

Darkness Technology
Darkness Techniques for Enlightenment



Mantak Chia

Darkness Technology

All spiritual traditions have used Darkness Techniques in the pursuit of enlightenment. In Europe, the dark room often appeared in underground form as a network of tunnels, in Egypt as the Pyramids, in Rome as the catacombs, and by the Essenes, near the Dead Sea in Israel, as caves. In the Taoist tradition caves have been used throughout the ages for higher level practices. In the Tao, the cave, the Immortal Mountain, the Wu San, represents the Perfect Inner Alchemy Chamber. Meditating and fasting in the cave is the final journey of spiritual work. The caves are the Earth Mother and its energy lines. Like the hollow bones, caves contain the earliest information of life stored inside the Earth. Caves contain the vital essence of the Earth Power. The Tao says: 'When you go into the dark and this becomes total, the Darkness soon turns into light.'

In the Darkness, our mind and soul begin to wander freely in the vast realms of psychic and spiritual experience. When you enter this primordial state or force you are reunited with the true self and divinity within. You literally 'conduct' the universal energy. You may see into the past and future, understand the true meaning of existence, and begin to understand the order of things. You return to the womb, the cocoon of our material structure and Nature's original Darkness.

Complete darkness profoundly changes the sensory sensibilities of the body/brain. We are deprived of all visual reference. Sounds begin to fall away as we lose contact with the external world and turn the senses inward. The effect of darkness is to shut down major cortical centers in the brain, depressing mental and cognitive functions in the higher brain centers. Emotional and feeling states are enhanced, especially the sense of smell and the finer senses of psychic perception. Dreams become more lucid, and the dream state manifests in our conscious awareness. Eventually, we awaken within ourselves the awareness of the Source, the spirit, the soul. We descend into the void, into the darkness of deep, inner space.

Darkness activates the deepest centers within the brain, the glands of the Crystal Palace, establishing a connection with the Original Source, the Wu Chi (Fig. 1). The pineal gland connects us to the Universal Energy. From the hypothalamus gland, we project our soul or spirit upwards, and receive the descending Universal Energy. The pituitary gland receives the Cosmic Force, used to launch the spirit bodies into the earthly or human plane for traveling.

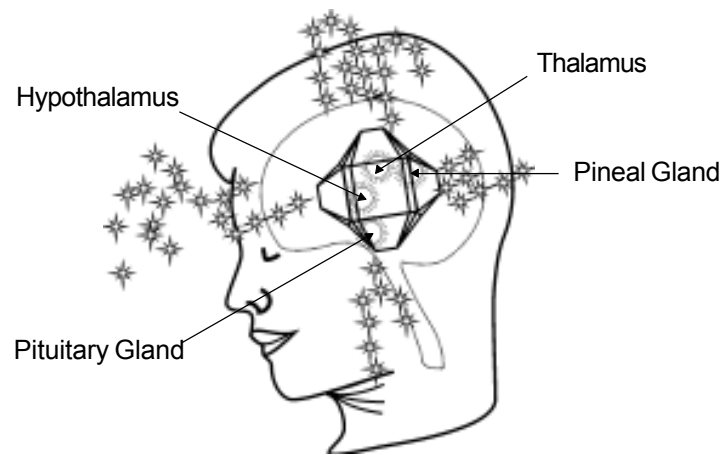


Fig. 1. Glands of the Crystal Palace are buried deep within the brain. They include the pineal, hypothalamus, thalamus, and pituitary glands.

The darkness actualizes successively higher states of divine consciousness, correlating with the synthesis and accumulation of psychedelic chemicals in the brain. Melatonin, a regulatory hormone, quiets the body and mind in preparation for the finer and subtler realities of higher consciousness (Days 1 to 3). Pinoline, affecting the neuro-transmitters of the brain, permits visions and dream-states to emerge in our conscious awareness (Days 3 to 5). Eventually, the brain synthesizes the “spirit molecules” 5-methoxy-dimethyltryptamine (5-MeO-DMT) and dimethyltryptamine (DMT), facilitating the transcendental experiences of universal love and compassion (Days 6 to 12) (Fig. 2).

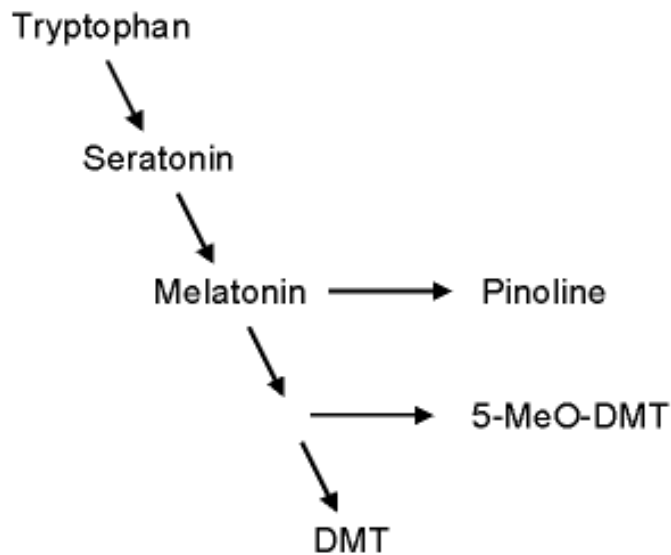


Fig. 2. Tryptamine synthesis, simplified: The amino acid tryptophan is the precursor for serotonin, melatonin, pinoline, 5-MeO-DMT, and DMT molecules.

Universal Tao Darkness

Starting many years ago, Master Chia went in search of natural caves suitable for meditation in absolute darkness, but none were found. Master Chia and Juan Li spent one day in Wu San, the Taoist Immortal Mountain, the most sacred of the Taoist power centers. The cave was not, however, suitable for a dark room retreat. Tourists were ever-present, and the stench of human urine and feces was overpowering. They failed to find the true teaching. Other natural caves were explored, but all suffered some deficiency. The cave environments were dirty and damp, and the air quality poor (dust, fungi, bacteria, insects, snakes, etc.). The caves were dumping grounds, repositories for human waste and garbage. The pristine silence of the darkness was not to be found. Perhaps the perfect cave is still hidden in some deep, high mountain.

Master Chia researched modern Darkness technologies for many years. A pyramid at Tao Garden, northern Thailand, provided the ground for early experiments in darkness retreats. He made visits to darkness retreats in other countries, to gain insights on the best designs for meditation and for comfort. Eventually, the Universal Tao Darkness was constructed, based on all available information and latest technologies. The facility is the perfect Inner Alchemy Chamber, conducive to meditation and providing comforts and necessities for up to 60 people. A large central meeting room is surrounded by two tiers of living quarters. The light and sound proof outer sheath is constructed of bricks made from the red earth of Thailand, preserving the earth elements of the original cave. The Mother Earth power is retained in the modern structure.

The Tao Garden Darkness is enclosed and encased in a light and sound-proof sheath. The building is constructed of bricks made from the red earth of Thailand, containing all of the properties of natural rock in a cave. The earth was mined and hydraulically pressed into bricks, thus preserving the constituent elements and minerals of the parent materials. The Mother Earth power is retained in the modern structure.

The facility consists of a large, central meeting room for meditation and for dining. Two tiers of bedrooms surround the central area, each with private bath. The entire facility is ventilated with fresh air intakes and air conditioning systems. Food is specially prepared to meet the particular requirements of the body, mind, and spirit in attaining the goals of darkness enlightenment. Fresh juices and soups are served for “breakfast” and a light organic meal is served in the “afternoon”. (See: Darkness Nutrition p. 42). Participants are trained and prepared for life in the dark (See: Darkness Preparations p. 39).

The Universal Tao Darkness is currently the largest and most advanced Darkness meditation facility in the world. Aspiring to the Tao, participants remain in utter and complete darkness for one, two, or three weeks, a perfect laboratory for Inner Alchemy. The spiritual knowledge gained by Taoist masters over the ages merges and blends with the insights of 21st century science and technology.

As Above, So Below

There is one point in the sky around which all other constellations revolve, the North Star point. The North Star is fixed, stationary, motionless. Taoists regard it as the Center, the source of the Universe, the Nothingness, or Wu Chi. The North Star is the Gateway to Heaven. In the Tao, the body is a microcosm of the Universe. "As above, so below." Whatever happens "up there" happens "down here." Hence, the physical body is marked with gridlines of energy and meridians of light around a Center. The Center is called the "Tan Tien", or "field of energy" (Fig. 3).

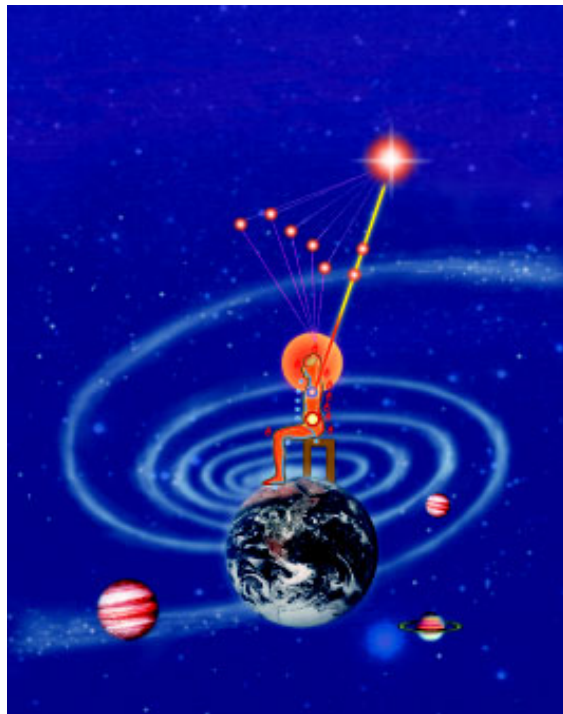


Fig. 3. Universal connections: We are connected to Mother Earth below, and to the Heavens above. Big Dipper and the North Star are the gateways to immortal life.

The idea of a Central Axis – the Pole Star in the firmament and a Cauldron in the body – is a central tenet in Taoist philosophy and alchemical practice. To get to the Center of the body, open the Tan Tien; to get to the Center of the Heavens, enter through the North Star. Both are doorways to the heart of the true Tao, the Wu Chi, from which both Heaven and Earth are born. The Inner Alchemy practice of the Universal Tao fuses the body's energies to give birth to a spiritual embryo capable of maturing into a deathless existence and of flight inward, beyond time and space, to the Source.

The Darkness meditation releases us from the bonds of the Earth. No longer controlled by the rotating power of the Earth, the Sun and the Moon, the organs vibrate in unison with the spiritual stars, the Gates of Heaven. The North Star, unmoving and unwavering in space, is the center, the Wu Chi, emanating violet rays throughout the galaxy, affecting every living cell of nature on our planet. The Big Dipper gathers all the violet light from the universe, and emanates the light as infra-red radiant energy. The emanation of infra-red light of the Big Dipper, combined with the violet rays of the North Star, has a positive, nurturing effect upon the bodies and minds of those who know how to access it. Taoists believe that the Violet Stars, the Big Dipper, and other constellations form the "Gates of Heaven." All living things must pass through these gates to return to their source of origin, the Wu Chi, which is the state of oneness with the Tao.

The Darkness environment activates the glands of the Crystal Palace, actualizing their higher powers and providing a "way back" to the Original Source (Fig. 1). When the Crystal Palace is open, it becomes illuminated like millions of shining crystals. It can give and receive light and awaken our inner knowledge and deepest potentials. It receives light and knowledge from the universe and reflects it to the various organs and glands to enhance them.

The pineal gland helps us to overcome death by taking in external forces and combining them with sexual energy and the Original Force to form an "Immortal Body." With this body we can leave the physical body before the final transition (death) occurs. By focusing

on the tip of the Crystal Palace, the pineal gland, and the back of the crown, we can project ourselves to the North Pole or North Star as we attract its violet emanations (Fig. 4).

The pineal, as Yang, is balanced by the Yin of the hypothalamus gland. Taoists regard this point as the main switch for the Universal Force. When the spirit awakens, it resides in the hypothalamus. When the pineal and hypothalamus are connected, they give out a powerful, balanced force. By focusing on this center and picturing the seven stars of the Big Dipper, you can access the constellation's energy, which emanates from the crown as a ray of red light. (Fig. 5).

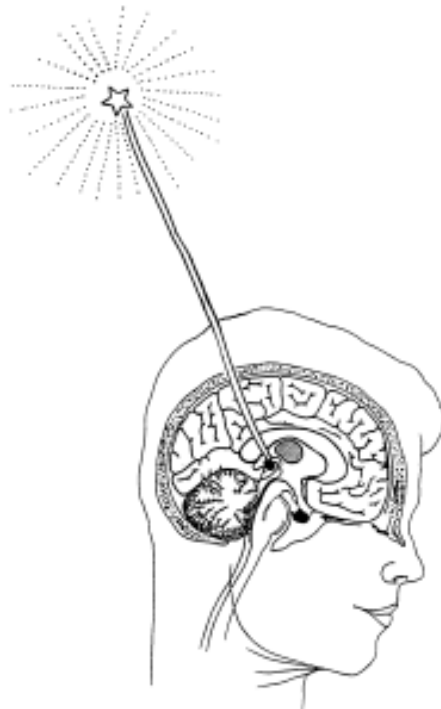


Fig. 4. *Pineal gland has a close connection to the North Star, receiving its violet emanations.*



Fig. 5. Hypothalamus and pineal glands, when connected, allow access to the infra-red emanations of the Big Dipper.

In the Tao, the sources of longevity and immortality are within the body, not as a physical womb but a spiritual one. Taoists call this spiritual womb the “cauldron”. The right method to “cook the cauldron” is not to search outwardly for love from others, but to search within the naked and abandoned self. Self-love, or self-intercourse is the way to give birth to the Immortal Self. The Darkness manifests the bodily processes of “Healing Love.”

The human states of true compassion and sexual arousal create a new chemistry and a new vibration within the body. This ‘special’ vibration occurs at a frequency of 8Hz. ‘As in the macrocosm, so it is in the microcosm’; hence if we make love, then all the cells and DNA actually make love as well. The DNA crosses over, like two serpents intertwined in an erotic embrace. You need the orgasmic vibration to arouse this crossover process which leads to the ‘two giving birth to three’; the conception of new cells. The two vital states are compassion and arousal leading to orgasm. Both are inextricably linked to love.

When the 'love-vibration' reaches the pineal gland a new hormone is produced, which in turn creates whole body conductivity (Fig. 6). Only when you feel the waves of orgasmic vibration and unconditional love for the self and others can the process be activated and the essence of the Darkness is magnified.

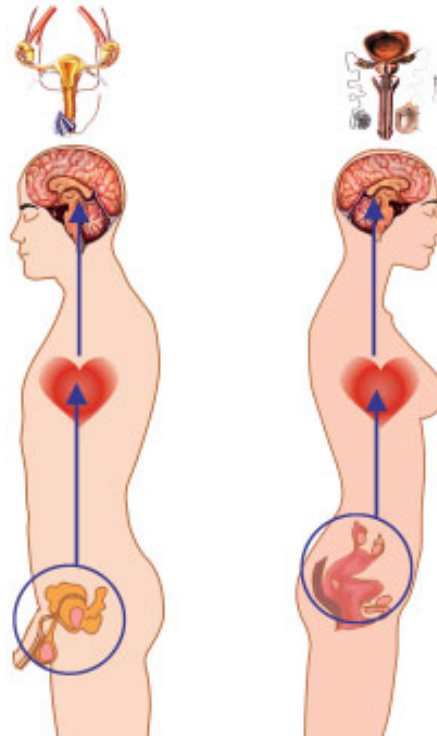


Fig. 6. Pineal gland connects with the sexual center in the meditation of self-intercourse.

The essence of the Darkness Practice is giving birth to the soul and spirit. The coupling of Yin and Yang energies of the body in the Kan and Li meditations is aimed at overcoming death. It is the method of going back to the state in which we are all orphans, in the very depth of our body/minds.

Consciousness and the Neuro-Endocrine System

The Darkness environment dramatically alters the chemistry of the brain, manifesting especially in the neuro-endocrine systems, which govern consciousness and regulate body functions. An important neurotransmitter involved in waking consciousness (serotonin) converts into a regulatory hormone (melatonin) that shuts down the organ systems, quieting the body in preparation for the finer and subtler realities of higher consciousness. The pineal gland initiates a cascade of inhibitory reactions, permitting visions and dream-states to emerge in our conscious awareness. Eventually, the brain synthesizes the “spirit molecules” 5-methoxy-dimethyltryptamine (5-MeO-DMT) and dimethyltryptamine (DMT), facilitating the transcendental experiences of universal love and compassion.

Autonomic Functions

The body responds automatically and unconsciously to maintain the integrity and vital functions of the organism. The hypothalamus, located deep within the brain, is the major regulatory gland controlling homeostasis, or body maintenance. Factors such as blood pressure, body temperature, fluid and electrolyte balance, and body weight are maintained in dynamic equilibrium, shifting with the needs of the body. To achieve this task, the hypothalamus receives inputs about the state of the body, and initiates compensatory changes if anything drifts out of whack.

The hypothalamus directs body functions through two main pathways. First, the hypothalamus connects to the brainstem, located at the top of the spinal cord, providing a link to the Autonomic Nervous System, the ANS. The ANS has two parts; the sympathetic nervous system activates the “fight or flight” response; the parasympathetic nervous system activates “rest and digest” activities of the body. The brainstem, through the ANS, controls the essential functions of

pulse, respiration, body temperature, water balance, swallowing, coughing, as well as our stereotyped reactions and movements.

A second pathway is from the hypothalamus to the pituitary gland, the master endocrine gland in the brain. The pituitary gland secretes hormones, which activate major organ systems in the body, for example the adrenal and sexual centers.

The hypothalamus is of particular importance in the Darkness because of its affect on circadian (day-night) rhythms in the body. The suprachiasmatic nucleus of the hypothalamus is one of the body's major biological clocks (Fig. 8). It not only regulates hormones related to the day/night cycle, but it orchestrates the activities of many other internal clocks. In numerous experiments, it has been shown that when the SCN is not innervated, the human body clocks run free; they set their own time¹.

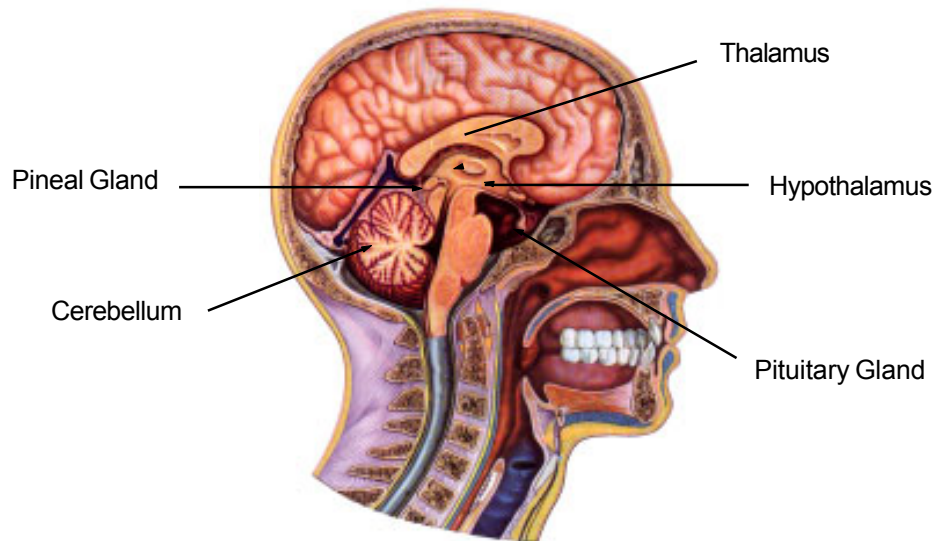


Fig. 7. Brain Organs

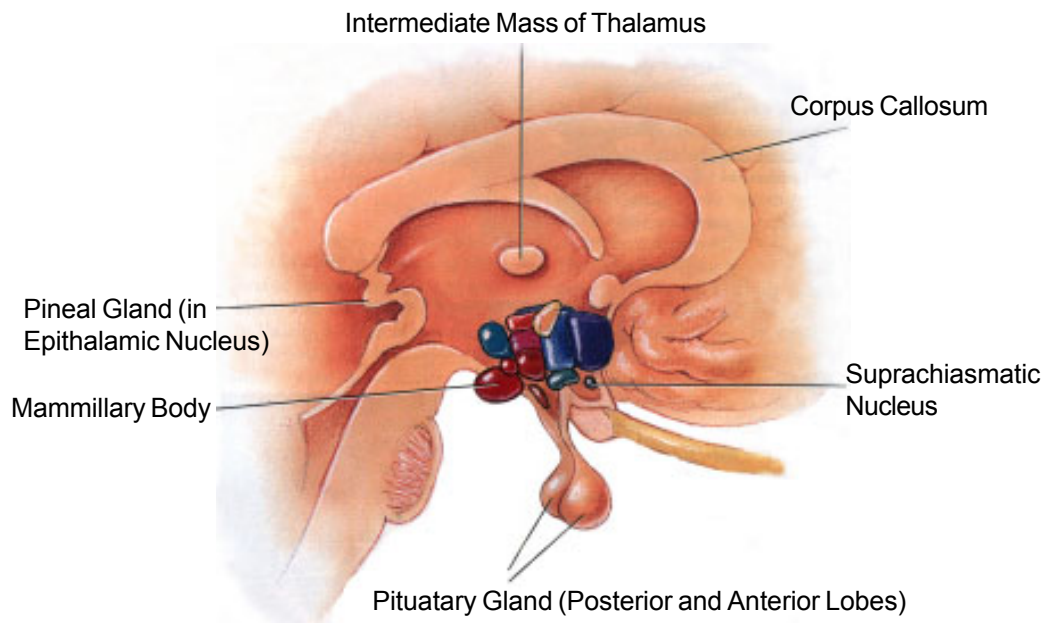


Fig. 8. Detail of the hypothalamic nuclei. Suprachiasmatic nucleus (SCN) regulates circadian (diurnal) rhythms and activates the pineal gland through sympathetic neurons originating in the brainstem (see Fig. 12)²

Waking Consciousness

An “alarm system” is built into the brainstem, to wake us up and bring us to waking consciousness, called the reticular activating system (RAS) (Fig. 9). Sight and hearing are two major pathways of incoming sensory information, providing cues which maintain our state of alertful wakefulness. The optic and auditory nerves stimulate brainstem centers, which, in turn, activate higher cortical centers in the brain through the RAS.

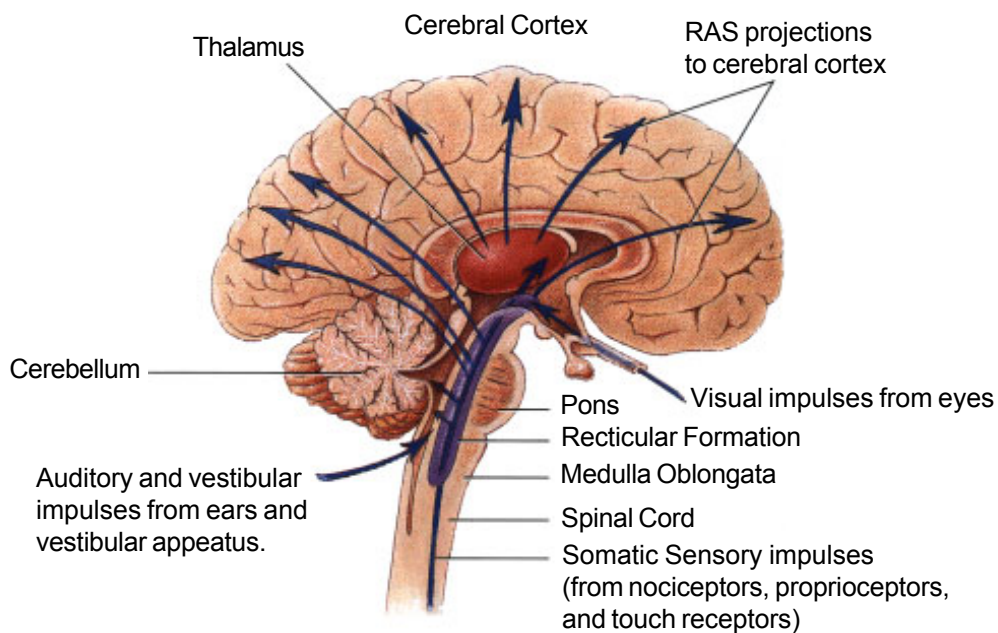


Fig. 9. *Reticular Activating System (RAS):* Fibers that project from the reticular formation through the thalamus to the cerebral cortex are responsible for maintaining consciousness, muscle tone, and awakening from sleep, with stimuli from the ears, eyes, and skin, but not the olfactory system, which explains why people die in house fires³.

Many of the functions of waking consciousness are maintained by the neurotransmitter serotonin. Serotonin is a chemical messenger, traversing the synapse, or the gap, between two nerve cells (Fig. 10). Some of the important nerve pathways assisted by serotonin begin in a region of the brainstem called the raphe nuclei and extend upwards into the cerebrum (Fig. 11). Serotonin plays an important role in maintaining cortical arousal, concentration, and suppressing distracting stimuli, as well as a role in sleep.

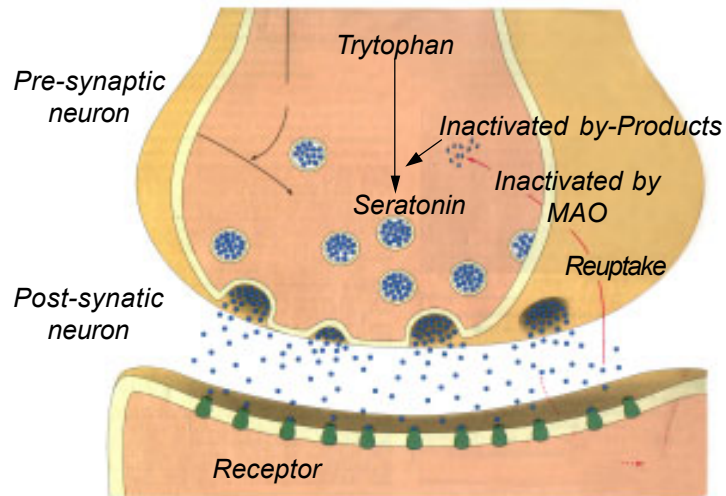


Fig. 10. Synapse: Neurotransmitter serotonin bridges the gap between nerve cells. After completing its “mission”, the serotonin is reabsorbed into the nerve cell and decomposed by MAO into inactive by-products⁴.

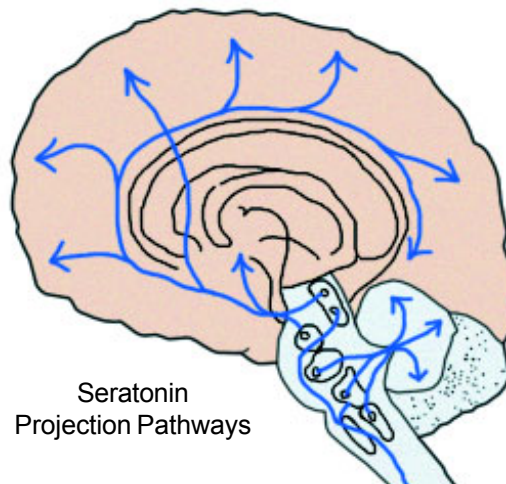


Fig. 11. Serotonin Pathways. Many of the important nerve pathways assisted by the neurotransmitter serotonin begin in the brainstem and extend upwards into the cerebrum⁵.

Serotonin is implicated in a wide variety of psychological phenomena, including depression, anxiety, obesity, and LSD hallucinations. The anti-depressant Prozac, for example, elevates serotonin levels in the synaptic cleft by blocking re-uptake of serotonin into pre-synaptic neurons. (Serotonin levels cannot be raised by ingestion, because the molecule is too polar to pass through the blood-brain barrier.) As another example, LSD mimics the shape of the serotonin molecule and redirects nerve impulses down unfamiliar and unstructured neural pathways, giving rise to hallucinatory perceptions and experiences. In short, serotonin is the most important neurotransmitter governing states of waking consciousness.

Sleep and Dream

Each night, our waking consciousness is subdued by chemical messengers that inhibit the activities of the brain. Melatonin, the “sleep molecule”, is one of these messengers. Melatonin is produced in the pineal gland, in response to the darkness of night, and to the circadian rhythms of light and dark that are programmed into the hypothalamus, an endocrine gland located deep within the brain (Fig. 12). Melatonin affects major organ systems, quieting the sympathetic nervous system and allowing daily rejuvenation of mind and body. (also see Appendix: Inner Alchemy, A Physical Explanation).

The primary function of sleep is to rest and restore not the body, but the mind. Depriving a person of deep, dreamless sleep (delta stage) results in the seepage of hallucinatory phenomena into the waking state. Sleep deprivation causes severe mental disturbance, attention deficits, visual complaints, hallucinations, and time distortion, and, after a number of days a person may go insane.

In the Darkness, melatonin gradually accumulates in the brain, and we begin to experience the revelations of sleep in our waking consciousness. Sleep and dream states manifest in our awareness, and aspects of our true nature begin to reveal themselves. Sleep consciousness is a profound state of rejuvenation and reconnection to our divine source. It has been said that “...the soul temporarily disengages during sleep to ‘visit’ other dimensions and have experi-

ences, which are remembered during the waking consciousness as dreams. Each and every soul leaves the body as it rests in sleep. The idea that some aspect of the self dissociates during sleep and transits between dimensions (e.g., astral travel) is a common theme in the traditions of many cultures. Sleep is viewed as an opportunity for the mental being to review previous experiences and plan future actions accordingly, hence the retrospective and precognitive function of dreams.”

“During sleep, connection of the physical, mental and spiritual bodies is maintained by a ‘silver cord’ ... similar to the ‘thread’ or ‘cord’ of the pineal system. Death involves the severance of this cord whereas sleep may be viewed as merely a temporary ‘stretching’ of it. The ‘projection’ of consciousness out of the body during sleep may be related to the ... “kundalini” experience and psychic awakening.”⁷

Extended Darkness retreats alter sleep cycles somewhat. Initially, people usually sleep more since most people are busy and often sleep-deprived. After two to three days, however, the need for sleep is diminished and a more restful state of being becomes a pervasive aspect of every day. We have observed that when people are quiet and less active during the beginning of a retreat, the elements settle into their own nature more quickly, and a state of alert relaxation arises. After a couple of weeks, one may need only a few hours of sleep each night, and that sleep is often in continuous consciousness.

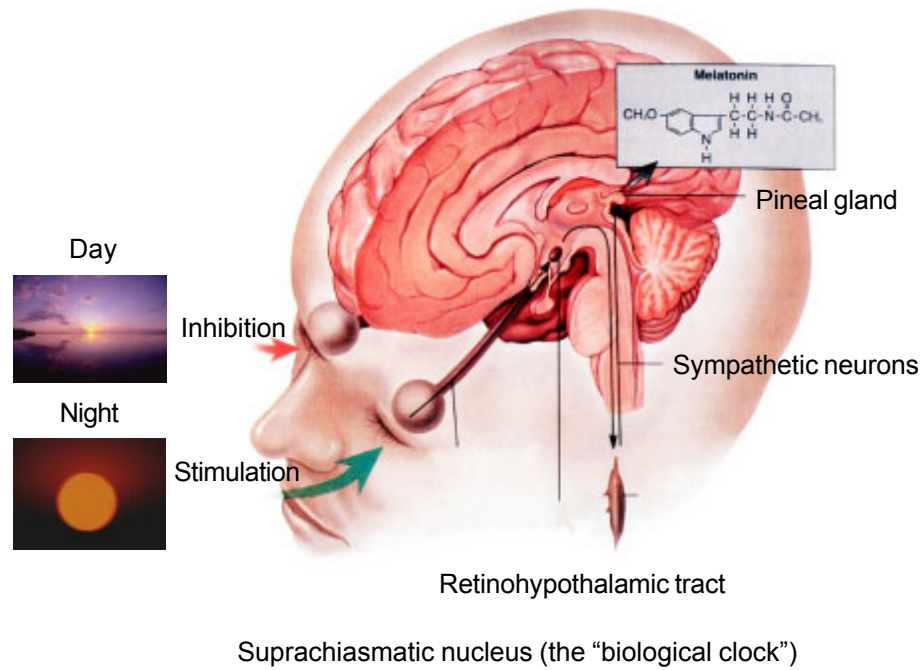


Fig. 12. Pineal activation: Secretion of melatonin by the pineal gland is stimulated by sympathetic nerve axons originating in the superior cervical ganglion of the brainstem. Activity of these neurons is regulated by the activity of the suprachiasmatic nucleus of the hypothalamus (SCN), which sets a circadian rhythm.

pineal gland

retic neurons

Descent into Darkness

In the Darkness, our mind and soul begin to wander freely in the vast realms of psychic and spiritual experience. First, sensory receptors that are controlled by the thalamus gland, with the exception of the olfactory, consciously withdraw (Fig. 7). Thus, breathing activity substitutes for the restfulness of visual and auditory function. By keeping the adrenal hormones at their lowest levels the inner peace remains undisturbed. In complete darkness, the visual and auditory abilities become ever more sensitive. The olfactory (smell) and tactile (feeling and touch) organs become the chief senses to supply the little needed energy to the body/mind. Thus the thalamus glands are slowly shut down. The pituitary gland, the master gland for bodily hormones, becomes distilled by the exchange of energy in the body/mind needed for spiritual awakening power.

The hypothalamus gland is in perfect balance and alternates peacefully between wakefulness and sleep. The pineal gland, secreting melatonin to control the subtle bodily rhythms, is sensitized to the vibrations of earth and the scanning light, no longer being driven by the instinctive drive from adrenal power and the waking consciousness of the thalamus glands and the reticular activating system. In this state, wakefulness is a dreaming state and dreaming consciousness is awakening consciousness. They become the functions of spiritual stars and planet earth, rather than the rotating power of the Earth, the Sun and the Moon. This state is the final stage of the returning process on earth.

Limbic System

The primary organ for the emotional activities is coordinated through the function of the amygdala, taken from the Greek word for "almond" because of its fanciful resemblance to almonds. In Taoist tradition, this is the crowning center where both the light and visual frames register, such as the image of sun or of a snake (Fig. 13). As the sexual power engages with the light above the brain to form sweet dew, the light in the pituitary becomes gray-white. When it radiates, the two amygdala glands are activated, allowing the Chi to

circulate within the temporal lobes on either side of the head, above the ears and around the temples. As the light moves forward, the Third Eye, the essential tool for healing diagnosis, is opened.

The temporal lobes govern all auditory, somatic, and motor sensitivities. The breath coming through the nostrils, as well as the light shining upon the amygdala, charges these sensory activities. The adrenal glands, responsible for releasing norepinephrine and epinephrine, become the seat for true inner stillness (Fig. 14). In this state, everything is transformed into the harmless and loving present. By drawing the unconscious light from the adrenal glands, themselves charged by the primordial sexual energy, the mind sees the light and the inner ear hears the cosmic vibration within both the body/mind and the Mother Earth. Mysteriously, the cave of the earth, the cave of the brain (Crystal Palace), and the hollowness within the bones echo with each other, making the cosmic vibration visibly meaningful through the conscious eye.

The meditations of the Inner Smile, Six Healing Sounds, and Fusion Practice are important for quieting and transforming the negative emotions.

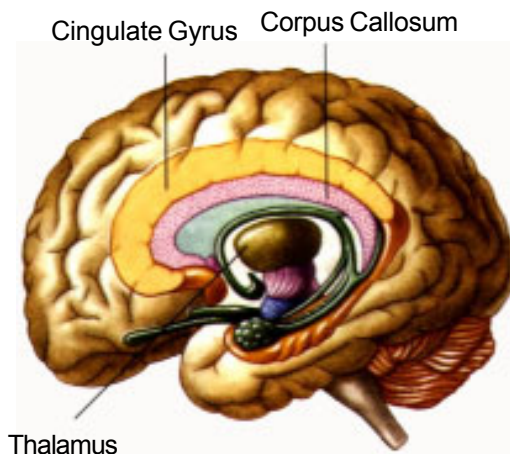


Fig. 13. Limbic System: *The limbic system encircles the top of the brain stem and forms a border (the meaning of “limbic”) linking cortical and midbrain areas with lower centers that control automatic, internal body functions.⁸*

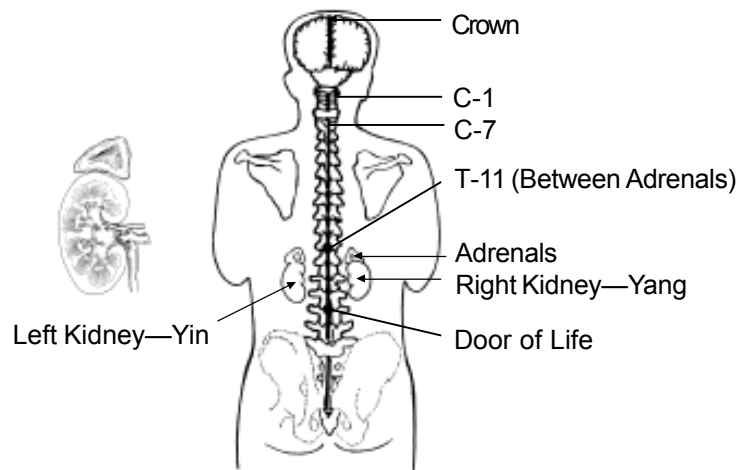


Fig. 14. Adrenal Glands

Pineal Gland

The pineal gland is the connection point for the Spirit or Soul. It is the physical center for, and transmitter of, psychic phenomena such as telepathy, clairvoyance in time and space, and the actual influence of thoughts on the physical surroundings⁹. (Fig. 16)

“When activated, the pineal gland becomes the line of communication with the higher planes. The crown chakra reaches down until its vortex touches the pineal gland (Fig. 15). Prana, or pure energy, is received through this energy center in the head. With practice the vibration level of the astral body is raised, allowing it to separate from the physical. ...To activate the ‘third eye’ and perceive higher dimensions, the pineal gland and the pituitary body must vibrate in unison, which is achieved through meditation and/or relaxation. When a correct relationship is established between personality, operating through the pituitary body, and the soul, operating through the pineal gland, a magnetic field is created. The negative and positive forces interact and become strong enough to create the ‘light in the head.’ With this ‘light in the head’ activated, astral projectors can withdraw themselves from the body, carrying the light with them”.¹⁰

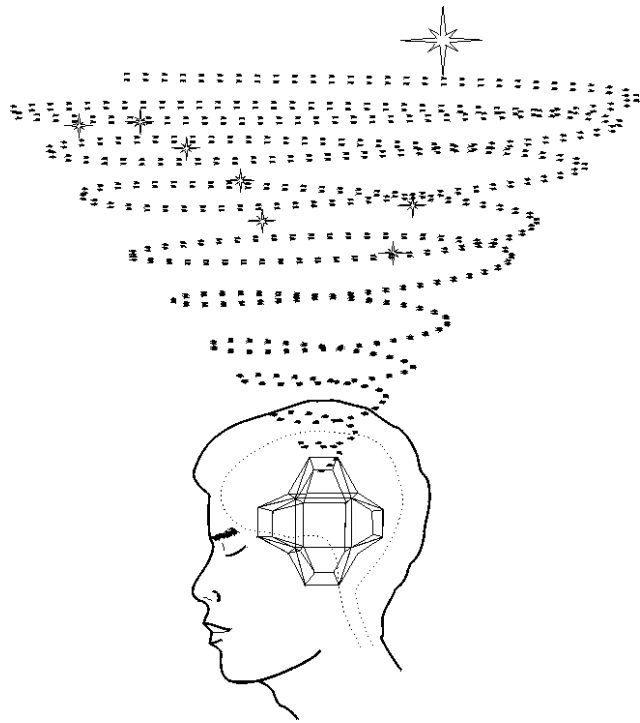


Fig. 15. Crown Vortex

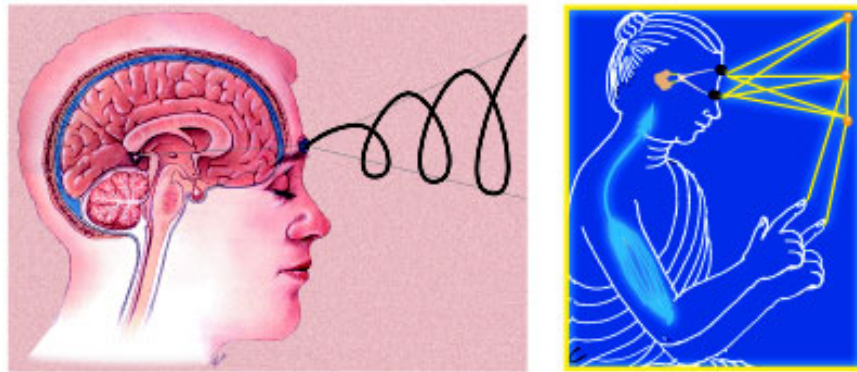


Fig. 16. Third Eye¹¹

“The pineal works primarily by converting the higher dimensional Light, that is constantly streaming into your reality, into usable information for your pituitary. As it gradually activates, the pineal permits the body to move its vibrational patterns into higher and higher levels. This process also allows your Light Body to attach itself even deeper into your physical instrument (Fig. 17). Our process is to reset the focus in the pineal. This chemical ‘lens’ largely disappears as you grow older. The decrease in its efficacy is one of the major reasons for your body aging as quickly as it does. When the pituitary begins to receive the consciousness energy packets from the Well of Dreams through its interaction with the pineal, it secretes enzymes that permit the chemical ‘lens’ in the pineal to reappear. As this ‘lens’ strengthens, it allows the RNA/DNA protein strings in your cells to activate your ‘third strand’.”¹²



Fig. 17. Heavenly Mirror

The pineal gland is located in one of the oldest anatomical regions of the brain. If you draw an imaginary line from the center of your forehead, crossed by a line through the head at the ears, you have its general location. The pineal is cone-shaped, about 8 mm (1/3 inch) in diameter, weighing from 50 to 150 mg. The gland is most active during childhood, and begins to regress at about age 7, becoming a calcified tissue strand in the adult (Fig. 18).



Fig. 18. Pineal Gland¹³

There are numerous anatomical and physiological idiosyncrasies associated with the pineal. It is one of the few solitary organs (most organs in the brain are paired, left and right). While small, the blood flow to the gland is quite large. The pineal has been considered as a homologue of the reptilian 'third eye'. Its photosensitivity derives from neural connections with the retina (Fig. 12).

The Taoist practice of Orgasmic Upward Draw is very important to help stimulate the pineal gland. Taoists regard the pineal as the second sexual gland (Fig. 19). In the Kan and Li practice, the steaming process helps to clean out all of the organs and reactivate the thymus and pineal glands.

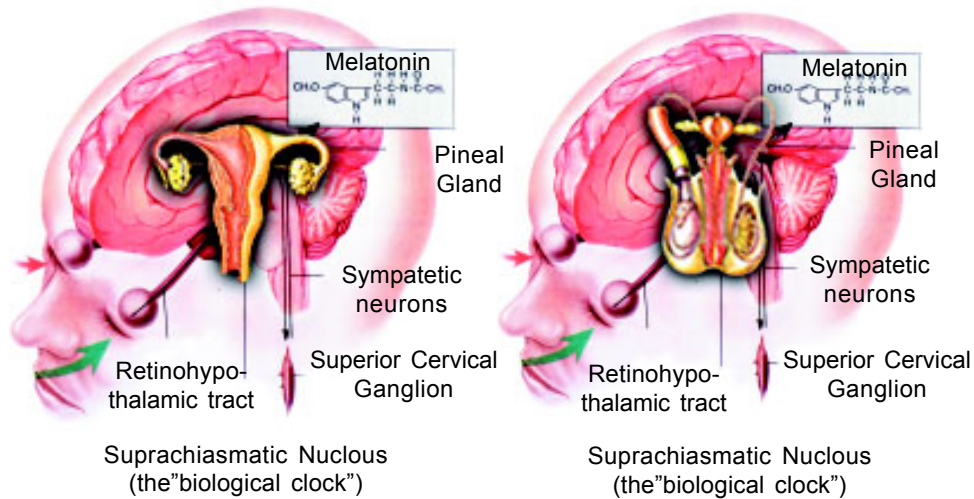


Fig.19 Pineal as Second Sexual Center

Fall from Grace

Nothing could be more natural than the state of Wu Chi, nothingness, or divine grace. And yet, the realization of Wu Chi is clouded by obscurations and confusions. Consciousness streams into every body, but only a few can see the light. Why is this so?

An essential function of the "upper brain", the Upper Tan Tien, is to manifest the esoteric and divine realizations of consciousness into our human bodies. Chi spirals through the Crown and the Third Eye into the pineal and pituitary glands, sustaining existence and nourishing the spirit. Infants and children bask in the glow and the power of the Chi Field streaming into, and interacting with, their bodies. The psyche is vibrant and alive and the energy bodies communicate in non-physical dimensions.

As we grow older, however, the internal realities begin to fade and the external world begins to predominate our existence. By puberty, the pineal gland has ossified into a calcified strand of tissue. Our minds project outwardly, and the demands of existence (work, family, daily living, etc.) preoccupy our awareness. Our emotions (fears, angers, resentments and all kinds of distractions to make ends meet) reflect this outward movement of the psyche.

Fear is the oldest negative emotion. It is felt by all animals, and is even stronger among humans since they have so little power to protect themselves, especially the newborn. The longer history required for organic development makes fear the basis of the entire civilization process: to protect ourselves and achieve our highest potential. Fear is closely connected to the kidney Chi (via the adrenal glands), and when the kidney Chi is diminished, the brain slowly begins to pull back and disengage from the fantastic worlds of the Divine. The upper brain becomes the observing brain, dedicated to the worldly tasks of sending, receiving and processing sensory signals related to daily living.

Inhibiting the Divine

The transition from an internally focused awareness of the Divine, the natural state of infancy, to an externally focused awareness of the adult World, requires significant shifts in the chemistry of the brain. The tissues and molecules which normally manifest the consciousness of Wu Chi must be “turned off” or inhibited. Chemically, the inhibitors are enzymes such as MAO (monoamine oxidase) which rapidly convert serotonin into inactive by-products, thus disabling the synthesis of the spirit molecules. The enzyme MAO breaks down serotonin before it can be converted into melatonin, 5-MeO-DMT and DMT (Fig. 20).

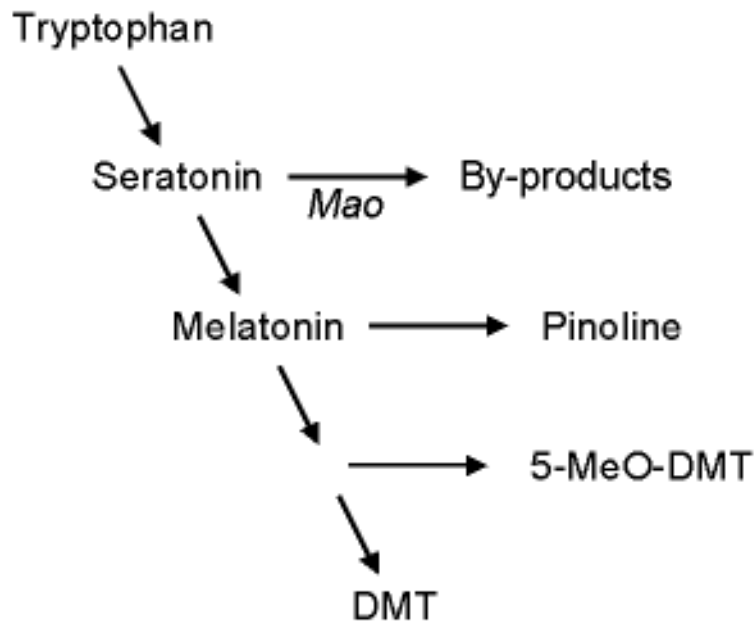


Fig. 20. Serotonin Deactivation

Our usual perception of the world in waking consciousness is, in fact, a state of waking ignorance. The brain must inhibit our true nature and divine connections to survive in the physical world. In everyday life, we see everything back to front, as it were. We perceive the primary actions of the brain as providing us with sensibility and cognitive awareness. In fact, the brain's mechanism is to filter and shut off the flow of divine consciousness, making possible survival on Earth, but obscuring all transcendental realities. Darkness meditations remove the obscurations. The inhibitory functions of the brain are lifted, and we revel in the experience of Oneness, Wu Chi, the Original Source.

Reawakening – Spirit Molecules

Waking consciousness satisfies the demands of physical existence, but severs the connection from the Divine. Thus, each night we must disconnect from the outer world and reconnect with our divine source, thereby sustaining life and nourishing the soul. In adult life, the experience of Wu Chi is relegated to the unconscious domains of deep sleep and the supernatural worlds of dream. In Taoist Inner Alchemy, we reawaken the soul to the Immortal Tao, the Wu Chi, the Original Source, and bring back the Divine into our conscious awareness.

Chemically, the reconnection to the Divine occurs by inhibiting the enzymatic actions of MAO and INMT, so that serotonin can convert into melatonin and melatonin into the spirit molecules 5-MeO-DMT (5-methoxy-dimethyltryptamine) and DMT (dimethyltryptamine) (Fig. 21). The enzymes are inhibited by substances secreted in the pineal gland, such as harmaline and pinoline. The “spirit molecules” allow us to reconnect to divine consciousness. They cause color imagery, out of body experiences, lucid dreams, visions of beings and/or animals, mystical states, subjective “other realities” and experiences of “being somewhere else.” These states are the language of dreams.

In the Darkness experience, the “spirit molecules” pinoline, 5-MeO-DMT and DMT alter the receiving qualities of the brain. The brain “tunes in” to invisible worlds and parallel universes, like a television tuning in to different channels. Mystical and near-death, out-of-body experiences reflect dynamic equilibria between “channels” in which we experience the essential energy that courses through the receiver¹⁵.

When you reach the 'DMT state' you begin to function consciously from the various psychic centers or chakras. The bodily processes of Healing Love combine the human states of true compassion and sexual arousal to create a new chemistry and a new vibration within the body. This 'special' vibration occurs at a frequency of 8Hz. 'As in the macrocosm, so it is in the microcosm'; hence if we make love, then all the cells and DNA actually make love as well. The DNA crosses over, like two serpents intertwined in an erotic embrace. You need the orgasmic vibration to arouse this crossover process which leads to the 'two giving birth to three'; the conception of new cells. The two vital states are compassion and arousal leading to orgasm. Both are inextricably linked to love.

Immortal Body

Rick Strassman, based on several years of intensive medical research, proposes that the release of DMT from the pineal gland at 49 days after conception marks the entrance of the spirit into the fetus. This 49-day prenatal period corresponds to the first signs of fetal pineal tissue, the differentiation of the gonads into male and female, and the time between the death of an individual and its soul's next rebirth according to the Tibetan Buddhist tradition. He suggests that the individual's life-force enters the body through the pineal gland and leaves it through the pineal gland at death (see "DMT, The Spirit Molecule", by Strassman¹⁶. The infant's brain is flooded with 5-MeO-DMT, secreted from the pineal gland and the brain is 40% more active and open¹⁷.

Chemistry of Consciousness

The chemistry of consciousness is, at first glance, complex. The infant basks in the divine glow of consciousness, manifested in the body/brain by the spirit molecules, 5-MeO-DMT and DMT. However, during development, the brain inhibits the flow of conscious-

ness, utilizing enzymes to deactivate the synthesis of the spirit molecules. Then, to re-realize the divine source, the brain must inhibit the inhibiting enzymes! The chemistry is explained in more detail below.

Serotonin (5-hydroxytryptamine), the neurotransmitter implicated in many of the functions of consciousness, is synthesized in the brain from the amino acid tryptophan, a basic building block of proteins (Fig. 21). After fulfilling its role in the synaptic cleft (the space between nerve cells), the serotonin molecule is decomposed into inactive by-products (5-hydroxyindole acetaldehyde) by the enzyme MAO (monoamine oxidase). The serotonin molecule differs from the tryptophan molecule only by the addition of a hydroxyl group (OH) and removal of a carboxyl group (COO).

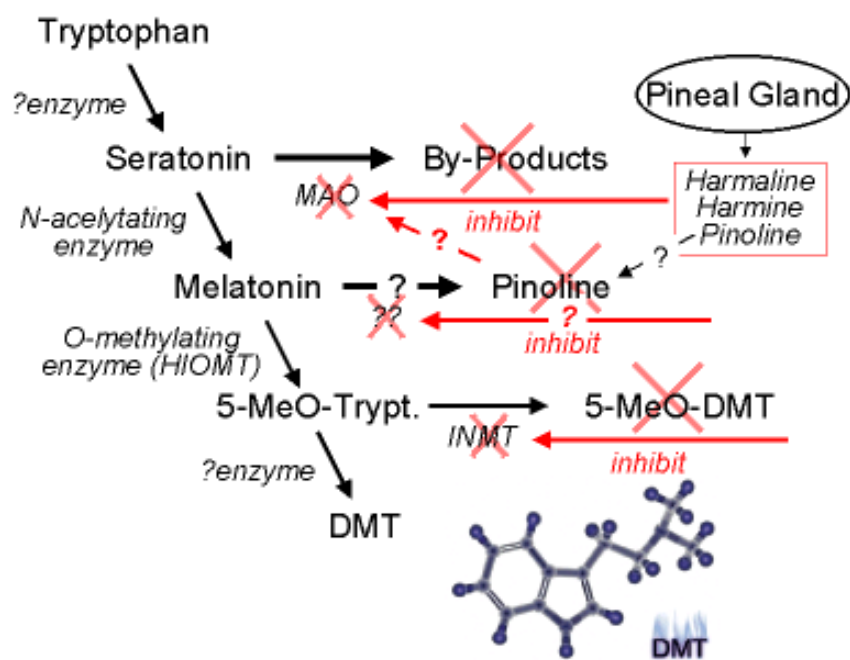


Fig. 21. Tryptamine Synthesis¹⁴

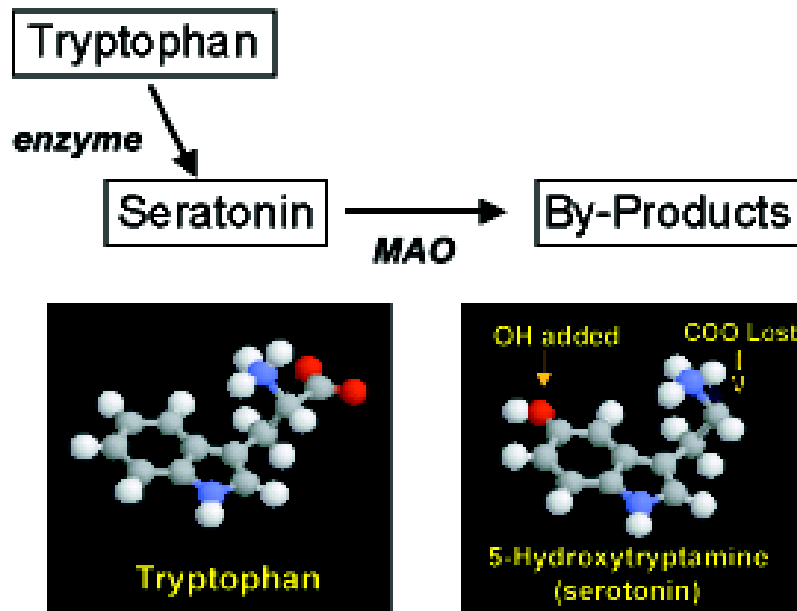


Fig. 22. Serotonin Synthesis¹⁸

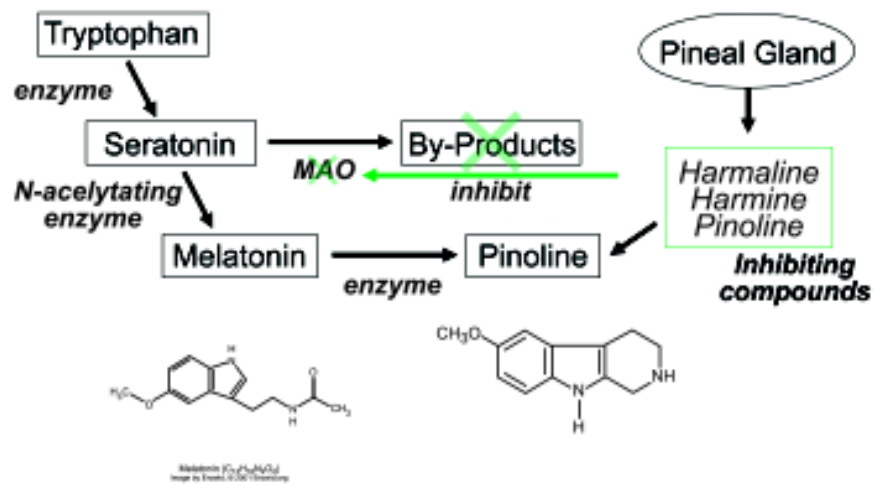


Fig. 23. Melatonin and Pinoline Synthesis¹⁹

indole sub.	aromatic (H ₀)	dihydro (H ₂)	tetrahydro (H ₄)
	<u>with a 1-methyl substituent</u>		
Ar-H	harman	harmalan	tetrahydroharman (THH)
Ar-6-OH	6-harmol	6-harmalol	6-tetrahydroharmol
Ar-6-OMe	6-MeO-harman	6-MeO-harmalan	6-MeO-tetrahydroharman
Ar-7-OH	harmol	harminal	tetrahydroharmol
Ar-7-OMe	harmine (a)	harmaline (a)	tetrahydroharmine (a)
	<u>with a 1-hydrogen substituent</u>		
Ar-H	βC	DHβC	THβC (tryptoline)
Ar-6-OH	6-HO-βC	6-HO-DHβC	6-HO-THβC
Ar-6-OMe	6-MeO-βC	6-MeO-DHβC	6-MeO-THβC (pinoline)
Ar-7-OH	7-HO-βC	7-HO-DHβC	7-HO-THβC
Ar-7-OH	7-MeO-βC	7-MeO-DHβC	7-MeO-THβC

Fig. 24. “Harm” Compounds: Pinoline also goes by the names 6-Methoxytetrahydro beta carboline, and 6MeOTHBC²⁰.

Melatonin (N-acetylserotonin), the neurohormone implicated in sleep, is synthesized directly from serotonin, by deactivating MAO and inhibiting the destruction of the serotonin molecule (Fig. 23). MAO (monoamine oxidase) is deactivated (inhibited) by the beta-carbolene enzymes secreted in the pineal gland: harmine, harmaline, and pinoline. As melatonin levels rise in the brain, the melatonin converts to pinoline (Fig. 23). There is some confusion in the literature regarding pinoline synthesis, perhaps because it has multiple synthesis pathways, as well as close affinities to a variety of related compounds (Fig. 24).

The inhibition of MAO (monoamine oxidase) also allows for the synthesis of the “spirit molecules”, 5-MeO-DMT (5-methoxy-dimethyltryptamine) and DMT (dimethyltryptamine) (Fig. 25). In a two-step process, 5-MeO-DMT is synthesized from melatonin with the assistance of the O-methylating enzyme HIOMT (hydroxyindole-O-methyltransferase) and the enzyme INMT. DMT differs from 5-MeO-DMT by the removal of a CH₃ group.

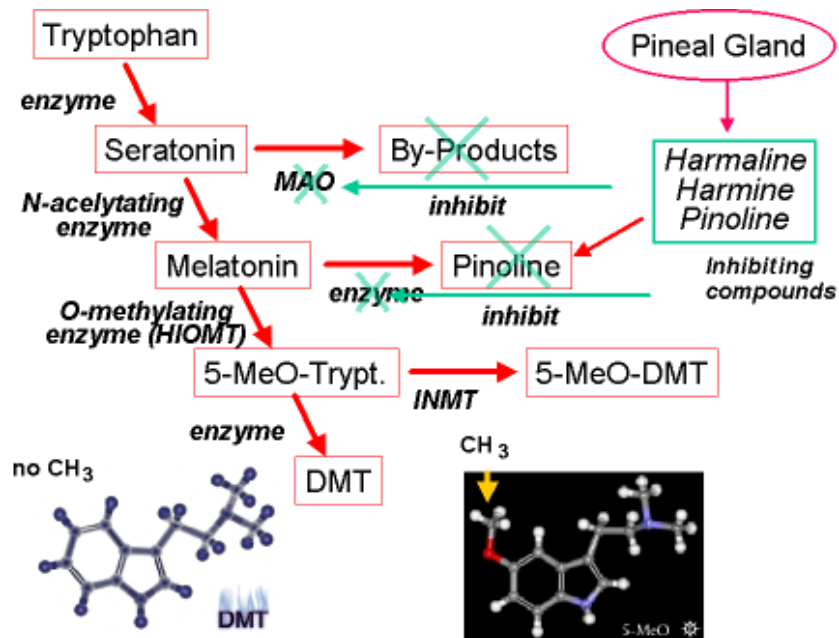


Fig. 25. 5-MeO-DMT Synthesis²¹

The pineal gland also secretes molecules that inhibit the enzyme INMT, allowing for the synthesis of DMT (Fig. 26). DMT synthesis may require activation by the adrenaline and ephedrine systems.

It should be noted that the tryptamine derivatives are often unstable, volatile substances, and molecules with nearly identical structures may have significantly different functions and effects (Fig. 27). DMT, for example, is metabolized by the brain in a matter of 10's of seconds. The tryptamine molecules may rapidly destabilize and transform into sister compounds, and multiple pathways may exist for the formation of a given tryptamine structure. This probably accounts for some of the considerable confusion in the literature regarding the origin of the various "spirit molecules". Pinoline synthesis, as a prime example, has been variously attributed to both melatonin and 5-MeO-DMT parent compounds. The suggestion that pinoline is a pineal secretion ignores the actual molecular pathways that lead to its synthesis.

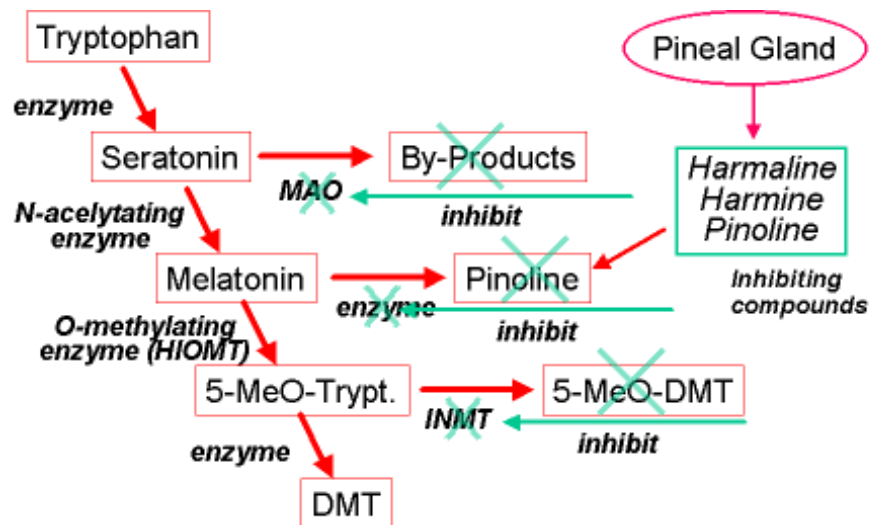
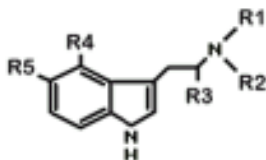


Fig. 26. DMT Synthesis²²

Orally and Parenterally Active Psychotropic Tryptamine

Derivatives <http://deoxy.org/tryptan.htm>

Based on McKenna & Towers 1984



Name of Compound	R1	R2	R3	R4	R5	Dosage (mg)	Route Oral/Par.
tryptamine	H	H	H	H	H	100 *1	par/oral?
DMT (dimethyltryptamine)	CH3	CH3	H	H	H	60	par.
5-MeO-DMT	CH3	CH3	H	H	OCH3	8	par.
serotonin	H	H	H	H	OH	100 *3	oral

Data compiled from [Kantor, et al. 1980](#); [Shulgin 1976, 1982](#); [Shulgin&Carter 1980](#)

Fig. 27. Tryptamine Derivatives²³

Stages of Darkness Technology

Benefits of Darkness Experience

The Darkness meditations will influence each person uniquely, depending on their maturity and stage of spiritual development. However, most people, even beginners, will receive great benefits, which may include:

1. Relaxation. This is one of the foundations for all other work. During the first days of the retreat, catching up on sleep, allowing the eyes to recuperate from the over-stimulation of our visual world, releasing the grip of mental concerns, plans, and agendas and simply letting the energies settle creates the best vacation you may ever have.
2. Once relaxed and feeling at home in the dark, the Inner Lights may appear as well as possible images of space teachers, deities, colors, and shapes. Imbalances in one's energies can manifest as dull colors.
3. Over time, as one becomes more open, balanced and awake, images clear as day may appear, not inside the mind's eye but outside in the space of the retreat.
4. Advanced practitioners may experience some of the following: Dreams and sleep become more lucid. A state of continuous consciousness arises in which there is no break in conscious awareness; meditation can continue during sleeping and non-sleeping hours.
5. The Taoist Secret of Love and the Healing Love become very active, so that working with sexual energies and engaging in creative work become easier and more powerful.
6. Dreams will often take the form of teachings or participation in great mythological stories.

The Darkness enables the body and mind to undergo a series of profound transformations. The 'states of consciousness' appear correlated with the organic synthesis and accumulation of psychedelic

chemicals in the brain, especially melatonin (Days 1 to 3), pinoline (Days 3 to 5), 5-MeO-DMT (Days 6 to 8), and DMT (Days 9 to 12). The pharmacology of these states is as follows.

‘Melatonin Stage’ (Day 1 to 3)

Complete isolation from external light causes the pineal gland to flood the brain with the neurotransmitter melatonin (average 2 to 5 mg/day), manifesting initially as the need for sleep and rest. The eyes recuperate from the over-stimulation of the visual world, releasing the grip of mental concerns, plans, agendas, and letting the energies settle. Melatonin is essential for maintaining the hibernation state, which facilitates the emergence of spiritual consciousness. The person retains a child-like biological condition where melatonin is conserved and recycled, not wasted in biological continuation. When this substance works together with the yellow marrow in the bone, the reddish firing reaction will activate a gentle interaction between the sacred water and the light. The sacred waters are the inner fluids that are responsible for producing bone marrow and other bodily fluids. The waters run not only in the center of the bones, but also in the spinal connections between the Crown and Perineum Points.

‘Pinoline Stage’ (Day 3 to 5)

After about three days, when melatonin concentration reaches sufficient levels (15 to 20 mg) the body then begins to produce the superconductor pinoline, whereby a greater fluidity of thought and healing of the body starts to occur. Pinoline induces cell replication (mitosis) and intercalates with DNA molecules. The ‘pinoline stage’ is normally activated only in the womb, in lucid dreaming, or in near death experiences. Within this state we can metaprogram the brain to the Unity of Self, heightening awareness of the pathways with which we filter reality. At this stage, the nervous system becomes aware of itself. We become aware of the hologram of the external world that we create constantly in our head²⁴.

When the pinoline is triggered you activate your clairsentient and clairaudient powers. You may see light and visions, hear music, and gain phenomenal insight. A decoding of the DNA then begins to take place. Cosmic particles are attracted to us and decoded in the form of sound, light, knowledge and realization. The particles, which have the same cell structures as humans (and from which the Tao believes you evolved), are attracted to you magnetically. The body has approximately six trillion cells, which correspond to the universe 'without'. Each of these cells can be seen as a computer with unlimited power and potential. Each cell can become a super conductor, able to receive information from space. You are able to decode this universal information carried from outer space, which may be as old as nothingness itself. When you enter this primordial state or force you are reunited with the true self and divinity within. You literally 'conduct' the universal energy. You may see into the past and future, understand the true meaning of existence, and begin to understand the order of things. You return to the womb, the cocoon of our material structure and Nature's original Darkness.

'5-MeO-DMT Stage' (Day 6 to 8)

At this stage the pineal gland starts to produce the neuro-hormone 5-MeO-DMT (aka 'akashon'). This psychoactive tryptamine is highly luminescent and also extremely phosphorescent due to the amount of phosphene that it transmits onto the visual cortex. 5-MeO-DMT switches on 40% more of the cerebral cortex and awakens the nervous system to become aware of itself; 'beingness' results. Hence, the possibility of metaprogramming the nervous system's bio-computer - activating healing and conflict message assortment of the nervous system. 5-MeO-DMT is the empathogenic neurotransmitter that expands the emotional body between 'infinity and zero'. It gives rise to telepathy in the emotional and intuitive bodies. It engages the awakening of the 'Flower of Life', the spine, which begins to glow in a state of beingness and peace.

5-Meo-DMT discharges the Darkness from the Darkness. A bright light is activated and one experiences a born-again mentality. This Great White Light, the manifestation of the astral body, enables the self to project externally. At this point, some degree of 'N-Methyl-D-Aspartate Inhibition' (NMDA-I) usually occurs. This is a 'soft form' of the slowing of the glutamate input signals into the cells. This makes it easier for the nervous system to cause electrons to stop flowing within the cells, allowing for profound meditative trance states. 5-MeO-DMT intercalates with messenger RNA. One can see in 3 dimensional Holon pictures, as the thoughts behind language.

"Techniques taught in the Darkness enable one to read and go beyond the matrix, by unifying all directions, and externalize the soul computer so that one can start to interact with ones own genetic code of the Tree of Life. In this intensive process 5-MeO-DMT activates the entire spine, the Tree of Life. The spine is activated and reprogrammed and you can start to process the illusion of the dream from its binary code into the unified translated Self: the Unity Self. Through 14 days of total light isolation your consciousness can be expanded to the wider range of wave emanations and transduce the core hologram of reality that is coherently programming ones nervous system to the Unity Self²⁵."

Many exercises will be practiced during this period: compacting Chi, consciousness and awareness into the nervous system, working with the Silent Self and anchoring the Immortal Body.

The 5-MeO-DMT prepares the nervous system, through its empathetic state of being and self awareness of the nervous system, for the DMT or dimethyltryptamine production of the pineal gland, in psychoactive milligram doses.

'DMT Stage' (Day 9 to 12)

When DMT levels reach more than 25 mg, one's experience can become very visual. DMT is the visual Third Eye neurotransmitter. It enables the energy body and spirit to journey into hyperspace, beyond third dimensional realms of time and space. It is intensely energizing. "After some 10-12 days one starts to see in infrared, and ultraviolet, one can actually run across the room and touch a person, by seeing their heat patterns. The Holon Images exteriorize and one is walking in a Virtual Reality, which appears to be the DNA language macro uploaded, and interactive."

When you reach the 'DMT state' you begin to function consciously from the various psychic centers or chakras. The bodily processes of Healing Love are then combined with those of the Darkness. The human states of true compassion and sexual arousal create a new chemistry and a new vibration within the body. This 'special' vibration occurs at a frequency of 8Hz. 'As in the macrocosm, so it is in the microcosm'; hence if we make love, then all the cells and DNA actually make love as well. The DNA crosses over, like two serpents intertwining in an erotic embrace. You need the orgasmic vibration to arouse this crossover process which leads to the 'two giving birth to three'; the conception of new cells. The two vital states are compassion and arousal leading to orgasm. Both are inextricably linked to love. When this 'love-vibration' reaches the pineal gland a new hormone is produced, which in turn creates whole body conductivity. Only when you feel the waves of orgasmic vibration and unconditional love for the self and others can the process be activated and the essence of the Darkness is magnified.

At this stage of the Darkness retreat, the required amount of sleep tends to diminish dramatically. Although the day may last 24 hours, 3 hours of sleep can seem like 12. During this period we will engage in further practices; psychic games and interactivity, Taoist Dream Yoga (advanced levels) and Imagination Expansion

Darkness Information and Logistics

Preparations for the Darkness Retreat

Our mindset and attitudes upon entering a Darkness retreat will help set the stage for our immersion into darkness. It would be wonderful to enter with a sense of clarity, openness, joy, and of resting in our true nature, but this is more the fruit of the retreat than a prerequisite. Nevertheless, some of the attitudes that can help set the stage include:

1. Looking forward to a wonderful rest and vacation from the pressures of everyday life.
2. Curiosity about what will arise.
3. Longing for the clarity, wisdom and fruits of the practices of the retreat.
4. Dedication to growth.
5. Treating whatever arises as an opportunity to learn.
6. Connecting to your teachers and the teachings.
7. A sense of support from the community.
8. Service to the larger community and the world and wishing to be a beneficial presence.
9. Confidence stemming from the fact that others have successfully navigated through such retreats for thousands of years and have returned with immense treasures through their commitment and efforts.
10. Gratitude for this opportunity to learn, to grow, and to create benefit and beauty for oneself, others, and the World.

Inner Preparations – Practice at Home

1. Each participant should practice the Cosmic Inner Smile, Six Healing Sounds, Fusion of the Five Elements, Microcosmic Orbit, Iron Shirt Chi Kung and Tao Yin, which bring the body into a state of balance and tuning. A physically fit vehicle is the foundation stone from which to launch astral travel into multi-dimensional orbits and higher cortical activity.

2. All participants are encouraged to engage in a healthy preparatory diet and bowel cleansing process, commencing 4 weeks before the retreat. Diet should be rich in Vitamin D, beta-carotene like choleric, calcium (2,000 gm), magnesium (500 mg) and zinc (20 mg/day).
3. We suggest that participants increase their daily intake of seaweed and blue green algae approximately four weeks before the retreat. Bring a sufficient supply of vitamins, seaweed and blue green algae along with you. This will enable essential amino acids and enzymes required by the body and third eye, to produce the all-important neurotransmitters of the 'Internal Alchemical Elixir'.
4. Participants should endeavor to disperse all emotional troubles with friends and family members, prior to the retreat.

Outer Preparations – Practical Advice

1. We recommend that you arrive at Tao Garden several days before the retreat, to settle yourself, continue the purification process, and to become accustomed to the physical environment and retreat layout. This will facilitate your day-to-day life in complete darkness.
2. It is imperative to leave any light-emitting device outside of the Darkness retreat. The eyes and our perception will become extremely sensitive to the least bit of illumination; even the faintest leakages of light, such as a watch dial or LED, will disturb the environment. Therefore, please do not bring: illuminated clocks and watches, flashlights, flash cameras, palm pilots, cell phones, etc.
3. Make sure that all clothing and personal items that you will need for the period of the retreat are in order. Create a way of laying out the different items so that you can easily determine what you are selecting. Organization and order can make everyday functioning much easier.
4. Bring eye-shades with you to Tao Garden, such as the blind-folds that you might wear during travel to help sleep. The

eye-shades will be worn during the retreat to soften the eyes and remind the eyes that they are unnecessary in the Darkness, breaking their habitual pattern of use.

5. Medications and vitamins require special care. It may be helpful to contain daily doses in separate vials, medication boxes, or plastic zip-lock bags. A multi-vitamin supplement is useful, and special supplements of vitamin D are particularly important to make up for the lack of exposure to sunlight.
6. It is important to take care of any personal business before entering the retreat, such as letters, phone calls, etc., and to plan on total isolation from the outside world for the duration of the retreat.
7. Bring sunglasses and eye-shades with you to Tao Garden. The 7th, 14th and 21st evenings are opportunities to terminate the Darkness Retreat. You will leave through a reflexive tunnel, wearing sunglasses to readjust to the light.

Darkness Nutrition

Food is specially prepared to meet the requirements of the body, mind, and spirit in attaining the goals of darkness enlightenment. Fresh juices and soups are served for “breakfast” and a light organic meal is prepared for the afternoon. The diet consists of simple, often liquid foods. Seaweed and blue green algae meet many of the general dietary requirements, supplying high concentrations of the eight essential amino acids required by the body (see below). Fresh juices, especially from the noni (*Morinda*) fruit, supply the metabolic enzymes necessary for developing the neuro-endocrine system to its highest potential.

Sufficient levels of tryptophan are especially important for the Darkness experience (See: *Chemistry of Consciousness* p. 28). Tryptophan is one of 20 amino acids, which are the basic building blocks of proteins. It is one of the eight “essential” amino acids, meaning it cannot be synthesized by the body from other amino acids, and must therefore be ingested in foods. Adults need from 3.5 mg/kg/day to 350-500 mg of tryptophan per day.

As tryptophan crosses the blood-brain barrier, it is converted to serotonin with the assistance of vitamins B6, B12 and folate. Tryptophan is also converted in the body to niacin (vitamin B-3) and picolinic acid. Giving high doses of vitamin B-6 along with tryptophan increases its conversion to niacin and decreases its uptake into the nervous system. Low blood tryptophan levels have been reported in depressed patients and are corrected with tryptophan supplementation. Tryptophan is better absorbed in the brain when consumed as part of a high carbohydrate meal.

Some of the tryptophan-rich foods available at Tao Garden, and recommended for the Darkness retreat, are listed below, along with several other tryptophan-rich foods.

Tryptophan-Rich Foods(Tao Garden³⁹) Tryptophan-Rich Foods

- Seaweed, Blue-Green Algae
- Tofu, Soy Milk, Soy Yogurt, Soy Beans
- Brown Rice
- Bananas, Dates, Figs
- Peanuts
- Watermelon Seeds
- Fish and other Seafoods
- Cottage Cheese
- Milk and Milk Products
- Malt
- Legumes
- Almonds, Soy Nuts
- Brewer's Yeast
- Animal Protein: Beef, Turkey, Chicken

Levels of tryptophan in some common foods⁴⁰:

- Fish and other seafoods 800-1,300 mg/lb
- Meats 1,000-1,300 mg/lb
- Poultry 600-1,200 mg/lb
- Peanuts, roasted w skin 800 mg/cup
- Sesame seeds 700 mg/cup
- Dry, whole lentils 450 mg/cup

Accessory Vitamins

B6 (pyridoxene); Sources: Meats, fish, green leafy vegetables, legumes, bananas, whole grains.

B12 (Cobalamin); Found almost exclusively in animal products (meats, fish, poultry, milk, eggs, yeast, cheese).

Blue Green Algae

Algae are the fundamental basis of the entire food chain — the foundational nutrient source for creating and renewing all life on earth. Blue green algae are the crème de la crème of all algae, one of the planet's most powerful foods. This single-celled organism (actually a bacterium) is richly endowed with a vast array of easily assimilated nutrients including essential fatty acids, active enzymes, vitamins, amino acids, minerals, proteins, complex sugars, and phytonutrients.

Blue green algae have an amino acid profile that is nearly in exact proportion to the requirements of the human body. It contains over 60 minerals and trace minerals in naturally chelated form so the body can absorb them into the cells. With the exception of vitamins D and K, all vitamins are present to provide fuel for our cells (Vitamin D and K are produced naturally by our body). Blue green algae contain the Essential Fatty Acids (EFA) Omega-3 and Omega-6, and are one of the highest known natural food sources of beta carotene (a cell regenerator and potent neutralizer of free radicals) and chlorophyll (excellent chelating ability to escort toxins out of the body). The food is also 97% assimilable, digestible and useable by the body.

Spirulina, a spiraled blue green alga, is one of the most common nutritional varieties of blue green algae. A spirulina factory is located in Lampang, southeast of Chiang Mai (see www.spirulina.co.th).

Summary

Complete darkness profoundly changes the sensory sensibilities of the brain. The body is deprived of all visual reference. Sounds begin to fall away as we lose contact with the external world and turn the senses inward. The effect of darkness is to shut down major cortical centers in the brain, depressing mental and cognitive functions in the higher brain centers. Emotional and feeling states are enhanced, especially the sense of smell and the finer senses of psychic perception. Dreams become more lucid, and the dream state manifests in our conscious awareness. Eventually, we awaken within ourselves the awareness of the Source, the spirit, the soul. We descend into the void, into the darkness of deep, inner space. The light appears.

The darkness environment dramatically alters the chemistry of the brain, manifesting especially in neuro-endocrine systems which govern consciousness and regulate body functions. An important neurotransmitter involved in waking consciousness (serotonin) converts into a regulatory hormone (melatonin) that shuts down the organ systems, quieting the body in preparation for the finer and subtler realities of higher consciousness. The pineal gland initiates a cascade of inhibitory reactions, permitting visions and dream-states to emerge in our conscious awareness. Eventually, the brain synthesizes the "spirit molecules" 5-methoxy-dimethyltryptamine (5-MeO-DMT) and dimethyltryptamine (DMT), facilitating the transcendental experiences of universal love and compassion.

The spirit molecules are synthesized from the amino acid tryptophan in a series of biochemical steps, which simplified are: **tryptophan → serotonin → melatonin → pinoline → 5-MeO-DMT DMT**. The spirit molecules enable the nourishment and sustenance of the soul, sought daily in deep sleep and dream.

The direct experience of consciousness is often discordant with the necessities of physical existence on Earth. Thus, in waking consciousness (actually waking ignorance), the body inhibits 5-MeO-DMT and DMT synthesis by producing the compound MAO to deac-

tivate the serotonin – DMT pathway. To maintain its connection to the soul, however, the body must periodically inhibit the action of monoamine oxidase (MAO), allowing for DMT synthesis and a return to the Source. This is accomplished by enzyme inhibitors, such as harmine and harmaline, which are secreted by the pineal gland in response to circadian rhythms and the darkness of night. The pineal gland also produces the hormone melatonin, which helps regulate circadian rhythms in the body.

Daylight is the cue that inhibits our essential connection to the Source, but facilitates physical survival on Earth. The Darkness experience relaxes this constraint, by inhibiting the inhibitor, thereby activating the consciousness connection; for example, the pineal secretion of harmaline inhibits MAO, itself an inhibitor, allowing synthesis of 5-MeO-DMT and DMT. Thus, in the Darkness, our biochemical connections to the Source are re-established. The Darkness facilitates the synthesis and accumulation of the spirit molecules (5-MeO-DMT and DMT) in the brain, and hence the experience of our true nature, of love and compassion energy, and our **reconnection with the Divine Tao (Wu Chi)**.

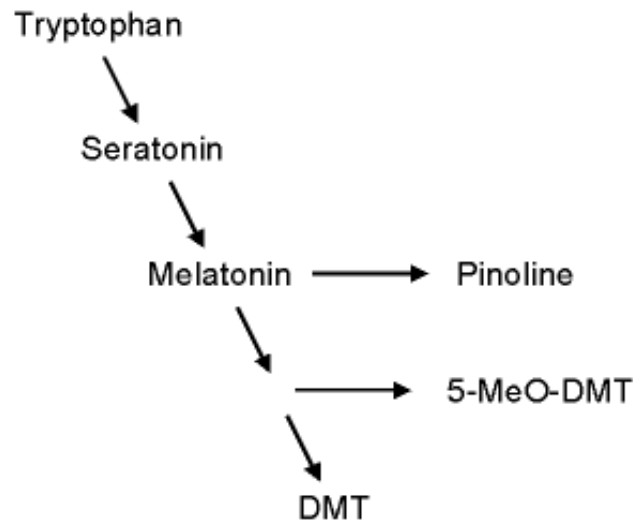


Fig. 28 Tryptamine Synthesis, Simplified

Appendices

References of Interest

DMT, The Spirit Molecule, by Rick Strassman, M.D.²⁶

TIHKAL, Tryptamines I Have Known and Loved, by Alexander Shulgin and Ann Shulgin²⁷.

The Vaults of Erowid: Documenting the Complex Relationship Between Humans and Psychoactives²⁸.

Orally and Parentally Active Tryptamine Derivatives²⁹.

Notes on the Synthesis of Tryptamine Derivatives

Fig. 21 is based on a variety of rather confusing sources, some of which are reproduced here for further reference and clarification.

"Melatonin is synthesized from serotonin (5-hydroxytryptamine) in the following manner: (1) An N-acetylating enzyme converts serotonin to N-acetylserotonin; (2) the latter compound is O-methylated through the action of hydroxyindole-O-methyltransferase (HIOMT). Serotonin is metabolized to 5-hydroxyindole acetaldehyde by the enzyme monoamine oxidase (MAO). The activity of this enzyme in the destruction of serotonin and that of HIOMT in the O-methylation of N-acetylserotonin provide convenient vehicles for controlling the amount of melatonin present in an organism at any one time.^{27"}

1. Melatonin: N-Acetyl-5-Methoxy-Tryptamine, or N-Acetyl-Serotonin.

2. Pinoline: About 212 electrons in weight, it is a tri-cyclic indole nucleus with 3 attached rings, a pyrido, 3,4-indole, known as the beta carboline base) it is: 6-Methoxy-tetra-hydro-beta-carboline 6-MeO-THBC. With C13 H12 N2 O.

3. DMT: Is an indole tryptamine made from Tryptamine and Serotonine by several enzyme metabolisations. It has 188 electrons, and is known as: N,N-Dimethyltryptamine, N,N,DMT, more technically as 3-[2-(dimethylamino)ethyl]-indole, with C12 H16 N2.

4. 5-MeO-DMT: 5-Methoxy-Dimethyltryptamine. It has 218 electrons in its molecular weight, it converts to Pinoline, and it is structured as C13 H18 N2 O.

Pinoline and Harmine as well as other beta carbolines, inhibit the Mono Amine Oxidase enzyme. In a process called oxidative deamination, MAO converts as much as 80 percent of the body's serotonin into a physiologically inactive metabolite. As serotonin binds to the enzyme's active sites MAO removes the amine function and renders the molecule harmless and ineffective. ... Hence, inhibiting MAO, softly, means that there is a much larger turnover of serotonin which renders a major anti-depressant affect, It appears that Pinoline plays an even more important role on depression, and it is produced only in sufficient quantities in darkness.

Pinoline (6-methoxy-1,2,3,4-tetrahydro-beta-carboline) is a naturally occurring compound in the mammalian body which inhibits 5-hydroxytryptamine (5-HT) [serotonin] uptake and exerts antidepressant-like behavioural effects in rats. ... pinoline did not have any modulative influence on the activity of 5-HT transporter and it interacts competitively with citalopram on the substrate recognition site of the 5-HT transporter.

Synthesis of DMT Derivatives. Tryptamine derivatives and beta-Carbolines have been detected as endogenous metabolites in mammals, including humans. Methyl transferases that catalyze the synthesis of tryptamines, including DMT, 5-MeO-DMT and bufotenine, are found in human lung, brain, cerebrospinal fluid, liver and heart (McKenna & Towers 1984). In the pineal gland MAO is the primary inactivation pathway of serotonin, a neurotransmitter synthesized from the amino acid tryptophan. If MAO is blocked by harmine, harmaline or other MAO inhibitors serotonin can be converted by the methyltransferase enzymes HIOMT and INMT into psychedelic tryptamines (serotonin $\xrightarrow{\text{HIOMT}}$ 5-MeO-trypt. $\xrightarrow{2 \cdot \text{INMT}}$ \rightarrow

5-MeO-DMT). A potent inhibitor of INMT, which is a necessary enzyme for the synthesis of DMT and 5-MeO-DMT, is found in particularly high concentrations in the pineal gland. A bypassing or inhibition of the synthesis of this inhibitor might be responsible for trances and other psychedelic states achieved "without drugs".

5-MeO-DMT Drug Trip Account

"I can remember this feeling of building intensity up to a point, and then I was not there in my body or in time. In the 10 to 15 minutes that my body was under the influence of the drug my mind was completely referenceless, there was no way for my consciousness to limit or gauge the stimuli my being was barraged with. I remember switching to a perception where the endless and intricate phosphene was love and the energy of light. I called upon those forces within my being to realign and submit, to let go of all the cogent fears and just exist ... and that innate decision saved me a lot of psychic damage. What is most outstanding about the way it feels is an inability to judge in any way, by any method of the mind ... it is unconquerable, as deep and profound as a totally unconditional love that is life. "What a trip, huh?" I beheld every thought that was going on everywhere in the universe and all possible realities while I was wracked out with this horrible ruthless love. It scared the hell out of me. When I could see again (15 minutes later) it was almost as if there was an echo of a thought in my head saying that I was given an extremely rare look at the true consciousness of it all. I've never been hit this hard since then. A definite ++++.

"... it began with a fast-rising sense of excitement and wonder, with an undertone of "Now you've done it," but dominated by a sense of, "WOW, This Is IT!" ... The entire universe imploded through my consciousness. It's as if the mind is capable of experiencing a very large number of objects, situations and feelings, but normally perceives them only one at a time. I felt that my mind was perceiving them all at once. There was no distance, no possibility of examining the experience. This was simply the most intense experience

possible; a singularity, a white-out (as opposed to a black out), I have little memory of the state itself ... I had the feeling, a visualization of being part of the universe of beings, all active in our daily, interwoven tasks, still moving at an incredible rate, and with a longing for a single group/organism awareness and transcendence. In a few more minutes it faded to an alert ... state with an additional sense of awe and wonder, relief, and a strong feeling of gratitude toward the universe in general, for the experience.”

DMT Drug Trip Account

After DMT inhalation: “As I exhaled I became terribly afraid, my heart very rapid and strong, palms sweating. A terrible sense of dread and doom filled me — I knew what was happening, I knew I couldn’t stop it, but it was so devastating; I was being destroyed — all that was familiar, all reference points, all identity — all viciously shattered in a few seconds. I couldn’t even mourn the loss — there was no one left to do the mourning. Up, up, out, out, eyes closed, I am at the speed of light, expanding, expanding, expanding, faster and faster until I have become so large that I no longer exist — my speed is so great that everything has come to a stop — here I gaze upon the entire universe.”

Inner Alchemy: Physical Explanation

Each one of the cells that our body is composed of is directly related to the first original cell located right behind the navel. This cell was born of the meeting of the ovum and sperm of our parents. As long as this cell sends a message of perfection to the DNA of each cell in the body, we are virtually immortal. When we work with inner alchemy, we can recombine the 64 Amino Acids of DNA by following the 64 eternal laws of change (I Ching), and our cells are able to get in better touch with more subtle forces (Higher Energy). We do this until we reach the divine spark in the original cell. This process can change our atomic structure.

Developmental Process of Melatonin

The history of melatonin starts around the pre-Cambrian age, when the anaerobic cells started to evolve into a more efficient form of life, called the aerobic state. Aerobic cells make use of the O₂ (oxygen, Yang, fire), and H₂O (water, Yin). In this way the cells assimilate the organic molecules (mostly composed of CO₂, Carbon) much more easily.

In the process of assimilation, oxidation occurs, creating free radicals. Some free radicals deform molecules by penetrating the cellular membrane and “bombing” the DNA, causing a great amount of damage, including mutations. The process of oxidation weakens DNA. When a cell reproduces the new cell’s DNA is also weaker. Taoists were aware of this process many thousands of years ago, and said that it was not good to reproduce when one was old, or if one drank, or was in a weak condition, as this would cause the offspring to be weak. To avoid this undesirable process cells started to develop melatonin.

Yin/Yang Harmony in the Body

The first action of melatonin is anti-oxidant, which is a Yang process. Another basic effect of melatonin is a reactive energy we call hormones, and this is Yin. This antioxidant is more efficient and versatile than Vitamin E or Glutathion, and is five hundred times more powerful than DMSO against radiation. They speak as well about Pi Gu, or the nearly complete cessation of food intake. In fact, when you get to the higher level, and not before, you don’t want to disperse your refined energy to counteract the oxidation process, especially when eating carbohydrates which are rich in C06. Everything in the universe including our glands have Yin and Yang. We spoke about the Yang aspect of melatonin, and we assert that the Yin side of melatonin is as a hormone. The hormone function of melatonin is related with the whole endocrine system, especially the adrenal glands. The Yin aspect of the adrenal gland is cortisone, while the Yang aspect is adrenaline. To have an ideal situation we

need to balance the Yin hormone melatonin with the Yang adrenaline, and the Yang antioxidant in melatonin with the cortisone that is Yin. The pineal gland that produces melatonin works more during the Yin period of our day, i.e. at night. The adrenal works more during the Yang part of the day, i.e. daytime. If during the daytime we move adrenaline through Tai Chi, meditation, Chi Kung, etc., then at night we will have a stronger production of melatonin and cortisone. From 9 to 11 pm, our bodies produce more cortisone. From 11 pm to 3 am, the sexual energy rises, producing more melatonin, (Yin). This process is connected with the pituitary gland and the thyroid growing process. From 3 to 6 am we produce more melatonin, or Yang antioxidant, and this matches perfectly with what Taoists say - that 3 to 6 am is the best time for meditation. At this time the pineal and sexual glands are connecting, straightening and rejuvenating the DNA, bone, and marrow. From 6 to 12 am, the body produces more adrenaline and it connects with the pancreas in helping the process of the construction of the tendon and muscle fiber. That is why Taoists say that this is the best time for physical practice. The Taoists speak about nine gems that distill essence. In fact, westerners discovered that the process of generating ovum and sperm starts in the pineal gland. A hormonal message, sent to the pituitary and other glands, eventually results in the production of the egg and sperm in the sexual glands. By bringing up this essence, we reconnect the circuit, enhancing and strengthening a more refined production of hormone that slowly starts a transformation, slowing the aging process and enabling the great masters to achieve their remarkable attainments.

Life Style Awareness

Most people do not follow the above mentioned timetable. They use the upper gland energy during the day, getting stressed and emotional, and the lower gland energy at night, by eating late, staying in artificial light, and especially having sexual intercourse at night time. They make the body too fiery and this increases its tendency to burn out over time. To reverse this aging process through inner transformation, we depend on the ability of our body to produce

melatonin to protect and recreate the stem cells located in the spinal marrow. If we can do this the body is able to reproduce brain cells and other body cells which are free of any of the signs of aging. As a result of the increased and refined flow of melatonin and other hormones in the glands, the immune system is activated 200% more than in the normal state. This especially increases the piastrims, phagocytes and lymphocytes.

Meditation

High dosages of melatonin shut down the conscious processes of the mind and create a space for deep, altered states of consciousness to arise. This means that we can dream and at the same time have Delta waves. We can also have Delta waves while awake, which was considered impossible by western medicine before this experiment. Taoists speak about the ecstatic or inner journey and this refers to the same process that western medicine is now discovering. This is nothing but a deep state of meditation.

Food, Drugs and Melatonin

Ansiolitic medications such as valium, zanax, aspirin and novalgin decrease the production of melatonin. Some mild antidepressant drugs induce relaxation by causing a slight rise in the production of melatonin. Stronger antidepressants, such as prozac, tend to decrease the melatonin production and stimulate the adrenal and other glands. Vitamin B-12, caffeine steroids, tobacco, and in a very special way, refined sugar all tend to decrease melatonin production. Alcohol consumed before 10:30 at night tends to reduce melatonin production, whereas, when it is consumed after 10:30 pm, it tends to increase melatonin production. At 11 pm energy flows into the liver, which is a basic organ in regulating hormonal secretion. Other foods rich in melatonin are: oats, corn, brown rice, ginger, ripe tomatoes, bananas, parsley, algae, dates, oysters, soya, cottage cheese, chicken liver, pumpkin and pumpkin seeds, turkey, tofu, watermelon and apple seeds, almonds, peanuts, yeast, vitamin B-3, (which is

found in dried fruit), parsley, liver, sunflower seeds, salmon and swordfish, vitamin B-6 (found in carrots, lentils, avocado, and prawns). Tryptophan, serotonin, calcium and magnesium, and marijuana increase melatonin production by more than 2000 times, if taken in the right quantities and at the right time of day. However, after such high production of hormone the result can be a down, or feeling of depression. Once a person is practicing we need to be careful. Our bodies become more subtle, precise, refined and more sensitive, so we need to avoid excesses of any kind, especially external stimulation. Such stimulation tends to disharmonize the subtle body mechanics, and this is true for drugs, medicine, food supplements, herbs, etc. If a food or an herb is medically perfect it doesn't necessarily mean that it is good for your body. It could be the opposite. What we are learning is to look for our inner medicine.

Footnotes

- ¹ <http://isd.saginaw.k12.mi.us/~mobility/hypothal.html>
- ² after Tortora & Grabowski, 2000
- ³ Tortora & Grabowski, 2000
- ⁴ Fox, 1999
- ⁵ <http://www.isat.jmu.edu/users/klevicca/neuroconn/>
- ⁶ Fox, 1999
- ⁷ <http://www.meridianinstitute.com/mh/pineal.html>
- ⁸ Clayman, 1995
- ⁹ <http://www.alphaomega.se/english/pineal.html>
- ¹⁰ <http://www.crystalinks.com/thirdeyepineal.html>
- ¹¹ www.crystalinks.com/thirdeyepineal.html and <http://serendipity.magnet.ch/mcclay/pineal.html>
- ¹² <http://home-2.tiscali.nl/~gibbon/pineal.html>
- ¹³ <http://xooo0ooox.freesevers.com/>
- ¹⁴ Sources: <http://deoxy.org/trypfaq.htm>, <http://serendipity.magnet.ch/mcclay/pineal.html>, <http://phoenix.akasha.de/~aton/PINEALpower.html>.
- ¹⁵ www.rickstrassman.com

- ¹⁶ <http://www.rickstrassman.com/>
- ¹⁷ <http://xooo0ooox.freesevers.com/>
- ¹⁸ Images from www.isat.jmu.edu/users/klevicca/neuroconn/
- ¹⁹ Images from www.erowid.org/smarts/show_molecule.php3 image=melatonin/melatonin_2d.gif, and www.alphaomega.se/english/pineal.html.
- ²⁰ From: <http://www.lycaeum.org/books/tihkal/44—6-meo-thh.shtml>
- ²¹ Image from http://www.erowid.org/chemicals/5meo_dmt/5meo_dmt.shtml
- ²² Image from <http://spiritplants.yack.org/articles/DMT.html>
- ²³ From: <http://deoxy.org/trypfaq.html>
- ²⁴ <http://phoenix.akasha.de/~aton/DRR.html>
- ²⁵ <http://phoenix.akasha.de/~aton/DRR.html>.
- ²⁶ <http://www.rickstrassman.com>
- ²⁷ http://www.erowid.org/library/books_online/tihkal/
- ²⁸ <http://www.erowid.org>, especially www.erowid.org/library/books_online/tihkal/
- ²⁹ <http://deoxy.org/trypfaq.html>.
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Darkness Technology

Darkness Techniques for Enlightenment

Mantak Chia

Illustrations by Udon Jandee

Darkness Technology

All spiritual traditions have used Darkness Techniques in the pursuit of enlightenment. In Europe, the dark room often appeared in underground form as a network of tunnels, in Egypt as the Pyramids, in Rome as the catacombs, and by the Essenes, near the Dead Sea in Israel, as caves. In the Taoist tradition caves have been used throughout the ages for higher level practices. In the Tao, the cave, the Immortal Mountain, the Wu San, represents the Perfect Inner Alchemy Chamber. Meditating and fasting in the cave is the final journey of spiritual work. The caves are the Earth Mother and its energy lines. Like hollow bones, caves contain the earliest information of life stored inside the Earth. Caves contain the vital essence of the Earth Power. The Tao says: 'When you go into the dark and this becomes total, the darkness soon turns into light.'

Darkness Technology gives our mind and soul the freedom to wander in the vast realms of psychic and spiritual experience. When you enter this primordial state or force you are reunited with the true self and divinity within. You literally 'conduct' the universal energy. With the information in this booklet you may see into the past and future, understand the true meaning of existence, and begin to understand the order of things. You return to the womb, the cocoon of our material structure and our original Dark Room.



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