

**This E-book
has posters which
were classified under
the following headings**

Vedas and Science

Vedas and Scientists

Ancient Vedic Scientists

Other eminent personalities on Vedas

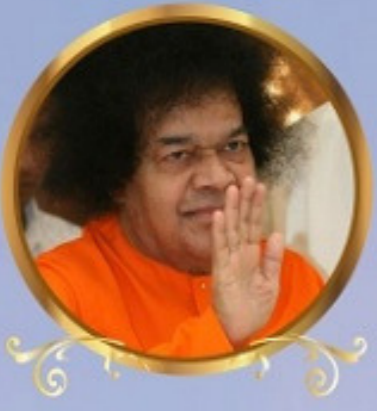
VEDA TATWA E-book 8 / 9

This E-book contains posters that were displayed during the Veda Tatwa Exhibition conducted as part of the International Veda Conference held at Prasanthi Nilayam on 20th and 21st Nov 2017. Most of the content used in these posters were taken from the teachings of Bhagawan Sri Sathya Sai Baba. The posters have been divided into 9 parts each published as an E-book



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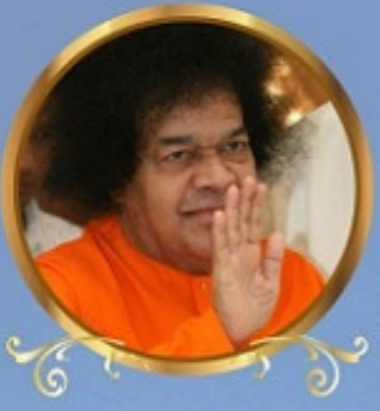
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WHAT IS MANTRA SHAKTHI ?

When a mantra is chanted in rhythmic tone with ups and downs, they create a melodious effect in the body. This effect can be defined as the Neuro-linguistic effect. The Neuro-linguistic effect will be possible even if you do not know the meaning of the mantra. Hence knowing the meaning of every mantra is not compulsory.

At the same time if you know the meaning it has got an additional effect which is known as Neuro-linguistic effect (NLE) + Psycholinguistic effect (PLE). Lot of Research studies have been carried out by many and important results derived by one of the famous professors Dr. T. Temple Tutler, of the Cleveland University, Ohio, USA on these effects are remarkable. The NLE and PLE effects are due to the production and spreading of curative chemicals in the brain. These curative chemicals give soothing and curing effect in the body. Thus mantra chanting is no way a superstition. It can also be directly called as mantra therapy in modern words.



BENEFITS OF CHANTING MANTRA

Listening to mantras directly lowers blood pressure, normalizes heart beat rate, brain wave pattern, adrenaline level, even cholesterol level. That is the reason why modern doctors advise the people under high tension to sit and listen to music or mantras for few minutes. This has become an accepted procedure just like the yoga and Pranayam practices. Even chanting the kirtans, melodious bhajans, songs, etc., have the good effect almost similar to the NLE and PLE. However, there should be a melodious pattern for that. The music / song /mantra should never be hard / harsh / rough / etc. The speed also should have a soothing effect for example even Gayatri mantra chanting should be done at the range of 4 - 8 times recital per minute, 'Om NamonArayanaaya' at 38 - 62 and 'Om NamahSivaaya' at 42 - 68 times recital per minute.



CAN REGULAR CHANTING OF MANTRAS CHANGE YOUR DNA? AN ILLUSTRATION



A team led by Russian biophysicist and molecular biologist Pjotr Garjajev have explored the vibrational behaviour of the DNA and found that they could actually change the genetic information of the DNA by using correct laser rays and radio waves, provided the frequencies (of sounds) were right. This scientifically explains why affirmations, hypnosis and the like can have such strong effects on humans and their bodies. It is entirely normal and natural for our DNA to react to language, words and thought. Thus, by simply applying vibration (sound frequencies) and language, our DNA can be affected, modulated, healed and more. Of course, the vibration has to be correct. The more evolved a person is, the easier it is to establish a conscious communication with the DNA. That is why raising one's individual consciousness is important to work any of these miracles. Nevertheless, what this has proven is that just by appropriate sounds produced with purity we can change the fundamental building blocks of our life, the DNA. We all know that chanting mantras produce positive vibrations that can literally change our DNA



EXPERIMENT IN THAILAND BY DR. ART ONG JUMSAI



The students of Sathya Sai School in Thailand took up an experiment wherein they planted rice in the fields. They used two methods in this experiment where, in the first field the children sowed paddy chanting the Gayatri Mantra with love. In the neighboring paddy field the laborers sowed paddy in the normal way. The result was that the land where the paddy was planted by the children chanting the Gayatri Mantra had a higher yield with faster growth, where as in the neighboring field the growth was normal. This proves that the plants absorbed the sacred vibrations of the Gayatri Mantra and it had positive impact on the yield.

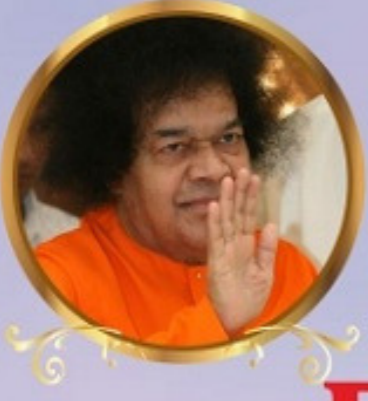


THE FIRST VOICE PLAYED ON A GRAMOPHONE

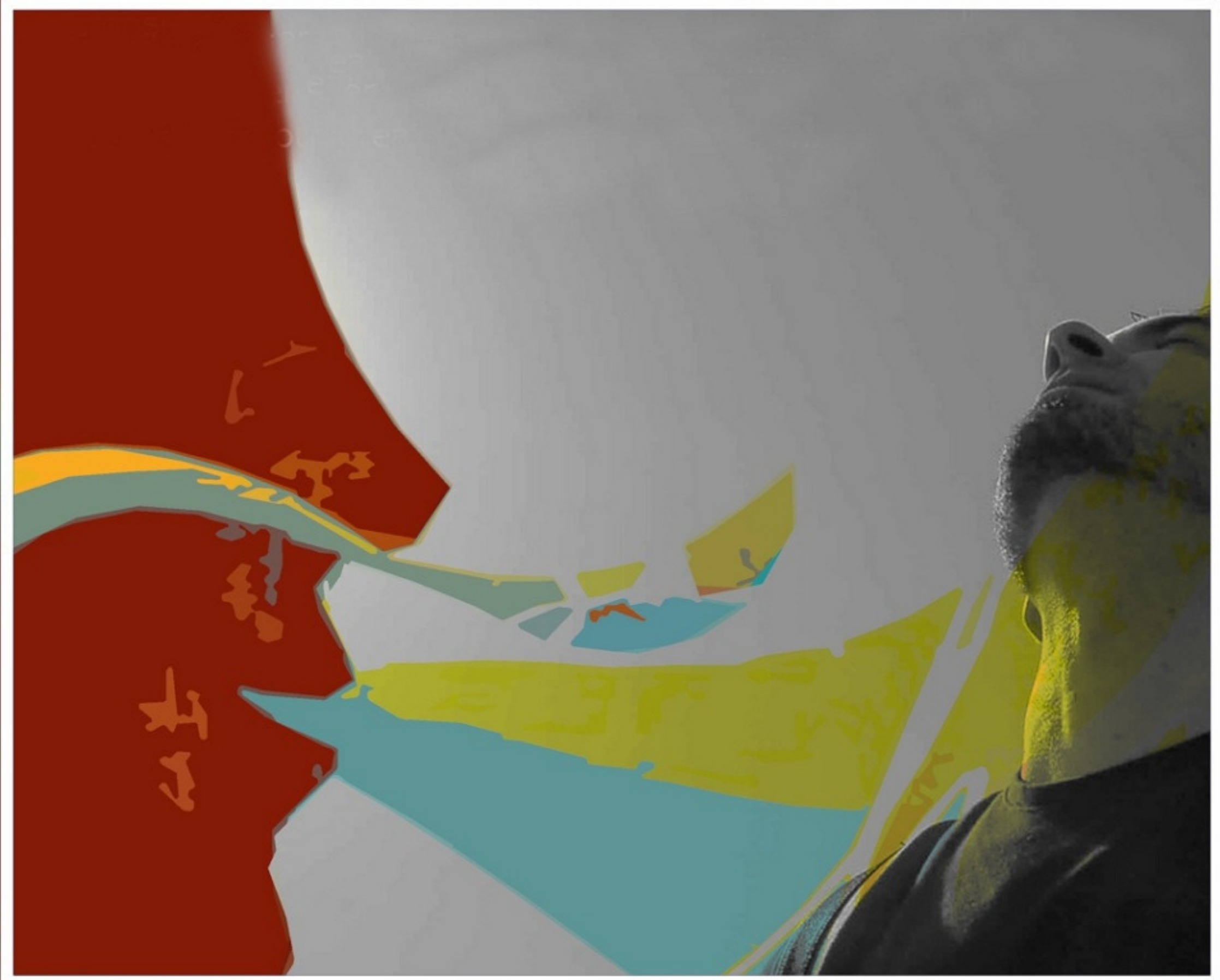


When Thomas Elva Edison invented the Gramophone, his friend Max Mueller advices him to record and play the first Hymn of the

Rig Veda अग्निमदेता पुरोहितान् यज्यास्युः
देवानरुविजान्

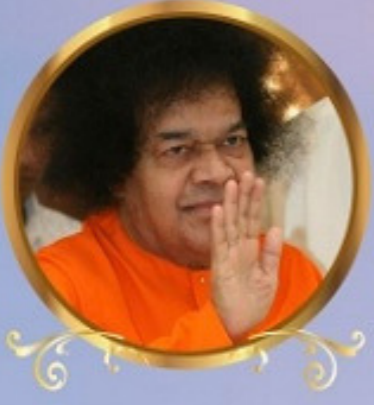


DO YOU KNOW THAT LEARNING & CHANTING THE VEDAS



From the Gross body - Sthula Sarira point of view

- Improves concentration.
- Improves memory.
- Purifies speech.
- Reduces stress.

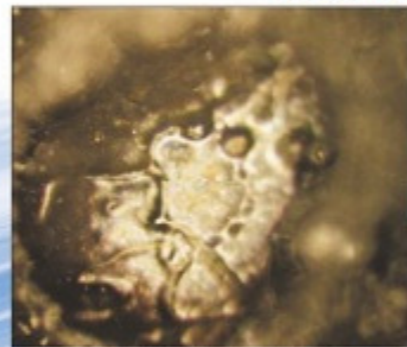


PRAYERS CLEANSE POLLUTED WATER

WATER IS THE ELIXIR OF LIFE

Water not only physically adjusts to any container it is put in, it has the capacity to visually reflect the environment and also reflect environment at molecular level. It can absorb mantras due to low hydrogen bond capacity of water. The human Thought, Word and Deed, Eco-system and Water elements form integral unit as a result individual transformation leads to collective transformation.

Photograph of Frozen Crystal Water observed under Microscope
Experiment by Masaru Emoto



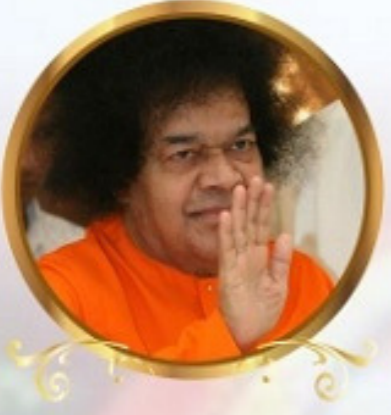
Before the Buddhist prayer
was offered at Fujiwara dam



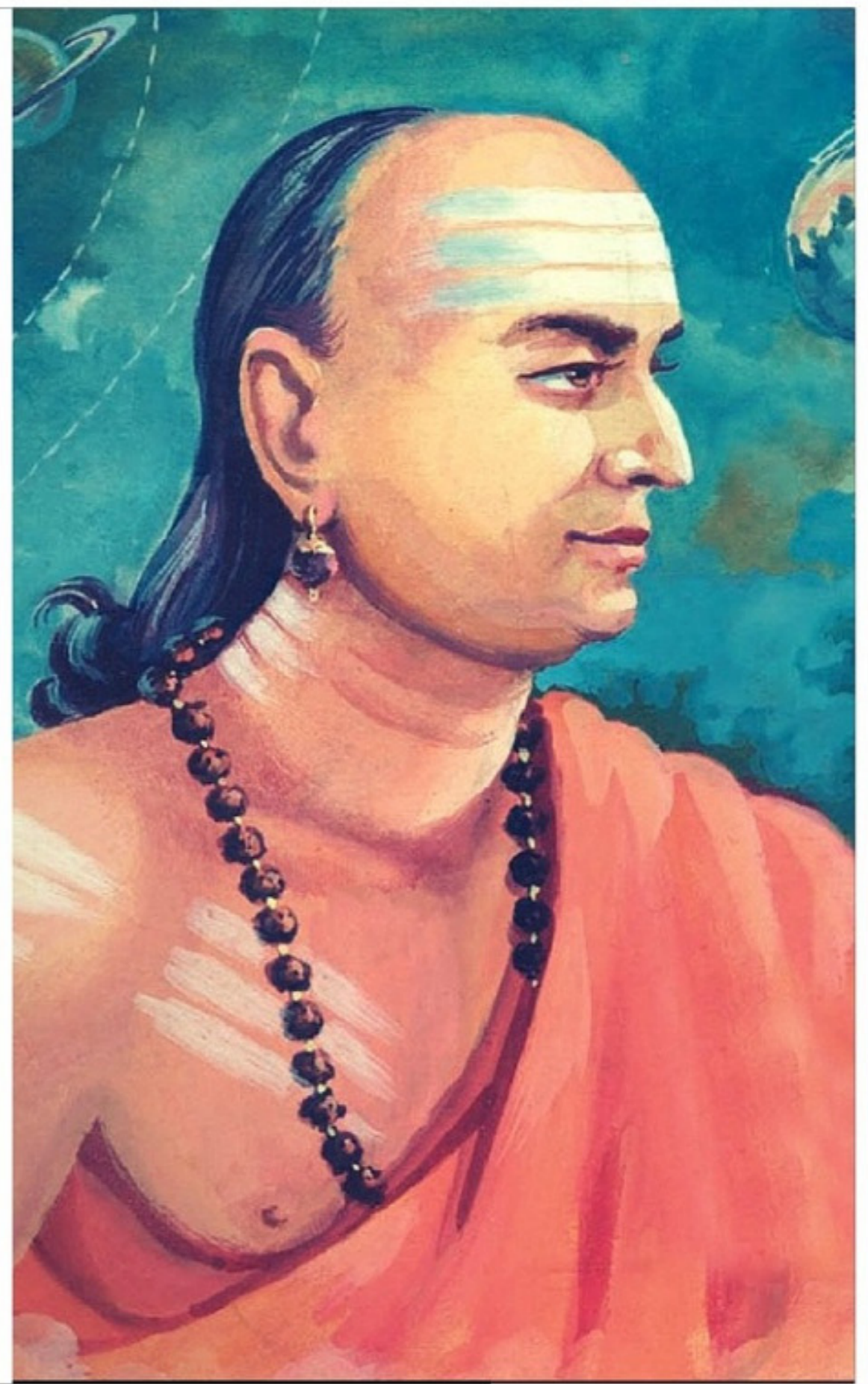
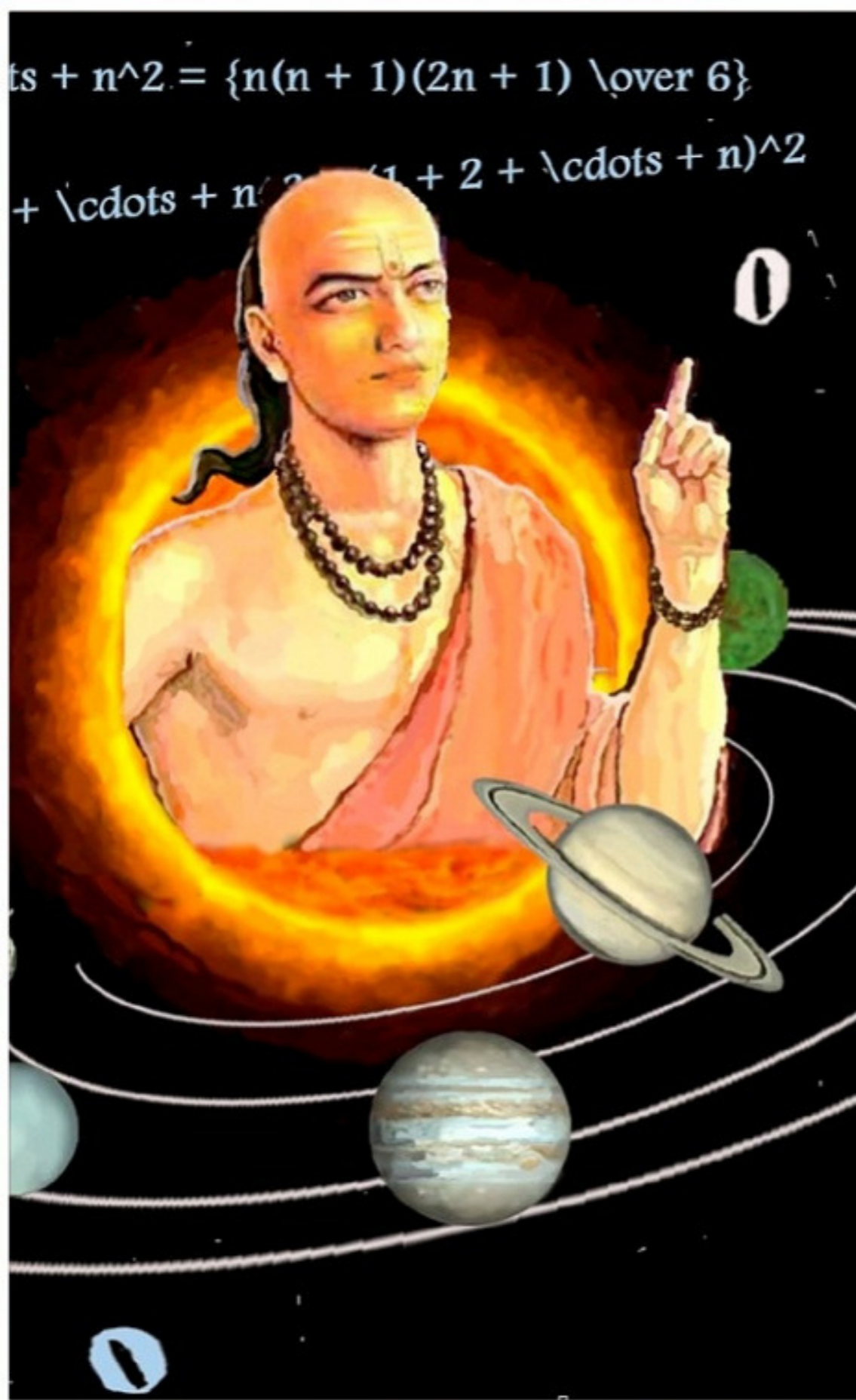
After the Buddhist prayer
was offered to Fujiwara dam



In the above picture, the left image is of very polluted and toxic water from the Fujiwara Dam. The right picture is of the same water after a Buddhist monk (Reverend Kato Hoki, chief priest of Jyuhouin Temple) offered a prayer over it for one hour. This proves that prayers with good intention have an extraordinary ability to restore the water back to its natural, harmonious, geometric symmetry.

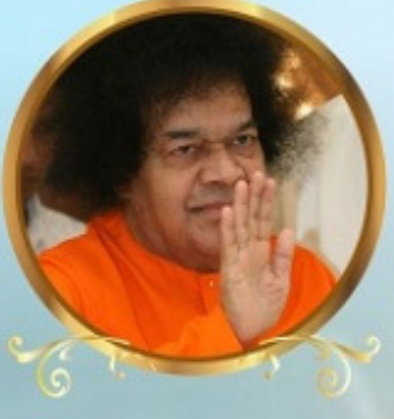


ANCIENT MATHEMATICIANS AND ASTRONOMERS



Bhaskaracharya was a great mathematician and astronomer of the 12th century A.D. . He was the head of the observatory of Ujjain. His famous works on mathematical astronomy Siddhanta – siromani and Karna – Kutuhala. The law of Gravitation, in clear terms had been propounded by Bhaskaracharya 500 years before it was rediscovered by Newton.

Varahamihira – The famous astronomer Varahamihira a contemporary of Vikramaditya and Kalidasa had been the author of Brihat – Samhita. Possibly he was a resident of Ujjain. He was one among the nine jewels of the court of Vikramaditya.

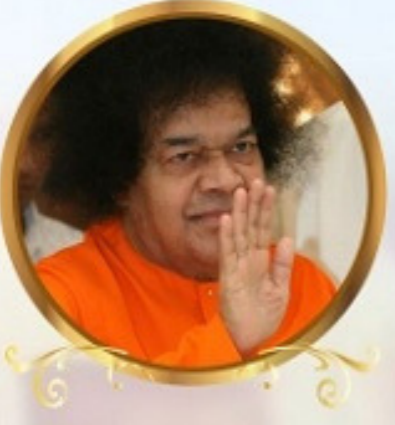


VISHWAKARMA

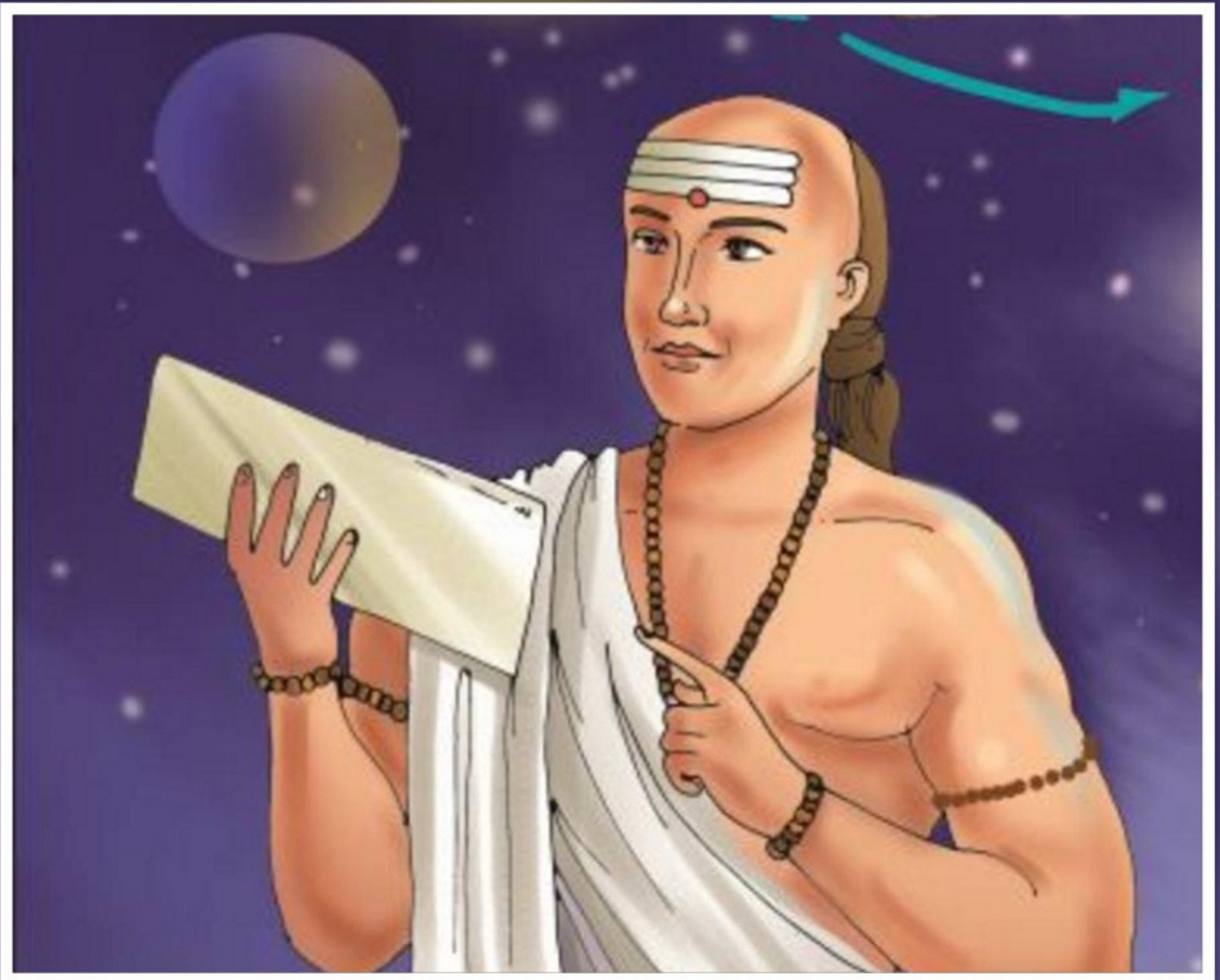
THE GOD OF ARCHITECTURE



Vishwakarma is considered to be the foremost architect and craftsman of the cities of Devaloka, The maker of the Sudarshana Chakra of Lord Vishnu, The Trishula of Lord Shiva and The Vajra of Indra. He is the grandson of Prabhasa Vasu and the son of Mahasati Yogasiddha. He had two sons Vishwarupa and Vraja who followed their father. Hindu craftsmen celebrate Viswakarama Jayanti which occurs when the Simha Rasi moves to Kanya Rasi.



ARYABHATTA ANCIENT ASTRONOMER



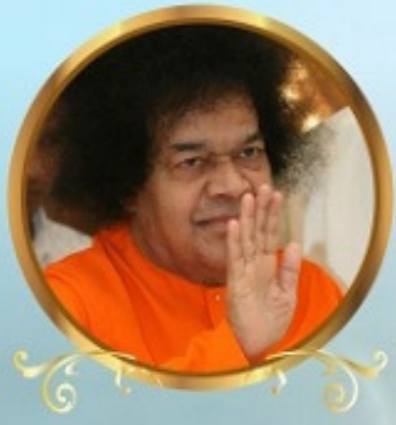
Aryabhatta, a great scholar and teacher of Astronomy, a much respected person of his time who wrote Aryabhatiyam. He also propounded the theory that the earth revolves around the sun.



DHANVANTRI GOD OF MEDICINE



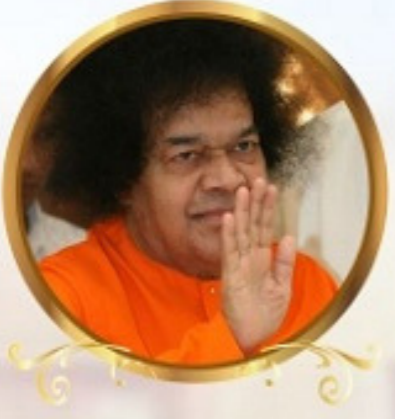
Dhanvantri is the God of Medicine. He is said to have come out with the “Amrita Kalasha” during the churning of the ocean and battle between the Asuras and the Devas. With Lord Vishnu's blessings, Dhanvantri was reborn in the Dvapara Yuga as “Dhanva” son of the King of Kashi. Everybody prayed to Dhanvantri for a healthy and disease free life.



VEDIC PHILOSOPHER KAPILA MUNI



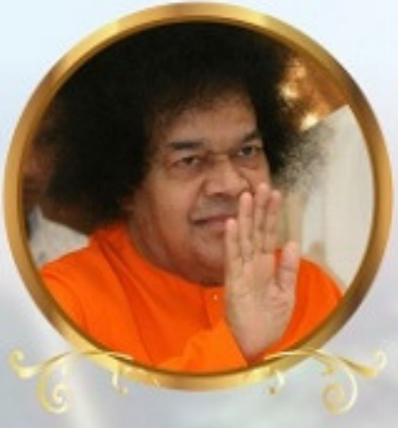
Kapila muni, the son of Sage Kardama and Devahuthi was a great ascetic and Siddha Purusha. He is respected as the propounder of Sankhya School of Indian Philosophy. The Sankhya Pravachana Sutra and Shashthi Tantra are his valuable works which advocate a dualistic cum pluralistic philosophy. This philosophy advocates the existence of Chetna Purusha and Prakriti (Nature) with Sattva, Rajas and Tamas as its components.



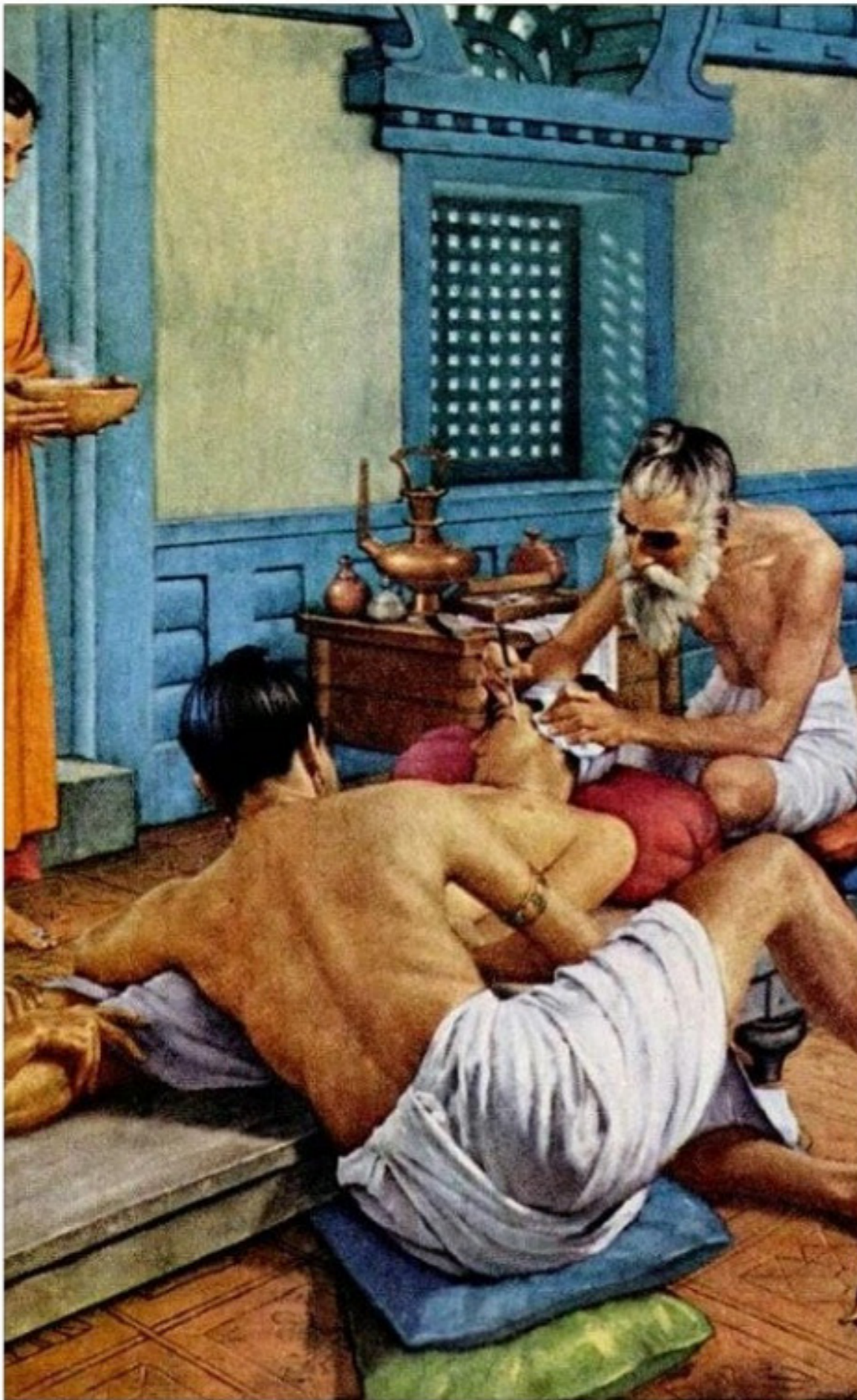
ANCIENT WOMEN RISHI - LOPAMUDRA



During the Vedic period women were assigned a very prominent and high place in society and shared an equal standing with the menfolk. Lopamudra was a female philosopher. She was not only the consort of Agastya but a Rishiki in her own right, as she was the well-known rishiki who visualized the "Panchadasi" mantra of the Sakta tradition of Hinduism.

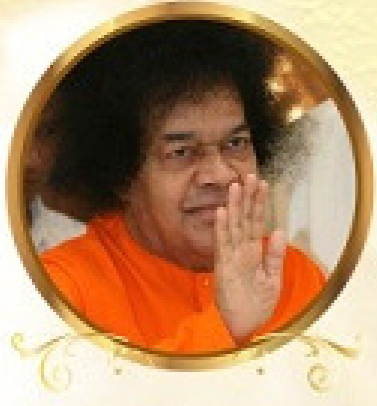


ANCIENT SURGEONS AND PHILOSOPHERS



Sushruta (Plastic Surgery) - The famous professor of the “Science of Health and Longevity” (Ayurveda) of the been specially known for his expertise in Surgery. Sushruta authored the work Sushruta Samhita. It is said that he received lessons in surgery from Divodas, the King of Kashi. He developed scientific constitution of the instruments of surgery as mentioned in Sushruta Samhita compares favourably with the instruments of surgery made these days so much s that the surgeons of these days are wonder struck. He was also an erudite ayurvedic physician and an expert in chemistry (Rasayan Sastra). His famous work an ayurveda is Astanga hrdayam.

Nagarajuna (166 – 196A.D) - The famous Buddhist Philosopher was born in Vidarbha. His two most important philosophical works are – Madhyamika Karika and Vighraha Vyavartani. This Philosophy is known as Sunyavada (Nihilism). Attainment of Sunyata is Nirvana (Ultimate release from the cycle of birth and death). An Alternate name of Sunyavada is Madhyamika Darshana which is positive.



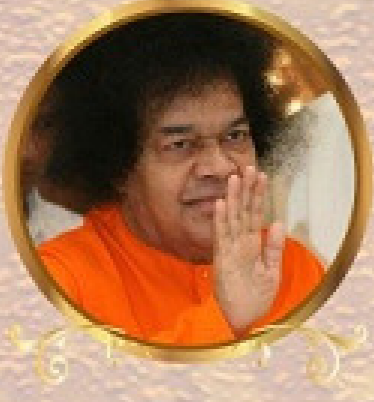
SANSKRIT AND BRAIN FUNCTION



Physiological effects of reading Sanskrit are similar to those of meditation. A recent study by Dr. Fred Travis, HOD, Dept of Neurophysics at Maharshi University confirmed that reading SANSKRIT verses have profound physiological effects on human brain. ECG, Heart - beat , Breath - rate, Skin - conductance - levels, EEG - power and Coherence - levels during reading SANSKRIT verses and that of during practice of Meditation are of similar as per a paper published in International Journal of Neuroscience.

	Effects of 15 minutes meditation	Effects of Reading Sanskrit	Effect Reading Modern Languages
EEG Power & Coherence	Increases	Increases	Lowers
Skin Conductance	Lowers	Increases	Lowers
Heart Beat	Lowers	-----	Lowers
Breath Rate	Lowers	Increases	Lowers

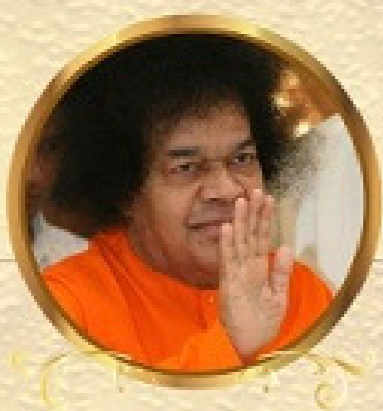
This suggests that physiological state reached during practising meditation and active mental process integrated while reading Sanskrit is similar.



KNOWLEDGE REPRESENTATION IN SANKRIT

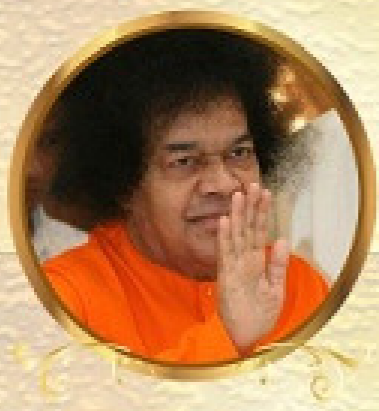


Recent research work of NASA confirmed grammatical structure of Sanskrit is most suitable for artificial Intelligence. After early attempts of Machine translation failed in their effort to Teach Computer and to understand Natural Languages. In Active and Passive sentences Syntax contributes the meaning for all intents and purposes of Knowledge representation rather than translation. The ancient Sanskrit Grammarians bridged logical gap employing “Phala/ Vyapara” Cause and Result in grammar. Semantic net programmers for artificial intelligence. Indian thinkers were who invented Zero and binary number system on which all modern computer system work.



A SCIENTIFIC RESEARCH CONDUCTED ON AN ANCIENT VEDIC RITUAL

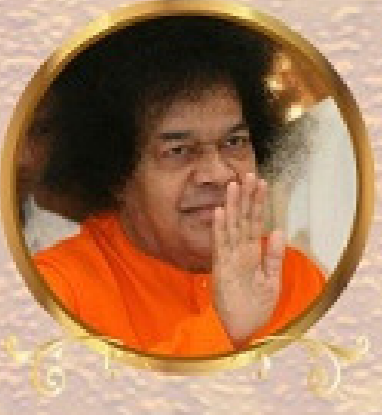
A team of scientists led by Prof. V P N Nampoodri, former director of the International School of Photonics, Cochin University of Science and Technology conducted a detailed study on the effects of a 4000 year old fire ritual in Panjal, a remote village in Thrissur, Kerala. This yagnam called “Athirathram”. According to the scientists, the fire ritual seems to have accelerated the process of seed germination. Also, the microbial presence in air, water and soil in and around the region of the fire ritual was vastly diminished. The team had planted three types of seeds – cowpea, green gram and bengal gram on all four sides of the ritual venue at varying distances. They found that the growth was better in case of pots kept closer to the fire altar. The effect was more pronounced in the case of bengal gram which grew at 2,000 times faster than in any other place. The study focused on counting bacterial colonies at three locations within the fire altar, 500 metres away and 1.5 kilometres away. The microbial analysis made before, during and four days after the yagna revealed that the air in the vicinity of the altar was pure and had very low count of microbe colonies. This was true not only of the air but also of the water and soil around the ritual venue.



VEDIC SACRIFICE TO THE RESCUE OF A BHOPAL GAS TRAGEDY VICTIM

The following mentioned incident occurred during the Bhopal gas tragedy in 1984. On the night of December 2nd there was an accidental leakage of methyl isocyanate a toxic gas from a pesticide factory. Thousands died and over 5,50,000 suffered partial or permanent disability.

Mr S L Kushwaha (45) woke up at half past one in the night of Dec 3 on hearing his wife Triveni vomiting. Soon he too began coughing and felt pain in his chest. His eyes started burning and he felt suffocated. His children got up in a few minutes and complained of the same symptoms. He had no clue what was happening. When he looked out of the window he saw people fleeing in panic. Someone shouted to inform that there was poison in the air because of a gas leak in the Union Carbide factory that was a mile away. Kushwaha too decided to run. But his wife stopped him and said, "Why not do Agnihotra?" Somehow Kushwaha agreed and they did. In 20 minutes, all the terrible symptoms disappeared. Agnihotra is a Vedic sacrifice based on the Vedic sciences of bioenergy, medicine, agriculture and climate engineering. In this, a fire is prepared in a copper pyramid tuned to the biorhythm of sunrise/sunset and into this is offered ghee, cow dung, rice and other ingredients accompanied with Vedic chants. It was found that the smoke that is generated gathers particles of harmful radiation in the atmosphere and on a subtle level neutralizes their radioactive effect. Nothing is destroyed, it is only transformed from the negative to the positive.



VEDIC LAW OF CAUSE & EFFECT

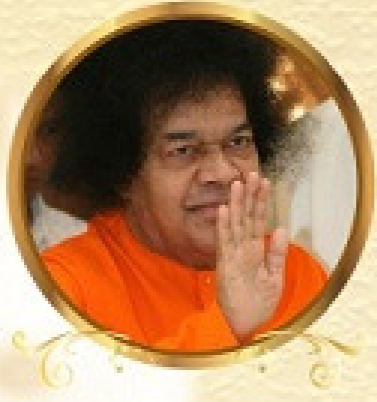
कारणाभावात् कार्याभावः ।

न तु कार्याभावात् कारणाभावः ॥

वैशेषिकदर्शनम्- १.२.



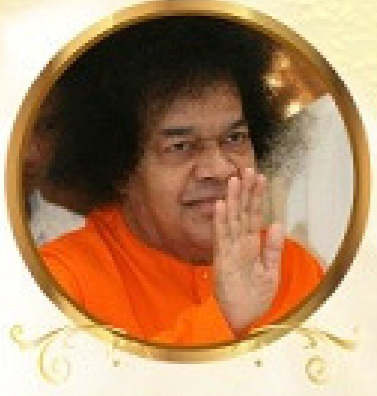
There is no effect possible without a cause. But absence of effect does not mean the absence of cause. The text also substantiates the above fact with an example: Like, applying force (less than needed to overcome friction) will not make a body move. In this case, Cause (force) is present but not the effect (motion).



STUDY OF AYURVEDA



The ancient seers were curious in understanding the natural beauty and ruggedness of forestry. This has become a part of study of Vriksha - ayurveda. Indian epics are strongly based on episodes in forests, portrayed wildlife as holy creatures and saints led their whole life in ashrams made of wood and leaves. Indians worshipped trees and our sages meditated under them. Ayurvedic medicine developed through centuries of knowledge on the medicinal effects of plants depends on forest trees and herbs to find cure for ailments. Ancient scholars educated and trained their younger generations at their homes situated in the forests.



SEQUENCE OF CREATION

Tasmadva etasmadatmana akasah
sambhutih Akasadvayuh | Vayoragnih | Agnerapah |
Adbhayah prithivi | Prithivya osadhayah |
Osadhibhyoasnam | Annat purusah ||

Source: Yajur Vedah, Taittiriyanopanishad, Brahmananda vallo,
Anuvakah 1(Vedic Period)

**From that Absolute Cause came space,
From which came wind,
From wind came fire,
From fire came water,
From water came the earth.**

**The sequence of the creation of matter is Akasha, Vayu,
Agni, Apa, Prithvi**

**Modern Physics gives this sequence as plasma, gas, energy, liquid and
solid. It also states the interconvertibility of matter and energy.**



ROBERT OPPENHEIMER

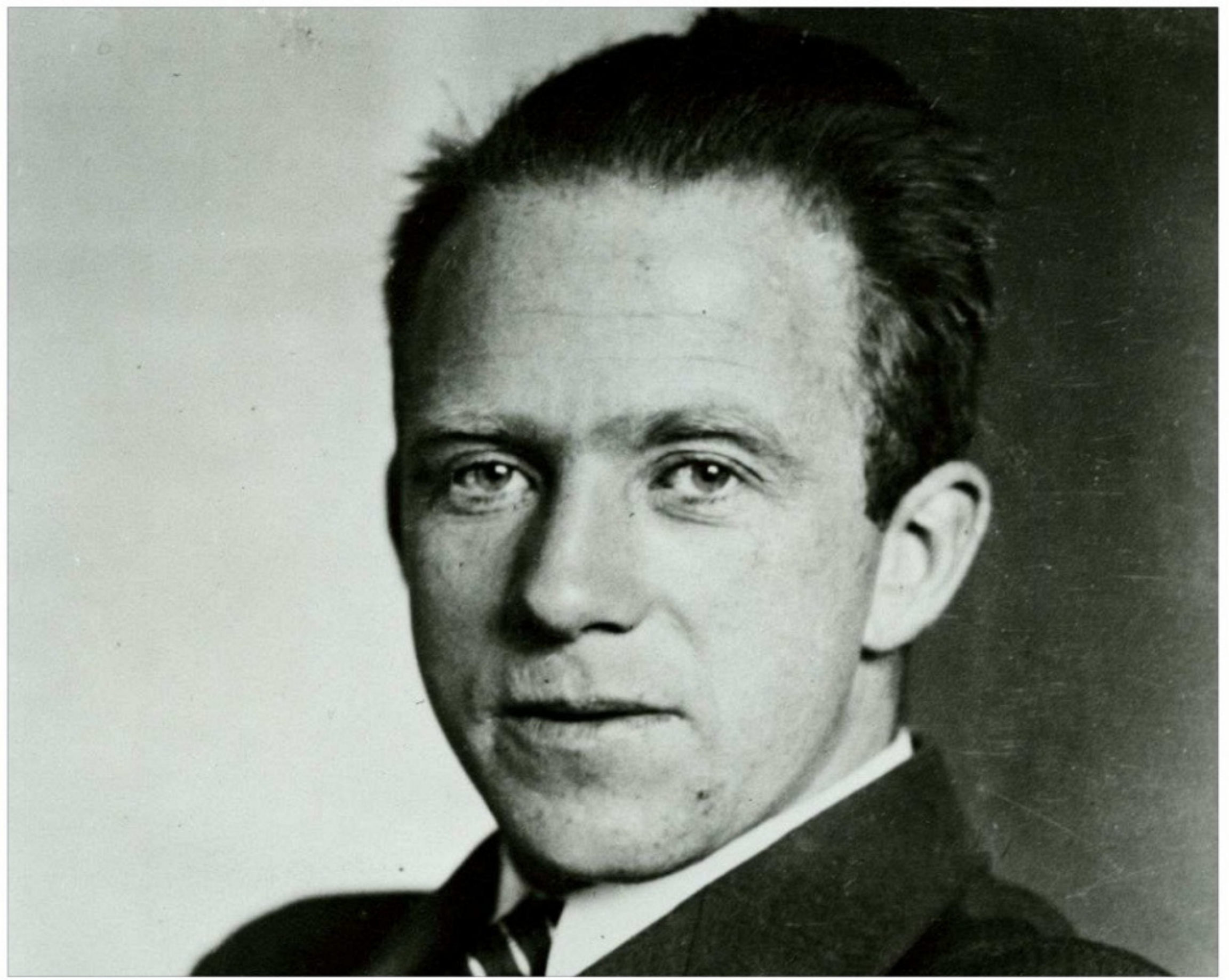


Robert Oppenheimer is considered as the father of the atom bomb. He was a theoretical physicist and was the head of the Manhattan project which was involved in inventing the atom bomb.

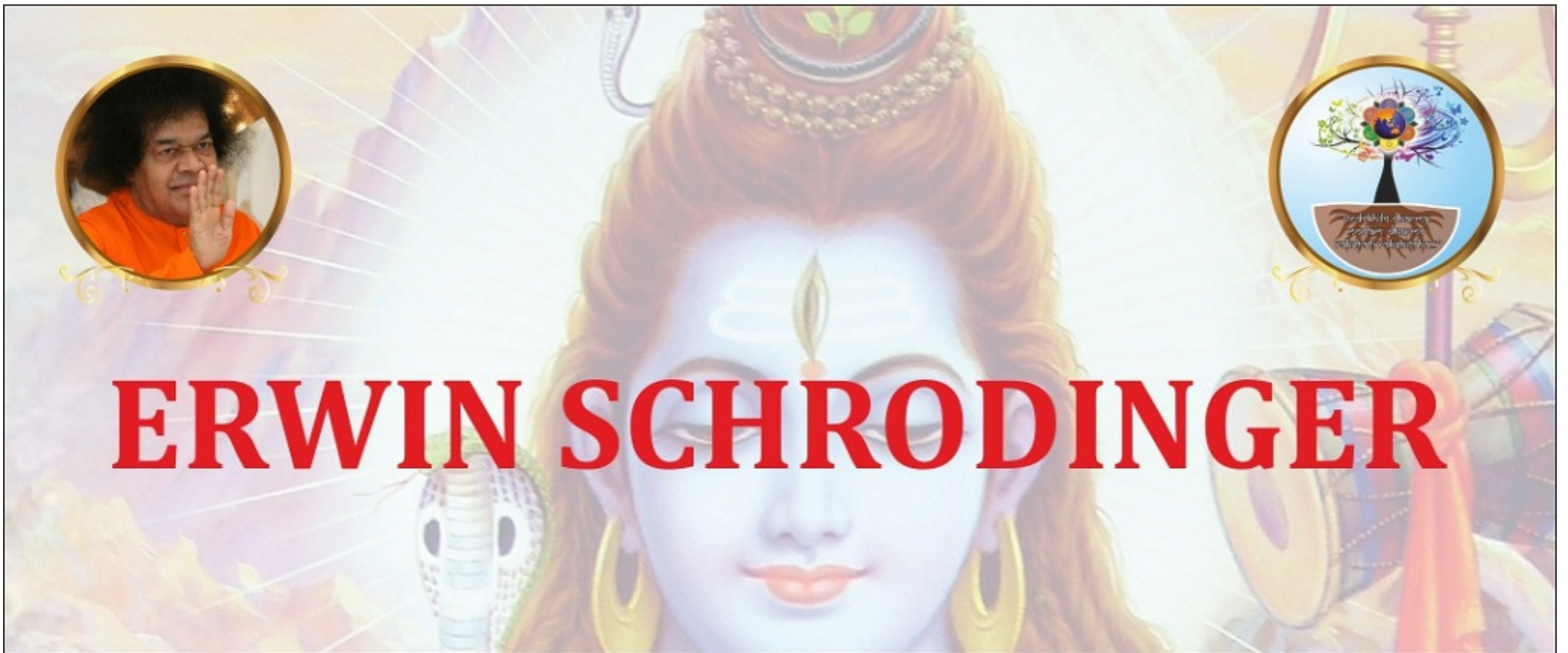
He says "Access to Vedas is the greatest privilege this century may claim over all previous centuries". He also says "The Bhagvad Gita is the most beautiful philosophical song existing in any known tongue".



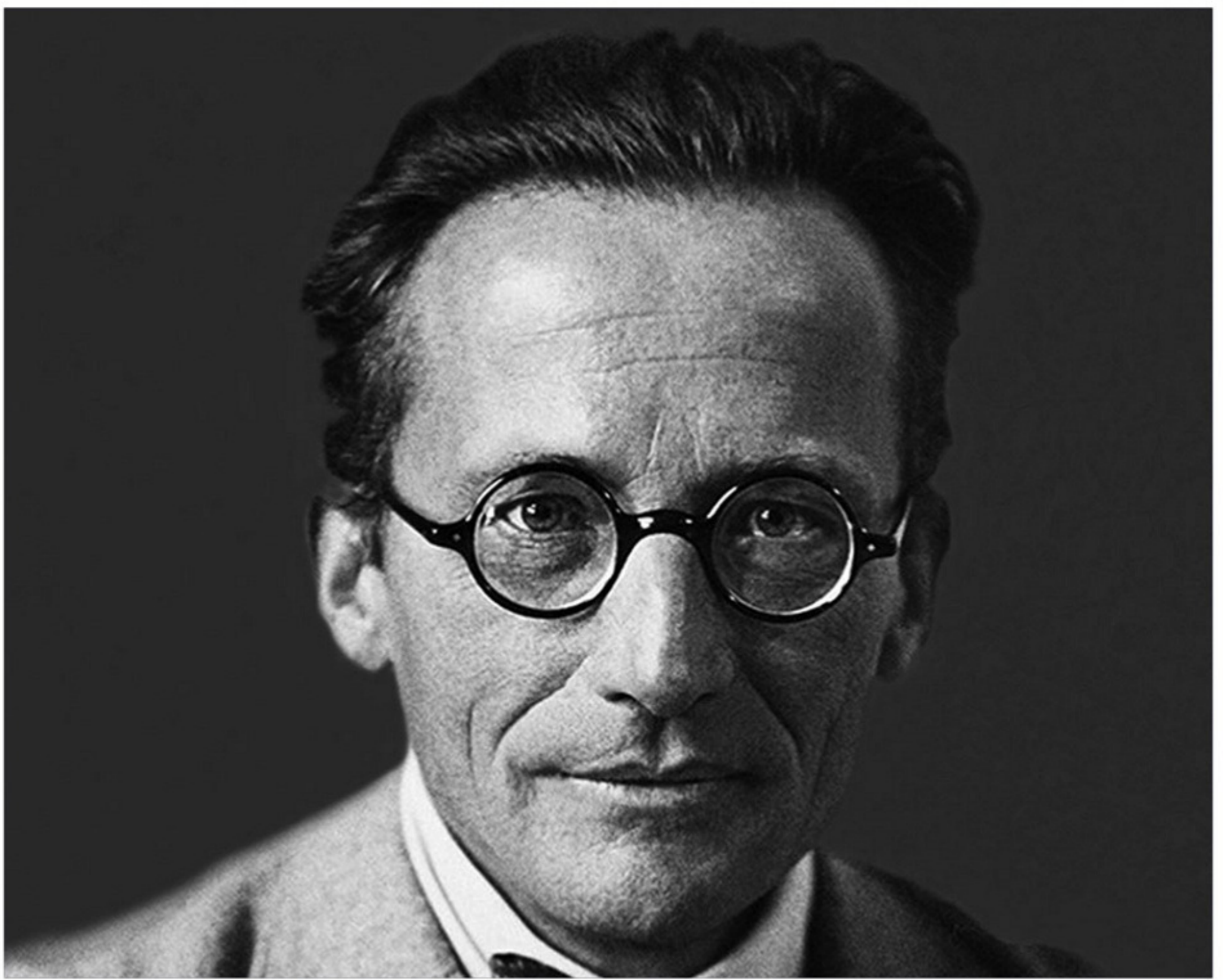
WERNER HEISENBERG



Werner Heisenberg is a key figure in the world of quantum mechanics and Noble Prize winner for Physics. In his conversations with Rabindranath Tagore he mentioned that he began to see that the recognition of relativity, interconnectedness, and impermanence as fundamental aspects of physical reality, which had been so difficult for himself and his fellow physicists, was the very basis of Indian spiritual traditions"



ERWIN SCHRODINGER



Erwin Schrodinger is an Austrian physicist who won the Noble Prize in Physics in 1933. He said most of my ideas and theories are heavily influenced by Vedanta. He also says from the early great Upanishads, the recognition Atman = Brahman was in Indian thought consideration, far from being blasphemous, to represent, the quintessence of deepest insight into the happenings of the world. The strivings of all the scholars of Vedanta was, after having learned to pronounce with their lips, really to assimilate in their minds this grandest of all thoughts.



NIELS BOHR

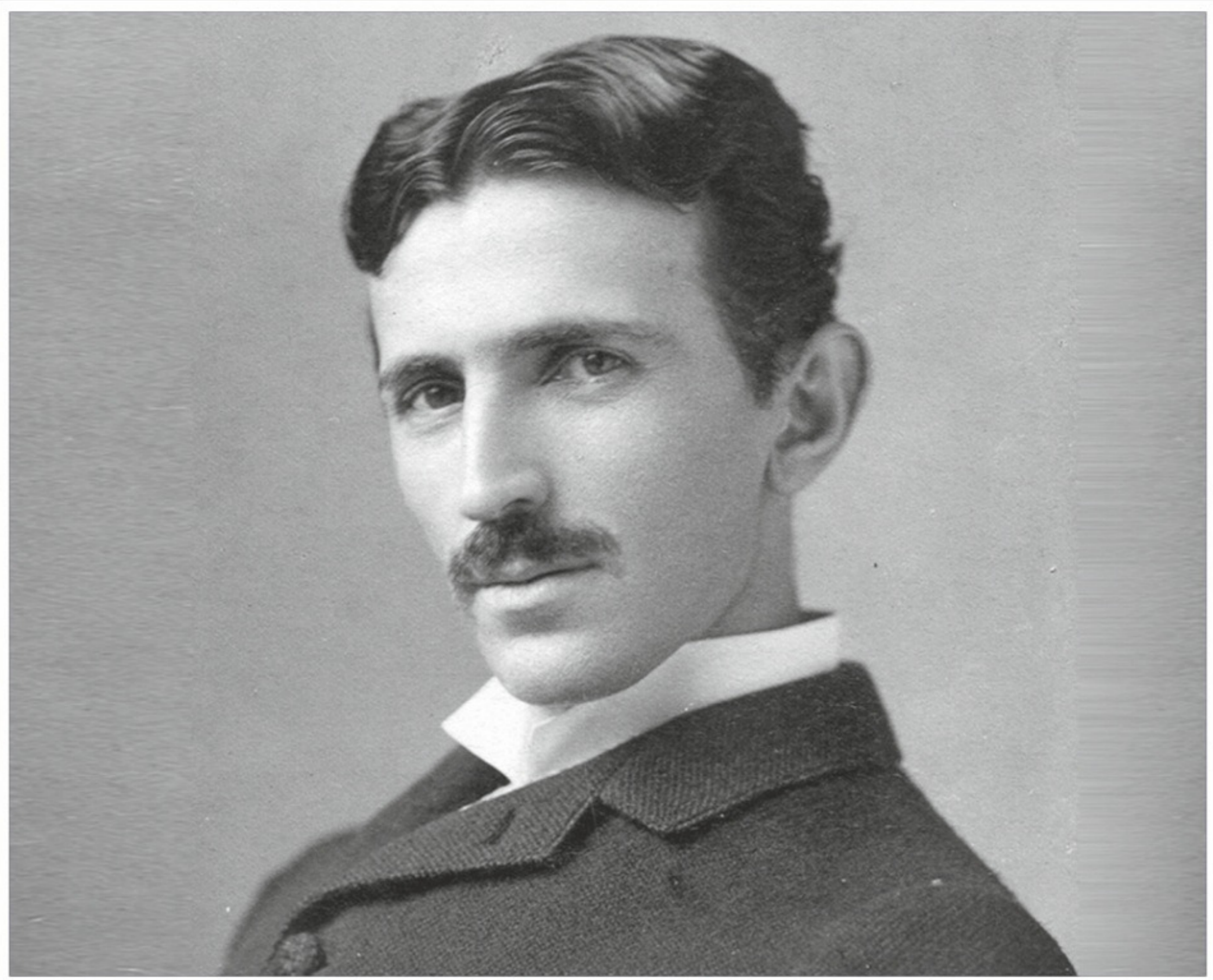


Niels Henrik David Bohr was a Danish physicist who made outstanding contributions to understanding atomic structures and quantum theory. He received the Nobel Prize in Physics in 1922. He was also a philosopher and a promoter of scientific research. He developed the Bohr model of the atom.

Niel Bohr has quoted " I go into the Upanishads to ask questions"



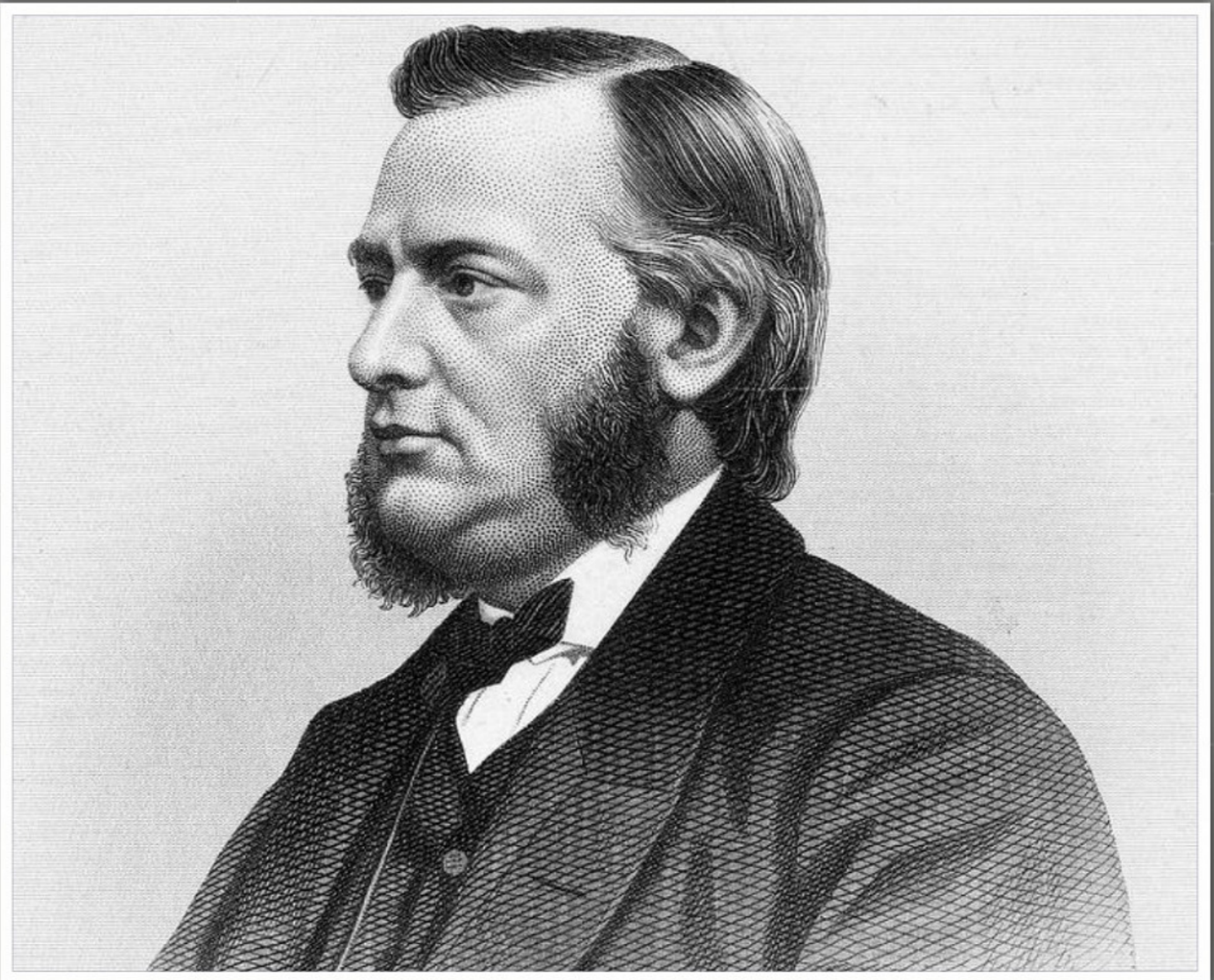
NIKOLA TESLA



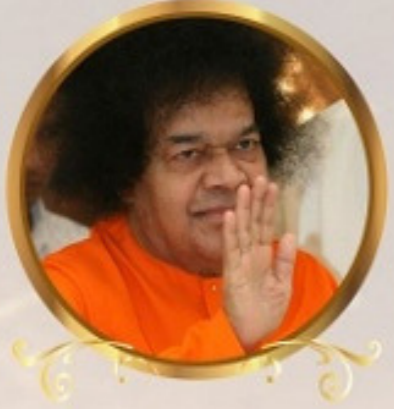
Nikola Tesla who was born in 1856, in modern day Croatia which was perhaps one of the greatest scientist ever lived and his inventions has given a great contribution to the mankind. He had been quoting Vedantic concepts : "All perceptible matter comes from a primary substance, or tenuity beyond conception, filing all space, the Akasha or aluminiferous ether, which is acted upon by the life-giving Prana or creative force, calling into existence, in never-ending cycles, all things and phenomena."



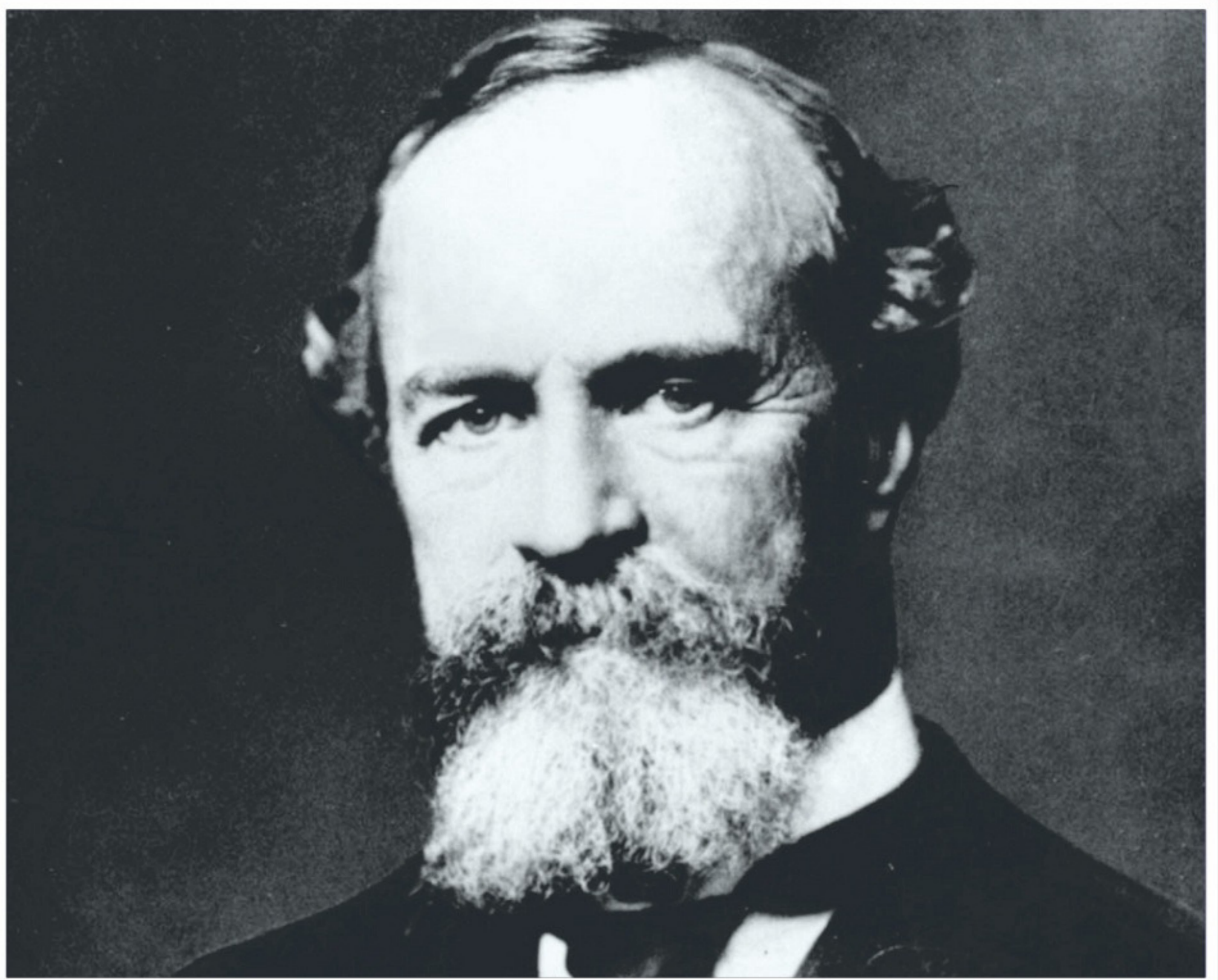
MAX MULLER'S CONTRIBUTION TO SPREADING THE VEDAS



Friedrich Max Müller (6 December 1823 – 28 October 1900), was a German-born philologist and Orientalist. He was one of the founders of the western academic field of Indian studies and the discipline of comparative religion. Müller wrote both scholarly and popular works on the subject of Indology. He began to translate the Upanishads and continued to research Sanskrit under Franz Bopp, the first systematic scholar of the Indo-European languages (IE). Schelling led Müller to relate the history of language to the history of religion. At this time, Müller published his first book, a German translation of the Hitopadesa, a collection of Indian fables. In 1845 Müller moved to Paris to study Sanskrit under Eugène Burnouf. Burnouf encouraged him to publish the complete Rig veda, making use of the manuscripts available in England. He moved to England in 1846 to study Sanskrit texts in the collection of the East India Company. At that time the Vedic scriptures were little-known in the West, though there was increasing interest in the philosophy of the Upanishads. Müller believed that the sophisticated Upanishadic philosophy could be linked to the primitive henotheism of early Vedic Brahmanism from which it evolved.



WILLIAM JAMES



William James (January 11, 1842 – August 26, 1910) was an American philosopher and psychologist who was also trained as a physician. The first educator to offer a psychology course in the United States, James was one of the leading thinkers of the late nineteenth century and is believed by many to be one of the most influential philosophers the United States has ever produced, while others have labeled him the "Father of American psychology", says "From the Vedas we learn a practical art of surgery, medicine, music, house".