

## The Power of Sound (excerpts)

Joshua Leeds. published by Healing Arts Press. (c) 2001

### **Vibroacoustics**

Based on resonance, soundwork creates change through vibration. As a neurologically based approach, applying music or sound can take many forms, from simple tuning forks to sound structures complete with computerized output of highly specific frequencies. The goal of the first tools I will discuss, vibroacoustic tools, is to vibrate the body.

### **Body Applications with Sound Tables and Sound Chairs**

Vibroacoustics may be defined as “the process of hearing sound vibrations through the body.” This is accomplished through specially constructed chairs, treatment tables, or beds (some with water) that are equipped with powerful speakers designed to vibrate the body with optimal psychological and physical impact. Dr. Drew Pierson, a psychologist with electrical engineering experience, notes that the purpose of vibroacoustics is to create tactile-soma integration. He says, “The body holds emotional events in cellular memory. The use of vibration from 4.5–1800 Hz (primarily 8–180 Hz) has the effect of disengaging those resonant patterns that seem to run in loops and fixate themselves in the body. Vibroacoustics change the bio-electrical signature of the emotional imprint.”

Vibroacoustic music (VAM) resonates the body directly through nerves, skin, and bones. Based on multiple transducers built into the furniture—located under the back, buttocks, and legs—the sound is not directed to the ears. In fact, unless you wear headphones, the only sounds you hear with your ears are the lowest frequencies of the soundtrack. According to Dr. Pierson, the low sounds travel up from the vagus nerve to the reticular activating system, touching all internal organs along the way. This is in complete contrast to how sound, heard through the ear, travels down through the vagus nerve to the anus, attaching to almost all the internal organs along the way. The vagus nerve is a very important conduit of sound waves regardless of the direction.

Pierson became so impressed with the effect of vibroacoustics that he created his own line of sound chairs. His primary clients are healthcare professionals. “Professionals can use this chair for a number of modalities: sound therapy, biofeedback or neurofeedback applications—whether its binaural beats, monitoring feedback signals (biofeedback, neurofeedback, or any digital signal that can go into a RCA jack), or even your own musical instrument.” Sound chairs are extremely versatile. Audio signals from any source (CD, electronic instruments, or microphone) can be input directly into the chair to produce the vibrational response.

Dr. Pierson explains that the principle of sonic induction through wood and metal is far more powerful than through the ear (and air). “The sound waves are added into the recliner via specially designed full-range-frequency, solid-steel transducers, which have been built into the structure of the recliner’s frame. You become part of the sound through direct bone conduction.” In order to distribute the sound waves more evenly through the whole body, Pierson places two 150-watt transducers in areas that have the greatest sound conductivity. (See “Soundwork Resources” for more information.)

While Pierson emphasizes the power of bone conduction, others consider skin absorption of sound equally important. Whole-body acoustic stimulation has been studied by Dr. Patrick Flannigan for more than thirty years. He believes that the human skin is a powerful sense organ: “Our skin is not just a covering; it is an enormously sensitive organ with hundreds of thousands of receptors for temperature and vibrotactile input. Every organ of perception develops ontologically and phylogenetically out of skin. In the embryo, skin folds and then forms our eyes and ears. Our skin may contain the latent capacity to perceive light and sound. I think that by stimulating the skin with energy in the right way, you can potentially repolarize the brain and charge it with energy.”

In a program evaluation conducted at the Clinical Center of the National Institutes of Health in 1997, titled “Effects of Vibroacoustic Music on Symptom Reduction in Hospitalized Patients,” Dr. George Patrick reports, “We have seen statistically significant and clinically significant results in both tension-anxiety reduction as well as symptom reduction.” The goal of the project was to determine the effectiveness of VAM in providing the relaxation response as an antidote to the stress of treatment and adjustment to the possibility of chronic or life-threatening conditions. Diagnostic groups included all chronic disease processes, such as cancer, AIDS, and heart, lung, blood, and psychiatric disorders. Data were gathered from 268 adult patients with varying diagnoses over a seventeen-month period. Cumulatively, a 53 percent reduction of symptoms following the program was reported.

Sound researcher and chiropractor Jeffrey Thompson was so impressed with the effects of VAM that he created his own sound tables and the music to go with them. He explains why the sound tables have such a powerful effect: “A huge section of the brain stem and nervous system is devoted to sensing and processing vibration. The spinal cord is composed of nerve bundles carrying different kinds of sensation such as heat and cold, pain, pressure, vibration, et cetera.” According to Thompson, two entire columns sense vibration and take up almost the whole posterior half of the spinal cord. In the primitive portions of the brain near the stem, large areas are devoted to the processing of vibration. “When you are lying on a sound table, powerful emotional information, in the form of musical vibrations, gets processed right in the part of the brain where our most deep-seated emotional programs reside.”

Given the emotional and physical effect of low bass vibrations through the skin, VAM is a valuable avenue of soundwork for mind or bodyworkers. Prices range from \$1,500 to \$45,000, with many models about \$3,000. For a comprehensive listing of vibroacoustic delivery systems, I recommend Mega Brain Power, by Michael Hutchison. These sound delivery systems (with or without headphones) will create a powerful experience for your patients. Many practitioners have discovered that VAM may be of as much value as the chiropractic, acupuncture, and other bodywork treatments themselves. To use this modality, your soundtracks are important. Most recordings will be optimally effective with the use of headphones as well as playback through the VAM.

## **Tuning Forks**

Another element of vibroacoustics comes in the compact form of tuning forks. Long used as an accurate tonal guide for tuning instruments, a tuning fork is a small steel instrument with two

prongs that when struck sounds a certain fixed tone in perfect pitch. In the hands of sound researcher John Beaulieu, however, tuning forks represent a powerful new way to resonate the body, brain, and etheric fields: “Our bodies, like musical instruments, can be in tune or out of tune. When properly tuned, we have a sense of well-being and perfect self-expression.” Beaulieu has pioneered a new musical form that can tune our bodies and nervous systems, with the purpose of creating greater harmony and balance. “When we listen to the tuning forks, our vestibular system—via the semicircular canals—reproportions our body based on the natural ratios of the tuning forks. During the listening process our physical body will reposture itself in alignment with the intervals created by the tuning forks. During the process, our nervous system via the right and left hemispheres of the brain comes into balance.”

Dr. Beaulieu, a board-certified naturopath and polarity practitioner, tells an interesting story about how he came to see the value of tuning forks while sitting in an anechoic chamber at New York University. (An anechoic chamber is a completely soundproof room that resembles a sensory deprivation chamber.) “I had read about the experiences of the composer-philosopher John Cage and decided to conduct a similar experiment. While in the chamber, Cage heard two sounds, one high-pitched and the other low-pitched. The engineer who was working informed him that the high sound was his nervous system and the low sound was his blood circulating.”

Inspired by Cage’s experience, Beaulieu sat in an anechoic chamber for five hundred hours over a period of two years and listened to the sounds of his own body. “I began to correlate different states of consciousness with the different sounds of my nervous system,” he says. “Being a trained musician, I noticed that the high-pitched sounds of my nervous system consisted of several sounds in different intervals. Then one day I brought two tuning forks and tapped them. Immediately I observed that the sound of my nervous system came into resonance with the sound of the tuning forks. It was then I realized that people can be tuned like musical instruments!”<sup>6</sup>

According to Dr. Beaulieu, author of *Music and Sound in the Healing Arts*, there are two ways to use tuning forks to tune the body. One is to hold them by their stems, tap the ends lightly on your knees (or some other hard object), and then place each fork four to six inches from each ear (one tuning fork on either side of the head). You can then use your voice to harmonize with them. The second way is to strike them together gently (away from the head) to create harmonic overtones. You may also move them around your head or body in order to experience the effects of the interval they create.

As tuning forks have become increasingly popular with massage therapists and other practitioners to deepen relaxation and balance the body’s energy fields, Beaulieu has developed a comprehensive product line he calls Pythagorean Tuning Forks. Numerous intervals are available based on ratios thought to have specific effects on the mind and body. (See “Soundwork Resources” for more information.)

### **Tuning Forks and Acupuncture Points**

An extraordinary approach to the use of tuning forks has been pioneered by Fabien Maman, founder of the Academy of Sound, Color, and Movement. Extensive trainings explore the field of vibrational medicine, qi movement, acoustic sound, and pure color. Tuning forks are an

integral part of the Maman approach.

In his twenty years of research, Maman has found the exact frequency of each acupuncture Shu Point, Mu Point on the back, and Ear and Foot Reflexology Point. He uses tuning forks that match these frequencies on the acupuncture points of the body. As he explains in *The Body as a Harp: Sound and Acupuncture*, the tuning forks used on the acupuncture points act on the physical and etheric level (etheric acupuncture points). The tail of the tuning fork gives the message to the acupuncture point itself and then to the meridian. The fork itself vibrates in the etheric body and gives the same message to the etheric energy. When you put a tuning fork on the identified points, it balances the energy because the vibration goes exactly where it is needed.

According to Maman, the impulse is given by the vibration of the tuning fork. With the acupuncture needle, you send a message to the meridian. The tuning fork works faster because the vibration of sound travels faster than the vibration of the needle. Because the sound also touches the etheric points, the tuning fork vibration can work to dissolve the crystallization of energy in the etheric as well as the physical level.

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