

## *Microcosmic Music*

**I**magine the human genome as music. Unravel DNA's double helix, picture its components lined up like piano keys, and assign a note to each. Run your finger along the keys. So begins a report by Associated Press writer, Daniel Woolls, in a January 18, 2003 news release from Madrid, Spain. Woolls continues: *Spanish scientists did that just for fun and recorded what they call an audio version of the blueprint for life.*

*The team at Madrid's Ramon y Cajal Hospital was intrigued by music's lure—how it can make toddlers dance and adults cry—and looked for hints in the genetic material that makes us what we are. They also had some microbial genes wax melodic.*

*The end product is "Genoma Music," a 10-tune CD released in February. "It's a way to bring science and music closer together," said Dr. Aurora Sanchez Sousa, a piano-playing microbiologist who specializes in fungi.*

*DNA, or deoxyribonucleic acid, is composed of long strings of molecules called nucleotides, which are distinguished by the sequence of the four nitrogen-containing bases they contain: adenine, guanine, thymine or cytosine, represented as A, G, T and C. These became the musical notes.*

*French-born composer Richard Krull turned DNA sequences—a snippet of a gene might look like AGCG-TATACGAGT—into sheet music. He arbitrarily assigned tones of the eight-note, do-re-mi scale to each letter. Thymine became re, for instance. Guanine is so, adenine la and cytosine do.*

*Played solo on percussion, classical guitar, or the other instruments used on the CD, the sequences would sound cute but rudimentary, the musical equivalent of PacMan in an era of Microsoft Xbox.*

*So the alphabet soup of bases served as just that,*

*base lines to accompany melodies composed by Krull and his scientific colleague.*

*They say the melodies were influenced, even dictated, by the mood and rhythm of the underlying genetic code.*

*In general, the genome music is an easy-listening sound that is vaguely New Age. One of the prettiest songs is based on Connexin 26, a human gene that causes deafness when it mutates. The DNA skeleton is expressed with tinkling bells and a flute melody does the rest.*

*Another song draws on a yeast gene known as SLT2. Sanchez Sousa, the main author of the project, is fond of the sequence because it features a stretch in which one triplet of nitrogen bases appears several times in rapid succession—a repetitive phenomenon that has a musical equivalent called ostinato.*

*"This is a very sad part, but a beautiful one," Sanchez Sousa said, wearing a white lab coat and waving her arms like a musical conductor as she played the segment for a visitor.*

*Seeking music in nature goes way back. In the 6th century B.C., the Greek philosopher and mathematician Pythagoras argued that celestial bodies in rotation gave off pitched sounds that blended into a beautiful harmony he called "the music of the spheres."*

*The idea is that matter and its behavior—wheat fields shimmering and tongues of fire dancing—may hold something intrinsic that can be transformed into music, said Dr. Fernando Baquero, head of microbiology at Ramon y Cajal Hospital.*

*Maybe that's why people like music: It's already inside them anyway, so hearing it touches a piece of them, Baquero said. "When we like something, it is because we recognize it," he said. "It's funny, but to like is to recognize."*

It should come as no surprise that all creation is a vast amalgam of sounds which are emitted by the keynotes of each form issuing from its creative archetype. For instance, as stated in the Rosicrucian literature, there is in the skull at the base of the brain a flame. It burns continually in the medulla oblongata at the head of the spinal cord, and like the fire on the altar of the tabernacle, is of divine origin. This fire emits a singing sound like the buzz of a bee, which is the keynote of the physical body, and is sounded by the archetype. It builds in and cements together that mass of cells known as "our body."

The composite of the human physical body has its keynote, but it in turn is the synthesis of organs and tissues which also have their own organizing and identifying keynotes. We may assume that even individual cells have their own sonic signatures or vibratory keys. This assumption has been confirmed by the regrettably unduplicated work of Royal Rife in the early twentieth century (see November/December 1996 *Rays*). Rife was able to cure a host of pathogen-caused diseases by identifying their initiating virus or bacteria, finding its vibratory keynote, and directing that same frequency upon the microorganism at an amplitude strong enough to cause it to burst or self-destruct. Rife could immediately confirm the effect of projecting this "mortal oscillatory rate," the microbe's achilles heel, by an *in vivo* viewing through his quartz microscope, which magnified up to 60,000 diameters. Rife determined the mortal oscillatory rate (M.O.R.) for the cancer virus (which he called the BX virus), as he did for many other virulent microorganisms, including syphilis, polio, tuberculosis, leprosy, pneumonia, typhus, and typhoid. The results he achieved from this technology were phenomenal. Tragically, his findings and accomplishments were buried by pride, greed, and ignorance.

Each material structure, at least in principle, is a Jericho whose walls, whether cellular or cinderblock, can be broken, given its signature vibration. Which is to say that not only sound, but all segments of the electromagnetic spectrum (sound being that segment which is experienced by the human auditory structures) can both build and disintegrate.

From the building side of vibration, *The Book of*

*the Hopi*, subtitled "The first revelation of the Hopi's historical and religious world-view of life," (Viking 1963) contains a beautiful story of creation. In this Genesis account, the Song of the Creator is the essential Force that brings to life the first humans, and the Earth itself is described as a musical instrument. To quote: "All the vibratory centers along the Earth's axis from pole to pole resounded His Call; the Earth trembled; the universe quivered in tune. Thus He made the whole world an instrument of sound, and an instrument for carrying messages, resounding praise to the Creator of all."

Frank Waters, the book's author, says that it is our duty, our sacred purpose as human beings, to echo this song of creation back to the Creator again by "making a joyful sound throughout the land."

While the device of assigning the four genomic amino acids a musical note and composing scores based on a particular gene's sequence of these four complex molecules is arbitrary, it is not amiss to suppose that they do emit their own vibratory ID. However, one would have to be clairaudient to detect it. What is insightful is Dr. Fernando Baquero's suggestion that people like music because "it's already inside them" and "it touches a piece of them." Spiritual sound is the language, one might say the very substance, of the World of Thought. All things sing, for those who have ears to hear. Etheric structures and their material counterparts are maintained by their creative spiritual archetypes, which we might also call archetones.

On the macrocosmic level, we may describe all earthly forms as patterns in a global quilt whose woof and warp are woven of stellar and planetary threads into continuously changing shapes and textures. As explained by Max Heindel, the Seven tones in the octave "are the replica of the Seven Planetary Spirits. Just as they can be brought into different connections and make different chords, so also these different tones of the worlds that are moving through space make up the harmony of the spheres, and according to the change in these vibrations humanity is evolving. There is a different vibration every single moment of time, and as a new being comes into existence, these varying vibrations act upon him and make him different from all others. Therefore he has a certain fate." □