Infrasonic Simulation of Emitted Qi from Qigong Masters

by Professor Liu Guo-long, MD, PhD
Beijing College of Traditional Chinese Medicine
with Richard Lee

SUMMARY OF RESEARCH:

Emitted Qi from Qigong masters clearly has a strong effect on the central nervous system, not only in humans but also in animal subjects. Qigong meditation and the Infratonic QGM have similar effects. These findings are summarized below:

*Emitted Qi has a pronounced and repeatable effect on EEG. It enhances frontal and occipital EEG power spectra, and often enhances the frontal so much that frontal becomes the dominant EEG activity whereas occipital dominance is more common. Emitted Qi also enhances and synchronizes the Alpha.*
Repetition of these tests with animals confirmed that these changes are physiological and not psychological phenomena by eliminating placebo effects.

**DOUBTS ABOUT EMITTED QI:** At the beginning of my research with Qigong, I was confident that a study of neurophysiology would prove that the “Wai-Qi” emitted by Qigong masters was nothing more than a psychological factor induced by the waving of hands and hypnotic suggestion.

Qigong is a system of physical and mental exercises which has been practiced in China for thousands of years. Up until the 1980’s, most Chinese considered Qigong masters (those who have mastered this Qigong training) to be mythical story book characters with super-human powers. However, as the Chinese government began to support scientific research into Qigong, the few remaining true Qigong masters began to surface, amazing researchers with feats like killing bacteria in test tubes and causing previously paralyzed people to get up and walk.

I thought that these were all tricks of one sort or another, perhaps magicians’ sleight-of-hand, hypnosis, or optical illusion. When I got the chance to work with people claiming to possess these abilities, I was fascinated. This was my chance to test with scientific equipment, whether there was any truth behind the excitement about Qigong masters. I was confident that I could disprove the myths.

**BACKGROUND:** I was a specialist in Western medical technology assigned to the research department of the Beijing College of Traditional Chinese Medicine. The project was sponsored by the China Government Department of Education and the Department of Natural Sciences. My research group was assigned to study the relationship of infrasonic waves to emitted Qi. These research grants were motivated by the pioneering research of Prof. Lu Yan Fang at the National Institute of Electro-Acoustics in Beijing, who developed prototype devices to simulate the output of Qigong doctors.

Research has confirmed that humans have a very high degree of acoustic activity in the subsonic range below 20 Hertz (infrasonic), similar to the alpha rhythm of EEG. Also, people with chronic illnesses were found to have a much lower level of infrasonic activity, while Qigong masters had a much higher level of infrasonic output when they were emitting Qi.

The implication was that infrasonic sound might be related to human functioning, and further, that it might be in some way involved in the mechanism of brain functioning. We searched the available scientific literature for research papers for relationships between sound waves and brain waves but found none that had been done.
Extensive clinical research, based on infrasonic Qigong simulation, showed it to be effective for a wide variety of hospital problems. These results are what motivated the National Departments of Education and Natural Sciences to look further into the importance of infrasonic sound and what led to the research I am about to describe:

**THE BRAIN AS A DETECTOR OF EMITTED QI:** I had learned in my many years of research with the Electro-Encephalograph (EEG) that the human brain responds to even the most subtle of stimuli to the body, so I reasoned that, if there were really any scientific basis to emitted Qi, it would show up in the brain waves of test subjects who were placed in the path of these emissions. I expected to see no difference between the resting states and the Qi emission states.

What we saw was extraordinary. Within a few seconds after the Qigong master began to emit Qi, the subject’s EEG would begin to shift. The EEG power spectrum was enhanced on all channels while the most pronounced increase was in the frontal lobe. Also, there was an enhancement and synchronization of the Alpha Rhythm in all channels. When the Qigong master stopped emitting Qi the EEG would gradually shift back toward the baseline readings.

To determine whether infrasonic energy was a significant part of the emitted Qi, we used the infrasonic Qigong prototypes in the same experiment. It was located 18 inches away, directly behind the back of the head of the test subject. The EEG electrodes were attached as before. The simulator was activated for short periods of time and the results recorded. We found that the effects on the receiver’s EEG were quite similar to those of the emitted Qi.

Our further research involved monitoring the various sensory-cortical evoked potentials during Qigong meditation, emitted Qi, and infrasonic Qigong simulation. We again found very similar results from all three stimuli. We found that a large portion of the cerebral cortex was inhibited while other somatosensory cortex were excited. One of the significant findings of this study is that the inhibition of the cerebral cortex during Qigong meditation is clearly different from the excitation of the cerebral cortex that is measurable during sleep.

Through Acoustical Brainstem Evoked Response (ABER) it was found that the brainstem structures from the medulla to the hypothalamus were significantly facilitated. The brainstem plays an important role in regulating the functions of the inner organs, motor function, and emotion.
The implications of these studies were startling. **Qigong masters can, without touch, voice, eye contact or any other traditional communication means, induce a clear, strong, and highly measurable change in a subject’s brain functioning.** A synchronization of alpha rhythm indicates deep relaxation, and is closely associated with accelerated healing. Enhanced power spectrum in the frontal lobe is especially significant because the association cortex of the frontal lobe is concerned with higher motor action, higher sensory function, emotional and motivational aspects of behavior, and integration of autonomic function. Facilitation of the brain stem, with its regulation of internal organs, may be a mechanism by which physical healing is induced or accelerated.

Despite these highly significant changes in EEG and evoked potentials, the subject had felt nothing and had no idea of the profound changes taking place within them.

The findings of these studies are solid evidence that a Qigong master can induce real physiological changes in a subject from several feet away, and further, may help to explain the high rate of recovery from chronic degenerative diseases in groups of hospital patients under the care of Qigong masters. These studies also show that the infrasonic Qigong simulator can induce similar changes in brain function and that, through Qigong meditation, a Qigong master can induce these same changes in his own brain.

**SCIENTIFIC CONTROLS:** There is much disagreement on how emitted Qi affects the brain. Many doctors insist that brain changes are psychologically induced, and that verbal suggestion, impressive hand motion, and expectation of the subject account for the observed phenomena.

To test this, we had several Qigong masters and people pretending to be Qigong masters treat the test subjects. The subjects were told that all were Qigong doctors, and all moved their hands in similar ways. We saw no significant changes in brain wave patterns with the fake Qigong masters, but when the real doctors emitted their Qi, or when we used the infrasonic Qigong simulator, we repeatedly got the highly significant changes.

Even this did not satisfy many of the doctors who reviewed our work, so we repeated the study with animals. We monitored EEG in awake rabbits and ABER in anesthetized cats as Qigong masters emitted Qi toward them. Even though there was no voice or eye contact between the Qigong masters and the animals, and the masters emitted Qi from several feet away, we saw shifts in EEG and ABER (Acoustical Brainstem Evoked Response) similar to those observed in the human subjects. This is a highly convinc-
ing result because all kinds of placebo effects are eliminated, yet modification of brain function at a distance remains.

**INFRASONIC vs ELECTROMAGNETIC INTERFERENCE:** Extremely low frequency (ELF) electromagnetic signals can affect EEG. There is growing concern about the low frequency radiation produced by 60 Hz electrical power lines located close to people’s homes and schools because of apparent disruption of brain and cellular function. ELF signals will cause the principal EEG power spectrum to show a spike at the frequency of the ELF signal. This is because the EEG is easily entrained by ELF signals. When the signal is discontinued, the EEG abruptly returns to normal. Electrical power lines operate at 60 Hz, which corresponds to EEG in the high Beta range, associated with mental anxiety and confusion. The entrainment of EEG to 60 Hz around power transmission lines may be why researchers are finding that people who live close to these power lines show a higher incidence of brain tumors.

The results using the infrasonic Qigong simulator were quite different from ELF signal entrainment. The shifts in EEG were gradual rather than abrupt, and while dominant EEG frequency did drift toward the dominant peak infrasonic frequency, it was a broad spectrum of EEG activity rather than a spike. The enhanced power spectrum continued after simulation was stopped, gradually decreasing and returning to the pretest state. From these observations it is clear that the effects of infrasonic are quite different from the entrainment of ELF electromagnetic signals.

**SUMMARY:** When I started this project in 1976, I had serious doubts about Qigong masters and emitted Qi. Now I am convinced that emitted Qi is very real and that Qigong is a very valuable art. With the support of the China government, an estimated 50 million Chinese are practicing Qigong daily, and many Western hospitals have added Qigong departments for patients with chronic and degenerative diseases. In addition, the China government has funded extensive scientific research into the nature of emitted Qi with the goal of advancing science and medical technology.

The study of emitted Qi and infrasonic sound, as they relate to human health and functioning, is a broad and exciting field. The use of Qigong in treating chronic degenerative diseases such as cancer and hypertension in China has proven very effective. It has been employed to accelerate healing for thousands of patients with a wide variety of diseases in Chinese hospitals. I am confident that emitted Qi, Qigong meditation, and the infrasonic Qigong simulator will play an increasing role in health care around the world.