

Quotations From Scriptures:

Selections From Acharya Umaswati's TATTVAARTH SUTRA¹
Introduction

Acharya Umaswati's TATTVAARTH SUTRA presents a systematic and comprehensive view of the seven aspects of reality, relating to the basic principles of Jainism. The seven aspects of reality (TATTVAs) are: souls (JEEV), inanimate entities (AJEEV), influx of karmic matter towards soul (AASHRAV), bondage of karmic matter to a soul (BANDH), stoppage of influx of karmic matter (SAMVAR), shedding of karmic matter (NIRJARA), liberation of soul from karmic bondage (MOKSHA).

The fifth chapter of the TATTVAARTH SUTRA presents the inanimate entities (DRAVYA) of the universe, which include matter (including energy, PUDGAL), principle of motion (DHARM), principle of rest (ADHARM), space (AKAASH) and time (KAAL). Certain concepts regarding the soul that relate to the inanimate entities have also been described in this chapter. It should be pointed out that some facts about matter delineated in this chapter correspond to modern scientific concepts.

Chapter 5

The four expansive inanimate entities:

AJEEVAKAAYA DHARMAADHARMAAKAASHAPUDGALAAH [5-1]

The four expansive (pervasive) non-sentient entities of the universe are: principle of motion (DHARM), principle of rest (ADHARM), space (AKAASH) and the multiplicity of matter (including energy, PUDGAL). Thus they are called AJEEVAKAAYA - inanimate and expansive, and they exist and so they are called ASTIKAAYA.

The principle of motion, principle of rest, space and matter are inanimate entities of the universe that occupy numerous iotas and that are all-pervasive. Space, principle of motion and principle of rest are continuous and pervasive. Matter, on the other hand, is not continuous, though its atoms and aggregates have the capability of occupying numerous iotas. Thus matter is also considered to be ASTIKAAYA. Obviously matter is also AJEEVAKAAYA - extensive inanimate entity.

The term non-sentient (AJEEV), not described in this aphorism, is the converse of sentient (JEEV sentient soul), which has been defined earlier in the following aphorism:

¹ Based on the following commentaries on TATTVAARTH SUTRA:

TATTVAARTH SUTRA by Acharya Umaswati, commentary by Pandit Sukh Lal Sanghvi, English translation by K. K. Dixit, published by L. D. Institute of Indology, Ahmedabad, 1974.

TATTVAARTH SUTRA by Acharya Umaswati, commentary by Pandit Phool Chandra Siddhantacharya, published by Varni Granthmala, Varanasi, 1949.

TATTVAARTH SUTRA by Acharya Umaswati, commentary by Pandit Mohan Lal Shastri, published by Saral Jain Granth Bhandar, Jabalpur, 1983.

Reality, English translation of Acharya Pujya Pad's SARVAARTHASIDDHI by S. A. Jain, published by Vir Sasana Sangha, Calcutta, 1960.

'That Which Is', a commentary on TATTVAARTH SUTRA by Dr Nath Mal Tatia, published by Harper Collins, 1994.

UPAYOGO LAKSHANAM [2-8]

The defining characteristic of soul is consciousness (UPAYOGA) - cognitive operation or capability to know and perceive.²

It should be pointed out that the principle of motion and principle of rest are unique to Jain philosophy and have not been mentioned in other ancient Indian schools of thought. Later in this chapter, it will be depicted that the principle of motion and principle of rest are essential for the conformity of concepts of the universe.

Entities - the constituents of the universe:

DRAVYAANI [5-2]

These four constitute the entities (DRAVYAs) of the universe.

The principle of motion, principle of rest, space and matter are four entities. The Sanskrit word 'DRAVYA' means that which attains different modifications without violating its intrinsic nature or that which is characterized by its distinctive modifications and qualities. However, the modifications and qualities of an entity are not severed from it. In other words, the modifications are integral features of respective entities.

It should be pointed out that souls, mentioned in the next aphorism, and time, described later in this chapter, are also entities of the universe. Thus in all there are six entities in the universe.

Soul - the sentient entity of the universe:

JEEVAASHCHA [5-3]

The multitude of souls constitutes the sentient entity of the universe.

Just like the principle of motion, principle of rest, space and matter, soul (JEEV) is an entity (DRAVYA) of the universe. There are innumerable souls in the universe. Each soul is independent, although on account of its interactions with external objects including abstract and material karmas, and its animate and inanimate environment, a worldly soul undergoes modifications - the cycles of birth and death. However, its intrinsic attributes such as perception, knowledge and bliss remain invariable. When a worldly soul sheds all karmas through self-endeavor, its mundane existence ceases and it becomes a pure soul (SIDDHA) and enjoys its pristine intrinsic attributes for eternity. In this regard, there are two classes of souls - worldly souls and pure souls.

Characteristics of the entities:

NITYAAVASTHITAANYAROOPAANI [5-4]

The entities mentioned above are eternal, fixed in number and intangible (AROOPI), devoid of attributes of matter.

All six entities of the universe are eternal - they have perpetually been in existence and are indestructible. Their innate attributes are invariable. One entity cannot be transformed into another. These entities are invariable in number - there is a single principle of motion, a single principle of rest, one integral space, constant totality of matter (including energy), certain fixed number of souls, and a stream of time. A soul cannot be created or destroyed. Further, it cannot be changed into matter or time or any

² Jain Study Circular, October 2004, page 3.

other entity. All entities (except matter) are intangible. They do not have the attributes of touch, taste, smell and color.

According to Jainism, the total mass-energy in the universe remains constant. This concept is in complete agreement with modern science. The law of indestructibility of matter as stated in the eighteenth century by the famous scientist Lavoisier is: Nothing can be created and in every process there is just as much substance (quantity of matter) present before and after the process has taken place. There is only a change or modification of matter. In modern times, scientists have observed that although matter can be converted into energy and vice versa, the total amount of mass-energy remains constant.

The above concept of the entities in Jainism implies that the universe has no beginning and no end. Therefore, the theory of creation and creator is inessential. All entities of the universe undergo transformations according to their intrinsic attributes. This precludes the necessity of God who regulates and/or controls the various events in the universe.

Singularity of matter:

ROOPINAAH PUDGALAAH [5-5]

However, the assortment of matter (including energy) is tangible (ROOPI) as they possess the attributes of touch, taste, smell and color.

Matter and energy are tangible and perceptible. They can be detected by our senses because they have the attributes of touch, taste, smell and color. The Sanskrit word 'ROOP' means 'form' - the effect of the aggregate of touch, taste, smell and color. Further, the Sanskrit word 'PUDGAL' is employed for matter as well as energy. This implies that according to Jain philosophy, energy is a form of matter. Modern science has the concept that matter can be transformed into energy and vice versa. According to Einstein's theory of relativity,

$$\text{Energy} = \text{mass} \times (\text{speed of light})^2.$$

Singular entities:

AA AAKAASHAADEKADRAVYAANI [5-6]

Each of the entities up to space, that is, principle of motion, principle of rest and space, are single.

It has been stated above that all entities of the universe are fixed in number. There is one principle of motion, one principle of rest and one space. Each of these three entities is one indivisible whole.

Immobile entities:

NISHKRIYAANI CHA [5-7]

They are immobile too.

The principle of motion, principle of rest and space are stationary as well. They are without any movement. Unlike particles of matter and souls, they do not move from one place to another. This does not mean that these three entities do not undergo any transformation. As described below (in aphorisms 29 and 30), by definition, an entity is defined as something that has existence. Further, existence is defined as the origination

of a new form, destruction of the antecedent form while maintaining the permanence of the intrinsic nature of the entity.

Entities occupying innumerable iotas:

ASAMKHYEYAAH PRADESHA DHARMAADHARMAIKAJEEVAA-
NAAM [5-8]

The principle of motion, principle of rest and each individual soul occupy innumerable iotas of space.

An iota (PRADESH) is defined as the space occupied by a single ultimate particle (PARAMAANU)³ of matter. The expanse of the principle of motion is innumerable iotas of space. It occupies countless iotas. The principle of rest has a similar expanse. Each individual soul also contains innumerable iotas. One may question: How are innumerable souls accommodated in the physical space whose expanse is innumerable iotas only? The soul is capable of contraction and expansion. That is how worldly souls can occupy material bodies of various sizes.

Infinite iotas of space:

AAKAASHASYAANANTA [5-9]

Space consists of infinite iotas.

The expanse of space is infinite iotas. Space has two divisions: physical space (LOKAAKAASH) and vacuous space (ALOKAAKAASH). Both divisions of space are intangible. However, the physical space accommodates all five entities, namely, the principle of motion, the principle of rest, souls, matter and energy, and time.

lotas occupied by matter:

SAMKHYEYAASAMKHYEYAASHCHA PUDGALAANAAM [5-10]

Various pieces of matter occupy numerable or innumerable iotas of space.

Matter consists of particles of various kinds and their aggregates. Some particles of matter occupy numerable iotas of space, while others occupy innumerable iotas of space. Matter can contract and expand. Thus the number of iotas occupied by a given piece of matter varies. This is quite obvious in the case of energy; the light emitted by a given lamp can fill a large room or a small closet.

The ultimate particle:

NAANOH [5-11]

However, the ultimate particle of matter (PARAMAANU) does not occupy innumerable iotas of space.

The ultimate particle of matter occupies a single iota of space. The ultimate particle is indivisible and consequently, an iota of space is also indivisible. It should be noted that due to contraction and expansion of matter, a large number of ultimate particles can be accommodated in a single iota of space.

³ It should be noted that PARAMAANU is not 'atom' or any other elementary particle of modern science.

Physical space:

LOKAAKASHEAVAGAAHAH [5-12]

All entities inhabit physical space (LOKAAKASH).

The principle of motion, principle of rest, time, matter and energy, and souls reside in the physical space. Alternatively, physical space can be defined as the region of space within which souls, matter and energy, principle of motion, principle of rest and time exist.

Principle of motion and principle of rest:

DHARMAADHARMMAYOH KRITSNE [5-13]

The principle of motion and principle of rest fill the entire physical space.

The principle of motion and principle of rest pervade the entire physical space. In fact, the number of iotas of the principle of motion, of principle of rest and of physical space is equal. These three permeate each other like oil in a sesame seed. The remaining entities, souls, matter and energy, and time, remain confined in the physical space. They cannot cross the boundaries of the physical space because there are no principle of motion and principle of rest beyond the physical space.

Expanse of particles of matter:

EKAPRADESHAADISHU BHAAJYAH PUDGALAANAAM [5-14]

Particles of matter fill a single or numerable or innumerable iotas of space.

An ultimate particle of matter occupies a single iota of space, while aggregates of matter occupy numerable or innumerable iotas of space. Further, on account of their capacity to expand and contract, various aggregates of matter can occupy numerable or innumerable iotas of space.

Expanse of souls:

ASAMKHYEYABHAAGAADISHU JEEVAANAAM [5-15]

A soul can occupy from an extremely small fraction up to innumerable iotas of space.

A worldly soul inhabits material bodies of various sizes in different births. Consequently, a soul can occupy varying number of iotas of space - an extremely small fraction or a significant portion of physical space.

A similitude:

PRADESHASAMHAARAVISARPAABHYAAM PRADEEPAVAT [5-16]

It is possible because the iotas of a soul can contract and expand like the light of a lamp that can fill a confined or a large space.

Just as the light radiation emitted by a lamp can illuminate a large room or it can be contained in a much smaller volume, similarly, the soul can expand or contract to occupy physical bodies of different sizes.

Functions of principle of motion and principle of rest:

GATISTHITYUPAGRAHAU DHARMAADHARMMAYORUPAKAARAH [5-17]

The functions of the principle of motion and principle of rest are, respectively, motion and rest of matter and souls.

The principle of motion assists various material objects and worldly beings in their movement from one region to another region of space. Similarly, the principle of rest is responsible for the state of rest of various objects and worldly beings. Thus motion and rest are functions of the principle of motion and principle of rest, respectively. As the principle of motion and principle of rest do not extend beyond the physical space, no entity exists outside the physical space. Beyond physical space lies the infinite empty vacuous space.

Function of space:

AAKAASHASYAAVAGAAHAH [5-18]

The function of space is to accommodate all other entities.

All entities reside in physical space. That is the function of space. The principle of motion and principle of rest pervade entire physical space. The other two entities, matter and souls, occupy varying numbers of iotas of space.

Functions of matter:

SHAREERAVAANGMANAHPRAANAAPAANAHAH PUDGALAANAAM [5-19]

The function of the variety of matter is to provide the worldly souls with bodies, facility of speech, mental faculty, and, various life processes such as nutrition and respiration.

As far as worldly beings are concerned, matter and energy perform a variety of important functions. The bodies of worldly souls are made of matter. Material particles facilitate speech and physical mental faculty (DRAVYA MANAH). The lives of worldly beings are sustained by nutrition and respiration. Obviously, matter is essential for these activities.

To a large extent, the life processes of worldly beings involve interactions of matter and soul. In addition to physical bodies, all worldly souls have karmic bodies - the collection of material karma. Speech involves the external organs that assist in speech and partial subsidence and/or elimination of pertinent karmas. Similarly, mental activities involve physical mental faculty as well as partial subsidence and/or elimination of appropriate karmas. Nutritional and respiratory processes are no exception. They too involve interactions of matter and soul.

More functions of matter:

SUKHADUHKHAJEEVITAMARANOPAGRAHAASHCHA [5-20]

Other functions of matter consist of causing pleasure and pain, and, life and death.

It is quite obvious that states of pleasure and pain, happiness and sorrow, life and death, all involve interactions of matter and soul. According to the Jain theory of karma, a worldly being acquires material karmic particles on account of its thoughts and feelings. The karmas, in turn, produce thoughts and feelings of happiness and sorrow at the same moment or in the future. The life of a living being ends when the relevant life-span-determining karma is exhausted. Then the worldly soul assumes a new life according to

the respective karmas associate with its soul. Thus life essentially involves interactions of matter with soul.

Functions of soul:

PARASPAROPAGRAHO JEEVAANAAM [5-21]

The function of souls is to assist each other.

Worldly beings assist each other. The assistance is mutual. For example, a teacher helps his/her student by imparting knowledge. The student exhibits the feelings of gratitude and respect for the teacher. In turn, the teacher has the satisfaction of helping his/her students in becoming worthy members of society. This is the process of mutual obligation. Similar concepts apply in our interactions with animal and plant life as well. Men domesticate animals and cultivate plants. In turn, the animals serve them and plants yield food, fruits and flowers. These are not incidents of charity or compassion. No one is expected to have feelings of superiority/authority or inferiority/servitude. All worldly souls are equal and independent of each other.

This aphorism has a profound ethical value. All living beings are expected to live in harmony and help each other. Human beings should not kill or hurt other men or animals. This is the message of nonviolence. The same applies to animals such as cows, horses and elephants. We do have to be careful in dealing with wild animals but we need not kill them. There are tiny living organisms that are helpful to us in living. Evidently, they should be protected. We should avoid harmful organisms without killing or hurting them as far as possible. In the spirit of this aphorism, one should avoid the intentional violence in one's endeavors. Such practices will bring peace and harmony on earth. They will also be helpful in protecting the environment.

Another aspect of nonviolence, implied in this aphorism, is that our actions and endeavors to live and improve our lives should have minimal impact on the lives of other human beings, animals and the environment. Otherwise, the concept of mutual assistance will be violated.

Functions of time:

VARTANAAPARINAAMAKRIYAAPARATVAAPARATVE CHA KAA-LASYA [5-22]

The functions of time (KAAL) include existence (VARTANA), transformations (PARINAAM), activity (KRIYA), and the sequence of events (PARATVA-APARATVA).

Time is a special kind of entity. It exists in the entire physical space. It is the stream of time that is responsible for the existence, transformations, actions and sequence of events in the universe. All entities exist preserving their intrinsic attributes. This is called VARTANA. All entities undergo transformations (PARINAAM) according to their inner qualities. There are two kinds of transformations: spontaneous (natural VAISRASIK) transformation that occurs without external intervention and induced (functional PRAAYOGIK) transformation that involves instrumental cause(s). Activity involves movement of an object or individual from one region of space to another. Activity also implies internal and/or partial movements. Obviously, activities also can be spontaneous or induced. Lastly, the function of time is to define the sequence of events such as before and after, old and young, anterior and posterior, and first and last.