VEDIC THOUGHT AND MODERN SCIENCE

Madhuchanda Kaushik

[On the basis of available literature on Vedas it is difficult to comprehend the meaning and content of Vedic texts in terms of modern scientific concepts. Vedas are nothing but the anthology of simplistic utterances of the people in the early stage of the evolution of modern civilization. The development of astronomy, mathematics, chemistry and other branches of sciences in ancient India are based on Vedic knowledge It is therefore, necessary that an analysis of the epistemological nature of the Vedic knowledge and that of modern science should be undertaken so as to ascertain the logical validity of the methods of establishing equivalence between Vedic concept and modern scientific precepts The subject like Jñāna (knowledge), Vijñāna (Science), Jñānin (Wisemen), Vijñānin (scientists), Bhautika Jagat (Physical World), Jīvana (Life), Mokṣa (salvation) were very important in the Vedic and post Vedic ancient India. I would like to highlight the fact that the Vedic seers and Vedic civilization understood the importance of Vijñāna (science) and considered it more important than Jñāna (Knowledge).]

On the basis of available literature on Vedas it is difficult to comprehend the meaning and content of Vedic texts in terms of modern scientific concepts. Vedas are nothing but the anthology of simplistic utterances of the people in the early stage of the evolution of modern civilization. But the development of astronomy, mathematics, chemistry and other branches of sciences in ancient India are based on Vedic knowledge. It is therefore, necessary that an analysis of the epistemological nature of the Vedic knowledge and that of modern science should be undertaken so as to ascertain the logical Validity of the methods of establishing equivalence between Vedic concept and modern scientific precepts. By Vedic world view we understand the world view reflect in the teachings mainly of the Saṁhitā and Brāhmaṇas as distinguished from that of the Upaniṣhads. But the difference between the Vedas and the Upaniṣads is not radical. In the Upaniṣads we find the growth of proper philosophical speculation, while in the Vedas these of teachings and in Vague, primitive and poetic forms The Vedas do not profess a uniform world view. According to same

Scholar the Vedas posses simply childlike naive prayers, some other find here uncertain and primitive type of monotheistic thoughts. According to same the deity's of the Vedas are simply allegorical representation of the supreme deity and to some others the Vedic hymns are only sacrificial compositions of a primitive race. According to Sāyaṇa, the great Indian commentator' the God's of the Vedic hymns represent only natural forces. Of the entire Vedic teaching the Ṛgveda may be considered as the main basis The Yajurveda and the Sāmveda we find only the Ṛg hymns modified for sacrificial purpose and the Atharua veda is not considered by many as of equal rank with these three Vedas.

In the Vedic natural phenomena teaching we find that prayers are related open with and inanimate objects, such as the hill (Parvata), the herbs (oṣadhi), the tree (vanaspati),the forest (aranyadi), the weapons (āyudha). In the Vedic world view we see the picture of the society whose principle means of sustenance's were cattle keeping and the cultivation of the soil with plough.

In the Vedic world view relation manifest as the most prominent and essential feature of human life. Generally there are four strate of thought can be discerned in the Vedic religion which are naturalistic, polytheistic, monotheistic and monistic. In its earlier from Vedic religion appeared as worship of nature. It was a sort polytheistic where striking phenomena of nature are defined, naturalism being combined with anthropomorphism. In this polytheistic world view the sun, the moon, fire, air, rive, forest all appear as Gods. Yet a tendency shows itself to one God with another or to through all the Gods together. Due to this tendency in Vedic polytheism we find classification of God into three spheres of earth, air and sky. Some Gods like mitra and Varuṇa are treated as pairs they fulfill identical function. All the Gods again sometimes are thrown together in one large concept of a Visva-devah or pantheon. This tendency leads to monotheism the concept of many Gods tended to meet into one. In the worship of Varuṇa we have the nearest approach to monotheism Moral and spiritual attributes of justice, beneficent, righteousness, pity were ascribe to Him.

Science is defined as the systematic knowledge of nature and behaviour of the, material and physical universe. It is based on observation, experiment and measurement, which could be demonstrated and verified. Scientific observation is done by

objective methods only' involving the five senses-seeing, hearing, smelling, testing and touching A lot of knowledge is gained through consciousness that is subjective experience and learning. This part of knowledge has not been accepted as science (vijñān) by the modern scientists. Consciousness is not stable and reliable and the subjective experiences are also not repeatable and reliable. It is true that experiences in the first three states of consciousness awaking, dreaming and sleeping are not always repeatable and reliable but it is also true that subjective experiences and learning in the higher states of consciousness are absolute, repeatable and most reliable. The Vedic method of acquiring knowledge uses both the objective as well as the subjective techniques and hence knows the total knowledge which satisfies the criteria of being science. In fact ancient India, vijñān (science) meant total knowledge. As a first step it is necessary that the basic nature of science and its limits and limitations be clarified. Albert Einstein assested that the operation of measurement of an entity is its definition and no concept or idea can become part of conventional Science unless it is measurable. Einstein's Science should be defined by the operation through which scientific knowledge is generated. An essential and common feature of every conceivable scientific experiment is a human observer, who must use his organs of sensory perception. Hence it can be observed that human sensory perception, aided on unaided by instruments, is the basic source of scientific knowledge. The world-view during the classical era was that of a static, mathematical universe. Man could master nature and use it for his own comfort and luxuries. With the advent of relatively and quantum theory (uncertainty principle as its backbone) this world-view changed. Space and time now become just one continuum and the classical observer observed picture is no more valid. Man's supremacy over nature is not quite true. Matter is not a primary entity; it is a product of space-time contimuum. The central aim of Vedic thoughts is to experience all phenomena in the world as manifestation of the same ultimate reality. This reality is seen as the essence of things and events we observe. This ultimate essence, however, cannot be separated from its multiple manifestations. In its phenomenal aspect, the cosmic one is intrinsically dynamic and the apprehension of its dynamic nature is basic to all schools of Vedic literature. This dynamic quality of Indian philosophy seems

to be one of its most important features. Vedic seers see the universe as an inseparable web, whose interconnections are dynamic and not static. Modern physics also believes that the universe as such is a web of relations and like Indian mysticism, it has recognized that this web is intrinsically dynamic. The dynamic aspects of matter arises in quantum theory as a consequences of the wave-nature of subatomic particles and is even more essential in relatively theory, as we shall see, where the unification of space and time implies that the being of matter cannot be separated from its activity. The properties of subatomic particles can therefore only be understood in dynamic content; in terms of movement, interaction and transformation. In the Vedic world view we find diverse theories regarding the creation of the universe. Some gods were suppose to build the world as the carpenter builds a house. They raise the question regarding the source and the process of creation and the latter stage they give answer that Brāhmaṇ is the tree and the wood out of which the heaven and the earth are made. The concept of Brahman is the material and efficient cause clearly seen in the Vedic world view. Again sometimes the world is conceived as the evolution of God. In the Puruṣasūkta the gods are conceived as the agents of creation. While the materials out of which the world is made is the body of the great purusa the Lord. The main terms used in Upaniṣad have dynamic connotations. The word Brāhmaṇ is desired from the Sanskrit root brih- to grow and thus suggests a reality which is dynamic and alive. The Ṛg Veda uses another term to express the dynamic nature of the universe, the term Ṛta. This word comes from the root ri- to move; its original meaning in the Ṛg Veda being 'the course of all things', 'the order of nature'. It plays an important role in the legends of the Veda and is connected with all the Vedic gods. The order of nature was conceived by the Vedic seers, not as a static divine law, but as a dynamic principle which is inherent in the universe. The Vedic seers, saw the world in terms of flow and change, and thus gave the idea of a cosmic order an essentially dynamic connotation. The concept of Ṛta was later brought clown from their original cosmic level to the human level and was interpreted in a moral sense; Ṛta as the universal law which a1l gods and humans must obey. The Vedic concept of Ṛta anticipates the idea of Karma which was developed later to express the dynamic interplay of all things and

events. The word karma means ‘action’ and denotes the ‘active’, or dynamic interrelation of all phenomena. In the words of the Bhagavad Gītā, all actions take place in time by the interweaving of the forces of nature. The general picture emerging from Vedic literature is one of an organic, growing and rhythmically moving cosmos; of an universe in which everything is fluid and ever-changing, all static forms being māyā, that is, existing only as illusory concepts.

Modem physics, pictures matter not at all as passive and inert, but as being in a continuous dancing and vibrating motion whose rhythmic patterns are determined by the molecular, atomic and nuclear structures. This is also the way in which Vedas see the material world. They all emphasize that the universe has to be grasped dynamically, as it moves, vibrates and dances; that nature is not in a static, but a dynamic equilibrium. In physics, we recognize the dynamic nature of the universe not only when we go to small dimensions, to the world of atoms and nuclei, but also when we tum to large dimensions, the world of stars and galaxies. Through our powerful telescopes we observe an universe in ceaseless motion. According to Einstein's general theory of relativity, space is not 'flat', but is 'curved', and the precise way in which it is curved is related to the distribution of matter by Einstein's field equations. These equations can be used to determine the structure of the universe as a whole; they are the starting point of modern cosmology. Newtonian mechanics explains all forces as well as gravitation by "action at a distance". The electromagnetic theory of Maxwell and Faraday replaces this by held in space or ether. Quantum mechanics explains all interactions by absorption and emission of 'virtual' particles which extend up to an 'infinite' distance as quantum field permeates all space Space-time being purely mental concepts, everything reduces to consciousness. Quantum field is considered to be the only reality in nature. It is the primal Matter on which primal Energy acts to create the world.

For a variety of reasons a lot of Vedic literature has been lost and whatever is available is not read and understood, partly because of negligence and partly because of the intricacies of Vedic Sanskrit. The elite in India and abroad have a vague feeling the Veda contains ancients knowledge, but for all practical purpose,

they consider that Vedic literature contains only prayer to a number of Deities and some high level but impractical philosophy of attainting salvation. Under the above circumstances, it is necessary that as first priority we should remove the misconception that Vedic literature does not contain modern science by showing in an unambiguous manner that Vedic literature does contain modern science as accepted by scientists today. This will establish credibility in the present context and make scientist and get interested and open minded to receive more knowledge hidden in the Vedic literature. Veda is a knowledge used by nature to create, grow, maintain and demolish the living and non-living items of universe. It is called Apuruṣeya. The knowledge has been passed on to successive generations by oral tradition. The oral tradition is very important because in Vedic Sanskrit a change in accent, intonation and texture of speech changes the meaning considerably. The Vedic literature is consists of Ṛg-Veda Yajurveda, Sāmveda, Atharva Veda, Saṁhitās, Brāhmaṇas, Āryaṇyakas, Upaniṣad, Darśana, Purāṇa, Itihāsa, Śikṣā, Kalpa, Vyākarṇa, Nirukta, Chandas, Jyotiṣa, Āyurveda, Gāndharva Veda, Dhanur Veda, Sthāpatya Veda, Brahma Sūtra, Śrauta Sūtra, Gṛhya Sūtra, Śūlva Sūtra, Dharma Sūtra, Rāmāyaṇa, Mahābhārata, Gītā and many other saṁhitās etc. The knowledge contained in these tents is by and large holistic in nature The fruit of knowledge is directly presented for the individual and society as various forms of yogic practices and rituals. All knowledge is directly related to human race and his environment and covers all aspects of living, happy, peaceful and fearless life.

Modern science and the related technologies have made tremendous progress to make our life comfortable, happy, safe and enjoyable. Inspite of the unprecedented achievements of modern science and its application, the whole world today is in biggest ever chaos and turmoil characterized by violence cruelty, depression, anxiety and intrigue etc our ultimate objective, therefore, will be to show that the Vedic literature contains the basic, essential and relevant ingredients of the science as accepted today and a lot more which is capable of removing the entire misery of the mankind.

Modern Science is hardly five hundred years old and when it started in an organized manner at the university level, it started as the department of "Natural Philosophy" and the oldest scientific

journal is called "Philosophical Magazine". one can appreciate the importance of mind by considering, for example, the case Stephen Hawking, one of the world's brilliant living Scientists, a Cambridge University professor who is a physical wreck. He explorers with the mind only, the vast reaches of inter glastic.[1] Space and has widened our understanding of the universe-- how it began, why we are what we are, and what our ultimate fate is likely to be Hawking says, "I work on intuition thinking that an idea ought to be right. Then I try to prove it". He also states, "It is quite possible that God acts in ways that cannot be described by scientific laws, as we know them today". In fact, all big landmarks in science have invariably began instinctively, intuitively and empirically; thereby reason and logic came later. Thing have happened other may also.

Actually the existence of modern objective science in derived from the Vedic literature. Vedic Saṁhitās, Darśana Sūtra, and some examples of Vedic science (subjective science). The roots of objective as well as subjective science are present in the four Vedic saṁhitās.

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