

Jainism and Science

Lecture Notes

Lecture-1

Scientific approach and Jainism

Jain philosophy is scientific in its deliberations. Many philosophers have recognized the scientific nature of Jain philosophy. Professor L.P. Tessitore is of opinion that "Jainism is of a very high order. Its important teachings are based upon science. The more the scientific knowledge advances, the more the Jain teachings will be proven." In fact, the Jain system of thought is so wonderfully consistent with modern realism and science, that Dr. Walter Schubring observes, "He who has a thorough knowledge of the structure of the world, cannot but admire the inward logic and harmony of Jain ideas. Hand in hand with the refined cosmographical ideas, goes a high standard of astronomy and mathematics."

We all know what science has given us, how comfortable it has made our life. Modern science has extensively explored the physical order of existence. It has proceeded on two broad assumptions.

1 The physical processes follow the law of causality. The events and the happenings are effects of a cause; no event takes place without a cause.

2 All truths are empirically verifiable. The theoretically and mathematically predicted events are accepted as truths when they are verified experimentally. Without experimental verification they remain as hypothesis and are not given the status of truth.

Individual perceptions and experiences are said to be subjective and have no scientific value. Only objective facts are counted as scientific.

Jainism takes a holistic view of reality and extends its domain to the physical as well as to the psychical order of existences. It also accepts personal perceptions and experiences as truths, these are however relative. The absolute truths are perceived and experienced by a pure and perfect soul (we are impure and imperfect). Jainism approach to reality is based on the following premises.

1 The law of causality holds good for the physical as well as the psychical order of existences. As no event in the physical world takes place without a cause, likewise no event in the life of a being also takes place without a cause. The cause may be traced in this life or previous lives, meaning that continuity is maintained in the lives of a being. Nothing in this life, the pain and the pleasure, has come as a surprise.

2 All truths are not empirically verifiable. Personal subjective experiences are also true. For instance, if you love someone your feelings are real though not empirically verifiable. Some chemical and physiological changes in the body do take place but these cannot represent the feelings. They are subjective in the sense that experiences of a particular event may vary with individuals. This is, however, not so in the case of a pure and perfect soul whose experiences and perceptions are objective and absolute.

Besides this many of the postulations of Jainism have scientific value.

Substance (Metaphysical Concept)

Jainism proposes rules for all existential in nature. The existential are called substances. We first define a substance and then study their rules.

Reality or substance is a metaphysical concept. We commonly believe that the things we see or perceive through our senses (or with the help of scientific instruments) are realities. All such things are forms of matter which are in fact modes of one reality called *pudgala*. All physical things we know, from an atom or its sub particles to a planet or a star, are modes of the same reality *pudgala*. There are five other realities which exist in the universe. We feel the existence of some of them but all five are confirmed by omniscient. Our perception is limited and relative due to the frame of reference provided by our physical mind, and our beliefs. An omniscient directly perceives the realities, physical and non physical, by his inner self without the help of senses and mind and therefore is able to experience the realities in their absolute form. Although we cannot directly conceive all the realities, their existence is logically proved.

The term reality or a substance (*dravya*) is used in specific sense in Jain philosophy. This refers to the fundamental substances that constitute the *Loka* or the universe. *Loka* is a technical term of Jain philosophy meaning the entire space in which all the six realities exist. A substance or *dravya* is described by its characteristics and properties. A substance is capable of eternal continuous existence through infinite succession of origination and cessation. A substance is also the assortment of qualities / attributes (*guna*). It experiences transformation or modification of its state. During this process of transformation the precedent mode (*paryaya*) ceases to exist and the succeeding mode originates but the basic nature of the substances is preserved in this change. This trinity of origination – cessation – permanence (OCP) is the basic characteristic of a substance. This rule applies to all substances and objects in nature. The attribute of permanence implies that a substance can neither be created nor destroyed; it can only change its form. Thus a substance is a reality or truth having permanent existence through change. Anything that does not confirms to the OCP rule is not a reality or a substance. All objects are, in fact, transitory permanent i.e. they are transient in respect of

modes and attributes and permanent in respect of their basic substance hood. No object can be purely transitory or purely permanent.

Modes

It follows from the above definition of reality that all realities are possessed of dual properties, one transitory and the other eternal. Due to the first, all things are in a state of flux, and they undergo transformation constantly, they cease to be and they become. But due to the second property, they do not lose their existence throughout the transformations, the substance persists through modes. If there was no persistence of existence through transformation, we would not experience continuity, this is it. On the other hand, if there was no transformation but absolute eternalism, we would not experience the ever changing pattern of the universe.

Qualities (Metaphysical)

That property which always subsists in a substratum is called quality. More particularly, qualities are also defined as those properties which have substance as their substratum and which are not themselves the substratum of other attributes. Qualities cannot be absolutely distinct from the substance, nor can they be absolutely identical with it. A quality can not belong to the substance without becoming its nature and being. The Jains admit that qualities are ever changing, but maintain that change of quality does not mean destruction of nature. An entity preserves its nature through change. The qualities also preserve their identities through their ever changing modes. Therefore the true relation between the substance and its qualities is one of identity-cum-difference. The element of identity explains the experience of persistence, while that of difference explains the experience of change.

A substance has three characteristics, it is real, it follows the OCP rule, and it possesses attributes and power of modification. The substance, the attributes and the power of modification, all three co-exist simultaneously, no one can be separated from the other. The attributes discriminate between substances and modification produces conjugated form of substance. There can be no modification without a substance and no substance can exist without modification. Similarly, there can be no substance without an attribute and no attribute can exist without a substance.

Many attributes co-exist in a substance but the modifications take place in succession. Co-existence indicates steadiness and occurrence of successive change represents dynamic nature of a substance. Modification is a continuous process and the modes come in existence one after another. A new mode can not come in existence without the cessation of the previous one and a mode cannot cease to exist without origination of a new mode. The

modification process is such that many cessations and originations take place in one '*samaya*'. A '*samaya*' is the smallest unit of time, a very tiny fraction of a second. All these characteristics are typical of a substance.

The metaphysical qualities are further divided into two categories:

(i) Universal qualities

(ii) Particular qualities.

Those, by virtue of which, things, in which they subsist, can be grouped together to form a class, are called universal qualities; while particular qualities are those, by virtue of which, one thing can be distinguished from another. There are ten common attributes, the first six are universal and are found in all substances. The universal attributes are:

(i) *Astitva* - Eternal existence. Eternal existence means continued presence of a substance without going in extinction. By virtue of this attribute the substance is neither created nor may it ever be destroyed it maintains its eternal identity.

(2) *Vastutva* - Causal efficiency. Every substance is capable of performing a purposeful action (*arth kriya*). This happens due to its causal efficiency which emphasizes the aspect of 'change' in the substance.

(3) *Dravyatva* – Substance hood. Substance hood is an attribute by which the mode of a substance keeps on changing continuously. The quality of substance hood enables a substance to be substratum of qualities and modes.

(4) *Prameyatva* – Objectivity. By virtue of this attribute a substance can become an object of one's knowledge.

(5) *Pradesatva* – Spatial existence. By virtue of this attribute the substance extends into the space. Therefore each substance has a shape.

(6) *Agurulaghutva* – Eternal persistence (Identity). By virtue of this attribute the substance preserves its specific substance identity and the qualities retain their quality hood during change. This attribute is the reason for individuality of a substance.

The four particular qualities are consciousness (*Cetana*), inanimate quality, materiality and non-materiality.

Each substance has eight out of ten attributes listed above. *Jiva* or soul has attributes of eternal existence, causal efficiency, substance hood, objectivity, spatial existence, eternal persistence, consciousness (*Cetana*), and non-materiality. *Pudgala* has the attributes of eternal

existence, causal efficiency, substance hood, objectivity, spatial existence, eternal persistence, inanimate quality and materiality. *Pudgala* does not possess consciousness. The rest four intangible substances have all attributes except consciousness and materiality.

Six Realities or Substances.

According to Jain philosophy there are six (and only six) kinds of substances in nature.

- (i) *Dharmastikaya* (or *Dharama*) – It helps motion of *Jiva* (life) and *pudgala* (matter and energy)
- (ii) *Adharmastikaya* (or *Adharma*) - It helps *Jiva* and *pudgala* to assume rest position.
- (iii) *Akasastikaya* (or *Akasa* or Space) - It provides accommodation to all other five realities.
- (iv) *Pudgalastikaya* (or *Pudgala*) – It means all matter and energy.
- (v) *Jivastikaya* (or *Jiva*) – It refers to all forms of life.
- (vi) *Kala* – Time.

All the six substances co-exist and accommodate one another. Although they are mixed with each other they maintain their distinct identity. The suffix '*astikaya*' used in first five realities above refers to the property of spatial extension. These substances are homogeneous continuum composed of multiple parts or *pradesas*. A *pradesa* is the space occupied by one *paramanu*, the smallest unit of energy. The term '*astikaya*' is a compound word made up of '*asti*' and '*kaya*' which respectively mean '(real) existence' and extensive body. The term *astikaya* thus means a real extensive magnitude i.e. having plurality of parts, (*pradesa*) in its constitution. *Kala* is not an *astikaya*, it has neither extension in space nor plurality of parts. Each of these substances continues to exist as an entity eternally.

***Pudgalastikaya* (Matter)**

Jiva and *pudgalastikaya* are the two main substances in *loka*; the rest four viz., *dharmastikaya*, *adharmastikaya*, *akasa* and *kala* are passive helping substances. The word *pudgala* is a derivative made up of two words: *pud* meaning combining or fusion and *gala* meaning dissociation or fission. The properties of fusion and fission, which characterize all matter, are also responsible for the name *pudgala* given to this substance.

The characteristic attribute of *pudgala* is that it possesses the properties which can be perceived by sense organs viz. color, smell, taste and touch. Concomitance of all the four is emphasized by the Jains. In other words, if a thing is perceived by the sense of touch, it must also necessarily possess smell, taste and colour. The *paramanu* structure of *pudgala* is, as its name implies, absent in other *astikayas*. Whereas the other four *astikayas* are indivisible i.e. not disintegrable, *pudgala* is divisible. The ultimate indivisible unit of *pudgala* is called

paramanu. *Paramanu* is the pure form of *pudgala* and all matter and energy are modes (impure) of *paramanu pudgala*. The *paramanu* can neither be created nor can it be destroyed. It is eternal. Although it possesses sense – qualities, it cannot be an object of sense – perception. It is the subtle most physical entity. By itself it transcends the sense experience, though it is basic constituent of all perceivable objects.

Pudgala is the only substance which is *murta* (corporeal) and perceivable. *Rupatva* (form) / *murtatva* (corporeality) or sensory perceptibility is the sum total of the four sensuous qualities mentioned above. All mutation of matter must possess all the four qualities as follows.

- ❖ Five types of primary color : Black, blue, red, yellow, white
- ❖ Five types of taste: Sweet, bitter, pungent, sour & astringent
- ❖ Two types of odor: Good smell and bad smell.
- ❖ Eight types of touch: Cold, hot, smooth (positive charge), rough (negative charge), light, heavy, soft and hard.

All colors, tastes and smells can vary in degree and a large range of colors, tastes and smells are possible.

Based on above qualities the material substances in nature are of three types.

- (i) Substance having one color, one smell, one taste and two touches.
- (ii) Substance having five colors, two smells, five tastes and four touches.
- (iii) Substance having five colors, two smells, five tastes and eight touches.

Paramanu is the two-touch substance, it has either cold or hot touch or either positive charge or negative charge. It has only one color, one smell and one taste. The four-touch substances comprise the subtle (*suksama*) class of matter, quasi-physical matter, as aggregates (*skandha*), which exist as energy. This matter has five colors, two smells and five tastes. The eight-touch substances constitutes the gross (*badar*) class of aggregates comprising energy and matter. These aggregates have the five colors, two smells and five tastes. Thus according to Jaina all aggregates, containing a large number of *paramanus*, necessarily possess all colors, smells and tastes. Generally only one or a few of the colors, smells and tastes manifest at a time, the others remain unmanifested. The manifestation of colors etc. is dependent on the mode of the substance. Some attributes manifest in the natural mode while some other attributes manifest in the alienated modes. The manifestations are both intrinsic and extrinsic. For example, some colors, smells and tastes manifest in a fruit in the green state and other colors, smells and tastes manifest in the ripen state.

Cold, hot, smooth and rough are primary touch qualities of *pudgala*. The smooth touch is also regarded as positive charge and the rough touch is regarded as negative charge. We shall use these equivalence properties in our study. The other four touch qualities viz. light, heavy,

soft and hard are secondary touch qualities. These touch qualities develop when bonding between infinite *paramanus* produces a gross aggregate. The mass (or weight) of the aggregate is said to relate to the light and heavy touch qualities. These two qualities always co-exist, they are not found separately in aggregate. The four touch aggregates and *paramanu* are *agurulaghu* and mass less. The mass is a property of gross aggregates having eight- touch.

In the true sense the *paramanu* and aggregates as a class have no beginning; they have always been in existence. But a particular aggregate or *paramanu* has a beginning and a life. The minimum life of a *paramanu* as *paramanu* and that of an aggregate as aggregate can be one '*samaya*' and maximum life can be innumerable '*samayas*'. Therefore, they undergo change. The *pudgala* are of two types, subtle and gross. The subtle does not remain subtle and gross does not remain gross for all time. After innumerable '*samaya*' the subtle changes to gross and gross changes to subtle form. Similarly, the color and other attributes of *pudgala* also change with time. A black color of one degree can stay in the same condition for a minimum time of one '*samaya*' and a maximum time of innumerable '*samaya*'. Thereafter, one degree black shall change to innumerable degree black. Intrinsic modification occurs in every substance every moment. Extrinsic modification of gross aggregates is also certain after innumerable '*samaya*'.

Vargana (Energy Fields)

Vargana is an important concept to understand matter at subtle level. In recent times, Acharya Mahaprajna defined *vargana* as *pudgala* aggregate made up of similar *paramanus*. According to Acharya Kanaknandhi a *vargana* is a cluster of *paramanus*, which are in unbound state.

There are infinite numbers and types of *varganas* according to Bhagwati Sutra but the following eight types are important from the point of view of their association with soul.

1. *Audarik* (Gross Body) *Vargana* - These *varganas* are of gross type and are used for construction of bodies of immobile and mobile organisms.
2. *Vaikriya* (Protean Body) *Vargana* - These *varganas* constitute the protean (*Vaikriya*) body that can exist in various forms like small or huge, light or heavy, visible or invisible, etc. Such bodies are possessed by celestial and infernal beings.
3. *Aharaka* (Migratory Body) *Vargana* - These *varganas* constitute a special kind of migratory body using yogic powers.
4. *Tejas* (Fiery Body) *Vargana* - The fiery or energy (*tejas*) body of an organism is made from *tejas varganas* which are supposed to have electrical quality.
5. *Karman* (Karma Body) *Vargana* - These *varganas* constitute the karma in the karma body of organism.

6. *Swasochhavas* (Respiration) *Vargana* - These *varganas* are source of bioenergy to organisms.
7. *Bhasha* (Sound) *Vargana* - These *varganas* are supposed to produce and transmit the sound and speech in organisms and inanimate objects.
8. *Mano* (Mind) *Vargana* - These *varganas* constitute the physical mind.

All these *varganas* are subtle and exist all over *loka*. Change of one type of *vargana* into another type is possible. Unless organized into a meaningful form by soul, these *varganas* remain in their natural state. It is only when soul organizes and uses them; they discharge meaningful functions as described above.

The *audarik*, *vaikriya*, *aharaka* and *tejas varganas* are supposed to exist as gross aggregates having attributes of eight- touch (including light, heavy, soft and hard touch). The *karman*, *bhasha* and *mano varganas* possess four touch attributes only (cold, hot, positive and negative), and exist in subtle form. The *swasochhavas varganas* exist both as four-touch (subtle) and eight touch (gross) *varganas*.

According to another classification there are 23 types of main *varganas* found all over *loka*. These *varganas* are classified on the basis of number of *paramanus* present in the cluster.

Dharmastikaya and Adharmastikaya

Out of the six substances, the first two *dharmastikaya* and *adharmastikaya* play an important role in understanding Jain cosmology. *Dharmastikaya* is the substance which renders direct assistance, without however exercising any force, to move *jiva* (psychical order of existence) and *pudgala* (physical order of existence) when they have developed the tendency to move, as water is in regard to the movement of fish. In other words, it is the auxiliary, and passive but indispensable and universal cause of motion. Similarly *adharmastikaya* renders extraordinary assistance to all substances to remain at rest. *Dharmastikaya* and *adharmastikaya* are not the initiator of motion and rest but they are only their auxiliary condition. However, without the help of the two media nothing can move or agitate and rest. There is an interesting and illuminating conversation on this subject between Bhagawan Mahavira and Gautama as follows:

Gautama: "O Lord! How does *dharmastikaya* benefit the *jivas*?"

Lord: "O Gautama! If there was no *dharmastikaya*, how would motion sustain? How would the sound waves spread across the space? How would our eyes blink? How would the mental, physical and verbal activities (subtle vibrations) take place? Then the whole universe would remain standstill. All types of motion take place only with the assistance of *dharmastikaya*. To assist motion is the characteristic of *dharmastikaya*."

Gautama: "O Lord! How does *adharmastikaya* benefit *jivas*?"

Lord: "O Gautama! If there was no *adharmastikaya*, how would it have been possible to achieve the state of rest, such as to retain standing, sitting, or sleeping pose? How could we achieve concentration of mind, maintain silence, or keep our body in complete state of relaxation, keep our eyes closed etc.? The universe would be in continuous state of motion resulting in chaos. It is only through the assistance rendered by *adharmastikaya* that rest is achieved. To assist state of rest is the characteristic of *adharmastikaya*."

Dharmastikaya and *adharmastikaya* are mutually interpenetrating and concomitant with cosmic space. Without them cosmos is impossible. Their existence and influence do not extend beyond the cosmos. They are all pervasive and co-extensive.

Akasa or Space

The *Akasastikaya* or *Akasa* in Jainism is defined as the substance, which acts as a container of other substances. It may be called as 'space', because the term 'space' also means the same thing. It is one homogeneous continuum and at the same time indivisible entity. It is ubiquitous, all-pervading and infinite in extent. So its *pradesas* are infinite in number. It is eternal i.e., beginning less and endless. It is non-corporeal (*amurta*) and devoid of touch, taste, odor and color. It is motionless. Being devoid of consciousness, it is *ajiva*, i.e., non-living. Space is not wholly occupied by other substances, but instead, it is partly occupied so even though it is a homogeneous continuum, ubiquitous and all-pervading, due to the presence of other substances, it can be classified into two types:

1. *Lokakasa* i.e., Cosmic Space
2. *Alokakasa*, i.e., Supra-cosmic (or trans-cosmic) Space.

That portion of space (*Akasa*) which is pervaded by other substances is called *loka* or cosmic space. The rest of the space, which is empty or simply void, containing no other substance, is called *aloka* or supra-cosmic space. The number of *pradesas* present in cosmic space is innumerable, whereas, there is infinite number of *pradesas* in supra-cosmic space. Cosmic space is one, indivisible and finite, and surrounded in all directions by supra cosmic space, whereas supra-cosmic space is one, indivisible, infinite and boundless. The shape of the *aloka* was explained by Lord Mahavira to his disciple Gautama, by the illustration of an infinitely big sphere which is hollow from inside. In other words, *aloka* resembles a huge sphere of infinite radius. This conveys the same idea that the universe is like an island of five substances viz., *dharmastikaya* etc., afloat in the infinite ocean of space. But it should be noted here that the space, cosmic and supra-cosmic, is a single entity. Only due to presence of other substances we divide space into two parts.

Cosmology has been described in detail in Jain scriptures. *Loka* is finite space in the centre of infinite *akasa*. *Loka* has a shape and volume. The Svetambara and Digambara literature differ in respect of the shape of *loka*. Both of these shapes are geometrical consisting of prisms and pyramids respectively. The *loka* is divided in three parts upper *loka*, middle *loka* and lower *loka*. Another kind of *loka* is also described in Jain scriptures. According to this the *loka* is *trisharavsamputakar* which means that the shape of *loka* is obtained by assembling three bowls of nearly truncated conical shape as shown in fig 1. The lower *loka* is an inverted bowl and two

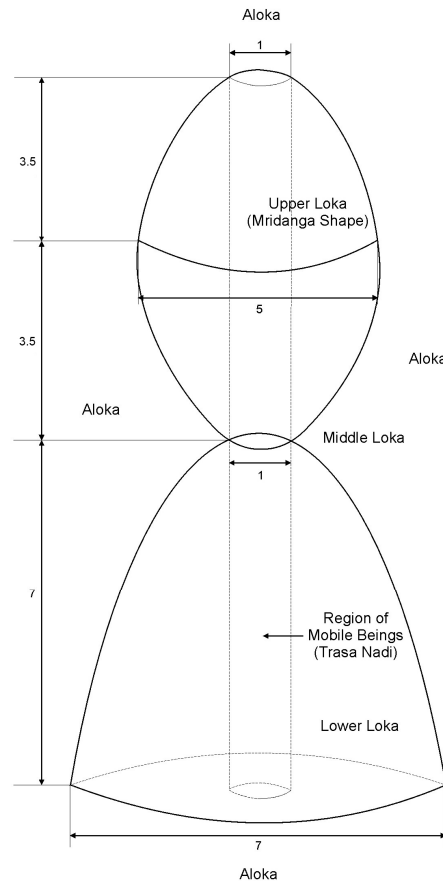
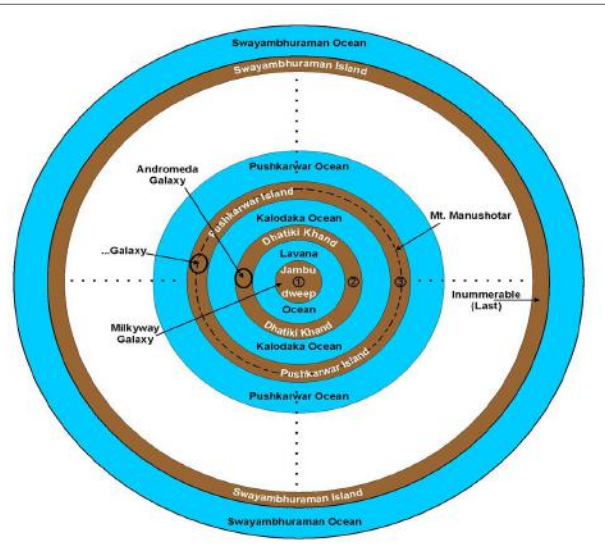
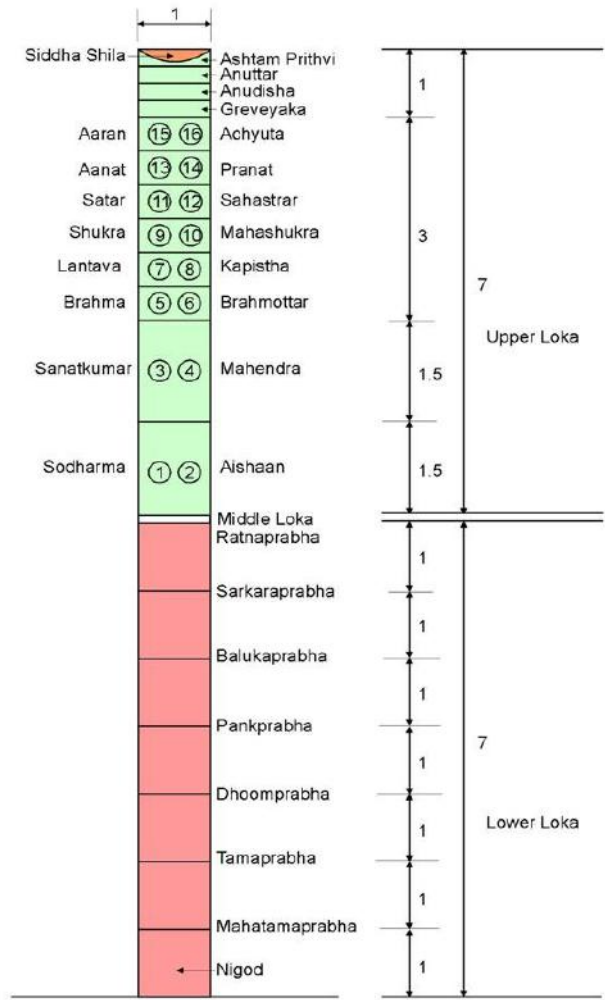


Figure 1: Three Bowl Shape Loka

bowls placed one above another constitute the upper *loka*, the lower one in upright position and the upper one placed inverted over it. The two bowls of the upper *loka* provide the shape of *mridnga*, a musical instrument of drum family. The total height of *loka* is 14 *rajju* and the height of lower *loka* and upper *loka* is 7 *rajju* each. The width at the bottom of lower *loka* is slightly less than 7 *rajju*. The width is 1 *rajju* at middle *loka*, 5 *rajju* at *brahma loka* and 1 *rajju* at the top. The cross section of *loka* at any height is circular.

The central region of *loka* is called *trasnadi*, or mobile zone, the abode of mobile organisms. All-mobile beings, including celestial beings and infernal beings, inhabit this zone and small sub-microorganisms are found all over *loka*. The upper *loka* part of *trasnadi* contains the heavens and the lower *loka* part of *trasnadi* contains the hells. The names of the hells and the heavens are shown on the figure.



The middle *loka* contains circular islands (*dweepas*) and oceans (*samudras*) alternatively placed as shown in figure. The central disk shaped island is called Jambudweepa. Jambudweepa is

surrounded by ring shaped Lavana Ocean, which is surrounded by Dhatikikhand Island. The next ocean is Kalodaka *samudra* and surrounding this ocean is Pushkarvara Island. The next ocean is Pushkarvara *samudra*. In this way there are countless islands and oceans one after another. The last island is Swayambhuramana Island and the last ocean is Swayambhuramana Ocean.

***Kala* (Time)**

Out of the six substances, time is one about whose nature there is no unanimity amongst Jain *Acharyas*, though they all are in agreement about the nature of the remaining five substances. The word '*kala*' has different meanings but in Jain philosophical discussion of substances, *kala* is used as a synonym of '*samaya*' (time). However, as per Jain philosophy, *samaya* is an indivisible unit of *kala*. (*Kala* usually means a period of time of some length of which *samaya* is the ultimate indivisible unit, a quantum time.) One *samaya* is defined as the time taken by a *paramanu* moving at the slowest speed from one space point to the adjoining space point. But, in common parlance, the word *samaya* is indicative of *kala*. While enumerating substances, *kala* has been counted as a substance whereas describing *astikayas* (extended existence), *kala* is not counted as an *astikaya*. Svetambara and Digambara traditions agree that *kala* is not an *astikaya*. *Kala* is without *pradesa*. Only the present moment of *kala* has existence. Past is already extinct and future has still not come into existence. Present moment (*samaya*) is a single unit and therefore cannot expand in three dimensions, came into existence means that *kala* is not an *astikaya*.

Although both Svetambara and Digambara *Acharyas* have divided time in two kinds, empirical time and transcendental time, there is difference of opinion among them regarding its nature. According to the former, transcendental time is the cause of transmutation. Substances like *jiva*, *pudgala* etc. undergo transmutation every moment, that is, their modes go on changing every moment; this is caused by transcendental time. In other words, transcendental time is the mode of *jiva*, *ajiva*. When seen from *niscaya naya* (transcendental standpoint), time is called transcendental time. Therefore transcendental time is considered real time. On the other hand, when the time is considered from the empirical standpoint, it is called empirical time. The empirical time periods range from the smallest unit of time, *samaya*, to the largest unit of numerable time. It is obvious that these distinctions of empirical time are made possible only with the help of some extraneous factors. The units of measurement are generally based on changes in the physical world, such as, the motion of the sun and the moon. This is why empirical time is never unconditional but dependent on other outside factors. The transcendental or absolute time is unconditioned, true and real. The empirical time presupposes the absolute time. The absolute time, consisting of instants, is conceived as beginning less and endless, whereas the empirical time has both. The instants arranged unilaterally are conceived as permanent. Every instant is coming into existence in one moment

and passing away in the next moment. Nevertheless, it is eternal. It implies that the flow of instant will continue for ever. It is running from the past unknown to the endless future. The instants have no extension of volume. In other words, there can be no question of simultaneous instants, the time series consisting of instants is always to be understood as successive. Empirical time is restricted to the human world and it is meant to measure the various distinctions of time for human activities.

What is propounded by Digambara tradition is entirely different from above propositions. Digambara Acharyas, though having accepted two types of times, transcendental time and empirical time, have, even then, given different definitions. Famous Jain Acharya Shri Nemichand Siddhant Chakravarti (10th Century A.D.) writes about *kala*: 'what is seen in the form of a transmutation of a substance is empirical time and that which is possessed of the characteristic of *varṭana* (duration) is transcendental time. That which pervades on each *pradesa* of cosmic space (*lokakasa*) like a heap of gems, remaining discrete from each other, is time-atoms (*kalanus*). Transcendental time which is in the form of *kalanus* is real substance and is innumerable from the point of view of number, because there are innumerable *pradesas* of cosmic space and there exists one *kalanu* each on each *pradesa*. These *kalanus* are independent of each other and not in aggregate form (i.e., not a *kaya*) and therefore time-substance does not become *astikaya*. Transcendental time in the form of *kalanu* is recognized by its characteristic of *varṭana*. Each substance itself becomes the material cause of transformation taking place in every *samaya*, but the auxiliary cause of this transformation is *kalanu* and this assistance of *kalanu* is noun as *varṭana*. According to some Acaryas, the experience of persistence of substance in the transformation of *pariyaya* taking place every *samaya* is *varṭana*. Thus, the *kalanu* substance which is possessed of the characteristic called *varṭana*, is the transcendental time. It implies that the changes (*pariyayas*) take place in the substances on account of the instrumentality of *kalanus* and at the same time the eternality of the existence of the substances is maintained. The *kalanus* themselves are also possessed of the trinity of origination, cessation and persistence. The present *samaya* (instant) is originated (i.e., comes into existence), the past *samaya* ceases to exist, but the *kalanus* which are the substrata of both these instants continue to persist all throughout. Thus, the definition of real substance (*sat*) which propounds that *sat* is possessed of origination, cessation and persistence, applies to *kalanu*, and consequently the *kalanu* is believed as a real substance. The term empirical time signifies the duration such as *samaya*, *ghati*, *muhurta* etc. or the *pariyayas* (modes) like new, old etc. of the substances. It means that the periods like instant, hour etc. which are related with the modes of the substances are designated as the empirical time and not the modes themselves. The empirical time is with a beginning and an end; whereas the transcendental time (*kalanu*) is eternal without beginning and without end. The empirical time it is not a substance. Thus, on account of the instrumentality of the transcendental time

(*kalanu*), (which itself is an independent substance) the changes in the form of *paryayas* (modes) take place in other substances and the empirical time is recognized as the duration of these modes.

Lecture-2

Classification of Soul in Jainism

Jainism has classified the souls in various ways. Primarily souls are of two types, the liberated souls (substantial reality) and mundane souls (psychical order). The mundane souls are further classified as follows.

(i) Active souls (*vyavahara rasi*) and Inactive souls (*avyavahara rasi*)

Active souls are the psychical order souls who assume different forms in accordance with their karmas and who take birth anywhere in the *loka*. Inactive souls are confined to the bottom part of lower *loka*. Their modes always belong to the least developed category of sub-microorganisms called *nigod*. Their lifespan is so short that in a period of one heartbeat they complete seventeen life cycles. An inactive soul comes out of *nitya nigod* and becomes an active soul when a soul in *loka* is liberated. Thus the number of active souls (mundane) in *loka* is always same. In this process the number of liberated souls increases and the number of inactive souls decreases. The total number of liberated souls is infinite and the total number of inactive souls is infinitely infinite. Thus there is an inexhaustible stock of inactive souls whose population shall not materially change at any time in future, even after migration of infinite souls to active category. All inactive souls are alike.

(ii) Souls capable of liberation (*bhavya Jiva*) and souls not capable of liberation (*abhavya jiva*).

Some souls are capable of liberation and some are not. However, there is no test to find out which soul is capable and which is not capable of liberation. This is known only to omniscient.

(iii) Mobile beings (*trasa jiva*) and immobile beings (*sthavar jiva*). Immobile beings have only one sense of touch.

(iv) Subtle (micro and sub-micro) organisms (*suksma jiva*) and gross organisms (*badar jiva*)

The subtle organisms are not visible to naked eyes. They may be immobile like sub microorganisms or mobile like bacteria and archaea (comparatively gross micro

organisms). Gross organisms are visible to naked eye. They range from one sense plant and vegetation to five sense beings.

(v) Organisms having mind (*samanaska*) and organisms without mind (*amanaska*)

Normally five sense organisms have mind. All organisms having one to four sense and also some five-sense organisms do not have mind. All human beings and terrestrial, aquatic and aerial animals possess mind. Organisms without mind also do possess some thinking ability but that is negligible.

Classification of soul based on birth

Souls are of four types according to birth

1. Infernal beings (*Naraki*)

The souls living in hell are infernal beings. The infernal beings are subjected to physical and mental torture and suffer the rages of heat and cold.

2. Animals

Animals are the biggest group among active souls. All souls having one to four senses necessarily belong to animal category. They include organisms like worms, ants, fly, insects etc. Higher animals have five senses. They include terrestrial and aquatic beings and birds. The five sensed animals generally have mind.

3. Human beings

Humans are highest developed and capable beings. Human beings are of three kinds (i) born on land of action (ii) born on land of inaction and (iii) having birth by agglutination (*sammurchim*), these are humans only for name sake. Humans born on a land of action make their living by productive efforts employing skills of agriculture craft, trading, reading, writing, defending and self protection, etc. Humans on lands of inaction are born in pairs of male and female and depend on trees (*kalpvriksha* providing fruits, vegetables and other needs) for their living. These humans are simple, sweet natured and soft speaking. Souls taking birth by agglutination are humans only for the namesake; they are microscopic and born in excreta and urine of human beings in highly undeveloped state and have a very short span of life.

Human beings have the controlling role in this world. Humans are discovering nature generating vast amount of knowledge and information, and are inventing machines, and aids for their physical and mental help and pleasure. Human beings only, among all organisms, have the capacity and abilities to acquire super natural powers through meditation and spiritual

efforts. The total population of human beings is less than the population of infernal beings or celestial beings. Life as a human being is a rare possibility and is highly valuable.

4. Celestial beings (*Devas*)

Celestial beings live in heavens. Their bodies are made from protean material. Celestial beings enjoy high degree of pleasure and prosperity and possess super natural powers of many kinds. They have a long span of life; on expiry of life span a celestial being is not born in heaven again. Similarly an infernal being is not reborn in hells. That is, both of these kinds of souls are reborn in middle *loka* (Earth like planets). The human and animals that are found in middle *loka* can be reborn in any part of *loka*.

Six Classes of Souls

The six classes of souls are – earth body soul, water body soul, fire body soul, air body soul, plant body soul and mobile souls. This kind of classification of souls is unique to Jain philosophy. Lord Mahavira gave this classification from his "direct" observation of nature by his power of omniscience. He could see the minutest form of life. He could see that there are innumerable numbers of lives in a tiny particle of earth or a drop of water, that they all breathe, take food and have a life span. He offered a detailed description as to their birth, life after death, cognizance power, passions, etc.

1. Earth Body Soul

The earth is the body of earth body soul. The earth, salt, gold, mica and all other minerals etc. are earth body souls. The earth, minerals etc, according to Jainism, have consciousness before processing. The total number of earth body souls is innumerable. Earth body souls mainly fall in two groups – subtle (*sukhma*) and gross (*badara*). The subtle earth body souls are not visible to naked eyes and the gross souls have bodies made up of large visible aggregates. The minimum life span of earth body soul is less than one Indian hour (*muhurt*) and the maximum span is 42000 years. Earth body souls are destroyed by cold, heat, salt, acid, alkali and electric charge.

2. Water body Soul

The flowing water is the body of water body souls. Dew, ice, fog etc. are water body souls of gross type. Water body souls are also innumerable in *loka*. They are destroyed in the same way as earth body souls. Before processing water has consciousness, the minimum life span of water body soul is less than one Indian hour and the maximum span is seven thousand years. Processing, i.e., handling of raw water in any manner whatsoever inflicts pain on these

organisms and is therefore a sinful act. All subtle water body souls are alike and found all over *loka*. Gross water body souls are of various kinds as mentioned earlier

3. Fire Body Soul.

Fire is the body of fire body souls. Some examples of fire body souls are burning fuel, sparks, flames, meteorites, etc. These souls are also innumerable in *loka*. They are destroyed in the same way as earth body souls and possess consciousness before destruction. Their minimum life span is less than one Indian hour and the maximum span is three days. All subtle fire body souls are alike and the gross souls are of different forms as mentioned.

4. Air Body Soul

The flowing air is the body of air body souls. Hurricanes, typhoons and wind storms are some examples of gross air body souls. Air body souls are also innumerable in *loka* and have consciousness before processing. The minimum life span is less than an Indian hour and the maximum span is three thousand years.

5. Plant Body Soul (*Vanaspatikaya*)

The plant and vegetation are bodies of plant body souls. Plant body souls are of two kinds' solitary body soul (*pratyeka vanaspati*) and common body soul (*sadharana vanaspati*). The soul who is the sole owner of the body is called solitary plant body soul. When more than one soul has a common physical body, the plant is called common body soul. In such cases the breathing process, food, age and body are common to all souls living in that body. It may be noted that there may also be many souls who depend on the body of a solitary body soul but in that case they enjoy individual independent lives and have no body in common. The examples of solitary body plant soul are:

Tree Mango, banyan, etc.

Grass Soft grass, etc.

Green vegetables Spinach, etc.

Plants growing in water Lofurs, etc.

All bulbous roots, roots of various sorts and sprouts are common body plant *jivas*. Aluya (not potato), onion, garlic, radish, ginger, turmeric etc. are well known common-body plants. The most significant difference between the two kinds of plants is that the individual body plants would have innumerable organisms, each with its own body; the common body plants contain infinite souls sharing a common organism. Some parts of the plants may of the latter

type in the early stage but would later be converted into the former type. For instance, every leaf in its infancy is a common body organism but later on as it matures it is converted into an individual body plant.

6. Mobile beings (*Trasakaya*)

All mobile beings with two to five senses are *trasakaya*. Mobile beings can move forward and backward, contract and expand, produce sound, move around and run in defense, get frightened, etc. All infernal beings, celestial beings, animals and humans are mobile beings. Mobile beings are found only in the *trasnadi*, the central region of *loka*.

Mobile beings having two to four senses are classed as deficient creatures.

Two- sense creatures – have the senses of touch and taste. Small insects, shell, conch shell, earthworm and other worms are some examples of two sense creatures.

Three- sense creatures – have the senses of touch, taste and smell. Ants, bed bugs, scorpions, pests, louse, etc. are some three-sense creatures.

Four sense creatures – have the senses of touch, taste, smell and vision. Flies, mosquitoes, black beetle, bee, locust etc. are four sense creatures.

Five sense beings. These beings are born either by womb or agglutination.

All creatures having one to four senses, five sense beings without mind and infernal beings are necessarily hermaphrodites. Celestial beings have male and female category (and no hermaphrodites). The human beings and animals have all three categories i.e. male, female and hermaphrodite.

The following facts apply to the soul:

1. In embodied existence, soul and body appear to be same but this is not really so. Body is different from soul.
2. Soul contracts or expands to occupy the space of the body he assumes. The same soul can pervade the body of an elephant or an ant. Notwithstanding the size of the body, the number of *pradesa* of soul remains the same (countless).
3. Soul is non corporeal and is recognized by his ability of cognizance and power of perceiving and knowing objects.
4. Soul is the source of intuition, perception, happiness and vitality in a living organism.

5. An embodied soul desires for comical amusement, recreation, pleasure, speech, movement etc.
6. The karma *varganas* attracted by a soul get converted into karma unaided.
7. The thoughts and actions of a soul leave a permanent impression. These impressions are stored in the karma body, which moves with the soul in his journey from one body to another.
8. The bondage of atman and karma is beginning less. The karma can be shed from the soul by practicing austerity and penance. This in fact, is the way to get rid of karma and attain the state of salvation.
9. Soul is non-corporeal but he is embodied due to his impurity in the presence of karma.
10. All living organisms have similar potential powers and abilities but every living organism is in a different state of development. The development of the soul is determined by own purifying efforts and other governing factors.

Karma

All Indian philosophies believing in re-birth believe that the records of actions performed in the life are maintained in some form and that these records become a cause for effects in future life. Such records are known as karma (or *Samskara*). The soul is immortal and is embodied due to his karma, which are the cause of cycle of rebirths. All births of a soul are not temporally independent but are linked through karma records. In fact, the soul is on a time journey consisting of several divisions, each division is known as life. The powers and abilities the soul enjoys in a particular life depend on his performance in previous births. Therefore, state of the soul in this life has not come as a surprise; it is a logical outcome of his previous performances. In other words the soul himself is responsible for his state in this life and there is no one else, including God, to blame for it. This type of continuity in the journey of the soul becomes possible through karma records. Contrast this to the life of any man-made system. If all the events in the life of a system were independent and were not connected in some way the system shall not function in the designed or desired way and shall lose its meaning in the intended sense. All man-made systems are carefully monitored, regulated and controlled to achieve the designed objectives. This process involves record, storage, transmission and application of information in an efficient and purposeful manner so that control on the system is maintained. The same is true for the soul. Here the soul himself maintains his records and uses them faithfully and efficiently in his onward journey. In case of a soul the records are extraordinarily large and are maintained over a long period of time, may be thousands of years, in a flawless and scrupulous manner. This is done in an ingenious and fool proof way so the records are carried from one life to another and the continuity of existence is maintained in a perfect and meaningful manner. The state of the soul is determined by the level of his manifested

consciousness, which in turn depends on the existing karma. The life a soul enjoys in different realms like animal human being, infernal being or heavenly being is a function of consciousness and karma. The karma body comprising of the karma is a common feature of all organisms in the Universe from a virus to highly developed organism like human beings.

Bonding of Karma

A soul binds karma by self performance. We know that karma *varganas* are subtle form of energy (mass less) existing in the whole cosmos. The karma body made of karma *vargana* can be considered as a field. The soul is associated with karma in the impure state. The impure soul is continuously in a state of agitation, these agitations have a relation with activities of mind, body and speech and passions. The passions in the form of traits like attachments and aversions are found in all worldly souls. Such traits do not allow the soul to rest in peace but keep him in an agitated state all the time. Such agitations being very subtle are not consciously experienced by the organisms but they are facts of life. The *jiva* substance, which is non-physical, is therefore always in a state of vibrations. The intensity of vibrations depends upon the strength of the acts of mind, body and speech and the attachment and aversion traits of soul.

The vibrations of soul induce similar vibrations in the karma field. We recall that the soul is non-physical and karma field is physical and there can be no direct interaction between the two. The principle of parallelism is supposed to hold between the soul and the karma field such that changes in the modes of one appear as corresponding change in the modes of the other without any physical connection. The relation between the state of the soul and the karma field is like an object and its image in the mirror, the changes in one are reflected in the other. According to Rajmalla, "both soul and karma possess a power of negativity (*Vibhava Shakti*) which affects bondage between the two. The manifestation of the negativity of the soul appears only when the soul is in union with the karma. In the absence of karma the negativity manifestations are suspended, the power of negativity of the soul then yields natural positive manifestations." A distortion is described as "the perversion of a natural power of the soul." When the function of the soul with respect to an attitude is distorted by its conjunction with the karma, we get the negative manifestation, but when such function is not obstructed, the soul yields positive manifestations.

The soul is said to possess the susceptibility of being affected by the karma and the karma, in their turn, have the capacity of so modifying themselves that they become instruments in the process psychic manifestations. The negativity possessed by the soul and matter both makes the two liable for mutual influence. The matter having obtained the conscious manifestations of the soul merely as an auxiliary cause transforms into karma by itself. The karma becomes simply auxiliary cause of the conscious manifestations of the soul

undergoing transformations by itself. Interaction and parallelism embody simply the side views of the facts of relation between the soul and karma. By holding the transcendental point of view the Jaina holds that the two series of the spiritual and material manifestations run parallel and are not mutually determined.

The vibrations in the karma field attract karma *varganas* of similar nature (or frequency) from the cosmos by the principle of resonance. This means that the frequency of vibrations of the karma field coincides with the frequency of karma *vargana* in the surroundings. These incoming karma *varganas* unite with the existing karma of the same nature and both get bonded due to force of passions of the soul. Bonding is an electrical activity using the charge of *paramanu*. The bonded karma contains the information of the event causing the inflow of karma *vargana*. Passion is the binding force between incoming *vargana* and the existing karma. If the passion were absent or not operative the incoming *varganas* shall not bond with the karma and will exit back to cosmos without interacting with karma. The bondage which occurs due to activity only is called an instantaneous bondage, while the bondage due to passions is called a long-term bondage. The soul which is not free from attachment incurs long term bondage. The soul which is free from attachment incurs the instantaneous bondage. One is due to freedom from passion and the other is due to the rising of passion. So they cannot occur simultaneously.

The nature of karmic bondage caused by influx varies according to the particular physical and psychological conditions of the subject, which are: high or low intensity of passions, whether the act is done knowingly or unknowingly, the enthusiasm (energy) with which the act is done and the instrument used in the act.

Where do the karmas bind in the karma field? The karma bond all over the field uniformly. Jain philosophy posits that the soul has innumerable *pradesas*, tiny space parts, each part is supposed to be equal to the point of a needle. The karma field is also divided in the same number of parts as the soul and the bonding takes place on each part uniformly so that at any instant each part of karma field contains the same amount of karma.

Karma Bonds

There are four properties of karma bonds.

1. **Numerical strength of Bond (*Pradesa bandh*)**. Truly speaking the soul is indivisible but for the purpose of theoretical explanation it is assumed to have numerous space points. Numerable, innumerable or infinite number of karma *varganas* may bond with each soul *pradesa* depending on the strength of action. If the strength of action is low, less number of karma bond with each *pradesa* and so on. The *pradesa* bond means the number of the karma

vargana binding with each soul *pradesa*. The bonding is uniform over all the *pradesas*. Why such a large number of karma *varganas* bond with each *pradesa*? This is because only infinite number of karma can obscure the ability of the soul. Further, only the karma in the active mode discharges this function as described below.

2. Nature of Karma bond (*Prakriti bandh*).

The pure soul is endowed with infinite bliss, intelligence, intuition and vitality. These are limited by karma in worldly existence. Jain philosophy classifies karma on the basis of the particular property of soul that the karma obscures and limits. The soul has eight main properties or attributes and accordingly there are eight main types of karma

1. Intelligence (or Knowledge) obscuring (*Jnanavarniya*) karma. A pure soul has pure and perfect knowledge. Karma obscures and limits the pure and perfect intelligence/knowledge of soul. Intelligence is conceptual consciousness and is determinate.
2. Intuition (or Conation) obscuring (*Darsnavarniya*) karma. This karma restricts the intuition, conation and perception ability of soul. Intuition is non-conceptual consciousness and is indeterminate.
3. Bliss obscuring (or Feeling producing) (*Vedaniya*) karma. A pure soul enjoys infinite bliss. This karma obscures the bliss property and produces the feelings of joy and grief to appear depending on the state of the soul.
4. Deluding (*Mohaniya*) karma. A pure soul experiences the absolute truth. The deluding karma hinders the perception of the truth. This happens in two ways, one the perception and comprehension is obscured so that truth is not apparent, and second the equanimity of conduct is obstructed. The very existence of soul is doubted or forgotten and all acts and efforts are directed towards the body.
5. Life Span (Age) determining (*Ayusa*) karma. A pure soul is ageless, it is never embodied. The life span determining karma determines the life span in a particular realm viz., animal, human, infernal or heavenly mode.
6. Form producing or Morphological (*Naam*) karma. This karma decides the form, structure, detailed features, outward appearance etc of the being. The concept is very general and refers to all kinds of existences including animals, plants, humans, infernal beings and heavenly beings.
7. Status (quality of inheritance) determining (*Gotra*) karma. This karma refers to quality of inheritance (genetic) one gets from the parents.
8. Vitality (or Will Power)-obstructing (*Anataraya*) karma. This karma produces obstruction in the expression of vitality of soul and causes hindrance in his capability of resolution and enjoyment.

The eight main types of karma are further divided into sub-types.

3. **Duration of bond (*Stithi bandh*).** Karma remains bound to the karma body for certain duration of time. The total duration consists of two parts passive and active duration. In the passive period called *abadhakala* the karma exercises no effect on the soul. In the active or experience period the karma acts and the soul experiences the prescribed effect of karma. For example, when intelligence obscuring karma rises the cognizing power of the soul is effected. At the end of active period the karma body becomes free of that karma.. The passive period is not fixed and varies between two limits, the minimum limit and the maximum limit. The passive period cannot be less than the minimum limit and cannot exceed the maximum limit. The minimum limit can be from about one hour to few hours depending on the type of karma and the maximum limit is of few thousand years.

The duration of the passive period is fixed at the time of bondage of karma some where between the two limits depending on the strength of the passion, lesser the strength smaller is the duration. On termination of the passive period there occurs karma *vipak* or the rise of karma. Now the karma becomes active and gives its fruits, that is, it shows its prescribed effect on the soul. The active period is much small as compared to the passive period. During the active period the karma separates from the karma body and migrates to the surroundings in the form of karma *vargana*.

4. **Intensity of bond (*Anubhag bandh*).** What shall be the intensity of experience, good or bad, when the karma becomes active? This depends on the intensity of the bond which is pre decided at the time of bondage of karma. A strong passion binds high intensity karma and vice versa.

Classes of Karma

The eight types of karmas are divided in two classes on the basis of their influence on soul.

1. **Psychical (*Ghatin*) Karma.** These karmas determine the psyche; they inhibit and destroy the fundamental nature of the soul. The intelligence obscuring, intuition obscuring, deluding and vitality-obstructing karmas belong to this group.
2. **Physiological (*Aghatin*) Karma.** These karmas decide the form of the physical body and do not affect the psychic powers of the soul. This group includes bliss obscuring karma, morphological karma, status determining karma and life span determining karma.

It may be mentioned that the fundamental characteristic of soul is never fully obscured. If that were the case, the soul would lose its basic character and become as good as an inanimate object. Even the densest and darkest of cloud cannot completely obscure the sun,

in the same way any amount of karma cannot obscure the total abilities of intelligence and perception of the soul.

In general the psychical karmas produce the following effects on the soul.

- 1 Generate attachment and aversion qualities like anger, ego, illusion and greed
- 2 Generate desires, instincts and needs like hunger, sleep, and defense (fear), mating (sex)
- 3 Determine the level of intelligence, knowledge, wisdom, perception, will power, determination
- 4 Determine faith, philosophical and anti-spiritual qualities
- 5 Determine personal and social conduct and behavior

The morphological karmas affect a wide variety of functions ranging from the type of realm of birth to the minutest details of the body. These karmas can produce all possible forms of all species, all possible variations in bodies of a given species, all different features like outer appearance, disabilities, voice etc., autonomic and physiological functions, and structural aspects of the body. The bliss obscuring karma may operate at mental or body level to produce mental or body related pleasure or pain. The life span determining karmas have a temporal character and may be connected with operation of *prana*.

Karma and Destiny

Is our destiny, fate or events in the life solely determined by karma? The answer is a definite No. If it were so, a soul will never come out of the karma cycle. In fact there are five operators which determine our destiny.

(a) **The power of the soul or the Free Will.** The power of the soul is immense and no amount of karma can completely obscure it. The soul is like a king and the karma his courtiers. Howsoever powerful the courtiers are the king can exercise his discretion, save in exceptional cases, and make appropriate decision. What is needed is determination. The power of the soul is so great that if a person is determined to proceed on the path to emancipation, the karma would go in the silent mode and await onslaught by the soul. The soul with his power can destroy the karmas and lead the way to liberation. This, however, should not imply that every soul can achieve this feat. Only in rare case the determination is so strong that the might of karma is defeated. Generally, the karmas dictate the imprisoned king, the soul.

(b) **Circumstances.** We have no control over the circumstances. The karma has access to the soul only. We have to adjust ourselves according to the circumstances external to soul. The

karma has no role in choosing the wife or husband, sons or daughters, meeting or departing, loss or profit, etc. Similarly the natural calamities like floods, draughts, storms, earthquakes, etc. have nothing to do with our karma. The government policies and rules are based on considerations other than our karma. In essence, the creation and elimination of anything external to our self is governed by their own causes and is not connected with our karma.

(c) **Time.** Time is an independent operator. It affects everything in the universe including our lives. Some events are time dependent and bear no relationship with our Karma. As a subject we have to put up with such events.

(d) **Karma.** Karma is the most important operator in our destiny. It plays the major role in deciding the course of our life. The effect of karma can be moderated by acting as a neutral observer of the events (*drasta-jnyata*), penance and meditation.

(e) **Soul Initiative (*Purushartha*).** By taking proper initiatives a soul can change the course of his life which otherwise would be guided by karma. Right initiative provides means in our hands to shape our destiny according to our will. What is needed is a strong determination, courage, untiring efforts, self – confidence energy and faith. Napoleon Bonaparte built his future by his own determination, hard work and confidence. You can be an architect of your destiny by inculcating such virtues. As per the Jaina theory the bonds of karma can be changed by proper initiatives. It is possible to have early rise of karma, the intensity of action of the karma can be reduced, and the nature of some karma can be changed, etc. by taking positive initiatives. The choice is with you. All great men in the world have fought with their karmas and won. Greatness is not a gift; it is earned by hard work, perseverance, dedication and determination. This is the way to defeat the karma and to shape the future. In the absence of proper initiatives the karma is the master of your destiny.

Karmas bear fruit in later life or later birth. Auspicious activities produce pleasure, peace and happiness. Inauspicious activities produce pain, misery and unhappiness. ‘You reap what you sow’ is absolutely true. Your present state is the result of your past karma. What you do in this life shall determine your future (this life or next). You shape your future. While you enjoy the rising karma, you also bond new karma due to activities performed. Generally, as karma balance is reduced, by spiritual efforts, the life is manifested with more intelligence, powers, happiness and peace. On elimination of psychological karma, one becomes Omniscient.

- Prof. Narayayan Lal Kachhara

Books recommended:

1 Narayan Lal Kachhara, "Jain Metaphysics and Science: A Comparison", Prakrit Bharati Academy, Jaipur, 2011

2 Samani Chaitanya Pragya, "Scientific Vision of Lord Mahavira", Jain Vishva Bharati, Ladnun

3 Narayan Lal Kachhara, "Jaina Doctrine of Karma", www.jainworld.com