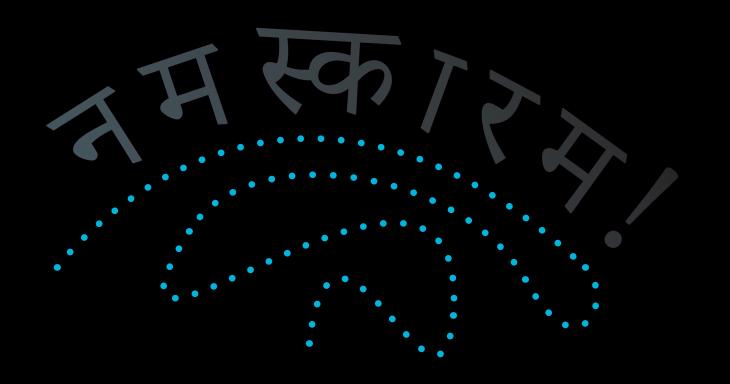


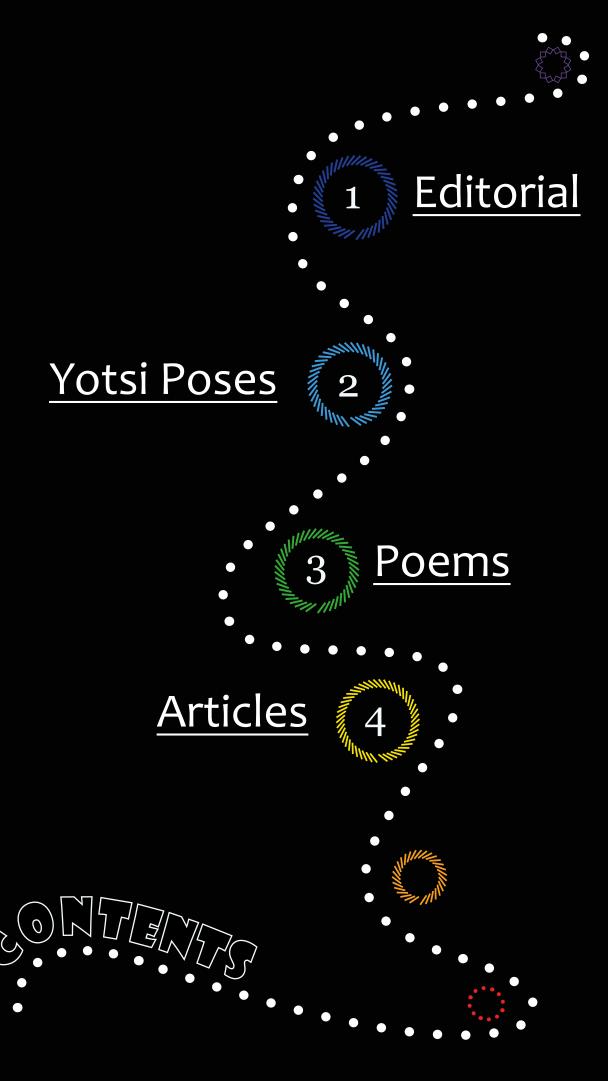


Yoge, he Magazibe, 2021

Yoga is a light, which once lit will never dim.
The better your practice, the brighter your flame

B.K.S. IYENGAR







# Editorial

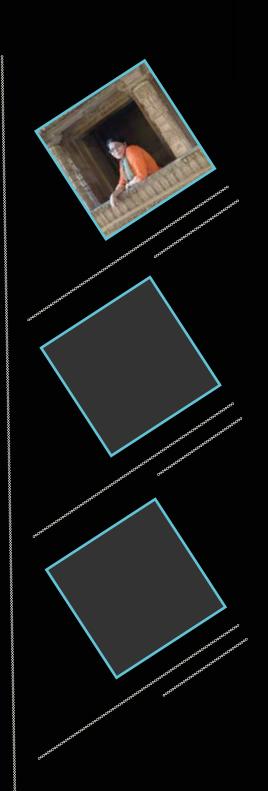
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#### Note from

# Faculty Coordinator



arch 2020, the month we might want to forget but can't, brought with it an unprecedented time. Life all around the globe came to a standstill. IISER Pune campus life wasn't any exception. Classes, lab work, etc. were suspended. Students residing on campus were sent home. The campus became almost empty.

When there was no light at the end of the tunnel, the technology came

to everyone's rescue. Virtual meetings, virtual teaching/learning and virtual activities became rampant. People learnt to make the most out of the restrictions.

In this difficult time when mental health and happiness became a major concern, a bunch of IISER Pune students came together and started the much needed yogen club in November, 2020. They held e-yoga competitions and showcased yoga poses using social media platforms. They conducted meditation workshops. They rented a virtual space where Yogen members along with IISER Pune community members practiced yoga



together. Starting from yoga learning video series to Live yoga events, they have conducted it all.

Last month on the occasion of the international yoga day, the yogen club organised events, activities, competitions amalgamating Yoga with Art, Culture and Science. I was happy to see participation from the students (campus residents and non-residents alike), faculty, staff and from their family members too.

I hope the Yogen club continues this amazing journey of learning, growth, focus, health, fitness, well being and happiness with even greater enthusiasm despite all odds.

- Anisa Chorwadwala
Faculty coordinator
Yogen club



#### Note from

# Yogen Club

There are always peaks and valleys in the founding of new ideas and the journey is beautiful after a victorious proclamation. The Yogen club started its mission in 2019, but failed to get established due to improper planning. The Covid 19 Pandemic hit us all terribly and compelled us to change our lifestyle. Outdoor activities, sports, and exercise became impossible, so the deterioration of physical and mental health became a severe concern. In such a scenario, the seven-member team Yogen (Anuradha Meena, Harini Sudha, Mahima Gautum, Pranav Meheshwari, Satyam Saurabh, Shivang Yadav, Shivani Verma) united together to work relentlessly to construct the club draft and survey, plan the budget, and manage everything to establish it. It was a great challenge to work online and get established in these unprecedented times.

Since then, we have conducted myriads of events and activities to take yoga to the fullest extent possible, including all Asana and meditation in the same flow, showing the full spectrum of yoga - physical, mental, spiritual - and yogic transmission. We are constantly supporting and



helping to conduct Yoga lessons to impart joy, courage, focus and sensitivity. Our focus is also to spread knowledge about the science behind yoga and meditation, and explore the health benefits of different asanas. Organizing different yoga-related activities like Yogasan, rhythmic yoga, yoga-related performances in cultural events, yoga competitions, yoga for physical and mental health etc helped us to captivate the large crowds in various events. We will continually work in the future to keep the IISER campus and community healthy and safe.

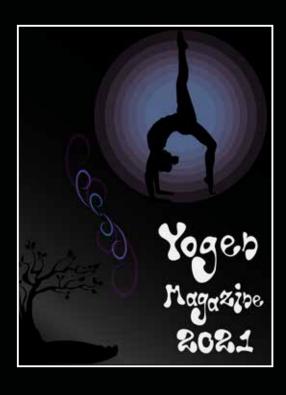
We, the team for the Yogen magazine, hope you enjoy reading this edition as much as we did making it!

Team Yogen



#### Note on

# Cover Page



As we know, yoga can be literally translated as to unite, merge, or combine. Evey existential thing in the universe is always in continuous contact with the surrounding present around. From the tiniest atoms to the largest planets, not a single object can stand alone on its own feet.

The living world, from unicellular organisms to multicellular organisms like humans, can not survive on their own without being in continuous contact with

the living and non-living world around.

The exchange of carbon dioxide and oxygen between plants and animals is its day-to-day life example. The regular transaction of our human body with outside world rules out the idea of individual being an independent existence. This is just one aspect; there are many other aspects that make existence coherent.

So, considering this one aspect as a theme for the magazine's cover page, I have illustrated this simple illustration.

#### **Tushar Sherkhane**

Third-Year BS-MS Student







Satyam Saurabh
Founder and Editor in chief

# Team Yogen Magazine



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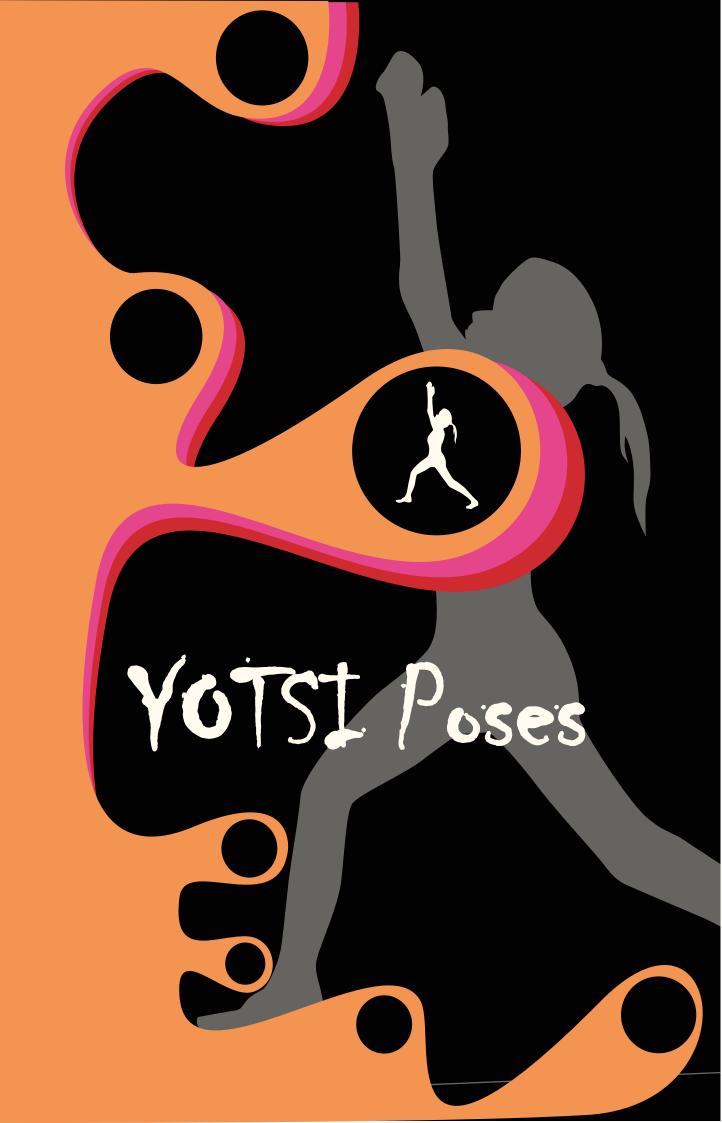


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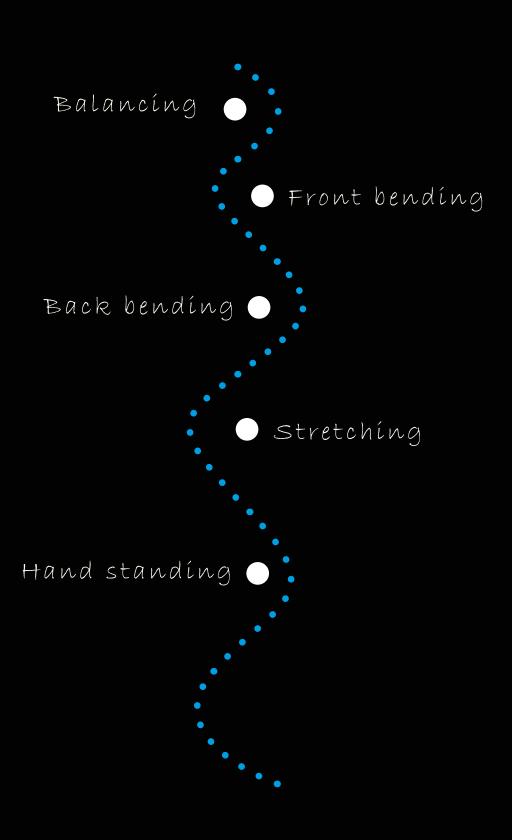


Bhavna Musunuri
Editing coordinator



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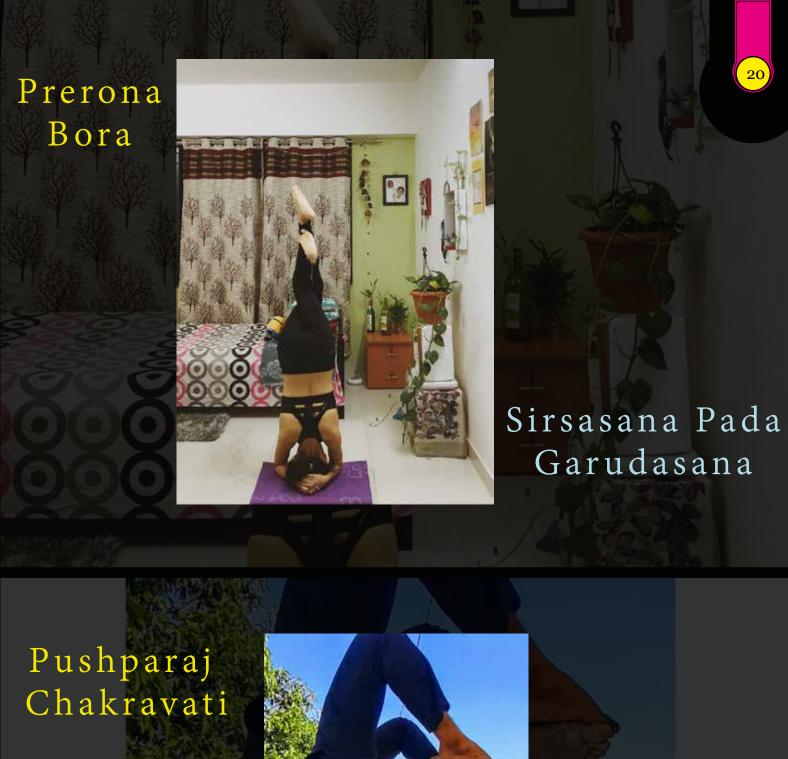
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Yogen Magazine



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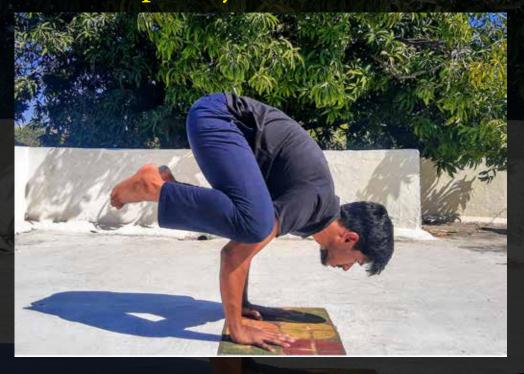


Vrishchikasan





# Pushparaj Chakravati



Vakasana

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Ardha Baddha Padma Navasana



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# Illustration by Emily Priyadarshini





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Arch your spine, lift your legs;
hold your toe and make a nice bow!

If not yet there, try again and again until you get there;
Once in the pose hold on to that bow, it hurts sometimes I know,
Come back again and relax, pat yourself on the back;
Don't mistake it as the end, it is where it all begins;
Because if you want to be a yogi, consistency will be the key to
your proficiency

- Mahima Gautam



### योगा



योग है एक आध्यात्मिक अनुशासन विश्वात्मा के संयोग में है इसका पालन ऋग्वेद में है इसका उल्लेख युज से उत्पत्ति मतलब होता मेल

हिन्दुस्तान इसका मूल स्थान है विश्वभर में योग गुरु से पहचान है मोक्ष प्राप्ति का यह एक रास्ता है विज्ञान से बहुत गहरा वास्ता है



बीमारियों का है सहज उपचार जीने को मिलेंगे साल एक सौ चार मन पर न होगा प्रभाव दुराचार बस करना है इसका अभ्यास

21 जून हुआ योग दिवस का ऐलान योगा ने बनाया नये नये कृतिमान स्वस्थता के मूलमंत्र का बहुत बड़ा सार आधुनिक जीवन शैली का होगा इससे बेड़ा पार

प्रकृति से मिला है मुफ्त उपहार जानवरों में भी आसन के संस्कार हम सबको आज ही प्रतिज्ञा लेना है बेहतर समाज के लिए योग अपनाना है॥

~ सत्यम सौरभ





योग करैं सब प्रतिदिन प्रातेः बुद्धि शीतल, तन स्वस्थ, होई । जो बैठे मनमैं बुरे विचारे तो योग सबही व्यर्थ होई॥

तन सहित मन शुद्धि कीजै प्रेमभाव जब मनमें होई जगत सबही परिवार लगै जब योग तबही सुफल होई॥

~ प्रणव माहेश्वरी



# मेरी चुप्पी

कह तो दूं मैं इसमें मेरा क्या जाता हैं

सुन लोगे तुम खुल जाएंगे सब दरवाजे

बस कह सकता तो जरूर कहता सुन सको तो मेरी चुप्पी सुन लो...

~ प्रणव निटुरकर

# Beauty of Yoga

On gleaming polished wood floor

J become a butterfly, a snake or a tree

To burn the muscles of my arm and core

Setting my limbs and back free

-Yashi Jain



40ga Practice

I do yoga, not to become a yogi, But to save myself from becoming a rogi!

- Chandana Rao A.S





# Beingin

What is Yoga? One may ask
If there's room for such questions
Sow can one know?

Overflowing acceptance
Compassion & spontaneity
Involvement & intensity

There's no one who hasn't tasted it There's no one who has never...

Reen in Yoga

The question is about staying there Staying, not to get stuck But to never get stuck ever!

~Pranav Niturkar





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# The Science and Art of Yoga

Pranav Maheshwari

Yoga, meaning union, is a millennials long concept, I must say a culture, born in India. Patanjali's 'Yogasutras' dated 400CE is the most organized collection of yoga mantras, theory, and yoga practice, but the roots of Yoga go far beyond 3000 BCE. The present-day world identifies yoga mainly as a form of physical exercise to keep the bod healthy. Incontrast, the real essence of yoga lies in the complete well-being of a human comprising of not only physical or mental health but also spiritual health. According to 'Shrimadbhagwat Geeta,' beingaYogi isthe supreme goal of human life, including knowledge of Karma, Gyana, and Meditation. In thesimplest of words, yoga is the eternal balance of mind and body, and being a Yogi is to masterthe art of this balance.

With the success of the scientific knowledgemaking process and the ever-increasing curiosity of the human mind, Yoga was also objected upon. Some claimed Yoga is just another form ofphysical exercise, while others claimed it to be an ancient tradition of no use in the modern world. Scientists started studying Yoga as soon as the 19th century. Though the beginning wasfrom a physiological point of view, Yoga has now become a scientifically proven way ofimproving physical as well as mental health. And now the whole world has accepted this old Indian tradition and is also celebrating International Yoga Day every year. Nevertheless, Yoga is now studied ingreatdetailby scientists. As a result, Indianowhas not only Yoga training schools but also Yoga research centers aimed at scientifically investigating this heritage of India.

Although alot of research is still underprocess, the Indian art of Yoga, first introduced to the Western world by Swami



VivekanandaJi, has now become apart of people's lifestyles across the globe. What matters the most to an individual is the effects that the self feels. Some people findYoga a fast way of relaxation and attaining peace. For others, Yoga just doesn't work. The difference lies in the art of doing it. Just as all other art forms like dancing, singing, writing, etc., Yoga has a rhythm. The serenity that 'Savasana' can provide requires a proper way of looseningbody parts and gradually slipping the mind into quietness. The same applies to other asanas andpranayama. The rhythm of yoga shouldn't be disturbed, and discipline should be maintained every time. Mastering it all is not a chilf's play; doing Yoga requires a lot of practice and patience. That's where appears Yoga trainers or Yogagurus, the practice and teaching of themodern form of Yoga was pioneered by Shri Yogendra Ji, which has evolved into many branches, Iyengar Yoga being one of the famous names. Since then, Yoga has developed not only asan art form but also asaviable profession with 1000s of Yogis involved. This art is flour is hing at an accelerating rate, and its charisma is now being experienced by all.



With the accepted success of Yoga asanexercise to enhance physical and mental well being, spirituality is also gaining momnum organizations such as Brahmakumaris and

Heartfulness practice yoga to build character and connect to the self-being. Yoga is promoted as an effectiveway of achieving inner peace. Meditation, especially, is highly practiced by all people, irrespective of any differences. Yoga has also brought together people from different walks oflife, different religions, or different races. Yoga in its present form is epitome of the principle of 'Vashuhev Kutumbakam.'

Yoga has a direct impact on the practitioner's life. In the stressful and busy human life of the 21st century, practicing Yoga gives you

minutes of mindfulness and calmness. These few moments of relaxation are enough to shape our meaning in life while providing physical, mental, and socialwell-being Knowledge from thousands of years ago is now transforming human lives in different ways. This knowledge itself is evolving, and now the time is for us to grow into better selves.



# Science T.V.Chakradhar

Being a student at an Institute dedicated to the study of Science, I am fortunate to be in the company

of fellow students and eminent scientists working on a plethora of topics, ranging from the origin of existence to the mysteries of intricate mathematical constructions. Behind this apparent diversity though, is the common theme of longing to know, to imbibe the very essence of knowing, to become one with it. Although it finds passionate expression among the scientific community, this longing to know is very much present in every human being, albeit in dormant states in a few. Of course, well known

are the historic efforts of humanity to design a systematic way of understanding, eventually evolving to this phase of elegant modern science.

This article is an attempt to present some of the ideas from the earlier Indian texts that try to explain the science of the Self, in a different style compared to modern science. Before we begin, let me assure you that every effort was made to verify the authenticity of the ideas presented here, using multiple sources. Also, I plan to strictly avoid my own interpretations because of the experiential nature of the subject, and every comment, including examples, are extracted from standard works. That being said, it is reasonable for

the audience to question the truth value of such theories and what difference it could make in one's

> life. Although such an endeavor is not the priority for most of us, I still attempt to present it because it is observed that even without any experiential perception, a mere intellectual understanding of this can also positively impact our attitude towards life and ourselves.

Most of the content is taken from 'Patanjali Yoga Sutras' (commentary by Śwami Vivekananda) and 'Atma Vijnana' by Swami

Yogeshwarananda Saraswati. Other relevant concepts are presented at appropriate sections, with a few of these from the works by Isha Foundation/Sadhguru Jaggi Vasudev.

The interpretation-free, literal meaning of Yoga is 'Union'. It is one of the Shad Darshanas of the Vedas (the six aspects of 'Vision' or 'Realization'). The ancient system of Yoga begins with an understanding of the limitations of the five senses that human beings can access by default, and explains the higher possibilities that a human being is potentially capable of. The ones who claim





to have realized this with intense practices (such as Yama, Niyama, Asana, Pranayama, Prathyahara, Dharana, Dhyana, Samadhi) or otherwise, all point to the same ideas that only differ in expression using models that make sense to the general public. One such model is this - that which we refer to as 'Self' or 'I' (in an individual sense), is made of five sheaths namely

- 1. Annamaya Kosha अन्नमय कोश
- 2. Manomaya Kosha मनोमय कोश
- 3. Pranamaya Kosha प्राणमय कोश
- 4. Vijnanamaya Kosha विज्ञानमय कोश
- 5. Anandamaya Kosha आनंदमय कोश

We describe these briefly, with special emphasis on the Manomaya Kosha. The first one, Annamaya Kosha, translates to 'food sheath'. It is the physical body, equipped with various organs, and modern medical science knows a good deal about its structure and functioning. It is said that this also houses the 'Chakras', situated along the spinal cord, although not strictly in a physical sense. This is explained in the section on the Pranamaya Kosha. One might ask the immediate question - 'What is it that you refer to as physical?' For now, you may think of it as all that you can sense with the five senses, including those perceived with the help of any scientific instruments. This is an incomplete answer, but it shouldn't bother us because the Yogis do not make a sharp distinction between the physical aspects and the mind as they are very closely related, as we shall see shortly. In fact, the first three - the Annamaya, Manomaya and Pranamaya Koshas are considered to be closely associated with the physical nature or in other words, seen as a manifestation of something more subtle, the other two Koshas. The Navarandhras (the nine major openings into the body) are considered as the gates to an inner world for the one who seeks to explore these using meditative techniques. The physical manifestation of existence is made of the Pancha-Bhutas, namely, Prithvi, Apas, Agni, Vayu and Akasa, which roughly translate to Earth, Water, Fire, Air and Space. It in no way points to the literal meaning of these substances. These Pancha-Bhutas form the basis of physical existence in a qualitative way. So, it is natural to look at them as something more than a model of classifying materials.

We describe the Manomaya Kosha in detail to whatever extent possible, because this is one aspect that has direct applications, providing practical insights to the functioning of our mind, which a large number of people are struggling to handle sensibly. The Manomaya Kosha is characterized by the Antahkarana

Chatushtaya, meaning - the hidden/inner instrument, whose function is invisible to the naked eye. As the name suggests, it consists of four aspects - मनस (Manas, mental faculty of concept and imagination), ৰুদ্ধি (Buddhi, intellectual or the reasoning faculty), अहंकार (Ahamkara, the sense of individuality and egoism) and चित्त (Chitta, the 'mind-stuff' of memory and emotion). Some aspects of this fourfold inner organ come under the Vijnanamaya Kosha, described later.

The Manas is the faculty that acts as a bridge between the gross sense organs and the mental faculty of perceiving. It will conceptualize the gross information received through the sense organs, forming a mental picture that is not gross in nature. The mind takes the impression farther in, and presents it to Buddhi, the determinative faculty which reacts. Along with this reaction flashes the ego, a sense of individuality. This is the Ahamkara. The Chitta is the storehouse of memory. This is a right place to discuss the concept of rebirth and Karma. Just like there is evolution happening at a physical level, there is evolution in terms of the inner world of consciousness and perception. This idea of Pancha Koshas is applicable to human beings, not to the other life forms. The animals at various stages of evolution do not have a structure of this Manomaya Kosha. Hence, their life happens within narrow boundaries, and their action or the Karma is largely fuelled by tendencies arising out of the past memory. This memory is of different types, the diversity of which depends upon the species under consideration. For example, in the highly evolved humans, this includes genetic memory to regulate the physical aspects, memory due to accumulated tendencies from the past animal births (one has to assume past births if we are to make any progress in this model, there is no reason to believe that the death of the physical body is the end of everything about 'me', the body being an accumulation of material over time), along with the huge store of Karma once the stage of human being is attained. Karma is the basis of our individual existence. It is classified into three categories- Sanchita (सन्वित), Prarabdha (प्रारब्ध), and Agami (आगामि) Karma. Sanchita Karma is the sum of accumulation from all the lives, waiting to give fruits when the time arises. Out of Sanchita, a small portion is set into action according to the environment available for the experience of fruits of the previous karma. This is called Prarabdha, which determines the nature of the present life such as species, conditions under which the individual is put into etc.,

based on the type of Karma that needs to be

discharged. In the case of a human, due to the presence of Manomaya Kosha and Ahamkara (identification with the ego), the new Karma generated is in huge quantities, which runs alongside the experience of Prarabdha. This new accumulation of Karma in terms of memory and tendencies is referred to as Agami Karma, which adds to your Sanchita, and the cycle goes on. The term Moksha or liberation is used in this context that when one ceases to have the false identification with the Ahamkara (ego), one can become free from the Karmic bondage that puts you into endless cycles. When the true perception, popularly known as Self-realization/ Enlightenment happens, the Sanchita and the Agami Karma developed until then would be dropped off and he/she becomes a Jivanmukta. However, the Prarabdha has to be fully experienced even by a realized being, just like we can't do much about an arrow that was already released from the bow (i.e. the part of Sanchita already set into action). When the Prarabdha is also burnt up finally, true liberation happens and there shall be no rebirth. This of course is just a broad overview of the model of Karma and is difficult to digest in this crude and apparently unnatural form. However, I can tell you that a detailed study of its intricate mechanics would be more convincing and appeals to a logical mind. So, there is no need to discard it straight away, just knowing it superficially.

With this knowledge, a thought is described as a force that is absorbed from the infinite storehouse, being taken hold by the instrument called Chitta for a brief period of time. These waves of thoughts are called Vrittis, and are compared to the ripples in a lake filled with water. Note that water is essential for any ripples to occur. Using the same analogy that the water should be free from dirt and ripples for us to clearly see the bottom, the Chitta and the Mind should be free from Vrittis or the chain of thoughts to be able to perceive the truth without distortions. Another interesting analogy is as follows - a little child is taken to a movie theatre, and the father tries to explain that the movie is not an actual happening but is played on a screen. The child exclaims, "Where is the screen?" Consider the lights being switched on as being analogous to us being conscious, and the movie being played analogous to the ceaseless chain of thoughts. Then we have four possibilities -

1. Projector is on, the lights are also on - conscious as well as thinking, the normal state of us being awake.

2. Projector is on, the lights are off - unconscious but still Vrittis are on, i.e. the

dreaming phase.

3. Projector is off, the lights are also off - unconscious with no Vrittis, during the dreamless deep sleep.

4. Projector is off, the lights are on - conscious, but free from the Vrittis.

Normally, we keep wandering in the first three states; in which case the little child can never understand what the screen means. Thus, the fourth state, known as Turiya (तुरीय), is regarded as the state beyond the usual three states of wakefulness (जागृत), dreaming phase (स्वप्न) and dreamless deep sleep (सुषुस्ति). It is only when the lights are on, but the projector is turned off, the child can perceive the screen, i.e. the undistorted truth is perceived only when we are fully conscious, but free from the Vrittis or the chain of thoughts. However, the Upanishads do point to a state that is beyond all these four states of existence, which is the ultimate perception and union with the truth.

Even though the Vrittis or the chain of thoughts come and go, they leave an impression on Chitta, depending upon the intensity and frequency of the type of Vritti that occurs. These impressions are known as Samskaras (संस्कार), and are carried across life times as well. These Samskaras can again result in Vrittis, often unconsciously, and the cycle continues, like that of a tree and a seed. Therefore, any genuine spiritual tradition aims at increasing the levels of consciousness and prescribes methods to prevent generating new samskaras, simultaneously eliminating the impact of existing Samskaras. It is said that gaining the right perspective of Self by dropping illusions would render these Samskaras or the seeds lifeless and they can no longer germinate to give rise to unwanted Vrittis, taking us closer to the state of Turiya.

If Annamaya Kosha is like the hardware and Manomaya Kosha the software, Pranamaya Kosha is the electricity, but way more intelligent and lively. That which is the main support of all living beings is known as 'Prana'. The Energy sheath pervades within and without the Annamaya Kosha due to its non-physical nature in spite of being closely associated with the Annamaya Kosha. The physical body cannot exist without the support of the life force or the Prana. The Pranamaya Kosha is made of five major pranas, namely, Prana, Apana, Udana, Samana, Vyana; each of them having a specific function and taking charge of different regions of the body. These work in harmony along with five other sub-pranas namely Devadatta, Krikal, Kurma, Naga and

Dhananjaya. The gross manifestation of Prana is sometimes associated with breath. It is said that maintaining the Pranamaya Kosha in perfect balance and fully activated would keep the Physical and Mental bodies free from natural ailments (those which are developed within the system, unlike the infectious diseases). There are various Kriyas to do this, ranging from simple pranayama to elaborate techniques involving breath, uttering sounds, body posture etc. This Kosha is supported by 72,000 Nadis (नाडी), the pathways or channels of Prana in the system that spring from three basic Nadis - Ida (इडा), Pingala (पिङ्गला) and the Sushumna (सुषुम्णा). The Ida is on the left side of the spine and Pingala on the right. The Sushumna inter-penetrates the cerebrospinal axis between these two. These are not manifested in the physical body, but can be noticed with certain practices prescribed. The energies lie in Ida and Pingala for most people and balancing these is required to live a fullfledged life. The Ida and Pingala represent the complementary natures of duality in every sense, which is essential for any manifestation of that which is absolute and one. The 72,000 Nadis have various junction points known as 'Chakras', which are 114 in number. Out of these, seven chakras are described extensively in the Yogic literature. These are situated along the Sushumna as follows

- 1. Muladhara (मूलाधार) at the perineum
- 2. Svadhistana (स्वाधिष्ठान) just above the genital organ
- 3. Manipuraka (मणिपूरक) just below the navel
- 4. Anahata (अनाहत) just beneath where the ribcage meets
- 5. Vishuddhi (विशुद्धि) at the pit of the throat
- 6. Ajna (आज्ञा) between the eyebrows
- 7. Sahasrara (सहस्रार) top of the head

Energizing these Chakras by raising the Prana in the Sushumna (popularly known by the name Kundalini) under the guidance of a Guru, would help in various aspects of spiritual progress by quickening the process of inner evolution. Also, activation of each Chakra can manifest in different ways such as attaining ecstatic states, razor sharp intellect, perception of other worldly beings etc. It must be noted that ill-handling of these energies without proper direction from a Guru can lead to disasters.

At this point, it is appropriate to discuss 'Ojas', a non-physical energy that can be made use of to lead a frictionless and effortless life. One who has well developed Ojas would naturally lead an exuberant life and has far more potential to influence people around.

This is often manifested in terms of physical strength, mental stability, serenity, people being drawn towards them for reasons not logical, and coming out safe in spite of taking all kinds of risks. Developing Ojas can happen through Kriyas, the right kind of diet (for example, consumption of Ghee) etc. Excessive indulgence in food or sexual activity, nervous stimulants and intense negative emotions such as anger would dissipate and destroy the growth of Ojas in our system. It is in this context that celibacy was prescribed for enthusiastic spiritual aspirants and also to adolescents in general, which eventually was turned into merely a matter of moral issue. One might ask that it contradicts the modern medical research which says that suppression of sexual desires can manifest as certain physical and mental ailments. This is certainly true, and even the Indian Ayurvedic texts suggest the same. However, the yogic prescription of celibacy involves gaining mastery over this biological instinct by evaporating it in all levels - physical, mental, both conscious as well as subconscious levels, unlike suppressing the natural urges. When it is erased on deeper levels, it would not even manifest as a biological compulsion, and hence there is no question of suppressing anything. Another aspect of Brahmacharya being prescribed is that sexual intimacy with multiple individuals would generate unnecessary Runanubandha (ऋणानुबन्ध, a subtle form of 'debt') that binds us even more to the Karmic structure, thereby causing hindrance in our journey for freedom. This was also eventually turned into merely a matter of morality, due to the lack of right perspective. The external appearance of morality, after all, is a relative thing depending on the time, place and overall requirements of the society (although we may not declare morality as a totally made-up concept; looks like it is the natural way to be, for one who has known the ultimate). Another important aspect is that the Pranamaya Kosha in some sense takes the shape of the physical body and can also extend a few inches outside the body. This is one of the reasons yoga practitioners are suggested to avoid skin tight clothing which obstructs the flow of Prana that is meant to be rejuvenated using Yogasanas. In case of top class yogis as well as consecrated temples, Prana may extend for miles together and hence there is a tradition of visiting temples and saints to positively impact your own Prana.

The three Koshas described so far are still in some sense physical in nature and the fourth one, known as the Vijnanamaya Kosha is a transitory one from the physical



to the non physical dimension. Vijnana is usually interpreted as Vishesha Jnana, i.e. extraordinary knowledge that is beyond the perception of the five senses. The power of that intellect which grasps the truth completely and does not accept even a trace of untruth is known as Ritambara Prajna or the truth-bearing intellect. Acquiring this through immense efforts would give special capacity for directly perceiving the hidden internal forms of objects and this perception is more direct than that seen by sense perception, derived by inference, or from scriptural testimony. Spiritual aspirants are warned of these as obstructions to further progress to realize the ultimate truth. Recall that some aspects of Antahkarana Chatushtaya (the fourfold inner organ) would come under this Kosha. The Ahamkara is closely associated with this Kosha and is still considered to be a false identification of our true Self which keeps binding Karma unconsciously.

The Anandamaya Kosha is completely non-physical in nature and it is better not described except probably that this is the source of existence for other Koshas. It is said that when one touches this dimension, great bliss pours in and some states of Samadhi or the ecstatic trance may be associated with this Kosha. This model of Panchakoshas is sometimes compared with the three body model consisting of-

1. Sthula Sharira (ম্থুল খাবীৰ, the physical body) – the Annamaya Kosha

2. Sukshma Sharira (सूक्ष्म शरीर, the subtle body) – the Manomaya, Pranamaya and Vijnanamaya Koshas

3. Karana Šharira (কালে খারীর, the causal body) – the Anandamaya Kosha. This causal body is responsible for individual existence by holding onto the Karmic structure.

If one can do away with these five Koshas, what remains is the true Self, also known as Atman. The relation between Atman and Paramatman (the ultimate, unmanifested source) is another question which is extensively discussed and debated as the

different ways of perception namely - Dvaitha, Advaitha, and Visistadvaitha. Fortunately, most of the Gurus that are considered genuine by various standards, have declared that these three are but various stages of experience in the journey to know the ultimate and the final goal is one and the same.

We will end with a brief note on the various paths designed for the sake of realizing the ultimate. The four aspects of life that we humans have direct access to are body, intellect, emotion and the energy/Prana. Four paths are designed based on this principle

- 1. Karma Yoga the path of action with the right understanding of the mechanics of Karma.
- 2. Jnana Yoga by sharpening the intellect to an extent of being able to perceive the undistorted truth.
- 3. Bhakti Yoga by developing an intense, single pointed emotion to reach the ultimate.
- 4. Kriya Yoga by transforming the life energies or the Prana.

As per one's own nature, one can choose either of these paths, or a right mixture of all or some of these that works best for them. The guidelines for choosing the means to the ultimate are also extensively discussed in various texts. The description of Panchakoshas in this article is more applicable for those who wish to explore the Self through meditative techniques, although we have also discussed basic aspects of Karma etc. This is in no way a requirement to know the ultimate, for this entire circus is unnecessary for those on the path of Bhakti.

# The Scientific and Artistic Basis of Yoga

Satyam Saurabh

The word 'Yoga' is derived from the Sanskrit word 'Yuj', meaning 'to unite.' Yoga unites the body, mind, and spirit; and brings perfect harmony between them. So it merges science and art, drawing on aspects of both in ways that cause the boundaries to overlap and blend. The physiological benefit of yoga is to regulate the amount of chemicals in the body that affect us mentally, physically, and psychosomatically. It is one of the fastest-growing and most effective sports in today's world. Practicing yoga asanas has numerous health benefits, both mental and physical. The minimalism of yoga also does away with the need for any heavy equipment or large courts. As the activity of intellect becomes stronger in the world and especially in academia, more people will shift towards yoga as it becomes the most popular way of seeking well-being. Seeing a performance of exquisite yoga asanas is also quite pleasing and desirable for an audience. It is an art of healthy living that brings emotional stability.

The whole of yoga is based on the scientific approach, and It has not been recognized in the past. As we move to the modern era, more and more people are trying to comprehend the scientific principle and precise benefit. It has been practiced for a long time due to huge medical benefits and interest. Practicing yoga can improve the immunity system by reducing cortisol hormones. It can cure addiction by modulating dopamine concentration. It is paramount to teach yoga to children for controlling impulsiveness, obsessive and seeking behaviour. It stimulates the parasympathetic nervous system that maintains the stress and anxiety levels in our body. It helps in secreting the antioxidants that are the best scavenger for the free radicals that can cause untreatable diseases like cancer. It eliminates the negative thoughts and brings positive energy that makes people more self-aware and self preservation. The popularity of yoga is



increasing day by day, and it is also being accepted in western culture. Many medical practitioners recommend yoga as a complementary technique to cure illness and an alternative to surgery in some cases. The cutting-edge research on yoga is also giving the underlying therapeutic value.

The aesthetic beauty of yoga can be considered an art. The geometry of different asanas seems very exquisite, and its architecture gives the true nature of visual attractiveness. The human body is the medium to represent various art forms. Artists and yogis have the same idea of innovation to portray art. The way of practicing yoga, the timing of particular asanas, correct posture, and good technique to reach special poses is an art. It can only learn through practice and become a master over time. Both experienced yogis and artists teach new learners with great zeal and zest. Yoga is a perfect balanced mixture of science and art. It has to be understood correctly to take full advantage. We need to emphasize both aspects to gain the full spectrum of yoga, physical, mental, social, spiritual, and yogic transmission. Yoga is not just a set of asanas and meditation that we practice regularly but rather a way of life to live. The key formula for a happy and stress-free life is a healthy body and a calm mind. It is the time to spread yoga to all corners of the world and that will be helpful in every aspect.

# mazing facts about yoga

~ Sakshi Velyankar

✓ oga has taken many forms over the years. It has a long and rich history. Even in the modern world its popularity is growing day by day. From the years of its birth to today's fame, there are many interesting facts to know about this form of expression.



The word yoga has various meanings, one of them being "union" in Sanskrit. Maharishi Patanjali, called "The Father of Yoga", compiled and refined various aspects of yoga in his "Yoga Sutras". There are different elements of yoga which include Hatha yoga (physical or active yoga), Karma yoga (following a path of righteous action), Raja yoga (meditation and concentration on the infinite), Jnana yoga (the pursuit of mystical knowledge), Siddhi yoga (awakening of mystical energies) and Shakti yoga (pure faith in the supreme being).

Among these, Hatha yoga, also known as the "yoga of forceful exertion", emerged in the tenth to eleventh century. Hatha yoga depicts the yogic body as a pneumatic, hydraulic and thermodynamic system. The practice of breath control became refined in the hathayogic texts, providing elaborate instructions concerning the calibrated regulation of the breaths. In view of today's postural yoga, Hatha yoga's greatest legacy is found in combination of postures (asanas), breath controlling techniques (pranayama), seals (mudras) and locks (bandhas).

Swami Vivekananda introduced raja yoga to the Western audience at the 1892 World Parliament of Religions in Chicago. He remained in the United States for most of the next decade, lecturing and writing on the Yoga Sutras.

Yoga became very popular in the west in the early 2000's. It has become a commodity, particularly in the United States. By some estimates, as of 2016, around 36 million Americans practice yoga regularly and have spent

16 billion dollars on yoga gear. India's greatest cultural export, yoga, has now become a mass culture phenomenon and one of the most successful by-products of globalization.

Along with this many people are considering teaching yoga as a career choice. Porchon-Lynch was recognized by Guinness World Records as the world's oldest yoga instructor at the age of 93, in May 2012.

One of yoga's primary aims is to improve mental and physical health by keeping the body clean and flexible. Increasing muscle tone and strength, better sleep, improving circulatory and cardio health, and improving mood by releasing endorphins are some of its health benefits.

According to the Yoga Journal survey, for most yoga enthusiasts physical fitness and gaining flexibility is the primary motivation for practicing yoga. This vision is a modern invention and nothing like this has existed in most of yoga's history.

Yoga is said to develop inner awareness. It focuses our attention on our body's abilities at the present moment. Mirrors are not usually present in the yoga studios. This is to encourage people to focus on their awareness inward rather than how a pose looks. Some surveys have found that people were more satisfied with and less critical of their bodies because of practicing yoga. Because of this, yoga has now become an integral part in programs that promote positive body image and self-esteem, as well as in the treatments of eating disorders.

Some special styles of practicing yoga have come up over the years. Below are some of them.

Bikram yoga or hot yoga: In this type, yoga practitioners perform yoga asana in a room where temperature reaches 105\mathbb{I}. Though there is no study to suggest that this has any additional health benefits.

Doga: In studios which offer "doga", people can practice yoga together with their dogs. Doga was started by Suzi Teitelman in New York in 2002. Adho mukha svanasana or downward dog pose is the most popular pose to enjoy with one's furry friend.

Mysore style yoga: This style yoga invites you to simply turn up and practice whichever poses you enjoy. You don't have to always follow any instructions.

Nude yoga: It is practiced in many parts of the world. Nude yoga is believed to deepen yoga practice and is thought to build body confidence and acceptance.

Goat yoga: This practice started in Oregon and has now spread across the world. Goats are seen as therapy animals, who offer comfort and affection to people who need it.

Here are some more interesting facts about yoga:

• Yoga was inscribed in 2016 on UNESCO's Representative List of the Intangible Cultural Heritage of Humanity.

- Competitive yoga became an official sport after its inclusion in the 2016 Summer Olympics.
- It is estimated that there are about 300 million Yoga practitioners all over the world.
- India has hosted the largest Yoga class in the world with 100984 participants.
- In India, the prison inmates who get top marks in yoga tests can get a reduction in their total jail term.
- The first yoga mat was created by Angela Farmer in 1982, using carpet underlay to create a sticky surface while teaching yoga. Traditionally yoga practitioners used grass or animal skin as a mat.
- George Harrison from the Beatles was a famous yogi. He incorporated his love for yoga into many of his songs.
- The Indian Postal Service released a commemorative stamp on the occasion of the first International Yoga Day on June 21, 2015. The stamp showcases the outline of a seated yogi with the Anjali mudra overhead.
- Markandeya Yoga City is the world's largest yoga center. It is situated in Bali in Asia.
- B. K. S. Iyengar authored the bestselling book available in English language. The name of the book is "Light of Yoga: Yoga Dipika".

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### Basis of Yoga: Art and Science

Yashi Jain

oga is both art and science.
Encompassed with beautiful
movements ranging from Shirshasana
to Dhanurasana, it lets us explore the limits of
our bodies and push our boundaries. It does
not just unite the body and the mind; but also
merges science and art, drawing on aspects
of both in ways that cause the boundaries to
overlap and blend. In other words, yoga offers
a range of benefits as science tells us but is
represented as art as if wrapping up all its
advantages in its magnificent poses. It may
also be said that yoga is built on a scientific
foundation, but presented as art, similar to the



way an engineer and architect collaborate on an elegant skyscraper. Without the science, the building might collapse, but without the shape and beauty of the final form, there is only a little interest in the structure that supports it.

#### The art of yoga

Yoga is a portable art form that is free from costly equipments. All it requires is a sense of adventure and a willingness to explore the vastness of the Self.

Yoga manifests itself as art by letting you connect to nature and by expressing the beauty of the human body. A blogger might use the internet as a medium to express their writings or art, a yogi uses their body as a means of expression. Everything a human does is an expression of who they are. Some might dance, some may sing songs or maybe paint pictures. Yoga in a way is diametrically opposite to this. It lets you become whatever you want to, perhaps a dolphin one day and a butterfly the other, changing the fundamentals of one's very existence. What is it that you can't be in a yoga session? Chakrasana to be a wheel, Dhanurasana to be an arch, Bhujangasana to be a snake or the naukasana to be a boat, literally anything you want to be. The geometry of all these different asanas is indeed a visual appeal.

There is also an art to understanding and using yoga. Knowing what pose to do when, how to assemble a sequence of asanas, is an art that is learned over time through experience. Flowing from one asana to another to express something meaningful just like a painter might assemble various shapes and figures to convey a meaning lies at the heart of yoga.



#### The science of yoga

The physiological benefits acquired from yoga have recently had radical scientific understandings behind its workings. It moderates the surge and the production of chemicals in the body that affect us mentally, physically as well as psychosomatically. So, let us understand the science behind yoga and how is it beneficial for us.

Various studies and researches on yoga have shown that yoga reduces cortisol levels in our body which is primarily responsible for stress and is often attributed as the stress hormone. This helps in alleviating stress, anxiety, fatigue and depression. Excess amounts of cortisol also dampens the effectiveness of the immune system. Yoga moderates the production of cortisol, thus boosting immunity.

Yoga also is proven to reduce inflammation in our body, which is a normal immune response, but chronic inflammation can contribute to the development of proinflammatory diseases, such as heart disease, diabetes and cancer.

The range of motions in yoga require an enormous amount of strength. Making certain postures and holding them for some time helps us develop muscular strength which further helps in increasing our metabolism and thus helping extremely in weight loss. Also, incorporating yoga into our daily routine helps improve our flexibility which reduces the possibility of muscle and bone injury.

Some research has shown that yogis have a bigger brain volume in the regions that contain mental mapping of our body. After conducting MRI scans, scientists have discovered that people practicing yoga have more brain cells than the non-practitioners. With more hours of practice per week, certain areas were more enlarged – a finding that hints that yoga was a contributing factor to the bigger brain size.

Emerging research suggests yoga can increase body awareness, or attention to the sensations and things going on inside you. Researchers think heightened body awareness can improve how well people take care of themselves.

The best evidence available on yoga and it's advantages is about it's effectiveness in reducing the lower back pain. Yoga does seem to help alleviate lower back pain, in both the short and long term.

While yoga may look like just a couple of body-bending exercises to our eyes, a lot goes on under the skin when we twist our spine and consciously breathe. Also, yoga is not just a set of asanas that one performs on the mat, but rather a way of life. With a healthy body and calm mind, one is bound to live a happier and stress-free life.



### YUGA what's that?

- Pranav Niturkar

Whenever any individual touches some kind of a peak experience, the thirst to know more becomes more visible and starts finding expression. Or in other words, one dip within makes you a willing slave, forever! You may not climb Mount Everest ever, and may not have seen someone who did. Maybe never seen a photograph, maybe never even heard of it! But are you not capable of feeling or experiencing what someone climbing Mount Everest does? It's no accident that the business of online entertainment keeps on growing every day! But what is one cultivating? Hatred, self-pity, frustration and what not. 'Yoga' has become one of those many hopping places for the wild human mind! So much nonsense on sale with everyone claiming theirs is the best. What is it that one can write down? It's got to be limited to the writer's memory.

What good can a writer's memory do to any reader? There can only be misinterpretation and manipulation. Why? Because that's the easiest thing to do. Then everything gets reshaped and moulded accordingly. Such a tiny aspect of life is the narrative in your head ruled by memory! Soo tiny & yet the human mind is such that it claims "I Know". Every scripture that outlives its span of influence, becomes a licence of misuse, a means of exploitation and a weapon of destruction.

What's referred to as YOGA is not an exercise or a practise, a posture or an asana, a ritual or a pooja. It's just the ambiance of life. Life that's capable of overwhelming you, if only you had enough intelligence to rest the narrative aside! So Yoga... either there's no such thing, or that's all there is! Anything else is either an ideology, a concept, a philosophy or a tricky business!



### The Two Backbones of Yoga

Maitreyee Khobragade

Yoga is often considered one of the best forms of exercise. But no focus is given to the science behind it. This discipline is never seen as an art but just a form of physical activity. In reality, art and science together make the backbone of Yoga. This makes learning about Yoga more interesting.

What does art actually mean? Art is the skill to perform a particular course. It is a technique of creating things. Hence, Yoga in itself is an art. Art is represented in various forms, and so is Yoga. Yoga comes in different forms like power yoga, restorative yoga, etc. Many people practice Yoga, but a few follow the proper way of doing it. As a result, one needs to have the expertise and guidance for practicing it as an art. It is believed to be one of the best creations in history. People all around the world come to India and learn this art. This art helps one to attain inner peace and strength. It changes a person's perspective of the world positively. Pursuing it as a hobby improvises health and physique. One might look at Yoga as an art of shaping oneself.

Nowadays, individuals seek for scientific basis in their surroundings most of the time. Yoga has been looked upon as an ancient Indian Science. Science always evolves. Yoga too has evolved from ancient to modern times. In ancient times, it was considered a philosophical science encompassing the thought of great sages. It has changed from spirituality to fitness in modern times. What is better in Yoga than other exercises? Yoga is believed to be anabolic (energy-creating) whereas, some exercises are believed to be catabolic (energy consuming). This is because Yoga involves slow and controlled body

movements with coordinated breathing. Each asana is supposed to serve a purpose. These purposes include improving the muscular system, digestive system, blood circulation, circadian rhythm, metabolism, mental stability, etc. Holding the asana helps the practitioner to attain constancy and to build up muscle strength without needing exercise equipment. Numerous chemicals are released that bring up the necessities to the body and mind. Thus, Yoga has a scientific basis.

Nevertheless, one needs to have proper knowledge of the art and science of Yoga before practising it, so that the best results can be obtained. Yoga serves the role of art and science in a way that benefits us humans. It has made this universe full of optimistic energy.



## **Metaphysics**

Comparision of Buddhism, Advaita Vedanta and Dvaita Vedanta

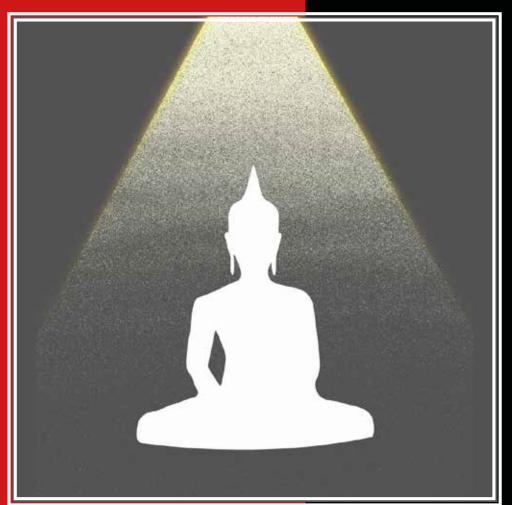
#### - Abhijit Menon

Vedanta are ancient philosophy systems that emerged from the Indian subcontinent at various times. Most Hindus today, willingly or unwillingly, believe in Vedanta metaphysics, which is summarised in the *Bhagavad Gita* by Veda Vyasa. At first glance, all these schools seem to advocate similar practises, namely, monasticism, intellectual reasoning, and meditation. Another common feature is that all three schools of thought identify both the body and mind as temporary perishable entities that do not survive death. Yet, there are some stark differences in these belief systems. But then, how do different assumptions and beliefs end up reaching similar

conclusions? For this, let us touch upon the philosophy advocated by each school of thought individually.

Buddhism is a religion that is based on the teachings of Siddharta Gautama Buddha, one of the many Buddhas according to Buddhist schools. Buddhism gives importance to

Dhamma (Sanskritised: Dharma), or, for our purposes, righteousness (although dharma doesn't really have a direct translation). Ethical action is important and takes a forefront in Buddhism.





The main motivation for spirituality in Buddhism is to be free from suffering caused by the impermanence of material objects and the universe itself, and to attain *Nirvana*, a state free from suffering. Seems abstract, doesn't it? Well, let's use an example. Consider you come upon a beautiful deer, with a full set of antlers. You enjoy its beauty the moment you see it, and then you simply walk along your path, and let the deer out of your sight, and out of your mind. If you want even more closure, you can assume a tiger pounces upon the deer and kills it in your sight. The absence of the deer does not cause you the same amount of pain as the pleasure you had when you were seeing it. Now consider another situation, where you find one of your old childhood toys, which you simply kept as a souvenir, broke. Are you sad? You hadn't paid anything for it, it didn't require maintenance, it was not even a living thing, yet you are still upset. Why? It is because you have attached a meaning to it, a part of your inner peace and happiness to it. I hope I made the idea of attachment clear. It is simply assigning your emotional well being, to another, external object. According to Buddhism, this is the primary cause of suffering. That everything in the universe, including you and me, is temporary, and hence perishable, is the fundamental philosophy in Buddhism. There are mentions in which even Gautama Buddha himself said, "Nirvana too can be temporary". All the spiritual practices in Buddhism are tied to this very belief.

So what is the source of 'everything' in Buddhism? How did it all start? Buddhists believe that the universe follows a cycle - once this universe ends, another one begins. There is nothing conserved among these cycles and everything perishes, only to give rise to new entities. Buddhists, thus, are unique in that they do not believe in any creator or God, or any permanent, omniscient, omnipresent entity that transcends time. "No Soul, no Self" is what Buddhists preach; that is, our identity is an illusion created by other entities in the universe. Another important aspect of Buddhism is the stress on 'The Middle Path'. Too much asceticism can lead to death, whereas none at all will cause a bad life. A popular analogy used here is that life is like a sitar string, and spirituality is the tension in this string. Too much tension will snap the string, and too little tension won't help it create music.

In **Vedanta** philosophy, the concept of attachment remains the same as in Buddhism. Vedanta agrees that attachment is indeed the cause of suffering, since with attachment comes expectations, and unmet expectations lead to disappointment and ultimately suffering. The material world is considered to be transient, just as in Buddhist philosophy. But, the similarity with Buddhism ends when we understand that Vedanta philosophy advocates for the presence of an omniscient, omnipotent entity, the *Brahman* (not to be confused with Brahmin, a hindu sub-community or Brahma, the Hindu creator-God) or *Para-Brahman*. It is from this supreme-soul that everything in the universe comes about, and is maintained and destroyed at the will of the *Brahman*. Now, there are two branching Vedantic thoughts.



**Dvaita (dualistic) Vedanta** states that the *Atman*, or the soul, which is the entity of an individual that survives death, and gets into another body for rebirth, is a different form of the *Brahman*. Dvaita schools advocate that, along with the Brahman, the material world and Atman are *real entities*, dependent on the *Brahman*, but real nonetheless, having their own independent properties and forming an independent reality. According to the Dvaita school, the goal of spirituality, the goal of the *Atman* is to reunite with the *Brahman*, just as a river meets the sea. This is called *Moksha*, liberation from the physical world and its endless cycles.

Advaita (Monistic) Vedanta believes that the *Atman* and *Brahman* are the same in nature across all aspects. The goal of spiritual practice in Advaita is to detach from the material world, which is an illusion (*Maya*) created by *Brahman*, and 'realise' our 'true nature', as the infinite, unending and omnipresent *Brahman*. A good analogy of the Advaita universe is a turbulent ocean. The *Brahman* is all the water in the ocean, and each material entity in the universe is comparable to the waves and whirlpools in the ocean, the latter (*Maya*) is nothing but an expression of the former (*Brahman*).

Now, how did these philosophies, despite being different, end up appearing similar? The main agreement among all three schools of thought is that the mind and the body are temporary, and hence so is our ego, which is a part of the mind. Thus, the major spiritual practice in all three schools is to renounce our attachment to the material world, including our own bodies and minds, in order to either achieve *Nirvana* or *Moksha*. Although most of us, myself included, are not considering future monkhood, we can all learn from the philosophy of these schools, irrespective of our beliefs or lack thereof. The main take-away lesson is that we should not attach ourselves to material things, whether they be coins, deer or even relationships for happiness and peace, as they are impermanent and ever-changing entities.



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