown; and 21:14 hands on abdomen and lower body until end at 33:50.



## Data Analysis

Summary amplitude windows for beta, alpha, theta, delta, and low, mid and upper gamma were used and are displayed in this report, in addition to composite displays and coherence reports. The Mind Mirror Summary provides three measurements: a brainwave display that is an average of each frequency bar across the segment or session; a Training Summary that is a statistical column chart comprising Training Levels 1-10, where 1 means 100% compliance and 10 means 100% deviation from the ratios of the various patterns; and a Summary Plot that depicts on a timeline a series of colored dots representing pattern attainment within the 1-10 training levels.

In this and other studies, Training Level 5 (TL 5) is used as a benchmark for higher states of awareness. Statistical values ranging from 75 to 98% at TL 5 are typically attained by advanced meditators for the Awakened Mind pattern. Evolved Mind patterns exceeding 30% at TL 5 are considered significant. Gamma Synchrony patterns exceeding 35% at TL 5 are also considered to be significantly high.

## Results

This report presents several noteworthy findings, some of which add to the Mind Mirror database knowledge about the brainwaves of healers and recipients. Most of the findings listed below apply only to this study, but a few can be generalized from it. All can be used for comparison purposes in other studies on energy healing.

- (NEW) Working at the crown of the head, particularly when the healer is producing/transmitting high-frequency, high-amplitude gamma, powerfully affects the healee's brainwaves. In this session, Marc's working at the crown repeatedly evoked resonant surges of gamma in Liz.
- Four distinct transfers of gamma frequencies by Marc resonated in Liz's brainwave patterns *without* noticeable body sensations, except for the "massive energy" she reported. However, there were several marked shifts in her heart rate during these energy transfers.
- Gamma production often increases the heart rate, although this is not the case for everyone. In this study, Liz's heart rate decreased when Marc worked on her crown, third eye, and spleen. Therefore, heart rate changes—in some people, including Liz—can serve as signposts pointing to the timing of events.
- (NEW) When body sensations do not signal healing events, brainwave synchronization—particularly in conjunction with shared intuitive information—can provide clues to the timing. This was the case when the healer and recipient synchronized their brainwaves and intuitively shared information about Liz's family issues, seemingly "out of the blue."
- According to a body of published research, interhemispheric amplitude symmetry (coherence) at its highest levels (synchrony) de-stresses the brain and facilitates physical healing. In this study, both Marc and Liz showed high coherence in 7 to 9Hz, the alpha-theta frequencies in which healing is known to occur (and is inclusive of 7.83Hz Schumann frequencies). It is

reasonable to hypothesize that these frequencies transport healing through sensory alpha into the long-term memories within subconscious theta. (NEW) Because coherence involves a powering-up of associated neurons, neural clusters, and neural pathways, the Mind Mirror's Coherence Coefficient and Coherence Summary reports should be employed in all studies on healers to determine whether 7 to 9Hz alpha-theta is involved in all instances of healing (even though the Mind Mirror electrodes measure only the temporal and occipital lobes).

- The alpha-theta crossover—a phenomenon during which theta amplitudes exceed alpha amplitudes—is associated with healing, mystical union, and transpersonal events. Liz produced the alpha-theta crossover frequently during the healing segment. See two examples in Mind Mirror patterns at 23:36 and 24:30 minutes, toward the end of this report.
- Delta can signify anticipation, seeking, hypervigilance, and/or psychic perception/transmission when it surges briefly. Protracted surges of delta imply intuitive empathy and the transmission and receipt of healing energy. In this session, Marc and Liz doubled their delta amplitudes at 3:53 minutes when Marc worked on Liz's upper shoulders and again at 19:40 while he worked on her spleen. Both of these surges were sustained. Liz's first sustained delta surge from 3:53 to 9:51 minutes elicited extremely high delta coherence starting at about 7:30 minutes and lasted until just before the healing segment, suggesting her enhanced ability to receive and transmit healing energy. During the healing segment, her delta abruptly decreased as she received the healing energy in a high-amplitude Awakened Mind pattern with an upwardly curved delta (Evolved Mind pattern), which signals an upward flow of energy and information from lower into higher frequencies. See this sustained series of brainwave patterns in Mind Mirror displays located at the end of this report, beginning at 18:16 minutes.
- (NEW) Numerous delta/gamma surges in this study evoked high-amplitude alpha surges in both Marc and Liz. This suggests that either delta/gamma activated alpha to transfer information into higher or lower frequencies and/or that alpha self-activated to process sensory information.
- (NEW) Energy healing involving gamma frequencies can increase gamma coherence in the healer, as was the case in Marc's brainwaves during this study. This suggests that the transmission of healing also heals the healer.

## RESTING BASELINES

As instructed, Liz and Marc sat up straight and remained still during a 1:26-minute eyes-open baseline recorded prior to the healing session (see the graphs immediately below). Marc's uncharacteristically low Gamma Synchrony (GS) 18% statistic at Training Level 5 is due to his excessive gamma in relation to his eyes-open alpha. Note the high amplitudes in his gamma frequencies from 30 to 100Hz, particularly in the left hemisphere. Despite the statistical values, this is a superconscious Gamma Synchrony pattern.

### Eyes Open, Baseline 1

Marc Gil

Liz Libbrecht



Liz's extremely high GS 80% score (at TL 5) is also uncharacteristic, given that she typically produces low-amplitude gamma with her eyes closed; her preference is to deepen into the peace and quiet of lower alpha-theta-delta frequencies. Her averaged brainwave pattern for this first eyes open (EO) reading, above right, also shows significant amplitudes of gamma from 30 to 100Hz and is considered to be superconscious. Because of her extremely strong EO alpha, she also scored a very high AM 69% at TL 5, compared to the 75-98% score attained by advanced meditators *with their eyes closed*.

(Below) An eyes-open baseline repeated at the beginning of the healing session from 0:00-1:08 minutes produced statistics similar to the separate 1:26-minute baseline shown above, except that Liz's gamma frequencies were considerably reduced and the attenuation scale was significantly lower (see the white microvoltage [uV] numbering at the bottom of the Mind Mirror displays).

### Eyes Open, Baseline 2

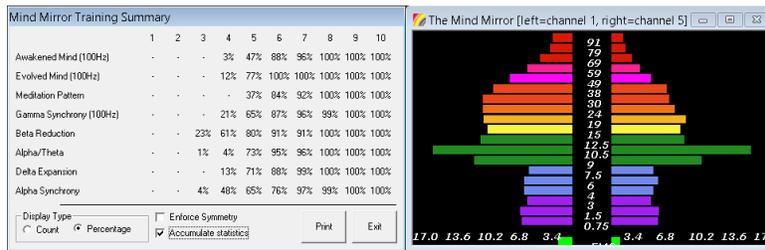
Marc

Liz



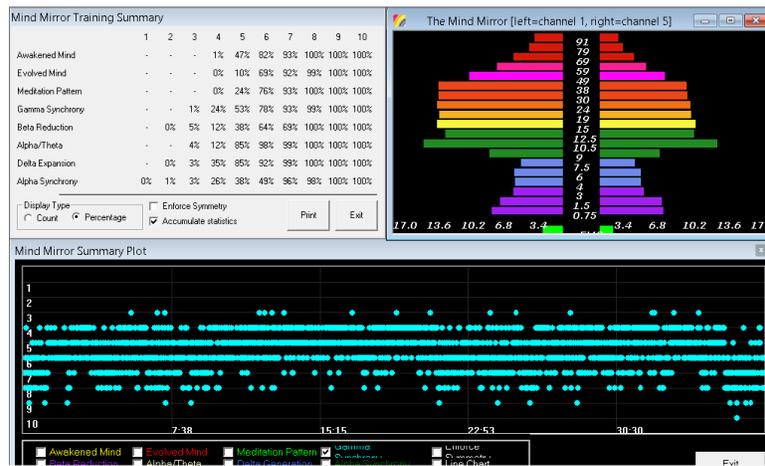
Note the sharp beta/gamma reduction in Liz's two EO baselines (reason unknown). Marc's eyes were open for most of the healing session, yet his alpha amplitudes were much stronger during the healing than in these resting eyes-open baselines. This suggests that his Lemurian healing techniques stimulate and employ his sensory alpha.

# THE HEALING



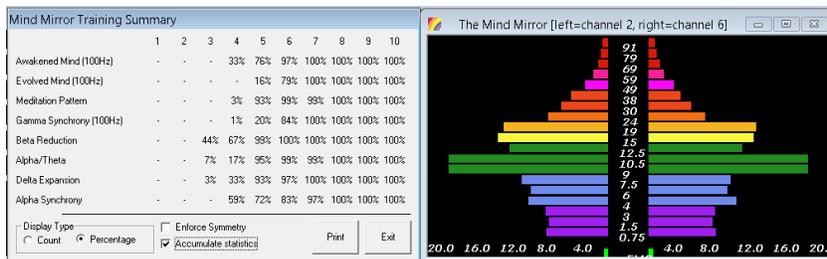
(Above) Marc’s MM Summary pattern and statistics for the 1:08-2:30 eyes-closed baseline

Marc’s eyes-closed baseline pattern and statistics, recorded immediately after the eyes-open segment, are similar to his eyes-closed meditations (mapped during 10 meditations prior to this healing session). His prodigious gamma reduces his Awakened Mind statistics in favor of very high GS values: AM 47%, EM 77%, and GS 65% at TL 5. This is a highly evolved brainwave pattern with strong gamma amplitudes all the way up to 100Hz. It shows Marc’s ability to enter a quiet, integrated, superconscious level of awareness—with a circular Evolved Mind at the top—in less than a minute and a half. Compare these pattern statistics to lengthy eyes-closed meditations during which he was sitting still: “Personal Transformation” AM 77%, EM 37%, GS 73%, and “Down and In” AM 59%, EM 24%, GS 83%.



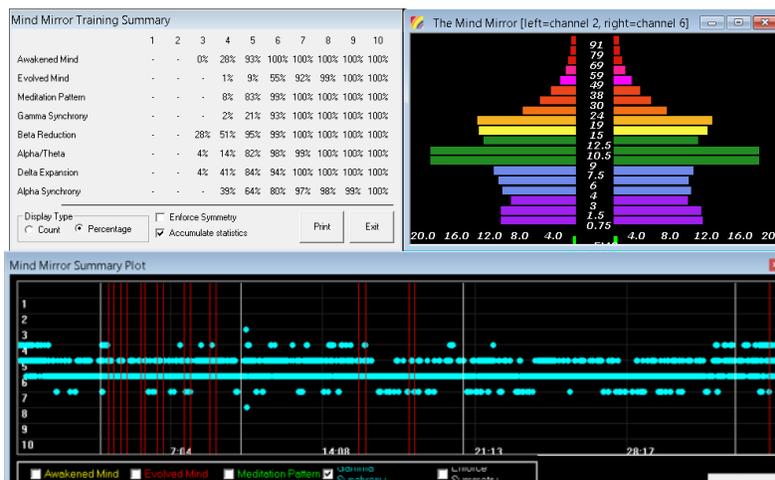
(Above) Marc’s averaged pattern and statistics for the healing, mostly with eyes open. The blue dots in the top line of the Summary Plot show his TL 3 pattern attainments.

Marc’s eyes-closed brainwave pattern resembles his eyes-open healing pattern, with the differences being stronger gamma and delta during the healing. His left-brain dominance is more pronounced during the healing. His Awakened Mind statistic of 47% for the healing is low because of his high-voltage gamma output, which well exceeds the pattern ratios but nevertheless results in a score of GS 58% at TL 5. He attained a Gamma Synchrony 24% reward at TL 4, and 1% at TL 3 when his gamma decreased. TL 3 rewards of any value are quite rare.

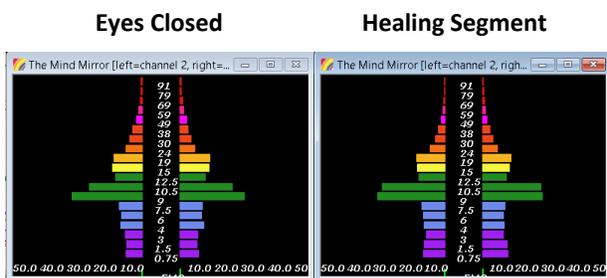


(Above) Liz’s eyes-closed pattern and statistics for the 1:08-2:30 eyes-closed baseline, 100Hz statistical scale

During the eyes-closed baseline (immediately above), Liz shifted into her typical meditation pattern. Except for the 19/15-Hz bars, her beta/gamma reduced as her theta amplified and her delta turned upward to form the nearly diamond-shaped pattern of the higher self—a movement toward the Evolved Mind of unity consciousness. Her Awakened Mind value of 76% is not as elevated as in longer and deeper meditations: compare this with “Personal Transformation” AM 95%, EM 15%, GS 23%, and “Down and In” AM 93%, EM 9%, and GS 29%. Nevertheless, this is an impressively quick reduction of the beta/gamma seen in her eyes-open patterns and also a quick shift to awareness of her subconscious and unconscious mind and her deep-state connection with the non-local field.



(Above) Liz’s summary pattern and statistics for the healing session. Note the blue GS dots at TL 4.



(Left, shown at 50uV) Note the changes in her alpha: from 10-12uV with EO to 30+uV with EC. Her alpha peak dropped to 9Hz during EC, but during the healing was nearly matched by the 10.5Hz band, a more “awakened” and alert state. Of importance here is the fact that even though

Liz greatly reduced her beta/gamma while relaxing on the table during the healing, which markedly points to periodic gamma surges in response to Marc’s gamma transmissions. Her gamma surges may account for the amplification of her 10.5Hz alpha: the presence of high-frequency gamma activity, however infrequently, tends to raise the alpha peak to higher frequencies.

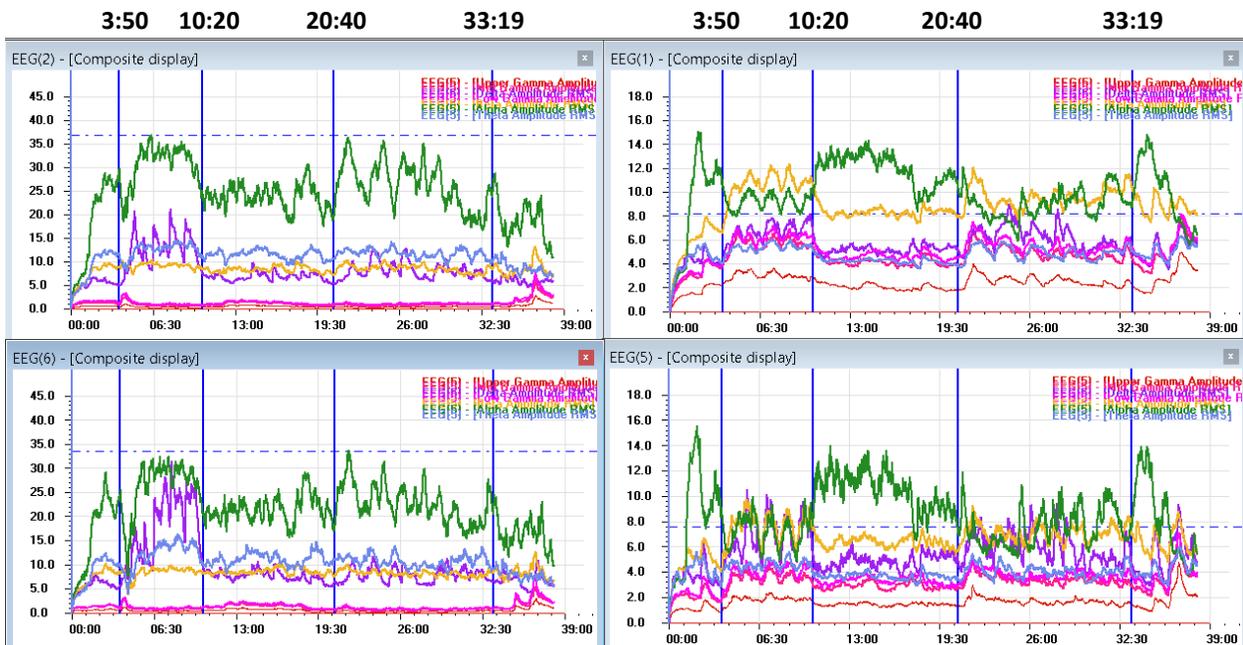
Liz’s reduced beta/gamma and 10.5/9Hz alpha peak accounts for the increase in her Awakened Mind scores from eyes-closed baseline 76% to healing session 93%. Otherwise, these statistics are similar to other meditations: her Awakened Mind scores are consistently very high in the 90<sup>th</sup> percentile; her Gamma Synchrony scores are relatively low in the 20<sup>th</sup> percentile. The Awakened Mind is her fundamental pattern, but she does produce noteworthy GS amplitudes in the 20<sup>th</sup> percentile of the mid-gamma range (45-65Hz).

### COMPOSITE SUMMARY WINDOWS

(Below) The left- and right-brain Composite Summaries windows for Marc and Liz show their brainwave changes and interactions. The vertical blue markers, with timing notations above them, delineate sharp changes in brainwave activity. See below for the color legend identifying the data lines.

LIZ – EEG 2/6

MARC – EEG 1/5



- [Upper Gamma Amplitude RMS]
- [Mid Gamma Amplitude RMS]
- [Delta Amplitude RMS]
- [Low Gamma Amplitude RMS]
- [Beta Amplitude RMS]
- [Alpha Amplitude RMS]
- [Theta Amplitude RMS]

The segment from 0:00 to 3:50 minutes contains the eyes-open baseline from 0:00-1:08 and the eyes-closed closed baseline from 1:08 to 2:30 minutes. Alpha sharply increased at 1:08 when they closed their eyes and at 2:30 when Marc began to work above Liz’s shoulders while she sat on the massage table.

At that moment, their brainwaves powered up enough that the Mind Mirror attenuation had to be increased from 20 to 30uV (as shown in Mind Mirror screenshots below). Marc worked at Liz’s shoulders until 4:13 minutes, when he steered her to lie down on the massage table and she closed her eyes.

The Composite Summary shows that Marc’s low and mid gamma doubled in amplitude when he closed his eyes, then tripled at 3:50 during an energetic transfer in gamma which caused an amplification of Liz’s gamma frequencies until she lay down on the massage table. After that, her gamma (bottom three lines) reduced by half to less than 1uV, her alpha (green) surged from 20 to 30uV, and her delta (purple) quadrupled from 5 to 20uV until the second marker at 10:20 minutes.

Following the below series of Mind Mirror screen captures, showing synchronization and inverse relationships, is an extended breakdown of each of the segments shown in the Composite Summary.

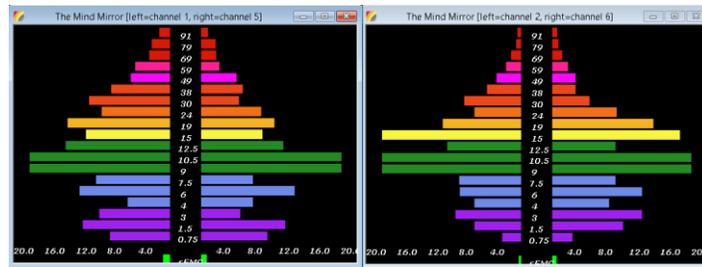
**MARC**

**LIZ**

**1:54 – During eyes-closed baseline, matching EM flares signifying unity: Marc RH, Liz LH**



**1:57 – Eyes-closed baseline: Marc flares into 100Hz GS in LH, AM in RH; Liz, strong EM circularity (0.5-44Hz).**

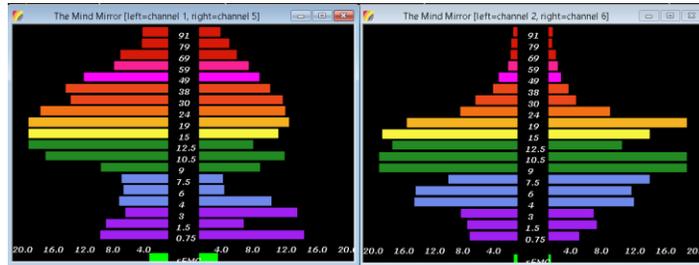


**2:17 – Toward end of eyes-closed: Marc flares into near 100Hz EM at top, Liz flares into Diamond/Evolved Mind pattern, especially at bottom.**

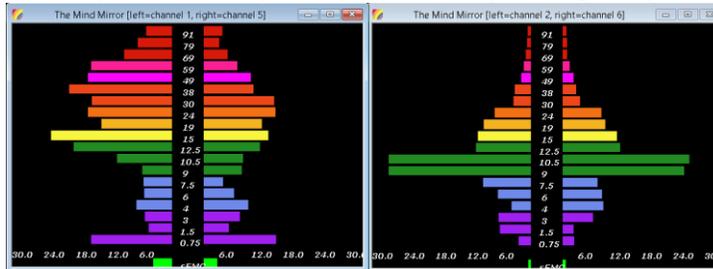


## Healing Session Begins at 2:30 Minutes

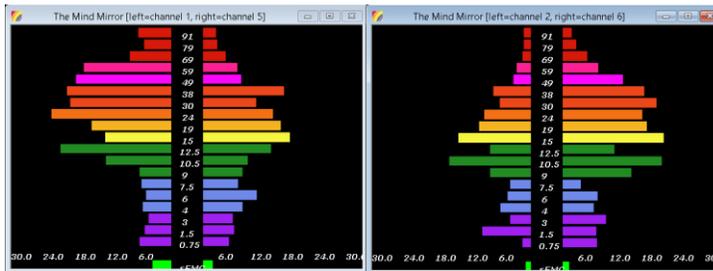
2:30 – Marc places his hands together over Liz’s shoulders; both power up  
Microvoltage readings were increased, after this, from 20-30uV



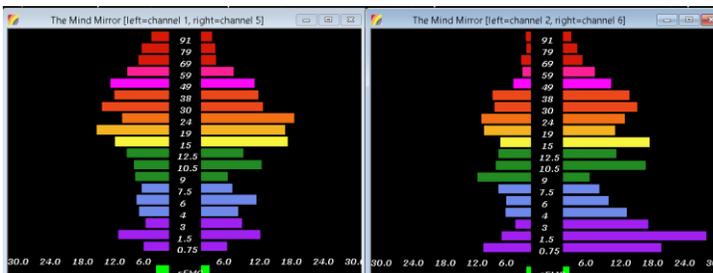
3:53 – (Upper shoulders) Marc’s LH gamma surges, RH alpha retracts, delta seeks and/or sends  
Liz maintains near EM pattern of unity consciousness except for high-amplitude sensory alpha



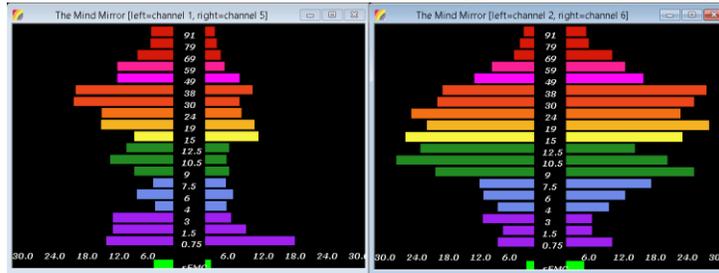
3:54 – Marc’s LH gamma further increases, Liz’s RH gamma surges



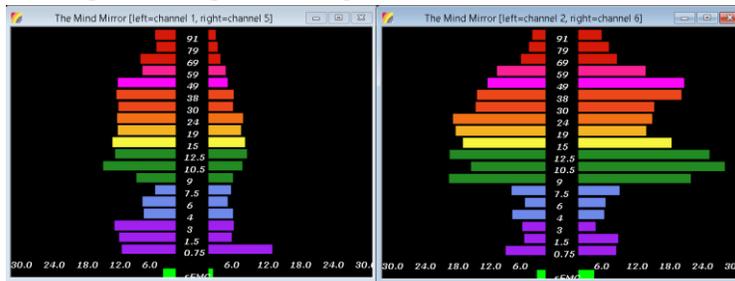
3:55 – Their right brains synchronize in gamma; Liz seeks or sends with RH delta



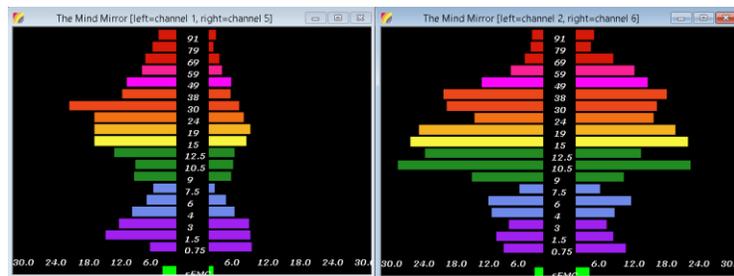
**3:57 – Marc’s delta extends to Liz’s; she surges into a 100Hz EM top;  
Marc’s hands still at back of her upper shoulder(s)**



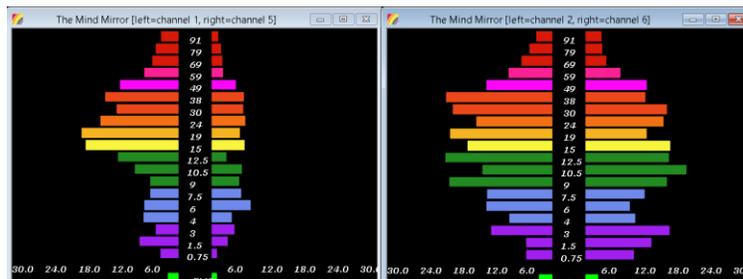
**3:58/3:59 – Marc’s gamma retracts as he transfers energy to Liz.  
Liz’s gamma surges, reducing her theta to match Marc’s theta.**



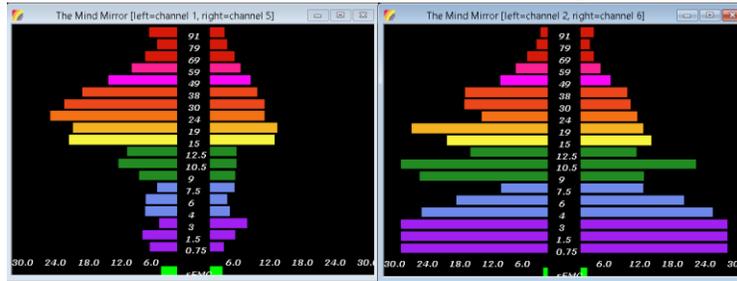
**4:01 – Liz’s gamma/beta continues to amplify**



**4:05 – Liz expands into nearly 100Hz EM pattern**



**4:13 – Liz reduces her gamma and amplifies her alpha-theta-delta into an Awakened Mind pattern when Marc steers her to lie down on massage table**



### Notes on Energetics and Gamma

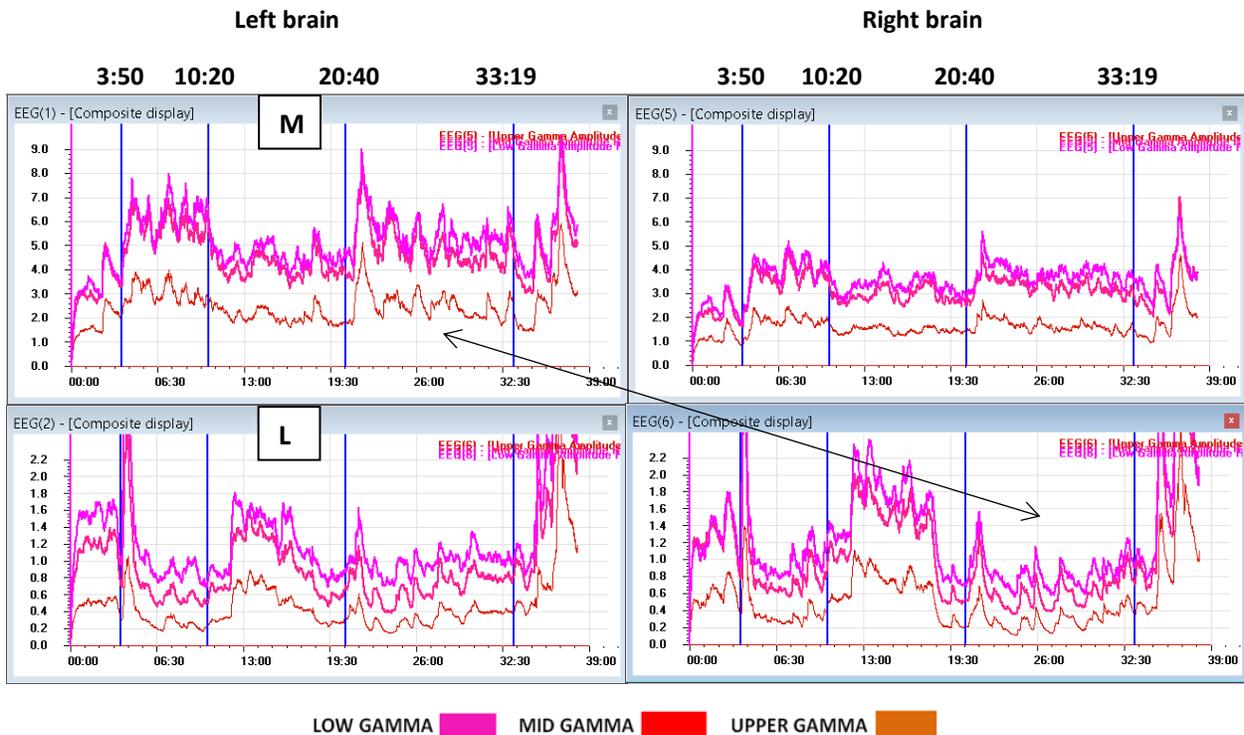
The above screenshots trace an energetic transfer which took place as Marc worked on Liz’s shoulders before she lay down on the massage table. Liz reported after the session that when Marc’s hands were on her head and shoulders she felt a “peaceful, massive energy” that led to a “bilocal feeling” that seemed as if she were in a zone without thoughts. Three months later she reported that this event occurred while she was lying down. If that is the case, the above screenshots show that an energetic transfer in gamma occurred at the shoulders *before* she lay down at 4:14 and her gamma reduced to its usual Awakened Mind pattern amplitudes.

Timekeeper Felice DuBois reported after the session that she felt a change in the room’s energy field before the healing began. She noticed a “pulsating big energy” pushing against and all around her head. She also heard a low, pulsating drone sound and felt the pressure of it all over her body.

Marc reported having felt the same as usual during Code Lemuria healings: he experienced heat coming down through his head. He felt the energy arriving when he was working different points of the Lemurian hologram on her shoulders. This likely occurred in the 2:30-4:14 segment shown above, if not before.

## Gamma Activity and Energy Transmission

In the Composite Summary windows below, Marc’s brainwaves are the top graphs and Liz’s are on the bottom. Compare his starting 3uV of low gamma (35-45Hz) with Liz’s 1.7uV. Because Liz’s gamma is typically low-amplitude (despite the uncharacteristic high-amplitude patterns in the two eyes-open baselines), any sustained surges above her usual gamma microvoltages signal the occurrence of energetic effects (possibly including her high-amplitude gamma output with EO during the baselines).



1/ **0:00-3:49** – The first minute was spent with eyes open, the second with eyes closed. At 2:30 Marc (M) placed his hands together over and above Liz’s (L) shoulders, the physical issue that needed healing. Marc’s gamma (and delta, not shown) amplitudes surged at 2:30 minutes in a **FIRST ENERGETIC TRANSFER**.

2/ **3:50 to 10:19** – Liz’s gamma spiked at 3:53 minutes in a **SECOND ENERGETIC TRANSFER** that occurred while Marc continued to work at her shoulders. Marc steered her to lay down on the massage table at 4:14 minutes, and her gamma sustained until 4:37. As her gamma dropped by half, Marc’s gamma increased from 5 to 8uV and sustained at that level until 10:20. (See the above Mind Mirror screenshots to view these surges in gamma.)

3/ **10:20 to 20:39** – At 10:20 minutes, Marc began to work on Liz’s crown and third eye, then again moved his hands to her shoulders; at 11:30, he felt drawn to her abdomen. Liz’s gamma doubled at 11:50, when his hand was flat on her abdomen, and her gamma sustained amplitude while Marc worked again at her crown at 11:55. During this period, Marc’s gamma decreased by half as Liz’s gamma

doubled. This suggests a **THIRD ENERGETIC TRANSFER** from Marc to Liz—quite literally an energetic siphoning from healer to recipient.

4/ **20:40 to 33:18** – At 19:08, halfway through the session, sensing that Liz’s shoulder “was okay,” Marc perceived an issue in her spleen that related to a family member or ancestor. At that point, he worked at the abdomen, ovaries, and knees, and at 21:25 leaned down and spoke to Liz. What he said is unknown. Marc’s gamma spiked 22 seconds later, at 21:47, and steadily increased during this segment, as if he were directing energy to the spleen in a **FOURTH ENERGETIC TRANSFER**. While he did this, Liz’s low gamma doubled from 0.7 to 1.4uV.

## **Mindwalking and Resonance: The Mechanics of Healing**

The above Composite Display windows show the four energetic transfers and point to the periods in which the healing took place. Max Cade noted in his studies on healers (and many other researchers agree) that energy transfers take place through resonance—a sharing of energy through frequency coupling made possible by brainwave coherence and synchronization. See the Composite Summaries above and the coherence reports and brainwave displays below for examples of this resonance phenomenon, referred to by some healers as “mindwalking.”

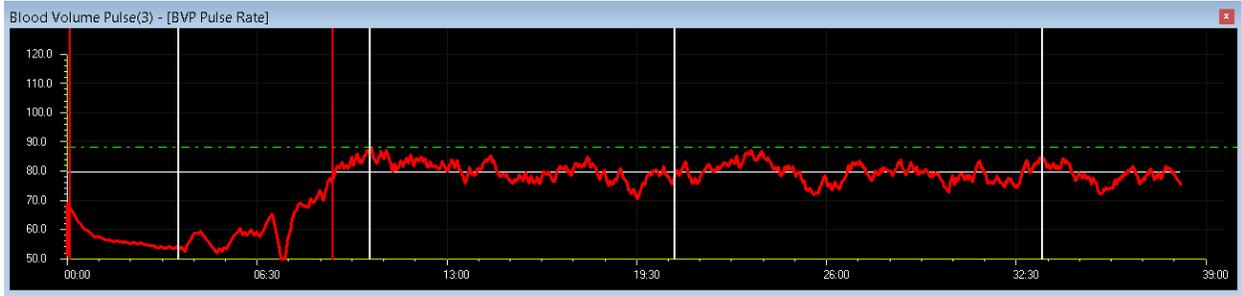
Referring to the above Composite Displays, note the tightly synchronized cross-hemispheric tracking (see the double black arrow from his left brain to her right brain) in low, mid and high gamma during the **20:40 to 33:18** segment in which he worked on her spleen and abdomen. The synchronization shows that this is where the central healing occurred. During this timeframe, Marc perceived an issue in her spleen that was related to a family member, and Liz thought about family members and ancestors who needed healing. He transmitted gamma-based energy into her spleen and abdomen while she, like a conductor, transferred his energies and her own to her ancestors, effectively healing/rewiring the issue within her subconscious. This information transfer was entirely intuitive, as neither knew what the other was doing. The resonant phase-locking of their gamma accounts for the mindwalking that is typically present during healing and at least some if not all of Liz’s remarkable gamma amplitude increases.

4/ **33:19 – 38:08** – The last segment shows persistent gamma tracking for about two minutes, until Liz sat up at 34:49, which movement resulted in artifact that falsely appears as a gamma increase. Their brainwave synchronization was almost perfect at 35:38 minutes, after the session ended (see the Mind Mirror screen captures below).

Altogether, the Composite Summaries show at least four energy transfers in gamma: 1/ at 2:30 when Marc’s hands were above Liz’s shoulders, 2/ at 3:50 when his hands were on the back of her upper shoulders; 3/ at 11:50 while he was working on her abdomen and at 11:55 moved to her crown; and 4/ from 19:08 until 33:18 while he worked on her spleen as she sent healing thoughts to her ancestors.

Scroll to the end of this report to see the Mind Mirror screen captures showing their steadily increasing synchronization with each other’s brainwave patterns.

## Liz's Heart Rate Measurements



(Above) The early BVP readings are in question due to the low 50 to 70 beats per minute (bpm) from the beginning of the session to the red artifact marker at 9:02 minutes. The surge in heart rate after 9:02 minutes to 85-90 bpm indicates that either the first nine minutes are artifact or that Liz's heart rate remained accelerated well above her norms in the following 29 minutes. In light of this stark variability before and after 9:02 minutes, only the measurements after the artifact marker are at this point considered to be reliable.

**The first decrease** below the 80 bpm mean (see the horizontal white line) to about 78 bpm occurred at 13:20 minutes while Marc was working on her crown and third eye. **The second and most important heart rate decrease** to 70 bpm was a sharp dip at 19:30, while he was working on the spleen. Liz's heart rate increased when he spoke to her at 21:25. The next decreases in her heart rate were 25:36 and 30:06, at which times Marc returned to her abdomen, and at 35:20, when she sat up and he placed his hands on her shoulders (although the latter could be movement artifact).

Altogether, these heart-rate measurements suggest that Liz's heart rate decreased when Marc worked at her crown, third eye and abdomen.

## COHERENCE REPORTS

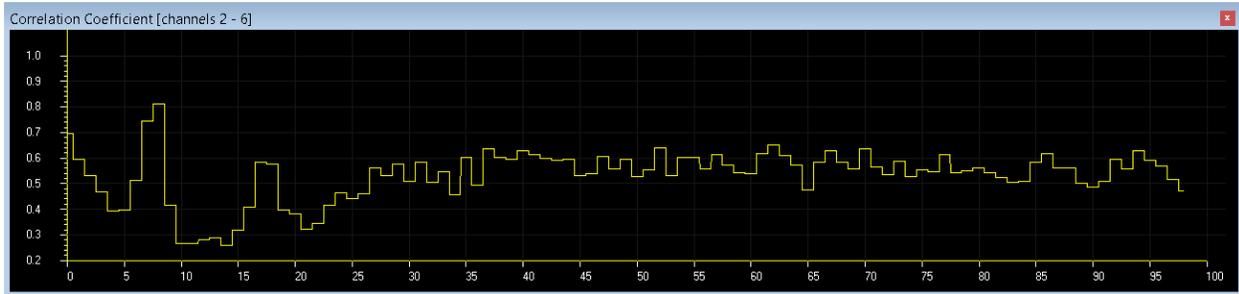
Coherence refers to amplitude symmetry across the two hemispheres of the brain. Coherence is reported in two summary windows. The first of these reports is the Coherence Coefficient, which shows the frequency scale across the bottom of the window and thereby indicates which of the 0.5-100Hz frequencies was the most coherent. High coherence is attained at the left-scale 0.8 value.

The second coherence report is the Coherence Summary, which provides a time record across the bottom of the window to show the increase or decrease of coherence over the course of the session. Readings of 0.7 and above indicate high coherence—that is, interhemispheric amplitude symmetry which, when high enough, suggests synchronization of the lobes of the brain being measured.

The Mind Mirror measures the temporal and occipital lobes, thus tracking coherence and synchrony in those two lobes. Coherence indicates that neural activity in a brain region is activating adjacent neurons, neural clusters, and neural pathways: essentially, that these regions are powering up and synchronizing their activity in the region and very likely beyond it, since brainwaves resonate throughout the head.

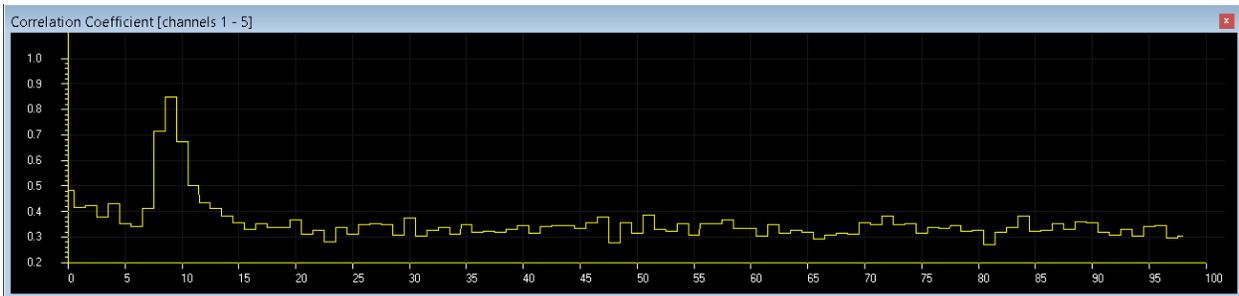
## Correlation Coefficient

Liz



(Above) Liz's frequencies approach coherence at 1Hz delta and exceed coherence at 7-9Hz, where healing occurs at the 7.83Hz borderline of alpha-theta. She approaches coherence in 16-18Hz beta upward to 100Hz gamma.

Marc

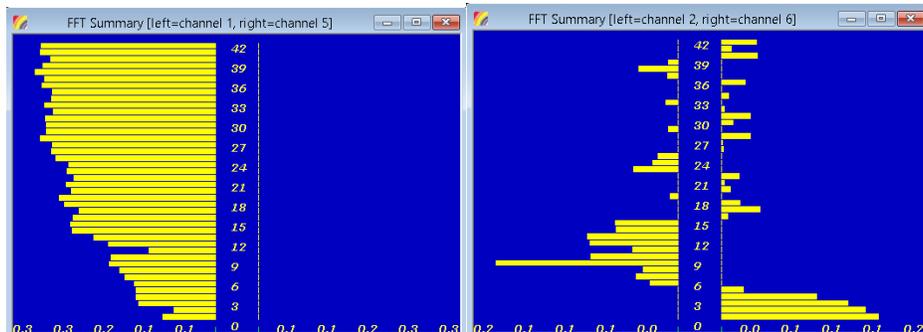


(Above) Marc's 7 to 10.5Hz alpha are in near coherence and exceed 0.8 high coherence at 9Hz. Resonance likely occurred in their mutual coherence within 7-9Hz theta/alpha.

## Hemisphere Symmetry

Marc: left-brain preference (30%)

Liz: insignificant asymmetry (below 20%)

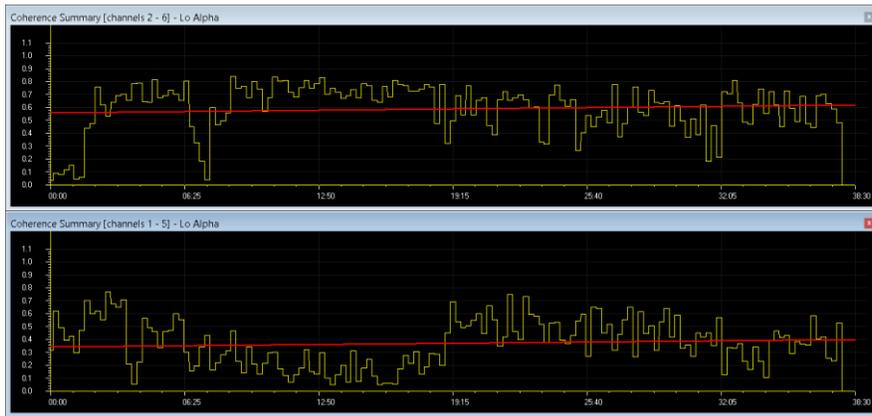


(Above left) Marc's left-brain preference accounts for his low coherence scores in beta and gamma. Left-brain hemispheric preference in gamma has been noted in other healers. Note Liz's high-amplitude LH 9Hz alpha and her LH dominance from 6-15Hz, the same as Marc's.

## COHERENCE SUMMARIES

**1/ Lo-Alpha Coherence and Synchronization.** Referring to the Lo-Alpha Coherence Summaries below, where 0.7 indicates high coherence, notice the inverse trajectories of Marc and Liz's low alpha (8-10Hz) until halfway through the session, when they synchronized. Liz surged into high coherence at 2:30 minutes when Marc's hands were above her shoulders and further increased to 0.8/0.9 at around 3:20 minutes during the first energy transfer in which Marc's right-brain alpha retracted; thus, his low coherence readings for this period. Marc low alpha surged to 0.8 high coherence while working on Liz's spleen at about 19:15 minutes; this mutual high coherence continued for most of the session.

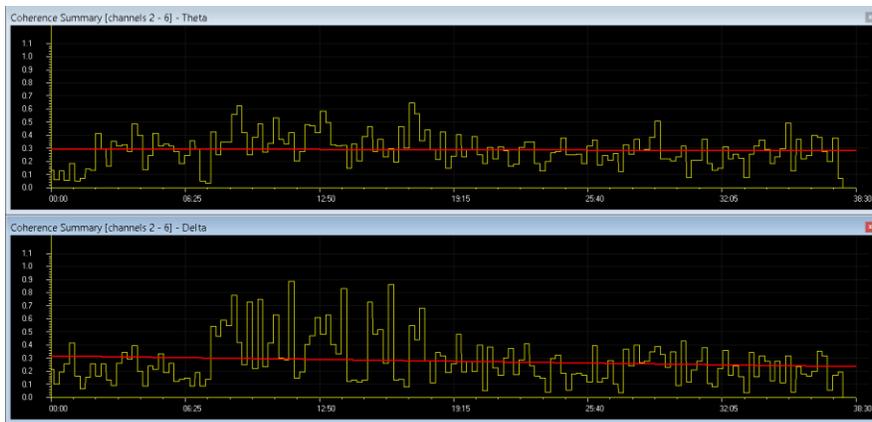
**Liz (top)**



**Marc (bottom)**

**2/ Theta, Delta, and Gamma Interactions.** Liz's delta coherence (below, bottom window) doubled during the second energy transfer, between 7:00 and 8:00 minutes, and exceeded 0.7 high coherence at 8:40 minutes, stimulating a surge in her theta coherence while Marc worked on her shoulders. Her theta and delta coherence thereafter tracked each other, with theta at near coherence and delta at very high coherence until 18:42 minutes (abdomen and crown). Her mid gamma (45-65Hz), at a value of 0.75, exceeded high coherence during this period; her upper gamma reached near-coherence at 0.65.

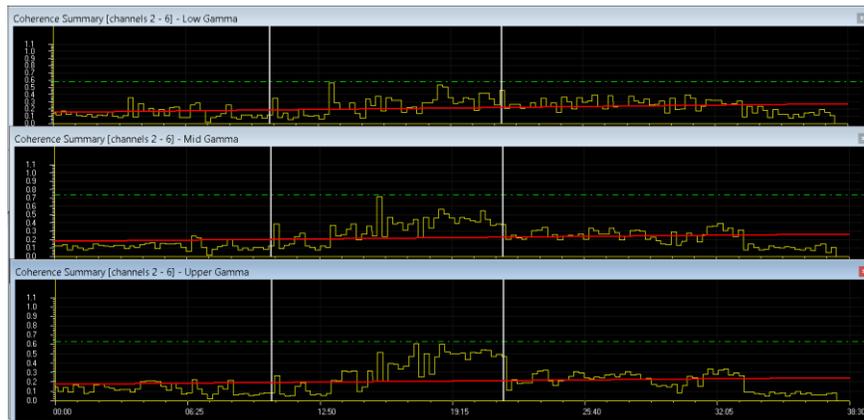
**Liz (top)**



**Marc (bottom)**

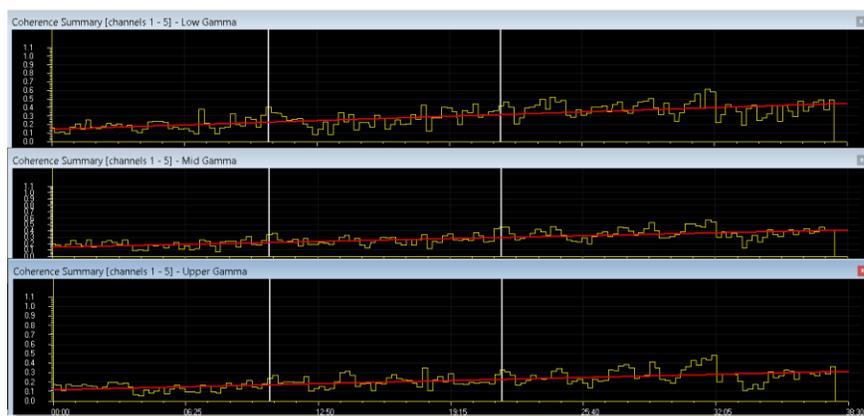
Quite a lot occurred during the second and third energy transfers. Doubling his gamma from 5 to 8uV, Marc worked at Liz's crown, legs and feet, then at 10:20 turned again to her crown, third eye, and shoulders. In the third energy-transfer segment his gamma reduced and transferred to Liz, whose gamma doubled at 11:50 when his hand was flat on her abdomen and at 11:55 when he returned to her crown. After 11:55 Marc returned repeatedly to her crown, chest, belly and abdomen, ending at her belly when the segment ended at 20:39. Until 16:42 Liz's low gamma maintained its doubled amplitude of 2uV. All the while, her theta-delta grew more coherent, as did her low, mid, and upper gamma.

### Liz



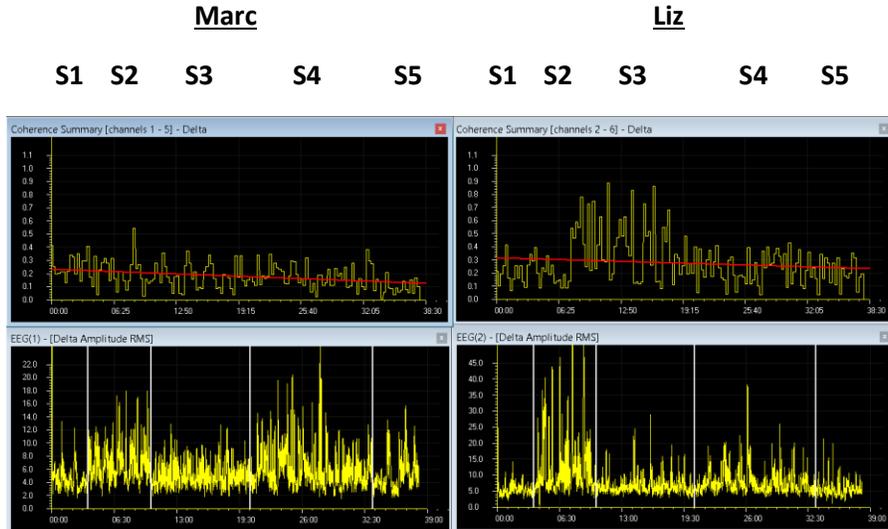
Gamma typically increases coherence across brainwave frequencies and synchronizes brain lobes. Toward the end of the fourth energy transfer, at about 20:30 minutes (second white marker above), Liz's mid and upper gamma sharply decreased in coherence and at about 33:15 minutes returned to the values seen at the beginning of the session. Despite his left-brain preference, Marc's gamma coherence continued to increase throughout the session, suggesting that this healing work was beneficial for him as well (see below). It is possible that his increasing gamma coherence relates to healing potency.

### Marc



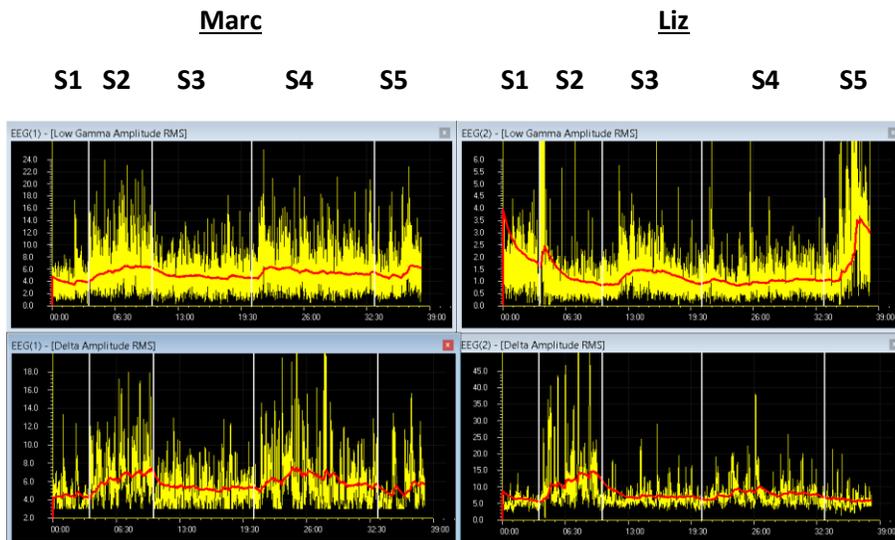
### 3/ The Frequency Orbit: Resonance and Coherence in Delta-Gamma

Delta is usually involved in healing work. Comparing delta and gamma amplitude changes and coherence summaries provides insights into the interactions between the healer and recipient, as well as subtle energies and brainwaves. Below, S1 refers to Segment 1, etcetera, as delineated by the white markers.



(Above) Compare these delta coherence summary windows and left-brain delta amplitude windows for Marc and Liz. During Segment 2 (S2), their delta more than doubled in amplitude, signifying their empathetic connection with each other and non-locality. During S4, their delta again doubled from the previous segment. After Liz’s Segment 2 delta surged (a range of 22 to 45+uV, her delta coherence increased to an extremely high 0.87-0.9 (suggesting her increased ability to attune to subtle energies), then decreased during the Segment 3 healing as she produced high-amplitude Awakened Mind patterns with the upwardly curved Evolved Mind bottom. (See the Mind Mirror brainwave displays following.)

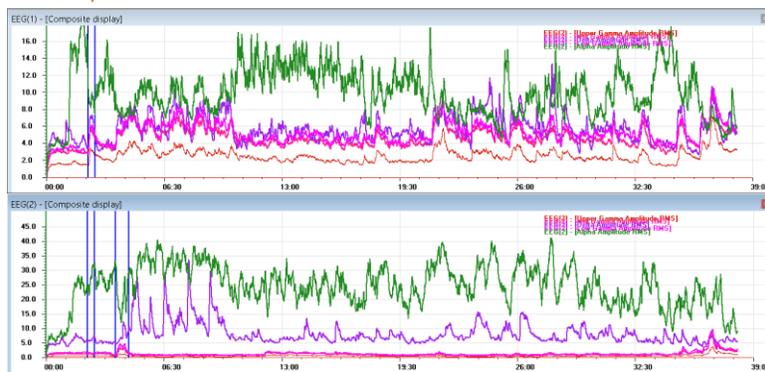
(Below) First, note the red trend line tracking in Marc’s delta and low gamma amplitude windows, which shows their synchronized activity. Second, find the white marker at the beginning of Marc’s Segment 2



and note that his delta and low gamma surged simultaneously with her low gamma, followed seconds later by her left-brain delta. (Her right brain delta, not shown, was slower to respond and did so with less amplitude.) This strongly suggests that the energy transmission came from Marc and occurred first in his low, mid, and upper gamma BEFORE being “picked up” by Liz’s left-brain delta.

(Below) The Composite Summary windows for alpha, delta, and low, mid, and upper gamma confirm that Marc’s gamma/delta stimulated Liz’s gamma then delta. Note that the initial sharp increase in their brainwave activity—aside from alpha, when healer and recipient closed their eyes at 1:08—is in the first set of markers at 2:30 showing Marc’s delta/gamma surging in tandem when he placed his hands together and held them above Liz’s shoulders. See the second set of markers (bottom window): Liz’s delta/gamma surged at 3:50, when Marc held his hands to the backs of her upper shoulders.

**M1 – Marc working on shoulder: delta/gamma stimulate increase in his alpha from 6 to 16uV**



**M2 – Liz’s gamma surge increases her 5uV delta to 25uV**

ALPHA █ THETA █ DELTA █ LOW GAMMA █ MID GAMMA █ UPPER GAMMA █

In both Liz and Marc, these delta/gamma surges preceded high-amplitude alpha increases. This strongly suggests that delta/gamma stimulates alpha. Either delta/gamma activates alpha to transport information across the range of frequencies, or alpha self-activates to process sensory information into higher frequencies, or both. In this study, delta/gamma appears to have stimulated alpha.

**MIND MIRROR PATTERNS**

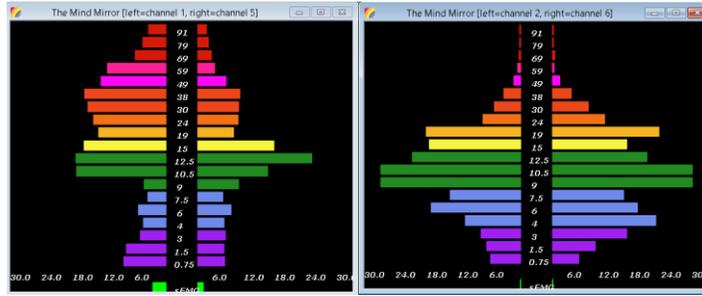
(Below) These Mind Mirror screenshots show the interaction between healer and recipient from halfway through the session until the end, while Marc worked on the issue in Liz’s spleen and replaced it with a positive “egg” (in his perception). Note the steady movement into synchronization as they share energy and information through delta and gamma, transfer it via alpha, and facilitate change in theta. *Important note:* The comments above each of the following graphs are not meant to suggest causation. Mindwalking is a back-and-forth exchange of energy sourced by healer and healee.

Marc

18:16

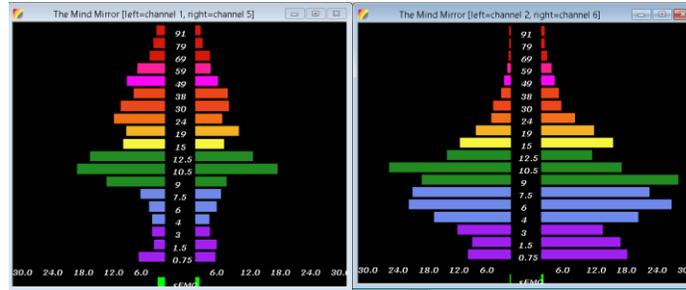
Liz

Marc's LH 100Hz gamma surge coincides with Liz's strong EM pattern (0.5-44Hz).



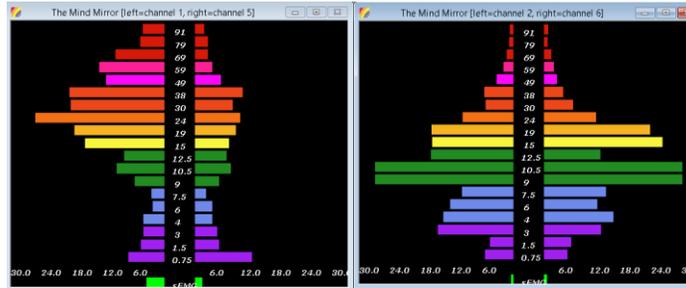
19:21

Marc accesses GS; Liz processes in near alpha-theta crossover



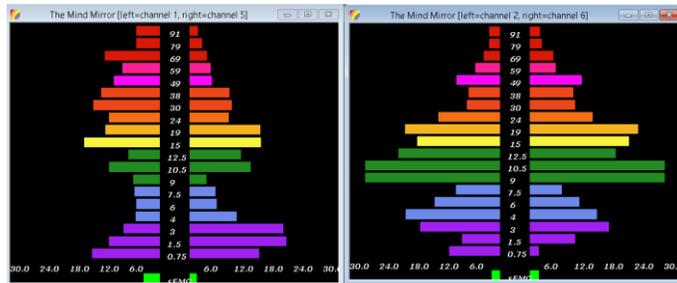
21:38

Marc sending LH gamma; Liz flaring into near EM pattern



21:39

Marc's RH delta transmits; Liz's gamma flares and delta upturns into EM flare



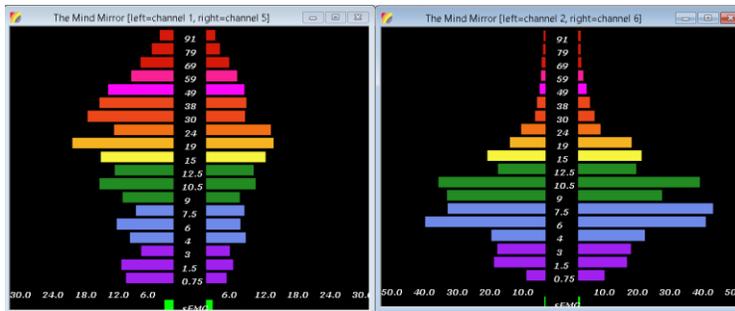
23:08

Marc rests; Liz drops into deep theta-delta



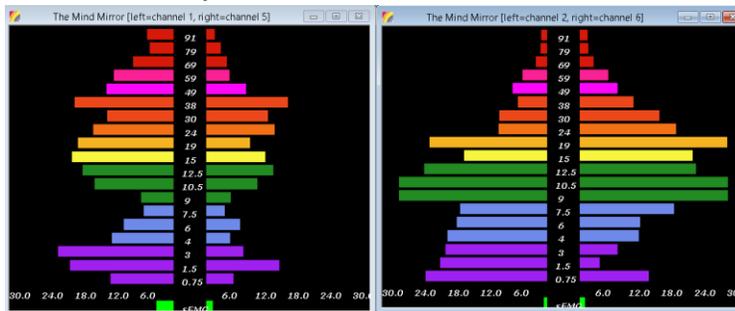
23:36

Marc's upper gamma flares;  
Liz forms near EM pattern with alpha-theta crossover at 6Hz



24:30

Marc amplifies LH in delta;  
Liz amplifies LH delta, with EM flare in RH



28:04

Marc amplifies alpha and gamma in near 100Hz GS pattern; Liz flares into EM



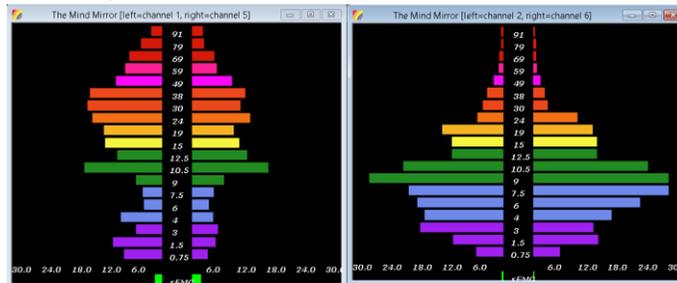
28:19

Marc maintains near 100Hz GS pattern; Liz flares into LH EM, RH AM



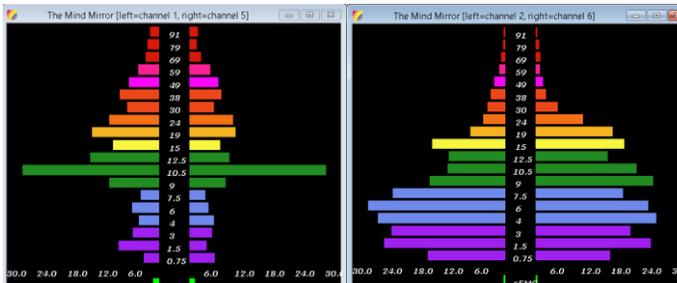
30:37

Marc amplifies LH GS and delta; Liz flares into EM bottom



34:04

Marc amplifies alpha and LH delta; Liz's forms dual-hemisphere alpha-theta crossover



35:08

Post session: Marc relaxes; Liz flares into 100Hz GS



35:10

Marc maintains LH GS, Liz flares into 100Hz GS pattern



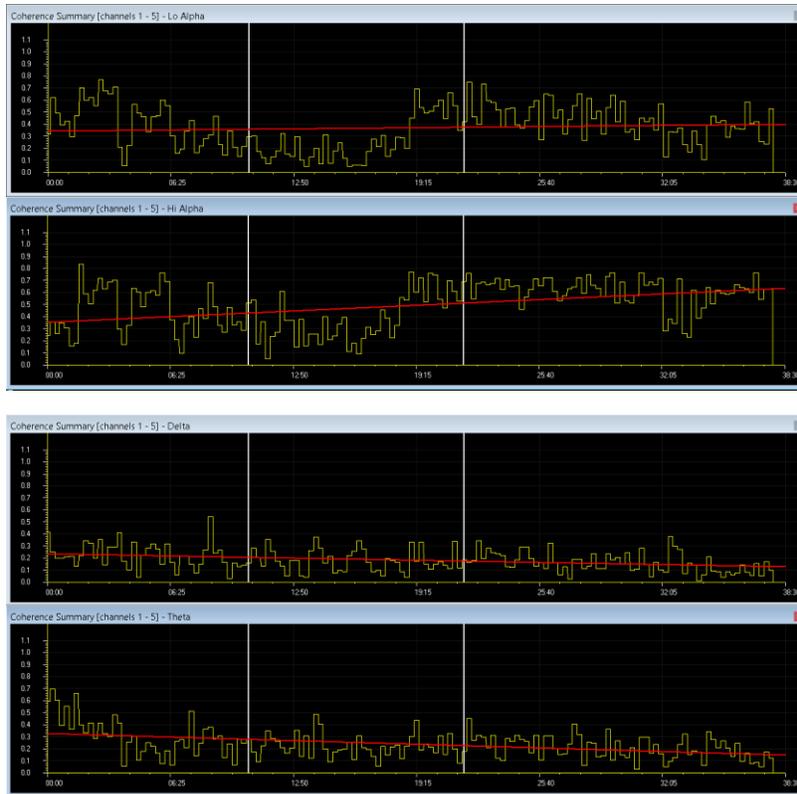
35:38

Post-session: Eyes-open patterns are synchronized



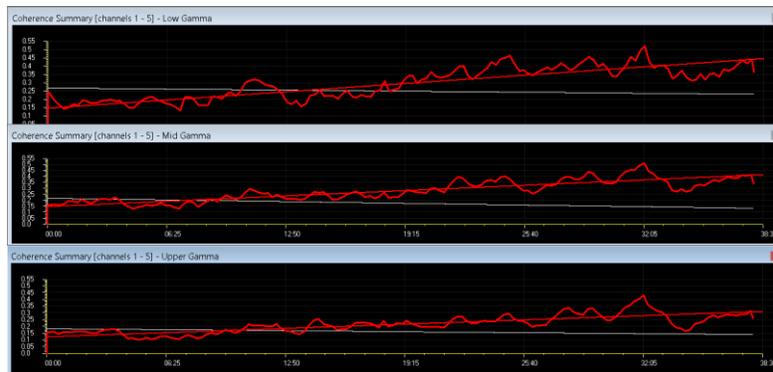
## COHERENCE SUMMARIES – MARC

These summaries show Marc's high brainwave coherence for low alpha (0.75) and extremely high coherence in high alpha (0.85). The stronger coherence in high alpha may show the uplifting influence of his powerful gamma/beta frequencies on Liz's matched 10.5/9Hz alpha peak.



Marc's theta was in high coherence at 0.7 to begin with, but plunged as his gamma steadily increased; this is a well-known phenomenon of gamma preference over theta for meditation and healing work. His delta coherence was low and steadily decreased, likely as a result of his back-and-forth delta "footwork" with Liz, as shown in the above Mind Mirror graphs.

Of special interest is Marc's coherence in low, mid and high gamma (see below). These levels are low-to-mid range (below 0.7 high coherence) due to his left-hemisphere dominance. Nevertheless, the trajectory is a strong and steady increase.



Again, that Marc's gamma coherence steadily increased from low- to mid-range coherence indicates that healing via Code Lemuria is of benefit to him as well.

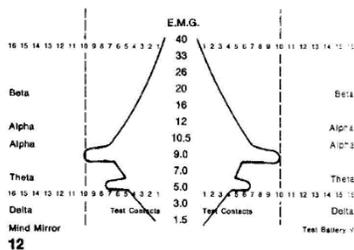
# CLOSING NOTES

## Gamma versus sEMG Artifact

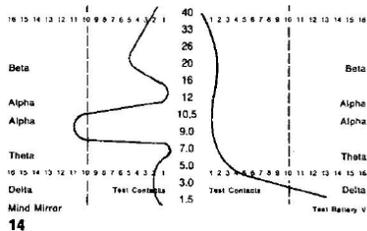
During the healing session, there was no signal quality loss as Marc moved around Liz and the massage table; however, sEMG artifact was unavoidable. As there is no way to differentiate between gamma amplified for healing and gamma amplified by sEMG artifact, this study considers that gamma activity sustained over a period of time, as opposed to artifact spikes, is real, except where the timekeeper noted gross movements or the brainwave patterns distorted due to movement or speech.

Liz's Signal Quality summary windows showed several breaks in signal quality which produced artifact. The red artifact markers in the Summary Plot for the healing session (see Liz's Summary Plot on page 7) show where data loss or distortion occurred due to signal quality issues. This information was excluded from the Mind Mirror Summary pattern and statistics.

## MIND MIRROR TEMPLATE PATTERNS



This pattern, from the back of Max Cade's book *The Awakened Mind*, resembles the bottom of Liz's diamond-shaped brainwave pattern during deep meditation. It also resembles the gamma frequencies at the top of Marc's pattern. This is Max Cade's own signature pattern.



This pattern from the back of Max's book shows how healers can use the two hemispheres of the brain appropriately and independently, as Marc did during this session. Max found this pattern present in a healer when he was "recharging his batteries." He referred to this phenomenon as Jung's transcendent function.

It was my pleasure and privilege—and that of timekeeper Felice DuBois—to monitor Liz and Marc's brainwaves during this healing session and to prepare this report.

Completed by Judith Pennington  
September 13, 2018