

Mûl Mantra - A Scientific Interpretation

JAGDEV SINGH KAINTH*

* Scientific Officer, Department of Atomic Energy, Govt. of India, Sector -1, Block-AF, Bidhannagar, Kolkata - 700 064

IN OUR DAILY LIFE, SIKHS begin their day or any work or journey by uttering, “*Ik Oankar*”. This intonation is the Emblem of the Sikh religion and is complete in itself. This Emblem states firmly that *Ik Oankar* is the only creative spirit, the Absolute (*Nirankar*) which is solely responsible for the origin of all beings. This gives further testimony to the creative action of the nine planets from which all religions have had their origin. This sacred symbol is often found at the head of letters, at the beginning of examination papers, enshrining in every gurudwara premises in some form or the other etc. The three *Kaals*, viz, past, present and future are intermixed in this one sound of *Ik Oankar* and thus exists beyond time.

Mystery of Experience:

The secret of *Ik Oankar* can be further demonstrated as follows:

- * *Ustat man main kar Nirankar*
- * *Sach khand vasai Nirankar*
- * *Too sadaa salaamat Nirankar*
- * *Gur samarath gur Nirankar*
- * *Gur oochaa agam apaar*
- * *Sargun nirgun Nirankar*
- * *Sunn samaadhi aap*

Kabir Ji performed the Aarti of the “Beyond Description” and “Formless” as follows: “Kabeer Das Teree Aarti Keenee *Nirankar* Nirbanee” from Guru’s *Aarti*.

Infinity:

This means that the word *Nirankar* originated with Kabir ji and later used and initiated by Guru Nanak and other Sikh Gurus as is repeatedly used in Sri Guru Granth Sahib.

“Koi na jaaney tumra ant
Oonchey te ooncha bhagwant”

Roop na rekh na rang kichh, Trihu gûn te prabh bhin..... (*Sukhmani*)

It is beyond doubt that Guru Nanak devoted most of his time in meditation upon God, the Absolute (*Nirankar*). So *Nirankar* can be written as .. *Nirankar* = Nir + Ankaar (that without) (form)

Ik Oankar is the sound, *roop* and *rekha* of the medium by which every soul connects itself with the Creator of the Cosmos at the recitation of Gurbani. When we recite “*Ik Oankar*”, we get tuned to the inspiration of God. This tuning of mind to God Consciousness is dependent on the following three factors:

- * The mental state of the individual
- * The physical state, and
- * The psychological state of mind

Religion & Science

Carried away by the triumphs of science, many people repudiate the existence of God (Waheguru). They can dispute anything which cannot be experimentally verifiable. Science and Religion are the two faces of the same coin. Science discovers the order by which whole of the Universe, including all the celestial bodies, are created and function conforming to some definite laws. Religion infuses the same kind of order, i.e. *hukum* in all our fellow beings for the smooth sustenance of life on the planet earth. As per Big Bang Theory all the Galaxies are moving away from each other. So the centre of creation from which all things originate and rise must be felt only by the "Power of Concentration" or the Concentration of Mind, which is nothing but the Solitary Meditation.

As far as power of concentration is concerned, all successful men and women are endowed with it. Many use it unconsciously. Some are born with it, others develop it but the majority of mankind do not use it at all. Our holy *Gurbani*, i.e. Sri Guru Granth Sahib Ji is the living example of this source of energy for the concentration of mind. Each and every word and line of AGGS gives us inspiration and teaches us how to lead the life in a noble way. It can enrich our thinking and can increase our power of concentration when taken positively and seriously.

One may have tried hard to follow some rambling statement, but at the end one hardly knows "what it was all about, and for whom it was mentioned". The person in question might have tried his best to impress you, but may make no impression on you whatever. This could be due to the fact that the individual has no power of concentration, and consequently no force behind his flow of words. When such people write lengthy letters or essays, using sentences and expressions well put together - do not make any effect on you and you will simply toss them aside and think no more about it. On the contrary, another person may say or write only few words, but these words create an effect.

Mind and Matter

This world is all about the state of mind. The mind has to be cultured and nurtured lovingly and positively, with 100 percent faith and belief.... The power needed to culture our mind is abundantly available through the *Jaap* of the Mystic Formula i.e. *Ik Oankar*. Develop your own way of reciting this word. Try to discard all the filth of your mind if you can, and co-ordinate your words, thoughts and actions accordingly. We do not dare to think for ourselves. We always think that our teachers alone have wisdom and that is why we are suffering. We are so dependent on our teachers that we are not at all ready to do anything for ourselves. This is the main cause of worry and misunderstanding.

Nature of Sublime

Behind all, there is *Ik Oankar*, the God of patience. His name has the merit of a pilgrimage to all the holy places. All that has been created by God, all that is His Name. True He is, and True is His creation, and Truth it is that He loves. Sikhism gives paramount importance on living a pious life. It is for this reason that various virtues are repeatedly advocated in Sri Guru Granth Sahib. Important among these are Truthfulness, True Wisdom, Self Control and Contentment. So by acquiring these virtues, by the Grace of God, one can get rid of five deadly passions. So *Ik Oankar* should be read in a proper perspective and should be given utmost respect and due consideration. The Oneness of God can be further demonstrated as follows:

- * Ekam Ekankaar Nirala, amar Ajoni jaat na jaala [M-1, p. 838 SGGS]
- * Ekankar awar nahee dooja, Nanak ek samai [M-1, p. 930 SGGS]
- * Sahib mera eko hai, eko hai bhai eko hai [M-1, p 350 SGGS]
- * Tishe sareek na deesei koi, aape appar aapra hey ... [M-1, p 1026 SGGS]

So from the above statements, it can be told that: "From the Absolute, He, of Himself became Manifest and then came the five elements."

Scientific Interpretation

"*Ik Oankar*" as per Guru Nanak can be described by

One in All, i.e. Expanded condition of the Universe

All in One, i.e. Condensed state of the Universe. It also means there are two conditions to be satisfied: first, that life started with One, and second, that all lives end in One.

The first condition indicates that "The energy density of the Cosmos becomes infinite when its volume becomes zero". The second condition states that all the heavenly bodies will continue to contract until all of the mass of the universe is contained in a singularity, a process known as Super Crunch. This could be the super plasma (ionised) state where matter and energy are totally inseparable. This indicates the state of timeliness. This kind of stability can however be upset by the last celestial body joining the Super Crunch when energy density controlled by the Super Gravitational Force becomes suddenly uncontrollable (approx. Infinity) and Big Bang occurs. This condition indicates that the Energy Density of the Cosmos suddenly try to become infinite and it explodes at a volume approaching zero.

keeta pasaa-o eko kavaa-o

Tis te hoi lakh daree-aa-o (SGGS)

Here, condition is like all souls of the Cosmos have no alternative but to attain Emancipation. With the Almighty God, man is for ever emancipated; without meeting with God (Waheguru), one is forever enthralled. No space left for Maya to play its role. The rolling back of the Cosmos indicates this condition to its original size. All the souls are purified here and ever shine in the company of Waheguru, the Creator.

Cosmic Energy

Unable to sustain itself, this Cosmic source of energy explodes with a Big Bang and spread out with full force in all directions moving many times more than the velocity of light. This cosmic *chakra* continues as is aptly described in *Sukhmani Sahib* by Fifth Nanak Arjun Dev ji :

Kaee Baar pasrio paasar,

sadaa sadaa Ik Oankar (SGGS)

Here, very important point has been conveyed by Eistein in his theory of Relativity:

"It states that when the mass of a particle is zero, it can move with the velocity of light" also "The mass of a non-zero mass particle becomes infinity when it approaches the speed of light". So both these conditions which are known as singularities, are to be satisfied between zero and one. So as per Guru Nanak, one,

or *Ek* or *Ik* can be read, written or spoken in many ways. Guru Nanak says that *Ik* is the Universal Force and is the key element in all the celestial existence.

The upper portion of "O" in *Ik Oankaar* <> indicates security to all and safety to the whole cosmic creation. The upper line also indicates that He is our shelter and He is our support. The up-going line indicates the expansion of the Cosmos and the downward trend shows the contraction of the Cosmos. It also indicates that the ever expanding Cosmos is looking beyond its boundaries and always looking ahead for the Cosmos to cool considerably and then starts returning to its original size, and so on.

Lastly, we can say "*Ik Onkaar*" represents the Spiritual Manifestation of the Universe. At this point of time it can be argued that "We all are spiritual beings enjoying the human experience."

Conclusion:

From the above discussion, it becomes absolutely clear that "*Ik Oankaar*" by itself is the central theme being projected in the opening hymn ... i.e, *Mul Mantra* of Sri Guru Granth Sahib. It conveys us the sole meaning that we should believe and worship only one God, the Formless... It also states that His power and perfection is true. He is ever-existing, He is without fear. He is without enmity, unborn, deathless and self-illuminated. He is True and ever true. There is a clear-cut order (*Hukum*) for the whole humanity not to worship any other deity, god or goddess.

The number "1" in *Ik Onkaar* undisputedly establish the complete Oneness of Godly powers. The total form of *Mul Mantra* describes the qualities of God, the Absolute (*Nirankar*). By simply reciting "*Ik Onkar*" one invokes the Almighty and seeks His Grace so that one may lead a noble, truthful and an honest life. Only He is responsible for the whole Creation.