

LOGOS IN PHILOSOPHY, RELIGION AND SCIENCE

1. Introduction

The purpose of this paper is to explore the concept of *Logos* in philosophy and theology, not restricted to Greek philosophy, but as it is found in the mystical philosophies of the East as well as in modern physics. The main argument of this text would be that the metaphysical concept of Logos as found in ancient Greek philosophy, leads us to a view of the universe (world or *Kosmos*) which is very similar to the views held by mystics as well as by the modern physicists. The parallels to the ancient Greek concept of Logos as seen in the fragments of Heraclitus appear not only in the *Vedas* of Hinduism, in the *I Ching*, or in the Buddhist *Sutras*, but also in modern physics. The contents of the paper aim at showing a striking agreement and an essential harmony between the ancient Greek philosophy, the Eastern philosophical and religious thought and modern physics. The two basic themes of the concept of Logos "the unity and interrelationship of all phenomena" and "the intrinsically dynamic nature of the universe" can be found to a great degree in Eastern Wisdom as well as in modern physics. In spite of differences amongst the various schools of eastern mysticism, "they all emphasize the basic unity of the universe which is the central feature of their teachings". All believe in the cosmos as "one inseparable reality forever in motion, alive, organic; spiritual and, materialistic at the same time."

With the hypothesis that the concept of Logos, as seen in ancient (pre-Socratic) Greek philosophy, has parallels in Eastern religious and philosophic thought as well as in modern science, I shall, for clarity and simplicity, examine Logos, as discussed in philosophy, in religion, and in science, in separate sections of my paper.

2. Logos in Philosophy

2.1 The inquisitiveness to know the world is bound to be as old as mankind is. The earliest, pre-rational or irrational mythical explanations of the world led to many unsolved problems and to dissatisfaction. With the development of reason, new forms of explanations emerged: "generalizable and systematic rather than *ad hoc*, naturalistic rather than having recourse to supernatural gods and powers, and backed by arguments open to inspection instead of assertions based on authority or mere durability."¹ In light of this emergence of a strong desire for a rational explanation of the perplexing problems, the meaning and theory of Logos, perhaps for the first time, is discussed, by the pre-Socratic philosophers "who were '*Phusikoi*' (from which comes the world physics), the speculators on the working of nature."² The concerns of ancient Greek philosophy centered on various philosophical problems, one of which was under the heading of permanence and change. In order to have an overall and ultimate explanation for the world, the search for something 'stable behind the restless world', something that 'binds the plurality of objects and diversity into one permanent unified cosmos was a necessity. The Greek word '*Kosmos*' (from which we derive cosmos) implies a universe which is ordered and beautiful in arrangement, and therefore in principle capable of explanation.³ With this introductory remark let us deal with the meaning concept and theory of Logos in philosophy, specially in Greek philosophy.

2.2. *Logos* -the Term: Logos is one of the main concepts of Greek-philosophy - "a term whose original meaning was universal law."⁴ "Logos in Greek and Hebrew means Metaphysics, the

unifying principle of the world.”⁵ It is a common term in ancient philosophy and theology “expressing an idea of immanent reason in the world, under various modifications.”⁶ Though the idea of Logos, in one form or the other, is reflected in Indian, Egyptian and Persian system of thought, “it was developed mainly in Hellenic and Hebrew philosophy.”⁷ Before we examine the meaning and development of this concept let us note Logos in its clear meaning as conceived and used by some of the philosophers.

The Greek Heraclitus held that “the world is animated and kept in order by Fire - this fire is the Logos. It is the power of order in the world and the power itself. It thus became the unifying feature of the Heraclitean system.”⁸ Heraclitus spoke of Logos in the sense “when he said that everything proceeds according to Logos, which is eternal, universal and essential”,⁹ the idealists (Hegel and others) wrongly regarded the Logos of Heraclitus as universal reason. Plato and Aristotle understood Logos as “a Law of being and principle of Logic.”¹⁰ Amongst the Stoics the term “Logos, denoted the law of physical and spiritual worlds in so far as they merged in a pantheistic unity.”¹¹ “To them God was immanent in the world, its vitalizing force, and God as the Law guiding the universe they called Logos; with the additional idea that all things develop from this force, it is called spermatikos Logos.”¹² Philo of the Judaic-Alexandrian school (1st Cent. A. D.) developed the doctrine of Logos as “a creative divine force (reason) acting as mediator between God and the created world and man.”¹³ He hit upon the Logos as “a union between the systems, retaining qualities of Stoic-logos and the Hebrew Logos.”¹⁴ We find Logos in a much restricted form in the system of emanations of Neoplatonism, in which “Logos was identified with Christ....Hegel in his philosophy described Logos as an absolute concept.”¹⁵ In oriental philosophy concepts analogous to Logos are *Tao* and in a certain sense *Rta* and / or *Dharma*.

The term Logos, in our final conclusion, means a law which is eternal and universal. But at the same time the word Logos has

more than one meaning. Even in the days of Heraclitus, i.e., even in Pre-Socratic period of ancient Greek philosophy, the word 'Logos' was *polysemic*, i.e., covered a broad range of notions which were closely linked in the Greeks' minds and therefore needs different words to be translated into modern English.¹⁶ Logos, thus can mean 'word', 'speech', 'story', 'narration', 'argument', 'teaching', 'count', 'calculation', 'relationship', 'proportion' etc. However, the philosophic meaning of the term Logos "can best be expressed by the word Law understood as an inner essential connection of things and phenomena."¹⁷

2.3 The Hellenic Logos : As earlier stated, we have noted that the meaning and theory of Logos developed in Hellenic and Hebrew philosophy in ancient periods in the west. Let us first see the stages of development of the thought in Hellenic philosophy : Heraclitus, the Stoics, Philo and the Neoplatonic.

(A) Heraclitus is a figure who stimulates great interest because of his ideas and his method in presenting his ideas. His central problem was that of 'reconciling change and constancy.' Heraclitus' famous view is that everything is in flux; everything is a process; there is no being, only becoming. "Things come to be and pass away under the influence of a tension of opposites; if some quality exists, then so must its opposite. The only factor in the world order not subject to change is the Logos, an objective overall controlling force on the processes which determines the nature of the world, which can be known only to the limited extent to which our soul is part of the divine Logos... Sometimes, Heraclitus speaks of the Logos in the abstract terms of controlling law of measure and proportion, at others it is apparently identified with the cosmic fire."¹⁸ For example, he points out that we can not step in the same river twice since the water is in constant flow, nevertheless we identify it as the same river; 'the being of the river is maintained in its becoming.' The Logos refers to a rational law whereby the existence of a thing is maintained. "God enters Heraclitus' cosmology as embodying all opposites, and as the fire which is the reality

behind appearance acting on the world in accordance with the Logos, which maintains an equal proportion of opposites, so producing all things.”¹⁹

Logos is the central notion of Heraclitus’ philosophy and to him Logos means not only Law, but also fire, mind, unit... etc. In fact, Fire as conceived by Heraclitus is characterised by its own Logos. His “fire :gold”and“Logos: city law” similes clearly show that he understood fire and Logos as two different aspects of reality: “Fire represents its qualitative and variable nature, Logos, its structural stability, the former stands for change, the later for its proportion.”²⁰

Heraclitus taught that ‘we inhale the Logos by breathing. He says “when man is asleep, his reason departs, and when he wakes up it returns so that his soul is like coals or amber which glow brighter when brought near the fire and fade when removed from it.” It is indeed a worth noting characteristic to see ‘the affinity of the soul to the Logos and Fire with life and knowledge’ in Heraclitus. He conceives soul as a modification of single living ‘nature’. “Drawing in, as it were, its Logos, the soul communicates with this ‘nature’ and cognises it to the extent to which it assimilates to its Logos.” (B.55) The soul in Heraclitus, “is a part of the universe which is everlasting Fire and Logos.” On the other hand, “the thinking faculty is common to all” (B.113) and “all men have the capacity of knowing themselves and acting with moderation” (B 116). “The Logos is ‘common’ and everybody can grasp it and attain wisdom -however according to fragment 2, “most men live as if they had a private understanding of their own.”

In our final conclusion of Heraclitus’ concept and theory of Logos, we can say that the Logos in Heraclitus is the rational necessity of being, “and it is intelligence, ‘nature’s word’ addressed to man, though he may be too stupid to understand it. But what does nature say when you have listened, not to me but to the Law (Logos), it is wise to agree, that all things are one.”.(B.50) Although this Logos exists forever, “men are always incapable of

understanding it, both before they hear it and when they have heard it for the first time." (B.50) Heraclitus' concept of universe is that it is "a two-story universe". One is the world which is material with its fire, its conflicts and opposites. But there is another-with the universal law which matter obeys and yet is beyond the material: "The name by which the laws of nature have come to be known is the Logos. Men are associated with it, he declared, yet they are separated from it. It is a unity, for all laws are related."²¹ Finally, we see in Heraclitus' philosophy the all-encompassing role of Logos: "one divine law governing, the world.... the Logos."

(B) The Stoics : Compared to the other schools of philosophy, Stoicism is less Greek, as the early Stoics were mostly Syrian and the later ones mostly Roman. In spite of being not typically Greek, its most fitting place, as chosen by Zeno (340-265 B.C.) the founder of the school, was Athens. "Zeno was a materialist, whose doctrines were, in the main, a combination of Cynicism and Heraclitus...."²² We should know that the main doctrines with which the Stoics were concerned were cosmic determinism and human freedom' and their main importance was ethical. Objectively the Stoic philosophy is aiming at "the true end of life which is freedom from the disturbing desires and from the pressure of external things, and a discipline of the mind that shall enable it to find satisfaction within itself."²³ To the Stoic his virtue is an end in itself. And even then, there were two respects in which Stoics' teachings bore fruit; these were, on the one hand, a theory of knowledge, and on the other, the doctrine of natural law and natural rights. "Greek logic was wholly deductive, and this raised the question of first premises. First premises had to be, at least in part, general, and no method existed to prove them. The stoics held that there are certain principles which are luminously obvious, and the basis of deduction."²⁴

To the Stoics, 'Reality is an organic whole, an intimate combination of form and matter, soul and body, through which one universal life pulsates.'²⁵ This connected whole is called indifferently God, or nature's Logos. Man is a part of the universal

nature and is in 'conformity to nature.' "The world of material nature is the sole reality; but it is not dead matter. It is a living being, informed by a rational soul -it is God. This soul of the world, the Logos, or rational principle is everywhere present as a more active and subtle kind of matter...." ²⁶ Tertullian says that, according to Zeno, God runs through the material world as honey runs through a honeycomb. According to Diogenes Laertius, Zeno held that the General Law, which is Right Reason, pervading everything, is the same as the Zeus, the Supreme Head of the government of the universe; God, Mind, Destiny, Zeus are one thing. ²⁷ The whole concept is in accordance with and in agreement to Heraclitus' concept of Logos. Logos doctrine "is a capital element in the system of the Stoics. With their teleological views of the world they naturally predicted an active principle pervading it and determining it. This operative principle is called both Logos and God." ²⁸

(C) Philo Judaeus (20 ? BC - 54 ? AD). Philo was a contemporary of Christ. Though he was orthodox in religion, he was a Platonist in philosophy. He was much impressed and influenced by the Stoics and Neo-pythagoreans. Philo's doctrine is the outcome of three forces - Platonism, Stoicism and Judaism. Before we note Philo's doctrine of Logos, let us briefly indicate the nature of the problem that Philo was dealing with.

Scriptures already described the conception of God and asserted that God is unknowable, God is supersensual and has no qualities, he can only be apprehended through revelation. This is what the scriptures said, running counter to all philosophical traditions of Greece. In Greek philosophy Reason is regarded as Divine and is identified with Truth, Beauty and Goodness. In order to overcome these apparently inseparable difficulties, "Philo resorts to what was in fact nothing but a trick: taking advantage of the polysemy of the Greek term Logos meaning both Law and Word, he identifies the rational principle of the universe, the law of nature becomes God's word enabling Philo to reconcile, as if by magic, the Scriptures and Hellenistic philosophy, mystic revelation and inquisitive thought." ²⁹

Philo describes Logos as the, 'inherent law' and the 'soul of the world,' as the "universal reason that governs the cosmos in the same way as man's mind controls the movements of the body. The world and man are respectively the Macrocosmos and Microcosmos. By his rational soul man assimilates to divine Logos, and by his body, consisting of elements, to the cosmos as the abode or body of Logos."³⁰ Philo asserts that "everyman carries a particle of the divine Logos and that the Logos moves in a circle called fate by most people." In the religious philosophy of Philo, we find that God played a much greater role. The highest layer next to God Himself contains Ideas, then comes the Logos (the totality of ideas), The Divine Spirit (later to be called the Holy Ghost) the Angels, Man, and finally Matter."³¹ Philo's doctrine of Logos is based on Stoic and Pythagorean concepts mixed with the Biblical image of God as creator, in terms of both Greek philosophical doctrines and the Hebrew Old Testament. Philo's doctrine of Logos is, thus, a union between the systems.' Philo's Logos, at times, is independent of God (because God's remoteness); at other times the Logos is simply the Reason of God (because Philo's monism obliges God to act in the world through His mediating force).³²

Philo's doctrine of Logos preserves the monotheistic idea and yet afforded the description of the Divine activity in terms of Hellenic philosophy. He was thus "able to make Logos theory a bridge between Judaism and Greek philosophy."³³ Philo's conception of Logos is not only "the principle of reason informing the infinite variety of things, and so creating the World-Order" but is also the divine dynamic, the energy and self revelation of God.

(D) Neo-platonism: Plotinus (AD 204 - 269) the last of the great philosophers of antiquity, born in Egypt and lived in Rome, is considered to be the founder of Neoplatonism. Since Neoplatonism is a new version of Plato's philosophy it gives a new interpretation to Plato's theories regarding change and permanence and God. The basic principles of neo-Platonism are "the idea of integration of Platonic philosophy and Aristotelianism, criticism of the Stoic

doctrine of corporeal soul, and the doctrine of unity of intelligence which divides only by descending into mortal bodies, however, diminishing or losing its identity."⁴⁴ We find the neo-Platonists' interpretation of Logos to be somewhat similar to Philo's interpretation. The neo-platonistic doctrines, i.e., 'The Doctrine of God', 'The relation of God and the world', 'The Process of Salvation' clearly reflect that it is a religious philosophy which connects itself closely with the consciousness of evil and the felt need for salvation."⁴⁵ However, in spite of a long discussion about the One, the Soul, the Mind, body, matter etc. Logos is used as a term identifying Christ. Logos should thus be interpreted as 'reason' in this connection. According to neo-Platonism, one reveals itself through emanation in the ideas of the Nous (Mind or Spirit) which then manifest themselves in the World Soul's Logos.

In our final conclusion of the stages through which the philosophical meaning of the term Logos evolved, right from Heraclitus till Plotinus and the eve of neo-Platonism, we see the concept of Logos as Law, Reason, God, and Christ; Logos, which was just a solution to Heraclitus' doctrine of change was the only law that passed through Platonism, Stoicism, Judaism and neo-Platonism, and which finally culminated in a monotheistic idea, the principle of reason, divine, dynamic, and an energy source.

Logos, the only law that is eternal, universal and essential, formed a 'Law of Being and a Principle of Logic. It became a 'law of physical and spiritual world (Stoics), a creative divine force-reason acting as mediator between God, world and Man (Philo), and an inevitable principle in the system of emanations (neo-platonism). We find that Logos, a Greek thought in its earliest stages, dialectically develops into a theory that combines Greek Reason and Jewish morality, the two most powerful sources of western civilization. Logos, a thought which was discussed from Heraclitus of Pre-Socratic Greek Philosophy till the fifth century A. D. (the eve of neo-Platonism), is developed into an idea which is both an end and a beginning: an end as regards the Greeks, and a beginning

as regards Christendom. Logos proceeds to Catholic and Religious philosophy which we will discuss under Logos in Religion.

3. Logos in Religion:

I will now discuss Logos in Christian theology (with reference to West) and in Eastern Mysticism with reference to Hinduism, Buddhism, Taoism, Zen etc. Let us see, first, Logos in Christianity.

3.1. In Christianity: In the Old Testament we come across a principle called the "Wisdom of God" active in the world. The idea, of the "world of God", equally active in the world, is also a very ancient Hebrew concept. We have already seen how Philo uses Logos as a synthesis between Judaism and Greek thought. In the Fourth Gospel as well as some other books of the New Testament, Logos is discussed with heavy influences from, yet not having the same exactly content as that of, Philo. In the Gospel, the Logos, which is the eternal God, took flesh and became man, in time. "The Logos is Jesus.... The intermediate Logos has been replaced by a Logos that is both God and man".³⁶ While narrating the life of a person historically, John adopted the Philonic idea of Logos: "Its eternal existence, its relation to God, its creative, illuminative and redemptive activity" However, he also made some modifications. The profound modifications of Logos by John in Gospel are; (1) the Logos becomes fully personified, (2) the Spiritual life, resides in the Logos and is communicated by him to men, and (3) the idea of Logos as reason becomes subordinate to the idea of Logos as world, the expression of God's will and power, divine energy, life, love and light. It becomes very clear that the author assumes the familiarity of the idea of Logos in Christian theology and the world. Sufficient references are available to note that the early Christian writers held that Logos or Word emanated from "personified reason", and that the Logos was an emanation from "God, Reason and Truth". God produced his own nature a rational power. His agent in creation, who now became man in Jesus. With Titian, "The Logos is the beginning of the world, the reason that comes into being as the sharer of God's rational power." With

Theophilus, "the Logos was in eternity with God as the counselor of God : Logos a part of Himself." With Hippolytus, the Logos, produced of God's own substance, is both the divine intelligence that appears in the world as the Son of God, and the idea of the universe immanent in God." In relation to God this Logos, or Son was a copy of the original. Nothing very essential or substantial to this has been added to the doctrine of Logos, in the later development.

3.2. Logos in Eastern Mysticism: In Eastern Mysticism, at least with reference, to a higher cosmic unity, we will discuss only the major religious traditions i.e. Hinduism, Buddhism, Chinese thought, Taoism, and Zen. Let us see what each has to reveal as exactly the same or as parallels to the Greek Concept of Logos.

(A) Hinduism : 'Is a name given to the religious, social political and philosophical beliefs which make up the totality of the Hindu way of life. Hindus themselves call their religious tradition "the Eternal Law" (*Sanatana dharma*) which has existed for over five thousand years. It is an aggregation of innumerable religious beliefs, cults, customs and rituals. However the main principles and mythologies of Hinduism come from the 'Vedas' (literally, 'Knowledge'), the *Upanisads* (end of Vedas), from Six Orthodox Philosophical Systems as well as a rich literature comprising scriptures and commentaries. It is at the same time very rich in its Philosophy, Mythology, Theology, Cosmology, Astronomy as well as occult science. It believes in Soul and Reincarnation of Life resulting from the Law of Karma (deed), and yet it aims at Salvation or Emancipation as the highest goal of life which makes Hinduism moral and Spiritual. With this primary introduction let us see what it has to say about the divine law that keeps the cosmic order.

Logos has its equivalent in Hinduism known, in Vedas, as *Rta* (cosmic and moral order) *Rta* also means 'divine law'. Ontologically, *Rta* represents "immanent dynamic order or inner balance of all cosmic manifestations",³⁷ in theology it-refers to divine law; in epistemology, to validity or truth."³⁸ *Rta* is held to be

equivalent to *Dharma* or *Brahman*. Prof. A. L. Basham in his "The Wonder that was India" notes that "*Varuna* was the guardian of *Rta*, the cosmic order a concept which was perhaps the highest flight of *Rig Vedic* thought. The world takes its regular course, day follows night and season succeeds season, because of *Rta*; man must live according to *Rta*."³⁹

'Logos' in Hinduism, has been used however, with one more meaning as well. 'Logos' also means a creative sound, which in the Vedas is called '*Shabda Brahma*' (i.e. creative word), The Primordial manifestation of the supreme spirit was creative sound or the First Word (*Adi Nad*). This first word or creative sound, the 'Logos' is 'OM' which is the very creative energy and the very base of the universe.

Logos' is also used as *Brahman* (God), the concept which is similar to the concept of "total field energy". This energy ('Logos') is not blind or mechanistic" but "profoundly intelligent"; it has a great wisdom and is spiritual. According to Hinduism, Logos can be experienced by becoming more and more spiritual and capable of feeling the inner hearing attuned to the music - a unique rhythm of Being.

This 'Logos' or the creative sound, in Hinduism, has been symbolized with the great god Shiva having a drum in one hand and a flame in other.⁴⁰ It is the divine-expression that attracts, fascinates and unites different things, even the conflicting forces and opposites. It assumes gravitational force in *Dik'* and *Kala* (i. e. in Space and Time). In short in Hinduism, God (as meant by Logos) is the balanced unity of opposites. This is very near to Heraclitus' concept and theory of Logos.

One of the schools of Hinduism or Indian Philosophy is Yoga. It talks about the three most important centers of human consciousness and how the Logos-the immeasurable and boundless (*ananta*) can be experienced and understood within these centers. The three centers are heart, eyebrow -center and the top of the skull.

(B) Buddhism : Like Hinduism, it is a dominant spiritual tradition of Indian Philosophy, "It has a strong influence on the intellectual, cultural and artistic life of the people of India, Srilanka, Tibet, China, Korea, Malesia, Japan etc."⁴¹ The central problem of Buddha is human-suffering, its cause and solution. Buddha was not interested in metaphysical issues like the origin of world, the nature of Divine etc. Even then, Buddhism has very high intellectual philosophies to attain direct mystical experience, which Buddhists call the *awakening*. "The essence of this experience is to pass beyond the world of intellectual distinctions and opposites to reach the world of '*achintya*', the unthinkable, where, reality appears as undivided and undifferentiated '*suchness*'."⁴² Buddhism, as we all know, like Jainism, does not believe in creator God. It does not believe in soul, and the world or the universe exists since the beginning of the beginningless time. Like Heraclitus Buddha says "All things arise and pass away," flow and change are the basic features of the nature. The doctrine of impermanence and temporality ultimately lead to 'Enlightenment' through which one gets rid of sufferings.

After Buddha's death, efforts were made to settle the disputes and to develop systematic teaching and doctrines of Buddha's philosophy. *Nagarjuna*, under the strong influence of *Ashvaghosha*, demonstrated that reality, ultimately cannot be grasped with concepts and ideas. Hence he gave it the name '*Sunyata*', 'the void' or 'emptiness', a term which is equivalent to *Ashvaghosha's* '*tathata*' or '*suchness*'; when the futility of all conceptual thinking is recognized, reality (Logos) is experienced as pure suchness. Just as the concept of suchness and void, there is also a concept of '*Dharmakaya*' ('the Body of Being') in Buddhism. This concept is closer in meaning to 'Brahman' in Hinduism and to the general meaning of 'Logos' in ancient Greece and Christian theology.

In *Mahayan* Buddhism, whose core is regarded to be in '*Avatamsaka Sutra*' the central theme is the unity and interrelation of all things and events; a conception which is not only the very

essence of the eastern world-view, but also one of the basic elements of the world view emerging from modern physics.”⁴³ This sutra offers a very close meaning to Logos—Logos as ‘suchness’, as Void or as ‘Body of Beings.’

(C) The Chinese Thought comprises mainly two distinct philosophical schools, Confucianism and Taoism. Both these trends of thoughts were very much different from one another; one emphasizing social organization, common sense and practical knowledge, while the other concentrating and observing Nature and the discovery of its Way, human happiness and intensive knowledge.

The Chinese, like Indians, believed that “there is an ultimate reality which underlies and unifies the multiple things and events we observe: There are three terms ‘complete’, ‘all embracing’, ‘the whole’. These names are different, but the reality sought in them is the same; referring to the One thing.”⁴⁴ They called this reality the *Tao*, ‘the Way’. *Tao*, in its cosmic sense, is the ultimate, undefinable reality just like Hindu *Rta* or *Dharma* and the Buddhist’ *Dharmakaya*. Unlike Buddhism, the Chinese thought believed in both change and constant pattern. Naturally a question might arise about the cosmic pattern as has been recognized by the Chinese. The pattern, according to the Chinese thought is ‘cyclic’ having “Ceaseless motion and change”, “of expansion and contraction”. According to the Chinese view the dynamic interplay of the two polar forces (*yin* and *yang*) all manifestations of the *Tao* - the law or Logos, are generated. The interplay of *yin* and *yang* is the interplay of a “Primordial pair of opposites.” In *I ching* or Book of Changes they developed *yin* and *yang* into a system of cosmic archetypes”. “The Book of Changes, *I ching* in Chinese—is unquestionably the most important book in the world’s literature”.⁴⁵ At the center of this book is the emphasis on the dynamic aspect of all phenomena. Thus even in Chinese thought we find a very striking similarity of *Tao* with Hindu concepts as well as western theories, all leading to fundamental basis of Logos, as discussed earlier.

(D) Taoism and Zen are the main trends of Chinese and Japanese cultures. Taoism, as we have seen, earlier, is mystically oriented and more relevant with modern physics. It is more interested in the "intuitive Wisdom" than the rational knowledge. Tao is beyond human comprehension, beyond reasoning and beyond knowledge. The implicit unity of all opposites, yin and yang, lies at the very basis of Taoist thought. Professor F. Capra in his famous book, *The Tao of Physics* observes: "It is amazing that, at the same time when Lao Tzu and his followers developed their world view, the essential features of this Taoist view were taught also in Greece, by a man whose teachings are known to us only in fragments and who was, and still is, very often misunderstood. This Greek 'Taoist' was Heraclitus of Ephesus. He shared with Lao Tzu not only the emphasis on continuous change, which he expressed in his famous saying 'Everything flows', but also the notion that all changes are cyclic".⁴⁶

When the pragmatic side of the Chinese thought came in contact with Indian Buddhism, a special kind of spiritual and mystical discipline developed which was given the name *Ch'an*, which means 'meditation'. This *Ch'an* thought was eventually adopted by the Japanese, around AD 1200 and was known as *Zen*. Zen is a mixture of three thoughts; the Indian, the Chinese and the Japanese. Zen is purely Buddhistic in its essence and the enlightenment experience, and is the same as what we find in other mystic schools of eastern philosophy. Its enlightenment experience is known in Zen as *Satori*. Just like Taoism it also believes that words can never express the ultimate reality. Chuang Tzu said, "If one asks about the Tao (we can add even *Satori*) and another answers him, neither of them know it."⁴⁷ Both the '*Rinzai*' (Sudden) and the *Soto* (Gradual) schools of Zen attach the greatest importance to 'Zazen' or sitting meditation, a way to realize one's own pure self or pure nature; body and mind being fused into a harmonious unity and to bring it in contact with the ultimate reality.

The religious traditions of the east not only emphasize the unity of things and events in the universe, but also the awareness of this unity which is mystic experience. "All things are seen as interdependent and inseparable parts of this cosmic whole; as different manifestations of the same ultimate reality."⁴⁸ The world view that emerges from these traditions i.e. from Hinduism, Buddhism, Taoism and the Zen, is having a striking similarity in its basic elements and these fundamental elements of Rta or Dharma (Hinduism), of Suchness or Tathata (Buddhism), and of Tao (The Taoism & the Zen) also seem to be the fundamental features of the world view emerging from modern physics. We, therefore, will now examine the parallels between Logos as seen in Philosophy and in Religions, and as it emerges in the Science, especially in modern physics.

4. Logos in Science :

We have sufficiently discussed the concept and theory of Logos in Philosophy and in religion; and we could note the striking agreements or parallels in their theories. Now, without becoming, technical, let us understand what Science has to say about Logos or about this Law of the universe. Of course, by the term Science, we will refer to physics and especially modern physics.

Prof. Arthur J. Ellison of City University, London, in one of his essays, on Western Science and Religious Experience, very briefly and precisely summarizes modern Physics as:

"In Rutherford's day atoms were considered to be like miniature solar systems. Electrons were seen as tiny charged particles rotating in orbits around the nucleus like planets around the sun. Physicists have now discovered that electrons sometimes appear as particles and sometimes as waves. In addition, particles sometimes disappear at one point and reappear at another, apparently without crossing the space in between.

Unlike Newtonian physics, quantum mechanics is firmly based on more than just observation and experiment. In quantum

mechanics the experimenters and what they do are not separated from the observation and the experiment. According to Schroedinger's wave equation, which generates an endless profusion of possibilities, when perception takes place, one part actualizes into "reality" by chance. No one knows why one possibility occurs and not another. The modern particle physicist has nothing to say concerning what happens between measurements. As Heisenberg said, "The term 'happens' is restricted to the observation." This is an exceedingly important new philosophy of science."

The basic oneness of the universe is one of the most important "revelations of modern physics". According to modern physics the universe is a web of relations which is dynamic. This dynamic aspect of matter arises in quantum theory as a consequence of the wave nature of sub - atomic particles. It could only be "understood in terms of movement, interaction and transformation. The material objects which seem to be passive and dead are, in fact, when seen in their magnified state, full of activity. Even when we go to large dimensions - stars and galaxies, we recognize the dynamic nature of the universe. It has been now proved in modern physics that the universe is, as a whole, not static but expanding ! Leaving the details about the expansion of the universe and how it is measured, we should note that the idea of expanding and contracting universe, has also been found in Indian as well as western mythology. "Experiencing the universe as an organic and rhythmically moving cosmos" reveals a systematic law-operating phenomenon - all objects as processes in a universal flux." According to our present knowledge of matter, its basic patterns are the subatomic particles forming a dynamic world. Even the modern astrophysicists and cosmologists acknowledge the basic unity of cosmos." In the words of the astronomer Fred Hoyle, "Our everyday experience even down to the smallest details seems to be so closely integrated to the grand scale features of the Universe that it is well nigh impossible to contemplate the two being separated."⁴⁹

The discovery of symmetry patterns in modern science has also played an important role to arrive at the fundamental laws of nature, which reveal beauty, harmony and perfection in the universe. The dynamic nature and essential interrelation of the subatomic world of modern physics is in agreement, to a very great degree, with the theories of ancient Greek Philosophy (Logos) and Eastern mysticism. The unified theory and even the "Theory of Everything" : once the preserve of the philosopher and theologian, now it has become the Holy Grail of the Scientist."⁵⁰

5. Conclusion.

In our final conclusion let us say that all the parallels establish a strange agreement in the meaning of what we call Logos, as a Divine Law of metaphysics, or God of the religious traditions, or as the unified world view of the modern science, and they are very much in agreement in their concept and theory. We have very clearly seen how the metaphysical concept of Logos as found in ancient Greek philosophy is very similar to the view held by the mystical oriented philosophies of the East as well as the modern sciences. Like the philosophers and sages, the scientists have accepted "to co-operate with nature and try to understand it, not in order to dominate but to be inspired and to be enlightened."⁵¹ Thus in a detailed examination of Logos in Philosophy, Religion and Science we find two profound syntheses-one, the concept of Logos and its parallels, as well as seeming agreement, and the other, the human attitude: from domination to co-operation. In our final meaning we find Logos (God) as a Divine Law of the Universe which is Whole and Dynamic, its parts are all interconnected, interrelated and interdependent through Logos. Logos is universal, essential and eternal - a creative divine force acting as mediator between God, the created world and man.

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"It would not be an exaggeration to claim that the keen concern with matters of medical ethics over the last few years has not only led to a proper way of dealing with many medical matters, but it has also established the view that the main medical concepts: health, illness (physical or mental), care, healing, pregnancy, life, abortion, death, reproduction are not only descriptive but also axiologically loaded and are directly related to problems of a purely philosophical nature (that is, to matters examined by metaphysics, ethics, logic and epistemology.)

Naturally, the answer to these problems affects not only medical research and science itself but is also connected to the whole network of activities referring to the concerns of the health sciences, such as medicine and hospital care and concern for the patient, man's life and death".

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