

THE CONCEPT OF MOTION: THE VAISESIKA PHILOSOPHY AND MODERN SCIENCE.

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ABSTRACT:

A great philosopher Kanad (300 BC), The founder of the Vaisesika Philosophy, described vividly about the whole cosmos. This philosophy treats as the metaphysics including physics in ancient time. Kanad wrote 'vaisesika sutra' in 300 BC. This philosophy deals with space, time, mass, motion and real things within the whole universe. All are logically described in this philosophy. All vaisesikas discuss fully the concept of motion (Karma) technically too. In the description of the universe, vaisesikas admit motion (Karma) as a padartha. 'Padartha' as a category is a technical term of the vaisesika philosophy. In physics, 'mass' 'energy', 'time' and 'motion' are technical terms. Such 'Padartha' is a technical term in the vaisesika philosophy. 'Padartha' means real things. Planets, stars and galaxies are real things. Vaisesika are realists and pluralists. They admit space, time, motion, minds, souls, material things and God. In evolution or creation of the cosmos in present, past and future, motion has an important role in the vaisesika system. Modern science with physics admit existence of motion as the basic reality. Here the concept of motion in vaisesika philosophy is discussed with modern science. Differences between them are shown.

Keywords : Padartha, Davya, Karma (Motion), Samyog (Conjunction), Dika (Space), Kala (Time) and Paramanu (Atom).

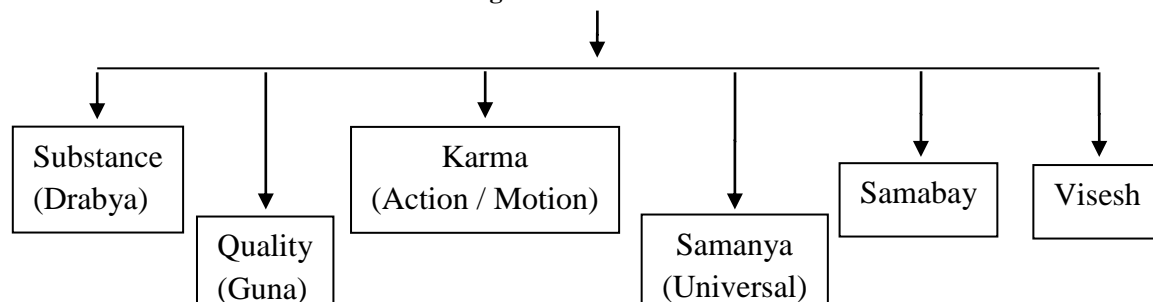
INTRODUCTION:

Kanad is one of the philosophers who proclaims that the 'Karma' as the action or motion is a basic thing in the world in 300 B.C.1. he admits that motion has an important role in the universe and he express that the motion exists in the physical objects.

"Water" is a word as a real thing water. Such word "Water" has a meaning of real thing named water. "Water" (a word) → water, an existing thing. Water is called padartha as the meaning of the word. According to Kanad, there is many things in the universe in the world. But though they are infinite in number, yet all such real things as meaning of the words are under six categories (Padharthas) only. They are all positive padarthas. They are dravya, guna (quality), karma (action / motion), samanya (universal), samavaya and visesh (particulars).

Motitions is one category or padartha in vaisesika system according to Kanad. So motion is a real thing as an existent in the world. When science did not discover motion as an entity in the western countries, then Kanad discussed about motion in his vaisesika philosophy in 300 BC. We perceive many things in the world. But they are only six categories and dravya (substance), karma or motion and guna (quality) are the three of them. Meaning of the word as existing things

Categories of the Padartha



Kanad perceive a law of only.

motion thus Karma or

motion is present in substance or dravya

No dravya, No Karma or Motion. Karma or motion can't exist without dravya.

Kanad preached in his vaisesika philosophy in ancient time that there is no existence of the world if there is no motion in dravya.

(1)

Kanad explained theory of motion in such way that any kind of motion exists in substance only. Motion cannot exist without moving thing. But it is clear to say that all moving bodies are

finite. So, Kanad's theory of motion exists in finite substances and motion itself is non eternal things.

Therefore, whole space as Dika is always devoid of motion. Because the space (Dika) is infinite an eternal thing 'Motion resides in a corporeal substances of limited dimensions. It is non-eternal and resides in a non-eternal substance.'²

There are nine kinds of substances. They are Ksiti (earth), Apa (Water), Teja (fire, heat and light), Vayu (air), Akash (Sky or Ether), Dika (space), Kala (Time), Mana (Mind) and Atma (self).

Above all are real entities. But motion are not present in all mentioned things. Here it is clear that all entities of science including Biology and Physics are clearly mentioned in Vaisesika's nine substances.

'An incorporeal, ubiquitous substance, like ether, time, space or a soul, is incapable of motion'³.

Explanation with examples can be given. A moving fan is in motion. The motion is present in the fan. Here the fan is a substance and Karma (motion) is a category on Padartha which is present in another category of substance as a fan. An nonmoving fan is without motion. The fan can exist without motion, but motion cannot exist without substance (here the fan). 'The third category is Karma or Action. Like quality, it belongs to and is hers is a substance and cannot exist separately from it.'⁴

A fan as moving or un-moving consist of infinite atoms (Paramanu) in it. Larger substance are more atoms present in it.

(2)

The number of atoms in a mustard seed is less than that of number of atoms present in the Mountain Himalaya as a bigger substance. Such any galaxy is a greater number atoms than that of the number of atoms present in the Himalaya.

"Any number of motions or Vegas may be impressed on a particle, but so long as these are in a uniform direction the resultant motion or Vega is in a straight line, and may be conceived as one (Prasastapada,.....). It is only when we come to Gamana (curvilinear motion) and its causes that the question of composition assumes a real significance. In all such cases, each separate particle has only one Vega (impressed motion) in a definite direction at any given instant, but the composition of the successive motions and Vegas in the same particle produces the curvilinear motion, e.g. the rotation of each constituent particle of the potter's wheel. The motion of the body (e.g. the wheel) results from the combined motions of the particles. If pressure or impact produces motion in an opposite direction to the Vega already impressed on the body, the original direction would be changed, as is seen in the case of rebounding after striking the pestle is a typical instance of such change of direction in Vega or motion. The impressed fore, e.g. impact, produces a changed motion in a different direction. One view is that the original Vega (momentum) is destroyed before a new motion and a new Vega are produced by the impact".⁵

Vaisesika philosophy holds that any motion is caused by unconditional conjunction and disjunction. This is also a non-herent cause. It means that motion is not always present in a substance forever. It is a temporary thing. Though In physics, Motion is eternal. Motion is permanently present in atoms. But Kanad and other philosophers of the vaisesika system expressed that GOD or Advista as the unknown cause or the unexplained cause of the nature exerts motion to paramanu and then parmanu is in motion. And after that the creation starts in motion. All atoms are eternally present at the absolute rest before the creation of the universe.

God or Adrasta imposed motion on motionless atoms to activate motion in the universe. 'The later vaisesika maintain that GOD produces motion in the atoms, combines them into composite products.....'⁶.

Some qualities of the vaisesika philosophy are related with motion. Gravity, fluidity, Velocity and viscosity and elasticity are such qualities. Gravity is a quality of earth and water 'Earth' is a technical term in Indian Philosophy. It means that all solid states of matter having quality odour (gandha). If a liquid or gas or other substance has some kind of smell, then there is naturally present earth substance. Some solid particles having smell are present in liquid or in gas or in other substance. Kerosene, Petrol, Mustard Oil, Ghee, Bromine gas etc are examples of earth substance. According to vaisesika philosophy, any planet or a star or a galaxy is made of five physical substance of ksiti (earth), apa (air), Teja (fire, heat and light), Vayu (air) and Akash (ether or sky). Gravity is associated with motion of any planet or motion of a star or of a galaxy, a planet or a star or a galaxy is a falling body due very important role of gravity quality according to the vaisesika philosophy.

'Gravity is a quality of earth and water by virtue of which they tend to fall to the ground'⁷

Falling body falls due to gravity of the earth in physics. Gravitational force is associated with it. Einstein predicted graviton particle for the gravitational force.

(3)

This hypothetical quantum acts as contraction and expansion for the shape of the space and time or space -time. Kanad expressed it first that falling to the ground is due to gravity (vega). Vaisesika Fluidity is another quality of the Philosophy. Fluidity is the cause of flowing a type of motion. Fluidity quality is found in three substances. Fluidity has two kinds. They are natural and acquired. Natural fluidity is found in water substance.

But acquired fluidity exists in earth and fire. Natural fluidity is present in atoms (parmanus) of water. Natural fluidity is also found in non-eternal composite watery substances. Acquired fluidity of earth and fire is for conjunction with heat. Examples can be given as gold and butter become fluid third when it is contact with fire.

Viscosity is a quality known as oilness. It is a special property of water. Velocity is the cause of motion. A body is in motion with velocity. Velocity is present in earth, water, light, air and mass. Matter and its states of soiled liquid, gas and plasma and energy are really included in Kanad's theory of motion. So galaxy is also in motion. Stars, planets and all heavenly bodies are in motion according to Kanad.

Elasticity is a quality present in some tangible substances. "It is the quality of a substance, which makes it revert to its original state by virtue of its elasticity when an arrow discharged from it".⁸

(4)

Kanad introduced five kinds of motion (Karma) in his 'Vaisesika Sutra'. Those five kinds are

- (1) Utksepana (Upward motion), (2) avaksepana (down ward motion), (3) Akunchana (contraction), (4) prasarana (expansion), and (5) Gaman (locomotion).

Kandand's kinds of motion satisfy all kinds of motion in modern physics as well as science.

"The third category is Karma or action..... Action is said to be of five kinds. (1) Upward movement (Utksepana) (2) downward movement (avaksepana) (3) Contraction (akanchara) (4) expansion (prasarana), and (5) Locomotion (gaman)".⁹

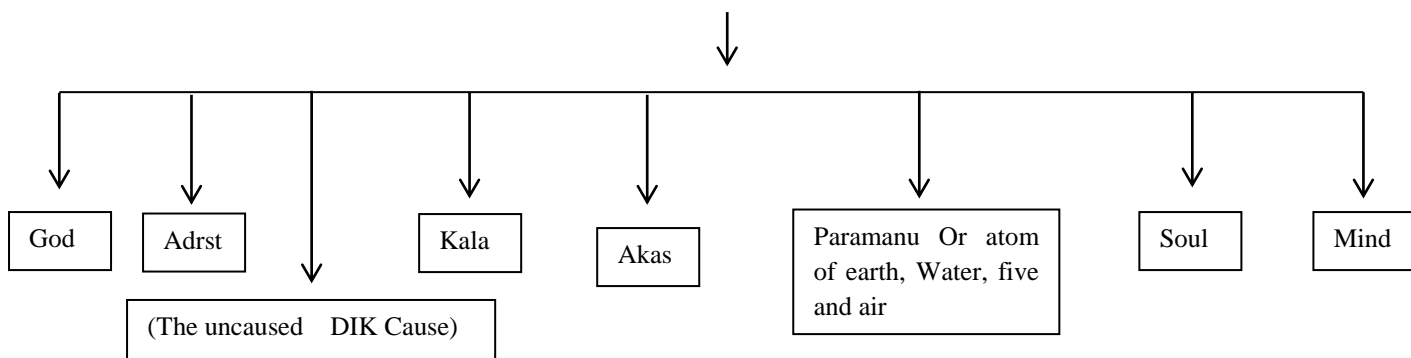
Ultimately all types of motion are derived from God. Firstly God imposes motion to motionless atom (Parmanu) to move. That is why paramanu (atom) is in motion and all moving bodies exist in motion. So atoms become mobile to form massive things. Thus motion is perceived in the world.

Conclusion:

Here it clear to say that the first thing called atom (Paramanu) is the basic fundamental thing. Paramanu is eternal and free at rest. But anything is made of such atoms with help of God's power of motion. Though God is at the also absolute rest, but God has only freedom to impose motion to atoms and all massive bodies to move, This doctrine of Kanad's motion states that atoms are finer things than that of electrons, protons as such sub atomic particles, high energy particles, all waves, strings etc. All physical Components of atoms (not Kanad's Paramanu), ions isotopes, molecules, electrons, protons, quarks, stings, matters and of energies are ultimately reduced to Kanad's Paramanu or Kanad's atom.

Kanad pointed out that Paramanu is motion is prior to all moving thigs. So all physical lowponents are is motion clue to the genesis of Kanad's parmau or atom according to Vaisesika Philosophy. So at the beginning of the universe Kanad's model shows that God as the only source of motion, the in finite time (Kala), Adrasta (unknown cause of unexplained nature), the whole space (Dik), Akash(sky), Souls (Atomas) mind.s (Manas) and all paramanu's of earth,

All eternal things at the creation of the world.



References

1. Radhakrishnan, S. 2009. Motilal Benarasi Dass Publishers Pvt. LTD Delhi, Indian philosophy, 179
2. Sinha, J.N. 1992. New central Book Agency Kolkata, Outlines of Indian Philosophy, 168

3. Ibid,168
4. Sharma, C. 2003. Motilal Benarasi Dass Publishers Pvt. LTD Delhi, A critical Survey of Indian Philosophy, 175 - 190
5. Seal, B. N. 2015 Shishu Sahitya Sansad Pvt Ltd,Kolkata -700009, The Positive Sciences of The Ancient Hindus, 105
5. Sinha, J. N. 1992, New central Book Agency Kolkata, Outlines of Indian Philosophy, 179
6. Ibid, 203,
7. Ibid, 204,
8. Sharma, C. 2003 Motilal Benarasi Dass Publishers Pvt. LTD Delhi, A critical Survey of Indian Philosophy,179

