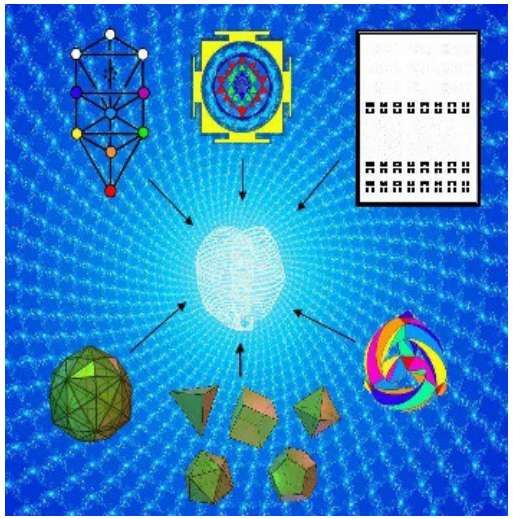
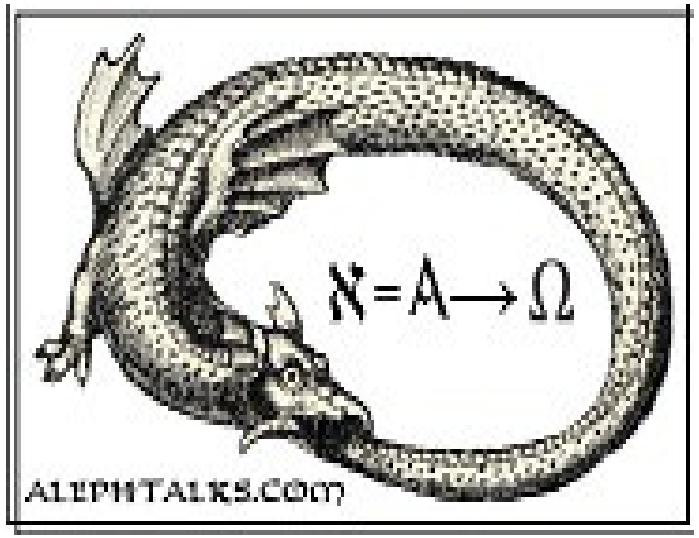
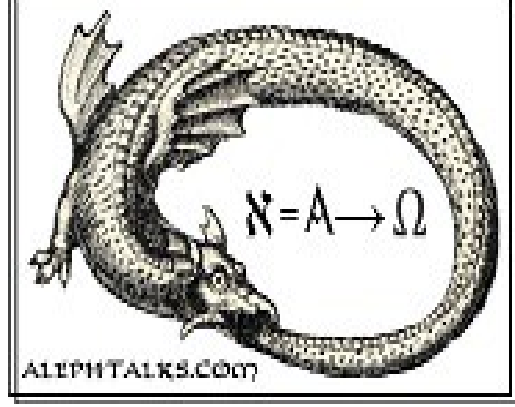
Mysticism: Where Science, Art, and Religion Meet





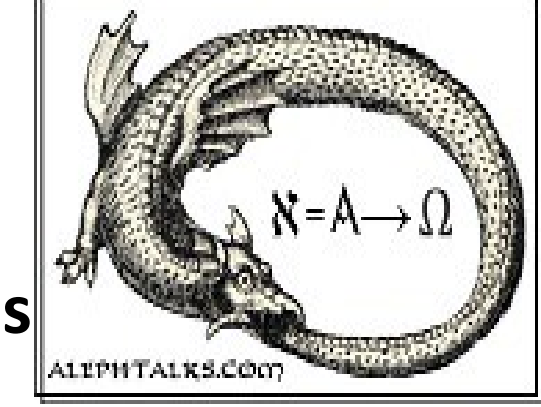
Subject Four
Mysticism East and West

Mysticism East and West



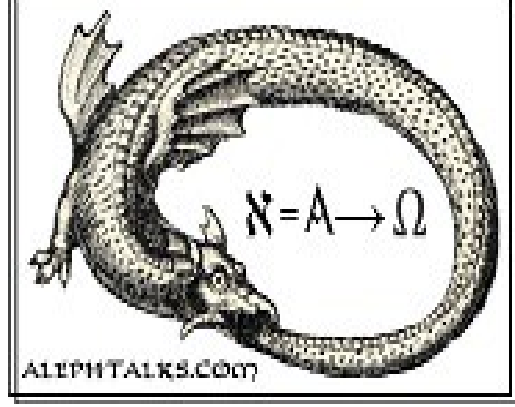
- **Art as Spiritual Endeavor**
- **Science: The Tao of Physics, Langlands Program**
- **Meditation**
- **Kabbalah**
- **Yoga Sutras of Patanjali**: excerpt from Book III
- **Christianity**
- **Alchemy**
- **Tarot**

Mysticism East and West



- The Body Electric, Accupuncture, Chakras and Nidis
- Chants
- Book of Enoch
- Taoism
- Buddhism
- Christianity
- Islam
-

Mysticism East and West



Mayan Religion

Aztec Religion

Native American Shamanism

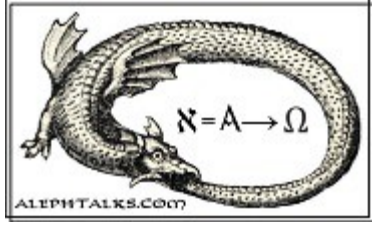
Gnosticism: Lost Gospels

Book of Job

The Mysticism of Mathematics

- **Groethendieck and Algebraic Geometry**
- **Langlands and Number Theory with Harmonic Analysis**
- **Discrete Mathematics: Combinatorics and Algebra**
- **Gödel Incompleteness Theorems/Turing Halting Problem**

Art As Spiritual Endeavor

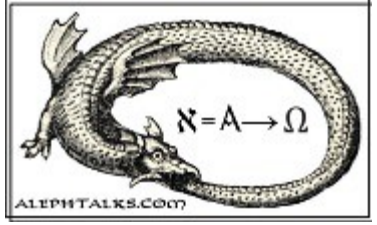


By Marjorie Partch, 2003, **Critical Essay on the Jorie Graham poem "Mind,"** published in the volume Poetry for Students, for the academic publisher formerly known as The Gale Group. Partch is a Jungian astrologer, writer, and graphic designer. In this essay, Partch considers the validity of Jorie Graham's use of poetry as a "medium for spiritual undertaking."

While there are many excellent artists whose work is fully accessible through a single glance at a single piece, the 1996 Pulitzer Prize-winning poet Jorie Graham is not one whose work can be understood or appreciated in isolation.

Some critics may object to the need for any special "preparation," lobbying for the democracy of immediacy. But how many uninitiates can truly appreciate a Jackson Pollock painting, say, without some introduction? To the casual or innocent eye, his work looks like the careless splatterings of a child or a madman, and indeed these comparisons have been drawn. With a little guidance, it becomes apparent that Pollock was attempting not at all to make pretty pictures but to portray movement in time. Beyond that, he sought to challenge the whole conceptual framework of reality—to bend space and time. With this perspective, his "action paintings" can be appreciated as delayed-shutter portraits of his dance, more like capturing the motion of writing with a penlight in the dark than snapshots of a posed static scene.

Art As Spiritual Endeavor

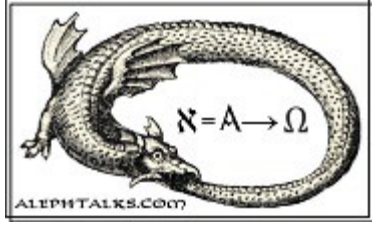


As poems and interviews of hers attest, Graham is an enthusiastic fan of Pollock's work and shares similar aims of evoking process in her own work. Rather than the body's dance through the fields of space and time, she seeks to simulate, and then to stimulate, perception and thought isolation, to extend this motion beyond the limits of language, the static "poetic moment" and the printed page, into the reader's ongoing experience. Graham seeks in her poetry to create for herself and recreate for the reader moments of opening, of beginning, rather than endings. Her poems may not always succeed on these grounds, but they must be judged as moving collages rather than failed still life snapshots, or the neatly wrapped-up happy ending will always appear to be missing. The open-ended lack of resolution is deliberate, not accidental. The suspended non-ending is intended to invite the reader's participation.

Many of Graham's detractors, such as Sven Birkerts, writing in the New York Times Book Review in 2003, question "the viability of poetry as an instrument of philosophy." Birkerts is also bewildered by "the onward march of mind and spirit searching for some arrival, some consummation, some end to all of this tending toward." But who is to say what is a suitable theme for poetic experience and expression: only matters of the heart? Can the processes of the mind really be declared off-limits? Surely the realm of experience to be explored is no less a matter of poetic license than experiments in form.

Some would have it that the immediately accessible realm of the senses and emotions, with some kind of conclusive point, constitutes the only "appropriate" terrain for "the poetic impulse." How can one really reserve the poetic endeavor for such touchy-feely subjects as love, loss, and memory? It could even be said that the entire crux of the poetic moment lies in the collision between consciousness and reality—i.e., experience.

Art As Spiritual Endeavor



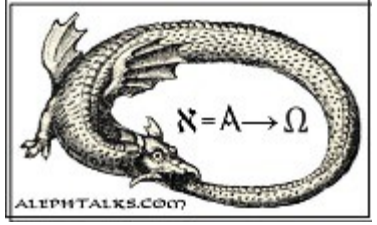
Poets, even the ancients, have always explored this synaptic leap of faith between the so-called objective and the subjective, between outer fact and inner response. Moments of sublime realization, however ambivalent or complex, cannot be disqualified as “too Intellectual” if the entire question of mind is the very landscape of the poet's (perhaps deeply emotional) experience. The postmodern view has shown once and for all that the very notions of self, identity, experience, other, object, etc., are nothing if not conceptual.

Graham does here achieve the elusive goal of transcendence, going beyond the individual personal mind. The poem reaches beyond even the projected divine mind to the more mystical concept of the phenomenon of mind, itself underlying and pervading reality on a subatomic level.

For mystics of every tradition, mind inhabits and vivifies the infinite spaces between things and is the governing principle behind thingness—the very ground out of which subject and object emerge. In keeping with the model of modern physics, the perspective of modern phenomenology maps the activity of the mind as more of a field of consciousness than a linear progression of thoughts. The mind is seen as but one phenomenon within the universe, which is itself a field of interwoven and interacting forces, rather than a simple progression of causally related events

.

Art As Spiritual Endeavor



.The opening lines of "Mind" evoke and mimic the atmospheric affect of this nonlinear percolation:

> The slow overture of rain,
> each drop breaking
> without breaking into
> the next, describes
> the unrelenting, syncopated
> mind.

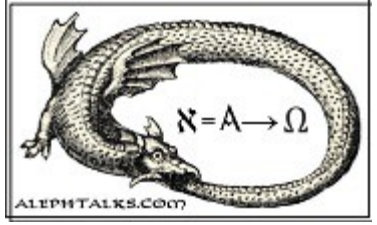
Everyday thoughts may seem to unfold one into the next, in an orderly single-file procession of cause and effect. However, Graham points out that in actuality, thoughts are often more random and chaotic than one might like to think, more like popcorn popping or rain drops falling than discrete pearls on a rope or links in a chain.
.

Art As Spiritual Endeavor

Sometimes thoughts come one after the other, sometimes simultaneously—but one thought may no more arise with any causality or logic from its predecessor than one rock following another in an avalanche—demonstrated in the poem's uninterrupted flow, coming on in a downpour of images, ideas, and words. However, in the end the poem does resolve itself, not with the decisive closing of a door but with a beckoning to an open window, where it invites the reader to "See." The second group of lines following the lines above portray the mind's tendency to project the patterns of its own workings onto what it perceives:

Not unlike
the hummingbirds
imagining their wings
to be their heart, and swallows
believing the horizon
to be a line they lift
and drop. What is it
they cast for?

Art As Spiritual Endeavor

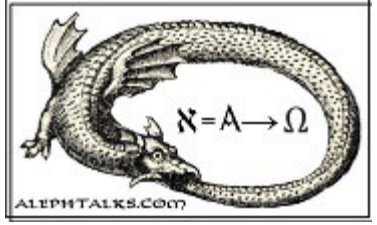


Thoughts tend to follow their routes, once established, as obediently as falling rocks yield to "gravity's stake in things." So, the question arises, does the mind arise from thought and not the other way around? Can the mind exist without language? Is there mind without thinking? Descartes would have it that being itself is dependent on thought, while spiritual teachers of the East and the West would have it precisely the other way around—being begins when thinking stops.

Only when the continual chatter of the mind is silenced, they would maintain, only when only its relentless busy-bee buzzing is stilled, can consciousness truly interact with reality. This is what is meant by Pure Mind. Pure Mind is the intersection toward which Graham is ever striving—the intersection between not only reality and con-sciousness, but also between being and doing, between experience and expression. Graham is continually striving to write from this place of clarity of pure being and to evoke those gem-like moments for the reader.

- **Like Pollock's attempt to explode the boundaries of his canvas, Graham seeks to speak from silence, to arrive at a place beyond words, by using language to delineate the contours of the ineffable.**

Art As Spiritual Endeavor

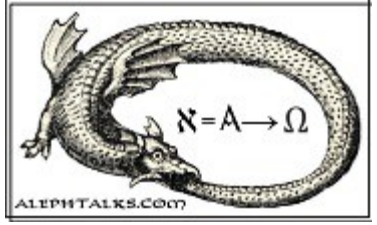


It is only when the sharp edges of the "puzzle pieces," the random shards of Mind (thoughts), soften a bit that readers can see how—

the picture becomes clear,
the mind entering the ground
more easily in pieces,
and all the richer for it.

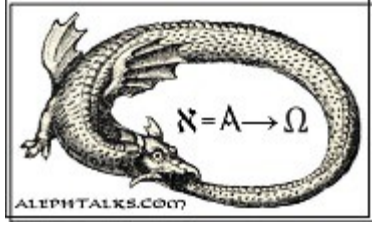
The unity of the whole emerges from the fragmentation of the habitual mental processes of the mind, into the fertile ground of the universal mind from which all phenomena, within nature and human consciousness, arise. When the edges are sharp and rigid, overly defined, the edges cannot penetrate the ground of their own being and the puzzle remains unsolvable. It is only when the thoughts' hard edges "give a bit" that they can return to their source. In a 1992 interview with Thomas Gardner in the Denver Quarterly, Graham commented, "Poetry is an extraordinary medium for spiritual undertaking."

Mind by Jorie Graham



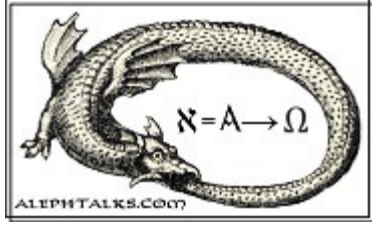
Mind
The slow overture of rain,
each drop breaking
without breaking into
the next, describes
the unrelenting, syncopated
mind. Not unlike
the hummingbirds
imagining their wings
to be their heart, and
swallows
believing the horizon
to be a line they lift
and drop. What is it
they cast for? The poplars,
advancing or retreating,
lose their stature
equally, and yet stand firm,
making arrangements
in order to become
imaginary.

Mind by Jorie Graham (continued)



The city
draws the mind in streets,
and streets compel it
from their intersections
where a little
belongs to no one. It is
what is driven through
all stationary portions
of the world, gravity's
stake in things, the leaves,
pressed against the dank
window of November
soil, remain unwelcome
till transformed, parts
of a puzzle unsolvable
till the edges give a bit
and soften. See how
then the picture becomes clear,
the mind entering the ground
more easily in pieces,
and all the richer for it.

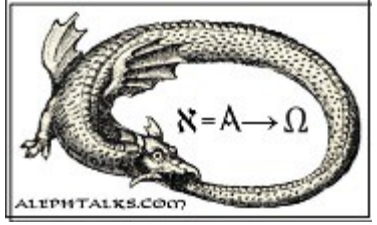
Art As Spiritual Endeavor



.
.
: The more one knows about poetry and spirituality, the more one will appreciate the risks Graham has taken in her bold experiments in both her content and its necessary form, as well as her task and her achievement. As to the appropriateness of her "use" of poetry for philosophical or spiritual purposes, one might even ask, What else? Are they not one and the same? The ambitious thoughts represented in "Mind" are not so shabby, coming from the precocious mind of a twenty-something-year-old poet in the late 1970s, a self-confessed hybrid of Whitman's lyricism on the one hand and Nietzsche's philosophy on the other.

Graham's early musings inscribe an arc with a promising trajectory; a promise duly fulfilled in the ongoing experiments and mature work of this highly complex, philosophical, and intellectual—and also beautifully musical—poet of the postmodern mind.

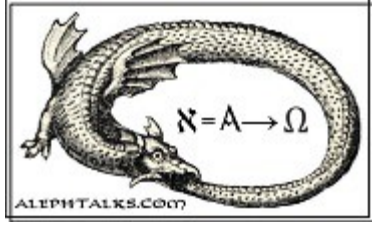
At Great Pond by Mary Oliver



.
.
:

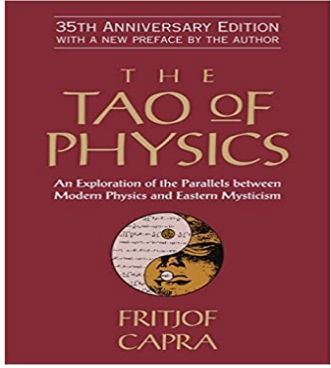
At Great Pond
the sun, rising,
scrapes his orange breast
on the thick pines,
and down tumble
a few orange feathers into
the dark water.
On the far shore
a white bird is standing
like a white candle ---
or a man, in the distance,
in the clasp of some meditation ---
while all around me the lilies
are breaking open again
from the black cave
of the night

At Great Pond by Mary Oliver



Later, I will consider
what I have seen ---
what it could signify ---
what words of adoration I might
make of it, and to do this
I will go indoors to my desk ---
I will sit in my chair ---
I will look back
into the lost morning
in which I am moving, now,
like a swimmer,
so smoothly,
so peacefully,
I am almost the lily ---
almost the bird vanishing over the water
on its sleeves of night.

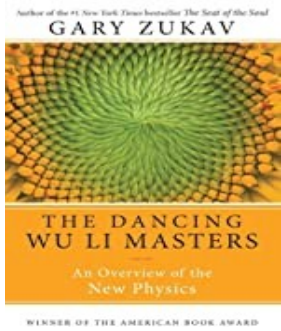
The Tao of Physics
Reviewed by Peter Woit, Columbia



- The Tao of Physics was completed in December 1974, and the implications of the November Revolution one month earlier that led to the dramatic confirmations of the standard-model quantum field theory clearly had not sunk in for Capra (like many others at that time).

- What is harder to understand is that the book has now gone through several editions, and in each of them Capra has left intact the now out-of-date physics, including new forewords and afterwords that with a straight face deny what has happened. The foreword to the second edition of 1983 claims, "It has been very gratifying for me that none of these recent developments has invalidated anything I wrote seven years ago. In fact, most of them were anticipated in the original edition," a statement far from any relation to the reality that in 1983 the standard model was nearly universally accepted in the physics community, and the bootstrap theory was a dead idea

- Even now, Capra's book, with its nutty denials of what has happened in particle theory, can be found selling well at every major bookstore. It has been joined by some other books on the same topic, most notably Gary Zukav's The Dancing Wu-Li Masters. The bootstrap philosophy, despite its complete failure as a physical theory, lives on as part of an embarrassing New Age cult, with its followers refusing to acknowledge what has happened.



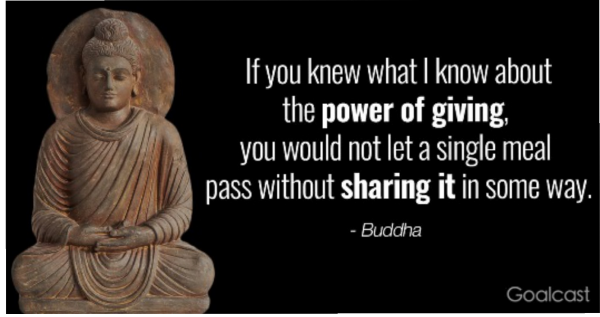
The Dancing Wu Li Masters

- The Dancing Wu Li Masters is a 1979 book by Gary Zukav, a popular science work exploring modern physics, and quantum phenomena in particular. It was awarded a 1980 U.S. National Book Award in category of Science.[1][a] Although it explores empirical topics in modern physics research, The Dancing Wu Li Masters gained attention for leveraging metaphors taken from eastern spiritual movements, in particular the Huayen school of Buddhism with the monk Fazang's treatise on the Golden Lion,[2][3] to explain quantum phenomena and has been regarded by some reviewers as a New Age work, although the book is mostly concerned with the work of pioneers in western physics down through the ages.

- The toneless pinyin phrase Wu Li in the title is most accurately rendered 物理 in Chinese characters, one Chinese translation of the word "physics" in the light of the book's subject matter. This becomes somewhat of a pun as there are many other Chinese characters that could be rendered as "wu li" in atonal pinyin, and chapters of the book are each titled with alternative translations of Wu Li, such as "Nonsense", "My Way" and "I Clutch My Ideas". Zukav participated as a journalist in a 1976 physics conference of eastern and western scientists at Esalen Institute, California; and he used the occasion as material for his book. At the conference, it was said that the Chinese term for physics is 'Wu Li', or "patterns of organic energy." Zukav, among others, conceptualized 'physics' as the dance of the Wu Li Masters – teachers of physical essence. Zukav explains the concept further:

The Wu Li Master dances with his student. The Wu Li Master does not teach, but the student learns. The Wu Li Master always begins at the center, the heart of the matter...

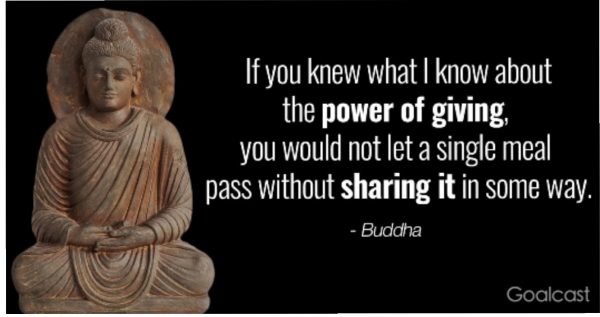
Buddhism Meditation



There are six popular types of meditation practice:

- mindfulness **meditation**.
- spiritual **meditation**.
- focused **meditation**.
- movement **meditation**.
- mantra **meditation**.
- transcendental **meditation**.
- Meditation involves focusing on your natural mind and letting it link with your consciousness.

Buddhism Meditation



How to meditate: Simple meditation for beginners

Sit or lie comfortably. You may even want to invest in a **meditation** chair or cushion.

Close your eyes. ...

Make no effort to control the breath; simply breathe naturally.

Focus your attention on the breath and on how the body moves with each inhalation and exhalation.

What to think about while meditating?

Focus on your breath. Start your **meditation** by taking several deep breaths. ...

Do a body scan. ...

Evaluate your energy. ...

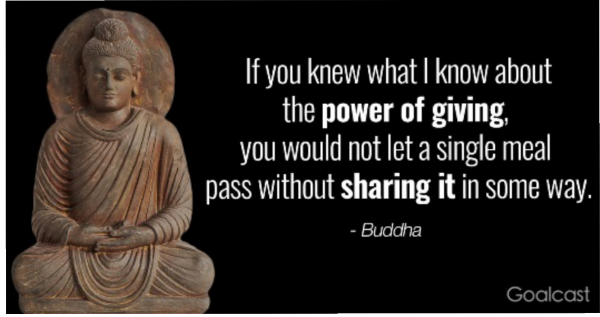
Practice gratitude. ...

Choose a mantra. ...

Reflect on the day. ...

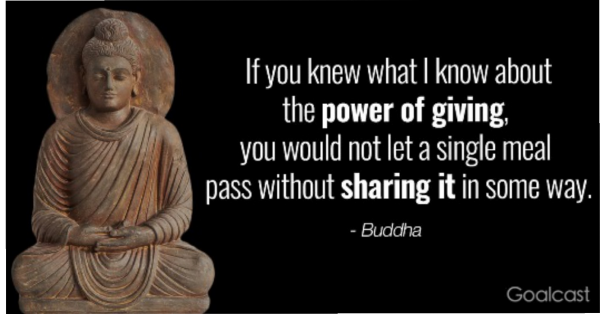
Reflect on the past week.

Buddhism Meditation Talking Points

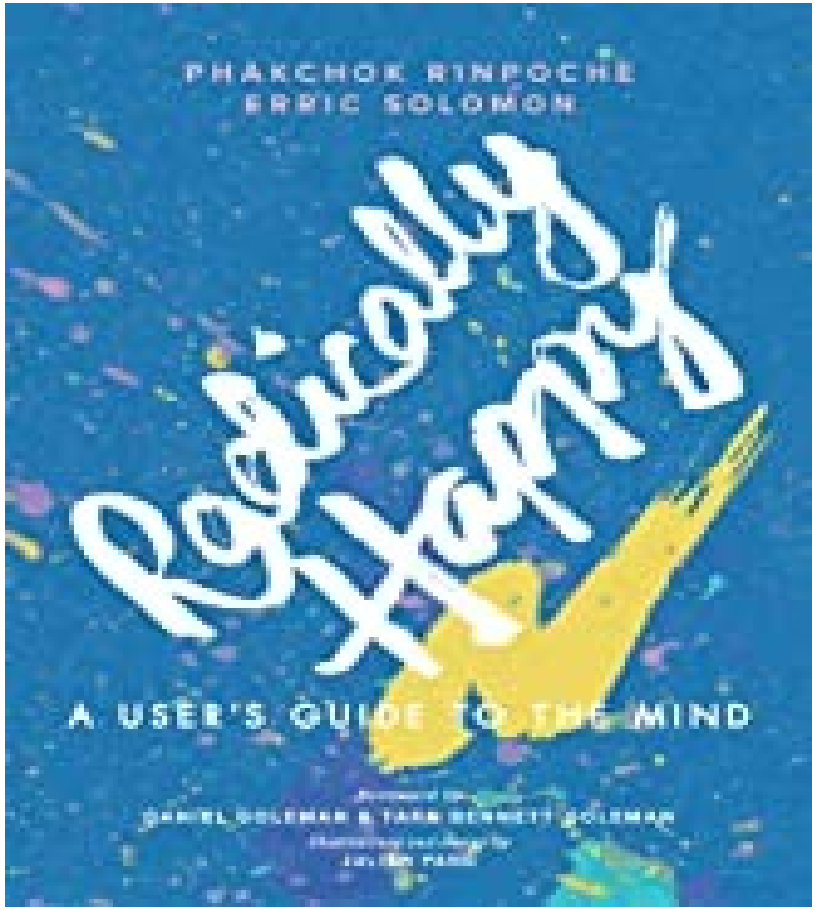


- Two minds: ancient and conditioned
- Main quality of ancient mind is love and compassion
- Buddhist Path: Sila, Samadhi, Panna, Morality, Concentration, Wisdom
- Sila means cooling the mind
- Main key is to develop compassion and kindness
- Can't see self or ancient mind means mind is divided against itself
- Ancient mind understands the universe is in perfect union
- The Path is all inner, all outer is appearance
- Deep meditation, time between in breath and out breath can be ten seconds

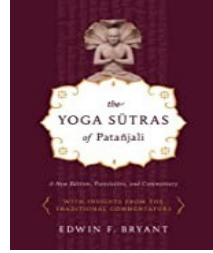
Buddhism Meditation



- Excellent tutorial on meditation

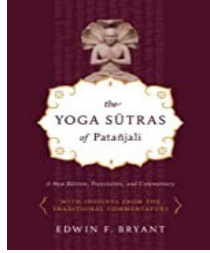


Yoga

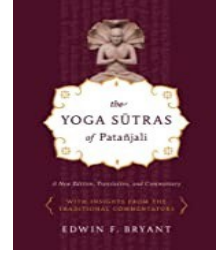


- Yoga was developed over 5,000 years ago in India with the purpose of connecting individual consciousness to a universal consciousness creating spiritual enlightenment. Poses or “asanas” combined with breath control and meditation improve the physical, spiritual, mental and emotional health of the practitioner.
- Yoga uses breathing techniques, exercise and meditation. It helps to improve health and happiness. Yoga is the Sanskrit word for union. Patanjali was a pioneer of classical yoga. He defined yoga as "the cessation of the modification of the mind" (stopping changing the mind).
- The fundamental purpose of yoga is to foster harmony in the body, mind, and environment. Yoga professes a complete system of physical, mental, social, and spiritual development. For generations, this philosophy was passed on from the master teacher to the student.
- Yoga's incorporation of meditation and breathing can help improve a person's mental well-being. Regular yoga practice creates mental clarity and calmness; increases body awareness; relieves chronic stress patterns; relaxes the mind; centers attention; and sharpens concentration,

Yoga



- Yoga utilizes mats and small props to aid or support the practitioner. Yoga poses are typically held for extended time periods to release muscle tension. In some styles of yoga, a long series of poses is repeated sequentially, with the purpose of warming the body to allow for increased range of motion.
- In many types of yoga, the session starts with the setting of an intention for the practice and ends with a guided meditation and relaxation or “savasana.” Goals are to clear the mind and surrender to the movement.
- Yoga teaches breathing in and out through the nose or a “warming breath.” This type of breathing is designed to relax the body and calm the mind. Focus in yoga is on “belly breathing.” The classes often use the breath as a mechanism to time each pose for example: "Hold this pose for another 4 breaths.
- Yoga emphasizes the mind-body and spiritual connection, quieting the mind by focusing on mastery through introspection. Flexibility and strength are improved through repetition of the asanas.



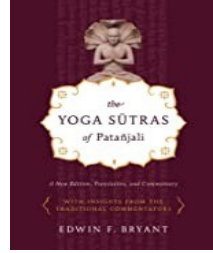
Yoga Sutras of Patanjali

III.25 pravṛttyāloka-nyāsāt sūkṣma-vyavahita-viprakṛṣṭa-jñānam

- pravṛttyā, cognition, higher sense activity; āloka, light; nyāsāt, by directing; sūkṣma, subtle; vyavahita, concealed; viprakṛṣṭa, remote; jñānam, knowledge
- By directing the light of cognition, one obtains knowledge of subtle, concealed, and remote things.

III.26 bhuvana-jñānaṁ sūrye saṁyamāt

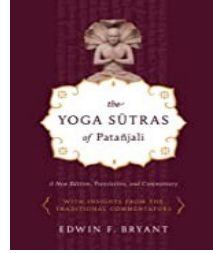
- bhuvana, regions, worlds; jñānam, knowledge; sūrye, on the sun; saṁyamāt, by saṁyama
- By performing saṁyama on the sun arises knowledge of the different realms in the universe.



Yoga Sutras of Patanjali

- III.45 tato ʼṇimādi-prādurbhāvaḥ kāya-sampat-tad-dharmānabhighātaś ca
- tataḥ, from that; aṇimā, the mystic power of aṇimā [lightness]; ādi, etc.; prādurbhāvaḥ, the appearance of; kāya, body; sampat, accomplishment, perfection; tat, their [the elements’]; dharma, essential nature; anabhighātaḥ, nonresistance, absence of limitations; ca, and
- As a result of this, there are no limitations on account of the body’s natural abilities; mystic powers such as aṇimā, etc., manifest; and the body attains perfection. Here Patañjali lists three consequences of the type of saṁyama discussed in the previous sūtra. For the removal of “limitations on account of the body’s natural abilities,” dharma-anabhighāta, Vyāsa lists the following: **(1) The earth does not obstruct the yogī by its quality of solidness, such that the yogī can enter even a stone. (2) Water, though moist, does not wet the yogī. (3) Fire, though hot, does not burn the yogī. (4) Wind, though moving, does not budge the yogī. (5) Ether, which normally does not cover anything, covers the yogī such that he or she remains invisible even to the siddhas, or those who have attained these very powers.**

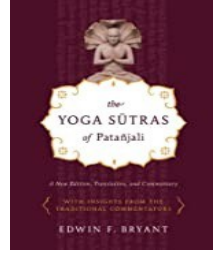
Yoga Sutras of Patanjali (III.45 continued)



- The eight mystic powers mentioned in this sūtra refer to the standardized list of powers that are ubiquitous in classical Hindu texts. That Patañjali sees fit to note only the first one (aṇimadi) followed by etc. indicates that these were already well-known to his audience.

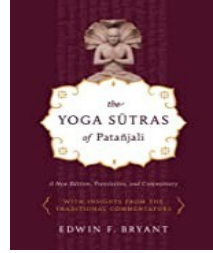
1. Aṇima, minuteness: the ability to make one's body atomic in size. This allows one to become small enough to enter into anything, and by so doing to become invisible to anyone.
2. Laghimā, lightness: the ability to make the body as light as one desires in terms of weight
3. Mahimā, largeness: the ability to make the body as heavy in weight as one desires.
4. Prāpti, attainment: the ability to attain anything one desires—one can touch the moon with one's fingertips, says Vyāsa.
5. Prākāmya, freedom of will: the ability to be unobstructed in one's desires—one can dive into the earth just as one plunges into water, says Vyāsa.
6. Vaśitva, mastery: the ability to control the elements and their qualities, and to control other beings.
7. Íśitṛtva, lordship: the ability to control the outward appearance, disappearance, and rearrangement of the elements.

Yoga Sutras of Patanjali



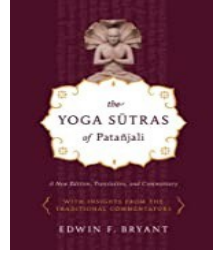
- III.47 grahaṇa-svarūpāsmitānvayārthavattva-saṁyamād indriya-jayaḥ
- grahaṇa, the process of obtaining knowledge; svarūpa, the essence; asmitā, the ego; anvaya, inherent quality, constitution; arthavattva, purposefulness; saṁyamāt, by saṁyama (concentration) on; indriya, the senses; jayaḥ, victory, control
- By the performance of saṁyama on the process of knowing, on the essence [the sense organs], on ego, on the constitution [of the guṇas], and on the purpose [of the guṇas] comes control over the senses. This sūtra analyzes another set of five progressively more rarefied ways of perceiving reality, in this case the metaphysical makeup of the senses with a view to attaining supreme control over them and thus overlaps with III.44, which in parallel fashion analyzes the objects of the senses in five progressively more rarefied ways. Grahaṇa, the process of knowledge, refers to the operation of the senses on the sense objects (the objects of sound, touch, sight, taste, and smell). As we know from I.41, grahaṇa literally means grasping and refers here to the process by which the sense objects are grasped or experienced by means of the channels of the senses.

Yoga Sutras of Patanjali



- III.48 tato mano-javitvam vikaraṇa-bhāvaḥ pradhāna-jayaś ca
- tataḥ, from that; manaḥ, of the mind; javitvam, quickness; vikaraṇa, without instruments; bhāvaḥ, existence; pradhāna, primordial matter; jayaḥ, victory; ca, and
- As a result of this comes speed like the speed of mind, activity independent of the bodily senses, and mastery over primordial matter.
- Patañjali here refers to three more sets of powers that accrue to the yogī who has conquered the senses in the manner outlined in the previous sūtra. Once one has mastered the senses, one's body can move at the speed of mind, mano-javitvam; one can act and attain knowledge at any time or place even without one's body and its sense organs of perception, vikaraṇa-bhāva; and one attains mastery over the primordial prākṛtic matrix91—and therefore, specify the commentators, over all its evolutes and thus all manifest reality, pradhāna-jaya

Yoga Sutras of Patanjali



- III.49 sattva-puruṣānyatā-khyāti-mātrasya sarva-bhāvādhiṣṭhātṛtvam sarva-jñātṛtvam ca
- sattva, intellect; puruṣa, the self, soul; anyatā, difference; khyāti, discernment; mātrasya, of one, only; sarva, all; bhāva, state of existence; adhiṣṭhātṛtvam, state of supremacy over; sarva, all; jñātṛtvam, state of knowledge; ca, and
- Only for one who discerns the difference between the puruṣa and the intellect do omniscience and omnipotence accrue. When buddhi has been cleansed of its rājasic and tāmasic ingredients such that only pure sattva remains, it attains a state of perfect clarity that Vyāsa calls vaśīkāra. In this state, the yogī has full realization of the difference between the highest aspect of the cognitive faculty, pure buddhi,93 and the puruṣa itself, sattva-puruṣa-anyatā

Alchemy

Alchemy (from Arabic: al-kīmiyā) is an ancient branch of natural philosophy, a philosophical and protoscientifi tradition practiced throughout Europe, Africa, China and throughout Asia, observable in Chinese text from around 73–49 BCE and Greco-Roman Egypt in the first few centuries CE.

Alchemists attempted to purify, mature, and perfect certain materials. Common aims were chrysopoeia, the transmutation of "base metals" (e.g., lead) into "noble metals" (particularly gold); the creation of an elixir of immortality; the creation of panaceas able to cure any disease; and the development of an alkahest, a universal solvent. The perfection of the human body and soul was thought to permit or result from the alchemical magnum opus and, in the Hellenistic and Western mystery tradition, the achievement of gnosis. In Europe, the creation of a philosopher's stone was variously connected with all of these projects.

In English, the term is often limited to descriptions of European alchemy, but similar practices existed in the Far East, the Indian subcontinent, and the Muslim world. In Europe, following the 12th-century Renaissance produced by the translation of Medieval Islamic works on science and the rediscovery of Aristotelian philosophy, alchemists played a significant role in early modern science (particularly chemistry and medicine). Islamic and European alchemists developed a structure of basic laboratory techniques, theory, terminology, and experimental method, some of which are still in use today. However, they continued antiquity's belief in four elements and guarded their work in secrecy including cyphers and cryptic symbolism. Their work was guided by Hermetic principles related to magic, mythology, and religion.

Alchemy

Modern discussions of alchemy are generally split into an examination of its exoteric practical applications and its esoteric spiritual aspects, despite criticisms by scholars such as Holmyard and von Franz that they should be understood as complementary. The former is pursued by historians of the physical sciences who examine the subject in terms of early chemistry, medicine, and charlatanism, and the philosophical and religious contexts in which these events occurred. The latter interests historians of esotericism, psychologists, and some philosophers and spiritualists. The subject has also made an ongoing impact on literature and the arts. Despite this split, which von Franz believes has existed since the Western traditions' origin in a mix of Greek philosophy that was mixed with Egyptian and Mesopotamian technology, numerous sources have stressed an integration of esoteric and exoteric approaches to alchemy as far back as Pseudo-Democritus's first-century AD On Physical and Mystical Matters (Greek: Physika kai Mystika).

Although alchemy is popularly associated with magic, historian Lawrence M. Principe argues that recent historical research has revealed that medieval and early modern alchemy embraced a much more diverse set of ideas, goals, techniques, and practices:

Most readers probably are aware of several common claims about alchemy—for example, ... that it is akin to magic, or that its practice then or now is essentially deceptive. These ideas about alchemy emerged during the eighteenth century or after. While each of them might have limited validity within a narrow context, none of them is an accurate depiction of alchemy in general.

Tarot

.

The tarot (/ˈtæroʊ/, first known as trionfi and later as tarocchi or tarock) is a pack of playing cards, used from the mid-15th century in various parts of Europe to play games such as Italian tarocchini, French tarot and Austrian Königrufen, many of which are still played today. In the late 18th century, some tarot decks began to be used for divination via tarot card reading and cartomancy leading to custom decks developed for such occult purposes.[1]

Like common playing cards, the tarot has four suits which vary by region: French suits in Northern Europe, Latin suits in Southern Europe, and German suits in Central Europe. Each suit has 14 cards: ten pip cards numbering from one (or Ace) to ten, and four face cards (King, Queen, Knight, and Jack/Knave/Page). In addition, the tarot has a separate 21-card trump suit and a single card known as the Fool; this 22-card section of the tarot deck is known as the major arcana. Depending on the game, the Fool may act as the top trump or may be played to avoid following suit.[2] These tarot cards are still used throughout much of Europe to play conventional card games without occult associations.

Tarot Occult Usage

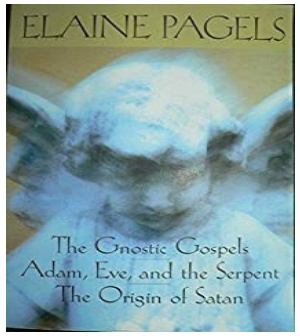
Etteilla was the first to issue a tarot deck specifically designed for occult purposes around 1789. In keeping with the unsubstantiated belief that such cards were derived from the Book of Thoth, Etteilla's tarot contained themes related to ancient Egypt.[20]

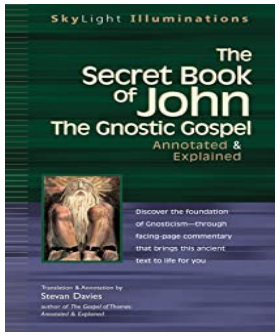
The 78-card tarot deck used by esotericists has two distinct parts:

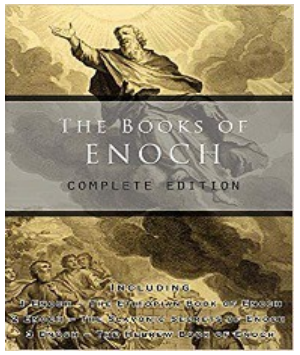
The Major Arcana (greater secrets), or trump cards, consists of 22 cards without suits: The Magician, The High Priestess, The Empress, The Emperor, The Hierophant, The Lovers, The Chariot, Strength, The Hermit, Wheel of Fortune, Justice, The Hanged Man, Death, Temperance, The Devil, The Tower, The Star, The Moon, The Sun, Judgement, The World, and The Fool. Cards from The Magician to The World are numbered in Roman numerals from I to XXI, while The Fool is the only unnumbered card, sometimes placed at the beginning of the deck as 0, or at the end as XXII.

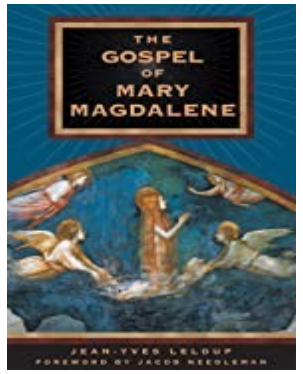
- The Minor Arcana (lesser secrets) consists of 56 cards, divided into four suits of 14 cards each;
- Ten numbered cards and four court cards. The court cards are the King, Queen, Knight and Page/Jack, in each of the four tarot suits. The traditional Italian tarot suits are swords, batons, coins and cups; in modern occult tarot decks, however, the batons suit is often called wands, rods or staves, while the coins suit is often called pentacles or disks.

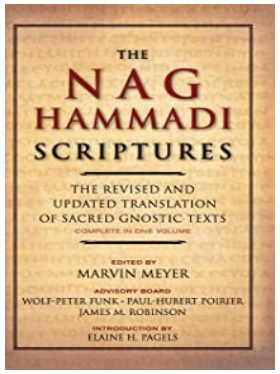
Gnostic Gospels

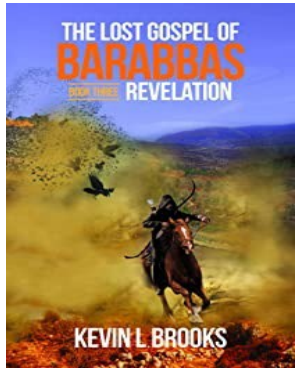


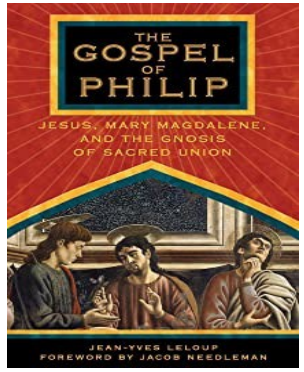


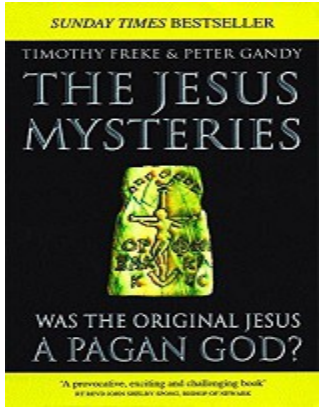


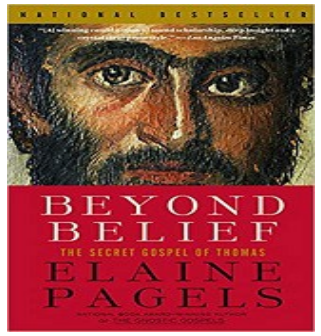


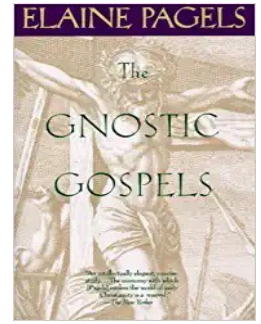












St Paul Epistle to Corinthians 1:13

1If I speak in the tongues of men and of angels, but have not love, I am only a ringing gong or a clanging cymbal.
2If I have the gift of prophecy and can fathom all mysteries and all knowledge, and if I have absolute faith so as to move mountains, but have not love, I am nothing.
3If I give all I possess to the poor and exult in the surrender of my body,a but have not love, I gain nothing.
4Love is patient, love is kind. It does not envy, it does not boast, it is not proud.
5It is not rude, it is not self-seeking, it is not easily angered, it keeps no account of wrongs.
6Love takes no pleasure in evil, but rejoices in the truth.
7It bears all things, believes all things, hopes all things, endures all things.
8Love never fails. But where there are prophecies, they will cease; where there are tongues, they will be restrained; where there is knowledge, it will be dismissed.
9For we know in part and we prophesy in part,
10but when the perfect comes, the partial passes away.
11When I was a child, I talked like a child, I thought like a child, I reasoned like a child. When I became a man, I set aside childish ways.
12Now we see but a dim reflection as in a mirror; then we shall see face to face. Now I know in part; then I shall know fully, even as I am fully known.
13And now these three remain: faith, hope, and love; but the greatest of these is love.

Gnostic Gospels

Gnosticism (from Ancient Greek: γνωστικός, romanized: gnōstikós, Koine Greek: [ɣnostiˈkos], 'having knowledge) is a collection of religious ideas and systems which originated in the first century AD among early Christian and Jewish sects. These various groups emphasized personal spiritual knowledge (gnosis) over the orthodox teachings, traditions, and authority of the church. Viewing material existence as flawed or evil, Gnostic cosmogony generally presents a distinction between a supreme, hidden God and a malevolent lesser divinity (sometimes associated with the Yahweh of the Old Testament) who is responsible for creating the material universe. Gnostics considered the principal element of salvation to be direct knowledge of the supreme divinity in the form of mystical or esoteric insight. Many Gnostic texts deal not in concepts of sin and repentance, but with illusion and enlightenment

Enoch in Genesis 5:18-24

[5:18] When Jared had lived one hundred sixty-two years he became the father of Enoch.
[5:19] Jared lived after the birth of Enoch eight hundred years, and had other sons and daughters.
[5:20] Thus all the days of Jared were nine hundred sixty-two years; and he died.
[5:21] When Enoch had lived sixty-five years, he became the father of Methuselah.
[5:22] Enoch walked with God after the birth of Methuselah three hundred years, and had other sons and daughters.
[5:23] Thus all the days of Enoch were three hundred sixty-five years.
[5:24] Enoch walked with God; then he was no more, because God took him.

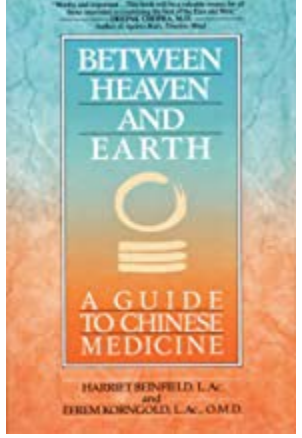
Genesis 6:1-7

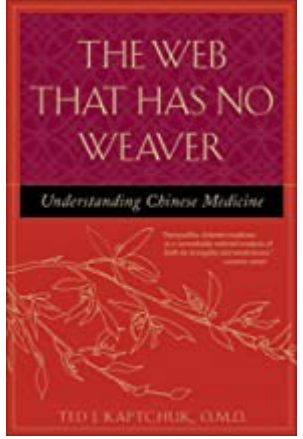
[6:1] When people began to multiply on the face of the ground, and daughters were born to them,
[6:2] the sons of God saw that they were fair; and they took wives for themselves of all that they chose.
[6:3] Then the LORD said, "My spirit shall not abide in mortals forever, for they are flesh; their days shall be one hundred twenty years."
[6:4] The Nephilim were on the earth in those days - and also afterward - when the sons of God went in to the daughters of humans, who bore children to them. These were the heroes that were of old, warriors of renown.
[6:5] The LORD saw that the wickedness of humankind was great in the earth, and that every inclination of the thoughts of their hearts was only evil continually.
[6:6] And the LORD was sorry that he had made humankind on the earth, and it grieved him to his heart.
[6:7] So the LORD said, "I will blot out from the earth the human beings I have created - people together with animals and creeping things and birds of the air, for I am sorry that I have made them."

Genesis 6:8-14

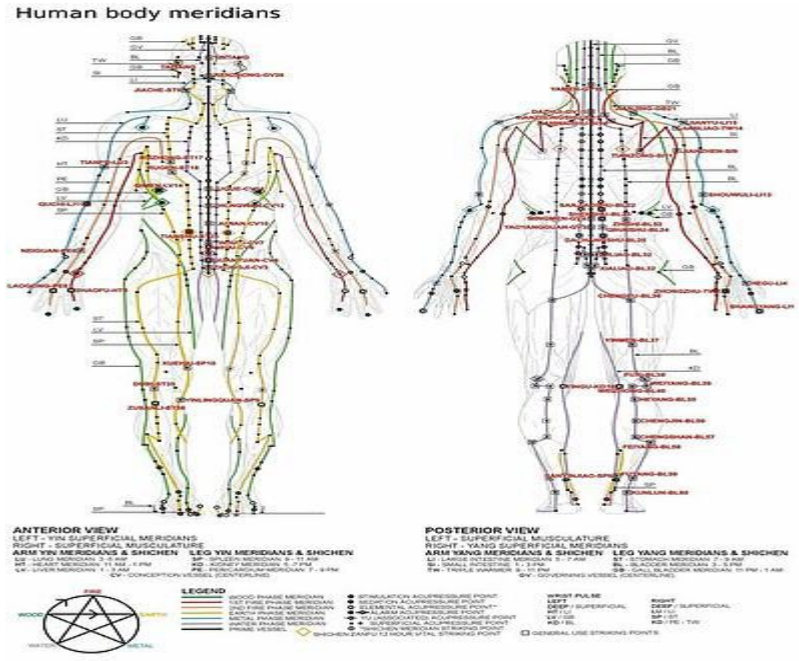
[6:8] But Noah found favor in the sight of the LORD.
[6:9] These are the descendants of Noah. Noah was a righteous man, blameless in his generation; Noah walked with God.
[6:10] And Noah had three sons, Shem, Ham, and Japheth.
[6:11] Now the earth was corrupt in God's sight, and the earth was filled with violence.
[6:12] And God saw that the earth was corrupt; for all flesh had corrupted its ways upon the earth.
[6:13] And God said to Noah, "I have determined to make an end of all flesh, for the earth is filled with violence because of them; now I am going to destroy them along with the earth.
[6:14] Make yourself an ark of cypress wood; make rooms in the ark, and cover it inside and out with pitch.

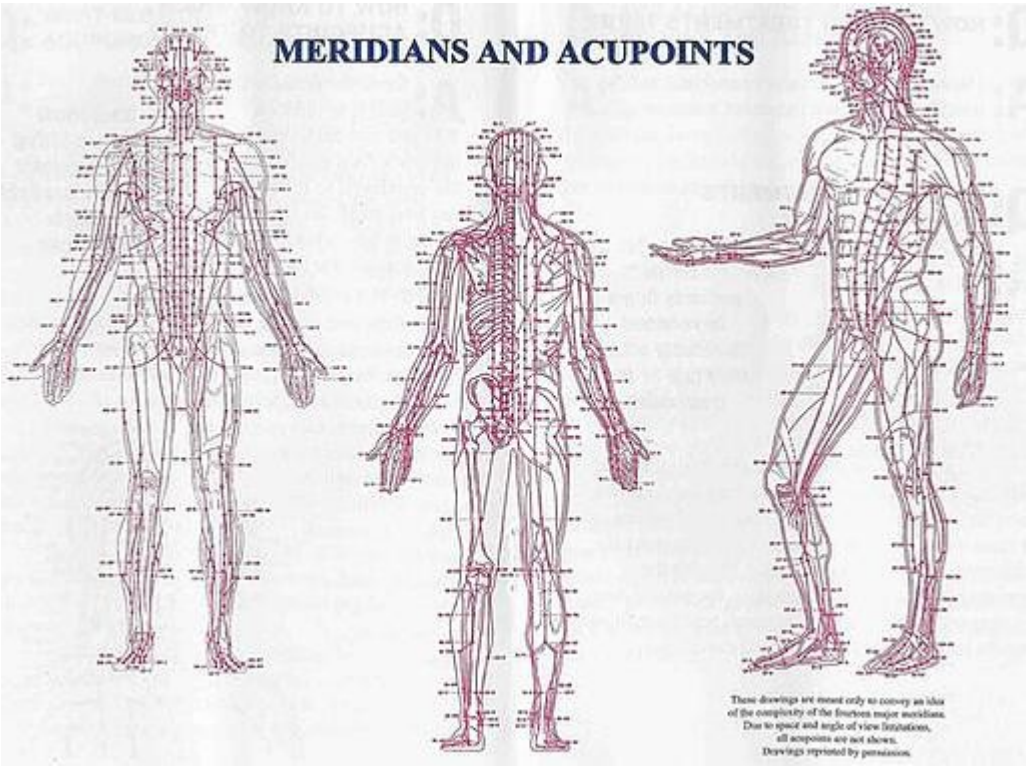
Traditional Chinese Medicine



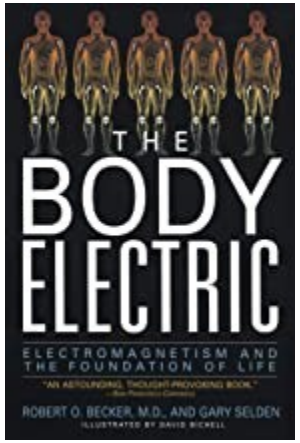


In **Traditional Chinese Medicine**, a **meridian** or Jing lou is a channel through which qi and the other fundamental substances flow. They are known by many different names, such as **acupuncture meridians**, acupoints, and energy vessels.

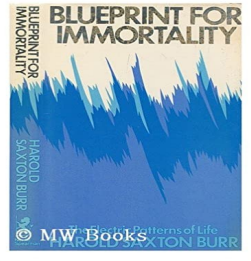




Acupuncture Instruments



Blueprint for Immortality, Harold Burr



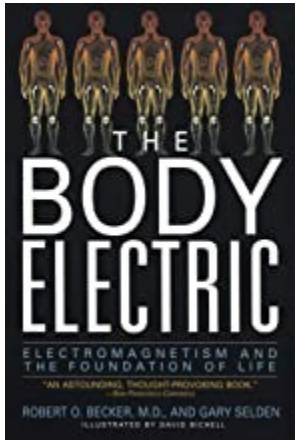
Harold Burr discovered that every living thing generates an electro-dynamic field that serves as a matrix directing it's growth. He called these living fields "L-fields". The L-field maintains the arrangement of whatever material is within it, no matter how often that material changes. L-fields determine the shape, and are determined by the body generating them.

"The following theory may then be formulated. The pattern or organization of any biological system is established by a complex electro-dynamic field which is in part determined by it's atomic physio-chemical components and which in part determines the behavior and orientation of those components. This field is electrical in the physical sense and by it's properties relates the entities of the biological system in a characteristic pattern and is itself, in part,a result of the existence of those entities. It determines and is determined by the components.

More than establishing pattern, it must maintain pattern in the midst of a physio-chemical flux. Therefore, it must regulate and control living things. It must be the mechanism, the outcome of whose activity is wholeness, organization, and continuity."

Burr found that a study of L-fields could predict growth and dis-ease in a body. He worked with, what some call, "the energy body" to predict the growth and disease of the physical body. This means we are susceptible to the ebb and flow of electromagnetic fields in the rest of the universe.

The Body Electric
Robert O Becker, Gary Selden (1985)

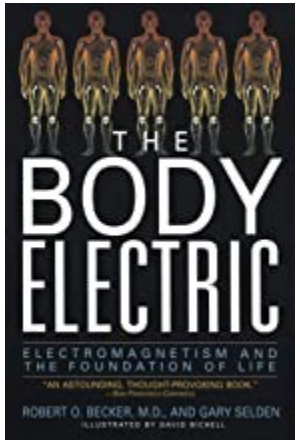


The Body Electric: Electromagnetism and the Foundation of Life is a book by Robert O. Becker and Gary Selden in which Becker, an orthopedic surgeon at SUNY Upstate working for the Veterans Administration, described his research into "our bioelectric selves".

The book was first published by William Morrow and Company in 1985.

The first part of the book discusses regeneration, primarily in salamanders and frogs. Becker studied regeneration after lesions such as limb amputation, and hypothesized that electric fields played an important role in controlling the regeneration process. He mapped the electric potentials at various body parts during the regeneration, showing that the central part of the body normally was positive, and the limbs were negative. When a limb of a salamander or frog was amputated, the voltage at the cut (measured relative to the central part of the body) changed from about -10 mV (millivolts) to +20 mV or more the next day—a phenomenon called the current of injury. In a frog, the voltage would simply change to the normal negative level in four weeks or so, and no limb regeneration would take place. In a salamander, however, the voltage would during the first two weeks change from the +20 mV to -30 mV, and then normalize (to -10 mV) during the next two weeks—and the limb would be regenerated

The Body Electric (continued)

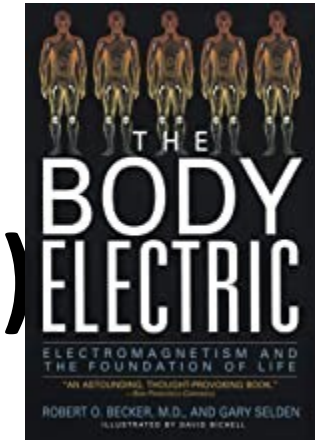


Becker then found that regeneration could be improved by applying electricity at the wound when there was a negative potential outside the amputation stub. He also found that bone has piezoelectric properties which would cause an application of force to generate a healing current, which stimulated growth at stress locations in accordance with Wolff's law.

In another part of the book Becker described potentials and magnetic fields in the nervous system, taking into account external influences like earth magnetism and solar winds. He measured the electrical properties along the skin surface, and concluded that at least the major parts of the acupuncture charts had an objective basis in reality.

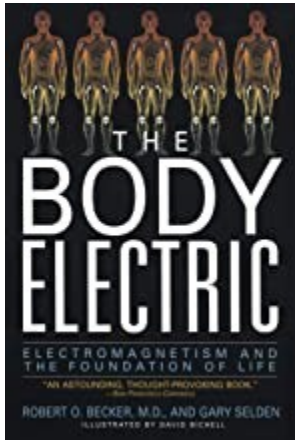
In the last chapters of the book, Becker recounts his experiences as a member of an expert committee evaluating the physiological hazards of various electromagnetic pollutions. He presents research data which indicate that the deleterious effects are stronger than officially assumed. His contention is that the experts choosing the pollution limits are strongly influenced by the polluting industry.

Michael Levin (https://ase.tufts.edu/biology/labs/levin/)



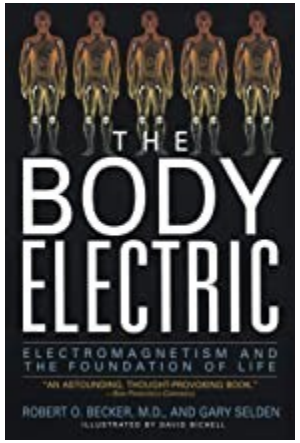
We work on novel ways to understand and control complex pattern formation. We use techniques of molecular genetics, biophysics, and computational modeling to address large-scale control of growth and form. We work in whole frogs and flatworms, and sometimes zebrafish and human tissues in culture. Our projects span regeneration, embryogenesis, cancer, and learning plasticity – all examples of how cellular networks process information. In all of these efforts, our goal is not only to understand the molecular mechanisms necessary for morphogenesis, but also to uncover and exploit the cooperative signaling dynamics that enable complex bodies to build and remodel themselves toward a correct structure. Our major goal is to understand how individual cell behaviors are orchestrated towards appropriate large-scale outcomes despite unpredictable environmental perturbations. Some general themes that run through our diverse research together

Michael Levin (continued)



We study bioelectrical signals that make up part of the language by which cells communicate to serve the patterning needs of the host organism. These natural voltage gradients exist in all cells (not just neurons), and regulate cell behavior and gene expression. We have developed new molecular tools to track and manipulate these biophysical conversations between cells and tissues in vivo. The results have yielded important findings about basic patterning, as well as new strategies to induce regenerative repair and reprogram tissues into new organs.
We have projects in development, regeneration, and cancer, as well as in the plasticity of the brain and its connection to somatic tissues. These fields are treated as distinct by most labs, funding bodies, and educational programs, but we span them because we are seeking the most fundamental aspects of biological regulation, and we hypothesize that common rules of information processing might be discovered throughout these aspects of biology. While our work will eventually give rise to practical applications in bioengineering and biomedicine, we are fundamentally interested in synthetic biology and artificial life - the understanding of living systems as cohesive, computational entities that store and process information about their shape and their environment

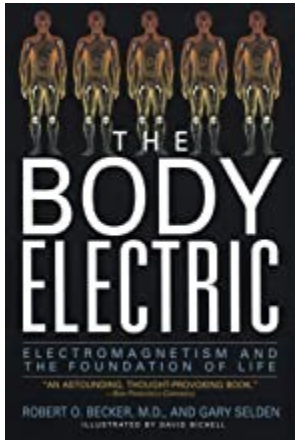
Michael Levin (continued)



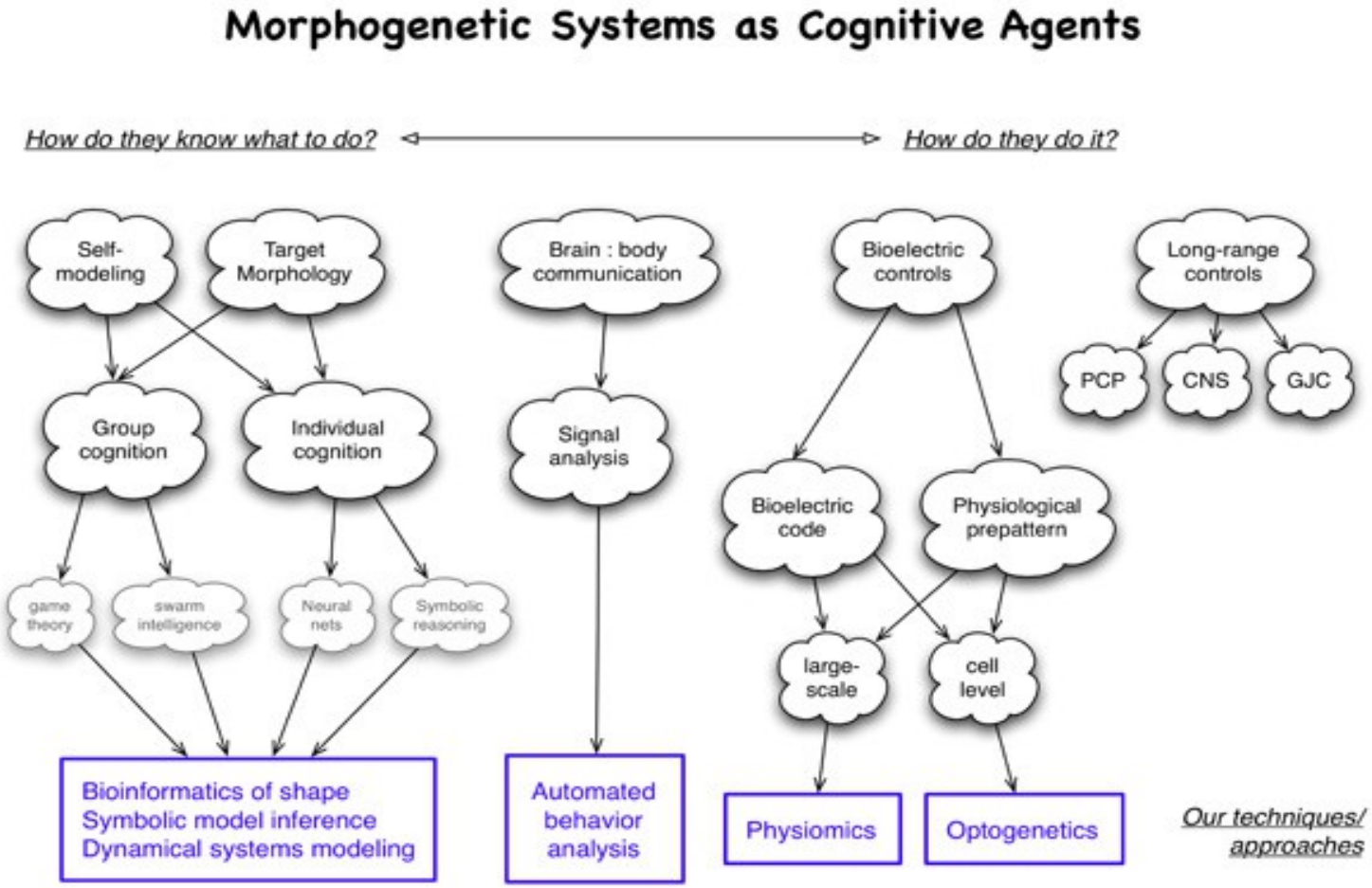
.

We complement reductive analysis of molecular components with a synthesis designed to understand top-down controls and large-scale properties. For example, we analyze morphogenetic systems as primitive cognitive agents that manipulate information about their shape and make decisions about pattern regulation. We use techniques of artificial intelligence and neuroscience to find out what information biological tissues have, and how it is stored, processed, and communicated. Our focus on algorithmic (constructivist) computer models of patterning is an important component of linking genetic networks to complex 3-dimensional shape and its regulation in vivo.

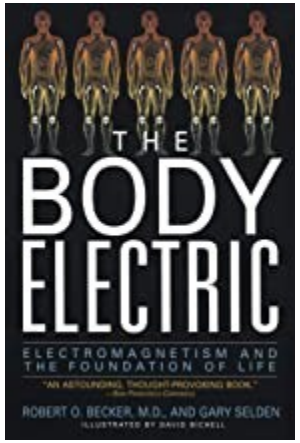
Michael Levin (continued)



.



Michael Levin



The Electrical Blueprints that Orchestrate Life

https://www.youtube.com/watch?v=XheAMrS8Q1c

Reading and Writing the Bio-electric Morphogenetic Code

https://www.youtube.com/watch?v=4d2SC3MFTBI&t=7s

Bioelectric Networks: Taming the Collective Intelligence of Cells for Regenerative Medicine

https://www.youtube.com/watch?v=41b254BcMJM

Speaking with Cells: the Electrical Future with Regenerative Medicine

https://www.youtube.com/watch?v=RzGaakopAKU

Chakras

Chakra (Sanskrit: चक्र, IAST: cakra, Pali: cakka, lit. wheel, circle; English: /ˈtʃʌk-, ˈtʃækrə/ CHUK-, CHAK-rə) are various focal points used in a variety of ancient meditation practices, collectively denominated as Tantra, or the esoteric or inner traditions of Hinduism.

The concept is found in the early traditions of Hinduism. Beliefs differ between the Indian religions, with many Buddhist texts consistently mentioning five chakras, while Hindu sources offer six or even seven. Early Sanskrit texts speak of them both as meditative visualizations combining flowers and mantras and as physical entities in the body. Within kundalini yoga, the techniques of breath exercises, visualizations, mudras, bandhas, kriyas, and mantras are focused on manipulating the flow of subtle energy through chakras.

The modern Western chakra system arose from multiple sources, starting in the 1880s, followed by Sir John Woodroffe's 1919 book The Serpent Power, and Charles W. Leadbeater's 1927 book The Chakras, which introduced the seven rainbow colours for the chakras. Psychological and other attributes, and a wide range of supposed correspondences with other systems such as alchemy, astrology, gemstones, homeopathy, Kabbalah and Tarot were added later. .

Chakras

The term chakra appears to first emerge within the Hindu Vedas, though not precisely in the sense of psychic energy centers, rather as chakravartin or the king who "turns the wheel of his empire" in all directions from a center, representing his influence and power. The iconography popular in representing the Chakras, states the scholar David Gordon White, traces back to the five symbols of yajna, the Vedic fire altar: "square, circle, triangle, half moon and dumpling".

The hymn 10.136 of the Rigveda mentions a renunciate yogi with a female named kunamnama. Literally, it means "she who is bent, coiled", representing both a minor goddess and one of many embedded enigmas and esoteric riddles within the Rigveda. Some scholars, such as White and Georg Feuerstein, interpret this might be related to kundalini shakti, and an overt overture to the terms of esotericism that would later emerge in Post-Aryan Bramhanism. the Upanishad.

Breath channels (nāḍi) are mentioned in the classical Upanishads of Hinduism from the 1st millennium BCE, but not psychic-energy chakra theories. The latter, states David Gordon White, were introduced about 8th-century CE in Buddhist texts as hierarchies of inner energy centers, such as in the Hevajra Tantra and Caryāgiti.These are called by various terms such as cakka, padma (lotus) or pitha (mound). These medieval Buddhist texts mention only four chakras, while later Hindu texts such as the Kubjikāmata and Kaulajñānanirnaya expanded the list to many more.

In contrast to White, according to Feuerstein, early Upanishads of Hinduism do mention chakras in the sense of "psychospiritual vortices", along with other terms found in tantra: prana or vayu (life energy) along with nadi (energy carrying arteries). According to Gavin Flood, the ancient texts do not present chakra and kundalini-style yoga theories although these words appear in the earliest Vedic literature in many contexts. The chakra in the sense of four or more vital energy centers appear in the medieval era Hindu and Buddhist texts.

Chakras

- The important chakras are stated in Hindu and Buddhist texts to be arranged in a column along the spinal cord, from its base to the top of the head, connected by vertical channels. The tantric traditions sought to master them, awaken and energize them through various breathing exercises or with assistance of a teacher. These chakras were also symbolically mapped to specific human physiological capacity, seed syllables (bija), sounds, subtle elements (tanmatra), in some cases deities, colors and other motifs.

  Belief in the chakra system of Hinduism and Buddhism differs from the historic Chinese system of meridians in acupuncture. Unlike the latter, the chakra relates to subtle body, wherein it has a position but no definite nervous node or precise physical connection. The tantric systems envision it as continually present, highly relevant and a means to psychic and emotional energy. It is useful in a type of yogic rituals and meditative discovery of radiant inner energy (prana flows) and mind-body connections.The meditation is aided by extensive symbology, mantras, diagrams, models (deity and mandala). The practitioner proceeds step by step from perceptible models, to increasingly abstract models where deity and external mandala are abandoned, inner self and internal mandalas are awakened.

Chakras

. These ideas are not unique to Hindu and Buddhist traditions. Similar and overlapping concepts emerged in other cultures in the East and the West, and these are variously called by other names such as subtle body, spirit body, esoteric anatomy, sidereal body and etheric body. According to Geoffrey Samuel and Jay Johnston, professors of Religious studies known for their studies on Yoga and esoteric traditions:

Ideas and practices involving so-called 'subtle bodies' have existed for many centuries in many parts of the world. (...) Virtually all human cultures known to us have some kind of concept of mind, spirit or soul as distinct from the physical body, if only to explain experiences such as sleep and dreaming. (...) An important subset of subtle-body practices, found particularly in Indian and Tibetan Tantric traditions, and in similar Chinese practices, involves the idea of an internal 'subtle physiology' of the body (or rather of the body-mind complex) made up of channels through which substances of some kind flow, and points of intersection at which these channels come together. In the Indian tradition the channels are known as nadi and the points of intersection as cakra.

— Geoffrey Samuel and Jay Johnston, Religion and the Subtle Body in Asia and the West: Between Mind and Body

Chakras

The more common and most studied chakra system incorporates six major chakras along with a seventh center generally not regarded as a chakra. These points are arranged vertically along the axial channel (sushumna nadi in Hindu texts, Avadhuti in some Buddhist texts). According to Gavin Flood, this system of six chakras plus the sahasrara "center" at the crown first appears in the Kubjikāmata-tantra, an 11th-century Kaula work.

It was this chakra system that was translated in the early 20th century by Sir John Woodroffe (also called Arthur Avalon) in the text The Serpent Power. Avalon translated the Hindu text Ṣaṭ-Cakra-Nirūpaṇa meaning the examination (nirūpaṇa) of the seven (ṣaṭ) chakras (cakra).

The Chakras are traditionally considered meditation aids. The yogi progresses from lower chakras to the highest chakra blossoming in the crown of the head, internalizing the journey of spiritual ascent. In both the Hindu and Buddhist kundalini or candali traditions, the chakras are pierced by a dormant energy residing near or in the lowest chakra. In Hindu texts she is known as Kundalini, while in Buddhist texts she is called Candali or Tummo (Tibetan: gtum mo, "fierce one").

Below are the common new age description of these six chakras and the seventh point known as sahasrara. This new age version incorporates the Newtonian colors of the rainbow not found in any ancient Indian system.

Chakras

Kurt Leland, who studied the history of the Western chakra system for the Theosophical Society in America, concluded that it was produced by an "unintentional collaboration" of esotericists and clairvoyants, often Theosophical; Indologists; the scholar of myth, Joseph Campbell; the founders of the Esalen Institute and the psychological tradition of Carl Jung; the colour system of Charles W. Leadbeater's 1927 book The Chakras, treated as traditional lore by some modern Indian yogis; and energy healers such as Barbara Brennan. Leland states that the two main elements of the modern system, the rainbow colours and the list of qualities, first appeared together only in 1977.

The concept of a set of seven chakras came to the West in the 1880s; at that time each chakra was associated with a nerve plexus. In 1918, Sir John Woodroffe, alias Arthur Avalon, translated two Indian texts, the Ṣaṭ-Cakra-Nirūpaṇa and the Pādukā-Pañcaka, and in his book The Serpent Power drew Western attention to the seven chakra theory.

In the 1920s, each of the seven chakras was associated with an endocrine gland, a tradition that has persisted. More recently, the lower six chakras have been linked to both nerve plexuses and glands. The seven rainbow colours were added by Leadbeater in 1927; a variant system in the 1930s proposed six colours plus white. Leadbeater's theory was influenced by Johann Georg Gichtel's 1696 book Theosophia Practica, which mentioned inner "force centres".

Psychological and other attributes such as layers of the aura, developmental stages, associated diseases, Aristotelian elements, emotions, and states of consciousness were added still later. A wide range of supposed correspondences such as with alchemical metals, astrological signs and planets, foods, herbs, Gemstones, homeopathic remedies, Kabbalistic spheres, musical notes, totem animals, and Tarot cards have also been proposed..

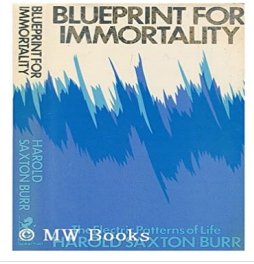
Chakras and Nadis

Ronald Cowen explored chakras and nidis via clairvoyance, and wrote this up as Part Seven of the Path of Love

. Note:Nāḍī is a term for the channels through which, in traditional Indian medicine and spiritual knowledge, the energies such as prana of the physical body, the subtle body and the causal body are said to flow. Within this philosophical framework, the nadis are said to connect at special points of intensity, the chakras.

According to my sketchy investigation of the evolution of intelligence, the chakras and nadis evolved to their present forms long efore any biological life took shape in our solar system. This means that their sophisticated structure and organization evolved in response to the world of dark matter. Their organization is so coplex that when I would use micro-psi perception to zoom in on the microscopic level to discern the function or purpose of a tiny structure, would find a function a function slightly different from the functions of adjacent structures. It would have taken thousands of hours of observation to discover the functions of the chakras and nadis. I simply did not have kind of time available to me. I therefore merely attempted to find the visual shape of the structures I could see. He made drawings of the following chakras:

- Crown chakra
- Third eye chakra
- Throat chakra
- Heart chakra
- Water charkra (hidden behind fire chakra)
- Sexual chakra
- Root chakra

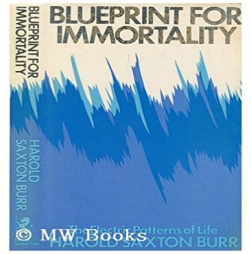


Chakras and Solfeggio Frequencies

Your body, although it appears solid, is made up of energy. Every organ, every tissue and every cell within the body is alive with vibrational energy. Even your mental and emotional state is a made up of energy that vibrates at varying vibrational frequencies.

Just as plants need the proper balance of water and sunlight in order to grow, our body system needs the proper balance of energy. The chakras are the vibrational energy system of the body and must be properly balanced and maintained in order to keep the body, mind and spirit in harmony.

Sound is also a vibrational frequency. Sound therapy tools and energy techniques are used for balancing and aligning the chakras. The Solfeggio frequencies make up an ancient 6-tone scale which is used in sacred music and chanting. These frequencies can be used to heal and energize your entire chakra system. Each Solfeggio tone is comprised of a frequency that will balance your energy and keep your body, mind and spirit in perfect harmony.



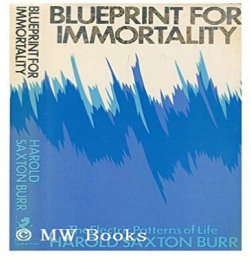
Chakras and Solfeggio Frequencies

The main six Solfeggio frequencies are:

Root Chakra - (UT) 396 Hz ,Liberating Guilt and Fear
Root Chakra - 396 hz - Solfeggio Frequency Sound Healing Meditation

Sacral Chakra - (RE) 417 Hz, Undoing Situations and Facilitating Change
Sacral Chakra - 417 hz - Solfeggio Frequency Sound Healing Meditation

Solar Chakra - (MI) 528 Hz, Transformation and Miracles (DNA Repair)
Solar Chakra - 528 hz - Solfeggio Frequency Sound Healing Meditation



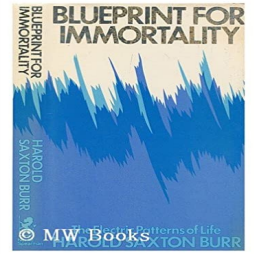
Chakras and Solfeggio Frequencies (continued)

Heart Chakra - (FA) 639 Hz, Connecting/Relationships
Heart Chakra - 639 hz - Solfeggio Frequency Sound Healing Meditation

Throat Chakra - (SOL) 741 Hz, Expression/Solutions
Throat Chakra - 741 hz - Solfeggio Frequency Sound Healing Meditation

Brow Chakra - (LA) 852 Hz, Returning to Spiritual Order
Brow Chakra - 852 hz - Solfeggio Frequency Sound Healing Meditation

Chakras and Solfeggio Frequencies



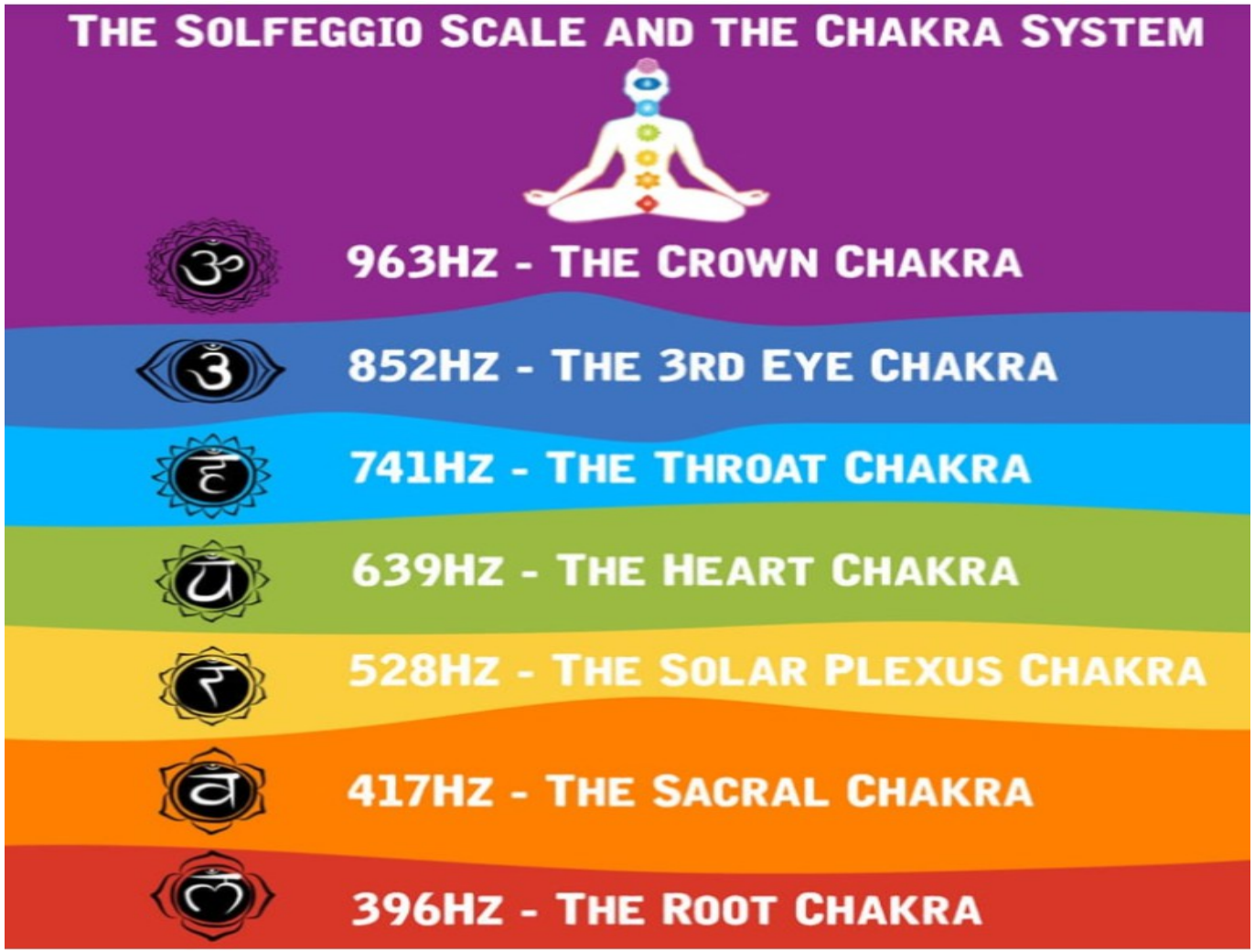
174Hz – The lowest of the Solfeggio Scale acts like an energetic anesthesia. It is great for reducing pain in the physical self. Its slow, low soothing qualities helps us to feel more safe, grounded and secure.

285hz – Is most beneficial in targeting your energetic field, by addressing blockages and holes in our aura and misalignment in the Chakra system. 285hz is the frequency of choice for a lot of energy healers

.

963Hz – Connects us with Universal Wisdom, higher realms, and dimensions. It assists with contacting ascended masters, the higher self and spiritual channeling, it is said to create strong ethereal connections to worlds beyond. 935Hz can also be related to Sahasrara (Crown) Chakra.

Chakras and Solfeggio Frequencies



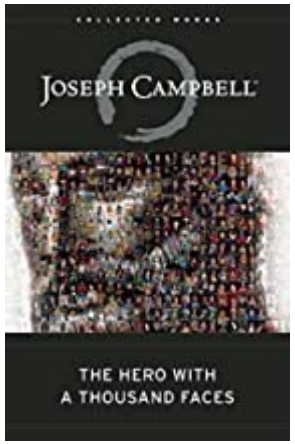
Joseph Campbell: The Hero and Mythology

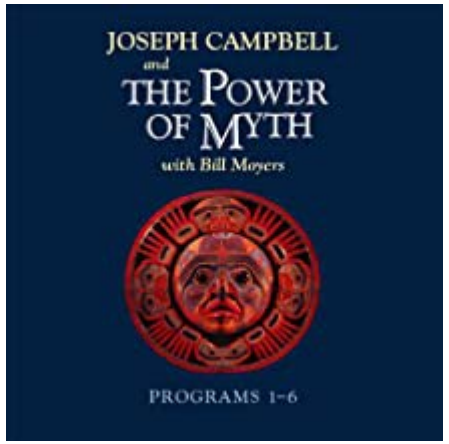
Joseph John Campbell (March 26, 1904 – October 30, 1987) was an American professor of literature at Sarah Lawrence College who worked in comparative mythology and comparative religion. His work covers many aspects of the human experience. Campbell's best-known work is his book **The Hero with a Thousand Faces** (1949), in which he discusses his theory of the journey of the archetypal hero shared by world mythologies, termed the monomyth.

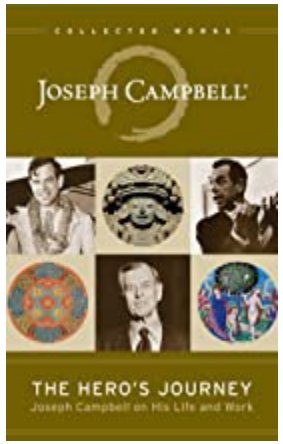
Since the publication of **The Hero with a Thousand Faces**, Campbell's theories have been applied by a wide variety of modern writers and artists. His philosophy has been summarized by his own often repeated phrase: "Follow your bliss." He gained recognition in Hollywood when George Lucas credited Campbell's work as influencing his Star Wars saga

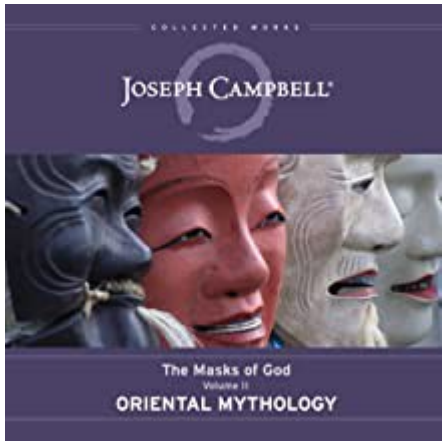
Campbell's approach to folklore topics such as myth and his influence on popular culture has been the subject of criticism, including from folklorists, academics in folklore studies.

Joseph Campbell:
The Hero and Mythology









The Mysticism of Mathematics

Riemann Hypothesis

Groethendieck and Algebraic Geometry

Langlands and Number Theory with Harmonic Analysis

Discrete Mathematics: Combinatorics, Graphs, Algebra, Data Structures

Gödel Incompleteness Theorems/Turing Halting Problem

Riemann Hypothesis

- In mathematics, the Riemann hypothesis is a conjecture that the Riemann zeta function has its zeros only at the negative even integers and complex numbers with real part 1/2
- Many consider it to be the most important unsolved problem in pure mathematics. It is of great interest in number theory because it implies results about the distribution of prime numbers. It was proposed by Bernhard Riemann (1859), after whom it is named.
- The Riemann hypothesis and some of its generalizations, along with Goldbach's conjecture and the twin prime conjecture, make up Hilbert's eighth problem in David Hilbert's list of 23 unsolved problems.

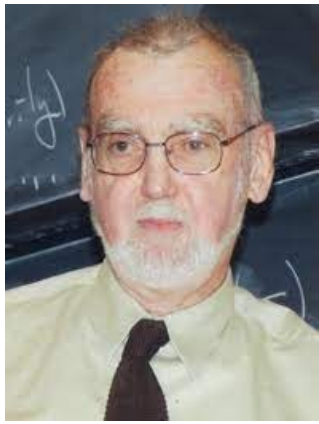
Groethendieck and Algebraic Geometry

Alexander Grothendieck's work during the "Golden Age" period at the IHÉS established several unifying themes in algebraic geometry, number theory, topology, category theory and complex analysis. His first (pre-IHÉS) discovery in algebraic geometry was the Grothendieck–Hirzebruch–Riemann–Roch theorem, a generalisation of the Hirzebruch–Riemann–Roch theorem proved algebraically; in this context he also introduced K-theory.

Then, following the programme he outlined in his talk at the 1958 International Congress of Mathematicians, he introduced the theory of schemes, developing it in detail in his Éléments de géométrie algébrique (EGA) and providing the new more flexible and general foundations for algebraic geometry that has been adopted in the field since that time. He went on to introduce the étale cohomology theory of schemes, providing the key tools for proving the Weil conjectures, as well as crystalline cohomology and algebraic de Rham cohomology to complement it.

Closely linked to these cohomology theories, he originated topos theory as a generalisation of topology (relevant also in categorical logic). He also provided an algebraic definition of fundamental groups of schemes and more generally the main structures of a categorical Galois theory. As a framework for his coherent duality theory he also introduced derived categories, which were further developed by Verdier

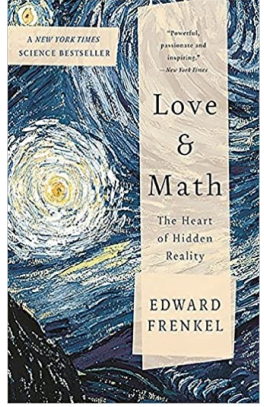
Langlands: Unifying Number Theory with Harmonic Analysis



In representation theory, the Langlands program is a web of far-reaching and influential conjectures about connections between number theory and geometry. Proposed by Robert Langlands (1967, 1970), it seeks to relate Galois groups in algebraic number theory to automorphic forms and representation theory of algebraic groups over local fields and adeles. Widely seen as the single biggest project in modern mathematical research, the Langlands program has been described by Edward Frenkel as ***a kind of grand unified theory of mathematics.***

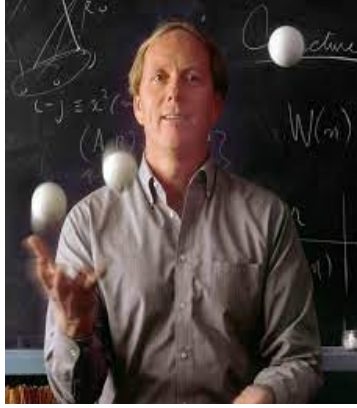
The Langlands program consists of some very complicated theoretical abstractions, which can be difficult even for specialist mathematicians to grasp. So to oversimplify, the foundational result and fundamental lemma of the project, posits a direct connection between the generalized fundamental representation of a finite field with its group extension, to the automorphic forms under which it is invariant. This is accomplished through abstraction to higher dimensional integration, by an equivalence to a certain analytical group as an absolute extension of its algebra. Consequently, this allows an analytical functional construction of powerful invariance transformations for a number field to its own algebraic structure.

The Langlands Program



- In mathematics, the Langlands program is a web of far-reaching and influential conjectures about connections between number theory and geometry.
- Proposed by Robert Langlands (1967, 1970), it seeks to relate Galois groups in algebraic number theory to automorphic forms and representation theory of algebraic groups over local fields and adeles. Widely seen as the single biggest project in modern mathematical research, the Langlands program has been described by Edward Frenkel as “a kind of grand unified theory of mathematics.”
- In a very broad context, the program built on existing ideas: the philosophy of cusp forms formulated a few years earlier by Harish-Chandra and Gelfand (1963), the work and approach of Harish-Chandra on semisimple Lie groups, and in technical terms the trace formula of Selberg and others.
- What initially was very new in Langlands' work, besides technical depth, was the proposed direct connection to number theory, together with the rich organisational structure hypothesised (so-called functoriality).

Discrete Mathematics: Combinatorics, Algebra, Graphs, Data Structures



- Discrete mathematics is the study of mathematical structures that can be considered discrete (in a way analogous to discrete spaces in topology in which all points are isolated from each other) rather than "continuous" (analogously to continuous functions). Objects studied in discrete mathematics include integers, graphs, and statements in logic.
- By contrast, discrete mathematics excludes topics in continuous mathematics such as real numbers, calculus or Euclidean geometry. Discrete objects can often be enumerated by integers; more formally, discrete mathematics has been characterized as the branch of mathematics dealing with countable sets (finite sets or sets with the same cardinality as the natural numbers). However, there is no exact definition of the term discrete mathematics.

NP Completeness

- In computational complexity theory, a problem is NP-complete when:
  - it is a problem for which the correctness of each solution can be verified quickly (namely, in polynomial time) and a brute-force search algorithm can find a solution by trying all possible solutions.
  - the problem can be used to simulate every other problem for which we can verify quickly that a solution is correct. In this sense, NP-complete problems are the hardest of the problems to which solutions can be verified quickly. If we could find solutions of some NP-complete problem quickly, we could quickly find the solutions of every other problem to which a given solution can be easily verified.
- The name ***NP-complete*** is short for ***nondeterministic polynomial-time complete***. In this name, ***nondeterministic*** refers to nondeterministic Turing machines, a way of mathematically formalizing the idea of a brute-force search algorithm. ***Polynomial time*** refers to an amount of time that is considered ***quick*** for a deterministic algorithm to check a single solution, or for a nondeterministic Turing machine to perform the whole search. ***Complete*** refers to the property of being able to simulate everything in the same complexity class.

Gödel Incompleteness Theorems

Gödel's incompleteness theorems are two theorems of mathematical logic that are concerned with the limits of provability in formal axiomatic theories.

These results, published by Kurt Gödel in 1931, are important both in mathematical logic and in the philosophy of mathematics. The theorems are widely, but not universally, interpreted as showing that Hilbert's program to find a complete and consistent set of axioms for all mathematics is impossible.

The first incompleteness theorem states that no consistent system of axioms whose theorems can be listed by an effective procedure (i.e., an algorithm) is capable of proving all truths about the arithmetic of natural numbers. For any such consistent formal system, there will always be statements about natural numbers that are true, but that are unprovable within the system.

The second incompleteness theorem, an extension of the first, shows that the system cannot demonstrate its own consistency.

Turing Machine Halting Problem

In computability theory, the halting problem is the problem of determining, from a description of an arbitrary computer program and an input, whether the program will finish running, or continue to run forever.

Alan Turing proved in 1936 that a general algorithm to solve the halting problem for all possible program-input pairs cannot exist.

For any program f that might determine if programs halt, a "pathological" program g, called with some input, can pass its own source and its input to f and then specifically do the opposite of what f predicts g will do. No f can exist that handles this case.

A key part of the proof is a mathematical definition of a computer and program, which is known as a Turing machine; the halting problem is undecidable over Turing machines. It is one of the first cases of decision problems proven to be unsolvable. This proof is significant to practical computing efforts, defining a class of applications which no programming invention can possibly perform perfectly.

Turing Machine

- A Turing machine is a mathematical model of computation that defines an abstract machine that manipulates symbols on a strip of tape according to a table of rules. Despite the model's simplicity, given any computer algorithm, a Turing machine capable of implementing that algorithm's logic can be constructed.
- The machine operates on an infinite memory tape divided into discrete "cells". The machine positions its "head" over a cell and "reads" or "scans" the symbol there. Then, based on the symbol and the machine's own present state in a "finite table" of user-specified instructions, the machine first writes a symbol (e.g., a digit or a letter from a finite alphabet) in the cell (some models allow symbol erasure or no writing), then either moves the tape one cell left or right (some models allow no motion, some models move the head), then, based on the observed symbol and the machine's own state in the table, either proceeds to another instruction or halts computation

Turing Machine Halting Problem

- The Turing machine was invented in 1936 by Alan Turing, who called it an "a-machine" (automatic machine). With this model, Turing was able to answer two questions in the negative:
  - Does a machine exist that can determine whether any arbitrary machine on its tape is "circular" (e.g., freezes, or fails to continue its computational task)?
  - Does a machine exist that can determine whether any arbitrary machine on its tape ever prints a given symbol?
- Thus by providing a mathematical description of a very simple device capable of arbitrary computations, he was able to prove properties of computation in general—and in particular, the uncomputability of the Entscheidungsproblem ('decision problem').