

The Comparative Study of Seismology and Bhuvaneshwari Bhukampshanti Yantra

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Abstract - We are trying to compare the Bhuvaneshwari Bhukampshanti Yantra with the aspects of Seismology and we try to prove that there is pure scientific concept in Bhuvaneshwari Yantra. It is well-designed structural & geometrical figure and powerful mathematical tool derived from Shri Yantra. By comparison, our main goal is the spiritual schematic diagrams are pure science. Using such kind of scientific tools and some facts regarding Seismology, we try to convey that the Bhukampshanti Yantra is derived and generated by using Shri Yantra with great correlations with geological scientific phenomena as well as Seismological terminologies.

Keywords: Symmetric mode, Antisymmetric mode, tectonic, Consciousness, manifestation, Epicentre, Seismic waves, SAWs (Surface Acoustics waves), substratum, Bhukampshanti Yantra etc.

1. INTRODUCTION

A Yantra is a Mandala, sacred figure or symbol characterized by simple geometric forms arranged in a symmetric design [5]. 'Yantra' holds a supreme status amongst all the occult sciences and disciplines and 'Tantra' and 'Mantra' are the elements which help it. Hence Yantra is an entry gate to all the occult sciences and result oriented accomplishments, and yantras are an abiding place of all deities whose seat lies at some place, direction, region or zone corner or angle and they feel elated at their designated places in a yantra, but in the centre place of a yantra resides the chief deity who is installed and worshipped at that place. Yantra is the body of a mantra wherein the laid down ritual related practices lie hidden in the same way as a building is hidden in house plan (diagram) or a tree is hidden in a seed. The scholars have laid stress on the fact that there is practically no distinction between a yantra and deity, in the same way as body and soul, though looking apart, are still the same this may be the reason as to why the deities never feel appeased, without the yantra being worshipped [2,36].

Bhuvaneshwari Yantra, also known as Bhukampshanti Yantra, one of the yantras derived from Shri Yantra which is mother of all yantras. Goddess Bhuvaneshwari is originated from Aadi Shakti and both are guardians of this entire universe and living being. Adi Shakti is presiding deity of Shri Yantra where, Bhuvaneshwari Goddess is presiding deity of Bhuvaneshwari Yantra. Bhuvaneshwari is one of the fourth major power of "Dasha-mahavidya" meaning ten great deities. The term Mahavidya means 'great knowledge' or wisdom. This Great Cosmic Wisdom is worshiped as the Great Goddess who protects all manifested worlds. This attribute of the goddess is also suggested by Her name: the Glorious Queen, or the Governor (Ishwari) of the whole realm of creation, with all the worlds (Bhuvana) which are contained in Her. In other words, she is the Divine Mother who protects the

worlds and consequently the whole universe is her body on which the numerous beings that exist are like jewels adorning her [4].



Bhuvaneshwari Bhukampshanti Yantra

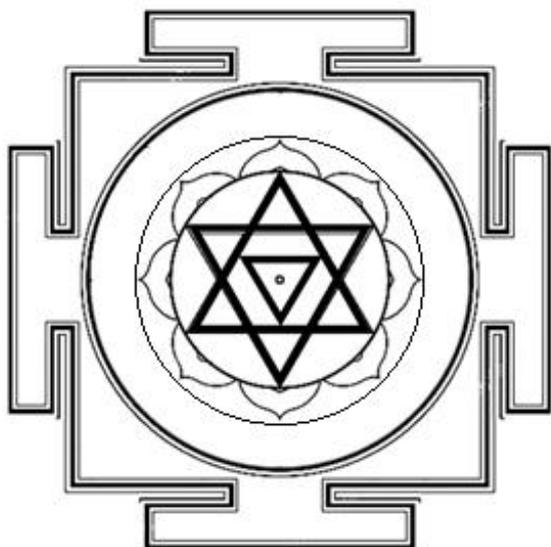
Bhuvaneshwari Yantra – "Bhuvaneshwari means Goddess of the infinite universe and Yantra means Instrument". Also, another name of Yantra which is Bhukampshanti Yantra where "Bhukampshanti means Earthquake pacifier". Therefore, Bhuvaneshwari Bhukampshanti Yantra means "An Instrument having control from Earth to over interstellar space energy which nullifies impacts of Earthquake shocks.

Bhuvaneshwari Yantra is said to be a divine storehouse of energy, which interacts with interstellar space, universal heavenly bodies via cosmic interconnectivity effect providing the worshipper constructive healing vibrations. Bhuvaneshwari Yantra is the three-

dimensional symbol of Goddess Bhuvaneshwari which conveys a message that everything is created from shakti and everything is perished in it. It is the fundamental cyclic flow of nature. Worshipping the Bhuvaneshwari Bhukampshanti Yantra for protection of entire universal living beings results to protection from anomalous natural disasters which are caused by Goddess for destruction of evil entities from universe. The devotee gets protection from natural disasters like earthquake for a definite amount of time which depends upon the devotion of devotee and proper technical spiritual worship as per ved-based installation of Yantra. When a devotee has a devotion for the welfare protection of all the entire living beings from sudden disastrous impacts of natural disasters towards Goddess Bhuvaneshwari, she bestows with protection from natural disasters through the effects of Bhukamshanti Yantra. This powerful Bhukamshanti Yantra resonates with the positive energies of the Goddess and provides protection of all the entire living beings.

2. METHODS AND MATERIAL

Bhuvaneshwari Yantra is a sacred diagram formed by six equilateral triangles surrounding the centre with 1 concentric layer of 8 lotus petals about the centre which radiate out from the central (bindu) point. The two-dimensional Bhuvaneshwari Yantra, when it is projected into three dimensions is called a "Maha Meru". It represents the Adi shakti in her form of Bhuvaneshari shakti or, tri-bhuvana or Goddess Queen of Bhoo (Earth), Bhuva (atmosphere) and Swa (Heavens) worlds [31]. Six equilateral triangles representing six powers of Bhuvaneshwari Goddess whereas the center point (Bindu) symbolizing female embodiment Shakti. Thus, the Bhuvaneshari Yantra also represents the union of Adi Goddess Divine and Bhuvaneshawri Goddess Divine.



**Geometric Schematic of Bhuvaneshwari
Bhukampshanti Yantra**

The 8 Lotus petals symbolize 8 directions. A lotus in Yantra represents the unconditional force of the Supreme Absolute Truth. The lotus serves as a divine seat for devas (gods), it also represents detachment, it grows in the mud but never touches even a tinge of mud, representing detachment to the external forces (material world) and maintaining the original nature which is pure and divine.

The broken lines of the outer frame denote the figure to be a sanctuary with four openings to the regions of the universe [1]. In the middle, is the power point (bindu), visualizing the highest, and the invisible, elusive centre from which the entire figure and the Earth geometric geological wave structure expands.

Goddess Bhuvaneshwari is feminine representation of the five forms of manifestation of the God Shiva. Therefore, Lord shiva is called Panchanan where, Goddess Bhuvaneshwari is called Panchananaa. All the aspects and shaktis related to five manifestations of Lord shiva represent for Goddess Bhuvaneshwari.

The panchanana, also called the panchabrahmi, are the five faces of shakti which are:

- 1) Creation (Srishti)
- 2) Preservation (Sthithi)
- 3) Destruction (Samhara)
- 4) Concealing grace (Tirobhava)
- 5) Revealing grace (Anugraha). [3,34]

The names, qualities, and attributes of these five aspects of Shiva are described in the Saiva agamas and puranas where, same attributes are described for Goddess Bhuvaneshwari in Devi Bhagawat Purana.

The five attributes of faces of Lord shiva are the same for Goddess Bhuvaneshwari symbolizing the 5 Equilateral triangles of Bhuvaneshwari Yantra where central point symbolizes the feminine shakti conjoining these triangles [3,4].

Goddess Bhuvaneshwari is known as "Trinetra" cause she has three eyes. Her three eyes represent "Ichcha" (Wish), Kriya (work) and Janana Shakti (Reproductive power). In reality, Adi Shakti, in her reincarnation as Goddess Bhuvaneshwari, creates as well as exerts control over the entire universe [4]. Bhuvaneshwari is "The Queen of the Universe or one who embodies the cosmos. Also called Rajrajeshwari, this bright-complexioned is depicted as a queen.

Therefore, there are total 6 shaktis or 6 powers which are in control of Goddess Bhuvaneshwari, 5 of which are due to shiva or shakti manifestation forms and rest one because of the third eye of Goddess Bhuvaneshwari representing Janana shakti. The six arms of Goddess also do represent the 6 shaktis named as [4]:

- 1) Man shakti
- 2) Anand shakti
- 3) Iccha shakti
- 4) Kriya shakti
- 5) Gyan shakti
- 6) Janana shakti

3. RESULTS AND DISCUSSION

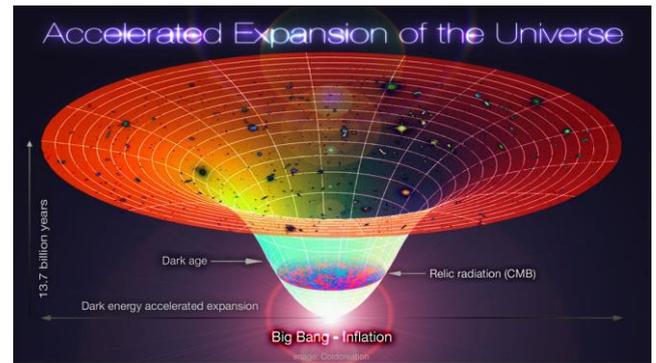
A. Goddess Bhuvaneshwari – State of Cosmic Embodiment

In the four Hindu Vedas Bhuvaneshwari is known as Aditi, the Great Cosmic Mother, infinite and indestructible, the origin of all manifestation, the primordial space. Bhuvaneshwari represents the power of openness and infinite expansion, of equanimity in spirit and profound peace that contains in it all things and that cannot be disturbed [4].



Infinite Manifestation of Universe

The Divine Mother Bhuvaneshwari creates the space so that all the things in the manifested world could come up eventually. This Great Cosmic Wisdom is worshiped as the Great Goddess who protects all manifested worlds. The modern science has reached just lately the conclusion according to which space (named in the yogic terminology akasha) represents in fact the primordial “matrix” from which afterwards are born all the other elements (air, fire, water, and earth) for instance, the substance from which the earth is made is essentially a concentration characteristic to the space in a certain area. Under this aspect of primordial substance from which emerges everything in the manifested world, Bhuvaneshwari is also known as Prakriti, or Mother Nature. However, we need to remember that this primordial space, fundament of any ulterior manifestation is essentially pure consciousness and consequently it is an ineffable expression of endless freedom and bliss [5].



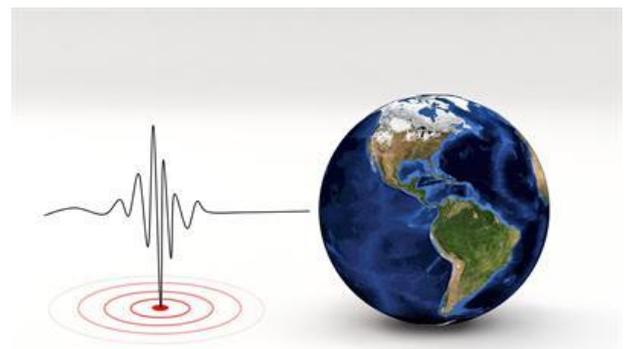
Bhuvaneshwari is in fact the whole universe embodied as a deity. Bhuvaneshwari sustains all the worlds, with the beings and things that are characteristic to all of them, in a gesture of perpetual blossoming of the creation. Gods infinite love gives birth to the desire to create and then to follow then the wonderful spectacle of the Creation. From this perspective, Bhuvaneshwari creates the worlds in which the endless power of the divine love manifests. Any manifested form is in fact a system of energy waves that exist based on subtle relationships, or resonances with the macrocosmic sources of energy from the Infinite [5].



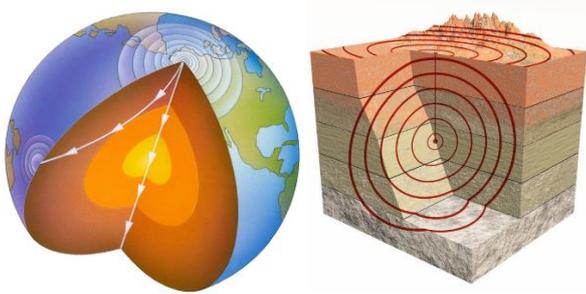
Supreme Goddess Bhuvaneshwari – Universal Embodiment

B. The Background of Seismology

Seismology is the scientific study of earthquakes (or generally, quakes) and the propagation of elastic waves through the Earth or other planetary bodies.



A seismic wave is a wave of acoustic energy that travels through the Earth or another planetary body. It can result from an earthquake (or generally, a quake), volcanic eruption, magma movement, a large landslide, and a large man-made explosion that produces low-frequency acoustic energy. Seismic waves are studied by seismologists, who record the waves using seismometers, hydrophones (in water), or accelerometers. Seismic waves are distinguished from seismic noise (ambient vibration), which is persistent low-amplitude vibration arising from a variety of natural and anthropogenic sources [6].



Seismic waves in Geological structure of Earth

Among the many types of seismic waves, one can make a broad distinction between body waves, which travel through the Earth, and surface waves, which travel at the Earth's surface [6].

C. How Goddess Bhuvaneshwari and Earth with Interstellar space are related?

Now, 2 verses from Bhusuktam in Atharvaveda that match the interpretation of description of Earth and interstellar space.

भूमिर्भूमना द्यौर्वरिणाऽन्तरिक्षं महित्वा ।
उपस्थे ते देव्यदतेऽग्निमन्नादमन्नायायाऽऽदधे ॥१॥

Meaning:

O bhumi-Earth, the wide one, the spacious one, supremest in the heavens, greater in the inter-galactic space! O devi Infinity-Adite! In the secure shelter of your motherly lap, I place, for food-giver agnihi - food for digesting

Scientific Interpretation:

The Bhuvaneshwari power with infinite energy is spreaded from the centre of Earth to the infinitely expanded intergalactic space. She is infinitely manifested by herself in entire universe in which we all exist as a microscopic part of her.



Interstellar Space

Inside the Earth, Lava heat (agnihi) exists and is erupted as time passes for stability of planet Earth which same represents the goddess Bhuvaneshwari who provides the element fire for survival. These lava after cooling undergoes minerals formation in cold rocks makes soil worth and effective for growth of Plants and foods.



Also, many materials and minerals on Earth actually exist now because of asteroid accidents with Earth. Water itself is the evidence for its existence on planet Earth because of asteroid impacts. This all life essential and crucial elements are originated from intergalactic space via asteroid accidents.



Ice Asteroids collision with Earth

Therefore, Goddess Bhuvaneshwari is source of all food providing elements which made entire living beings on Earth to grow, evolve and survive.

समुद्रवती सावित्रीह नो देवी महाङ्ग ।
महीधरणी महोव्यधिष्ठाः शृङ्गे शृङ्गे यज्ञे यज्ञे विभीषिणी ॥३॥

Meaning :

Holder of oceans, all-protective, with vast limbs (geographical features) here & now (protecting us); Holder of expanses vast, also of earthquakes great as well, from peak to peak, from yajña to yajña, causing fear from time to time.

Scientific Interpretation:

Goddess Bhuwaneshwari is a great power which has protective control over oceanic movements. She represents all the geographical features of Planet Earth. She is the cause for tectonic movements in the plates of inner surface of Earth.



She leads to contractions and expansions of Earth soil layers thereby having complete control over Peak Earthquake to zeroth Earthquake. She is herself who gives birth to seismic wave vibrations and she herself destroys them for protection of her devotee. It is the power which creates as well as destroys the fear of volcanic eruptions (Yajna in ground Earth) and Earthquake hazardous impacts. She is also the cause for such volcanic eruptions also is cure for this problem too.



Volcanic Eruptions

Therefore, she protects the righteousness from disastrous impacts of her supreme power of holding Material Earth entities. She is the power which infinitely manifests herself in entire universe causing peak most effect to lowest effect on each particle of Universe.

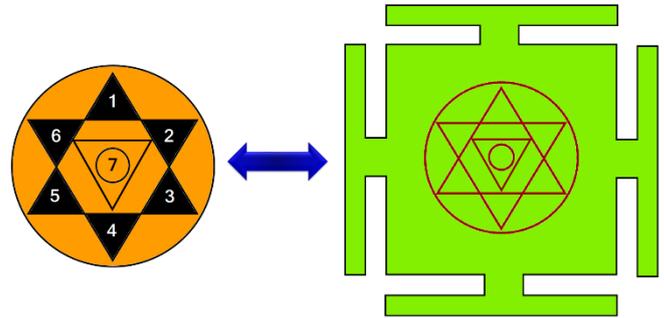
Bhuwaneshwari Yantra is itself reflection of Goddess Bhuwaneshwari which represents subtle protective shield from subtle preliminary impacts of seismic waves.

D. Seismic Waves and Bhuwaneshwari Yantra

Now as per the Seismic Waves concept, there are 8 of the waves with centre of earthquake belonging to seismology: -

- ❖ Primary Waves
- ❖ Secondary Waves
- ❖ Stationary Waves
- ❖ Lamb Waves

- ❖ Love Waves
- ❖ Stoneley, Scholte Waves
- ❖ Sezawa Waves
- ❖ Rayleigh Waves
- ❖ Epicenter of Earthquake

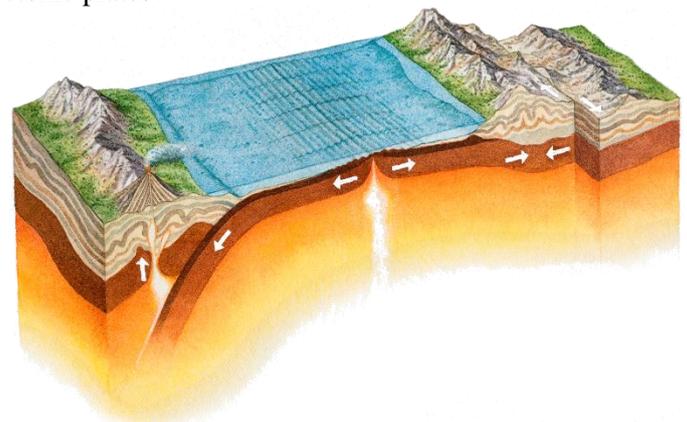


Sources: Authors Compilation

Matter can't do anything without energy. Energy is the power which drives matter and cause movements in matter. There are various reasons and ultimate causes that exist behind earthquake.

- Man-made operations for example digging, mining
- Cruel killing of animals, oceanic creatures at large amount
- Wars, explosions

The fundamental scientific reason for earthquake accidents is the movements in tectonic plate because of pressure deflections, but anything doesn't move or happens on its own. What causes these movements of tectonic plates?



Movements of Tectonic Plates

Humans are involved in destructive activities such as mining and digging of earth. Huge amount of digging causes imbalance in earth which are required to be settled. This imbalance is needed to be settled so as to regulate the flow of movement, rotation and revolution of Earth. Earth itself being Nature is programmed in a way to auto-heal its wounds. It's the self-healing mechanism of planet earth similar to self-healing mechanism of animal/human bodies.

Many animals, oceanic creatures produce ultrasonic sounds at very high frequencies which carry a lot of

energy. So, when the animals are killed cruelly due to the concentrated genocide of animals, they cry out aloud causing so many ultrasonic waves absorbed majorly by earth. This large amount of energy cannot be destroyed as per the law of conservation of energy. Therefore, this energy is absorbed in the interior of the earth causing vibrations in the tectonic plates resulting into disastrous earthquakes, consequently tsunamis. Since, humans cannot perceive the high ultrasonic frequencies, we are unable to understand the consequences of this energy on planet earth.

Now, Nepal is a country which is near high-risk seismic zones. A real incident happened in Country Nepal, where huge amount of animal killing was done by humans (Gadhimai festival in Nepal, 2009). More than 20,000 buffaloes were sacrificed on the first day. It is estimated that 250,000 animals were sacrificed during the Gadhimai festival [20]. Therefore, it caused release of painful high frequency ultrasonic waves from animals which were absorbed in crust land of Nepal, which ultimately led to striking gaps between tectonic plates under the layers of Himalayan mountains. The April 2015 Nepal earthquake (also known as the Gorkha earthquake) killed 8,964 people and injured 21,952 more. It occurred at 11:56 Nepal Standard Time on Saturday, 25 April 2015, with a magnitude of 7.8Mw or 8.1Ms [21]. The BBC reported that nearly three million farm animals have died in fires accidental explosions across the country US between 2018 and 2021.10 billion animals are slaughtered each year in the US. 99% of them are raised on factory farms. An additional 47 billion aquatic animals are killed each year. 18000 animals were killed in Texas [23,41], US which ultimately resulted into frequent intense magnitude earthquakes after 2014-2015 to 2022 [22]. Afghanistan's mountainous northeastern province of Badakhshan, home to a plethora of rare and nearly extinct animals, is seeing an increase in illegal bird hunting. Environmental officials in Badakhshan say uncontrolled hunting of wild and rare birds have substantially increased in the remote province, threatening several key species and pushing some toward complete extinction in 2020 [24]. Therefore, it consequently resulted into an earthquake of magnitude 6.5 on 21 March 2023 struck Badakhshan Province, Afghanistan, with an intermediate depth of approximately 187 km (116 mi) [25].

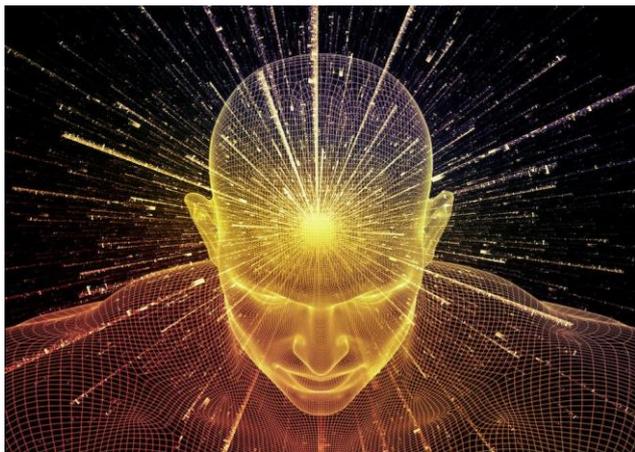
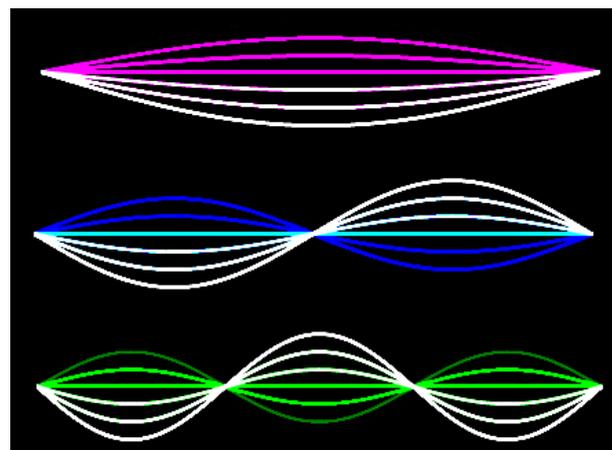
Now, in Bhukampshanti Yantra, The two inner and outer concentric circles about the circle of 8 lotus petals represent the protection from the preliminary subtle waves before actual impact of earthquake. The outer circle represents protection from subtle primary waves whereas inner circle represents protection from subtle secondary waves. The inverted triangle about the centre of Bhukampshanti Yantra represents the direct protection from shock of Hypocentre of earthquake which is perpendicularly downwards to Epicentre of Earthquake, thereby providing subtle protective shield from area surrounding the Epicentre. Many animals have the

sensation of preliminary subtle shock waves of primary secondary waves of earthquake before the actual earthquake about to happen. Bhukampshanti Yantra, the vibrations of mantras and stotras chanted [38] for the installation and energization of Yantra causes diversion of the path of these subtle preliminary waves resulting into deviation of primary, secondary waves away from the region where Bhukampshanti Yantra is situated. Therefore, Bhuwaneshwari Bhukamshanti Yantra is such a powerful protective shielding mechanism which provides subtle enhanced dual protection from initial subtle body waves.

Similarity Table		
Energy Position	Spiritual Symbolism	Scientific Symbolism
1	Sriṣṭi or Creation or Mana shakti	Stationary Waves
2	Sthithi or Preservation or Anand shakti	Lamb Waves
3	Samhara or Destruction or Iccha shakti	Love Waves
4	Tirobhāva / Concealing grace or Kriya shakti	Stoneley, Scholte Waves
5	Anugraha/ Revealing grace or Gyan shakti	Sezawa Waves
6	Janana Shakti or Reproductive power	Rayleigh Waves
7	Para Shakti or Cosmic Energy	Epicentre

Sources: Authors Compilation

Now, we are trying to explain comparative similarities of spiritual symbolisms and scientific symbolisms.

**1) Mana Shakti or Potency for Mind****Stationary Waves**

Goddess Bhuvaneshwari wields the power of creation, represents the mind power (**Mana-shakti**). She is shakti manifest in all of nature; the causer of birth. She is responsible for all forms of creation around us. She manifests herself as the individual souls or pure consciousness in the bodies and in the materiality of all existence. She is responsible for balancing this creation and the life in it [2].

Creativity is the ability of mind. Creativity of all the objects has been arisen through the creative power of mind. Stability is an important crucial property of mind. Cosmic Universal creativity can be balanced by subtle power of mind [2].

Therefore, where mind interacts with multiple thoughts. Mind try to balance itself to become stable while dealing with the thoughts. As similarly mana shakti of mind approaches for higher survival nature of thoughts of creativity.

Mana shakti is itself a power which works for survival of conscious and subconscious strength of mind. This power, together with your imagination, can create success or failure, happiness or unhappiness, opportunities or obstacles. Therefore, Mana Shakti is a power of a being which initiates the working mechanism of other Shaktis [2].

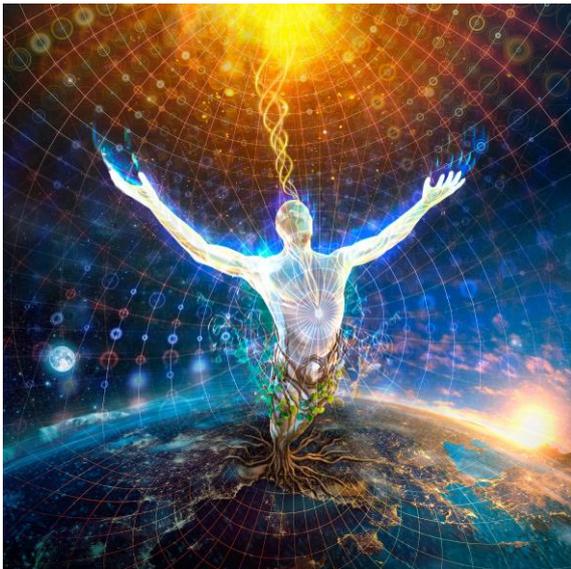
This Mana shakti is entirely in the control of Goddess Bhuvaneshwari. Therefore, this supreme power can control, regulate, destroy Mana Shakti, but it preserves this power for entire beings in the universe, for existence of the universe. Therefore, everything which comes under the working of Mana Shakti is completely regulated by this cosmic embodiment. Stationary waves are related to this Mana shakti, thereby due similar fundamental nature of existence of these waves are in control of this supreme power.

A standing wave, also known as a stationary wave, is a wave that oscillates in time but whose peak amplitude profile does not move in space. The peak amplitude of the wave oscillations at any point in space is constant with respect to time, and the oscillations at different points throughout the wave are in phase. The locations at which the absolute value of the amplitude is minimum are called nodes, and the locations where the absolute value of the amplitude is maximum are called antinodes [7].

Mind power or Mana shakti tries to stabilize mind and bring back to original state. Stationary waves are waves which tend to stabilize themselves irrespective of any different vibrating conditions. Their amplitudes take peak from zeroth value to maximum values representing the nodes and antinodes at specific points on wave. Similarly, Mind exists in different state of thoughts positive and negative, enthusiastic and depressive but in itself it tries to balance via mana shakti.

Peak amplitude of stationary wave remains constant with respect to time at any point of moment which is same represented by mana shakti where mind tries to become stable for each and every moment of longer span. The most common cause of standing waves is the phenomenon of resonance [7]. When mind stabilizes in the mode of resonance with universal frequency, this resonance balances mind into potentially stable state.

Stationary waves are distributed and spatially arranged in different phases of vibrations. As their phase of vibration changes their amplitude frequency-based parameters also deviate. Similarly, Potency for Mind is the cause which makes mind exist in different state of thoughts in different phases of lifetime. Even though, phases of mind are quite random, it tends to stabilize and regulate flow of thoughts in the particular phase. Standing wave stabilizes its amplitude parameters in respective phase of vibration.



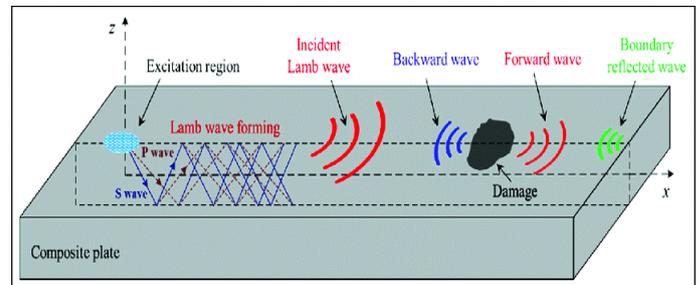
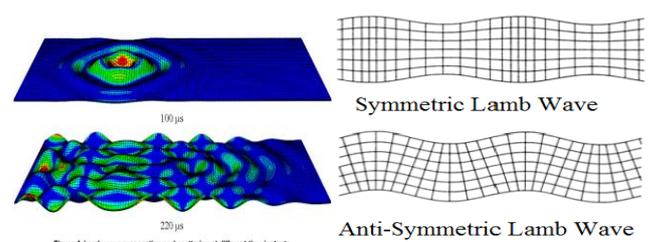
2) Anand Shakti or Potency for Happiness

As preserver, Goddess Bhuvaneshwari is responsible for the continuation of all the worlds and beings. He is the preserver of everything that he creates and manifests. This preserver part of Lord Bhuvaneshwari shakti symbolizes **Anand Shakti** [2].

Ananda Shakti is a Sanskrit term with Ananda meaning “bliss,” “happiness” or “the bliss of wholeness,” and Shakti meaning “the divine feminine creative energy.” In yoga, Ananda Shakti is described as a kind of energy referred to as “Energy of joy.” [2]

Anand Shakti is a power which leads a being to self-realization and self-healing. Anand shakti itself represents self-happiness and self-satisfaction by which both self and universe stay in a vibrant state of happiness. The absolute state of happiness can only be achieved when it is worked by self. If a being is itself not connected to itself, it cannot feel the essence of this Anand Shakti. Self-interacting particles represent Anand Shakti in self-interacting state of vibration. One who pursue selfish desires, while they are not doing anything inherently sinful, will not be able to access the state of higher consciousness that leads to an experience of Ananda Shakti. Experience of Anand shakti can be perceived by self-realization for happiness of the entire universe [2].

This Anand shakti is also another power under Goddess Bhuvaneshwari. Therefore, controlling and regulation of this power by supreme embodiment causes the existence of Anand Shakti. Lamb waves represent the Anand shakti via self-interaction with self and self-interaction with universe by the symmetric and antisymmetric mode of interactions



Lamb Waves

Lamb waves propagate in solid plates or spheres. They are elastic waves whose particle motion lies in the plane that contains the direction of wave propagation and the direction perpendicular to the plate. In 1917, the English mathematician Horace Lamb published his classic analysis and description of acoustic waves of this type [8].

When incident Lamb waves propagate in a media with a nonlinear mechanism such as a fatigue crack, nonlinear components, including higher harmonics due to the primary mode self-interactions and modulations due to mutual interactions, are generated from the nonlinear region. Only symmetric secondary wave fields can be excited for symmetric–symmetric mode mutual interaction or antisymmetric– antisymmetric mode mutual interaction, while only antisymmetric secondary wave fields can be excited for symmetric–antisymmetric mode mutual interaction [9].

Here, symmetric mode represents a state of being self-explored, where antisymmetric mode represents state of exploring universe. For welfare of universe through self, a being in universe being self should be connected with the preserver part of universe which is similarly reciprocated by lamb waves in such a way that antisymmetric mode means state of Anand shakti exists when there is mutual interaction between self (symmetric mode) and universe (antisymmetric mode). The interactions (both self-interactions and mutual interactions) of two Lamb modes of the same nature (symmetric or antisymmetric) leads to secondary wave fields that are symmetric modes, while interactions between two modes of opposite nature lead to secondary wave fields that are antisymmetric modes [9].

If both of two entities stays in interaction with their own state, it leads to symmetric interacting mode. Therefore, this Anand shakti exists for self, universe and self with universe.



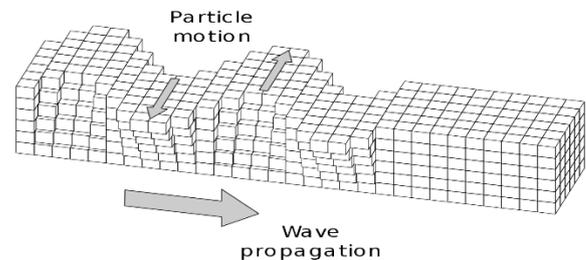
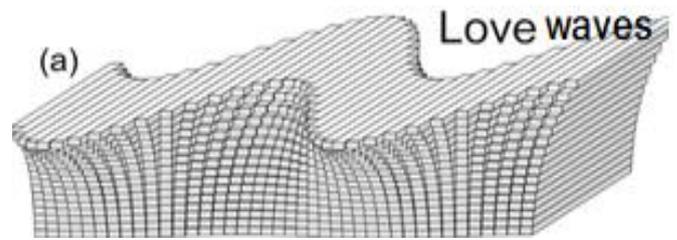
3) Iccha Shakti or Potency for Inertia

Destroyer part of Goddess Bhuvaneshwari is battle-ready part. Her main function is destruction (samhara). She represents the element fire, the power of desire (**iccha-shakti**) [2]. Iccha Shakti is the essence of vibrant health, feeling that meaningful and valuable life. Presence of Iccha Shakti, results energy to engage with life in meaningful ways. Iccha Shakti empowers you to seek growth and change and to find purpose and fulfillment in everyday life [1]. Iccha Shakti is the foundation for a conscious life. When Iccha Shakti is directed inwards, it empowers you to raise your consciousness, to experience yourself as part of something greater [1].

Ultimately, Iccha Shakti is the fuel that powers your spiritual growth and the awakening of consciousness. Another meaning of Kriya Shakti is an outward physical manifestation of awakened kundalini, such as a spontaneous body movement related to Kundalini energy flow. [1]

The Iccha Shakti or willpower is most powerful tool for achieving the human goal. It is the Strong force of interaction which causes willpower enhancement which further makes a being successful or leads to achieve the goal. Stronger Iccha shakti leads to intensive interaction. Iccha shakti works stronger for similar entities, whereas become weaker for naturally opposite entities. For example, a person aspires to achieve a goal, so he will always look forward for the parameters which are concerned with his desired goal. He will not look for the subjects which are not really related to his goal.

Iccha Shakti is one of the important powers of Goddess Bhuvaneshwari which is closely related to fundamental natural working and impacts of Love waves. Love waves are naturally the fastest wave among all surface waves. They have the strongest intensity to destruct similarly it is observed for Iccha Shakti that intense will power can destruct or protect intended entities. Therefore, these waves are under control of Goddess Bhuvaneshwari via Iccha shakti thereby getting protection from destruction causing due to Love waves.



Love Waves

In elastodynamics, Love waves, named after Augustus Edward Hough Love, are horizontally polarized surface waves. The Love wave is a result of the interference of many shear waves (S-waves) guided by an elastic layer, which is welded to an elastic half space on one side while bordering a vacuum on the other side. In seismology, Love waves (also known as Q waves (Quer: German for lateral)) are surface seismic waves that cause horizontal shifting of the Earth during an earthquake [10].

Augustus Edward Hough Love predicted the existence of Love waves mathematically in 1911. They form a distinct class, different from other types of seismic waves, such as P-waves and S-waves (both body waves), or Rayleigh waves (another type of surface wave). Love waves travel with a lower velocity than P- or S- waves, but faster than Rayleigh waves. These waves are observed only when there is a low velocity layer overlying a high velocity layer/ sub-layers [10].

Love waves are the strongest and most destructive waves among all surface waves. By strong intensity of interaction Love waves either destruction or stabilization can happen similarly if will power is positive, contributes to creation, if negative, results to destruction. [2] Strong interaction of thoughts in mind via Iccha shakti represents the strong interaction of Love waves with ground.

Love waves travel faster compared to all specialized classes of surface waves. These are the most destructive waves among all seismic waves. Third Power of goddess Bhuvaneshwari represents the destruction power and Iccha Shakti. These love waves with higher intensity can cause large amount of destruction whereas lesser intensity will result lesser destruction. The complete functioning of love waves is entirely related to the Iccha Shakti or will power.



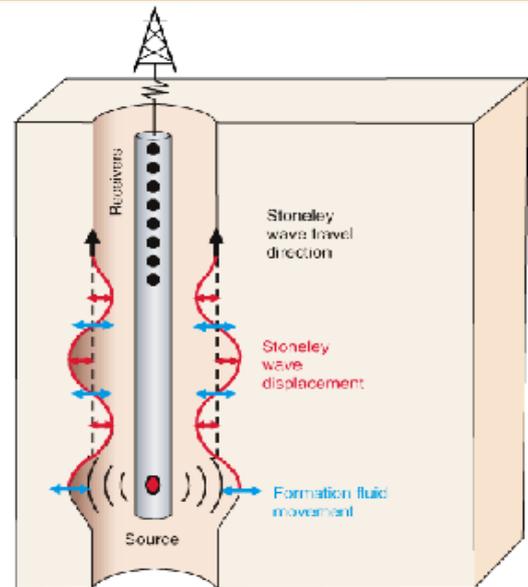
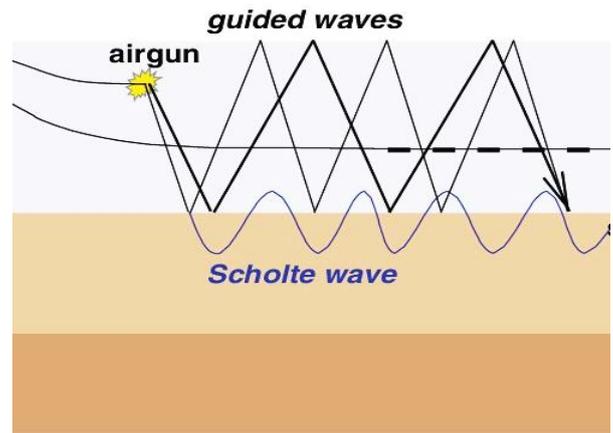
4) Kriya Shakti or Potency for Action

Fourth power of Goddess Bhuvaneshwari, Obscuring grace, the power which hides the truth from souls, thereby permitting experience, growth and eventual fulfillment of destiny. She is who symbolizes the principle of ignorance

As the concealer, Shakti casts the net of delusion (maya) upon the whole creation and keeps the beings deluded, so that the order and regularity of the worlds are not disrupted. Because of her deluding power (maya-shakti) beings cannot perceive her or realize their own essential nature, which remains suppressed or hidden behind a veil of impurities [2].

She is the suppressor who conceals behind a veil of delusion. In the body, she represents egoism, the power of action (**Kriya-Shakti**), and the element of air. She does not let the living beings perceive their true nature or become aware of her presence [2]. Kriya Shakti which is responsible for cause of any movement or action in entire universe. Without this Kriya Shakti no object in universe can have mobility or motion.

Kriya shakti of this cosmic power represents the 4th triangle in Bhuvaneshwari yantra, is an illusive power in universe which does not appear with its true nature. Similarly, when two different media interfaces come in contact with each other, these Stoneley and Scholte waves exist at location of boundary contact of two media. Further when their position goes away from the contact boundary their intensity decreases exponentially. Action of existence of adjacent alignment of two different layers of media resulted into reaction of formation of these waves. Also, action of waves getting away from contact boundary causes reaction of diminishing intensity and amplitude of these waves. This concealing power of Goddess Bhuvaneshwari is representing effect on waves intensity due magnitude distance separation between contact boundary and these waves via representation of Kriya Shakti.



Scholte and Stoneley Waves

A Stoneley wave is a boundary wave (or interface wave) that typically propagates along a solid-solid interface. When found at a liquid-solid interface, this wave is also referred to as a Scholte wave.[11] The wave is of maximum intensity at the interface and decreases exponentially away from it [11,12].

A Scholte wave is a surface wave (interface wave) propagating at an interface between a fluid and an elastic solid medium (such as an interface between water and sand). The wave is of maximum intensity at the interface and decreases exponentially away from the interface into both the fluid and the solid medium. Both waves are type of waves which undergo transition from one medium to another medium. Scholte, Stoneley waves are in subclass of Rayleigh wave, still it takes peak when it comes closer to surface boundary of solid -liquid, solid-solid media interface. Increase in the fracture extension length between the boundaries of the 2 media results in exponential reduction of the relative amplitude of Stoneley wave [13,14].

Kriya shakti does basically exist for the phase change of any object. Phase change of these waves in two media therefore caused control of these waves under Kriya shakti or Potency for inertia



5) Gyan Shakti or Potency for Knowledge

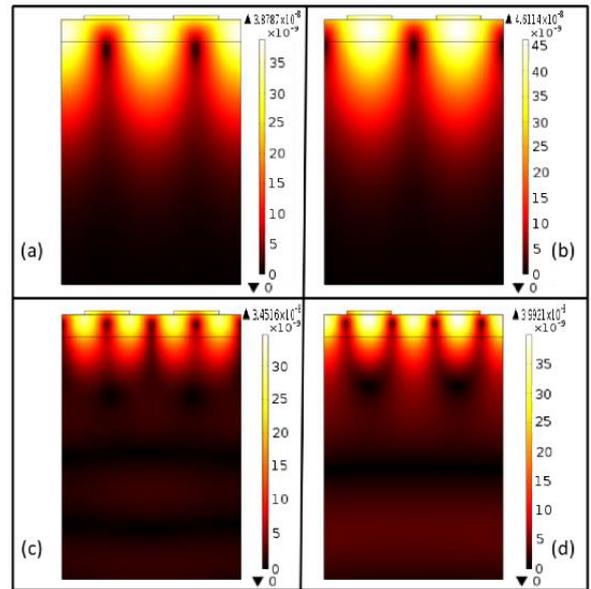
Revealer form of Goddess Bhuvaneshwari, the eternal being, who manifests spontaneously (sadyojata), and who is described as the granter of grace, leader of delight (nanda) and enjoyment (Sunanda, revealing grace (anugraha), which grants knowledge and severs the soul's bonds [2].

She represents the power of liberating knowledge (**Gyan Shakti**), and the element of space. As the revealer of truth, source of knowledge, and grace [2]. Shiva is responsible for the liberation of beings. He is the master of liberation. None can achieve liberation without his grace. In Shaivism, individual effort and good karma are important, but the grace of Shiva is even more important to achieve liberation, for which the path of knowledge is the prescribed method [2].

Revelation (Anugraha) power of Goddess Bhuvaneshwari represents the truth as well as supreme knowledge. She is the one responsible for providing liberation to all the beings. Without her blessings attaining inner peace and liberation is not possible. In order to attain liberation, one must do good karma and worship shakti with faith and devotion.

Power is based on knowledge and makes use of knowledge; on the other hand, power reproduces knowledge by shaping it in accordance with its anonymous intentions [1]. Power (re-) creates its own fields of exercise through knowledge. The weak force plays a greater role in things falling apart, or decaying. Gyan Shakti, utilizes wasted energy for achieving the human goal with perfection [1].

Gyan Shakti is continuous unstoppable infinite transition of knowledge from higher potential to lower potential. Gyan shakti increases and strengths when transfer of knowledge happens between two potentially different entities. Transfer of knowledge from higher potential to lower potential is gradual and pro-longed process.



Mass Loading Sensitivity of Sezawa Wave Mode-Based Surface Acoustic Wave Sensors

Sezawa Waves are higher order SAW propagating on layered SAW devices where the acoustic velocity of the substrate is higher than that of the piezoelectric thin film deposited on it. Sezawa waves are the weakest waves among surface waves. The mass loading sensitivity of Sezawa waves is two to eight times higher compared to Rayleigh waves propagating on the same SAW device [16,17].

Similarly, Gyan Shakti is a sensitive power in the universe. The flow of Gyan shakti from one potential to another potential is fundamentally sensitive in nature. All knowledge in the universe cannot be known and realized in a single day. It takes time, patience, and dedication to attain knowledge. Gyan Shakti being slower and gradual process, but it can be disturbed due to even fraction amount of disturbance.

A SAW device employing Sezawa Wave mode shows a decrease in resonance frequency for an increase in mass loading at the surface and exhibits significant mass loading sensitivity [17]. These Sezawa Waves reduce exponentially after travelling further distance from original source of emission where in spirituality, the Gyan is falling in person from the universe or the Guru [1]. The mass loading is nothing but the interruption in the flow of Sezawa Waves which causes into decrease in its amplitude intensity. When two knowledge potentials happen to exist close to each other transition rate of knowledge is always sensitive. Therefore, Absolute resonance of knowledge between two entities can be disrupted due to even small amount of interruption.

Therefore, Gyan Shakti and Sezawa Waves are representing each other by such similar fundamental characteristics.

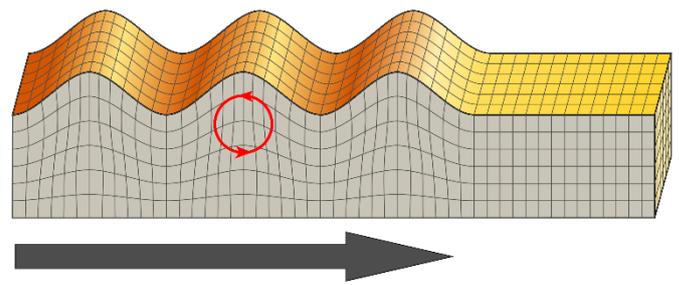


6) Janana Shakti or Potency for Procreation

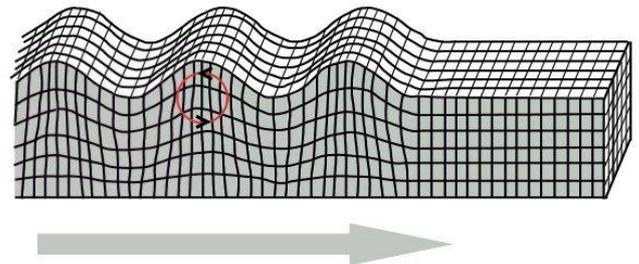
The 3rd eye of Goddess Bhuvaneshwari represents the **Janana shakti**, a power which reproduces living beings and every matter in universe. Everything in the entire universe is created by the force of Mana Shakti, but the creation is needed to be propagated further in the timeline scale. If this propagation does not happen, the entire universe cannot exist for its complete duration of life. Janana shakti is the cause for continuous unbreakable chain of generation of each entity in the universe. Therefore, Janana shakti reproduces an entity from its parental entity thereby causing continuous propagation of generations [4,5].

It is the Janana shakti or reproductive power which provides the mother invincible ability of giving birth to a child. Mother gives birth to a child by suffering an extremely intense amount of pain, but the birth of the child becomes successful. Janana shakti is itself the power which causes the successful propagation of one entity from its parental entity.

Third eye Lord shiva causes the destruction of the universe whereas third of the eye of goddess bhuvaneshwari causes reproductive propagation of universal entities. Both the shiva and shakti are fundamental energies in the universe which are resulting in continuous, balanced flow of the universe. These shiva and shakti cosmic powers exist in universe in such a way that they balance consequences of each other thereby which results in a smooth flow of the evolution of the universe.



Rayleigh Wave



Rayleigh Waves

Rayleigh waves are a type of surface acoustic wave that travel along the surface of solids. Rayleigh waves are part of the seismic waves that are produced on the Earth by earthquakes. Rayleigh waves are a type of surface wave that travel near the surface of solids. Rayleigh waves include both longitudinal and transverse motions that decrease exponentially in amplitude as distance from the surface increases. There is a phase difference between these component motions. Rayleigh waves have a speed slightly less than shear waves by a factor dependent on the elastic constants of the material [18].

SAWs (Surface Acoustics waves) such as Love and Rayleigh waves tend to propagate for much longer than bulk waves, as they only have to travel in two dimensions, rather than in three. Furthermore, in general they have a higher velocity than their bulk counterparts [39].

Rayleigh wave is the slowest and most ripple producing wave in all surface waves. It is a gradual and progressive wave in such a way that it propagates itself further by restoration of energy in its previous packet of wave energy. Similarly, in case of Janana shakti, parental entity has to restore the energy and utilize it for the upcoming generation of life. That energy which is restoring is itself the janana shakti which is continuously transferred into one generation to next generation for the complete time up till entire universe exist.

Janana shakti is slow and gradual process. Every entity in the universe is not created instantly after the birth of its parental entity. It takes gradual time to propagate the further chain of evolution. Similarly, Rayleigh wave propagate and conserve the energy for further propagating transfer of the next wavelength consisting of crest and trough.



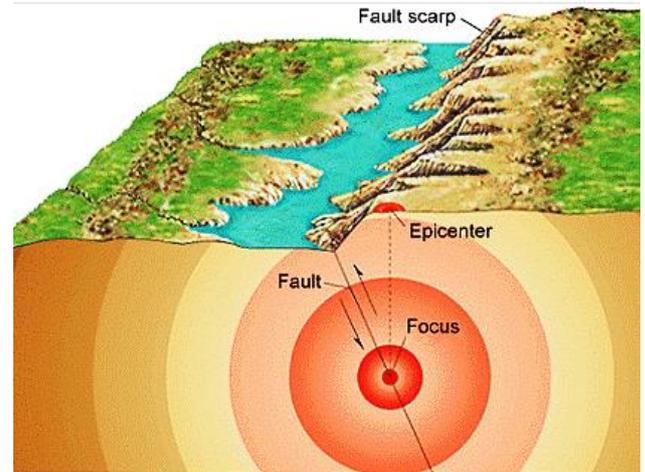
7) Para Shakti or Cosmic Energy

Para Shakti is pure consciousness, the substratum or primal substance flowing through all form. It is Śiva's inscrutable presence, the ultimate ground and being of all that exists, without which nothing could endure. Para Shakti, "Supreme Energy," is called by many names: silence, love, being, power and all-knowingness. It is Sat-chidānanda—existence-consciousness-bliss—that pristine force of being which is undifferentiated, totally aware of itself, without an object of its awareness. It radiates as divine light, energy and knowing [33].

Sir John Woodruff said, "According to the theory of physical science in Hindu Scriptures, Shakti is everything. It is the same energy which is occupied in unlimited form in the matter of the universe. Along with this science, with the help of that power, if we understand human psychology, then we can understand that power as satchit and happiness."

Impulse of creativity brings forth a pulse, or Shakti, called Para Shakti, which is one thousandth of Parasiva's brilliant radiance. Next, another Shakti, called Adi Shakti, arises as a thousandth of Para Shakti. Next, Icha Shakti manifests as one one-thousandth of Adi Shakti. Then Gyana Shakti arises as one tenth of a hundredth of Icha Shakti. Finally, Kriya Shakti arises as a thousandth of Gyana Shakti. Each Shakti is less subtle than the Shakti from which it arises. These five Shaktis are all transcendental and formless. [2,3]

Out of Para Shiva ever comes Para Shakti, the first manifestation of mind, super-consciousness or infinite knowing. Siva's Shakti is the sustaining power and presence throughout the universe. This unbounded force has neither beginning nor end. Without desire, knowledge, action, it is impossible to achieve goal. All these three powers fully co-exist within Para Shakti. Without Para Shakti, the entire universe is actionless.



Epicentre

The epicentre, or epicentrum in seismology is the point on the Earth's surface directly above a hypocentre or focus, the point where an earthquake or an underground explosion originates. During an earthquake, seismic waves propagate in all directions from the hypocentre. Seismic shadowing occurs on the opposite side of the Earth from the earthquake epicentre because the planet's liquid outer core refracts the longitudinal or compressional (P-waves) while it absorbs the transverse or shear waves (S-waves). Outside the seismic shadow zone, both types of waves can be detected but, because of their different velocities and paths through the Earth, they arrive at different times [19].

Epicentre is centre which is causing the release of surface seismic waves. Epicentre is absolute truth for movement-based release of seismic waves in crust of Earth, symmetrically para shakti is absolute power which conjoins all powers of Goddess Bhuvaneshwari by co-existing within them, thereby causing the effects of expansions and contractions of the waves in interior of Earth [2].

This epicentre of earthquake works in nature as anti-gravity. In case of gravity, objects are absorbed in towards centre of gravitation whereas epicentre causes repel of seismic waves away from centre. Para shakti works for both gravity and anti-gravity based fundamental phenomena. This para shakti consist both the effects of gravity inward as well as outward. Para shakti is an energy, which is availing completely, without it nobody can able to do something. This occurrence and creation of epicentre happens irrespective of anyone's belief in it. Para shakti is itself the power which works being independent of anyone's thoughts.

Therefore, Para shakti is also cause for control over seismic effects on earth which ultimately leads to overall control over seismic waves, thereby protecting and shielding the respected devotee from impacts of seismic waves.

4. CONCLUSIONS

- The Bhuvaneshwari Bhukampshanti Yantra is very scientific and powerful geometrical figure.
- The defining energies in Bhuvaneshwari Yantra are not only spiritual or virtual thing but this Bhuvaneshwari Yantra is very near to the universal scientific tool.
- Each part of Bhuvaneshwari Yantra is fully energized by cosmic energy.
- The concept of Seismic waves is parallel to the spiritual interpretation of 6 equilateral triangles in Bhuvaneshwari Yantra.
- All parts of the Bhuvaneshwari Yantra preserve potential energy or Shaktis, which are represents the protective control over subtle effects of preliminary subtle seismic waves through the crust of earth.
- In this paper, we are approaching for conclusion that the Bhuvaneshwari Yantra is not only a spiritual geometric mechanism but also, it is purely scientifically structured and engineered with geological point of view which is related to sciences like geological seismic sciences.

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