"When a person is artistically engaged with tone, they put their ear to the very heart of nature itself; they perceive the will of nature and reproduce it in series of tones."

Rudolf Steiner

Overview

Listen. Sound is around us in every direction. Imagine if we took the time and listened intently for every sound that we could hear. We approach this practice through contemplation and what is revealed is the potential of our consciousness for sound to extend well beyond the physical anatomy of our bodies. Our ears not only hear and our vocal cords not only produce sound but these sounds carry with them intelligence, ideas, feelings and memories. Sound then is not as simple as it first appears but upon continual investigation reveals complex patterns of transmission and interpretation from the body to the brain. Beyond hearing or producing sounds externally Nāda yoga states that sound is happening internally within us and if we refine our attention towards those sounds eventually they will be experiences. This practice promotes openness and has the capacity to facilitate our creativity as it heightens and expands our consciousness of sound in as many dimensions of awareness and attentional dynamics as humanly possible.

Objectives

When you have completed this module, you should be able to:

1. Define listening vs hearing
2. Understand basic science of sound
3. Understand the anatomy of the ear
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Hearing vs. Listening

The ear makes it possible to both hear and listen. To hear physically means that vibrations or waveforms that are within the range of human hearing (in frequency typically 16 Hz - 20,000 Hz and amplitude 0.05 db to 130 db) can be transmitted to the auditory cortex by the ear and perceived as sounds. However, the word hear has many more dynamics and meanings within a cultural history that is forever changing.

Listening takes place in the auditory cortex and is based on the experience of the waveforms transmitted by the ear to the brain. We learn to associate and categorize sounds such as mama, papa, meow, whistles, and more sounds through experience. Many waveforms after first experience are discarded, unnoticed and without conscious interpretation. Understanding and interpreting what the ear transmits to the brain is a continual process, developing from the instantaneous survival reactions to ideas that drive consciousness. The listening process continues through one's lifetime.

Physical descriptions of sound properties and listening do not explicate the phenomenal world of perception that takes place in the auditory cortex. According to Stephen Handel in Listening: an Introduction to the Perception of Auditory Events, "There is no perception that always comes from one and only one pressure variation."

Physicists then continue to study the nature of physical descriptions of sound and psychologists the perception of sound. Physicists can measure acoustics and pressure waves. Psychologists measure the experience of the listeners. Thus neither discipline can solve auditory perception. Sound pressure patterns assist hearing but cultural history and experience influence listening.

Sound as Meditation

Nāda Yoga is a form of meditation that directs attention to the delicate interplay of sounds and silences in our internal and external environments. Sound is not limited to musical or speaking sounds, but is inclusive of all perceptible vibrations (sonic formations). This relationship of all perceptible sounds is important and becomes the foundation for this meditation practice.

In order to acquire the discipline and control that this meditation requires, physical and mental relaxation as well as concentration is essential. Other practices of yoga and meditation can be useful as they are means to similar results. The practice of Nāda Yoga is intended to facilitate creativity, which means the formation of new patterns, exceeding the limitations and boundaries of old patterns, or using old patterns in new ways.
If you are narrow in your awareness of sounds, you are more likely to be disconnected with your environment. More often than not, urban living causes narrow focus and disconnection. Too much information is coming into the auditory cortex, or habit has narrowed listening to only what seems of value and concern to the listener. All else is tuned out or discarded as garbage.

Compassion and understanding comes from listening impartially to the whole space/time continuum of sound, not just what one is presently concerned about. In this way, discovery and exploration can take place. New fields of thought can be opened and the individual may be expanded and find opportunity to connect in new ways to communities of interest. Practice enhances openness.

The Science of Sound

Sound is produced by moving objects, and is itself a kind of motion. Imagine that you have struck a bell. The metal of which the bell is composed is actually rather elastic and so moves rapidly back and forth, or oscillates in response to the blow. The air next to the bell also moves rapidly back and forth. Notice that the air next to the bell will move not only forward with the metal next to it but back with it as well. The air, therefore, experiences no net movement. That is, the average of its motion is zero, for it always ends up back where it started. But air is a compressible gas, so when the bell moves outward it slightly compresses the air adjacent to it. Then when the bell moves back again, the air is made less dense (i.e., it is rarefied).
So what actually happens to the air is a combination of two things: movement back and forth, and alternate compression and rarefaction.

The air next to the bell is also in contact with yet more air. The alternating compressions and rarefactions will push against the adjacent air, producing similar (though slightly weaker) compressions, and rarefactions will push against the adjacent air, producing similar (though slightly weaker) compressions and rarefactions in it. This air, in its turn, causes yet more adjacent wire, to do the same thing. In this way compressions and rarefactions will be transmitted in steadily widening circles about the bell, much as ripples spread out from a dropped stone in a still pool. Because some energy is lost in the form of heat as these disturbances travel, they become even weaker, until at some distance away they may cease to be detectable. This takes longer to happen in a solid or incompressible fluid, such as water.

Imagine a very sensitive instrument capable of detecting changes in air pressure, and placed a short distance away from the bell. As each compression passes over it, the instrument registers a brief increase in air pressure. As each rarefaction passes over it, it registers a similar decrease. A graph drawn of these changes in air pressure plotted against time and pressure; would resemble a wave. This is what is meant by a sound wave.

Notice two things about this sound wave: There is a definite distance between the peaks and valleys. This is called amplitude: it is experienced as loudness. There is a definite distance between adjacent peaks. This is called the wavelength. The number of wavelengths that pass a point in a given time is called the frequency. We experience frequency as pitch. A loud sound has a greater amplitude than a soft one. A shrill tone has a higher frequency (i.e. a higher number of vibrations per second) than a deep tone. Middle C of the piano, for instance, has a frequency of 256 vibrations per second. High C has a frequency of 512 vibrations per second. Some frequencies are too high for human beings to hear, and some are too low.
Sounds of different qualities have different vibrations within their vibrations. These are called overtones; they make it possible to distinguish two instruments playing the same note at the same time, at least in the middle registers. A tremendous medley of vibrations impinges upon the ear at all times, and the moving parts of the ear vibrate in sympathy with all of them. Their mechanical motions are converted into electrical activity by special transducer cells, and ultimately reported to the brain, which analyzes and compares them for your pleasure or distress.

Anatomy of the Ear

The ear is made up of three parts:

1. **The Inner Ear**, which contains the essential organs of hearing and equilibrium (present in all vertebrates).

2. **The Middle Ear**, an air-filled chamber with one or more ossicles for conducting sound waves to the inner ear (present in amphibians and higher vertebrates only).

3. **The Outer Ear**, which collects the sound waves and conducts them to the tympanic membrane lying next to the middle ear (present only in reptiles, birds, and mammals but most highly developed in the latter).

Structure and function of different parts of ear. In higher vertebrates the ear is typically made up of three parts: an outer ear for the collection of sound waves, a middle ear for their transmission, and an inner ear specialized for sensory reception.

The Outer Ear

The outer ear is made up of two parts:

1. The pinna, or skin covered flap of elastic cartilage and muscles the auditory canal.

In humans, the pinna serves some function in collecting sound waves; in many other mammals (i.e. rabbit and cat), the pinna is freely movable and so is more effective. The auditory canal extends inward in an oblique direction so as to prevent hard objects from striking the tympanic membrane directly. Its walls are lined with hair and wax-secreting glands as a protection against the entrance of foreign objects.
The Middle Ear

The middle ear is separated from the external ear by the eardrum, or tympanic membrane, which consists of a stretched connective tissue membrane. Within the air-filled middle ear, a chain of three tiny ossicles, malleus, incus, and stapes, conduct the sound waves across the middle ear. This chain of bones is so arranged that the malleus (hammer) is in contact with the eardrum and the stapes (stirrup) is in contact with the oval window membrane of the inner ear. When sound waves strike the tympanic membrane, its vibrations are transmitted by the chain of ossicles to the inner ear. To increase the tension of the tympanic for delicate sounds or to counteract undue displacement of the membrane, a muscle (tensor tympani) is inserted on the malleus and the tympanic membrane inward. A similar muscle (stapedius) is fastened to the stapes and controls the tension of the fluid in the external ear. The middle ear communicates with the pharynx by means of the eustachian tube, which regulates the air pressure in the middle ear. Both the eustachian tube and the middle ear are lined with mucous membranes and are subject to invasion by disease germs from the throat region.

The Inner Ear

The inner ear consists essentially of labyrinths, one within the other. The inner one is called the membranous labyrinth and is a closed ectodermal sac filled with the fluid, endolymph. The part involved with hearing (cochlea) is coiled like a snail's shell, making two-and-a-half turns. Surrounding the membranous labyrinth is the bony labyrinth, which is a hollowed-out part of the temporal bone and conforms to the shape and contours of the membranous labyrinth. In the space between the two labyrinths, perilymph, a fluid similar to endolymph, is found.

The cochlea is divided into three longitudinal canals that are separated from each other by thin membranes. These canals became progressively smaller from the base of the cochlea to the apex. One of these canals called the vestibular canal; its base is closed by the oval window. The tympanic canal, which is in communication with the vestibular canal at the tip of the cochlea, has its base closed by the round window. Between these two canals is the cochlear canal, which contains the organ of hearing, the organ of Corti. The latter organ is made up of fine rows of hair cells that run lengthwise from the base to the tip of the cochlea. There are at least 24,000 of these hair cells in the human ear, each cell with many hairs projecting into the endolymph of the cochlear canal and each connected with neurons of the auditory nerve. The hair cells rest on the basilar membrane, which separates the tympanic and cochlear canals, and are covered over by the tectorial membrane found directly above them. The basilar membrane is composed of transverse connective tissue fibers that vary in length at different levels of the cochlea.

In hearing a sound, sound waves are picked up by the external ear and transmitted to the auditory canal to the tympanic membrane, which cause it to vibrate. These vibrations are conducted by the chain of ear ossicles to the oval window, which transmits the vibrations to the fluid in the vesicular and tympanic canals. The vibrations of the endolymph cause the basilar membrane, with its hair cells, to vibrate so that the latter rub against the tectorial membrane. This stimulation of the hair cells causes them to initiate nerve impulses in the fibers of the auditory nerve, with which they are connected. In the place of pitch discriminations it is stated that when sound waves
strike the inner ear the entire basilar membrane is set in vibration by a wave of displacement, which increases in amplitude from the oval window toward the apex of the cochlea. The displacement wave reaches a maximum at the region of the basilar membrane that resonates with the frequency of the incoming sound waves. The particular hair cells in that region will be stimulated and the impulses conveyed to the fibers of the auditory nerve. Those impulses that are carried by certain fibers of the auditory nerve are interpreted by the hearing centre as particular tones. The loudness of a tone depends on the number of hair cells stimulated, whereas the **timbre**, or quality of a tone is produced by the pattern of the hair cells stimulated by sympathetic vibration. This latter characteristic of tone enables one to distinguish between different human voices and different musical instruments, even though the notes in each case can be of the same pitch and loudness.

**Nāda Yoga and its Origins**

Embedded in the history of Yoga, Nāda Yoga is most skillfully recognized through meditation on sound. Russill Paul author of *The Yoga of Sound* says that "Nāda Yoga embraces the notion that the universe is vibratory, and therefore sonic in nature. Yoga claims that the universe is made up of infinitesimally small subatomic strands of energy vibrating at different frequencies. This cosmology recognizes that the shapes we see in nature are constructed of vibrating entities, each with a different frequency and wavelength. The speed at which an object vibrates (as well as its size, however infinitesimal) contributes to its particular sound, thus, all the tones and frequencies that comprise the known universe become the subject of meditation in Nāda Yoga."

The root of the word nada (naad) means sound. The root of the word yoga (yuj) means union or "to yoke." One's union (subject) with the sound (object) is the goal of Nada Yoga. In yoga there are two kinds of sounds in the universe, ahad sounds and anahad sounds. Ahad sounds are sounds created by something striking something else. The wind blowing through the trees, the breath striking the vocal chords and mouth- these are ahad sounds. Ahad sound vibration must travel through matter, because these sound vibrations are transmitted through the movement of molecular structures; Anahad literally means the un-struck melody. We cannot hear all sound with our ears. In fact all matter is vibrating at certain frequencies. Rocks and stones have a very slow and low frequency. Color and light have a high frequency and can travel through space. Our minds have the ability to grasp this concept yet it is through the experience of the body that one can fully comprehend anahad.

Nāda Yoga as a practice involves a deep listening to the sounds of nature and recognizing its ongoing presence in our daily lives. It also includes listening deeply to the body, to its inner sounds and the resonance that those sounds create.

According to yoga, sound occurs on four levels relating to frequency, degree of fineness and strength.

1. Vaikhari: The coarse (ordinary audible, material) sound
2. Pashyanti : The mental sound

3. Madhyama : The visualized sound

4. Para nada : The transcendent sound

The Vaikhari sounds are audible and can be physically produced. Vaikhari is the spoken sound. It is produced for example by rubbing or hitting two things against each other. Its vibrations are limited to a certain range. These ordinary sounds are the coarsest manifestation of Nāda. We are aware of the coarse sounds and we hear them everyday. They are vibrations which hit our ear drums from the space around us, from our surroundings.

Pashyanti in Sanskrit means: "that which can be seen or visualized". It is a subconscious sound which is linked to the characteristic of your mind and not to your vocal organs; tongue, throat or mouth. It is not heard with the physical ear, but with the inner ear. After having left the coarse and tangible sounds that we experience through the senses, we can become conscious of the mental sounds. They are sounds which we hear in the mind. Their frequency and strength is dependent on both our mental and physical state. In a relaxed state they are easy to perceive. The sounds also become clearer when we are exhausted, agitated or after intense and prolonged physical activity.

Madhyama is a sound that can hardly be heard. ordinarily, when two objects hit each other they produce a coarse sound; like when we clap. But in the case of Madhyama no two things physically hit each other to produce an audible sound. Madhyama produces vibrations such as when one whispers. It is an intermediate sound. the word Madhyama means "in between" or "in the middle". So this middle sound can be called whispering or is like the sound of whispering. When we go deeper still, we reach the subtle sounds, the sound which is found in the inner space and which appears in visual form. Certain forms answer to certain sounds and certain states.

The transcendent sound, which has the highest frequency, is called Para Nada. Para means highest or farthest, and in this connection; transcendent. Para Nada is beyond the reach of the sense organs. It is heard in other dimensions, on other levels of consciousness. Behind the visual sounds the transcendent or supra-conscious sound is found. The transcendent sound and the transcendent consciousness are the same. In Nāda Yoga, universal consciousness is perceived in the form of sound.

We can compare the different levels of Nāda with other meditations where we begin in the senses, in order to satisfy the mind and create a state of security as a basis for going deeper. We can also begin in the physical: From having experienced the body and its muscles and organs we turn to the breath, which is experienced without any interference. In this way, a deeper relaxed state is gradually triggered.

With a mantra, a sound syllable which we repeat mentally, we transcend the mind and reach the inner sounds and symbols; pictures which we see within and which, depending on their nature, represent various levels of consciousness.
For the Nāda yogi it is important to make contact with the sounds that are found in the other dimensions: the mental and psychic. In this way, the capabilities of the mind are expanded.

In the Upanishads, the mantra OM is said to be the manifestation of Para. But not the audible OM, which we chant. That is not Para because it is the object of our hearing, our understanding and our logic. Therefore it cannot be called transcendent. Para is at the same time silent and eternal. It has form and its nature is Jyoti (light). It is different to the sounds one usually understands or hears.

The Upanishads state clearly about the Para Sound: “This is OM, this sound is OM.”

“Nada is sound.

OM is Nada Brahman.

Veda is Nada Brahman.

Sound is vibration.

Name is inseparable from form.

The form may vanish,

but the name or sound remains.

OM is the first vibration of sound.

The world has come out of Nada or OM.

In Pralaya all sounds merge in OM.

Sound vibrations are gross and subtle.

The quality of Akasha [space or ether] is sound.

Akasha is infinite.

So you can fill the ear with the infinite sound.”
Poses for Nāḍa Yoga

1. **The Nāḍa Yoga pose** is the most suitable pose for beginners. Take a fairly big and hard pillow, place it on the floor and sit astride it, so there is pressure on the perineum. Sit with the soles of the feet flat on the floor. the knees project upwards, so that the elbows can rest on them. The back is kept straight.

   The put a thumb in each ear and at the same time rest the head in the hands.

2. Sit in **Siddhasana** *(perfect pose)* with a stool in front of you to rest the elbows. This pose should be used by those who can sit in this pose for a long time without moving.

3. For the more advanced, **Yoni Mudra** *(as in the womb)* is recommended. Sit in **Siddhasana**.
   Inhale and close the ears with the thumbs. Place the index fingers over the eyelids, to they can stay closed without being pressed too hard. Close the nostrils with the middle fingers, one at each side and close the mouth with the ring and little fingers by placing them above and below the lips respectively.

   **Variation**: Do the above but without closing the mouth and nose. Stay sitting for longer and breathe normally.

4. For the even more advanced Nada Yoga practitioner, who has succeeded in the following sounds with closed ears: sit in **Siddhasana** with the hands resting on the knees and the index finger in contact with the thumb, either at its root or at its top. The three other fingers are stretched out and together. This position of the hands is called **Chin Mudra**.

   At this stage you need no longer close the ears if there is reasonable silence around you.

   “**Bathe in the centre of sound,**
   
   *as in the continuous sound of a waterfall.*
   
   **Or, by putting the fingers in the ears,**
   
   *hear the sound of sounds.***
   
   (Vigyana Bhairava Tantra)

**When you sit in the Pose in Nāḍa Yoga**

Lock the ears gently with your fingers. Listen inwardly up to **bindu** (the convergence point) at the top of the back of the head.
When you concentrate on Bindu, after having closed the ears, it is here that the sound in manifested from the transcendental plane to the next and where you experience it as an astral sound.

Now, you may hear the sound of a bumble bee. It can be the sound of a musical instrument, a harp perhaps or a flute, the rhythm of a guitar, birds chirping at sundown, crickets or grasshoppers. It can even be the vision of the sky on a starry night where a total silence prevails.

Continue listening for some time to the sound which comes to you first.

Let the first sound be the starting point- the one end of a thread. Hold on to it as closely as you can. When you are getting really close to the sound, then you will experience that other sounds arise in the background. Now you let go of the first sound, move, onto another and concentrate intensely on it.

While you listen, the sound you have chosen will become clearer. You get closer to the sound, both mentally and physically, and feel as if you become one with it. When this has happened you discover that other sounds have arisen in the background, and you choose one of them, which you then concentrate on.

In this way you can continue with a fourth, a fifth, a sixth sound, a seventh eighth and ninth inner sound. Different sounds can arise. It can be like a river flowing through the landscape; the distant murmur of the sea, or a bell which rings or chimes.

It if is difficult to discover a sound at Bindu, then let the mind search at Sahasrara or Ajna (chakras), or at the left or right ear drum. Or experience a space within, hearing it there in the middle of the head. Or search at the eyebrow centre- go on until you are sure you hear a sound.

The method to discover the sound is simple. Instead of imagining a sound, put all your attention on listening, and you will soon hear the first sound. The sound you have chosen should be followed until it becomes clear and distinct. As soon as it is distinct, another sound, another tone, finer or weaker is heard or felt in the background, and then you listen to that, till that has become prevailing.

Sometimes it is a finer sound of the same kind, i.e. a flute, but finer, more subtle, than the first, that you discover behind the first; sometimes it is like you hear in a different way or another direction and quite another kind of sound appears, i.e. of bells chiming.

When you discover a new sound, then let go of the one you just listened to, and follow the new. Sound after sound will keep coming up as if from the bottom of an ocean.

The Nada Yoga Sadhana unfolds and reaches the unbroken sound, which in yoga is known as Anahata Nada- the sound which continues. It has no beginning and no end.
At the highest point of your practice you may feel that the whole body and mind, the whole personality is nothing but rapid vibrations, a movement of fast sound vibrations. Thus you experience yourself as sound.

Hatha Yoga Pradipika: Verses on Nāda Yoga

Chapter four: Samadhi

Verse 64-102

Salutation to Sushumna, Kundalini, the nectar flowing from the moon, to the mindless state of mind (manonmanī), to the great Shakti, to the atma.

I will describe the concentration on Nada as told by Gorakhnath which is attainable by even the unlearned who are unable to comprehend Thatness (tattwas).

There are one and a quarter core ways told by Sri Adinath to attain laya, but we think the one and only thing is nada anusandhana or the exploration of nada.

The yogi, sitting in muktasana, concentrated in shambhavi, should listen closely to the nada heard within the right ear.

Closing the ears, nose and mouth, a clear distinct sound is heard in the purified subhumna.

In all the yogic practices there are four stages; arambha, beginning; ghata, vessel; parichaya, increase; nishpatti, consummation. 

The Brahma granthi being pierced, the feeling of bliss arises from the void; wondrous, tinkling sounds and the unfrock sound (anahata) are heard within the body.

When the yogi experiences arambha in the void of the heart, his body becomes lustrous and brilliant with a divine smell and diseaseless.

In the second stage, when ghata is achieved, the Shakti goes in to the middle nadi. Being fixed in his asana the wise yogi is comparable to a divine being.

When the Vishnu granthi is pierced the greatest bliss is revealed. Then from the void the sound of the kettledrum manifests.

In the third stage is the experience of the sound of the drum. Then there is the great void and one enters the place of total perfection or siddhi.
Then the bliss of chitta being attained, natural or spontaneous ecstasy arises. Imbalance of the three humours or doshas, pain, old-age, disease, hunger, sleep are overcome.

If the Rudra granthi is pierced, the fire of prana moves to the place of Ishwara. Then in the stage of nishpatti or consummations the tinkling sound of the flute resonating like a vina.

This is called raja yoga when there is one element in the mind or chitta. The yogi becomes Ishwara, being the creator and destroyer.

Whether there is liberation or not, nevertheless there is pleasure. The pleasure arising from laya is derived from raja yoga.

There are practitioners of hatha yoga who do not have the knowledge of raja yoga. I consider them as mere practitioners because they derive no fruits for their efforts.

In my opinion, contemplation on the eyebrow centre leads to a mindless state immediately. It is a suitable method even for those with less intellect to attain the state of raja yoga. The laya attained through nada gives immediate experience.

There is plenitude of bliss in the hearts of the great yogis who remain in samadhi through nada anusandhana or exploration of nada, which is unequalled and beyond any description, known by the one and only Gurutnath.

Having closed the ears with the hands, the muni should listen to the inner sound with the mind steady on that, then the state of stillness is achieved.

Through sustained listening to the nada, awareness of the external sound diminishes. Thus, the yogi overcomes mental turbulence within fifteen days and feels the pleasure.

When he first begins to hear sounds during practice, there are various prominent nadas but with prolonged practice the subtlest of subtleties becomes audible.

The first fruits are the sounds of the ocean, then clouds, the kettledrum and jharjhara drum. In the middle stage the shankha (conch), gong and horn.

Now, reaching the inner point of conclusion, are the tinkling of bells, flute, vina and humming of bees. Thus, the various nadas are produced and heard from the middle of the body.

Even when the sounds of clouds and the kettledrum are heard, attention should be kept on even subtler nada.

Though the attention may go from the deep to the subtle or subtle to deep, the mind should not move to various things other than the sound.
Whatever nada the mind initially adheres to, it becomes perfectly still in that and dissolves with it.

Just as the bee drinking honey is unconcerned about the fragrance, so the mind engaged in nada is not craving for sensual objects.

By the sharp goad, the nada, the mind, which is like a furious elephant roaming in the garden of the senses, is controlled.

When the mind ceases to be fickle and is united by fixing it in nada, it becomes immobile like a wingless bird.

One who desires complete dominion of yoga should thus explore the nada with an attentive mind and abandon all thoughts.

Nada is like the net which snares the deer (mind) inside. It is also like the hunter who slays the deer (mind) inside.

It is like the bold locking a horse inside, for one who is self-controlled. The yogi must therefore meditate regularly upon nada.

Just as liquid mercury is solidified by sulphur, so mind is bound by nada and freed from restlessness. the one moves unsupported in void.

Hearing the nada, mind, which is like a serpent within, becomes captivated and oblivious to all else, not moving anywhere else.

Just as a deer attracted by the sounds of bells is easily killed by an expert archer, so is the mind silenced by an adept in nada yoga.

One hears the sound of the unstuck resonance (anahata shabda); the quintessence of that sound is the (supreme) object (consciousness). The mind becomes one with that object of knowledge and it dissolves therein. That is the supreme state of Vishnu (sthiti).

The conception of akasha (the substratum of sound) exists as long as the sound is heard. The soundless, which is the supreme reality, is called the supreme atma.

Whatever is heard of the nature of the mystical nada is indeed Shakti. that in which all the elements (panchatattva) find dissolution, that is the formless being, the supreme lord (Paramehwara).
Sound and Yoga

Nāḍa Yoga is generally a phrase foreign to today's average yoga practitioner, yet the most embedded in the history of Sound and Yoga. It promotes investigation of ourselves and our interwoven relationship to nature solely by a practice of deep listening and meditation. With science and technology evolving everyday we gain valuable insight into the phenomenon of the human body and its interdependence with its environment. Just as science has evolved with time, so too, has Nāḍa Yoga (now more commonly referred to as "Sound and Yoga") and other sound practices have also emerged from this evolution.

Here, we will look briefly at mantra and the unique application of the voice to achieve higher states of awareness and attention. At the basis of all yoga sound practices it is recognized that the potential of our human nature moves well beyond our physical anatomy.

Mantra is experienced at a subtle level in which the practitioner integrates fully with their body. This is the second of a four-tier practice, which is referred to as ghatavastha in Sanskrit, an integration of the three sariras (body, mind, and spirit).

1. Karana Sarira (causal body) - composed of the spiritual sheath.
2. Sukshma Sarira (subtle body) - comprised of the psychological and intellectual sheaths.
3. Karya Sarira (gross body) - composed of the anatomical sheath.

Yoga states that sound is not only carried by our throat and vocal cords (karya-sarira) but that we also can articulate sounds in parts of the body which are connected with particular emotions. The body covers 50 sounds of the Sanskrit language and these sounds are carried throughout the body via a network of nadis and chakras (sukshma sarira). Nadis and chakras are energetic pathways and centres that carry prana, a universal vital energy that sustains human life.

According to Yoga, the nadis and chakras have healing powers that unlock the spirit (katana sarira) and can be obtained with a dedicated practice of japa (repeated chanting) on the sounds of the chakras. Japa is a meditative repetition of a mantra. Mantra is a sound, syllable, word or group of words that is believed to have transformative powers. Chakras have a certain number of petals depending on the number of sounds that it is capable of producing. During a practice of japa, when a specific sound is produced, the sound vibrates the petals which in turn vibrates the chakra. At first glance what appears as a basic repetition of a word with time and practice reveals the incredible nature of the human body to assimilate itself.
Vocal Anatomy

Although there's a part of the body called "the voice box" (also known as the larynx), singing and speaking require far more than the use of this one organ. Singing creates sound by using the abdominal and back muscles, the rib cage, lungs, the oral cavity, and more.

The vocal cords (medically they are "vocal folds") are membranes that snap open and closed while singing, speaking, or making noises. As air pressure builds up against them, the folds snap together and a sound is created. When they are snapped gently, a soft sound is heard; when they snap forcefully, a loud sound is the result. The quicker the cords open and close, the higher the resulting pitch will be. (These are durable little suckers: vocal cords open and close 100 times per second during normal speech).

The "false" vocal folds should not be confused with the folds described above. The false vocal folds sit just above the true vocal cords and prevent food, etc. from entering the trachea when swallowing. They typically don't play a major role in speech or singing.

When you start to sing, you begin by breathing. The muscles of the larynx bring the vocal cords together. They stay closed until enough breath (i.e. enough pressure) builds up and a burst of air escapes through the cords. As you run out of breath, the vocal cords are once again drawn together. So, the vocal cords do not work like a stringed instrument; they don't produce sound by vibrating against each other. Sound is actually produced by the pressure changes created when small jets of air pass through moving vocal cords; this is why it can be helpful to think of breath control as the steam engine that makes the machinery of singing function.

The picture to the right is a microscopic illustration of the vocal cords. You can see the the very term "cord" is misleading, since the cords are actually folds of tissues. These cords, or folds, are made up of several layers, and in a healthy cord, the uppermost layer is loose.

The top illustration will give you an idea of how the vocal folds open and close during sound making. They don't open all at once; the lower part opens first, then gradually the cords open wide, then close again. Anything that interferes with this process (i.e. a swelling or inflammation from incorrect singing, smiling or small lesions that cause hoarseness) reduces voice quality.
The Larynx

The voice box (or larynx) rests in the neck and is made of four basic components; the skeleton, "intrinsic muscles" (which move the vocal cords, among other things), "extrinsic muscles" (which adjust the position of the larynx in the neck), and mucosa. The intrinsic muscles alter the position, shape, and tension of the vocal cords and can bring them close together, spread them apart, or stretch them in length.

The Resonators

The tongue, palate, oral cavity, nasal cavity, sinus cavity, chest cavity, pharynx, and other anatomical structures act as resonators for singing; they are mostly responsible for vocal quality. The vocal cords themselves produce only a "buzzing" sound; the resonators are necessary to create music and speech.

A common method of finding good placement is to sing while smiling inwardly. This raises your cheekbones and allows the vocal sound to enter and resonate inside the area called the "mask" (you'll feel vibrations in the teeth/lips, cheekbones, nasal cavity, and possibly the forehead).

- Your sinus cavities are where you'll resonate your highest notes.
- Your nasal cavity, your teeth/lips, and the upper pharynx (these three, some refer to as "the mask") is where your head voice lies.
- The oral cavity, soft palate, and middle pharynx are where you'll resonate your chest voice. If you bring your head voice down into your lower notes, it will also "sit" here.
- The upper chest cavity (which will make your breast bone vibrate) and lower pharynx are where much of your chest voice singing resonates.

The Power Tool

What we typically call the diaphragm is the power source for singing. The purpose of this diaphragm is to generate a force that directs a controlled air stream between the vocal folds, which is necessary for vocalization to occur. The principle muscles that help us breathe in are the diaphragm (a dome-shaped muscle that extends along the bottom of the rib cage), and the rib muscles.
Nadis and Chakras

The physical body (karya sarira) is shaped in accordance with the nature of the subtle body (sukshma sarira). The physical body is something like water. When water is heated, the steam or vapour corresponds to the subtle body. In the same way, the subtle body is within the gross/physical body. The gross body cannot do anything without the subtle body. Every gross centre of the body has its subtle centre. A clear knowledge of the gross body is of utmost importance as this Yoga deals with the centre of the subtle body.

Nadis

The Sanskrit word nadi derives from the root nad, which means "flow", "motion", or "vibration". The word itself suggests the fundamental nature of a nadi: to flow like water, finding the path of least resistance and nourishing everything in its path. The nadis are our energetic irrigation system; in essence they keep us alive.

According to many Tantric texts, the human body contains 72,000 nadis that channel prana to every cell. Some are wide and rushing, others are a mere trickle. When this system flows freely, we are vital and healthy; when it becomes weak or congested, we struggle with poor mental and physical health. The practices of hatha yoga are so effective because they strengthen the flow of prana in our bodies, invigorating the current so that it carries away obstructions that block the free flow of energy.

Three nadis are of particular interest to yogis. The sushumna (most gracious) nadi is the body's great river, running from the base of the spine to the crown of the head, passing through each of the seven chakras in its course. It is the channel through which kundalini shakti (the latent serpent power) and the higher spiritual consciousness it can fuel - rises up from its origin at the muladhara (root) chakra to its true home at the sahasrara (thousandfold) chakra at the crown of the head. In subtle body terms, the sushumna nadi is the path to enlightenment.

The ida and pingala nadis spiral around the sushumna nadi like the double helix of our DNA, crossing each other at every chakra. If you visualize the caduceus, the symbol of modern medicine, you'll get a rough idea of the relationships among the ida, pingala, and sushumna nadis. Eventually all three meet at the ajna (middle-eye) chakra, midway between the eyebrows.

The ida nadi begins and ends on the left side of sushumna. Ida is regarded as the lunar nadi, cool and nurturing by nature, and is said to control all mental processes and the more feminine aspects of our personality. The color white is used to represent the subtle vibrational quality of ida.

Pingala, the solar nadi begins and ends to the right of sushumna. It is warm and stimulating by nature, controls all vital somatic processes, and oversees the more masculine aspects of our personality. The vibrational quality pingala is represented by the color red.

The interaction between ida and pingala corresponds to the internal dance between intuition and rationality, consciousness and vital power, and the right and left brain hemispheres. In everyday
life, one of theses nadis is always dominant. Although this dominance alternates throughout the
day, one nadi tends to be ascendant more often and for longer periods than the other. This results
in personality, behavior, and health issues that can be called ida-like or pingala-like.

Ida-like individuals have lunar, or nurturing, qualities but may lack the verve to sustain a strong
yoga practice. They are full of potential, but unless they develop their pingala side may never
manifest that potential in either worldly affairs or spiritual development. Pingala-like individuals
have solar qualities: type A personalities, lots of creativity, abundant vitality. But unless they
develop their ida side, they may lack the quietude, introspection and receptivity necessary to
yield to the grace of spiritual awakening.

Bringing ida and pingala into equilibrium is a major focus of hatha yoga- so important in fact,
that the term hatha symbolizes this balance. Although the word hatha literally means "forceful"
in Sanskrit, it is composed of ha and tha, two esoteric bija (seed) mantras that have arcane
meaning and power. Ha represents the solar qualities, the vital force, of pingala; tha represents
the mind and the lunar qualities of ida. Balancing sun and moon, or pingala and ida, facilitates
the awakening and arising of kundalini, and thus the awakening of higher consciousness. In fact,
some yoga teachings hold that as long as either ida or pingala predominates, sushumna stays
closed and the power of kundalini lies dormant.

The most powerful method of balancing ida and pingala is Nadi Shodhana, alternate-nostril
breathing. (Literally, the Sanskrit means "nadi cleansing.") This practice is effective because the
ida nadi is directly connected to the left nostril, and the pingala nadi to the right. A few rounds of
this basic pranayama technique at the end of an asana practice are an excellent way to help
restore equilibrium between the two nadis and to compensate for any imbalance you may have
inadvertently caused during your practice.

Chakras

Chakras are considered in Yoga as the astral or subtle body. These have corresponding centres in
the spinal cord and the nerve-plexuses in the gross body. Each Chakra has control and function
over a particular centre in the gross body yet cannot be seen by the naked eyes.

Sukshma Prana (subtle) move in the nervous system of the subtle body. Sthula Prana (gross)
moves in the nervous system of the subtle body. Sthula Prana (gross) moves in the nervous
system of the gross physical body. The two courses are intimately connected. They act and react
upon each other.

Wherever there is an interlacing of several nerves, arteries and veins, that centre is called
Plexuses. The physical gross plexuses that are known to the Vaidya Shastra are Hepatic, Cervical,
Brachial, Coccygeal, Lumbar, Sacral, Cardiac, Epiigastric, Esophageal, Pharyngeal, Pulmonary,
Lingual, Prostatic. Similarly there are plexuses or centres of Sukshma Prana in the Sushamna
Nadi. All the functions of the body, nervous, digestive, circulatory, respiratory, genito-urinary
and all other systems of the body are under the control of these centres in Sushumna. These are
subtle centres of vital energy. These are the centres of consciousness (Chaitanya). These subtle
centres of Sushumna have their corresponding centres in the physical body. For example, Anahata Chakra which is in the Sushumna Nadi has its corresponding centre in the physical body at the heart (Cardiac Plexus).

The subtle centres in the Sushumna Nadi are otherwise known as Lotuses or Chakras. A particular Tattva (element) preponderates at every Chakra. There is a presiding deity in each Chakra. In every Chakra a certain animal is represented. There are six important Chakras: Muladhara, Svadhisthana, Manipura, Anahata, Vishuddha, and Ajna. Sahasrara is the chief Chakra. It is in the head.

When Kundalini is awakened it passes on from Muladhara to Sahasrara through all the Chakras. At every centre to which the Yogi directs the kundalini, he experiences a special form of Ananda (Bliss) and gains special Siddhis (psychic powers) and knowledge. He enjoys the Supreme Bliss when Kundalini is taken to Sahasrara Chakra.

Each Chakra has a particular number of petals with a Sanskrit alphabet on each petal. The vibration that is produced at each petal is represented by the corresponding Sanskrit letter. Every letter denotes the Mantra of Devi Kundalini. The letters exist in the petals in a latent form. These can be manifested and the vibrations of the Nadis felt during concentration.

The number of petals of the lotuses varies. Muladhara, Svadhishthana, Manipura, Anahata, Vishuddha and Ajna Chakras have 4, 6, 10, 12, 16, and 20 petals respectively. All the 50 Sanskrit letters are on the 50 petals. The number of petals in each Chakra is determined by the number and position of the Yoga Nadis around the Chakra. From each Chakra a particular number of Yoga Nadis crop up. The Chakra gives the appearance of a lotus with the Nadis as its petals. The sound produced by the vibrations of the Yoga Nadis is represented by the corresponding Sanskrit letter. The Chakras with their petals hang downwards when Kundalini is at the Muladhara Chakra. When it is awakened, they turn towards Brahmarandhra.

**Muladhara Chakra**

Muladhara Chakra is located at the base of the spinal column. It lies between the origin of the reproductory organ and the anus. It is just below the Kanda and the junction where Ida, Pingala and Sushumna Nadis meet. Two fingers above the anus and about two fingers below the genitals, four fingers in width is the space where the Muladhara Chakra is situated. This is the Adhara Chakra (support) as the other Chakras are above this. Kundalini, which gives power and energy to all the Chakras, lies at this Chakra. Hence this, which is the support of all is called Muladhara or Adhara Chakra. From this Chakra four important Nadis emanate which appear as petals of a lotus. The subtle vibrations that are made by each Nadi are represented by the sanskrit syllables Va, Scha, Sha, and Sa.

The seed mantra syllable is "Lam". Curve the tip of your tongue up and back, and place it on the rear section of the upper palate to pronounce a sound like the word alum without the initial a.
**Svadhishthana Chakra**

Svadhishthana Chakra is located within the Sushumna Nadi at the root of the reproductory organ. This has control over the lower abdomen and kidneys in the physical body. From this centre six Yoga Nadis emanate, which appear like the petals of a lotus. The vibrations that are produced by the Nadis are represented by the Sanskrit syllables bam, bham, mam, yam, ram, and lam.

The seed mantra is "Vam". Place the upper set of teeth on the inner section of your lower lip and begin with a breathy consonant to imitate the sound of a fast car. Pronounce the mantra like "fvam".

**Manipura Chakra**

Manipura is the third Chakra from the Muladhara. It is located within the Sushumna Nadi, in the Naghi Sthana (region of navel). This Chakra corresponds to the Solar Plexus in the physical body and has control over the liver and stomach. This is a very important centre. From this Chakra emanate ten Yoga Nadis which appear like the petals of a lotus. The vibrations that are produced by the Nadis are represented by the Sanskrit syllables dda, ddha, nna, ta, tha, da, dha, na, pa, and pha.

The seed mantra is "Ram". Place the tip of your tongue on the roof of the front section of the upper palate, roll the r like in Spanish, and pronounce the mantra like the first part of the word rum-ble.

**Anahata Chakra**

Anahata Chakra is situated in the Sushumna Nadi (Sukshma centre). It has control over the heart. It corresponds to the Cardiac Plexus in the physical body. From here 15 Yoga Nadis emanate. The sound that is produced by each Nadi is represented by the following Sanskrit syllables kam, kham, gam, gham, ngam, cham, chham, jam, jham, nyam, tam, and tham. Anahata sound, the sound of Shabda Brahman, is heard at this centre.

The seed mantra is "Yam". Pronounce it by inhaling audibly though your mouth, and pronounce the word hum (as in humming); allow the breath to extend beyond the resolution of the consonant.

**Vishuddha Chakra**

Vishuddha Chakra is situated within the Sushumna Nadi at the base of the throat, Kantha-Mula Sthana. This Chakra corresponds to Laryngeal plexus in the physical body. From this centre emanate 16 Yoga Nadis which appear like the petals of a lotus. The vibrations that are produced by the Nadis are represented by the 16 Sanskrit syllables.
The seed mantra is "Ham". Pronounce it by inhaling noiselessly through your mouth, and pronounce the sound like the word yum (as in yummy); allow the sound along with your breath to fill your mouth and throat cavity.

**Ajna Chakra**

Ajna Chakra is situated within the Sushumna Nadi and its corresponding centre in the physical body is at the space between the two eyebrows. This is known as Trikuti. This is the seat of the mind. There are two petals (Yoga Nadis) on each side of the lotus (Chakra) and the vibrations of these Nadis are represented by the Sanskrit letters: Ham on the left petal and Ksham on the right.

The seed mantra is "Sham". Pronounced shum, this sound is formed in the latter part of the palate.

**Sabasrara Chakra**

Sahasrara Chakra is the abode of Lord Siva and is situated at the crown of the head. When Kundalini is united with Lord Siva at the Sahasrara Chakra, the Yogi enjoys the Supreme Bliss, Parama Ananda. The word Sahasradala-Padma denotes that this padma has 1000 petals. That is, one thousand Yoga Nadis emanate from this centre. There are different opinions about the exact number of petals. It is quite sufficient if you know that innumerable Nadis proceed from this centre. As in the case of other Chakras, the vibrations that are made by the Yoga Nadis are represented by the Sanskrit letters. All the 50 letters of the Sanskrit alphabet are repeated here again and again on all Yoga Nadis. This is a Sukshma centre. The corresponding centre in the physical body is in the brain.

The seed syllable is "Aum". Pronounce it by inhaling audibly through your nostrils, and direct the stream of air to the point between your eyebrows. Pronounce the sound along with your exhalation as a subtly audibly whisper, allowing the sound and breath to resonate in the cranial area.

The term "Shat-Chakras" refers to the chief six Chakras, Muladhara, Svadhihthana, Manipura, Anahata, Vishuddha and Ajna. Above all these we have Sahasrara Chakra. This is the chief of all the Chakras. All the Chakras have their intimate connection with this centre. Hence this is not included as one among the Shat-Chakras. This is situated above all the Chakras.
The Sound of Om
By Richard Rosen

"Om-the ancient sacred syllable- may be the only mantra you'll ever need."

Mantras, sacred chants, come in all shapes and sizes. They can be composed of sentences, single words, or even single syllables; they can be perfectly intelligible or completely mystifying (at least to the uninitiated).

Single-syllable mantras, known as bija (seed) mantras, are the easiest to remember and recite; they're also the most powerful. It's believed that, just as a tiny seed contains a majestic tree, each bija contains vast amounts of spiritual wisdom and creative force. One of the oldest and most widely known of these seeds is om.

Om is the "primordial seed" of the universe- this whole world, says one ancient text, "is nothing but om." It is also considered to be the root mantra from which all the mantras emerge and to encapsulate the essence of the many thousands of verses of Hinduism's holiest texts, the Vedas. According to the Katha Upanishad (2.15), om is the "word which all the Vedas rehearse."

As such, om is the meditative seed par excellence. Patanjali- who wrote the Yoga Sutra and is considered to be the father of classical yoga- taught that when we chant this sacred syllable and simultaneously contemplate the meaning of it, our consciousness becomes "one-pointed: and prepared for meditation. In a commentary on the Yoga Sutra, the ancient sage Vyasa noted that through chanting om "the supreme soul is revealed." In a similar vein, Tibetan scholar Lama Govinda wrote that om expresses and leads to the "experience of the infinite within us." Thus, chanting om may be the easiest way to touch the Divine within your very self.

Yogis often meditate on the four "measures," or parts, of om. Though commonly spelled om, the mantra actually consists of three letters, a, u, and m. (In Sanskrit, whenever an initial a is followed by a u, they coalesce into a long o sound). Each of these three parts has numerous metaphysical associations, which themselves serve as meditative seeds. For example, a (pronounced "ah") represents our waking state, which is also the subjective consciousness of the outer world; u (pronounced "ooh") is the dreaming state, or the consciousness of our inner world of thoughts, dreams memories, and so on; and m is the dreamless state of deep sleep and the experience of ultimate unity.

By contemplating the meaning of each of these letters as we chant them, we are led through the three states of our ordinary consciousness to the mantra's fourth part, the anusvara (after-sound): om. The vibration slowly dissolves into silence, symbolic of the transcendent state of consciousness, equated with Brahman (the Absolute). This silence is the crown of the mantra; it
is described in the Maitri Upanishad as "tranquil, soundless, fearless, sorrowless, blissful, satisfied, steadfast, immovable, immortal, unshaken, enduring."

On Sound
by Richard Rosen

Sound is all around us, whether it's just random noise or organized into language or music. Sometimes the babble of modern life seems overwhelming, and if you're like me, you've learned to tune much of it out, if only to protect your sanity. I wonder though: if I learn to selectively ignore much of the unnecessary racket in my life, what effect will this have on my capacity to hear what is necessary, not only coming to me from the outside world, but from my inner world as well? And if I desensitize myself to the sound the world is making, do I do the same with the "sound" I'm making, in my everyday thoughts and conversations, and so inadvertently contribute to the very cacophony I'm trying to avoid?

The yogis are avid listeners, and no sound escapes their notice. It's no surprise then that they've elaborated a "science of sound" since they've turned just about everything available to us through our senses, in one way or another, into a vehicle for self investigation and self-liberation. Certainly Western science has also studied sound, but only as a material phenomenon; as is usual with their scientific inquiries, the yogis' occupation with sound has taken them beyond the physical realm into the metaphysical. They've discovered that the whole universe is shaped, pervaded, and ultimately, at the end of its life cycle (kalpa), reabsorbed by sound, or to be more precise, a vibratory power that has both audible and inaudible manifestations.

It may seem contradictory to talk about inaudible sound, though of course we're bombarded all the time with sounds we can't hear because of the inherent limitations of our sense of hearing. But for the yogis, subsonic and supersonic sounds are still considered audible, since we can hear them if our hearing is amplified with special instruments. Instead inaudible sound refers to subtle, or what the yogis call "unstruck" (anahata) sound. Naturally we can't hear subtle sound with our everyday ears, for that we need to train our special "yoga ear" with constant mediation practice. Subtle sound is, as it were, like a homing device: when we hear it with our yoga ear, we know we're heading in the right direction and getting closer to the goal of our practice. The yogis describe subtle sound in concrete terms, ocean waves, various drums, a gong, a horn, even oddly enough clouds, which suggests that the "unstruck" is unlike any sounds we've ever heard before.

The yogis distinguish between four "states" (bhava) of sound. In effect these are four stages of world/word creation, though it might be more accurate to say that all sound, whether random or organized, issues or broadcasts from the same "soundless" source in three increasingly "soundful" extensions or involutes. The source is called the "supreme sound" or "supreme voice" (shabda-brahman or para-vac), similar to what we in the West call the Logos (which mans both "speech" or "word" or "reason") or the Word of God. "In the beginning was the Word," writes the disciple John at the opening of his gospel, "and the Word was with God, and the Word was God." The ancient Greeks envisaged the Logos as the creative governing spirit of the world, while for the early Christians the Word was divine wisdom incarnated in the person of Jesus. Shabda-brahman is the transcendent, perfectly quiescent background to sound, in which
there's as yet no differentiation into subject and object, and so no world and nothing to say. In Shabda-brahman the world/word exists only in potential. But each of us is ultimately rooted this absolute, and given the proper training, we can develop our inborn ability to tap into its creative, transformative, and emancipative power.

The first faint stirring of Shabda-brahman's world/word-building impulse—actually the first moment of consciousness—gives rise to the second stage of sound, called "visible sound" (pashyanti-shabda). This unusual phrase needs some explanation, since pashyanti is still located in the subtle, wholly subjective sphere and certainly can neither be seen by a physical eye nor heard by a physical ear. The root of this Sanskrit word means, in its simplest and most literal sense, "to see, look at, observe." Here though it's used in a more specific sense that means "to see with the spiritual eye, to have insight or discernment."

With second-stage sound there's still no distinct separation between self and other, only an intense desire to be a self, an "I", and to "see" (and hear) itself in and through the "that", the world of objects.

The third stage is called the "middle sound" (madhyama-shabda) simply because of its location in the middle of the second and fourth states, between the sheer possibility of the world/word and the world's palpable inception and sounding out. Middle sound is also known as "hidden speech" because it's associated with thought or ideation and reason.

With this stage we're finally in familiar territory. Now a clear difference is established between self and other, and the Word is cut up into words, though not as yet fully "spoken" as the world/word.

Finally we arrive at the fourth stage of this involutionary scheme, "corporeal sound" (vaikhara-shabda). Several interesting explanations have been offered for the Sanskrit word vaikhari: for instance: it's what is in that which is most solid (vikhara), the body; or it's that which certainly (via) enters (ri) the space (kha) of the ear. Corporeal sound, whether random or organized, is the sound of Western science and the everyday world, including human speech (vac).

This graduated emergence of everyday sound from its soundless source has been compared to the process of human birth, in which the child first exists only as an abstraction in the loving thoughts of its parents, then as a fertilized egg, then as a fetus, and finally as a neonate. Every sound we make is a "child" of ours, and a so little world-creation. But only the yogis are aware of this intrinsic connection between their sounds and the soundless source. Their words then, as Vyasa remarks in his commentary to the Yoga-Sutra (2.36), are "infallible." If a yogi "says to somebody 'be virtuous' he becomes virtuous, if he says 'Go to heaven' he goes to heaven" (translation by Swami Hariharananda Aranya). The rest of us are unconscious of this connection; consequently our words are cut off from their source which makes them confused and confusing, and so a source only of ignorance (avidya) and bondage.

Though all sound radiates out from Shabda-brahman, and possesses some degree of its power, some sounds, called mantras, are far more powerful than others. The yogi's science of sound is often called mantra-vidya (mantra-wisdom) or mantra-shashtra (mantra-teaching). You've likely
heard the word mantra before, and maybe even recite mantras in your daily practice. It's a word that has no exact correlation in English. Though it's often translated as "hymn" or "prayer" these words have associations in English that are misleading when applied to mantra, and so it's probably best left untranslated.

A mantra is literally an "instrument of thought" (the Sanskrit man means "to think"), though not the kind of discursive thinking most of us engage in most of the time. To fill out this definition, we might add in brackets the word "concentrated" or "meditative" right before "thought" and the phrase "about the self" right after. Mantras are really sacred formulas, through which we can invoke and affirm our identity with the soundless source, but only if they're properly pronounced with due attention paid to their essential meaning, and held in strictest secrecy. They can consist of a single letter, a syllable or string of syllables, a word, or a whole sentence. The building-blocks of the mantras are the 50 letters of the Sanskrit alphabet, the holy "perfected" (samskrita) language of India. Collectively these letters or sounds are known as "divine city writing" (devanagami); individually each is affectionately called a "little mother" (matrika), a "seed" (bijā) or packet of spiritual energy, an aspect of spark of Shabda-brahman.

There are more mantras than we can found. Probably the most famous mantra in the West is the monosyllable OM, the "root mantra" (mula-mantra), which has been venerated and chanted by practitioners for thousands of years. To conclude this article, I'd like to work with a mantra that, while surely not as well known as OM, is nevertheless on every living creature's lips, breath after breath, throughout its life. It's called the "unspoken mantra" (ajapa-mantra).

The yogis teach that each inhale and each exhale mass a low though distinct sound. Remember how I asked you to "listen" at the start of this article? Sit back now, close your eyes, and listen carefully for a few minutes to the sound of your everyday breathing. (Incidentally, I was once taught that the yoga ear is situated at the back of the skull, just in front of that little bony bump you can feel at the apex of the neck. You might want to "listen" from this spot as an experiment). Don't get discouraged if you can't hear the mantra right away- just pretend that you do, and eventually it will come.

We're supposed to hear a hissing SA-sound with each inhale, and a breathy HA-sound with each exhale (though in some old instructional manuals the sounds are reversed). Joined together the two syllables make the mantra SAHAM (sometimes spelled SOHAM). This mantra, which we all speak with every breath we take from cradle to grave, bears witness to our eternal identity with the soundless source, "That (SA) am I (HA)." Try tuning into the unspoken mantra for a few minutes a few times each day, especially when you're feeling stressed or out of sorts. The practice will naturally draw your awareness inward, slow the speed of your breathing, and help soothe the tumultuous fluctuations (vritti) of your consciousness.
Meditation through Music

by David Gordon

Nāda Yoga means "union through sound." It is the ancient spiritual art and science of inner transformation through sound and tone. Meditation on sound is one universal path to Self Realization, accessible to anyone, and appropriate for people of any religion or spiritual aspiration. The term "Yoga" means to combine, coordinate, harmonize, integrate. Actually, there are many varieties of yoga, generally grouped into five categories:

1. Jnana yoga, the yoga of knowledge and self-inquiry
2. Bhakti Yoga, the yoga of devotion
3. Karma Yoga, the yoga of service
4. Kriya Yoga, the yoga of technique
5. Raja Yoga, a yoga integrating all the other four forms

Hatha Yoga, a basic form of Kriya Yoga, is the yoga of physicality, postures, and movement. It's probably the most well-known form of yoga in the West; however, the main classical text on yoga- the Yoga Sutras of Pantanjali- discusses physical postures (Hatha Yoga) in only three of its two hundred verses.

Within the heading of Kriya Yoga, or yoga of technique, there are several subtly different forms of yoga which teach meditation on sound as a path to spiritual growth and awareness. The three principal forms of this variety of yoga are Nada, Laya, and Surat Shabda yoga. The subtle differences between these three are beyond the scope of this article, and for the purpose of this discussion I group them all under the heading of "Nada Yoga." In the following paragraphs I use this term to mean, basically, "meditation on sound."

Absorption in Sound

Our mind easily becomes absorbed in sound. This is why we all- even infants and animals- enjoy listening to music. When the mind is fully concentrated on anything there arises a feeling of inner bliss. In Nada Yoga, we learn that the source of the sound may be external or internal. The sound may be "gross" or "subtle." That is, it may be "struck" out loud (Sanskrit: "hat), as from a voice or musical instrument; or "unstuck" and outwardly silent (Sanskrit: "anahat"), arising inwardly as from the subtle currents of energy or prana moving throughout the body.

With practice, concentration on carefully selected outer or "struck" sounds will enable the mind to become calm and transparent. At this point you may begin to become aware of the subtle inner "unstruck" sounds. You might perceive inner sounds that seem like bells, or flutes, or even a hum like an electrical transformer. Some of these sounds are actually just the sounds of your own body: blood pumping, or the electrical energy of nerves and inner ear. Other deeper sounds are the "sounds behind the audible sound." It is into this deeper realm that Nada yoga can take you.
Some traditions tell us that this subtle, inner sound originates in the "heart chakra of the subtle body," considered the centre of unstuck sound. Yogic tradition connects this inner sound with Kundalini itself.

In Nada yoga you concentrate on these finer and deeper sounds, moving from outer to inner realm, moving awareness from outer to inner sounds (Sanskrit: "madam"), while all the time gently easing your mind into relaxed concentration and focus. This is a highly enjoyable form of mediation and it's relatively effortless: as you meditate, your entire being; every cell and atom and part of you, is being purified and balanced by the sounds that you are focusing on. Remember, whatever you pay attention to, you become. "Where you put your treasure, there you shall also find you heart." Therefore it is very important that you choose positive and enlightening music and sound for this meditation.

How to Begin

One easy way to begin a practice of Nada Yoga is to start with beautiful music. You must choose music which sustains a level mood: calming, quiet, maintaining an even loudness and emotion. This is one fine use of "New Age" music- Brian Eno "Thursday Afternoon" or music by Stephen Halpern or Don Campbell for example. Eastern music is also a valuable tool- North Indian sitar: Japanese shakuhachi. Native American flute music can also be an excellent choice. Choose Western classical music with care; often the dynamic and emotional range is too great for this meditative use. Whatever you choose, it must be instrumental music- no voices. Voices and words are too "specific" and distracting.

At first, simply sit quietly and focus all your attention on the music for 10-15 minutes once or twice a day. Continue this practice with regularity, listening to the same type of music, always with your fullest concentration. Gradually you may be able to hear subtle sounds that come from within, rather than the audible sounds from outside. As you begin to be aware of the inner sounds, listen to them and focus on them. Then you can gradually change your meditation from listening to music to listening to the subtle sounds.

Go at your own speed with this. Each experience is unique. Awareness of inner sound may happen sooner- or later- but it will happen. Finally, you will no longer need music for meditation at all, and may choose to use it or not, as you wish. Then continue listening to the inner sounds for your meditation practice eery day. Your perception of the sounds may change as your body and mind become purified and elevated. Just continue to focus on the inner sound or "madam" daily.

This form of Nāda Yoga is actually much easier than it sounds. The wonderful bonus of this practice- meditating with music- is that the process, the journey itself, i highly pleasant. Every step of the way you are bathing yourself in uplifting sounds and music, balancing and healing your heart, mind, and spirit.

Thus, no matter what the specific "meditative" outcome, you can receive only benefits from this pursuit. Your listening skills will also impure, and you will become more sensitive not only to music and sound, but to the subtle emotions and energies within yourself and in others. You will
"listen" to others more completely and directly, and you'll find you are able to hear what others are really saying, no matter how loudly they speak…

Meditative Toning
by David Gordon

What is Toning?

Toning is the creation of extended vocal sounds on a single vowel in order to experience the sound and its effects in other parts of the body.

No melody, no words, no rhythm, and no harmony- just the sound of vibrating breath. Its a simple yet powerful technique, accessible to everyone regardless of vocal ability or training. Through toning you can immediately experience the effects of sound on your physical, mental, emotional, and spiritual wellbeing.

By literally massaging body and mind from the inside out, meditative toning can help you focus and relax; release negative emotions; reduce stress; and improve stamina and concentration.

Toning synchronizes the brainwaves and helps relieve tension within a few minutes. Toning is also a wonderful technique for developing your voice-ear connection and enhancing your power of listening to everything around you.

Most of all, toning restores balance and harmony to the mind and body. It can help you awaken and deepen your sense of self, and align you to the deepest vibrations for soul and spirit. on the path of toning, you move toward the source of your own inner balance, creativity, well-being, and freedom.

Since the early 1980s, thousands of people have discovered toning, and found it useful for their own health and mental clarity. Doctors, nurses, psychologists, therapists, body workers, teachers, and business professionals have affirmed the benefits of toning in their lives and work.

Company is stronger than will power

You don't have to "OM Alone!" Toning with others is supportive and fun.

Get together with like-hearted toners and make vocal sounds as a group. Create an informal toning mediation circle with a few friends. Look around you for companionship, help or guidance. Whether you're with an organized group, a casual friend, or an experienced toning "guide" you will deal better with resistances, physical difficulties, and uncertainties if you have companionship.
Vowels and the Energy Centers

The power of toning lies in the vowels (like "ah-eh-ee-oh-uu").

Vowels are much more important in toning than the "pitch" (high or low). Most people experience each vowel as unique in energy, emotion and effect.

Modern medical and physiological sciences study and monitor the measurable "electromagnetic" energy in the body—such as the electrical impulses in muscle nerves, and neural synapses in the brain. And for centuries traditional healing techniques such as acupuncture have followed and utilized the energetic map of the human body.

It seems the body has certain "hots spots" of energy. The medical and sacred teachings of both East and West describe them, and often correlate them with specific thought patterns and archetypal effects. (Some ancient spiritual and medical sources depict these energy centers as Chakras.)

Whether we interpret them metaphorically or literally, exploring the body's energy centers through sound is a fascinating journey. As we learn to perceive the relationship of objective vowels and subjective energy, as we learn to "listen" to ourselves on every possible level, we enrich our understanding of the broad spectrum of energies and emotions within us. The "simple" act of toning heightens our awareness of our own inner energies and vibrations. Through that awareness we feel more alive, and more connected with everything around us.

Vowels and Energy

There are many vowel sounds in the human language.

For toning we begin by focusing on several principal sounds. Remember, this is not a list of universal truths, just some traditional suggestions for you to begin with.

<table>
<thead>
<tr>
<th>Vowel</th>
<th>Possible Attributes or Related Perceptions</th>
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</thead>
<tbody>
<tr>
<td>UU (&quot;who&quot;)</td>
<td>grounding, calming, relaxing, awareness of physicality, gives sensation of depth, base of spine</td>
</tr>
<tr>
<td>OH (&quot;go&quot;)</td>
<td>conscious self-image, identity issues, solar plexus self-confidence, individuality</td>
</tr>
<tr>
<td>AH (&quot;car&quot;)</td>
<td>centering, expanding, pleasant heartfelt emotions, gives sensation of breath, heart area</td>
</tr>
<tr>
<td>EY (&quot;pray&quot;)</td>
<td>self-expression, communication, listening throat and neck</td>
</tr>
<tr>
<td>EE (&quot;knee&quot;)</td>
<td>energizing, awakening, mental and physical stamina, gives sensation of length, head</td>
</tr>
</tbody>
</table>
MM (lips closed) balancing, harmonizing and integrating, the subtlest and most powerful sound

Examples of vowel combinations for balancing and centering (to be vocalized as one continuous full-breath tone exhalation):

"UU-AH-EE-MM"   Balance and energize. Morning wakeup.


Note: this is a list of just a few traditional suggestions to begin with. Your own awareness may be quite different; that's fine! These are just starting points; There is no "normal" toning experience, only "your" experience! With practice, your inner wisdom will guide you and tell you what vowels you need.

Try this for starters: let your intuition choose a vowel for you. Spend several minutes toning it. Begin in the comfortable middle of your vocal range. then try a lower pitch, then higher, always with moderate volume and without straining. If the vowel feels physically or vocally "wrong" right now, leave it and choose another. Be open to inner experience and sensation, without seeking a specific "result." Explore the sensations of each of these vowels and their total effect on you.

Toning engages your entire being, not just your voice. Whatever specific vowel you may be toning, open your awareness to all physical or energetic sensations, without judgement or analysis. Listen to the vibrations with your whole body, and don't just "hear" with your ears. For example, place the palms of your hands at various places on your body as you tone and allow your hands to feel the sound vibrations.

A-U-M-Silence... the ancient sound of "OM"

by David Gordon

Seeking the unstruck sound

Ancient teachings and modern science agree: you, I, all living things, all things in existence are made up at their most essential level of vibrating; pulsing energy.

For millennia, mystics have recounted their experience of this energy, which is said to manifest in our hearing awareness as a humming vibration around and within everything else.

In the Sanskrit tradition, this sound is called "Anahata Nada," the "Unstruck Sound." Literally, this means "the sound that is not made by two things striking together." The point of this particular distinction is that all ordinary audible sounds are made by at least two elements: bow and string; drum and stick; two vocal cords; two lips against the mouthpiece of the trumpet, the
double reed of the oboe; awes against the shore; wind against the leaves. All sounds within our range of hearing are created by things visible or invisible; striking each other or vibrating together, creating pulsing waves or air molecules which our ears and brain interpret as *sound*.

So, sound that is not made of two things striking together is the sound of primal energy, the sound of the universe itself. Joseph Campbell likens this unstuck vibration to the humming of an electrical transformer, or the (to our ears) unheard humming of atoms and molecules.

And the ancients say that the audible sound which most resembles this unstuck sound is the syllable *OM*. Tradition has it that this ancient mantra is composed of four elements: the first three are vocal sounds: *A, U, and M* The fourth sound, unheard, is the silence which begins and ends the audible sound, the silence which surrounds it.

There are several traditional and allegorical interpretations of this ancient sound.

**One ancient tradition of AUM**

The loveliest explanation of OM is found within the ancient educe and Sanskrit traditions. We can read about AUM in the marvellous *Manduka Upanishad*, which explains the four elements of AUM as an allegory of the four planes of consciousness.

"*A*" (*pronounced "AH" as in "father") resonates in the centre of the mouth. It represents normal waking consciousness, in which subject and object exist as separate entities. This is the level of mechanics, science, logical reason, the lower three chakras. Matter exists on a gross level, is stable and slow to change.

The sound "*U*" (*pronounced as in "who") transfers the sense of vibration to the back of the mouth, and shifts the allegory to the level of dream consciousness. Here, object and subject become intertwined in awareness; Both are contained within us. Matter becomes subtle, more fluid, rapidly changing. This is the realm of dreams, divinities, imagination, the inner world.

"*M*" is the third element, humming with lips gently closed. This sound resonates forward in the mouth and buzzes throughout the head. (Try it). This sound represents the realm of deep, dreamless sleep. There is neither observing subject nor observed object. All are one, and nothing. Only pure consciousness exists, unseen, pristine, latent, cored with darkness. This is the cosmic night, the interval between cycles of creation, the womb of the divine Mother.

**The Yoga of AUM**

It might be said that the ultimate aim of Yoga is to enter this third dreamless realm while awake. Yoga means "yoke" or "join." Through yoga we "join" our waking consciousness to its "source" in the world of pure, qualitiless unconsciousness.

Which brings us to the fourth sound of AUM, the primal "unstuck" sound within the silence at the end of the sacred sellable. in fact, the word "silence" itself can be understood only in reference to "sound." We hear these silence best when listening to sound, any sound at all,
without interpreting or judging the sound. Listening fully, openly, without preconceptions or expectations. The sound of music, the sound of the city, the sound of the wind in the forest. All can give us the opportunity to follow the path of sound into the awareness of the sound behind the sound.

When one really "listens" to this silent sound, this unstuck vibration, on comes inevitably to stillness, to pure and open existence. The poet Gerhart Hauptmann says the aim of all poetry is "to let the Word be heard resounding behind words." The sound behind the sound. And in making the sound of AUM, we hear this unstuck sound most clearly in the instant when the last humming vibrations of the "M" fade away. At that moment, that instant separating audible sound a silence, the veil is thinnest, and our listening awareness is most expansive.

At that moment of silence, to use William Blake's word, the "doors of perception" are cleansed and "everything would appear to man as it is, infinite."

Another way to make the AUM sound

One of my favorite exercises with the sacred AUM sound involves a more modern interpretation of its elements. In short, "A" is the sound of infinite expanding energy in the universe, the energy of unity consciousness and Divine Love; "U" is the sound of that very energy manifesting and materializing in our waking reality; with the sound of "M" we absorb and integrate that energy into our own being. In the silence after the sound we give thanks and allow the process to resonate within us.

Try this: stand comfortably, feet shoulder width apart, hands and arms hanging easily at your sides. Prepare to make the "AUM" sound, all three vowels in one seamless breath. Inhale gently, easily, expanding into your belly as you breathe. open your mouth fully as you inhale, as if to "inhale" the "A" sound itself, creating the intention of the sound before the sound actually begins.

Then, as you begin to make the "A" sound, raise your arms out to the side, as if opening to embrace all the universe. Then as your voice transitions seamlessly to the "U" sound, extend your arms to the front, as if to hold something precious and powerful in your hands. You might wish to visualize some shape, round and energetic, manifesting between the palms of your hands; Then, gliding from "U" to the "M" sound, bring your hands, and whatever they may contain, to your heart centre. Finally, in the echo of the silence, bring your palms to your chest, pressing them lovingly to your heart. Breathe gently.

Repeat this exercise several times. It is remarkably centering and relaxing.

Find your own way

The most important aspect of this second form of AUM is the combination of sound and movement. It really doesn't matter what "images" you create in your mind as you do this exercise, or what specific significance you choose to attribute to each of the individual vowel sounds; The mere fact that you are intoning this ancient sound, and combining it with gentle intuitive
movements of the upper body, will have a naturally gentle and balancing effect on your body, mind, emotions, and spirit.

In that state, we can best hear the Anahata Nada, the unstruck sound behind the sound, the very Sound of the Self.

Resources


