

An Overview of Primordial, Apaurusheya, Perennial, Universal 'OM' Mantra and Its Scientific Analysis



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ABSTRACT

Based on the assertions recorded in various scriptures, texts, articles and research papers over the past thousands of years, the syllable 'OM' was perceived to have existed even before the creation of the universe, even before the so-called "Big Bang" occurred. OM is, therefore, primordial. It is the most original, the first ever sound/syllable ever 'heard' by the ancient saints during their deep meditation state; it is the 'Brahma Nad' (the sound of the Originator/Creator). It is 'Anahata' (meaning without 'Aahat', the sound) in its purest form. It is 'Apaurusheya', meaning that it is not discovered by any human (Purush). It is perennial, meaning that, it timeless, everlasting, which is valid in the past, present and future. 'OM' is revered in many religions in the world: Hinduism, Buddhism, Jainism, Sikhism, and Zoroastrianism, to name a few. It is therefore 'Universal'. Hundreds of millions of persons in the world use this syllable 'OM' as the most sacred and the most effective Mantra (Beej Mantra) used for chanting during their meditation practice, leading them to mental peace, calmness, happiness, bliss, enlightenment and salvation. In this article, the virtues of 'OM' are explained in details, followed by its scientific analysis. Finally, various experiments and research investigations have been quoted in this document to show the OM chanting and OM-mantra-based meditation has several benefits for the mind, body and soul. The aim of this article is a humble but sincere attempt to stir the hearts and minds of a large number of readers across the globe and to stimulate them in their journey to enlightenment through the most sacred mantra 'OM'.

Key words: Om, Aum, Akshara, Mantra, Primordial, Universal, Perennial, OM chanting, Meditation, Science of Om

1. INTRODUCTION

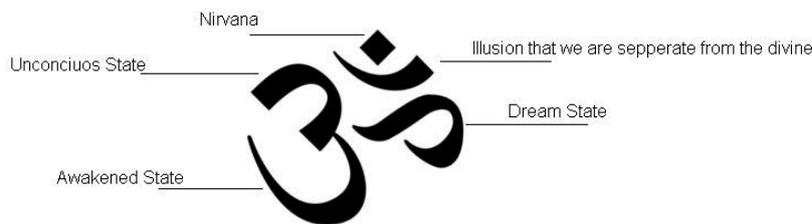
Om itīdam sarvam (Taittirīya Upaniṣad 1.8) "This whole world is OM". The syllable OM, also known as Aum and Pranava, is the most sacred symbol of Hinduism, Buddhism, Jainism, Sikhism and Zoroastrianism [1]. It is used both as a symbol and as a sound in religious worship, ritual chanting, performance of sacraments and rituals, meditation and tantra. In Hinduism it is venerated as Brāhman ('Brahma Nada' or 'Pranava Nada') in the form of word (askshara) and sound (shabda). Om is believed by many as "Apaurusheya" (not of human origin).

Initially, in the early Vedic period, because of the sanctity associated with it, the word was kept as a secret and never uttered in public. It was used in private conversations and passed

on from the teacher to the disciple or father to son directly and in secrecy. It was also not used in the rituals. Because it was not permitted to use the word directly, some early Upanishads referred to it indirectly as the udgita (upsound) or pranava (calling out), alluding to its significance in regulated breathing and religious chanting respectively [2].

The sacred OM is the primordial sound from which the whole creation has manifested. It is compared to the so called scientific big bang theory. The Mandukya Upanishad deals with this topic in detail. The sound Om is divided in four stages or parts. AUM and the silence afterwards. These four represent the four states of human life, viz., the waking, dream, deep sleep and *turiya*. They also represent the three bodies, viz., Gross body, subtle body and causal body and the *turiya* or transcendental reality. *Turiya* is not a name but an indication for the self which is the subtlest state or the transcendental meditation state in which the body is completely at rest but the mind is fully alert (a state of 'restful alertness'). OM (AUM) is the mystic name for the Hindu Trimurti, and represents the union of the three gods: "A" for Brahma, "U" for Vishnu and "M" for Mahadev, which is another name of Shiva.

Various states of consciousness are illustrated in the following from the symbol of OM [1]:



Decoding the symbol as written in Sanskrit brings deeper insight: the parts that resemble a "3" and an "o" represent three stages of the human mind's states of consciousness or progression from ignorance to clarity and the "cup shaped half circle" symbolizes that which separates these states from the "dot" which represents the true self.

Vaishvanara: the lower left curve (the bottom half of the "3") is waking state, the Conscious mind, which is focused outward to material objects and the gross or relative world.

Tajjasa: (represented by the "o" to the right of the center of the "3") is the Dreaming state, active unconscious or the subtle world; that which is focused inward to only the thoughts in the mind.

Prajna: (represented by the top curve or upper part of the "3") is the Casual plane of existence, the dreamless deep sleep state, deep meditation and latent unconsciousness.

Turiya: (represented as a dot or point above the top curve") the Bindu, absolute, pure unity consciousness, Atma/Brahman/Self. The "True Self" in its most un-worldly and purest consciousness (where) "*awareness of the world and of multiplicity is completely obliterated*". *Turiya*, "the true self", is separated from the other 3 states by a horizontal curve, the Nadi which means Sound; this is how Maya, the illusory world, the manifest or relative is transcended.

The **aim of this article** is a humble but sincere attempt to stir the hearts and minds of a large number of readers across the globe and to stimulate them in their journey to enlightenment through the most sacred mantra ‘OM’.

2. ‘OM’ is PRIMORDIAL

OM or AUM is not just a sound a vibration. It is not just a symbol. It is all that is within our perception and all that is beyond our perception [3]. It is core of our existence. OM was revered before the birth of all the religions in the world. The origin of “Big-Bang” is from the experiments made by Dr. Robert Wilson and Dr. Arno Penjias on microwave radiation in the universe [4]. During their studies they were continually getting some unknown radiation from the universe. This radiation associated with the body at a temperature of 3 degrees Kelvin and it is presumed that the radiation must have emanated when Big-Bang took place. Actually their experiment proved the reverberation of the Big-Bang explosion with which the universe began. Synonymous to this, our scriptures state that the sound OM or AUM – the Pranava mantra – was the first energy created at the time of disturbance of the equilibrium. It has been accepted in Hindu Religion that AUM – the first **primordial** sound energy (‘Brahma Nad’) emerged in the process of creation. Hence, what the scientific experiments revealed as microwave reverberations during the Big-Bang is already explicitly explained by our scriptures in the form of ‘AUM’ [4]. “Om is the primordial throb of the universe. It is the sound form of Atma (Consciousness).” – Maitri Upanishad. According to Guru Granth Sahib, the most sacred book of Sikhs, The name of the Creator (OM or Ik Onkar) is True In The Primal Beginning. True Throughout The Ages. (1-4, Japu, Mahalla 1)

3. ‘OM’ is APAURUSHEYA

OM is the soundless sound of existence, which the Zen Buddhists refer to as ‘the sound of one-hand clapping’. The sound of ‘OM’ is known as ‘Anahata’, which means un-struck sound. All other ordinary sounds in the universe emerge as a result of frictional force between any two or more objects. Therefore the ‘OM’ sound cannot be generated by person. It is self-producing sound. It is Apaurusheya. OM stands outside of history: as the distillation of the wisdom of the Vedas, the syllable remains "beyond human origin" (*apauruṣheya*), eternal, prior to everything (Pūrva Mīmāṃsā Sūtra 1.1.27-32)

4. ‘OM’ is PERENNIAL

OM is the akshara, which literally means immutable or imperishable, or perennial: the characteristic of the Syllable ‘OM’ as mentioned in the scriptures subsequent to Rig Veda. Therefore OM is perennial, meaning that, it timeless, everlasting, which is valid in the past, present and future. As mentioned earlier, even Guru Granth Sahib mentions this to be perennial [10].

5. ‘OM’ is UNIVERSAL

OM is not related to any particular religion. As stated earlier, ‘OM’ is revered in many religions in the world: Hinduism, Buddhism, Jainism, Sikhism, and Zoroastrianism, to name a few. It is therefore ‘Universal’. Following paragraphs justify this ‘Universalism’ of OM in details.

5.1 'OM' in Hinduism [3-7]

5.1.1 OM in Rig Veda

Although the oldest scripture in Hinduism is known to be 'Rig Veda' (the first of the four Vedas), ironically it does not mention about 'OM' directly; rather it indirectly refers to it as 'Akshara' (Rig Veda, 1.164.39).

रचो अक्षरे परमे वयोमन यस्मिन् देवा अधि विश्वे निषेदुः |
यस्तन न वेद किं रचा करिष्यति य इत तद विदुस्त इमे समासते || (1.164.39)

Richo akshare parame vyoman, yasmin deva adhi vishve nishedhuhu|
Yasthannaveda kim richa karishyathi, yayithath vidu stha ime samasathe||

"Richa is situated in akshara. knowledge is structured in consciousness, the non-changing transcendental basis of all relative existence in which reside the impulses of creative intelligence responsible for the whole manifest universe. He whose awareness is not open to this level of reality, what can these eternal expressions of knowledge accomplish for him?"

OR, in other words:

"He who knows not the eternal Syllable (Akshara) of the Veda, the highest point upon which all the gods repose, what business has he with the Veda? Only its knowers sit here in peace and concord" [2].

The akshara literally means immutable or imperishable, or perennial: the characteristic of the Syllable 'OM' as mentioned in the scriptures subsequent to Rig Veda.

5.1.2 OM in Yajur Veda

Yajurveda Chapter 40 is also called Isha Upanishad. It says:

ॐ क्रतो स्मर कृत स्मर , वायुर्निलममृतमथेदम भस्मानतम शरीरम।
ॐ क्रतो स्मर कृत स्मर क्रतो स्मर कृत स्मर ॥१७॥

Om krato smara. Vayur-anilam-amrtam athedam Bhasmantagm sariram,
Om krato smara krtagm smara, krato smara krtam smara.

O men, at the time of death remember OM, the name of God. Think about God and yourself, think about the deeds you performed in your entire life. The vayu takes the soul. And remember that the body is mortal and will be finally destroyed.

"O3m krato smara |"

'O3m' is the highest reality. Here, the number intervening between o and m refers to 3 aspects of 'om' – (1) the sound originating in muladhara, (2) proceeding toward chest and (3) entering and spreading in the head; it spreads in three vyahruti- bhu, bhuvah, svah. Therefore

‘OM’ is also referred to as ‘AUM’, where ‘A’ represents Agni, ‘U’ represents Vayu, and ‘M’ represents Aditya. [3]

5.1.3 OM in Aitareya-Brahmana

ओम इती आसो यो'सु (साउरीआ) तपती | ऐत्रेय-ब्राह्मण (5.32)

Om ity asau yo'sau [sūryah] tapati. Aitareya-Brāhmana (5.32)

“That which glows [i.e., the Sun] is Om.”

5.1.4 OM in Brihadaranyaka Upanishad

यो ह वै ज्येष्ठं च श्रेष्ठं च वेद ज्येष्ठश्च ह वै श्रेष्ठश्च भवति प्राणो वाव ज्येष्ठश्च श्रेष्ठश्च ॥ 5.1.1 ॥

yō ha vai jyēṣṭhaṅ ca śrēṣṭhaṅ ca vēda jyēṣṭhaśca ha vai śrēṣṭhaśca bhavati prāṇō vāva jyēṣṭhaśca śrēṣṭhaśca ॥ 5.1.1 ॥

“Om is Brahman, the Primeval Being. This is the Veda which the knowers of Brahman know; through it one knows what is to be known” [2].

5.1.5 OM in Chandogya Upanishad

ओमित्येतदक्षरमुद्गीथमुपासीत।ओमिति ह्युद्गायति तस्योपव्याख्यानम् (छान्दोग्योपनिषत् १.१.१)

ōmityēṭadakṣaramudgīthamupāsīta. ōmiti hyudgāyati tasyōpavyākhyānam (1.1.1)

“One should meditate on this syllable: Om. That is the quintessence of the essences, the Supreme, the highest” (Chandogya Upanishad 1.1.1).

स एष रसाना रसतमः परमः परार्थोऽष्टमो यद्गुद्गीथः ॥ छान्दोग्योपनिषत् १.१.३ ॥

“The syllable OM which is called Udgitha, is the quintessence (means the most perfect) of the essences, the supreme, deserving of the highest place.” (Chandogya Upanishad 1.1.3)

This can be said, because Om is the Primal Word, the Original Sound, the First Word “spoken” by God, and by which all that “is” was created, and is being sustained and evolved at this very moment.

तदेतन्मिथुनमोमित्येतस्मिन्नक्षरे ससृज्यते यदा वै मिथुनौ समागच्छत आपयतो वै तावन्योन्यस्य कामम् ॥ छान्दोग्योपनिषत् १.१.६ ॥

“Speech and breath are joined together in the Syllable OM” (Chandogya Upanishad 1.1.6)

ओमित्येतदक्षरमुद्गीथमुपासीतोमिति ह्युद्गायति तस्योपव्याख्यानम् ॥ १.४.१ ॥

“One should meditate on Om.... This sound is that syllable, the immortal, the fearless. having entered this, the gods become immortal, fearless. He, who knowing it thus, praises this syllable, take refuge in that syllable, in the immortal, fearless sound, and having entered it, he becomes immortal, even as the gods became immortal” (Chandogya Upanishad 1.4.1-5).

अथाध्यात्मं य एवायं मुख्यः प्राणस्तमुद्गीथमुपासीतोमिति ह्येष स्वरन्नेति ॥ १.५.३॥

“The breath is continually sounding Om” (Chandogya Upanishad 1.5.3).

स एष परोवरीयानुद्गीथः स एषोऽनन्तः परोवरीयो हास्य भवति परोवरीयसो ह लोकाञ्जयति
य एतदेवं विद्वान्परोवरीयाऽसमुद्गीथमुपास्ते ॥ १.९.२॥

“This is the Udgitha (the song as OM, which uplifts the singer), the most excellent; this is endless. He who, knowing this, meditates on the Udgitha; obtains progressively the most excellent life and wins the most outstanding worlds.” (Chandogya Upanishad 1.9.2).

अग्निर्हिकारो वायुः प्रस्ताव आदित्य उद्गीथो नक्षत्राणि प्रतिहारश्चन्द्रमा निधनमेतद्राजनं
देवतासु प्रोतम् ॥ २.२०.१॥

“The sun is Om” (Chandogya Upanishad 2.20.1).

तान्यभ्यतपत्तेभ्योऽभितपत्तेभ्य उँकारः सम्प्रास्रवत्तद्यथा शङ्कुना सर्वाणि पर्णानि
संतृण्णान्येवमोँकारेण सर्वा वाक्संतृण्णोँकार एवेद सर्वमोँकार एवेदऽ सर्वम् ॥ २.२३.३॥

“As all leaves are held together by a stalk, so is all speech held together by Om. Verily, the Syllable Om is all this—yea, the Syllable Om is all this” (Chandogya Upanishad 2.23.3).

तद्यथा महापथ आतत उभौ ग्रामौ गच्छतीमं चामुं चैवमेवैता आदित्यस्य रश्मय उभौ लोकौ गच्छन्तीमं चामुं
चामुष्मादादित्यात्प्रतायन्ते ता आसु नाडीषु सृप्ता आभ्यो नाडीभ्यः प्रतायन्ते तेऽमुष्मिन्नादित्ये सृप्ताः
॥ ८.६.२॥

“Even as a great extending highway runs between two villages, this one and that yonder, even so the rays of the sun go to both these worlds, this one and that yonder. They start from the yonder sun and enter into the nadis. They start from the nadis and enter into the yonder sun.... When a man departs from this body, then he goes upwards by these very rays or he goes up with the thought ‘Om.’ As his mind is failing, he goes to the sun. That, verily, is the gateway of the world, an entering in for the knowers, a shutting out for the non-knowers” (Chandogya Upanishad 8.6.2, 5).

5.1.6 OM in Katha Upanishad

सर्वे वेदा यत्पदमामनन्ति तपाऽसि सर्वाणि च यद्वदन्ति ।

यदिच्छन्तो ब्रह्मचर्यं चरन्ति तत्ते पदऽ संग्रहेण ब्रवीम्योमित्येतत् ॥ १५॥

एतद्ध्येवाक्षरं ब्रह्म एतद्ध्येवाक्षरं परम् । एतद्ध्येवाक्षरं ज्ञात्वा यो यदिच्छति तस्य तत् ॥ १६॥

एतदालम्बनं श्रेष्ठमेतदालम्बनं परम् । एतदालम्बनं ज्ञात्वा ब्रह्मलोके महीयते ॥ १७॥

“That word which all the Vedas declare, which all the austerities proclaim, desiring which people practice brahmacharya, that word, to you I shall tell in brief: It is Om. This syllable is, verily, the everlasting Spirit. This syllable is, indeed is the highest end; knowing this very syllable, whatever anyone desires will be his. This support is the best. This support is the highest; knowing this support, one becomes great in the world of Brahma” (Katha Upanishad 1.2.15-17).

5.1.7 OM in Mandukya Upanishad

ॐ इत्येतदक्षरमिदं सर्वं तस्योपव्याख्यानं
भूतं भवद् भविष्यदिति सर्वमोङ्कार एव
यच्चान्यत् त्रिकालातीतं तदप्योङ्कार एव ॥ १ ॥

सोऽयमात्माध्यक्षरमोङ्करोऽधिमात्रं पादा मात्रा मात्राश्च पादा
अकार उकारो मकार इति ॥ ८ ॥

अमात्रश्चतुर्थोऽव्यवहार्यः प्रपञ्चोपशमः शिवोऽद्वैत
एवमोङ्कार आत्मैव संविशत्यात्मनाऽऽत्मानं य एवं वेद ॥ १२ ॥

“Om: this syllable is all this.... All that is the past, the present and the future, all this is only the syllable Om. And whatever else there is beyond the threefold time, that too is only the Syllable Om.... The Self is of the nature of the Syllable Om.... Thus the Syllable Om is the very Self. He who knows it thus enters the [Supreme] Self with his [individual] Self” (Mandukya Upanishad 1, 8, 12).

ॐ इत्येतदक्षरमिदं सर्वं तस्योपव्याख्यानं
भूतं भवद् भविष्यदिति सर्वमोङ्कार एव
यच्चान्यत् त्रिकालातीतं तदप्योङ्कार एव ॥ १ ॥

Om-ity-etad-aksharam-idam sarvam, tasyopavyakhyanam bhutam bhavad bhavishyaditi sarvam-omkara eva. Yaccanyat trikalatitam tadapy omkara eva

All is OM: The whole universe is the syllable Om. Following is the exposition of Om. Everything that was, is, or will be is, in truth Om. All else which transcends time, space, and causation is also Om.

सोऽयमात्माध्यक्षरमोङ्करोऽधिमात्रं पादा मात्रा मात्राश्च पादा अकार उकारो मकार इति ॥ ८ ॥

Those Four are the Same with “**A-U-M**” and **Silence**: That Om, though described as having four states, is indivisible; it is pure Consciousness itself. That Consciousness is Om. The three sounds A-U-M (ah, ou, mm) and the three letters A, U, M are identical with the three states of waking, dreaming, and sleeping, and these three states are identical with the three sounds and letters. The fourth state, Turiya is to be realized only in the silence behind or beyond the other three.

धनुर्गृहीत्वौपनिषदं महास्त्रं शरं ह्युपासानिशितं संधयीत ।
आयम्य तद्भावागतेन चेतसा लक्ष्यं तदेवाक्षरं सोम्य विद्धि ॥३॥

Dhanur grhīvtā aupaniṣadam mahāstraṁ śaraṁ hy upāsā-niśitam saṁdadhīta, āyamya tad-bhāvāgatena cetasā lakṣyam tad evākṣaram, saumya viddhi (2.2.3).

“Taking as the bow the great weapon of the Upanishads [Om], one should place in it the arrow sharpened by meditation. Drawing it with a mind engaged in the contemplation of That [Brahman], O beloved, know that Imperishable Brahman as the target. (Mundaka Upanishad 2.2.3).

5.1.8 OM in Prashna Upanishad

एतद्वै सत्यकाम परं चापरं च ब्रह्म यदोङ्कारः ।
तस्माद्विद्वानेतेनैवायतनेनैकतरमन्वेति ॥ ५.२.२॥

यः पुनरेतं त्रिमात्रेणोमित्येतेनैवाक्षरेण परं पुरुषमभि-
ध्यायीत स तेजसि सूर्ये सम्पन्नः । यथा पादोदरस्त्वचा
विनिर्भुच्यत एवं ह वै स पाप्मना विनिर्भुक्तः स
सामभिरुन्नीयते ब्रह्मलोकं स एतस्माज्जीवघनात् परात्परं
पुरुशयं पुरुषमीक्षते । तदेतौ श्लोकौ भवतः ॥ ५.२.५॥

ऋग्भिरेतं यजुर्भिरन्तरिक्षं
सामभिर्यत् तत् कवयो वेदयन्ते ।
तमोङ्कारेणैवायतनेनान्वेति विद्वान्
यत्तच्छान्तमजरममृतमभयं परं चेति ॥५.२. ७॥

“Satyakama, son of Shibi, asked [the Rishi Pippalada]: ‘Venerable Sir, what world does he who meditates on the Omkara until the end of his life, win by That?’ To him, he said: ‘That which is the Omkara, O Satyakama, is verily the higher and the lower Brahman. Therefore, with this support alone does the wise man reach the one or the other.’... If he meditates on the Supreme Being [Parampurusha] with the Syllable Om, he becomes one with the light, the Sun. He is led to the world of Brahman. He sees the Person that dwells in the body, who is higher than the highest life.... That the wise one attains, even by the Omkara as a support, that which is tranquil, unaging, immortal, fearless, and supreme” (Prashna Upanishad 5:1, 2, 5, 7).

5.1.9 OM in Shvetashvatara Upanishad

उद्गीतमेतत्परमं तु ब्रह्म तस्मिंस्त्रयं सुप्रतिष्ठाऽक्षरं च ।
अत्रान्तरं ब्रह्मविदो विदित्वा लीना ब्रह्मणि तत्परा योनिमुक्ताः ॥ श्वेताश्वतरोपनिषत् १.७॥

“Om has been sung as the supreme Brahman, and in it are the Triad [the individual spirit, the cosmos, and the Cosmic Spirit]. It is the firm support, the imperishable. The knowers of Brahman by knowing what is therein become merged in Brahman, intent thereon and freed from birth” (Shvetashvatara Upanishad 1:7).

वहनेर्यथा योनिगतस्य मूर्तिर्न दृश्यते नैव च लिङ्गनाशः ।
स भूय एवेन्धनयोनिगृह्य- स्तद्वोभयं वै प्रणवेन देहे ॥ १.१३ ॥

स्वदेहमरणिं कृत्वा प्रणवं चोत्तरारणिम् । ध्याननिर्मथनाभ्यासादेवं पश्यन्निगूढवत् ॥ १.१४ ॥

“As the form of fire when latent in its source is not seen and yet its seed is not destroyed, but may be seized again and again in its source by means of the drill [a pointed stick whirled to produce fire for the Vedic sacrifices], so it is in both cases. The Self has to be seized in the body by the Pranava. By making one’s body the lower friction stick and the Pranava the upper friction stick, by practicing the friction of meditation one may see the hidden God” (Shvetashvatara Upanishad 1:13, 14).

5.1.10 OM in Bhagavad Gita

रसो ऽहम अप्सू कौन्तुय प्रभुत्व ससी-सूर्याह प्रणव सरवा-वेदसू सबदा है पौरसम ब्रसु (7:8)

“O son of Kuntī, I am the taste of water, the light of the sun and the moon, the syllable Pranava (OM) in the Vedic mantras; I am the sound in ether and ability in man.” (Bhagavad Gita 7:8).

ओमित्येकाक्षरं ब्रह्म व्याहरन्मामनुस्मरन् । यः प्रयाति त्यजन्देहं स याति परमां गतिम् ॥८- १३ ॥

“Uttering Om, the single-syllabled Brahman, meditating on me, departing thus from his body, he attains the Goal Supreme” (Bhagavad Gita 8:13).

पिताहमस्य जगतो माता धाता पितामहः ।
वेद्यं पवित्रमोकार ऋक्साम यजुरेव च ॥९- १७ ॥

“I am the father of this universe, the mother, the support, and the grandsire. I am the object of knowledge, the purifier and the syllable om. I am also the Rig, the Sama, and the Yajur [Vedas].” (Bhagavad Gita 9:17).

महर्षीणां भृगुरहं गिरामस्म्येकमक्षरम् ।
यज्ञानां जपयज्ञोऽस्मि स्थावराणां हिमालयः ॥१०- २५ ॥

“Of the great sages I am Bhrgu; of vibrations I am the transcendental om. Of sacrifices I am the chanting of the holy names [japa], and of immovable things I am the Himalayas.” (Bhagavad Gita 10:25).

तसमाद ओम इति उद्रहित यज्ञ-दाना-तप-क्रियाह
प्रवर्तक विदोनोकत सतत्म ब्रह्मा-वादीनाम (17:24)

Thus the transcendentalists undertake sacrifices, charities, and penances, beginning always with OM, to attain the Supreme. (17:24)

5.1.11 OM in Manu Smriti

The Laws of Manu (Manu Smriti) is the oldest code of laws in India.

एकाक्षरं परं ब्रह्म प्राणायामः परं तपः । सावित्र्यास्तु परं नास्ति मौनात्सत्यं विशिष्यते । (मनु स्मृति, 2.83)

“The monosyllable Om is the highest Brahman. ...Undoubtedly a Brahmin reaches the highest goal by japa of Om alone, whether he performs other rites or neglects them” (Manu Smriti 2:83, 87).

5.1.12 OM in Mandukya Karika

ओंकारं पादशो विद्यात्पादा मात्रा न संशयः । ओंकारं पादशो ज्ञात्वा न किञ्चिदपि चिन्तयेत् ॥ २४ ॥
“Om should be known. Having known Om, one should not think of anything whatsoever” (Mandukya Karika 1:24).

युञ्जीत प्रणवे चेतः प्रणवो ब्रह्म निर्भयम् । प्रणवे नित्ययुक्तस्य न भयं विद्यते क्वचित् ॥ २५ ॥
“One should concentrate one’s mind on Om, for Om is Brahman beyond fear. For a man, ever fixed in Brahman, there can be no fear anywhere” (Mandukya Karika 1.25).

प्रणवो ह्यपरं ब्रह्म प्रणवश्च परः स्मृतः । अपूर्वोऽनन्तरोऽबाहयोऽनपरः प्रणवोऽव्ययः ॥ २६ ॥
सर्वस्य प्रणवो ह्यादिर्मध्यमन्तस्तथैव च । एवं हि प्रणवं ज्ञात्वा व्यश्नुते तदनन्तरम् ॥ २७ ॥
प्रणवं हीश्वरं विद्यात्सर्वस्य हृदि संस्थितम् । सर्वव्यापिनमोङ्कारं मत्वा धीरो न शोचति ॥ २८ ॥
अमात्रोऽनन्तमात्रश्च द्वैतस्योपशमः शिवः । ओंकारो विदितो येन स मुनिर्नेतरो जनः ॥ २९ ॥

“Om is surely the lower Brahman; and Om is considered to be the higher Brahman. Om is without cause, and without inside and outside; and it is undecaying. Om is indeed the beginning, middle, and end—everything. Having known this way indeed one attains immediately identity with the Self. One should know Om to be God seated in the hearts of all. Meditating on the all-pervasive Om, the intelligent man grieves no more. The Om, without measures and possessed of infinite dimension, is the auspicious entity where all duality ceases. He by whom Om is known, is the real sage, and not so is any other man” (Mandukya Karika 1:26-29).

5.1.13 OM in Satyarth Prakash

(Written by Maharishi Dayanand Saraswati, Founder of ‘Arya Samaj’ Movement)

ओ३म् शन्नो मित्रः शं वरुणः शन्नो भवत्वय्य मा ।
शन्नऽइन्द्रो बृहस्पतिः शन्नो विष्णुरुक्रमः ॥

नमो ब्रह्मणे नमस्ते वायो त्वमेव प्रत्यक्षं ब्रह्मासि । त्वामेव प्रत्यक्षं बहम् वदिष्यामि ऋतं वदिष्यामि
सत्यं वदिष्यामि तन्मामवतु तद्वक्तारमवतु।

अवतु माम् अवतु वक्तारम् । ओ३म् शान्तिशान्तिशान्तिः ॥१॥ (सत्यार्थप्रकाश, प्रथम समुल्लास)

"Mayest Thou (AUM), O God, Who art (Mitra), Friend of all, (Varuna) Holiest of all, and (Aryama) Controller of the Universe, be merciful unto us. Mayest thou (Indra) O Lord Almighty, (Brihaspati) the Lord of the Universe, the Support of all, endow us with knowledge and power. Mayest thou (Vishnu) O Omnipresent and (Urukrama) Omnipotent Being, shower Thy blessings all around us."

"We bow unto Thee (Brahma), O most Powerful Supreme Being. Thou alone art our Omniscient God whom we feel in the interior of our hearts. I will call Thee, Thee alone, my true God, Thy will, as truly revealed in the Vedas, will I obey and preach. I will be truthful in word, deed and thought. Thou art my shelter. Mayest thou protect me - Thy servant - who speaketh nought but truth, so that my understanding be firm in Thy Will, and never turn away from it. Thy Will is Truth and Righteousness. That which is contrary to it is Untruth and Unrighteousness. Mayest Thou again shelter and protect me. O Lord, be merciful and grant this, my prayer, for which I shall feel grateful unto Thee for ever and ever. Peace! Peace!! Peace!!! (Satyarth Prakash Chapter 1 – Samullas 1)

5.2 ‘OM’ in Buddhism [8]

5.2.1 Avalokitesvara mantra

ओ मनि पद्म हूँ / ओम मणि पद्मे हम् /

“Om̐ Mani Padme Hūm̐ / Om Mani Padme Hum̐”

Avalokiteshvara (or Avalokitesvara) is a Bodhisattva who represents compassion, and his mantra also symbolizes that quality. Avalokiteshvara means “The Lord Who Looks Down (in compassion)”.

Om has only a mystical meaning — suggesting primordial reality. Mani means jewel, while Padme means lotus. Hum, like Om, has no conceptual meaning. Overall, the mantra is suggestive of the bringing together of the qualities of wisdom (the lotus) and compassion (the jewel).

5.2.2 Manjushri mantra

Manjushri is a Bodhisattva who represents wisdom, and his mantra also symbolizes that quality.

ओम एक रा पा का ना धह

“Om̐ A Ra Pa Ca Na Dhīh̐”

He holds a sword in his right hand — symbolizing his ability to cut through delusion. In his left hand, by his heart, he holds the stem of a lotus flower, which bears a book — the Perfection of Wisdom teaching, or Prajnaparamita.

5.2.3 Vajrapani mantra

ओम वज्रपनी ह्रम

“Om Vajrapani Hum”

Vajrapani is a Bodhisattva who represents the energy of the enlightened mind, and his mantra also symbolizes that quality. Vajrapani is pictured dancing wildly within a halo of flames, which represent transformation.

He holds a vajra (thunderbolt) in his right hand, which emphasizes the power to cut through the darkness of delusion. Vajrapani looks wrathful, but as a representation of the enlightened mind, he's completely free from hatred.

5.2.4 Green Tara mantra

ओम तारे तुटारे तुरे स्वाहा / ओम तारे तुटारे तूर स्वाहा (ग्रीन तारा)

Om Tāre Tuttāre Ture Svāhā / Om Tare Tuttare Ture Svaha

“OM ! O Tara! I entreat you, O Tara ! O swift one ! Hail !”

5.2.5 Amitabha mantra

ओम अमेडेवा ह्रीह

Om Amideva Hrih

Om represents the enlightened body, speech, and mind; Ami represents Buddha Amitabha; Dewa represents the deva realms, 6 desire realms, and Brahma realms; Hrih represents the seed syllable of compassion.

Om Ami Dewa Hrih is the sacred mantra of Amitabha (Amitayus) Buddha which protects you from obstacles and dangers and overcomes all hindrances to your success. This chant is also known as “Dharani for pulling out karmic obstructions by the roots and obtaining birth in the Pure Land” or “Rebirth Mantra”.

5.2.6 White Tara mantra

White Tara is the Tara associate with compassion and long life. The White Tara mantra is very often chanted with an individual in mind, in order to entreat Tara to bless them with the long life and the compassion that they need to overcome obstacles.

ओम तारे तुटारे तुरे माँ अयह पुण्य ज्ञान पुष्टिम कुरु स्वाहा

Om Tare Tuttare Ture Mama Ayuh Punya Jñana Pustim Kuru Svaha

Om – can also be reflective of an awareness of the surrounding universe. It is used at the start of many mantras.

Tare – this is representative of salvation from suffering and other forms of mundane dangers. Tara is very often depicted as being one who can alleviate suffering from accidents, crime, and natural disasters.

Tuttare is representative of the delivered down the right spiritual path, and the need for protect from dangers to the spirit. Delusion, hatred, and greed are the three primary spiritual dangers that are responsible for suffering in us all.

Ture – this is representative of the deliverance to the true spiritual path of a bodhisattva. With this syllable, Tara is said to liberate us from the suffering we are inflicted with, while helping us to progress along the path that will allow us to have compassion for others.

Mama means “mine” and is indicative of the desire to possess the qualities of wisdom, happiness, long life, and more. These qualities can be asked for someone else, or for the person reciting the mantra.

Ayuh is representative of long life.

Punya is representative of the merit that is earned from living an ethical life and is said to guide one to a life that is happy and long.

Jnana is representative of wisdom, which is something we all seek.

Pushtim is representative of abundance or an increase in wealth.

Kuru is said to be a mythical land located in the northern regions of the Himalayas but can also be taken to mean “make it so.”

Svaha is said to be representative of “allow the meaning of this mantra to take root in my mind.”

5.2.7 Shakyamuni mantra

Shakyamuni (the sage of the Shakyen clan) is the historical Buddha, also known as Siddhartha Gautama.

ओम मुनी मुनिमोनी शकीमुनी स्वाहा

Om muni muni mahamuni shakyamuni svaha

“Om wise one, wise one, great wise one, *to the wise one of the Shakyans* hail!”

5.2.8 Padmasambhava mantra

Padmasambhava was a historical teacher who is said to have finally converted Tibet to Buddhism. He was a renowned scholar, meditator, and magician, and his mantra suggests his rich and diverse nature.

ओम आह हम वज्र गुरु पद्म सिद्धि हम

Om Ah Hum Vajra Guru Padma Siddhi Hum

”I invoke you, Vajra Guru, Padmasambhava, by your blessing may you grant us supreme and ordinary realization.”

5.2.9 Bhaisajyaguru (Medicine Buddha) mantra

The Medicine Buddha, or Bhaisajyaguru, is as his name suggests connected with healing.

ओम भाईजैय भाईजय महाभारिहै भाईज्याराजे सामगेट स्वाहा ।

Om bhaisajye bhaisajye mahābhaisajye bhaisajyarāje samudgate svāhā

“Bhaisajya” means “curativeness” or “healing efficacy,” while “guru” means “teacher” or “master.” Thus he’s the “master of healing.” He’s also known as Bhaisajyaraja, “raja” meaning “king.”

The mantra could roughly be translated as “Hail! Appear, O Healer, O Healer, O Great Healer, O King of Healing!”

5.2.10 Vajrasattva mantra

ओम वोरजत्त्व समायाम अनूपलया वज्रसतत्व तवेपोटीघा दहो मुझे भव सतोती मुझे भव सफोम्यो
मुझे भव अनराकोटो मुझे भव

Oṃ vajrasattva samayam anupālaya vajrasattva tvenopatiṣṭha dr̥dho me bhava sutoṣyo me bhava supoṣyo me bhava anurakto me bhava sarva siddhiṃ me prayaccha sarva karma su ca me cittam śreyaḥ kuru hūṃ ha ha ha ha hoḥ bhagavan sarva tathāgatavajra mā me muñca vajrī bhava mahā samaya sattva aḥ (hūṃ phaṭ)

“Oṃ Vajrasattva! Preserve the bond! As Vajrasattva stand before me. Be firm for me. Be greatly pleased for me. Deeply nourish me. Love me passionately. Grant me siddhi in all things, And in all actions make my mind most excellent. hūṃ! Ha ha ha ha ho! Blessed One! Vajra of all the Tathāgatas! Do not abandon me. Be the Vajra-bearer, Being of the Great Bond! aḥ (hūṃ phaṭ)”.

5.3 ‘OM’ in Jainism



This **Jain Symbol** is a modified version of the Hindu **OM** (ॐ).

The five parts that make up the symbol symbolize the five lines of the Namokar Mantra [9]xz czx, a daily prayer whose recital by believers is a central part of the Jain religion.

णमोकार मन्त्र

प्राकृत

अर्थ

णमो अरिहंताणं

अरिहंतो को नमस्कार हो।

णमो सिद्धाणं

सिद्धों को नमस्कार हो।

णमो आयरियाणं

आचार्यों को नमस्कार हो।

णमो उवज्झायाणं

उपाध्यायों को नमस्कार हो।

णमो लोए सव्व साहूणं

लोक के सर्व साधुओं को नमस्कार

एसोपंचणमोक्कारो, सव्वपावप्पणासणो

यह णमोकार महामंत्र सब पापो का नाश करने वाला

मंगला णं च सव्वेसिं, पडमम हवई मंगलंतथा सब मंगलो मे प्रथम मंगल है।

The **Namokar (or, namkar)** mantra honours the five Jain Panch Parmeshtis, or great entities.

The five *parmeshtis* are:

- **Arihantas**, (Tirthankars or Jinas), the pure souls, the saints.
- **Siddhas**, liberated souls who are beyond birth and death.
- **Acharyas**, leaders of Jain congregations.
- **Upadhyays**, initiated monks and nuns.
- **Sadhus and Sadhvis**, male and female laypersons (householders).

The Namokar mantra is as follows:

I bow to the Arihantas, the perfected human beings. I bow to the Siddhas, liberated bodiless souls. I bow to the Acharyas, the masters and heads of congregations. I bow to the Upadhyayas, the spiritual teachers. I bow to the spiritual practitioners in the universe, Sadhus. This five-fold obeisance mantra, Destroys all sins and obstacles, And of all auspicious repetitions, Is the first and foremost. I bow to the enlightened beings; I bow to the liberated souls; I bow to religious leaders; I bow to religious teachers; I bow to all ascetics of the world. These five salutations are capable of destroying all sins. And they are the most auspicious of all benedictions.

5.4 'OM' in Sikhism

The equivalent of 'OM' in Sikhism is **Ik Onkar**, represented by the following symbol:



The symbol **Ik Onkar** communicates the idea of one one creative being, or one God, manifest in all of existence. The creator and creation are one entity, inseparable in the way an ocean is made up of its individual drops.

Such is the importance given to Hindu equivalent of Om that the symbol **Ik Onkar** (ॐ) has been mentioned **568** times In “Shri Guru Granth Sahib ji”, the most sacred and the most revered book in Sikhism.

The root of Onkar is traceable to the Hindu sacred syllable Om, also written as Aum. Historically, in the beginning, Om was used as a reply of approval or consent. It was the inspired vision Shri Guru Nanak ji (the first Master or Guru of the Sikkhs) that transformed AUM into Ek-Onkar representing the Supreme Being, *the Sole Absolute Eternal Reality which, while manifesting itself in multiplicity as Onkar, is still in its essence 'Sole and Absolute'; Transcendent as well as Immanent. Impersonal is also Personal in Ek-Onkar. Ik*

Onkar (Gurmukhi: **ੴ**, ਇੱਕ ਓਅੰਕਾਰ; Ikk Ōankār Punjabi, is the symbol that represents the One Supreme Reality. [10]. According to Swami Vivekanand, "Onkar is the most holy word of the Vedas". A symbolic word meaning the Supreme Being, the Ocean of Knowledge and Bliss Absolute". (Raja Yoga)

Another definition of the word is given in the Mandukopanishad: "That which was, is and will be, is all *Onkar*. And that which triple time transcends is *Onkar* too. (Verse 1)

“One Universal Creator God. The Name Is Truth. Creative Being Personified. No Fear. No Hatred. Image Of The Undying, Beyond Birth, Self-Existent. By Guru's Grace ~” (Sri Guru Granth Sahib, 1-1).

“(Onkar) is True in the Primal Beginning. True throughout the Ages.” (1-4, Japu, Mahalla 1)

5.5 ‘OM’ in Zoroastrianism

‘**AHUM**’ of Zoroastrianism is also like **AUM** [11]. ‘Ahum Bis’ is a term, which means the ‘healer of life’, a title used for ‘Ahura Mazda’, the name of God in Zoroastrianism and his prophet, Zarathushtra. ‘Ahura’ is term in Zoroastrianism, which indicates god or diety. It is derived from the root ‘Ahu’ or life.

In the pre- Zoroastrian Iran, there was a group of deities known as Ahuras, of whom Ahura Mazda was later chosen as the supreme deity. Ahura Mazda directed Zarathushtra to instruct people to the path of ‘Truth’ (ASHA).

Two of the five Gathas in Zoroastrianism, which frequently mention Ahura Mazda are: (i) Gatha Ahunavaiti (Gatha of free choice) and (ii) Gatha Ushtavaiti (Gatha of Bliss and Enlightenment). For example, in the hymn # 31.19 of Gatha Ushtavaiti, it states [11]:

Gushta ye mafita ahum bis vidvae ahura (Gatha Ushtavaiti, 31.19)

“He who hears the Truth and lives it in his Life, Soul-healing Lord of Wisdom he becomes. To spread true teachings, Ahura, his words are eloquent and able to convince, O Mazda through Thy Fire blazing clear, Unto each man his place do Ye assign.” [13].

6. ‘OM’ CHANTING

OM may be spoken, recited, chanted, intoned, sung, whispered, mumbled, and even mentally evoked. There are four levels of our personality [3]. (i) First is the outer physical level, where there is a specific form. All our activities and speech happen in this level. (ii) Then there is the mental level where thoughts and emotions take place. (iii) Then there is the subtler vibration of the causal level that defines our individuality; and (iv) on the fourth level of our being, we are all one with the transcendental reality that exists beyond the states of waking, dreaming and the deep sleep. This is the centre of supreme peace that exists at the core of our being.

All these layers of our persona are the manifestation of OM at different levels. The outer physical level is called the ‘**Vaikhari**’ or manifestation at the grossest level. The word Vaikhari in Sanskrit means: the flowering. So our physical persona is the ‘**Vaikhari Om**’.

Then there is the second level, that is the mental level, which is called the **‘Madhyama’**. Madhyama, in Sanskrit, means that which is in the middle; it is the level between the seed and the flower. It is like the tree, which bears the flowers. It is our thoughts that bear the flowers of our speech and actions. So the mental level of our persona is the **‘Madhyama Om’**.

On the third level of our personality, there is the notion of individuality that is the seed of all our thoughts, speeches and actions. It is called the **‘Pashyanti’**. Pashyanti, in Sanskrit, means that, which witnesses. Our sense of individuality, as the **‘I am’**, witnesses all our thoughts, speech and actions. This level of witnessing is called the **‘Pashyanti Om’**.

Beyond these three levels of our personality lies the fourth. This is our **transcendental**, unborn nature. It is beyond thought, the supreme, un-decaying, un-modified state; a place that is unfathomable. It is the level of Supreme peace, where we are one with all that exists. This is defined as the **‘Para’**. Para, in Sanskrit, means, that which transcends. It is that level of our existence, which transcends birth and death and all worldly dualities. This level is **Para Om’**, the Supreme Silence from which all manifestations emerge and into which all manifestations are dissolved. It is the ‘field of all possibilities’. It is the equivalent to the ‘vacuum state’ in Quantum Mechanics from which any higher energy level can be achieved by providing the appropriate input energy. It is *Turiya*.

In the first level (Vaikhari) of the Om chanting, our lips, which are parts of our physical body, are active. The lips are open in this stage and chanting the sound of Om. In the second level (Madhyama), our lips remain shut but the mind is active in uttering Om. In this stage, even the vocal chords are not moving (in an attempt to chant Om). We are just thinking about the ‘sound’ of Om. In the third stage (Pashyanti), we shut down our lips as well as our mind in order to move into the deeper level of our consciousness. In this stage, we may at times hear the sound of our breath or even the heart-beat as an effortless happening in OM in our system. In the fourth level (Para) of our being, even the witnessing is dropped. We become completely still and merge with the blissful silence of our inner being.

7. SCIENTIFIC ANALYSIS OF ‘OM’

Sound (nad) is the basic component of creation and is based on the sciences of Music and Mantra. Now pronounce ‘Om’ as one usually does and note the spiritual experience. Then prolong the duration of Om three to four times, that is ‘O....m....’, and then record the experience. With the prolonged Om one experiences more energy or goes into a kind of trance, than with the usual Om. The reason for this is that with the usual pronunciation only one direction is stimulated whereas with the prolonged variation all the eight directions are stimulated. It is for this very reason that usually when a note is prolonged a positive effect is obtained [14].

Another important aspect of mantras is their correct pronunciation. It is mentioned in Patanjali’s Mahabhashya that:

मन्त्रो हीनः स्वरोत्त वर्णो या मिथ्याप्र्युटो न तमर्थमाह
स वावर्जो यजमानां हिनस्ति यथेन्द्रशत्रुः स्वरोपेराधात

The meaning: The mantra without proper pronunciation of vowels (svar) and consonants (varna) that is the utterance of a mantra in a faulty manner makes it faulty and does not convey the intended meaning. Instead it gets converted into a verbal thunderbolt and may harm the one chanting it.

7.1 Frequency of Om

The famous scientist Nikola Tesla once remarked, “If you want to find the secrets of the universe, think in terms of energy, frequency and vibration”

Is Om really a sound? It is, only at the Vaikhari level when it is chanted with the lips open. In that stage alone, it is audible within the audible range of human beings. Otherwise, Om does not have any frequency in the audible range. In the Para stage, the frequency of OM is immeasurable. With this in view, the literature claims the following three different frequencies of Om.

7.1.1 136.1 Hz

The sound ‘Om’, when chanted, vibrates at the frequency of 136.1 Hz, which is the same vibrational frequency found throughout everything in nature [14-15]. Interestingly, it is also the frequency of the 32nd Octave of the Earth Year.

Illustration:

Time Period (T) of one rotation of earth round the sun = 365.256 days x 24 hrs/day x 60 min/hr x 60 sec/min = 31558118.4 sec.

So, frequency (f) of earth year = $1/T = 3.168757 \times 10^{-8}$ Hz.

If we multiply this with 32nd octave, that is. with 4294967296 ($=2^{32}$),

we get = 136.1 Hz = *frequency of the sound ‘OM’*.

7.1.2 432 Hz/7.86 Hz

German physicist Winfried Otto Schumann documented the Schumann Resonance in 1952. He understood that global electromagnetic resonances exist within the cavity between the Earth’s surface and the inner edge of the ionosphere and are excited and activated by lightning [16]. He determined that the frequency of these electromagnetic waves are very low, ranging anywhere from 7.86 Hz to 8 Hz. This frequency is essentially the Earth’s heartbeat; the frequency the Earth beats at.

Now, 432 Hz resonates with the frequency of 8 Hz. And here’s how...

On the musical scale where A has a frequency of 440 Hz, the note C is at about 261.656 Hz. On the other hand, if we take 8 Hz as our starting point and work upwards by five octaves (i.e. by the seven notes in the scale five times), we reach a frequency of 256 Hz in whose scale the note A has a frequency of 432 Hz.

This frequency (7.86-8 Hz), which is at the top end of the Theta range and at the start of the Alpha range of the Brainwave frequency, makes us feel very relaxed but conscious and open

to intuitive learning. Listening to a concentrated recording of music at this frequency, like a binaural beats track, will synchronize (entrain) the brain to this state and induce the aforementioned effects.

So it makes sense that if we spent more time being attuned to the natural electromagnetic pulses of the earth (the heartbeat of Mother Nature) – at 432 Hz – we would, in turn, feel more centered, balanced, conscious and peaceful.

Further evidence of a 432 Hz preference is found in ancient Greece, where instruments associated with Orpheus – the God of Music – were tuned at 432 Hz. The evidence doesn't stop there, either. Using a [Korg Tuner](#), sound researcher Jamie Buturff discovered that many CD recordings of Tibetan monks' singing bowls were tuned at 432 Hz. This is undoubtedly because of the frequency's direct link to Mother Nature and natural ability to make people relax for meditative purposes.

7.1.3 What is really the actual frequency of OM?

It is not clear as to which of the above-mentioned frequencies of OM in the audible range (136.1 Hz or 432 Hz) is the actual frequency of OM. Moreover these frequencies can be measured on when OM chanting is done at the Vaikhari level, which is a gross level and not that effective. But the frequency (**7.86-8 Hz**), which is at the top end of the Theta range and at the start of the Alpha range of the Brainwave frequency, seems to be more plausible one. It is not in the audible range and, therefore, is produced in the Madhyama or Pashyanti level and which generates a relaxation feeling to the chanter of OM.

7.2 Time and Frequency Analysis of 'OM'

(i) Jina Devi et al [17] attempted to identify the predominant frequencies and their subharmonics of A-kara, U-kara, M-kara (of AUM) and Om-kara. The experiment consisted of : (i) recording of the Mantra with the help of a sensitive microphone, (ii) digitizing the analog waveforms with a sampling rate of 44100 Hz, (iii) analyzing the digitized data to extract information about the frequency, and finally (iv) to identify the predominant frequencies. It was observed that the average fundamental frequency for the female voice was approximately 240 Hz as compared to the male voice, where it was 113 Hz.

(ii) In an analysis of OM mantra, it was established by Gurjar et al [18] that consciousness improved by the repetition of OM mantra. In this work, the time-frequency analysis was carried out using wavelet transforms for the sound OM. This was established by recording the pattern of the OM-meditators before, in the beginning and during the meditation. As the meditation progressed the steadiness of the brain pattern improved. Thus, they concluded that OM chanting brings steadiness, calmness and peace to the stressed mind.

7.3 Scientific Evidence of Benefits of OM chanting or OM meditation

(i) In another experiment, Gurjar et al [19] did the recordings of OM chanting for several people. The recordings were made in a quiet room at 44.1 kHz sampling rate using a close-talk microphone. Male and female subjects of the age group 30-40 years participated in the recording process in evening time after the office hours and before the dinner time. Recording was done for about 10 minutes for each subject. These recordings were then digitized with the help of MATLAB using a sampling rate of 44.1 KHz.

It was observed that the swing in the FM signal carrier was more in the initial OM chanting session. As the subjects went on chanting OM mantra, the mind became calm and the fluctuations and the swing decreased. From this it was concluded that chanting of OM mantra results in stabilization of brain, removal of worldly thoughts and increase of energy. OM mantra thus acts as a brain stabilizer.

(ii) In one of the experiments [20], the autonomic and respiratory variables were studied in seven experienced meditators (with experience ranging from 5 to 20 years). Each subject was studied in two types of sessions--meditation (with a period of mental chanting of "OM") and control (with a period of non-targetted thinking). The meditators showed a statistically significant reduction in heart rate during meditation compared to the control group.

(iii) In yet another experiment [21], the autonomic and respiratory variables were studied in seven experienced meditators. Each subject was studied in two types of sessions - meditation (with a period of mental chanting of "OM") and control period (with a period of non-targetted thinking). The meditators showed a statistically significant reduction in heart rate during meditation as compared to the control period. This was interpreted as a sign of increased mental alertness, even while being physiologically relaxed (as shown by the reduced heart rate).

(iv) Soumya Mishra et al [22] observed the beneficial effects of "OM" chanting on perceived stress and auditory and visual reaction time in female school teachers. The participants performed Om chanting once in a day at 6:00 am daily for 12 weeks. They observed significant decrease ($P < 0.05$) in stress and significant improvement ($P < 0.05$) in both auditory and visual reaction times in these participants after OM chanting; thus proving that Om mantra is the great stress reliever, which with regular practice may improve the quality of life thereby health.

(v) Arati Amin et al [23], studied the beneficial effects of OM chanting on depression, anxiety, stress and cognition in elderly women suffering from hypertension. A total of 40 elderly women (age 50–60 years) with diagnosed hypertension were included in the study, with blood pressure values of $120-179/\leq 109$ mmHg were enrolled. Intervention group participants performed Om chanting once in a day at 7:30 daily for six months under the supervision of trained teacher. Pre intervention depression, anxiety, stress and MMSE (Mini Mental State Examination) scores and blood pressure and pulse rate were not significant between the groups. However, following by six months of Om chanting, systolic and diastolic pressure, pulse rate, depression, anxiety, stress decreased significantly. MMSE scores improved significantly followed by Om chanting. So the study concluded that the practice of Om chanting in a traditional way can be used as one of the powerful means in calming down the mind and enhancing memory and cognition skills.

(vi) Through an investigative experiment, Jyoto Kori [24] established the positive effects of OMKARA chanting on the pulse rate to calm the minds of some healthy volunteers. In this experiment the participants were asked to chant OMKARA for five minutes daily for four weeks. Their pulse rate was recorded before and after chanting. The results showed the reduction of pulse rate of the participants in post chanting measurement. Average reduction in the pulse rate was found to be 6 pulses per minute, thereby resulting in the reduction of stress level.

(vii) Chaudhari Kiran and Kapse Neeta [25] established the positive effects of OM chanting on the patients having thyroid problem. It was observed by the authors that the thyroid disorder found in a large majority of people and the medication and clinical treatment available for the same was generally having some side effects. Hence this study of OM chanting on these patients was an effort to find an alternative treatment method. The natural humming energy of OM exists all around us. According to the authors, OM vibrates at the frequency of 432 Hz, which is the same frequency as everything in nature. Useful sounds that are particularly beneficial to the body is a clean “A” or “O” sound which will make the chest, sternum and neck vibrate. Vibrations in the sternum will stimulate the immune system because the oscillations boost the thymus, a small gland in the chest which controls the production of the body’s key defense cells called T lymphocytes. The thymus becomes smaller and smaller with age and almost disappears in the end. Some researchers even believe that different infections and cancers in old people are closely linked to the decline in T lymphocyte production. Hence, if we were to stimulate the thymus in some way e.g. through OM chanting, it is sure to be advantageous. Chanting of Omkar is one of the best effective treatments for thyroid problems. The vibration from the vocal cords affects the thyroid directly and regulates and stimulates its function.

Regular OM chanting for 15 – 30 minutes resulted into a good progress of thyroid patients. Also listening to Om chanting throughout night was also very effective. This vibration throughout the head also stimulated pituitary and hypothalamus to function effectively.

(viii) In his PhD dissertation recently submitted by Sanjay Kumar [26], he has studied the effect of OM meditation on Brainstem auditory evoked potentials, autonomic and respiratory variables. The study design consisted of four sessions i.e., two meditation and two control sessions. All four sessions consisted of three states, i.e., ‘pre’ (5 minutes), ‘during’ (20 minutes), and ‘post’ (5 minutes) separately on different days. The summary of his findings for OM meditation (**Dhyaan**) are as follows:

(a) There were no significant changes in Brainstem auditory evoked potential during all sessions. (b) There was a significant increase in the galvanic skin resistance during and after the dhyāna session (8.60% to 17.03%). (c) There was a significant decrease in the heart rate in dhyāna session (Pre versus during & post: 4.93% to 7.73%). (d) There was a significant decrease in the respiratory rate (Pre versus during & post: 8.86% to 19.59%). (e) There was significant decrease in low frequency in dhyāna session (Pre versus during & post: 15.42% to 25.53%).

(ix) In another paper on the scientific analysis of OM [27], it been mentioned that chanting of AUM mantra on regular basis restores the balance of the body at physical, mental, emotional and spiritual level. It also helps in enhancing creativity, increasing energy level in the body and increasing performance at the workplace. It brings clarity in mind, increases self-awareness, greater ability to be associated with the world, selflessly serving others and being open for positive thoughts, simultaneously negative thoughts are swept away that heals the body on a cellular level, with more energy, strength and focus.

In another experiment to study the effect of AUM mantra on nervous system, it was found the frequency module swung more in initial chanting but after sometimes the mind becomes calm. When the mind becomes calm, the body feels relaxed, the negative thoughts are dramatically swept away that heals the self on a cellular level. It was observed in the results that the brain gets stabilized, removal of negative thoughts and it acts an energy booster for

human being results in reduced stress. Some scientists conducted another pre and post test analysis experiment in which they analysed Magnetic Resonance Imaging Scans (MRI) for investigating the effect of chanting AUM mantra in treating depression and epilepsy. The consistent chanting of AUM manta increased the parasympathetic system results in relaxation response used in the treatment of depression and epilepsy.

8. CONCLUSION

In this Review document, the significance of the most sacred syllable, that is, 'OM' has been described with the highest reverence for the same by the author. The author himself has been a regular practitioner of chanting of 'OM' and OM-mantra-based meditation for the last more than five decades and relished its beneficial effects on mind, body, soul himself. Based on the recorded texts in the ancient and modern literature, it has been asserted here that the syllable 'OM' is primordial, that is, it was perceived to have existed even before the creation of the universe, even before the so-called "Big Bang" occurred. It is the most original, the first ever sound/syllable ever 'heard' by the ancient saints during their deep meditation state; it is the 'Brahma Nad' (the sound of the Originator/Creator). It is 'Anahata' (meaning without 'Aahat', the sound) in its purest form. It is 'Apaurusheya', meaning that it is not discovered by any human (Purush), it is beyond human origin. It is perennial, meaning that, it timeless, everlasting, which is valid in the past, present and future. 'OM' is revered in many religions in the world: Hinduism, Buddhism, Jainism, Sikhism, and Zoroastrianism, to name a few. It is therefore 'Universal'. Hundreds of millions of persons in the world use this syllable 'OM' as the most sacred and the most effective Mantra (Beej Mantra) used for chanting during their meditation practice, leading them to mental peace, calmness, happiness, bliss, enlightenment and salvation. In this Monograph, virtues of 'OM' are explained in details, followed by its scientific analysis. Finally, various experiments and research investigations have been quoted in this document to show the OM chanting and OM-mantra-based meditation has several benefits for the mind, body and soul. The aim of this article is a humble but sincere attempt to stir the hearts and minds of a large number of readers across the globe and to stimulate them in their journey to enlightenment through the most sacred mantra 'OM'.

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