EXPLORING THE EFFICACY OF VOWEL INTONATIONS

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Abstract

An important Rosicrucian teaching advocates working with "vowel intonations" to aid the student in meditation and to create physical and spiritual harmony. Modern science, especially in the realm of quantum physics, has begun to confirm some of the ancient mystery school teachings about the power of vibration and sound. This paper attempts to connect recent thought, demonstrated through experiments with sound, with Rosicrucian teaching in its exploration of how sound affects the cell.

Exploration de l'Efficacité des Sons Vocaux

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Abstrait:

Un enseignement Rosicrucien important préconise l'utilisation des sons vocaux afin d'aider l'étudiant en méditation ainsi qu'à créer une harmonie physique et spirituelle. La science moderne, en particulier le domaine de mécanique quantique, commence à confirmer quelques uns des anciens enseignements des écoles de mystères sur la puissance des sons et des vibrations. Cette étude essaye de faire le pont entre la pensée moderne, démontrée par des expériences sur le son, et les enseignements Rosicruciens dans l'exploration des influences du son sur les cellules.

Explorando la Eficacia de la Entonación de Vocales

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Una importante enseñanza Rosacruz aboga por el trabajar con "entonación de vocales" para ayudar al estudiante en la meditación y para crear armonía física y espiritual. La ciencia moderna, especialmente en el campo de la física quantum, ha empezado a confirmar algunas de las enseñanzas de las escuelas ocultas sobre el poder de la vibración y el sonido. Este artículo intenta conectar las enseñanzas Rosacruces con el nuevo pensar, el cual ha tratado de investigar, por medio de experimentos, cómo el sonido afecta a las células.

Explorando a Eficácia de Intonações Vocálicas

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Sumário:

Um ensino Rosacruz importante defende a prática de se trabalhar com "intonações vocálicas" para ajudar o estudante em sua meditação e para criar uma harmonia física e espiritual. A ciência moderna, especialmente no campo da física quantum, tem começado a confirmar alguns dos ensinos das antigas escolas de mistério sobre o poder da vibração e do som. Este artigo tenta conectar os pensamentos recentes, demonstrados através de

experimentos com som, com os ensinos Rosacruzes em suas explorações de como os sons afetam as células.

Untersuchung der Wirksamkeit von Vokalintonation

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Zusammenfassung:

Ein wichtiger Teil der Rosenkreuzlehre handelt von der Wirksamkeit der Vokalintonation wenn es darum geht die richige Stimmung zum Meditieren, sowie physische und spirituelle Harmonie zu erziehlen. Die moderne Wissenschaft, besonders wenn es sich um Quantumphysik handelt, ist auf dem Wege einige der uralten Lehren der Mysterienschulen mit Bezug auf die Kraft von Schall und Vibration zu bestaetigen. Diese Schrift macht den Versuch neuere Gedanken, die durch Experimente mit Schall bestaetigt wurden, mit rosenkreuzischen Lehren zu verbinden die sich mit der Erforschung der Wirkung des Schalls auf the Zelle befassen.

EXPLORING THE EFFICACY OF VOWEL INTONATIONS

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The aim of this study is to explore the Rosicrucian teaching that intonations formed from vowels, consonants, and specific musical tones are truly beneficial to the persons intoning and hearing them - in fact, even capable of stimulating and affecting cells and centers in the body, and in the space in which they are intoned. This is not meant to be primarily a scientific paper, but one which explores various theories and discoveries from the standpoint of a musician. To accomplish this end, it is necessary to set up a scenario from which the basic concepts are derived.

ANCIENT MYSTERIES

Ancient mysteries teach that in the beginning, Creative Force "spoke," and this sound, this vibration, this Word, became the unit of all existence: "The six days were created [through the Word], being lights emanating from the Word and illuminating the world."¹ As created beings, we embody this primeval sound in our physical, mental, and spiritual selves. Our very bones, blood vessels, and nerves are singing the song of the universe: "From the deepest interior of the atom there are shrill tones dozens of octaves above the highest tones of a violin. This is the music of the atomic nucleus ... this is the symphony of life, this unimaginably complex tapestry of music that is sounding within us every moment of our life."²

In ancient times, "when the world was ruled by the wise,"³ the intuitive knowledge of the vibrations of that creative energy was manifested in life and ritual. Traces of vocal expression are first found in our animal forebears; studies of animal behavior show that "vocalizations reflect changes in the signaler's affective state, emotions, and motivation. ... based on ... research with rhesus monkeys and other

species, it appears that ... components of our own musical capacity have been in place for a long time."⁴ The natural practice of mothers chanting or singing to their children and the use of other soothing or expressive sounds suggests that "ancestral adults could well have followed a similar course in ritualizing natural vocalizations at times of strong emotions and when solidarity was displayed or required."⁵ As the use of sound became more sophisticated, human beings realized that its application could raise vibrational levels in the consciousness. In fact, chanting or another form of music is in all accounts connected with ritual, primitive religion, and the first stages of religious expression.⁶

In ancient Egypt, the laws of music were even engraved on the temple walls. The Egyptians took the seven vowels from the Oriental languages and used them as musical characters.⁷ Invocations to the seven planets were composed of vowels and designated musical modes. It was believed that a word or vibration is capable of actually disintegrating matter, due to the relationship of the vibrations of that word with the vibratory state of the matter involved. This was central to the soul of Egyptian "magic."⁸ In the Hermetic writings we read that Egyptian words contain in themselves the energy of the objects being spoken about, that is, each symbol contained in itself a vibrational complexity. A word was "the sound of spirit striking the air and declaring a person's whole wish ... a sound full of action."⁹ In like manner, the ancient Egyptian ritual for preserving the Pharaoh's influence after death consisted of a musical enchantment: "The Hierophant made the seven notes [which corresponded to the astral waves of the seven planets] resonate magically ... then the atmosphere of the tomb was animated by lines of subtle energies ... [forming] a wondrous fluidic spiral...¹⁰ At this point, the seven notes would resonate into the higher octaves of unheard sound, deriving their power from these higher energies. Other uses of the original vowel sounds included healing and creating well-being.

In Kabbalistic study, it is taught that Hebrew letters and words are elements of power. In the Kabbalah, sound, "when properly manipulated," can bring one to ecstasy. ¹¹ Thought and word (sound) were taught as the same essence. Most spiritual systems have chants, sometimes called *mantras*, to assist with centering and meditation; some also teach the relationship between these chants and certain energy centers in the body. The Rosicrucian vowel system speaks of the use of combinations of sounds and pitches to stimulate "psychic centers" in the human being with the purpose of maintaining health and raising the consciousness of the cells as the spiritual self evolves. After study of the esoteric claims of sound and psyche, one could raise the question: is there evidence on the scientific and intellectual levels to support these propositions?

ROSICRUCIAN THEORIES AND SCIENCE

To examine this question, we must first refer to a principal Rosicrucian teaching which holds that *everything is vibratory in nature*, from the lowest cell to the densest matter to the most transparent space. Indeed, this is a law of physics. *Sound* is the articulation of a vibration, heard by human beings at certain auditory levels. Each sound also has its counterparts in harmonics or overtones, vibrating sympathetically into the highest octaves. The teaching states that this is how intonations connect us with higher energies and enhance a state of meditation.¹² It goes on to say that the vowel intonations, when intoned on a given pitch, actually cause centers in the body to resonate in harmony, enabling energy to flow freely, meditation to be enhanced, and health to be maintained.

Science has for some time been examining many aspects of esoteric principles which were kept hidden in ages past.¹³ With the advent of modern particle physics and quantum mechanics, many principles of vibration which were once the realm of mystery schools have become scientific theory. In quantum physics, the fundamental forces of nature are vibratory; the "music" created by the combination of waves is matter. The principle of modern physics that is most relevant to our study is that of *resonance*. Of course, the word means "re-sounding" and refers to the sympathetic response of one vibrating object to another vibrating object. In their brilliant study, *The Living Energy Universe*, Drs. Gary Schwartz and Linda Russek constantly go one step beyond the status quo. When discussing the principle of resonance with an example of two tuning forks, they posit that resonance is a two-way street: not only does tuning fork *B* pick up vibrations from *A*, which is sounding, it also *returns* vibrations to *A* over and over again, resulting in a cumulative state of vibration within the tuning forks.¹⁴

A conclusion could be postulated when this study is related to vowel sounds and their resonance within the body: the "centers" affected by the intonations gradually build up memory and response so that regular practice, especially when done in a group setting, has a cumulative, healing effect. The various combinations of vibratory frequencies in the body respond more immediately with each intonation session, made more powerful when coupled with visualization techniques and directive thoughts.

Science has for some time realized the power of sound. Ultrasound is used in various capacities; plant therapy has demonstrated that sound can affect growth. The work of Alfred Tomatis shows the effect of sound on the nervous system, especially in his focus on overtones and the music of Mozart.¹⁵ "Vowel sounds," intonations, and soundings are capturing the attention of mainline scientists and medical professionals as well. One such practitioner, Dr. Mitchell Gaynor, an oncologist in New York City, uses sound in the forms of intonation and Tibetan bowl resonances with his cancer patients to speed healing. He refers to the work of scientists and psychologists such as David Simon, M.D., in San Diego and Mark Rider, Ph.D., in Dallas, who have conducted studies that determine empirically that music, especially chant, is actually *metabolized* in the body and acts as a healer and positive influence on the immune system.¹⁶ He goes on to describe the effect of "intoning" as related to the phenomenon of *entrainment*, which seems to be a slightly more complex form of resonance, involving motion and rhythm as well as sound frequencies:

"The seventeenth-century Dutch scientist Christian Huygens noticed that the pendulums of two clocks, hung side by side, would begin of their own accord to swing to the same identical rhythm. The reason that entrainment occurs is that the more powerful rhythmic vibrations of one object, when projected upon a second object with a similar frequency, will cause that object to begin to vibrate in resonance with the first object."¹⁷ The phenomenon has also been described as "the synchronization of two or more autonomous rhythmic processes ... [which] have been identified in many natural systems. When one physically oscillating system *entrains* another, it means that the timing of repetitive motions by one system influence motions by another oscillator such that they fall into a simple temporal relationship with each other."¹⁸ This dynamic can be observed in the animal kingdom when birds fly together or fish swim in schools. Essentially they are "feeling" the motion in unison. Another example is the harmony felt between a mother and her baby, or between two "soul-mates." The human body in general also exhibits this attraction towards harmony, which is its natural state. It has been observed in the laboratory that two individual living cells from the heart, seen under the microscope, each pulsing separately, suddenly move closer, shift rhythms, and begin to pulse perfectly together!¹⁹

ENTRAINMENT APPLIED TO ROSICRUCIAN INTONATIONS

This phenomenon of entrainment could be said to lie behind the effect of vowel intonations. If a certain sound, intoned at a certain pitch level (wave length), affects a nerve center in the human being, it is perhaps because that center begins to vibrate sympathetically and synchronously with the intoned vowel, causing motion in the form of cell activation and even repair. According to Rosicrucian teachings about the vowel sounds, the process is described thus: the intonations "start certain rates of vibrations in the room which harmonize with other vibrations of the universe and affect a certain condition connected with the aura."²⁰ The "rates of vibration" are of course the sound waves, configurations which enliven the air in a room and cause all bodies which are in harmony with them to resonate.²¹

The requirement that the vowel sounds be intoned at the "proper" pitches presents another question. We could ask, is there any evidence that one pitch is more effective than another? We know that the cell is the basic unit in the body, and that vibration is the simplest unit of music. Each pitch has its own sound wave. The cell vibrates; therefore a tone, a sound focused at one pitch level, and vowels, which are compounds of musical tones, have an affinity with the cell. In fact, science has developed a study called *cymatics*, after the Greek word for "wave," which is looking into the theory that each molecule in the body has its own frequency and that our bodies are therefore "harmonies" composed of frequencies of component cells.²²

In a paper dated 1986 from the Beckman Research Institute in California,²³ geneticist Susumu Ohno reported that, in order to detect the flowing patterns of genetic equations, he decided to convert them into music. He devised a simple rule for the conversion: each of the four basic nucleic acids in the genes was assigned two consecutive notes from the musical octave; the notes were then strung together in the exact genetic sequence. When living mouse RNA was converted by this process, it was found that a portion of the genetic material, when translated into notation and played on the piano, had the same melody as parts of Frederic Chopin's Nocturne, Op.55, No.1! When the process was reversed, and the Funeral March of Chopin was converted to

chemical equations, entire passages appeared to be identical to a human cancer gene. Ohno explained this amazing finding as a natural law which both nature and music follow.²⁴ Since cells are composed of atoms, and each atom projects a tone, when we take into account the phenomenon of overtone partials, cells should respond to sympathetic sounds, because every tone actually includes all the tones in the universe.

In Mindquest experiments performed in the laboratory at Rosicrucian Park in the 1970s, scientists reported human reactions using galvanic skin response instruments when certain vowel combinations on particular pitches were intoned.²⁵ In related Mindquest experiments a decade later, Fourier transform analysis was used to measure vowel intonation waves; it was found that many factors affect the efficacy of the intoned sound. Harmonics, vocal chord resonance, even throat and sinus cavities affect the sound produced. From these results, it could be surmised that each person has a particular pitch or pitches which resonate more consonantly in the body; the effects of the given pitch of an intonation could be experienced differently by various persons intoning it. However, there are certain traditional pitches which may or may not resonate more strongly. The conclusions of the researchers state, for the record, that "the value of such an analysis comes if we accept the hypothesis that vowel sounds are more effective when properly done."²⁶

THE EFFECT OF PITCH ON THE BODY

Dr. Gaynor also reports on an experiment in which two French scientists, Fabien Maman, a composer and bioenergeticist, and Helene Grimal, a biologist, using a camera mounted on a microscope, were able to observe the inner structure of human cells. They used both healthy and cancerous cells, observing them while various acoustical instruments were played and vocal pitches were intoned. As an ascending musical scale was sung into the cells, Maman reported:

The structure disorganized extremely quickly. The human voice carries something in its vibration that makes it more powerful than any musical instrument: *consciousness* ... It appeared that the cancer cells were not able to support a progressive accumulation of vibratory frequencies. As soon as I introduced the third frequency in the sequence, *the cells began to destabilize*. [my italics]²⁷

The same scientist reported his discovery that "every human molecule has a particular corresponding musical frequency. The masses of particles behave ... among themselves *as if they were musical notes* ..." [my italics]²⁸ Of course, this concept was first introduced by Pythagoras, the "intellectual and spiritual godfather of sound medicine,"²⁹ who based much of his school of philosophy on ancient Egyptian principles – that there is music, unheard by us, existing in each human organism, which causes, depending on circumstance and mathematical proportion, consonance or dissonance between the soul and the body.³⁰ Again, quantum physics reiterates the ancient teaching that even the smallest particles of matter may now be realistically considered "nodes of resonance."³¹

In continuing the discussion of how intonation may affect the body, we discover that sound frequencies have been shown to create geometric forms and shapes in matter; the scientists Ernst Chladni and Hans Jenny performed now classic experiments which allow us to "see" sound waves when matter affected by vibration changes shape. Chladni (1756-1827) in particular experimented with circular and square plates on which he scattered sand. A violin bow was drawn up and down on the side of the plate, and the sand formed itself into distinct patterns. In other words, he showed that sound frequency can "rearrange" physical properties.³² So, it can be observed that intonations have the possibility not only of eliciting cell responses through resonance, but also of actually causing structural movement and rearrangement of bodily energies to speed healing through the harmonic principle.

CONCLUSIONS

The experiments and their effects discussed as part of this exploration indeed seem strongly to suggest a confirmation of the Rosicrucian teaching about vowel intonations – that their effect is not merely emotional but arises from powerful energies which can enliven a space and affect the human organism. When vowel intonations are used as part of a disciplined study and meditation regime, with knowledge of the principle of overtones and octaves known as the "cosmic keyboard," they can effectively access the physical and psychic bodies as a healing and stimulating force. As we seek to reflect the higher energies, we realize that "... it is only through harmony and resonance that energy is transmitted from one state to another, [so] when we resonate in harmony with the Cosmic, we become divinely conscious.^{33,}" Focusing the power of sound through vowel intonations is one way to achieve this.

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¹⁵ See Robert Gass, *Chanting: Discovering Spirit in Sound* (Broadway Books, 1999), p. 30; and of course, the original study of Don Campbell, *The Mozart Effect* (Avon Books, 1997).

¹⁶ Gaynor, p. 18.

¹⁷ Gaynor, p. 48; the pendulum observation is also referred to by Gass, p. 35

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²⁸ Gaynor, p. 137.

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