

The Sound of Healing

*Interviews with Jonathan Goldman, B.Sc., M.A.,
and Suzanne Jonas, B.A., M.A., Ed.D.*

Russ Mason, M.S.

Although the medical use of sound in modalities such as ultrasound and sonograms has been widespread for at least 50 years, using audible sound for healing is, for many practitioners, an obscure, unproven concept. The reality, however, is that over the past 2 decades, research has demonstrated that specific sounds can be used to foster wellness. Consequently, there is a growing amount of material, research, and new technology supporting the use of sound for healing.

Jonathan Goldman, B.Sc., M.A., and Suzanne Jonas, B.A., M.A., Ed.D., are two innovative and dedicated professionals who, 25 years ago, began to recognize the value and importance of sound as a healing modality. Each of them intuitively understood that using sound represents, in many respects, the future of medicine.

Their belief has been borne out in cutting-edge sound research that shows extraordinary promise for the future. Both agree that nearly every illness or condition can be either remedied or greatly helped by specific sounds, and that certain tones and recordings can enable a listener to achieve high states of consciousness, awareness, and often ecstasy. These states, Mr. Goldman and Dr. Jonas say, are indicative of where humans might consciously evolve in the future—toward a greater sense of interconnectedness and well-being.

Jonathan Goldman, B.Sc., M.A.

Mr. Goldman is an authority on sound healing and a pioneer in the field of harmonics. Mr. Goldman is the author of *Healing Sounds: The Power of Harmonics* (Rochester, VT: Healing Arts Press, 2002) and other books on this topic. He holds a B.Sc. from Boston University in Massachusetts, and an M.A., earned for independent study on sound healing, from Lesley University, also in Boston. He is a lecturing member of the International Society for Music and Medicine and is the director of The Sound Healers Association, an organization he founded in 1982, which is dedicated to providing education and raising awareness about using sound and music for healing. Mr. Goldman was among the first to do comprehensive research into sound as a healing modality.

Russ Mason: It seems the entire field of therapeutic sound has greatly expanded in the last 20 years.

Jonathan Goldman: It's blossoming and blooming. When I first began my work in healing music more than 20 years ago the field didn't exist. Now sound is being used in hospitals and treatment centers and I am grateful because I can feel it taking off.

RM: What do you say to practitioners who are curious about using therapeutic sound in their practices?

JG: It is important for anyone interested in sound as a tool for healing to realize that sound is energy. It not only goes into our ears and brains, thus affecting our nervous systems but it also has the ability to go directly into our bodies. This field is generally called psychoacoustics. In 1988, *The New York Times* stated: "Sound shaped into a dazzling new tool can make, break, or rearrange molecular structure." So we are talking about altering molecular structure with sound!

RM: How is sound different from music with regard to healing?

JG: With music we have a tendency to notice components, such as the melody or rhythm, or the listener might hum or sing along if it's a popular piece. So much of sound therapy is the use of single-tone frequencies that are quite effective. Additionally, the use of sacred chants from various spiritual traditions can have a healing effect.

Sound has the ability to affect our brainwaves and our nervous systems. I am not only about talking a therapeutic CD [compact disc] that has been created with a special audio component but other types of music as well, such as a gentle, slow classical piece, which has the ability to affect our heartbeats, respiration, and brain states.

It is difficult to de-stress while listening to up-tempo music. And yet, for someone who is hyper, it may be necessary to play up-tempo music and then gradually bring him or her down. We are all unique, vibratory beings and music that works well for one person may not work as well for another.

For a practitioner, it would be a good idea—when first seeing patients—to ask what kind of music they use to relax or what kind of music makes them happy. What kind of music do they despise? This will help in selecting appropriate music for patients.

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RM: The number-one reason people visit doctors is for pain control. So are you saying that, while a patient is being treated, a special CD or tape could be playing in the background that would assist the treatment?

JG: That's right. But another extremely valuable tool for the practitioner is the use of tuning forks. Not only can tuning forks synchronize the hemispheres of the brain but they can also help to rebalance the nervous system. These forks are made of aluminum, come in different notes, and are under \$50 for a pair.

There are different sound ratios and this is important to consider when using tuning forks. One ratio is 2:3, a C and a G. Another ratio is 8:13, and that is D and A. We have found the C and G to be very effective for promoting well-being. The D and A are also powerful and I have had reports of extraordinarily powerful healing effects. Each pair of tuning forks is a harmonically related system.

The C and G, the 2:3 ratio—which has the greatest therapeutic applications—is the result of my dear friend, John Beaulieu, N.D., Ph.D. [High Falls, NY]. He was using tuning forks 25 years ago in Bellevue Hospital in New York City. He found that the use of the tuning forks was calming and relaxing to his patients. Tuning forks have been used successfully for the treatment of headaches, as well.

RM: How does one use tuning forks?

JG: You tap them to set them vibrating and then you hold one next to each ear about 3 inches away. Then, after about 15 seconds, you move the tuning forks to the opposite ears. It is this process that brings about the wonderful psychoacoustic effects.

RM: How would a health care practitioner use tuning forks in his or her practice?

JG: The use of the tuning forks promotes deep relaxation as well as hemispheric synchronization of the brain. For patients who are stressed or nervous the tuning forks can be an immediate and effective therapy.

RM: Are there doctors today using tuning forks?

JG: Yes. Bear in mind that some people are more sensitive or receptive than others. I have worked with doctors who practice energy medicine and they have had some extraordinary results



**Jonathan Goldman, B.Sc., M.A.,
The Sound Healers Association.**

with the tuning forks. These doctors became convinced of the powerful effect of sound on the human system and energy field.

RM: Are the tuning forks used only for therapeutic purposes or can an individual use them for a quick "tune-up?"

JG: I'll give you an example of how a layperson can use them. We have an accountant who was very mainstream in her approach to health and healing. . . very traditional. I taught her how to use the tuning forks. During tax season, for example, if she begins to get stressed, she will "tune" herself for a 30-second or 1-minute break. She uses the C and G tuning forks, which are the ones I recommend for most uses.

RM: I know a physician who uses Tibetan bowls in his practice. What do you think of their sonic influence in healing?

JG: I really like Tibetan bowls as well as quartz crystal bowls. They are very powerful sound healing tools. However, neither of these different types of bowls fits easily in your back pocket. They are difficult to move and crystal bowls can shatter. So tuning forks, especially for a practitioner, seem to work better in terms of their practicality.

What is perhaps most significant about using sound for healing—regardless of whether the sound comes from a crystal bowl or from tuning forks—is the *intention* of the practitioner or the person creating the sound. I devised a formula: Frequency + Intent = Healing.

RM: Your CDs also have a variety of healing sounds on them that practitioners can use while they are treating patients. Are there any particular titles that you recommend for doctors to keep handy?

JG: This is a good question. What must be addressed is: What is the purpose of the use of the sound? If it is to help a patient relax and go to sleep, we have a CD, Celestial Reiki* that is very gentle music. Or, for the birthing process or for neonatal infants, a CD called Dolphin Dreams* has been very effective. My CD Chakra Chants* is great for people who are into yoga and meditation.

RM: Dr. Jonas told me that she uses your Holy Harmony CD.*

JG: That recording is the result of research based on frequencies that two doctors, through their research, suggested to me. I incorporated these frequencies with an ancient chant and it turned out to be very effective. It does work and I have a file cabinet full of testimonials from those who have had profound healing experiences with it.

*All of these CDs are produced by Healing Sounds, Boulder, Colorado; www.HealingSounds.com

The use of the voice—toning—is also extremely important and there is a long history in virtually every tradition of vocal sound, chants, and toning that have been used for healing purposes. I think that doctors and all sorts of therapists need to encourage their clients to make sounds. A person's own voice can be an instrument of healing. I am not talking about singing Strangers in the Night in front of an audience but about being able to use sound to resonate to and vibrate different parts of our physical bodies and the associated chakras.



Suzanne Jonas, B.A., M.A., Ed.D.,
Inner Harmony Health Center.

Vowel sounds—such as ah, eee, ohhh—are very good. Another good sound is “ng.” Say the word “song” and then extend it, so the “. . .ng” becomes resonant. [Mr. Goldman demonstrates, making a sound like a buzz saw.] Research by Ranjje N. Singh, Ph.D., [University of Western Ontario Research Park, London, Ontario, Canada] has shown that this sound, along with others, helps stimulate the pineal gland to release the hormone melatonin. That's quite amazing.

So many healing and meditative traditions use chant and toning; a simple toning for 20 seconds twice a day can give your body a wonderful, resonant tune-up.

RM: It is surprising that something so simple is not in use in therapeutic practices.

JG: In the rush to find new drugs for stress or heartburn, this simple, effective technique—centuries old—has been largely overlooked. To tone, to chant, has tremendous curative properties. Anyone can do it—and it works.

RM: Mr. Goldman, thanks for talking with me today.

JG: My pleasure.

Suzanne Jonas, B.A., M.A., Ed.D

Dr. Jonas is the director of The Inner Harmony Health Center in Maryville, Tennessee. For the past 25 years, she has worked as a psychotherapist and specialist in the use of music, sound, and imagery. Dr. Jonas's background includes degrees in music, counseling, and creative therapies, including training in behavioral medicine, bioacoustics, and other adjunctive therapies.

Dr. Jonas has practiced behavioral medicine in acute-care and rehabilitation hospitals, dealing with concerns ranging from infertility and pain control to pulmonary and cardiac healing. She has also taught at the University of Connecticut (Storrs), the University of Massachusetts (Amherst), and Maryville College (Maryville, Tennessee).

Her published work includes a self-published book, Take Two Tapes and Call Me in the Morning, and a variety of CDs created specifically for healing purposes. Her Deep Relaxation CD is used to decrease pain*

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Left to right: Klini Sound chair; and the Voice Spectral Analysis device.

and tension in patients in many U.S. hospitals. She is available to teach Passive Music Medicine to onsite hospital personnel. Dr. Jonas lives in Walland, Tennessee.

Russ Mason: You have a unique approach to wellness. Please talk about that.

Suzanne Jonas: For those who practice health care, there is a tendency to focus primarily on the physical body. As a behavioral medicine psychologist, I know that all physical problems manifest from the belief system. The physical body is the receptacle of everything else. If we were to see an inverted triangle, the body would be at the bottom tip, the lowest and smallest part. Above that are emotions, which are vast. Above the emotions is the mind, which can venture out into the universe and connect with other minds. Above the mind is the soul, which is—so far as we can tell—limitless. Beyond that is God, the one, the all, or, as Jung called it, the collective unconscious.

Now, to paraphrase quantum physicists, everything is energy and thus vibrates at its own unique frequency. In healing terms, if a person has a problem with his or her thyroid, it is because there is something in the belief system that triggered an imbalance in the thyroid and we would say the thyroid is “out of tune.” So instead of prescribing a pharmaceutical, we examine the person's belief system to eliminate further problems. At the same time we can “tune up” the thyroid by applying the laws of physics through the use of sound therapy.

RM: How is that accomplished?

SJ: Sound affects virtually every aspect of our beings. Much of the sound we hear on a daily basis is unfocused, random sound—noise. However, certain sounds, when properly delivered to the individual, can have immediate beneficial effects: greater mental acuity; deep relaxation; even help with going to sleep.

Binaural Beats

Binaural beats are auditory brainstem responses that originate in the superior olivary nuclei of each hemisphere of the brain. These responses result from the interaction of two different auditory impulses originating in opposite ears. These impulses are below 1000 Hz and differ in frequency by between 1 and 30 Hz.^a

For example, if a pure tone of 400 Hz is presented to the right ear and a pure tone of 410 Hz is presented simultaneously to the left ear, an amplitude modulated standing wave of 10 Hz—the difference between the two tones—is experienced as the two wave forms mesh in and out of phase within the superior olivary nuclei. This binaural beat is not “heard” in the ordinary sense of the word but is rather perceived as an auditory beat and theoretically can be used to entrain specific neural rhythms.

Source: <http://web-us.com/thescience.htm>

^aOster G. Auditory beats in the brain. *Sci Am* 1973;229:94–102.

For the health care practitioner, the use of sound—even playing a special CD in the treatment rooms or reception areas—can have a beneficial impact. We know that specific sounds, certain recordings, and new audio technologies can facilitate the healing of an individual and there is a great deal of groundbreaking work being done in this field. What has been discovered can benefit many health care practitioners, regardless of their specific practices.

RM: Can you give me an example?

SJ: One of the most promising examples is a diagnostic/therapeutic device called Voice Spectral Analysis[†]—a computer-based assessment tool. One speaks into a microphone that is connected to a computer, and the Voice Spectral Analysis records the voice and then interprets what is recorded. It works because the human voice carries subtle information that shows which areas are out of balance within the body.

RM: So it's a diagnostic tool for the practitioner?

SJ: Yes, and remedies can be found with the use of a special tone generator that corresponds to those frequencies representing a problem. The tone generator is part of the software package. With a computer program, a practitioner has new and comprehensive assessment and treatment options.

RM: How does one listen to the healing frequencies?

SJ: As a practitioner I have several options. I can put a patient in a special “sound chair” that has integrated speakers built into its design. I use a Klini Sound chair,[‡] but there are others available. I can also generate the specific frequencies from a “tone box,” which is about the size of a Walkman cassette player. This way the patient can take the box home and listen to the specific

frequencies. I can also make a CD of the specific tones on the computer so the patient can listen to the CD at home.

RM: Being that the majority of practitioners do not currently have sound chairs, do you advise the use of therapeutic sound or music in treatment rooms? Or is this a “dedicated” activity?

SJ: Dedicated listening is better than casual, ambient listening but even background music can have therapeutic effects.

The music that touches people's souls varies tremendously so one CD title is not going to have the same impact on everyone. Many people are stirred by Handel's “Messiah” and have profound experiences while listening to it. However, there are CDs now that have specific brainwave altering technology embedded in the recording, with something called *binaural beats*.[§] For an individual who is stressed, playing a binaural beat CD that has alpha brainwave frequencies can be very beneficial.

Binaural beat recordings are very effective for helping the physical body, especially, to relax or to sleep. But there are other recordings that do not use binaural beat technology, which are extremely effective also. Specific Mozart pieces can be effective for enhancing focus and concentration. We have also compiled frequency programs for such issues as relaxing muscles, stimulating the spine, oxygen delivery, and digestion. These CDs and other sound recommendations can be found on our website.*

RM: How did you first begin to integrate healing sounds into your practice?

SJ: To explain that I need to provide some background.

When I was in high school, I played flute in a semiprofessional orchestra and I had several transformational experiences. With certain passages of music I would experience sensations that ran all through my body. I became paralyzed: I could not play. I didn't know what was happening but it was clear I couldn't continue to play with the orchestra.

But the odd thing is, I found these paralyzing musical passages to be transcendent—and quite pleasant—experiences. My soul had been deeply touched. It was an early realization that sound could heal on many levels.

I began to search for a teacher who knew about these things—about the impact of music on one's emotional and physical bodies. But there wasn't anybody. The closest I could find—when I chose my college career—was music therapy. This was not ideal because, at that time, music therapy focused only on the physically handicapped or mentally ill. I wanted to work with people who were basically OK but to facilitate the kind of healing that I had experienced.

When I was in graduate school, someone suggested I look into the work of Jonathan Goldman, which I did. I found that Goldman was doing wonderful work exploring new ways music could be used therapeutically and that he had produced many wonderful CDs for healing.

I switched my major to counseling and psychotherapy. This was necessary since, at that time, music therapists could not qualify for insurance reimbursement. So, at the University of Massachusetts [Amherst] I was able to combine these two loves: music for healing and counseling.

[†]BioWaves, LLC., Bellevue, Washington; www.BioWaves.com

[‡]Klini soundwave, Tyler Texas; www.klini.com

[§]See the box entitled Binaural Beats for more information on this effect.

In the late 1980s I attended workshops at The Monroe Institute [Faber, Virginia], which uses proprietary audio technology as part of its training programs. I use their Hemi-Sync[®] CDs in my practice every day.

RM: Please explain how these CDs help.

SJ: Not long after I got my doctorate, I worked in a stroke rehab unit in Springfield, Massachusetts. The newly admitted patients all had very high levels of anxiety and some were off the charts. To help them, I created a special CD, in concert with Monroe Products, called Deep Relaxation and Self-Healing. On the CD I provide a guided narration as Hemi-Sync brainwave music plays in the background.

I gave it to all of my patients in the hospital and I still give it to all of my patients. It is effective because the CD helps slow down the listener's brainwaves and the person becomes more calm, centered, and peaceful through the binaural brainwave patterns that are encoded on the disk.

Interestingly, I have since worked with surgeons and anesthesiologists who use Monroe Products' Surgical Support Series,[®] a 4-disk set. The surgeons report that patients respond well to the recordings during surgery.

RM: You mean the surgical patients were wearing headphones and listening to a CD while on the operating table?

SJ: Yes, the anesthesiologist oversaw it. [The CDs] had been in use at the University of California–Los Angeles Medical Center but I am not certain if they are still in use today.

Preoperative anxiety is not healthy, nor is any kind of stress. So therefore a patient, by using the CDs, is able to relax and achieve a more receptive state of mind prior to the surgical event, during the surgical procedure, and in postop recovery.

RM: Many people, including surgical patients, have not experienced a guided relaxation or meditation CD so this was probably something new.

SJ: Yes, that's right. But there is something more significant: Many people have never, ever been deeply relaxed. On many occasions I have heard a patient say: "I only listened to it once, but I felt so much more at ease about going to the hospital."

RM: It sounds as though there are physicians and other health care practitioners whose work would be easier if they used the recordings because patients would be less stressed.

SJ: Absolutely. As I stated previously, my first job was in a general hospital and rehab facility. I had the opportunity to train staff in a 6-week course and I taught the use of music as medicine. The results were that they could see the effects on the patients almost immediately.

RM: How did patients who had strokes respond to music therapy?

SJ: They had a much easier time in their recovery and were more relaxed. With lessened anxiety, they were able to think more clearly, to see possibilities for the future, and generally be more at peace.

RM: Is dementia something can be treated with sound or music therapy?

SJ: Oh yes. Registered music therapists will tell you that dementia patients respond amazingly well, particularly to songs that were popular when the patients were in their late teens [or] early 20s. It brings them into that memory state and this may facilitate lucid conversations. There is also a set of frequencies that can assist in decreasing the confusion of dementia.

RM: How do you treat a patient with a chronic condition?

SJ: Here is one example: I had a patient with severe arthritis. She had difficulty walking; there was a lot of pain in her joints. This condition had evolved over a period of time. She bought a subwoofer to hook up to her tonebox and listened to her frequencies at night. Within a month, there were noticeable differences in her level of pain, her range of motion, and her endurance for walking. She was very happy and her condition continued to improve.

RM: When you see new patients, what do you do?

SJ: They fill out some paperwork, which includes a symptom checklist. I will not look at it immediately because my first look will be at the Voice Spectral Analysis. I may say, "hm! Says here that your stomach meridian is out of balance. Have you been having trouble with digestion?" Or, similarly, the Voice Spectral Analysis may show that there is some foot trouble. One patient said that she had gone skiing, had rented boots, and they didn't fit right. It always amazes me how accurate the Voice Spectral Analysis is.

Based on the Voice Spectral Analysis, a review of the patients' records, and my consultation, I will often "prescribe" a sound remedy, which may involve some time in the Klini Sound Chair. What is good about this kind of therapy is that it is nontoxic, noninvasive, and very effective.

We are just at the tip of the iceberg with sound therapy and it's exciting to think where it will go.

RM: Dr. Jonas, thank you for talking with me today.

SJ: Thank you. □

¹Monroe Products, Lovingson, VA; www.hemi-sync.com

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