



shaping up with sound

Relax as **Jeff Volk** tells you how the sound frequencies used in Cymatics can Tone up your Body and Tune up your Mind.

you're resting in a comfortable chair, soft soothing music playing in the background as a cosmetologist hovers dotingly overhead, gracefully waving her magic wand about you. You watch in amazement as years of life's accumulated anguish vanishes from the topography of your face like south-facing snowflakes melting beneath springtime's warming rays. After just one 45-minute session, you notice that those stress marks around your eyes are not nearly as pronounced. The contracted skin around your lips has relaxed, and you look like you've just awakened from the most restful nap you've ever had. Perhaps it was a dream, but it's a dream you can step right into and walk out looking, and feeling like a new person! (See p15 to see the results).

As wonderful as this may seem, the Cymatique® beauty treatments are just one of many new therapeutic applications in the field of Cymatherapy which uses specific sound frequencies to stimulate muscles, organs, even bones, to their natural state of resonance. Unlike ultrasound, which uses very high frequencies to hyper-excite the cells in the body and can cause tissue damage if performed incorrectly, Cymatherapy employs specific overlays of frequencies all within the audible range, and poses no such risk. In the example of our 'sonic facelift' waves of sound emitted by a small, hand-held applicator 'wand' gently penetrate the skin, stimulating blood and lymph circulation to help remove toxins, while toning and firming the facial muscles. The average 40 to 50 year-old should notice significant and long-lasting results after 10 to 15 painless, relaxing sessions – a far cry from the 'nip and tuck' option!

A Closer Look at **Sound-** All is Vibration!

Cymatherapy is based on a vibrational device originally designed by Peter Guy Manners, a British osteopath who performed extensive clinical research at his Bretforton Hall Clinic from the 1970s until its close upon his retirement in 2005. Contemporary research and further clinical trials have been carried out in the States in a variety of settings, with applications ranging from dental treatments to bone and muscle injuries. Some of the most dramatic results include the rapid recovery of professional athletes from a variety of injuries.

Sound of Body

One well-known 34 year-old Football League player, suffering from a ligament tear and bone chip in his ankle, used Cymatherapy as his primary treatment. His rapid recovery amazed his doctors, with inflammation and even fibrotic scar tissue resolving within the first two weeks of treatment.

Full range of motion, muscle strength and balance effortlessly returned within four weeks of treatment. If you've ever even slightly sprained your ankle, you know how long it normally takes to be 'up and running again'. Yet within one month he was able to run and even turn on a sixpence – a very stressful move for the ankle – without any further difficulties from his injury. His verdict? 'My ankle feels as good as it did prior to my injury.' He is but one of a growing number of athletes who uses Cymatherapy not simply remedially, but as a part of his general health maintenance regimen and to prepare his 'psychological edge' for his demanding professional life (1).

Perhaps the most rewarding case was that of the thoroughbred racehorse, 'Rarely Found', who sustained a torn flexor tendon (similar to our Achilles tendon). Usually when this occurs, regardless of the amount of rest, massage, acupuncture, electric shock and other therapies, the horse is unable to race again, due to the build-up of scar tissue. His full recovery with no scar tissue in only six weeks (as opposed to two to three years of conventional treatment) amazed owner and veterinarians alike, and might very well have saved him from being put down.

All matter exists at specific densities, or looked at another way, at different rates of vibration. Therefore, each individual particle, or collection of particles, will have its own unique resonant frequency. This is why you can make a wine glass or a crystal bowl sing so brilliantly when you excite them within the narrow range of their natural resonant frequency. For several years medical scientists have been using this principle to break up kidney stones, and more recently, to excite the individual cancerous cells within a tumor to the extent that they rupture, thus destroying the tumour (2).

Over many years of research in the 1940s and 50s Dr. Manners and his colleagues ascertained a large body of 'commutations' for specific bodily organs and tissues. Because every person's anatomy is different, the same organ or tissue in your body will have a slightly different resonant frequency than mine, but within a very narrow range. Manners solved this problem by using a tone consisting of an overlay of five frequencies, producing a harmonic of the tissue. Five seemed to be the 'magic number', creating a frequency signature precise enough to stimulate the targeted bone, organ or muscle tissue, while at the same time enabling one generic setting to work effectively, despite individual variations.

Why five frequencies? Various theories have been put forth including that it relates to the Chinese Theory of the 5 Elements, which are themselves based on the esoteric principles of the five platonic solids. A more biological interpretation might be that these frequencies are somehow related to the five main stages of the cell renewal process. Suffice to say that this particular patterning of five audible sound frequencies has been shown to effectively correspond with the given tissue throughout a broad population over several decades of clinical research and therapeutic application.



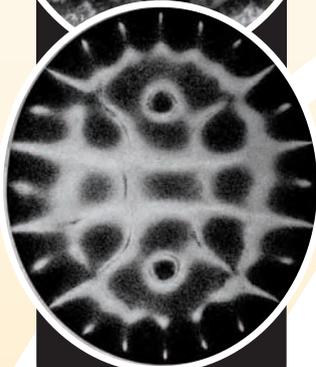
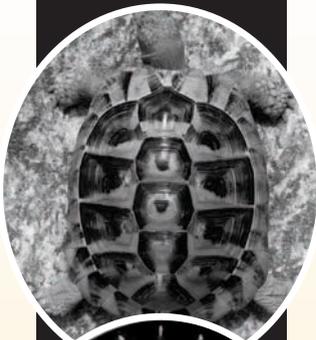
“All matter responds to vibration in a unique way, having its **OWN resonant frequency** ‘signature’”

A Brief Overview of Cymatics

Cymatherapy is a therapeutic application derived from the pioneering work of Swiss scientist, D. Hans Jenny, who in the 1960s coined the term Cymatics from the Greek word for 'wave'. Dr Jenny spent over 14 years documenting his experiments in great detail, publishing books and films showing many intricate and elaborate forms which sound produced in various powders, pastes and liquids (3). Although Jenny was a medical doctor, his primary interest was studying the way inanimate matter responded to sound from a physical perspective, rather than directly exploring the therapeutic effects of sound. However, his extensive body of work did, in many ways, lay the foundation for much of today's burgeoning field of sound healing, vividly showing how sound can restructure matter into a more coherent form. A short historical review may help to explain.

Sound advice

From his studies of the natural sciences and Anthroposophy, the mystical science of Rudolf Steiner, Jenny was well aware that all matter responds to vibration in a unique way, having its own resonant frequency 'signature'. He wished to show this empirically, using simple materials and protocols whose results could be readily repeated. Jenny's scientific rigour opened a new chapter in the detailed study of sound patterns popularized in the early 19th Century by 'the Father of Acoustics', Ernst Chladni. Whereas Chladni had to steady a small steel plate covered with sand in his fingers while stroking it with a violin bow, Jenny had the advantage of electronic equipment, giving him much greater control over his experiments. This allowed him to recreate these vibrational patterns at will by reproducing the same frequency (pitch) and amplitude (loudness) of the exciting signal. He used sand, pastes, water, and a fine spherical powder called lycopodium, which is very responsive to vibration, allowing him to see the complex resonances created when a thin steel plate is vibrated at various frequencies.



Vibration mimics tortoiseshell

With subsequent advances in electronics and engineering, contemporary researchers such as German photographer Alexander Lauterwasser, and British acoustic engineer John Reid, are now able to create precise 'sound figures' or 'CymaGlyphs' in water, sand and lycopodium.

Lauterwasser is the son of a well-known portrait photographer, so to speak, has been to create and compile the most striking collection of Cymatic photographs I have seen in over 20 years documenting this field. His book, *Water Sound*, beautifully

portrays many of the infinite ways that

sound can structure

matter. This fascinating array of images shows how the powder configures itself along the node lines (areas of minimal vibration) of a steel plate, clearly mimicking naturally occurring patterns such as zebra stripes, leopard spots, tortoise shells, and even the complex structures of the ectoskeletons of crustaceans.

Sound wave

But for me, his most awe-inspiring images are those created in samples of water vibrated in a small petri dish. As the sound waves travel through the water, they reflect off the walls of the container,

creating characteristic wave train

patterns, again determined primarily by the frequency and amplitude of the sound signal. The water sample is illuminated from above, and his camera is also pointed straight down. So, as light reflects off the many wave crests on the surface of the water, the most delicate patterns appear with geometric precision.

It's important to note that these patterns are strictly the result of physical vibration; nothing is added to the water, nor are these images altered or digitally enhanced. While such figures could be derived using well-known formulas of physics, their similarity to patterns found throughout nature – from the structures of galaxies to the forms of single-celled animals and microscopic plants – is most striking. This raises some interesting conjecture as to the underlying vibrational nature of physical reality, and Lauterwasser quotes liberally from various creation myths and sacred scriptures to support this understanding.

You'll never look at sound the same again!

Perhaps the most frequent inquiry I've received over the past two decades has been, 'How can I do this? How can I make these kinds of patterns; with my voice, with my harp, with our chant group? In *Water Sound Images*, Lauterwasser shows a series of sound figures created in water using instruments as diverse as sitar and digeridoo, and with music ranging from Bach and Beethoven to Skrijabin and Stockhausen. 'But I want to see this for myself! How can I do it?'

Well, thanks to the untiring efforts of 'retired' acoustic engineer John Reid, I may finally be able to give a helpful reply to that question. With the assistance of American inventor/designer Erik Larson, a greatly improved version of the tonoscope, which Hans Jenny originally produced as a toy nearly 50 years ago, may soon be coming to a store near you! The simple acoustic model, which

Reid is calling the CymaScope Jr, is a small table-top instrument that up to four people can sing into at once,

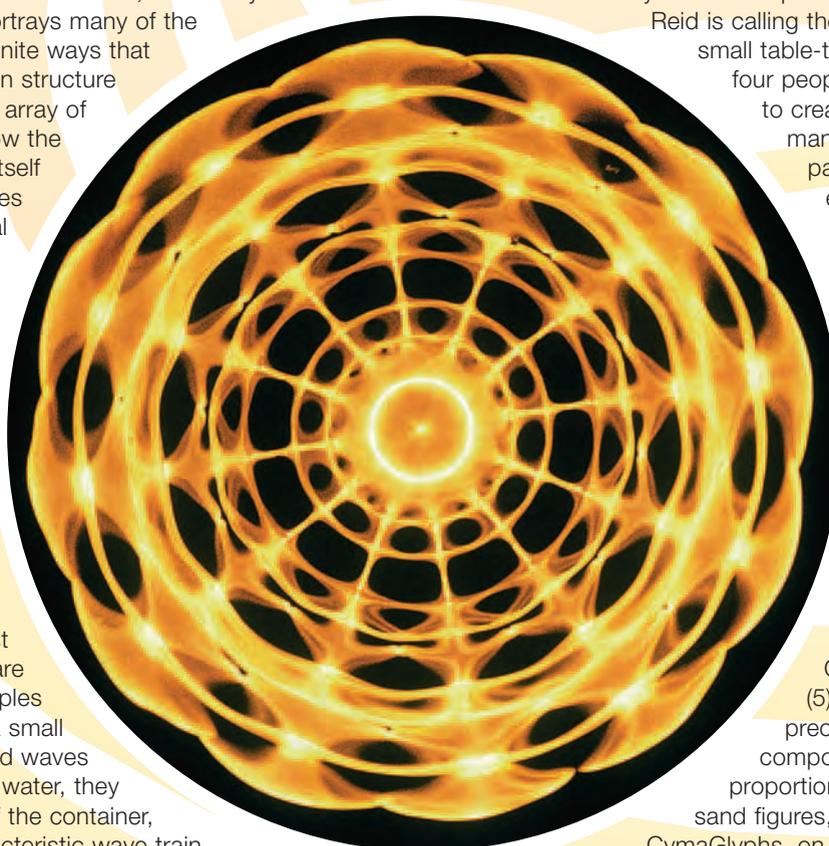
to create multi-coloured, mandala-shaped sand patterns on a vibrating elastic membrane. A

prototype of the more complex electro-acoustic device, the CymaScope SE, has already received great acclaim in the US, and will be officially unveiled at

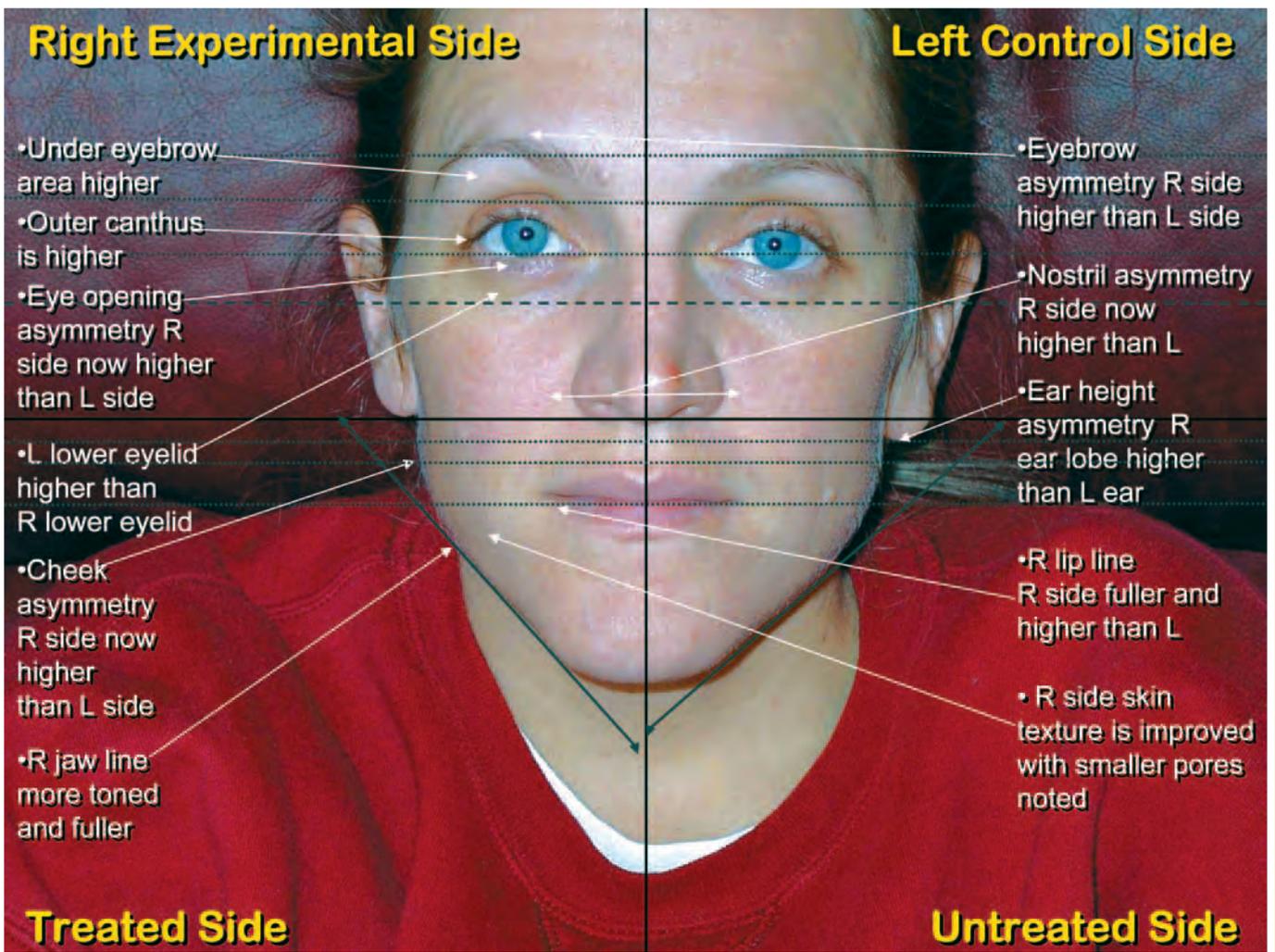
the First International Conference on Cymatics: The Science of Sound and Vibrational Healing in Atlanta, Georgia on October 21 - 22, 2006 (5). This unit features

precision engineered components in phi ratio proportions, to create the complex sand figures, which Reid calls

CymaGlyphs, on a vibrating membrane. It accepts a variety of audio inputs, and a built-in video camera will project these images onto a screen or video monitor. Specially designed membranes will also allow water images to be projected. A smaller, high frequency model enables the sounds of nature, such as bird songs, whale and dolphin sounds, to be rendered visible, opening a new window into acoustic analysis of animal communication.



“(It's) a bit like viewing a high-speed movie of the development of life itself!”



Sound effect

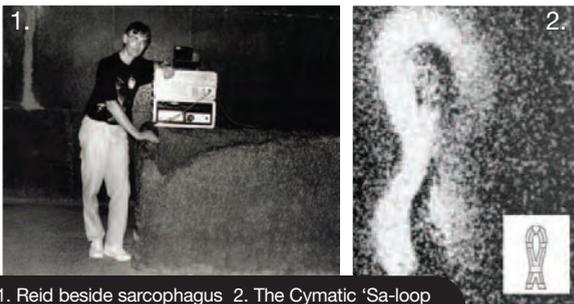
Reid, who turned the 'sarcophagus' in the King's Chamber of the Great Pyramid into a giant cymatic resonator by stretching a membrane over its opening and applying electronic frequencies to set it into resonance, has his own theories of how sound

rigorously applied to a field which has been, for so long, relegated only to faith. To actually be able to observe, actuate and reproduce the creation of life-like figures from inert matter, and then to watch as these forms become more complex as the frequency increases, is a bit like viewing a high-speed movie of the development of life itself!

Perhaps the science of Cymatics may even some day help to unite two diametrically opposed ideological factions – the religious fundamentalists who believe in a literal version of Genesis and the 'fundamentalists' whose views of evolution leave the big question (Where did it all

come from?) unasked, no less unanswered. In the mean time, this diverse field is rapidly evolving in its own right, providing valuable opportunities to peer into the invisible realms of creation, 'hear' and now.

Perhaps even more promising than the potential that Cymatics holds as a therapeutic modality, is its power as a 'living metaphor' to inspire awe and wonder, and to awaken that subtle yearning within us to 'return to the Sound' which gives rise to all form and structure. When you look at the origin of the word 'resonance' in the light of Cymatics, it's easy to conceive of coming into attunement with a Universal Tone... a view which is music to my eyes, and sustenance for my soul! ks



1. Reid beside sarcophagus 2. The Cymatic 'Sa-loop' with (inset) the hieroglyph for protection

was essential to the beginning of life on earth. He also believes that these fundamental principles are encoded into the architectural design of the Great Pyramid, most particularly in the acoustic properties of the initiation chambers and in the geometry of the enigmatic passageways leading up from those chambers (6).

Indeed, the formation of the world through sound is a theme that echoes through the sacred texts of all the world's great spiritual traditions, so it is especially heartening to see the scientific method

more information

- Award-winning producer, Jeff Volk, lectures widely throughout North America. Jeff created a series of videos on Cymatics and re-published Dr. Hans Jenny's groundbreaking Cymatics books, which scientifically demonstrate how audible sound creates harmonic, geometric patterns found in intricate life forms, and in the sacred art and architecture of the world's Great Traditions. See *Kindred Spirit's* mail order pages for some of these products. Further information may be found at www.cymaticsource.com
- 1 For clinical documentation on this and similar case studies, see www.cymatherapy.com
- 2 *The Role of Music in the 21st Century*, Fabien Maman, see www.cymaticsource.com. Regarding further research in the field of sound healing. Firstly, Drs Gimzewski and Pelling of UCL, concerning the field of sonocytology: www.darksideofcell.info/ An abstract of their original paper can be found at: www.sciencemag.org/cgi/content/abstract/305/5687/1147/ Also the work of Gendel, in Northern Ireland, with their CEFUS technology (Combined Electric Field and Ultrasound) can be found at: www.gendel.co.uk/
- 3 See feature article in *Kindred Spirit* issue #60, Sept. '02 available on the *Kindred Spirit* website.
- 4 © 2002 Alexander Lauterwasser. English edition, MACROmedia Publishing, 2006. www.cymaticsource.com After August, this book will be available via *Kindred Spirit* magazine and website.
- 5 See www.cymatherapy.com or www.cymaticsource.com for conference details.
- 6 See *Egyptian Sonics*, by John Reid (c)2001, Sonic Age, UK.