

# Sound and The Mind

## **PRIMORDIAL SOUNDS:**

Encoded within the human mind and body are autonomic reactions to certain natural sounds that trigger powerful responses. These sounds can be looked upon as analogs to the visual archetypes or collectively recognized symbols that Carl Jung researched and expanded upon. The effect of primordial sounds can be peaceful and soothing to the listeners consciousness. Ocean waves, fire, rain, forest noises, heartbeats and wind are examples.

## **BINAURAL BEATS THE RHYTHM OF SOUND AND ENTRAINMENT:**

Rhythm is the nature of the universe, rhythm is godhead. Everything is moving to it's own beat. From the micro-orbits of electrons and protons to the macro-orbits of planets, stars and galaxies. In lifeforms rhythm is even more obvious, from the continuous beating of the heart, to cycles of the breath. Another word for rhythm is "periodicity", which means that the activity of something falls into cycles. The cadence of human beings is intricately woven into the web of cosmic pulsation.

Soundwaves are examples of periodicity. Sound is measured in cycles per second (hertz or hz). Each cycle of a wave is in reality a single pulse of sound. The average range of hearing for the human ear is somewhere between 16 hz. and 20,000 hz. We can not hear extremely low frequencies (ELFs), but we can perceive them as rhythmic.

Entrainment is the process of synchronization, where vibrations of one object will cause the vibrations of another object to oscillate at the same rate. External rhythms can have a direct effect on the psychology and physiology of the listener. Slower tempos from 48-70 BPMS have been proven to decrease heart and respiratory rates, thereby altering the predominate brainwave patterns.

Binaural beats are continuous tones of subtlety different frequencies, which are delivered to each ear independently in stereo via headphones. If the left channel's pitch is 100 cycles per second and the right channel's pitch is 108 cycles per second, the difference between the two equals 8 cycles per second. When these sounds are combined they produce a pulsing tone that waxes and wanes in a "wah-wah" rhythm. Binaural beats are not an external sound; rather they are subsonic frequencies heard within the brain itself. These frequencies are created as both hemispheres work simultaneously to hear sounds that are pitched differed by key mathematical intervals (window frequencies). The brainwaves respond to these oscillating tones by following them (entrainment) and both hemispheres begin to work together. Communication between the two sides of the brain is associated with flashes of creativity, insight and wisdom.

## **BRAINWAVE PATTERNS:**

The electroencephalograph (AKA. EEG) is a machine that monitors brainwave activity. Laboratories around the world have done studies and experiments using these tools to better understand the four main brainwave patterns: BETA, ALPHA, THETA and DELTA. Each frequency has a characteristic blueprint and produces a distinctive state of consciousness. BETA waves (14 cycles per second and above) dominate the normal waking state of consciousness when attention is directed towards the outside world. ALPHA waves (8-13 cycles per second) are present during dreaming and light meditation when the eyes are closed. THETA waves (4-7 cycles per second) occur in sleep and are dominate in the highest state of mediation. In deep meditation and deep sleep, DELTA waves (.5 to 3 cycles per second) are experienced. Each of these brainwave frequencies serves an important function. The optimum level for deep thought is in the realm of THETA. When in THETA, the senses are withdrawn from the external world and focused on then inner one. DELTA waves endow a total vacation from existence and provide the most profound feelings of peace.

Window frequencies are binaural beats that are harmonically related in perfect mathematical intervals. Because harmonics govern everything from planet orbits to the proportions of the

human body they provide a path of least resistance for the entrainment tones.

### **STEREO THREE-DIMENSIONAL SOUNDS:**

By strategically placing and moving sounds around the head and body the sounds are experienced in subjective spaces. This can enhance and modify the perceived experience of them. Primarily effective when listened to through headphones, these soundtracks create precise locations in three-dimensional acoustic soundscapes.

### **AUM, THE MOST ANCIENT OF ALL TRANCE INDUCING SOUNDS:**

Thousands of years ago in ancient India the seers rediscovered the sacred syllable AUM (pronounced OM). AUM is more than a single word, it is the seed of all other words and a scientific formula. When each letter is vocalized correctly, all vowels and consonants are foreshadowed within it. "A" embodies the waking state of consciousness, the material world. "U" represents the dream state of the astral and subtle planes of existence. "M" symbolizes the state of deep dreamless sleep, a state of bliss and transcendence which is not consciously experienced. The most important part of this primeval formula is the silent resonance that is felt after sounding the "M." This fourth part is the spirit, consciousness itself. The vibration of AUM brings about physical and psychological evolution.