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#### **Contents**

NEED OF THE DAY-COMPARATIVE STUDY OF INDIC-RELIGIONS Prof. Sagarmal Jain	7
KARUNA AND THE SIGNIFICANCE OF ITS SOCIAL INPLEMENTATION  Dulichand Jain	12
TRANSMIGRATION, EVOLUTION AND JAIN KARMA DOCTRINE Dr. Subhash C. Jain	19
IMPACT OF JAINISM ON ENVIRONMENTAL SUSTAINABILITY Dr. Chandranath Chatterjee	41
JAIN RESPONSE TO ENVIRONMENTAL CRISIS Dr. Anindita Mitra	52
HISTORICAL DEVELOPMENT OF JAINA EPISTEMOLOGY AND LOGIC Dr. Anupam Jash	. 59
THE SCIENCE OF CLOUDS IN ANCIENT JAIN LITERATURE K.G. Sheshadri	67
ANCIENT JAINA ART AND ARCHITECTURE  Dr. Renuka Porwal	74

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## Need of the Day-Comparative Study of Indic-Religions

Prof. Sagarmal Jain\*

#### **Orientation:**

General Knowledge of different *Prakrits* with their peculiarities and their literature, along with Jain concepts of non-violence, non possession and non-absolutismism is essencial for Indic studies Indian culture consist of two traditions *Śramanic* and *Vedic*. At present *Śramanic* tradition has mainly two traditions-*Jainism* and *Buddhism* though there were some other were vanished in due course of time or merged in the greater *Hindu* tradition of Indian culture.

Early Jaina canonical literature has been written in prākņit languages, so to know Jainism in its original form knowledge of prākņit languages, with their grammar and with their different shades and their literature is necessary. Buddhist literature has been written Pāli language. In earlier times Pāli also had been called as Māgadhi, which was one of the shades of Prākņits. Pāli and Ardha-māgadhi which was one of the shades of Prākņits. Pāli and Ardha-māgadhi language of Jain canonical literature are very near to each other.

#### Various Prakŗit :

Prākrit language has various shades such as Māgadhi, Addhmāgadhi, Saurseni, Mahārastri and Paiśāchi etc. Jain canonical literature of Swetāmber sect had been written in Addhamāgadhi and of Digambar sect in Śaurseni prākrit. These two sades of Prākrit

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language are very near to  $P\bar{a}li$  and not very far from the *Vedic Sanskrit* and the language of *Avaistha* of *Parasi* tradition. For the studies of Indian culture as a whole the knowledge of these *Prakrit*-languages is very essential.

#### Purpose of Prākrits and Jain Studies:

The purpose of this Indic-study to teach the basic human values of Indian tradition along with the different *dharmas* of Indian origin and their basic philosophies as well as to understand the unity in diversity of Indian culture. We cannot understand of it's i.e. *Jainism, Buddhism* and *Hinduism,* because they various similarities along with their mutual impact so one thing must be clear in our mind that the studies and researches in the field of *Indic*-studies are not possible in isolation. In fact, *Jainism, Buddhism* and *Hinduism* are so intermingled and mutually influenced that to have a proper comprehensive knowledge of one, the understanding of the others is essential.

#### Śraman and Brahman Tradions of Indian Culture:

However, two distinct trends have been pre-domination in Indian culture from its earliest days, known as *Brahmanic* and *Śramanic*. No. doubt these two trends are distinguishable, but at the same time we must be aware of the fact they are not separable. Though on the basis of some peculiarities in their theories, we can distinguish them, yet in practice, it is very difficult to divaricate, them because neither of the two remained uninfluenced by the others. The earlier *Śramanic* trends and their later phases, *Jainism* and *Buddhism*, were influenced by the *Vedic* tradition and vice-a-versa. The concepts of *Tapas* or austerity, asceticism, liberation, meditation, equanimity and non-violence are earlier absent in the *Vedas* and came into existence in *Hinduism* through *Śramanic* influence. The *Upanisadas* and the *Gīta* evolved some new spiritual definitions of *Vedic* rituals, these two are the representatives of the dialogue taken place in *Śramanic* and *Vedic* traditions.

#### Mutual Impact of These Two Tradition:

The Upanisadic trend of Hinduism is not a pure from of Vedic

religion. It incorporated in itself various Śramanic tenets which gave a new dimansion to *vedic* religion. Thus, we can say that our present Hinduism is an intermingling of Vedic and Śramanic traditions. The vioce raised by our ancient *Upanişadic Rsis*, Munis and Śramanas against the ritualistic and worldly outlook of caste-ridden Brahminism, became more strong in the form of Jainism and Buddhism along with other minor Śramanic sects. Infact the Upanisadic trend as well as Jainism and Buddhism provided refuge to those, who fed up with vedic ritulism and the worldly outlook. Not only Jainism and Buddhism but some other sects and schools of Indian thought such as Ajīvikas and Samkhyas also adopted more or less the same course towards Vadic ritualism. However, Jainism and Buddhism were more candid and vehement in their opposition towards *Vedic* ritualism. They out rightly rejected animal sacrifices in vainas, the birth-based castesystem and the infallibility to the vedic verses. In Mahāvīra and Buddha, the most prominent preachers (exponents), we find the real crusaders: whose tirade, against caste-ridden and ritualistic *Brahminism*, touching a low water-mark and crumbling under its inner inadequacies, they gave a severe jolt to it. Jainism and Buddhism came forward to sweep away the long accumulated excrescence, grown on Indian culture in the form of rituals, casteism, and superstitions.

But we shall be mistaken if we presume that in their attempt to clear away the dirt of *Vedic* ritualism, *Jainism* and *Buddhism* remained untouched from it. They were also considerably influenced by Vedic rituals. Ritualism in the new form of *Tāntric* practices crept into *Jainism* and *Buddhism* and these practices became part and parcel of their religious practices and mode of worship. With the impact of Hindu *Tantricism*, *Jainas* adopted various *Hindu* deities and their mode of worship with some changes, which ware suited to their religious temperament, but these deities were alien to *Jainism* in its original form. The *Jaina* concept of *Śāsana Devatā* or *Yakṣa-Yakṣis* is nothing but a *Jaina* version of *Hindu* deities. As I have pointed out earlier, the influence has been reciprocal. This can be demonstrated by the fact that

one one side *Hinduism* accepted Raṣabha and Buddha as incarnation of God while on the other side *Jainism* inculded *Rama* and *Kṛṣṇa* in its list of their Śalākā Puruṣas. A number of *Hindu* Gods and Goddesses were accepted as consorts of *Tīrthankaras* such as *Sarasvati*, *Kāli*, *Mahākāli*, *Cakresvari*, *Ambikā*, *Padmāvati* and *Siddhikā*.

#### The Need of Comparative-Religious Studies:

The moot point I intend to make is that different religious traditions of our great Indian culture have borrowed various concepts from one another and that is the duty of ours to study and highlight this mutual impact, which is the need of the hour and thus we can bridge the gulf, existing between different religious systems.

To see the mutual impact and to understand the basic unity among these various religions and their canonical works such as a Prakrit work Rsibhāsita (Isibhāsiyaim) and Pali works such as Dhammapada and thera-gatha are most essential for the Indic studies, because Isibhāsiyaim has the basic teachings along with their philosophies of these three basic constituents of Indian culture i.e. Jainism, Buddhism and Hinduism along with some minor sects of Śramanic tradition. It has the basic teaching of two Jain thinkers, three Buddhist teachers as well as twenty two Upanisadic Rsis along with some other Rsis of minor Śramanic and Vedic traditions. Thus the study of the Prākrt language is necessary for to understand the unity in diversity in Indian-culture along with its three constitutes. To understand early Jain as well as Buddhist canon and mutual impact in these traditions the knowledge of these basic languages i.e. Pāli, Prākṛt and Sanskrit languages and their early literature is essential. The study of mutual impact and unity in diversity between these three systems of Indic culture is the fundamental aim of this university.

The advancement in all the walks of life and knowledge could not sublimate our animal and selfish nature. The animal instinct lying within us is still forceful and is dominating our individual and social behavior and due to this our life is full of excitements, emotional disorders and mental tensions. The more advanced a nation, stronger the grip of these evils of our age over it, the single most specific feature by which our age may be characterized is that of tension. Now a day not only the individuals, but the total human race is living in tension.

### Need for the Comparative Studies of Humane Values Propounded in Different Indian Religions:

Though outwardly we are pleading for peace and non-violence yet by heart we still have strong faith in the law of the jungle, i.e. the dictum 'might is right'. We are living for the satisfaction of our animal nature only, though we talk of higher social and spiritual values. This duality or the gulf between our thought and action is the sole factor disturbing our inner as well as outer peace. Once the faith in higher values or even in our fellow beings is shaken and we start seeing each and every person or a community or a nation with the eyes of doubt, definitely, it is the sign of disturbed mentality.

The basic problems of present society are mental tensions, violence and conflicts of ideologies and faiths. Jainism had tried to solve these problems of manking through the three basic tenets of non-attachment or non-possessiveness (*Aparigraha*), non-violence (*Ahimsā*) and non absolutism (*Anekānta*). If mankind observes these three principles, peace and harmony can certainly be established in the world.

First of all we are human being and then any thing else i.e. Hindus, Buddhists, Christians, Muslims, Sikhs, Jainas and the like. To be a real human being, is a pre-condition for being a real Hindu etc. Our prime duty is to be a human in its real sense. This spirit is echoed in one of the earlier Jaina text Uttarādhyayana where in Lord Mahāvīra has laid down four conditions for true religious being. viz-1. Humanity, 2. Belief in true of religious teachings, 3. Control over sensed and 4. Efforts for self purification. Thus we see that among these four conditions of a religious being, humanity occupies the first and the foremost position and to be a real human unbiased study of various religious systems and their script uses in essential.

## Karuṇā and the Significance of its Social Implementation

#### **Dulichand Jain\***

Some concepts and ideas are so powerful that they can have the power to transform the human mind and the human condition in a significant say. Karuṇā as propounded by the Jaina Tīrthankaras is one such potent tool. The Jaina scriptures teach that life is precious to one and all: hence one should not cause harm even to the sublest form of life. Such an attitude fosters kindness and friendliness which can unite hearts and minds. Live and let live-said Lord Mahāvīra. This slogan contains the answer to many of the problems that plague the world today such as disharmony, war, cruelty, terrorism, pollution, environmental degradation, ecological imbalance - to name a few. Today there is great need to protect the environment and ecology from disaster. Such problems have taken on a overwhelming proportion, and there is a dire need to understand that they have arisen because of our selfishness and self-centredness. They have arisen because we are not in harmony with the universe, with others, and with our own selves.

Lord Mahāvīra was a great seer who strived to halp the masses find peace and happiness. He did this by laying emphasis on non-violence and compassion. Non-violence is considered one of the five principles or Jainism along with truthfulness, non-stealing, celibacy and non-possessiveness. One is required to conduct one's life in accordance with these principles. Compassion is the practical implementation of non-violence. One cannot practice non-violence without compassion. The practice of compassion sows the seeds of re-

<sup>\*</sup> Chairman, Karuna International, Chennai, T. N.

spect for another. It teaches us that just as my life is precious to me, another person's life is precious to him too.

So Mahāvīra stressed on "reverence for all life". The life is every being is sacred and must be respected. He said,

```
सब्बे पाणा पियाउया, सुहसाया दुक्खपिडकूला।
अप्पियवहा पियजीविणो, जीविउकामा सव्वेसि जीवियंपियं।। (Ref. No. 1)
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i.e. "All living beings are fond of life, they relish pleasure, loath misery, disfavour injury, wish for longevity and long for survival. In short, life is dear to all."

Such compassion for every from of life, human and non-human, from the single sensed creatures to the five-sensed creatures, lies at the heart of Jainism. Life is precious and to kill any being, be it an innocent bee or a serial killer, is considered abhorrent.

No wonder then, the great seer declared compassion to be the mother of religion. He said.

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सव्वेहिं भूएहिं दयाणुकंपी, खंतिक्खमे संजयबंभ यारी। (Ref. No. 2)
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i. e. A true monk should have compassion on all beings, he should be of a forbearing nature, restrained and chaste.

He further said,

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कोडिकल्लाणजणणी दुःखदुरियाखिग्ग निद्ववणी।
संसार जलहिततरणी. एकाचिय होइ जीवदया।। (Ref. No. 3)
```

i. e. "Compassion gives millions of benefits; all troubles, sins and enemies are destroyed by it just as a boat which can take us across this worldly ocean."

It is in a paralled vein that the great scientist Albert Einstein stated, "Our task must be to free ourselves by widening our circle of compassion to embrace all living creatures and the whole of nature and its beauty".

Thus, the need of the hour is for 'HUMANE EDUCATION PROGRAMME'. As Yehudi Menuhin asked with his uncanny perception, "Why is compassion not part of our established curriculum,

an inherent part of our education? Compassion, awe, wonder, curiousity, exaltation, humility-these are the very foundation of any real civilization, no longer the prerogatives of any of the churches bu belonging to everyone, every child in every home, in every school."

It is to address the need of the hour that the KARUṇĀ IN-TERNATIONAL movement was conceived. It was built to revive and ignite these finer emotions in our youth, who will define and decide the future course of humanity.

At Karuṇā International, we are aware that in order to create a caring and compassionate society in the future, the seeds of love and kindness need to be implanted in children at an early age. Children are born with an inborn curiousity towards their environment, and they have a natural affinity towards birds and animals. It this innate affection can be converted into an informed awareness and sympathy, they will grow into sensitive, compassionate humane beings who will abhor all forms of 'hiṁsā' or violence and create a truly refined and civilized society in the future.

From its humble initiation of 3 schools in 1995, the organization has grown today into a magnificent and gigantic network of more than 1850 clubs in schools and colleges across the country.

#### The Mission of The Karunā Movements is:

- ➤ To inculcate kindness, sympathy and understanding towards all living creatures.
- > To instill reverence for life since all life forms are sacred and should not be callously destroyed for man's pleasure and benefits.
- > Appreciation of the unity and harmony in the universe and the need for peaceful co-existence.
- > Practicing compassion and participation in all activities that promote love and kindness.
- > Promotion of vegetarian way of life.
- Development of nobility of character.

The need to spread the Karuṇā mission is becoming more and more urgent because the social definition for success today is instant material rewards and a flamboyant lifestyle based on high levels of consumption and self-gratification. In such an ambience, it is very easy for youngsters to lose sight of what they are trampling upon while racing towards their goals. It is important to make them realize that they cannot inflict pain or sufering on other life forms for their own pleasure. Such as attitude may bring them success, but only shortlived.

#### Karuņā Club-Programmes And Activities:

The Karuṇā club in each school is launched with an impressive inaugural function, followed by a solemn pledge taken by the students to eschew violence and embrace compassion. These clubs receive guidance and support, as well as periodic review and assessment, by Karuṇā International. Each club must conduct at least six programmes annually, including meetings, competitions exhibitions, publications, ecoclubs and guest lectures. (Ref. No. 4). At these programmes, the activities must be aimed at building awareness of Karuṇā ideals such as kindness towards animals, protection of the environment and vegetarianism. The clubs are also required to organize a minimum of 10 activities such as visits to animal shelters, animal feeding, environmental maintenance, interaction with the elderly presons at old age homes and similar events. Based on the activity reports sent by the clubs, Karuṇā International confers awards during its annual conference.

Karuṇā clubs assist in building organizing skills, leadership and Karuṇā values. The unique feature of the system is that, being entirely activity oriented, students need to reflect on Karuṇā ideologies, understand them and create activities around them. This curriculum not only stmulates initiative but also generates conviction among the students regarding the need for compassion and non-violence and thus enables them to spread the message effectively. During the

annual Karuṇā conference, students enthusiastically participate in inter-school cultural events, exhibitions and exchange ideas in implementing the Karuṇā way of life.

Karuṇā International is recognized by the Animal Welfare of India and accredited to impart programmes for school and college teachers on humane education. Teachers are crucial catalysts in a child's world; hence it is important to involve them in any programme aimed towards children. A syllabus on humane education is also prepared for the guidance of teachers. (Ref. No. 5). Frequent training and orientation programmes for teachers are conducted to equip them to inspire and co-ordinate the Karuṇā club activities in their schools. Teachers who effectively carry the Karuna torch forward are felicitated by Karuṇā International.

The Karuṇā club programmes are formulated after thorough consultations with eminent educationalists and teachers so as to make them relevant, practical, effective and enjoyable. A fourteen-point programme has been designed as a model to be followed by Karuṇā clubs.

The Karuṇā club organization is growing and widening rapidly, and more and more schools and colleges are affiliating with this noble movement. Karuṇā International is established to address the following concerns regarding the erosion of value systems in our society:

- Degradation and imbalances in the eco-system.
- The excessive and indiscriminate consumption of non-vegetarian food which leads to the destruction of animal lives.
- ➤ The need to preserve the cosmic integral unity of the universe where all natural resource are naturally balanced and biodiversity is maintained.
- > The need for humane education worldwide and the importance of compassion as a way of life.

By inculcating the nutritive values of vegetarian dief, the Karuṇā movement has transformed the lives of many non-vegetarian teachers and students. Many have voluntarily opted to consume vegetarian diet after understanding the various cruelties caused to poor voiceless animals by non-vegetarian food. By this market tranformation, they indirectly exhibit their compassion and kindness towards poor animals.

These changes are brought out by the resource persons who deliver lectures on "Vegetarianism" in Teachers and Students Training Programmes on Humane Education. Moreover the CDs, cassettes, posters and books supplied by Karuṇā International during those occasions are also responsible for the impact. Karuṇā International's journey towards Vegtarianism will not cease and will progress continuously.

#### Highlights:

- ➤ Karuṇā International has organized 12 All India Conferences in which 1000 teachers and activities have taken part in each conference. Also they have organized 8 regional conferences on state levels.
- ➤ We have organized 300 teachers training programmes and 400 students training programmes. They have also conducted thousand of Inter-school competitions on the theme of compassion, non-violence, animal welfare, prevention of cruelty, love for nature and environment and maintaining ecological balance.
- ➤ We have published 12 books in English, 12 in Hindi, 5 in Tamil and 3 in Telugu which are distributed free in all schools and colleges.
- ➤ With the efforts of Karuṇā International, 1,02,000 students of 96 schools have decided to use only non-leather shoes. They have also undertaken not to use any animal products.
- > 22,000 students have switched over to a vegetarian diet.
- Karunā International publishes a monthly Newsletter which gives information about all Karunā club programmes.

➤ In the competition on "Stories of compassion" book, 40,000 students give examination and they are awarded prizes worth Rs. 2,50,000/- each year.

#### Our Hope for Tomorrow:

To shoulder this ideology forward among the community at lage, 35 Karuṇā Kendras have been established in towns and cities to involve more and more citizens; these Kendras will strengthen and vitalize the movement further. Our insensitivity and carelessness towards animal lives and our veering towards non-vegetarian food habits is largely responsible for environmental degradation and global violence that stalks the world today. This has been recognized not only in India, but across the globe. The need for compassion is the most urgent requirement of the world today for its peace and continued survival.

Thus, we fine that the noble thought of 'Jeev-dayā' or compassion preached by Lord Mahavira 2500 years ago has been implemented effectively by Karuṇā International. Within the past 14 years significant work has been done by these clubs in communicating the message of compassion to 10,00,000 children and 35,000 teachers through 1850 schools and colleges.

#### Reference:

- 1. *Ācārānga Sūtra* 1.2.3.63
- 2. Uttarādhyayana Sūtra 21.13
- 3. Daśavaikalika Cūrņi 5.11
- 4. *Karuṇā club : A universal movement*, page 7 published by Karuṇā International, Chennai-1
- 5. *Syllabus on Humane Education*, Published by Karuṇā International, Chennai-1

### Transmigration, Evolution, and Jain Karma Doctrine

Dr. Subhash C. Jain\*

#### Introduction:

According to the Jain karma principle, living beings have been wandering in the cycle of life, death, and rebirth since beginningless time and will continue to do so as long as they carry the karmic load of their karmic (kārmaṇa) body with their soul. The soul of living beings transmigrates in the four birth categories (gati): infernal (nāraki), • celestial (deva), human (manusva), and subhuman (tirvañca)<sup>1</sup>. The gati of a living being in the next birth is determined by the nature of karma performed by the living being. The causes of lifespan  $(\bar{A}yu)$ karma have been described in the Tattvārtha Sūtra<sup>2</sup>. For example, virulent aggression and extreme possessiveness lead to birth in the infernal gati<sup>3</sup>. deceitfulness is the reason of birth in the subhuman gati<sup>4</sup>; attenuated aggression, attenuated possessiveness, and a softhearted and straightforward nature lead to birth in the human gati<sup>5</sup>. and self-restraint with attachment, partial restraint, involuntary purging of karma and the austerities of misguided people lead to birth in the celestial gati<sup>6</sup>. In other words, auspicious karma leads to birth in higher gatis, such as human and celestial gatis and inauspicious karma leads to birth in lower gatis, such as infernal and subhuman gatis.

The questions of superiority between higher *gatis* and inferiority between lower *gatis* are not discussed a great deal in scriptures. If a human being that performs auspicious karma in the present life is born as a celestial being in the next birth, then it means that the celestial *gati* is superior to the human *gati*, because the auspicious karma

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leads to birth in a superior gati. But such an inference is not acceptable, because liberation can be achieved only from the human gati, not from the celestial gati. While the spiritual development of a celestial being cannot be higher than the fourth spiritual stage (gunasthāna)<sup>7</sup>, a human being can ascend all the fourteen rungs of the spiritual ladder and transcent it.8 On the other hand, the supposition that the human gati is superior to the celestial gati contradicts the scriptures, as human beings on performing auspicious karma transmigrate to the celestial gati. A category of human being can, therefore, be more spiritually and physically developed than a category of human beings can therefore, be more spiritually and physically developed than a category of celestial beings, and vice versa. Hence, living beings can transmigrate from the celestial to the human gati and from the human to the celestial gati. There is a need to identify the category of human beings who could be born as celestial beings in the next birth and the category of celestial beings who could take birth as human beings in the next life.

Similarly, if a human being that performs extreme inauspicious karma in the present life is born as infernal being, not as subhuman being, in the next birth, then it means that the infernal gati is inferior to the subhuman gati. But such an inference is not acceptable, because the life form of infernal beings is more developed than that of most subhuman beings, as infernal beings have a mind while subhuman beings with one to four senses and some with five senses do not have a mind<sup>9</sup>. On the other hand, the supposition that the subhuman gati is inferior to infernal gati contradicts the scriptures, as the soul of Bhagwan Mahavir in a previous life trnsmigrated from the subhuman gati as a lion to the infernal gati<sup>10</sup>. A category of infrenal beings, and vice versa. Hence, living beings can transmigrate from the infernal to the subhuman gati and from the subhuman to the infernal gati. There is a need to identify the categories of subhuman beings and infernal beings that are born respectively as infernal beings and subhuman beings in the next birth.

Living beings in every gati occur in a wide range of bodies that differ in shape, size, color, touch, taste, smell, and the number and the potentiality of their vital powers (prāna)11. The physical development/ deterioration, termed evolution/devolution, of the life-form of living beings can be characterized by the number or the potency of the vital powers of their bodies. It should be emphasized that term evolution/ devolution in this paper carries a specific connotation which is quite distinct from that of the term used by Charles Darwin<sup>12</sup>. The evolution/devolution of the life form occurs on increasing/decreasing the number of vital powers or the potency of the vital powers. It is hypothesized that the evolution/devolution of the life form of living beings is governed by the "load" of their attached karma, termed karmic load, defined later. Based on this hypothesis a conceptual scheme between the number or the potency of the vital powers and the karmic load of living beings is presented to explain their evolution from a less developed to a more developed life-form and their devolution from a more developed to a less developed life form. The conceptual scheme also identifies the categories of living beings that transmigrate from one gati to another.

#### Living Beings:

Living beings possess a soul and three or four types of physical bodies. The types of physical bodies are: gross body (audārika-śarīra); protean body (vaikriya-śarīra); "coveyance" body (āhāraka-śarīra); fiery body (taijasa-śarīra); and karmic body (kārmaṇa-śarīra), A living being always has a fiery and a karmic body in the state of bondage. A living being can also have at the most two other bodies. A living being can have either gross or protean body, not both. Human and subhuman beings have a gross body; and infernal and celestial beings have a protean body. Only an ascetic can create for a short duration a "conveyance" body. Hence living beings, except some ascetics, have three physical bodies. All living beings have identical souls, but they different gross or protean, fiery, and karmic bodies.

The gross or protean body of living beings has vital powers prāṇa) of physical senses, physical actions, respiration, and age.<sup>14</sup>

These vital powers are essential for life; the gross or protean body of dead beings loses these vital powers. Living beings can have up to five vital powers of senses of touch, taste, smell, vision, and hearing and up to three vital powers of physical actions of body, speech, and mind<sup>15</sup>. All living beings have the vital powers of respiration and age. The least developed beings, such as *nigodas* and plants, have only four vital powers, namely, one vital power of sense of touch, one vital power of physical action of body, the one vital power of each of respiration and age. There is no living being with five vital powers, because the vital powers of sense of taste and physical action of speech develop simultaneously, There are living beings with number of vital power that range from six to ten. All ten vital powers; which include the five vital powers of senses, the three vital powers of physical actions, and the one vital power of each of respiration and age, are present in the mose developed beings, such as human beings.

All living beings, including one-sensed living beings, have the vital powers of sense of touch, physical action of body, respiration and age, Only living beings with two or more senses have the vital powers of sense of taste and of physical action of speech. All one sensed to four-sensed and some five-sensed subhuman beings do not have the vital power of physical action of mind. Infernal, celestial, and human beings and most five-sensed subhuman beings have the vital power of physical action of mind. <sup>16</sup>

It should be pointed out that vital powers of senses have a hierarchy, starting from touch, taste, smell, vision, and finally hearing. Any living being with the sense of hearing has to have the senses of vision, smell, taste, and touch; with the sense of vision has to have the senses of smell, taste, and touch; with the sense of smell has to have the senses of taste and touch; and with the sense of taste has to have the sense of touch. Similary, the vital powers of physical actions also have a hierarchy, starting from the body, then speech and finally mind. Any living being with speech has to have body; and with mind has to have speech and body.

#### Thus living beings can be divided into ten classes:

Living Beings	Number of Vitalities
Human	10
Celestial	10
Infernal	10
Five-sensed-samanaska subhuman	10
Five-sensed-amanaska subhuman	9 (w/o mind)
Four-sensed subhuman	8 (w/o mind and hearing)
Three-sensed subhuman	7 (w/o mind, hearing, and vision.)
Two-sensed subhuman	6 (w/o mind, hearing, vision and smell)
One-sensed subhuman	4 (w/ touch, body, respira-
	tion and age)
Nigoda	4 (w/ touch, body, respira-
<del>-</del>	tion and age)

#### Karma Doctrine:

The law of karma is a causal law, which implies that every deed has consequences. A deed is defined as an intentional, voluntary activity carried our by the physical action of mind, speech, and body, termed Yoga, 17 and the spiritual action that includes intention, desire, attachment/aversion, etc, termed passion (kaṣāya). 18 In short, a deed is an action performed by yoga-plus-kaṣāya. Living beings perform deed all the time. For the law of karma to be meaningful, it should be valid every moment and everywhere in the universe. In other words, the law of karma, similar to physical laws, is universal 19,20. If the law of karma is universal, then the law-of-karma-governed consequences of deeds are also universal. 21 The law-of-karma-governed consequences of a deed depend only on the deed and do not depend on any other factor such as the time and place of the deed. It implies that the law-of-karma-governed consequences of a deed are same whether the deed is done in India or anywhere in the universe and whether it

was done in the past, or it is done today, or it will be done in the future.

According to Jainism, karmic matter that is said to be found every where in the universe is the carrier and deliverer of the law-of-karma-governed consequences, and *yoga* is the efficient cause (*nimitta kāraṇa*) of the inflow of karmic matter that comes in contact with the karmic body<sup>22</sup>. Karmic matter after coming in contact with the karmic body transforms into eight species of karma that remain attach to the karmic body for a duration. *Kaṣāya* controls the time and intensity of fruition of karma<sup>23</sup>. At the end of its duration of its attachment, karma executes the law-of-karma-governed consequences of the past deeds, detaches from the karmic body, and transform back to karmic matter. The fruition of the old karma results in a new deed, which, in turn, binds new karma and the cycle continues. The law of karma presupposes rebirth and hence transmigration.

The karmic body can be considered as a load, termed karmic load, which a soul carries with it. The karmic load of the karma attached to the karmic body depends on the intensity of yoga-plus-kaṣāya of deeds; of deeds; higher is the intensity of yoga-plus-kaṣāya of deeds, higher is the karmic load. Three processes occur simultaneously within living beings; (1) fruition and detachment of the old karma from their karmic body; (2) execution of a deed by them; and (3) attachment of the new karma to their karmic body. Due to these three processes, the karmic load carried by their soul change with time. The consequences (karma phala) of the old karma are the efficient cause of changing the mode (paryāya) of the qualities (guṇa) of the soul and the gross or protean body of the living being, which, in turn, controls their new deeds.

As mentioned above the karmic matter that comes in contact with the karmic body trnsforms into eight species of karma, but only seven species of karma excluding the lifespan  $(\bar{a}yu)$  karma attach every instant to the karmic body; the  $\bar{a}yu$  karma attaches to the karmic

body only once in a life time among eight time-opportunities, called apakarṣa²⁴. The moment when a living being binds the āyu karma of its next life is termed as age-bonding moment. It is said that the subspecies of the āyu karma depends on the regular nature of volition activities of a living being²⁵. Though the causes of karmic bondage of the eight types of karma are described in the scriptures²⁶. The factor that determines the regular nature of the volition activities of a living being is not explicitly mentioned in them. As the new deeds of a living being depend on the karma phala of the old karma, it is logical to assume that the regular nature of the volition activities of the living being depends on the karmic load of their karmic body and the birth-species in the next life depends on the karmic load at the age bonding moment.

#### **Conceptual Scheme of Evolution:**

The evolution of the life-form of living beings is characterized by the number of the potency of the vital powers, which in turn are determined by the karmic load of their karmic body. Life-form evolves with the increase either in the number or the potency of the vital powers. The evolution of the life-form is, therefore, of two types: upward and lateral. In the upward evolution of the life-form the number of the vital powers increases from four to ten. In the lateral evolution of the life-form the potency of the vital powers increases while the number of the vital powers remains the same.

The evolution of the life from of living beings is based on one of the universal rules of the karma doctrine, termed 'Rule of Development'. According to the rule of development, the spiritual and physical developments/deterioration of living beings occur with the decrease/increase in their karmic load. The spiritual development occurs with the physical development and vice versa. Both developments take place simultaneously and mutually influence each other<sup>27</sup>. The rule of development will become meaningless if one development

happense, not the other one, For example, if the karmic load of a human being at the age-binding moment is so large that he is born as a three-sensed-sub-human being in the next life, not only the number of vital powers of the gross body of the living being reduces from ten to seven, the qualities of its soul also deteriorate. Though the soul of both the human being and the three-sensed-sub-human being is the same, the qualities of the soul of the former are more advanced than that of the latter. The rule of development will become meaningless if either the qualities of the soul of the latter are more advanced than that of the former or the qualities of their souls are same.

According to Jainism there are infinitely infinite (anantānant) numbers of living beings in the universe, called nigodas<sup>28</sup>. which have the least developed life form. Nigodas are the organisms that are smaller than the mircroorganisms, they are in the universe since beginningless time<sup>29</sup>. Living beings in the increasing order of the developed life from are; nigoda beings; one-sensed, two-sensed, threesensed, four-sensed, and five-sensed-amanaska (without mind) beings; and five-sensed, samanaska (with mind) beings. The five-sensed-samanaska beings, which can be sub-human, human, infernal, and cetestial beings, have all ten vital powers. The mind of the samanaska sub-human beings is far less developed than that of the human beings; the life form of samanaska subhuman beings is, therefore, less developed than that of human beings. The ranking of the life forms of the infernal and celestial beings is explained later making use of the rule of development.

Several notations are used in the paper. Some notations shown in column I below are used for the maximun value of the karmic load at the age-bonding moment of a living being to take next birth in the birth-species mentioned in column 2.

Column 1	column 2
Max karmic load	Birth-species
K <sub>N</sub>	Nigoda
$\mathbf{K}_{1}$	One-sensed subhuman being

$K_2$	Two-sensed subhuman being
K <sub>3</sub> .	Three-sensed subhuman being
$K_4$	Four-sensed subhuman being
K <sub>sa</sub>	Five-sensed subhuman being
K <sub>ss</sub>	Five-sensed-samanaska-subhuman
	and infernal being
$K_{M}$	Human being
$K_c$	Celestial being
K <sub>H</sub>	Infernal being

It the karmic load, K, at the age-bonding moment of a living being is greater than  $K_{ss}$  i.e.  $K \ge K_{ss}$  (or  $K_{ss} \le K$ ) then its life-form in the next birth, according to the notations shown above, would be less developed than that of five-sensed-samanaska-subhuman (fsss, here after) beings; and if K is less than or equal to  $K_{sa}$ , i.e.  $K \le K_{sa}$ , then ist life-form in the next birth more would be developed than that of four-sensed-subhuman beings. In other words, if K is  $K_{ss} \le K \le K_{sa}$ , then its next birth would be five-sensed-amanaska (fsas, here after) subhuman being.

The conceptual scheme of evolution of living beings to the various birth-species is based on several presuppositions which are described below:

PRESUPPOSITION 1. The number and potency of the vital powers of a living being increase in the next life with the decrease of its karmic load of the agebonding moment and vice versa.

Presupposition 1 is based on the rule of development described earlier and will be utilized in formulating the conceptual scheme of evolution. For example, as the vital powers are fewer in *amanaska*-subhuman being than human beings, a human being will be born in the next birth as an *amanaska* sub-human being only if his karmic load at the age-bonding moment is sufficiently large as explained later.

PRESUPPOSITION 2. The karmic load of amanaska-subhuman beings always decreases with time; hence, they always

transmigrate in their next life to a more developed life from.

Amanaska-subhuman beings are not judicious and do not have the discretion to choose between good and evil actions as they do not have a mind and therefore are not responsible for their karmic load. Their karmic load always must decreases with time; otherwise they would never be able to escape from the cycle of transmigration. In other words, the increase in their karmic load due to the attachment of new karma of their new actions is less than the decrease in the karmic load due to the detachment of the old karma of their past actions. As a result, they always transmigrate to a more developed life-form in their next life. They transmigrate to a life-form with either the same number of vital powers of increased potency or one more vital power. For example, a two-sensed-subhuman being will be born as either a two-sensed-subhuman being with increased potency of vital powers or a three-sensed-subhuman being.

Nigoda beings have only one sense and innumerable souls of nigoda beings share one gross body. The karmic body of the nigoda beings carries such a large quantity of the karmic load that decreases with time at an infinitesimal small rate so that only a finite number of nigoda beings advances to the next developed life-from of a one-sensed beings with only one soul in each gross body, termed one-sensed-subhuman being.

The karmic load, K, of an *amanaska*-subhuman being at the age-bonding moment determines the birth-species in its next life, as shown in Table I and Figure 1.

Table 1. Possible birth species in the next life for the given *amanaska*-subhuman birth-species in the present life.

Present Birth-species	Next Birth-species
Nigoda	Nigoda if $k_1 \le K \le K_N$ ;
	One-sensed subhuman if $K_2 \le K \le K_1$
One-sensed subhuman	One-sensed subhuman if $K_2 \le K \le K_1$ ;
	Two-sensed subhuman if K <sub>3</sub> ≤K≤K,

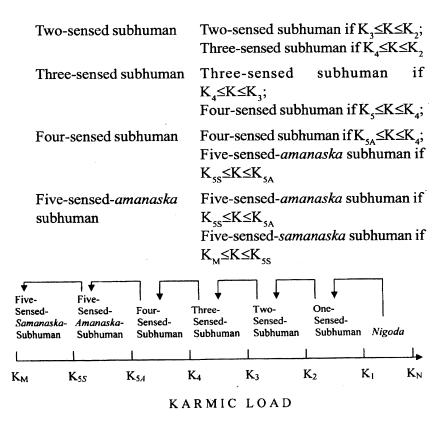


Figure 1. Range of karmic load for subhuman birth-species

Table 1 and Figure 1 are explained by using illustrations. For example, if the present birth-species of a living being is the *nigoda*, than its next birth-species would be *nigoda* if  $K^1 \le K \le K_N$  and one-sensed subhuman if  $K_2 \le K \le K_1$ . Similarly, if the present birth-species of a living being is the three-sensed subhuman, its next birth-species would be three sensed subhuman if  $K_4 \le K \le K_3$  and the four-sensed subhuman if  $K_5 \le K \le K_4$ . An fsas being would transmigrate to the fsas birth-species if  $K_5 \le K \le K_5$  and the fsss birth-species if  $K_M \le K \le K_5$ . Note that  $K_N \ge K_1 \ge K_2 \ge K_3 \ge K_4 \ge K_5 \ge K_M \ge 0$ .

PRESUPPOSITION 3. The karmic load of infernal beings always decreases with time: they always transmigrate in their next life

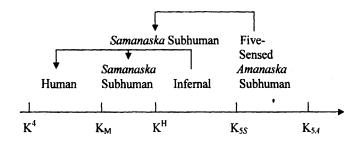
to a more developed life form, which is either the samanaska-subhuman being or human being; and they cannot transmigrate to a celestial birth-species in their very next birth.

Infernal beings are in hell to bear the fruits of their past karma; therefore, their karmic load decreases with time. The life-form of infernal beings is more developed than the life-form of the fsas beings, because the former have vital power of mind and the latter do not. The karmic load at the age-bonding moment of a living being to transmigrate in the next life to the infernal birth-species should, therefore, be less than or equal to K<sub>ss</sub>. In other words, the karmic load of a living being in the infernal birth-species cannot be greater than K<sub>ss</sub>; hence an infernal being cannot transmigrate in the next life to the amanaska birth-species. It should be noted that the minimum karmic load to take birth in the fsas birth species is freater than K<sub>ss</sub>. The lifeform of infernal beings is less developed than the life-form of human beings; the minimum karmic load at the age bonding moment of a living being to take birth in the next life as an infernal being, denoted by  $K^H$ , Should be greater than  $K_M$ , i.e.  $K^H \ge K_M$ . It may be mentioned that infernal beings are capable to rise only up to the fourth spiritual stage<sup>30</sup>. Infernal beings cannot transmigrate to the celestial birth-species, because of a rule that a living being cannot acquire protean body in succession. It implies that celestial beings also cannot transmigrate to the infernal birth-species and infernal and celestial beings cannot be born in the same birth-species in the next birth. Infernal beings, therefore, transmigrate only to human or samanaska-subhuman birthspecies. As shown in Figure 2 and Table 2, they transmigrate in the next life to the samanaska-subhuman birth-species if K<sub>M</sub>≤K≤K<sub>u</sub> and the human birth-species if  $K_4 \le K \le K_M$ , where  $K_4$  is the minimum value of the karmic load of a living being in the fourth spiritual stage.

#### KARMIC LOAD

Figure 2. Transmigration from the infernal birth-species.

Table 2. Possible birth species in the next life for the



infernal birth-species in the present life

Next birth-species Samanaska subhuman if  $K_M \le K \le K_H$ ; Human if  $K_A \le K \le K_M$ 

The fsas beings cannot transmigrate to the infernal birth-species; the reason for it can be recognized by considering the responsibility for the karmic load of an fsas being who acquired this birth-species for the first time since beginningless time. The karmic load of an fsas being is the result of the karmic process governed by Presupposition 2 that is beyond its control; hence, the fsas being is not responsible for its karmic load. A living being transmigrates to the infernal birth-species because of its inauspicious past karma for which it is responsible. But the fsas is not responsible for its karmic load and should not transmigrate to the infernal birth-species. Therefore, living beings in their downward devolution, not in their upward evolution, transmigrate to the infernal birth-species. For example, an fsas being transmigrated to the fsss birth-species, not to the infernal birth-species if  $K_M \le K \ge K_{5S}$ ; and the human and the fsss beings transmigrate to the infernal birth-species if  $K^H \le K \le K_{5S}$ . Note that  $K_{5S} = K^H$ .

PRESUPPOSITION 4. The karmic load of five-sensed-samanaska-subhuman beings can both increase and decrease with time; hence, they can transmigrate to infernal, five-sensed-amanaska-subhuman, infernal, human, and celestial birth-species.

The fsss beings have mind, but their mind is not as developed as that of human beings; and they are not completely responsible for

their karmic load. They are capable to rise up to the fifth spiritual stage<sup>31</sup>. Hence, their karmic load cannot become larger than  $K_{5A}$  and less than  $K^5$ , where  $K^5$  is the minimum value of the karmic load in the fifth spiritual stage. They can, therefore, transmigrate, as shown in Figure 3 and Table 3 to the fsas birth-

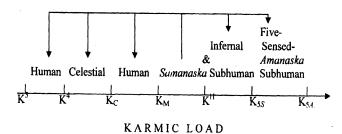


Figure 3. Transmigration form the *Samanaska* subhuman birthspecies.

Table 3. Possible birth species in the next life for the *samanaska* subhuman birth-species in the present life

#### **Next birth-species**

Five-sensed-ama $\overline{.}$ aska subhuman if  $K_{ss} \le K \le K_{sa}$ ; Infernal if  $K^H \le K \le_{ss}$ ; Samanaska subhuman if  $K_M \le K_{ss} \le K^H$  Human if  $K_c \le K \le K_M$  Celestial if  $K^4 \le K \le K_C$  Human if  $K^5 \le K \le K^4$ 

Species if  $K_{ss} \le K \le K_{sh}$ , the infernal birth-species if  $K^H \le K \le K_{ss}$ , Samanaska-subhuman birth-species if  $K_M \le K \le K^H$ ; the human; birth-species if  $K_C \le K \le K_M$  and  $K^5 \le K \le K^4$ , and the celestial birth-species if  $K^4 \le K \le K_C$ , where  $K_C$  is the minimum value of the karmic load at the age-bonding moment of a living being to take birth in the next life as a celestial being, as explained later.

PRESUPPOSITION 5. Human beings can transmigrate to all birth-speies.

Human beings have the discretion to choose between good and evil actions and are, therefore, responsible for their action. Depending on their actions, their karmic load either increases or decreases. Their karmic load can become larger than  $K_1$ ; consequently, they can transmigrate to the *nigoda* birth-species. On the other hand they can completely annihilate their karmic load reducing it to 0; consequently, they can be liberated. Their karmic load can vary from zero to value larger than  $K_1$ , they can, therefore, transmigrate to all birth-species, including the celestial birth-species, as shown in Figure 4 and Table 4.

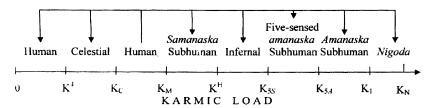


Figure 4. Transmigration from the human birth-species.

Table 4. Possible birth species in the next life for the human birth-species in the present life

#### Next birth-species

Nigoda if  $K_1 \le K \le K_N$ ; One-sensed-amanaska subhuman if  $K_2 \le K \le K_1$ . Two-sensed-amanaska subhuman if  $K_3 \le K \le K_2$ . Three- sensed amanaska subhuman if  $K_4 \le K \le K_3$ . Four- sensed amanaska subhuman if  $K_5 \le K \le K_4$ . Five- sensed amanaska subhuman if  $K_5 \le K \le K_5$ . Infernal if  $K^H \le K \le K_5$ ; Samanaska subhuman if  $K_M \le K \le K^H$  Human if  $K_C \le K \le K_M$ ; Celestial if  $K^4 \le K \le K_C$ ; Human if  $0 \le K \le K_4$ 

PRESUPPOSTION 6. Celestial beings transmigrate to either human birth-species or five-sensed-samanaska subhuman birth-species.

Celestial beings, similar to human beings, are responsible for their actions; their karmic load can either increase or decrease depending on thier actions. But there are restrictions on the lower and upper limits on their karmic load. Their karmic load cannot become larger than K<sub>ss</sub>; hence, they cannot transmigrate to an amanaska-subhuman birth-species. The celestial beings are not capable to achieve a spiritual stage (gunasthāna) higher than fourth stage<sup>32</sup>; hence, their karmic load cannot become less then K<sup>4</sup>. The life form of celestial beings is more development than the life form of human beings in the first spiritual stage (mithyādrsti), because a mithyādrsti human being can transmigrate in the next life to the celestial birth-species by reducing his or her karmic load. The maximum karmic load, K<sub>c</sub>, at the agebonding moment of a living being to take birth in the next life as a celestial being should be less than or equal to  $K^1$  i.e.  $K_c \leq K^1$ , where K<sup>1</sup> is the minimum value of the karmic load of a mithyādṛṣṭi living being.

As shown in Figure 5 and Table 5, a celestial beings transmigrates to the five-sensed-samanaska-subhuman birth-species if  $K_M \le K \le K_{ss}$ , and the human birth-species if

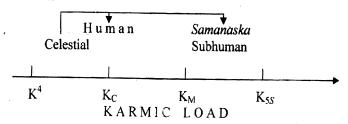


Figure 5. Transmigration from the celestial birth-species.

Table 5. Possible birth species in the next life for the celestial birth-species in the present life

#### Next birth-species

Samanaska subhuman if  $K_M \le K \le K_{5S}$ Human if  $K^4 \le K \le K_M$  The value of K for the various life forms can be determined using the above propositions. For the given birth-species in the present life, the possible birth-species in the next life are given in Table I through Table 5. It can be seen from Figure 4 and Table 4 that a human being born with the karmic load less than or equal to  $K_M$  and greater than  $K_C$ , i.e.  $K_C \le K \le K_M$  can transmigrate to the celestial birth-species by reducing his or her karmic load at the age-bonding moment less than or equal to  $K_C$  and greater than  $K^4$ , i.e.  $K^4 \le K \le K_C$ . It implies that human beings with the karmic load of  $K_C \le K \le K_M$  are less spiritually and physically developed than celestial beings with the karmic load of  $K^4 \le K \le K_C$ . On the other hand human beings in spiritual stages higher than four with  $K \le K^4$  are more spiritually and physically advanced than celestial beings.

Similarly, Figure 3 and Table 3 show a category of subhuman beings that are more spiritually and physically developed than a category of infernal beings, and vice versa. The *samanaska*-subhuman beings with the karmic load  $K_M \le K \le K^H$  are more spiritually and physically developed than infernal beings with the karmic load  $K^H \le K \le K_{5S}$  and *amanaska*-subhuman beings with the karmic load  $K \ge K_{5S}$  are less spiritually and physically developed than the infernal beings with the karmic load  $K^H \le K \le K_{5S}$ .

#### **Dateral Evolution**

O

In the lateral evolution of living beings the potency of their vital powers increases, but the number of the vital powers stays the same. The potency of the vital powers of living beings born with same number of vital powers are not identical. Some are born with more potent vital powers than others. According to the 'rule of development' if two living beings carrying different karmic loads during transmigration reincarnate in the same order of the developed lifeform with same numbers of vital powers, the living being that carries the less karmic load during transmigration reincarnate in the same order of the developed life-form with same numbers of vital powers,

the living being that carries the less karmic load during transmigration rencarnates with more potent vital powers. For example, two living beings A and B carrying karmic loads of  $K_A$  and  $K_B$  during transmigration are born as human beings, A with the first type of bone joint (vajra-rṣabha-nārāca samhanana) and B with the second type of bone joint (rṣabhanārāca samhanana). Because the former bone joint (samhanana) is more potent than the latter bone joint (samhanana), karmic load  $K_A$  must be less than karmic load  $K_B$ .

Similar illustration of the 'rule of development' to the other subclasses of the physique determining karma (Nāma-karma) can be given. For example, one of the subclasses of the Nāma-karma is the Parāghāta-nāma-karma that gives the capacity to protect the body from the attackes of the extrinsic substances such as virus and bacteria<sup>33</sup>. This capacity to protect the body can be considered as the immune power. The karmic load of the living being born with a weak immune power or less potent vital power of the Parāghāta-nāma-karma is greater than that of the living beings born with strong immune power or more potent vital power of the Parāghāta-nāma-karma.

Moreover the potencies of their vital powers keep changing during their life span and increase with decreasing karmic load they carry with their karmic body. As the karmic load of a human being decreases, he or she climbs the 'ladder' of the fourteen spiritual stages; and then the intensity of fruition of the auspicious nondestructive (aghātiyā) karma increases, the intensity of the inauspicious nondestructive karma decreases, and the potency of the vital powers increases.

The spiritual and physical development of living beings is depicted graphically in Figure 6. The rate of change of the karmic load of a living being gradually increases as the living being evolves from the least developed life-from of *nigoda* beings to the most developed life-form of human beings. It is logical to assume that the change in the karmic load is negligible in the *nigoda* birth-species.

The karmic load in the nigoda birth-species decreases at an infinitely small rate  $K_1 \sim K_N$ , where  $K_N$  is the maximum karmic

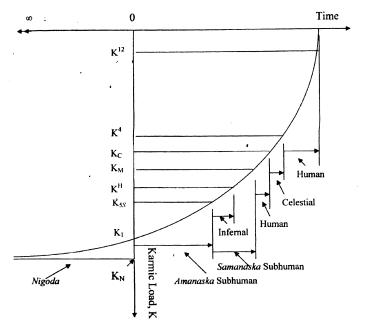


Figure 2. Evolution with karmic load.

load of the *nigoda* beings since time immemorial. The rate of change of the karmic load in the *amanaska*- and *samanaska*-subhuman birth-species is small. The rate of decrease of the karmic load, hence the development process, proceed at a higher rate in the human birth-species and significantly much higher rate after the fourth spiritual stage.

Some arbitrary values of the karmic load are:  $K_{58}/K_N \sim 95\%$ ,  $K^H/K_N \sim 90\%$ ,  $K_M/K_N \sim 85\%$ ;  $K_C/K_N \sim 75\%$ , and  $K^4/K_N \sim 65\%$ . According to these arbitary values of the karmic load, the decrease in the karmic load in the *amanaska*- and subhuman birth-species is only about 5 and 10 percent of the maximum karmic load, respectively. Generally all living beings, except celestial beings born beyond *kalpopapanna* and a few exceptional human beings like Bhagwan

Mahavira, are born *mithyādṛṣṭi* with the karmic load less then  $K_M=0.85K_N$  and greater than  $K_C=0.75K_N$ . It means to achieve liberation that almost 85% of the karmic load is to be annihilated in the human birth-species and almost 65% of the karmic load is to be eradicated beyond the fourth spiritual stage. Purging of the large amount of the karmic load will require constant practice of wholesome moral conduct. To be born as a celestial being in the next birth, human beings have to reduce their karmic load from  $K_M/K_N=0.85$  to  $K_C/K_N-0.75$ , i.e. about ten percent only; they should be able to do it by performing karma with mild yoga-plus-kasava. On the other hand, human beings with an increase in the karmic load from  $K_M/K_N=0.85$  to  $K^H/K_N-0.90$  and  $K_{ss}/K_N-95$  i.e. about five to ten percent only will be born as an infernal being in the next birth. Human beings should, therefore, be very careful in performing their deeds if they wish to avoid transmigration to the infernal birth-species.

#### Conclusion

The development of the life-form of living beings is characterized by the number and the potency of the vital powers, which in turn are determined by the karmic load accumulated in their karmic body. The development of the life-form of living beings is based on the rule that the spiritual and physical development of living beings occur with the decrease in their karmic load. Based on this rule a conceptual scheme between the number and the potency of the vital powers and the karmic load of living beings is presented to explain their evolution from the least developed to the most developed life-form.

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# Impact of Jainism on Environmental Sustainability

## Dr. Chandranath Chatterjee\*

## **Introduction:**

Sustainability is a 'buzz' word in present scenario. In today's global environment every country is focusing on sustainable development. Sustainable Development implies meeting the need of present without compromising the ability of future generations to meet their own needs. (Brundtland Commission, United Nation, 1987). In other words sustainabitlity is the longterm maintenance of responsibility, which has environmental, economic and social dimensions.

For the purpose of increasing awareness regarding environmental sustainability world over and determining the severe environmental issues an Earth Summit was organized in June 1992 at Rio de Janerio. It is popularly called as Rio Earth summit. This summit comes up with a future conservation plan for sustaining environment and for this a blue print was prepared. Interestingly, ancient Indian civilization also knows the importance of nature and in this regard several principles were developed and practiced in ancient India which is very much similar to Rio principles. The modern holistic methods of ecological sustainability are replicated in many ancient indian literature. The Vedic, Jain, Buddhist, and Kautilya's Arthaśastra established the principles of sustainability centuries ago, earth is to be protected like respected and "bhoomimataputrohamprithivyah". In many parts of India, communities have inherited the rich tradition of love and reverence for nature through the ages. Religious preaching's, traditions and customs played

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a prominent of environmentalism. They promote such guidelines and principles amont common people that ensured an intimate contact and sense of belonging with nature. It comes up in the form of directive principles and orders to the followers of religion, to perform certain rites and rituals that became a part of their life and ensure environmental sustainability. For the Jain tradition, the term used to describe the soul is *jiva*, a term derived from the Sanskrit root *jiv*, which means "to live". The ideas regarding the life force or soul of Jainism carry several characteristics which distinguish this concept from its counterparts in other Indian traditions. The concept of soul in Jainism holds profound implications for human agency and environmental ethics. In some respects, however, environmental activism can wim a secondary place at best in the practice of the Jaina faith. The observance of ahimsā must be regarded as ancillary to the goal of final liberation, or kevala. In terms of the lifestyle of the Jaina lay person, certain practices such as vegetarianism, periodic fasting, and eschewal of militarism might be seen as ecofriendly.

#### Threat to the earth:

We have entered into a new phase of Earth-human relations, wherein the human effectively has conquered nature. The now submissive earth relies upon the human for its continuance. The earth has been bruised by the abundance of radioactive waste and the ever-present threat of nuclear conflagration. The sky has been fouled with emissions from autombiles and factories. Human and industrial wastes have polluted our rivers and lakes.

Adherents of Jainism, given their ethic of nonviolence and their deep involvement with the governmental structures of India and the business community worldwide, are well positioned to initiate such a dialogue. The story of human superiority over nature has been told throughout the world, even by the Jainas who seek to rise above nature. And this story has been realized, as seen in the success of consumer culture worldwide. Native habitats continue to be destroyed as

industrialization expands. As this happens, entire species of animals, insects, and plants disappear, never to return. Yet humans proliferate, taking up more space worldwide with their houses and condominiums and farmland, encroaching on and destroying the wild, isolating humans within fabricated landscapes that separate the human from the pulse of nonhuman life.

A shift in consciousness must take place that values life in its mayriad forms. Telling a different story may help in bringing about this shift. The cosmological views of Jainism, the insights of contemporary science, and the growing perception of the beauty and fragility of the natural order all can contribute to this essential change in perspective.

Environmental protection is intrinsic, innate and inherent in Jainism. It is in-built and intergrated in every principle, tenet and mandatory doctrine of Jainism, in its epistemology, ontology and metaphysical concepts. Enlightened Jain icons, Arhats, Tirthankaras, learned saints and Acharyas pondered over and considered every aspect of environment, the various causes of its degradation and necessary measures, prophylactic to pre-empt as well as remedial to redress and redeem and also for its sustained maintenance. They evolved and prescribed environment friendly concepts, tenets, principles, ordained mandatory doctrines and an elaborate code of conduct to ensure sustained, congenial, clean, healthy and symbiotically harmonious environment. The connotation about environment is much wider than generally understood. It implies not only physical environmental of air, water, soil, animals etc. but also social environment of multitudinons relationships between individual human beings, families, groups, societies and nations and also interdependent interactions between all life dorms which also interact with physical constituents. Both physical and social environment are interactive, mutually reinforcing and influencing to mould and condition each other. If physical or natural environment with its myriad constituents air, water, soil, minerals etc. suffer degradation, pollution and imbalance, the consequences in green-house effect, climate-change, droughts, floods, storms, famines, pestilences etc, will influence and disturb the social environment, its stability, health and harmony. Likewise imbalances in social environment beset with conflicts and wars will adversely affect the physical environment, accentuating its degradation, pollution and imbalances and this in turn will disturb the social environment and the vicious cycle will go on. Environment should be considered in its totality as a composite aggregate whole in which every constitutent smallest and biggest is equally important in its own specific symbiotic role. It can be compared with any organism in which there are 2 trillions of cells and each cell work for the whole body i.e. for all cells and all cells work for every single cell. Any dereliction or aberration on part of a single cell will destory itself and all other cells and the body. In any manmade machine every smallest part is important for functioning of the machine. Environment is like an organim, a composite unified system in which every constituent is important and all constituents small or big should be considered equally indispensable.

In Jainism equality of all is one of the important fundamental principles and even earth forms, water-forms, air-forms, energy-forms which are generally considered inanimate (non-living being) are considered life forms similar to other living beings including human beings. This is unique in Jainism only and unparalleled as compared to other schools or thoughts anywhere and at any time. In recognized living forms also the smallest microbe has been assigned potentially the same status as highest evolved life form of human beings in as much as that all living beings possess similar souls, all capable of attaining the highest enlightenment, perfection and salvation.

It is also unique of Jainism that it subscribes to the principle of mutualism (symbiosis) in all inter dependent interactions of all the constituents of environment both animate and inanimate, that all act and interact for mutual benefit. This mutualism ensures sustain ability of congenial, healthy and harmonions environment. In Jain chronology the time-cycle begins with Susamā-Susamā (Happiest) period (era) when all living and non-living live inperfect harmony, interact in mutually beneficial way. The environment also remains congenial without any pollution, erosion etc. and there are no natural calamities of floods, famines, storms, and also there are no conflicts and wars. The conditions decline from best to good to bad to worse gradually because ofgreed of mankind, its encroachment and exploitation of natural resources beyond their carrying capacities. Hopefully, however in Jain cosmology there is mention of areas where conditions remain in best or good state as a result of realization at any stage by human beings to limit their numbers and consumerism commensurate with the carrying capacity of natural resources.

It is imprtant to mention here that in natural forest based life style, the populations remain optimum according to the availability of food naturally as proved in a recent experiment on wolves in Germany. With the advent of agriculture food availability was augmented artificially and this triggered increase in population, requiring more land for agriculture and necessitating more destruction and clearance of forests for cultivation, then more population and more requirement of land and more destruction of forest and the cycle continued till recently legally and illegally even now by extensive encroachments on remnant forest areas inspite of stringent laws. So long as population explosion continues, this will not stop.

As availability of land for agriculture became scarce, use of chemical fertilizers and poisonous pesticides increased and their indiscriminate use is single most maximum contributor off extensive pollution of air, water and soil. The dangerous pesticides through soil and food are entering in human body with biological magnification resulting in increasing incidence of fatal diseases of heart, kidneys, liver and cancers of various types. It is like turning of a good friend as enemy because of wrong behaviour. Mankind is still in slumber, and have not awakened inspite of conclusive scientific evidence of looming suicidal disasture.

Subsequently industrialization added fuel to fire, accelerating environmental degradation and pollution. Scientists have estimated that at present levels of consumption and population we need natural resources of 4 to 5 such planets as earth. Obviously the pressure on environment is at least four times more than its capacity. The problem is that all the factors responsible for environmental degradation are accentuating and not declining.

## Resistance from degradation:

Only mankind is responsible for environmental degradation. Other lifeforms live symbiotically and in harmony with nature. It is only when human beings in their greed and lust encroach their natural habitat and their sources of livelihood that there are aberrations in their behavior including harmful mutations.

In fact, living forms can be found in the earth, in water, in fire, and in air itself, taking the shape of large rocks and in microscopic particles circulating in the wind. Jainism's unique cosmology gives cause for Jains to think deeply about their role in such environmental issues as industrial pollution and global warming. Jains state that the waters and the air contain life, in addition to the living creatures that dwell therein. Hence, pollution deemed harmful in either element must be mitigated, not only for the sake of human health, but also for the sake of the life that thrives in air and water. Similarly, global warming will not only cause great disruption for humans but will displace and perhaps decimate countless species, the most famous at present being the polar bear. Given human complicity and causality in regard to climate change, Jains would have a double incentive for taking action: protection of humans and protection of other life forms.

#### Conservation of Nature:

The culture of conservation of nature dates back to the ancient Vedic Period. The four Vedas i.e. Rigveda, Samaveda, Yajurveda and Atharvaveda are full of hymns which exeplicitly advocate the supremacy of different natural power. The Rgvedic hymns refer to many gods and goddesses that is just the personification of natural entities like sun god, moon god, thunder, water god, rivers as mother, rain, lightening, trees etc. Today it has been confirmed that solar energy is the ultimate source of energy that regulates the flow of energy through water chain, food chain and drives various other nutrient cycles and in this way establish a control over the earth ecosystem, but it was well understood and realized by the ancient Indians.

This respect to nature and ecology can be noticed in avast network of sacred rivers, sacred mountain, revered treesand plants, and even holy cities across India. Nature has the same blessed connection with manas mother has with her child. This is evident from the practice done by a classical Bharat Natyam dancer when she steps on to the stage. Firstly, she touches the floor and with a prayer she asks forgive ness from the Earth as she is going to stamp hard with her feet on the earth while dancing.

#### Conservation of Flora:

Conservation and preservation of flora also called as plant kingdom has been an integral part of Indian culture. Tress have been given huge importance in the ancient Indian tradition. The four Vedas are full of hymns regarding reference to different herbs, trees, flowers and their significance for nature, ecology and man himself. Trees and plants were considered as living beings. Modern Science also confer that plants have life. To cut and harm them unnecessarily or at largescale was considered as sin. Peepal tree continuously releases oxygen in the atmosphere which is very important for humanlife, and therefore, such knowledge must have been put into a spiritual form by our ancestors. The tradition of sacred groves was also practiced in ancient period and it is still practiced infolk and tribal communities. A sacred grove is consists of oldtrees generally at the outskirts of a village. They were not cut and left untouched when the villagers or

original settlers cleared the forest for growth and development or to establish the village. Such groves were called to be revered and regarded asthe abodes of gods and goddesses or spirits and there fore conserved with utmost care. There are many sacred plants such as Tulsi, Rudraksha, Bar, Peepal etc. Planting and worship Tulsiand adding it to water and food is considered sacred. Tulsi is a very good medicinal plant. Scientific evidences sugest that it is hepato-protective, anti-inflammatory, antimicrobial, immuno-modulatory, cardio-protective, adaptogenic,-antidiabetic, anticarcinogenic, neuro-protective, radioprotective, mosquito repellent etc.

#### Fauna and Wildlife Protection

With land and plants, fauna was also protected and conserved. Fauna refer to animal kingdom. Wild and domesticated animals were given due respect in the acient Indian tradition. Many Hindu gods and goddesses have some particular animal or birdas their vehicles (vāhana). These consist of lion, tiger, elephant, bull, horse, peacock, owl, ox, mouse, etc. The association of these animals with peoples' religious beliefs played a prominent role in their protection and conservation for so long in India, until the colonial rule starts intensive hunting. The feeling of sacredness attached to wildlife protected it and help in creating an ecological balance. Snake worship was a holy effort done by our saints to preserve this animal, who is associated with fear and persecution among people because of its perceived venomous nature. Even modern science has confirmed that snakes have an important role to play in food cycle. It also plays a significant role in maintaining the ecological balance.

## Sustainable Practices in Jainism

Buddhism and Jainism are the two most important religion of India. Both of these heterodox sects of ancient India also advocate ecological conservation. Where Buddhism advocates patience, love, concern, forgiveness, the Jainism believes incomplete nonviolence (Ahimsā). Jainism treats every creature of earth either smaller insects,

microbes or big ones as equal and forbids their killing by any means. This perception provides a better understanding among followers of this religion towards conservation of nature, ecology and bio diversity.

Jain environmentalism is largely based on spirituality, non violence and equality. Jainism is a religion of kindness. It aims at the welfare of all living beings. Non-violence (Ahimsā) is one of the principal doctrines of Jainism that deals with there striction of not harming living beings. Each life form that is plant or animal has an inherent worth and each must be respected. Jain followers can actively use their knowledge and understanding of practing non-violence principles in meeting the present ecological needs. Jainism presents a giant view that advocates the inter relatedness of all forms of life (Jiva). Its ethics and principle, which is largely based on obligation, can easily be extended to earth ethics. It explicitly emphasized that every Jiva must be respected. It confers that every human beings which is highly advance creature of earth have a great moral adn ethical responsibility with the rest of the universe in thier shared dealings and associations. This ethical responsibility makes Jainism a cradle for the creed of ecological conservation.

Jain ethics insists that any form of violence has harmful effects on those who commit it, with subsequent ill effects in terms of karma. "Ahimsā-paramo-dharmaḥ" means non injury to any living creature, is one of the basic principal of Jainism. Harming or killing any life form (Jiva), is the greatest of all sins. Jainism asserts that there must be no destruction. There should be kindness and sympathy for all living creatures at every step of daily life. For the Jains, ahimsā means to represent one's compliance to detach himself not merely from acts of injury or killing, but also from the entire mechanism of violence, hostility, anger, possession, and utilization that is common in rest of the world. Jainism preached it so philosophically by accepting the principle the inter dependent existence of nature and animals. Jain

Tirthankar Mahavira says, "kill no creature" and even avoid accidental injury to all living beings. Jains wear nose-masks to stop inhalation of microbes. These are many important principles laiddown by Jainism to avoid any type of harm to water, air, fire, and other forms of life. It also asserts on minimizing such evils like sound pollution, and thus helps to maintain the balance between community and ecology.

#### Conclusion

The mismatch between and carrying capacity of natural resources is increasing and is eating away the very resource base necessary for all life-forms including humans. Mankind being at the top of the pyramid in biosphere has the sole responsibility to check further deterioration and reverse the trend towards better environment. Hope fully, the realisation is coming and people are now aware of environmental hazards. Human ingenuity with its present phenomenal wealth of knowledge as never before, will certainly beable to rectify and redeem the damage done mainly by its own anthropocentric attitudes. The process will be difficult but not in surmountable. It will need tremendous collective efforts and will power of manking as a whole. The first step should be to change attitude from anthropocentric and selfish to compassionate and universal for all the constituents of environment both animate and inanimate and universal for all the constituents of environment both animate and inanimate. The attitudinal change then should be translated inpractice and deeds.

Thus we can say that ancient Indians were very much aware about the ecology and sustainability. It helps in solving specific environmental problems and the modern principles of sustainability were adopted at that time. But unfortunately we have forgotten those golden principles laid up by them. The Jaina programs of environmental education could be expanded to prepare future leaders to be more familiar with environmental issues.

Whether seen as a continuity of interchangeable life forms of as

a succession of discrete incarnations, the weblike nature of both contemporary biology and traditional Jaina cosmology merits our attention. Both views require us to see the world as a living, breathing, sensuous reality, from its elemental building blocks of earth, water, fire, and air, through its microbial expressions, right up to its array of complex insects and mammals, including primates. The key to Jainism might well be its evocation of immediacy and care, rather than any narrative myth or set of externally imposed ethical values.

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## Jain Response to Environmental Crisis

#### Dr. Anindita Mitra\*

For economic development and better living, man has sacrificed forest lad for agriculture, industries, urbanization etc. This has brought in to trail environmental disaster and backfired on man himself endangering etc. The root of the ecological crisis is a spiritual crisis of self concerned greed, aided ans abetted by indigenous technologies no longer properly restrained. Pollution, extinction of species and destruction of forests and wild life are exploitations against the earth and against humanity. The most urgent task of both science and religion is to assert the unity and sacredness of creation, and to reconsider the role of human in it. Traditional Jain teaching can serve to remind the world of the power and complexity of nature as well as the moral advantage of living simply according to the vows associated with non-violence. It we want a clean environment, we have to adopt a life style that springs from a moral and spiritual dimension. We have to follow a simple, moderate life style avoiding both extremes of self deprivation and self-indulgence. Satisfaction of basic human necessities reduction of wants to the minimum, frugality and contentment are its important characteristics. With such a life style, humanity will adopt a non-exploitative, non-aggressive, caring, attitude dowards nature.1

## Concept of deep ecology:

Arne Naess developed his principle of deep ecology in response to increasing ecological degradation and the perceived inability of contemporary ecological movements to develop substantial and viable solutions to the growing environmental problems of his time. A visionary environmental ethicist, Naess claimed for a renewal to what

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he called shallow ecology: ecological ethics which focused primarily on developed countries and preventing resource depletions for their benefit. He suggested that shallow ecology be replaced with deep ecology, a series of ethics which address the deeper issues around envirnmental destruction for the benefit and protection of nature itself<sup>2</sup>. Deep ecology concetrates on the deeper social and cultural issues surrounding environmental destruction, and in doing so, attempts to establish a comprehensive ethic for the prevention of further ecological damage. Later scholars such as Devall (1999), Sessions (1995) and Warwick (2003) supported Naess's philosophy, establishing it as a contemporary and essential environmental ethos in contemporary ecology. Lastly, deep ecology borrowed from the Hindu, lexicon and incorporated its non-violent approach to other living beings, known as *ahimsā*.

## Connections Between Deep Ecology and Jainism:

This basic idea of non-violence is not only found in Hinduism, but is also a principle ethic within Jainism, although Jains interpret and apply non-violence differently. Ahimsa is so central to the Jain belief system that they champion it as their maxim; Ahimsā Paramo Dharma!. As one Jain ascetic explained, Ahimsa is not an ethic, but--- the virtue: all other restraints are simply elaboration of this central one3. Jainism is considered by scholars to have developed as an sprout of Vedic Hinduism around the eighth century BC4,5, and is today a minority tradition centralized in Northern India. Although scholarly literature has traditionally engaged with Jainism as an ascetic world renouncing tradition,6 it has recently become associated with ecology and environmental ethics due to its application of non-violence towards the natural world<sup>7</sup>. More specifically, it is doctrine of anekāntavāda (non-absolutism) and parasparopagraho jīvānām (interrelatedness) are compared to deep ecology's similar values of pluralism and an interconnection between all living beings. As Chapple states, --- The common concerns between Jainism and environmentalism can be found in a mutual sensitivity towards living things<sup>8</sup>. The doctrine of *anekāntavāda* is associated with deep ecology's emphasis on the possibility of a plurality of solutions to environmental problems, while the Jain aphorism, *parasparopagraho jīvānām*, compares with deep ecology's emphasis on the interconnectivity of living beings. These two Jain tenets are both cited within the tradition as well as by outside academics as examples of Jainism's inherent ecological ethic. Any comparison between deep ecology and Jainism based on *anekāntavāda* and *parasparopagrahojīvānā* can be based only on a nearsighted view of the terms, and, as a result, an incomplete representation of the relationship between Jainism and the deep ecology movement through *anekantavada* and *parasparopagraho jīvānām* is produced.

Jainism and deep ecology are most commonly connected through the Jain doctrine of ahimsā, or nonviolence, and is best articulated through the aphorism -- ahimsā paramo dharmah", or nonviolence is the paramount path<sup>9</sup>. This statement has become the calling card of Jainism, and the flag behind which Jains have connected themselves to deep ecology. Kokila Shah explains that Jain--non-violence is the principle for ecological harmony par excellence. It may be compared with deep ecology<sup>10</sup> or as Devall<sup>11</sup> states: -- "The norm of nonviolence is readily accepted by deep ecologist". Deep ecologist use  $ahims\bar{a}$  as a doctrine that respects other living creatures, and requires the protection of these creatures from all forms of harm, specifically harm from human environmental destruction. As we have seen, the Jain understanding of what is a living creature extends to any being that has one or more of the five senses (touch, tast, smell, sight, and hearing). Therefore it requires that the principle of nonviolence be used towards elements, plants, animals and humans.

## Value of Living Beings in Jainism and Deep Ecology:

The idea of inherent value for living things within the natural world is also found within Jainism's *ahimsā*, which argues that all

living beings deserve freedom from violence and interference, as well as---compassion, harmlessness, and respect for the sanctity of life in all forms<sup>12</sup>. Jains agree that all living beings deserve respect and protection from violence through the doctrine of ahimsā, yet unlike deep ecology, Jains do not consider all beings to be equal, therefore contradicting deep ecology's biocentric egalitarianism. This idea of inherent value as a justification for a protectionist attitude towards the natural world is represented through the idea of animal rights and liberation. Jain animal rights groups have used the idea of value to protect animals in association with the doctrine of ahimsā. L.M. Singhvi in his Jain Declaration on Nature explains that, ---transgressions against the vow of non-violence include all froms of cruelty to animals and human beings. 13 Although deep ecology and Jainism both suggest that animal rights must be protected, the two have a different understanding of what animal protection means. Not only do Jains have a structured hierarchy of the animal kingdom, which deep ecology rejects, but the animal shelters (pinjrapoles) that are run by Jain philanthropic organizations do not fully protect animals in the manner in which deep ecology's ideal of inherent value requires.

Meat eating is considered to be the--biggest enemy of righteousness, purity and goodness in Janism<sup>14</sup>, and vegetrianism is one method that Jains have developed in an attempt to protect animals from harm and ensure their own positive karmic rebirth. Beyond vegetarianism, another concrete representation of Jain animal protection and ---living ahimsā is seen in the establishment of Jain pinjrapoles (animal shelters). The Mysore Pinjrapole Society in Mysore, Southern India describes its Mission Statement to: "Prevent Cow slaughter, protect cattle, shelter cattle, dogs, sheep, goats, horses, rabbits etc., that are weak and helpless, and provide, food, water, medical help to all animals" Pinjrapoles are seen as an active representation of ahimsā since---it is the duty of human beings to act for animal welfare Jain community groups often organize, run and fund, pinjrapoles that take in stray animals including cattle, elephants, dogs,

and goats. These animals may be bought from meat markets by Jains and donated to the pinjrapoles to prevent them from going to slaughter, or injured animals that have been found around the city are brought to the shelters to be cared for <sup>17</sup>. Most commonly, animals are brought to a pinjrapole because they are hurt, either having been injured, or suffering from an illness. The Bird Hospital of New Delhi India is dedicated to the protection of Birds in the area and is run by the Digambara Jain community. Birds that are injured are brought to the shelter and treated and released, although many never leave choosing to spend the rest of their lives around the hospital. Until recently, and even now with only few exceptions, predatory birds were turned away from the hospital. As a rule *pinirapoles* do not take in carnivorous animals, as they are violent and would require staff to provide live food for the patient. Therefore, such animals are regarded as secondary to herbivores within the Jain perception of animal value. Pinjrapoles are a live representation of Jain ideal on animal protection in which a clear hierarchy between animals exists within the system. Deep ecology's biocentric egalitarianism rejects any instance where one species is valued over another. Pinjrapoles act as the living ethic of ahimsā and animal protection in Jainism, the reality of which does not relate to deep ecology's ideal of animal rights.

While the Jain animal protection through *pinjrapoles* may initially appear to adhere to the ethic of inherent value in deep ecology, the philosophy and actions towards animals do not. Biocentric egalitarianism suggests that living things, including plants and animals have inherent value and therefore should be protected in a manner where no one species takes precedence over another. Deep ecology requires a strict protection of animals beyond simply preventing harm, while Jains have a highly developed hierarchy between living beings. Therefore Jainism's live representation of animals rights and *ahimsā*, through the establishment of *pinjrapoles*, does not equate to deep ecology's principle of inherent value and biocentric egalitarianism.

#### **Conclusion:**

Jainism does not look upon the universe from an anthropocentric, ethnocentric or egocentric viewpoint because it is rooted in the doctrine of anekāntavāda and syādvāda. It takes into account the viewpoint of other species, other communities and nations and other human beings. The discipline of nonviolence, the recognition of universal interdependence and the logic of the doctrine of manifold aspects, leads inexorably to the avoidance of dogmatic, intolerant, inflexible, aggressive, harmful and utilitarian attitudes towards the world around. It encourages an attitude of give and take and of live and let live. It offers a pragmatic peace plan based, not on the domination of nature, nation or other people, but on equanimity of mind devoted to the preservation and balance of the universe. It is this conception of life and its eternal coherence, in which human being have an inescapable and ethical responsibility that made the Jain tradition a cradle for the creed of environmental protection and harmony.

### Acknowledgement

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## Historical Development of Jaina Epistemology and Logic

## Dr. Anupam Jash\*

The development of Jaina theory of knowledge or epistemology extends over a long period. And it can be devided into three parts.

First, the Jaina epistemology of *āgamic* period begins with the age of *tīrthaṁkara* Mahāvīra (600 BC) continued to the first century AD.

Secondly, the Jaina epistemology of Philosophical period from the first/second century to the eighth century A.D., beings with Kundakunda (Ist cent.), Umāsvāti, Siddhasena Divākara and Samantabhadra (600 AD) and lasts up to the age of  $\bar{A}c\bar{a}ryya$  Hemacandra (1100 AD) and Malliṣeṇa Sūri (1229 AD).

Thirdly, there is the *tārkik* period of Jaina epistemology which begins with *ācāryya Yaśovijaya* (18th cent.) and continues to his followers.

## Dawn of Jaina Epistemology:

The idea of knowledge and its various types can be traced as early as the history of Jainism. An exhaustive study of Jaina philosophy indicates that the Jaina theory of knowledge existed long before the birth of Mahāvīra and it is associated with the age of *Pārśvanātha*, which is not later than 800 BC. But we found that the main discussion about the theory of knowledge was originated in the time of the 24th *tīrthamkara*, Lord *Mahāvīra*, as well as the Jaina canonical literature. The extant Jaina canonical literature is based on the discourses of the 24th *tīrthamkara*, Lord *Mahāvīra*. He had eleven main disciples who are known as 'Gaṇadharas'. Indrabhūti Gautama was the first gaṇadhara who gave the sūtra form the discourses of Lord

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Mahāvīra. Sudharma Svāmi was another eminent gaṇadhara to whom credit can be given for compiling a number of sūtras. Thus, Lord Mahāvīra propounded the knowledge by meaningful expressions and the gaṇadharas rendered the knowledge in sūtra form. In this sense the gaṇadharas have been called the composers of āgama literature.

## Composition of the $\bar{A}gamas$ :

In the beginning these  $\bar{A}gamas$  were not writen for several centuries, it was transmitted orally. Later in order to collect and compose the  $\bar{A}gamas$  transmitted so far orally, three councils were held after a long interval after the death of  $Mah\bar{a}v\bar{i}ra$ . Those councils were:

## A. Pāṭaliputra Council (c. 367 B.C.)

A terrible famine appeared in Magadha in the reign of  $Candragupta\ Maurya$  in the middle of the fourth century B.C. (after about 150 years of the nirvana of Lord  $Mah\bar{a}v\bar{i}ra$ ). Many of Jain  $\bar{a}c\bar{a}rya$  lost their lives for want of food and with them the knowledge of  $\bar{A}gamas$  are also destroyed. After the famine was over, a council of Jaina  $\bar{a}c\bar{a}rya$  and saints was held at P $\bar{a}taliputra$  to collect the  $\bar{A}gamas$ .

## B. Mathurā Council (c. 303 A.D.)

But due to famine and other reasons the Jaina community and their literature again appeared to a severe obliteration. The canonical literature again went into disorder and hence a second council was held at  $Mathur\bar{a}$  in between c. 300 A.D.-313 A.D. under the leadership of  $\bar{a}c\bar{a}rya$  Skandila. It was another attempt to bring together the  $\bar{A}gamas$  which were scattered and were in the process of being lost. During the same period Nāgārjuṇa Sūri organized a Sramaṇa Sangha in Vallabhūnagara. But unfortunately the compiled version of one did not fully tally with that of the other.

## C. Vallabhī Council (c. 454 A.D.)

After one and a half century of the *Mathurā* Council another śramaṇa saṅgha was organized under the leadership of *Devardhi* Gaṇi Kśamāśramaṇa. In this Council, as D.C. Jain says, the different versions were reconciled as far as possible and given a definite

shape<sup>2</sup>. In this council the canons were written down according to version of Mathurā Council. Thus Vallabhī Council, according to Herman Jacobi, was a landmark in the history of Jaina canonical literature as it determined the definite and final shape of Jaina Agamas in book form3.

## Epistemology in the $\bar{A}gama$ period:

In the agama period the idea of knowledge stands, as one of the constituents of the way of salvation. The description of five types of knowledge stands as the spiritual powers manifested gradually as the self aspires for higher and higher reality. L. C. Shastri remarks<sup>4</sup> in this context that, knowledge in this period is not valued on the merit of epistemological and logical validity but as a means for the spiritual development and ethical progress. Jñāna (knowledge) is one of the constituents of the path towards the attainment of moksa

The first half of Ācārānga Sūtra (i. 5. 5. 5) contains a significant remark expressing the identity between the cognizer and the cognition<sup>5</sup>. In the Bhagavatī Sūtra (5.3.191.192.). the nature of knowledge have been discussed<sup>6</sup>. In the Sthānānga Sūtra (321), the term pramāna, and its various distinction have been explained<sup>7</sup>. The Bhagavatī and the Sthānānga clearly express the five types of knowledge with its divisions. Uttarādhyana Sūtra also enumerates the five types of knowledge<sup>8</sup>. In Rājapraśnīya (165)<sup>9</sup> we see that Kesi Kumāra, a follower of *Pārśvanātha* explains five types of knowledge to King Paesi (Pradesi). Nandī Sūtra is fully devoted to the theory of knowledge. Daśavaikālika Sūtra Niryūkti discusses the ten avayava of syllogism and the different types of debates which are very important in the history of Indian logic. Āvaśyaka Sūtra Niryūkti provides a valuable material for the study of Jaina epistemology<sup>10</sup>. The *Digambara* works like the Satkhandāgama, Kaṣāya Prābhṛta and Mahābandha provide valuable information in this respect.

## Epistemology in the Philosophical period:

In philosophical period, the idea of knowledge is meant to ascertain relaity. The criteria of validity of knowledge, methods of its ascertainment, the sources of knowledge and its relation with the object are the main problems of this period to the Jaina philosophers.

The Tattvārtha Sūtra of Umāsvāti; Pravacanasāra of Kundakunda ācāryya; Āptamīmāmsā of Samantabhadra, Sanmati Tarka and Nyāyāvatāra of Siddhasena Divākara, Dvādaśaranayacakra of Mallavādin, Tattvārtha-Rāja-Vārtika, Aṣtaśatī, Pramāṇa Saṃgraha, and Naya Viniścaya of Akalaṃka; Anekāntajayapatākā of Hari Bhadra; Tattvārthaślokavārtika, Aṣtasāhaśrī, Āpta Parīkṣā, and Pramāṇa Parīkṣa of Vidyānanda; Parīkṣāmukhamof Manikyanandī; Prameya Kamala Mārtaṇḍa of Prabhācandra; Nyāviniścayavivaraṇa of Vādiraja; Pramāṇamīmāmsā of Hemacandra, Syādvāda Mañjarī of Malliṣeṇa Sūri are the main texts on the Jaina epistemology in this period.

This history of non-canonical literature of śvetāmbra begins with Umāsvāti. Umāsvāti (1-85 AD). who was called Umāsvāmin by the advocates of digambara sect is the author of the Tattvārtha Sūtra (according to the śvetambara thinkers) or Tattvārthadhigama Sūtra Tattvārtha Sūtra (according to the digambara thinkers) is recognised as an authority by both the śvetāmbara and the digambaras. Professor Mohanlal Mehta mentions that 11, the main features of Jaina logic, epistemology, psychology was found in Tattvārtha Sūtra in deals.

**Siddhasena Divākara** (480-550 AD) was a great logician. His works include the *Sanmatitarka*, and the *Nyāyāvatāra*. The *Sanmatitarka* is an excellent Prakṛta treatise on the theory of *nayas*. It also deals with the theories of knowledge and judgment. The *Nyāyāvatāra* is the earliest Jaina work on pure logic.

Samantabhadra (6th-7th cent.) a diagambara philosopher is the author of the Āptamīmāmsā, Yuktyānuśāsana and Svayambhūstotra. Among these three books only in the Aptamīmāmsā the philosophy of non-absolutism as well as jain epistemology is explained.

Haribhadra (705-775 AD), a famous śvetāmbara philosopher, composed a large number of works both in Sanskrit and Prakṛta, His Saddarśanasamuccaya, Anekāntajayapatākā, Śāstravārtāsamuccaya, Anekāntavādapraveśa, Sarvajñāsiddhi etc. deals with Jaina theory of knowledge in brief.

Akalamka (750-800 A.D.) was a great digambara philosopher who composed the following philosophical (logical) treatises in Sanskrit: (I) Laghīyastraya, (2) Nyāyaviniścaya, (3) Pramārtharājavārtika and (4) Siddhiviniścaya. He commented on the Tattvārtha Sutra is known as Tattvārtharājavārttika and that on the Aptamīmāmsā is called Aṣṭaśati. All of these works deals with the Jaina theory of knowkedge.

Mānikyanandi was an early Jaina philosopher of digambara sect. It is mentioned that Mānikyanandi lived about c. 523 AD, according to S.C. Ghosal it is 6th century and according to S.C. Vidyābhusana it is 800 A. D. We must accept the opinion of Vidyābhusana as Parīkṣāmukham of Mānikyanandi is the first aphoristic treatise on Jaina Nyāya philosophy or Jaina logic and it is based on the various works of Akalamka such as Tattvārtha-rāja-vārtika, Aṣtaṣatī, Nyāya-viniṣcaya, Laghīyastraya, Pramāṇasmgraha etc. Anantavirya, the first commentator of Parīkṣāmukham writes in the beginning of his commentary named Prameyaratnamālā thus. 'Salutatation to that Mānikyanandi who has churned the nector of nyāya vidyā from the ocean of Akalamka's works'. In this work Parīkṣāmukham the author discussed the logical problems in sūtra style. He established in this book the Jaina views on logical grounds.

The Naycakra or Dvādaśāranayacakra by Mallavādin (827 AD) is an excellent Sanskrit work on the Jaina theory of naya and dvādaśāngī naya.

Vidyānandin (9th century) is a distingushed Jaina philosopher

belonging to the digambara sect. His Aṣtasāhaśrī commentary on the Aṣtaśatī (Akalaṁk's commentary on the Āptamīmāmsā of Samantabhadra) is, perhaps, the most difficult of all the Jaina philosophical treatises, It was further commented upon by Yaśovijaya. Vidyanandin's Tattvārthaślokavārtika is an important commentary on the Tattvārtha Sūtra. His other Sanskrit philosophical works include the Āptaparīkṣā, the Pramāṇaparīkṣā the Pātraparīkṣā, and the Satyasāsanaparīkṣā.

**Prabhācandra** (c. 10-11th century), the *digambara* philosopher composed some distinguished commentaries. His *Prameyakamalamārtanda* and *Nyāyakumudacandra* are comprehensive Sanskrit commentaries on the *Parīkṣāmukha* (a work on Jaina logic by Mānikyanandin) and the *Laghīyastraya* (a work on Jaina logic by Akalamka) respectively.

Hemacandra (1072 A.D.) was the most versatile śvetāmbara Jaina philosopher. He was called 'the omniscient of the Kali age' ('Kalikālasarvajña') as mentioned by R. Williams<sup>12</sup>. He contributed to almost all branches of knowledge of his time. His Ayogavyāvacchedadvātrimśika is an easy and lucid exposition of the doctrines of Jainism. And his Anyayogavyāvacchedadvātrimśika refutes the doctrines of the non-Jaina systems. It is a commentary called Syādvādamañjarī by Malliṣeṇa, which serves an excellent treatise on Jaina philosophy. The Pramāṇamīmāmsā by Hemacandra is a valuable work on Jaina logic.

## **Epistemology in the Logical period:**

Jaina epistemology of the  $t\bar{a}rkik$  (logical) period begins with  $\bar{A}c\bar{a}ryya$  Yaśovijaya Sūri in the 18th century A.D. who is superb genius scholar of Jaina logic and epistemology. Yaśovijaya was a distinguished śvetāmbara scholar of his time. M. Winternitz<sup>13</sup> fixed his time at circa 1624-1688 A. D. When Indian logic took a new turn with the advent of *Tattvacintāmaṇi* by Gangeśa Upādhyāya, Yaśovijaya also

made an epoch-making revolution in the realms of Jaina philosophical and logical thoughts. Yaśovijaya meticulously refined and re-constructed the whole Jaina philosophical and logical thoughts by his great erudition and re-interpreted the Jaina logic and philosophy in the Navya Nyāya style and made it up to date. He wrote 72 philosophical works in Sanskrit, Prākṛta, Gujarati and Hindi, The titles of some of them are Jaina Tarkabhaāṣā, Jñānabindu, Anekāntavyāvasthā, Aṣṭasahasri-Vivaraṇa, Nayāloka, Syādvāda-Mañjuṣā, Nayarahasya, Nayopadeśa, Nyayakhaṇḍakhādya, Jñānārñava, Pramānarahasya etc.

The other epistemological works of this period after Yaśovijaya Sūri are Saptabhaṅgītaraṅginī of Vimala Dāsa, Syādvādabhāṣa of Subhavijaya, Ātāpapaddhati and Nayacakra of Devasena, Pramāna Vistāra and Nayadīpikā of Dharmabhuṣaṇa, Nayavāda and Tarkavāda of Prabhadeva, etc. These authors gave a comprehensive account of Jaina epistemology and logic. The main current of this period was not only the systematization of the logical notions but also the defense of non-adsolutism against the attack of absolutist systems.

But it has been seemed that modern researchers on Jainism have given comparatively less importance to these works than the works of post-Mahāvīra Jain philosophers.

This is, in brief, an outline of the Historical Development of Jaina Epistemology and Logic. The *anekāntavāda*, *syādvāda* and *saptabhaṅgī-naya* as well as the theory of knowledge and the divisions of knowledge is the great contributions of Jainism to Indian philosophy.

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## The Science of Clouds in Ancient Jain Literature

## K.G. Sheshadri\*

#### Introduction

Clouds are a collection of ice crystals or water droplets visible to everyone. From time immemorial they have been a source of endless fascination. They can be calming and inspiring or at times they can be terrifying through their constantly changing shapes and colors. Observation of clouds and their varied nature formed an important component of rainfall forecasting practices in ancient India. The shape, color and nature of cloud provided rich information for prediction of rainfall.

#### Clouds in Vedic and Post-Vedic Texts

The *Rigveda*<sup>1</sup> has clear concepts of the rainfall process as in RV (1.164.36), RV (1.164.47-51). They describe the process by which rays of the Sun hold for six and half months the waters capable of fertilizing earth. *Agni*, the God of fire takes the waters to heavens and *Parjanya*, the rain God brings them down as rain. The *Yajurveda*<sup>2</sup> has descriptions of cloud seeding as is evident from *Kārīṣṭi* sacrifice in *Taittirīya Saṃhitā*. The *Kārīra* fruits offered in fire produce dense smoke and goes up mixing with clouds. These fruits have properties of Soma and smoke going up aids in squeezing rains from clouds. Sage *Vālmīki* 's eternal Epic *Rāmāyaṇa*<sup>4</sup> has an equivalent statement echoing the rainfall process described in *Rigveda* in the *Ayodhyakanda*.

The Brahmanda Purāṇa<sup>5</sup> [1.2.22.30-36] classifies clouds into 3 types (Agneya-fire born), (Brahmaja - born of Brahma) and

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Pakṣaja--of wings). The Linga Purāṇa<sup>6</sup> [1.54.40] says cloud are formed by smokes and various smokes have various results.

Kautilya in his Arthaśāstra<sup>7</sup> (2.24.5) speaks of various clouds of which those that pour rain continuously for 7 days in the plains are of three types, those that pour minute drops are of 8 varieties and those that are accompanied by sunshine are of 30 types. The Samhitā texts deal elaborately of the Garbhadana (fertilization of clouds). The Brhat Samhitā<sup>8</sup> of Varāhamithira (6th c.A.D) [XXI and XXIV] deal on various processes of the fertilization. It takes 196 days for clouds to take birth and grow. Those that fertilize during day time give rain in night and those fertilizing during night time give rain during day.

The 'Kṛṣi Parāśara' a work on agricultural meteorology based on a text of 10th c. A.D. classifies clouds broadly as Āvarta (rains in particular area), Samvarta (rains everywhere), Puskara (scantly rainfall) and Drona (rains in wide area).

The Meghamalamanjari<sup>10</sup> or generally titled as 'Meghamala' is an exclusive text dealing elaborately on classification and descriptions of clouds. It is in the type of a Kavya and deals with 8 types of clouds with ten varieties in each of the following mountains namely Kailāsa, Trikuṭa, Jaṭhara, Śṛṅgavera, Himavat and Gandhamādana. In the form of Śiva-Pārvati Saṁvada, the text describes the following 12 clouds. These 12 clouds are Subodha, Nandaśali, Kanyada, Pṛthuśrava, Vāsuki, Takṣaka, Vikarta, Sarbudha, Hemamati, Vajradaṁṣṭra and Viṣaprada. Each of them appears on the basis of entry of Jupiter into the 12 zodiacal constellations.

#### Clouds in Jain Literature

Just as Vedic texts and their associated literature deal on clouds and their formation similarly Jain Canons are also replete with their information. The *Rai Pasenīya Sūtra*<sup>11</sup>, the second among the 12 *Upānga Sutras* has some details of clouds. The *Abhiyogic* Gods of

Sūryābhadeva created clouds containing water through Vaikriya power also inducing thundering, whirling action of the clouds in sky so that they showered fragrant water all around the seat of Bhagwan Mahavir. Thereafter they created the flower bearing clouds that showered flowers on him [1.16-17]. The Bhagavati Sūtra<sup>12</sup> [2.5.101] says that conception of clouds lasts for 6 months [approximately 196 days]. Conflicting views exist on the time of conception of clouds. Some say clouds conceive in 4 months from Mārgašīrṣa to Phālguṇa and deliver in 4 months from Śravaṇa to Kārtikā. Or they conceive from Kārtikā to Magha and deliver from Āṣāḍha to Āśvina. Some say the season of conception takes place in Pauśa after sun traverses first half of Mūla and delivery commences from Āṣāḍha when sun enters Ardra asterism or conception takes place when sun occupies Svāti, or both Sun and Moon in Svati, or when Sun in Svāti and Moon in Aśvini.

The Sthānānga Sūtra<sup>13</sup> mentions that clouds are of Four kinds namely *Desavāsī* (that rains in a specific area), *Savvāsī* (rains in all states or in a wide area), Some are both *Desavāsī* and *Savvāsī* while some are neither *Desavāsī* nor *Savvāsī*. The same text also adds that with just one rain the *Puṣkala* Samvartaka clouds makes land fertile for 10,000 years, the Pradyumna clouds make it fertile for 1000 years, Jimuta clouds for 10 years and *Jimha* clouds for one year. The *Jambūdvīpa Prajñapti Sūtra<sup>14</sup>* mentions that *Puṣkara* clouds occur during the first *samaya* of second Aeon of Utsarpini time cycle. These clouds remove dryness and spread along the length and breadth of *Bhāratadeśa*. They cause rains for 7 days and 7 nights. The text also mentions rains of milk, ghee, nectar in a divine context alluding to the following clouds namely *Kṣīramegha*, *Ghṛtamegha*, *Amṛtamegha*, *Rasamegha*.

The Bhadrabāhu Samhitā<sup>15</sup> of Jain Bhikshu Bhadrabahu dated prior to Varāhamihira's text deals on various aspects of clouds. It classifies clouds based on their colours and their directions as Brahmana (white - North), Ksatriya (Red - East), Vaiśya (Yellow -

South),  $\dot{su}dra$  (Black - West). It further classifies them based only on colours such as black, yellow, copper coloured or white. An interesting feature is that it alludes to a classification of clouds based on tastes of rain poured by the cloud.

sugandhagandha ye meghaḥ susvarāḥ svādusaṁsthitāḥ\ madhurodakaśca ye meghāḥ jalāya jaladāstathā ||

'Clouds having smell of (*Kastūri / Kesara*) flowers making sweet and peaceful (thundering) sounds, whose rain tastes sweet create good rains'.

It has rich information on various shapes of clouds not found in any other texts. These shapes of clouds are used to predict victory or defeat or death to a king. Clouds shaped in form of flag, banner, bell, arch associate victory to a king if moving before his march route [VI. 11], those in shapes of buffalo, pig, donkey, meat eating birds like vulture, Crow, hawk and wild animals like lion cause king's defeat or death if moving in opposite direction of king's march [VI.13]. Clouds in shape of chariot, weapons, horse, elephant, sword indicate victory if moving forward. Clouds shaped like bow, armour, young elephant, horse tail indicate war and so also those clouds that strike each other [VI. 15-16]. Similar shapes of clouds associated with a king's march are also given further in the text [VIII. 10-12] and [VII. 23-24]. Clouds shaped like a lion, cat, meat-eating birds, cheetah and so on causes heavy rain that is blood red in color [VIII. 16-17]. Prognostications from clouds of various shapes and in different directions as specified beginning from Jyestha Śukla Pañcami to Pūrņima and from Aṣāḍha Kṛṣṇa Pratipad to Amavasya are given in the Bhadrabāhu Samhitā. The pregnancy of clouds is dealt in detail in the text [XII] and gives a conception of 196 days [XII.4] in accordance with the Bhagavati Sūtra and Bṛhatsamhita. The Bhadrabāhu Samhitā also gives the prognostication of clouds according to seasons.

Acārya Jinasena in his Kāvya named 'Pārśvābhyudaya' 16 modelled after Kālidāsa's Meghadūta and dated to 7th c.A.D. has

details on descriptions of clouds [Canto I-II]. In Canto [I.62] it mentions about an artificial cloud although how it was created is not referred-

vidyunmālākṛtaparikaro bhāsvadindrāyudhaśrī rudyanmandrastanita subhagaḥ snigdhanilāñjanābhaḥ \ śīghram kṛtakajalada tvatpayobindupāta prātisnigdhairjanapadavadhūlocanaiḥ pīyamānaḥ ||

"O" artificial cloud, you intermingled with diffusion of successive flashes of lightnings possessing lustre of shining Indra's bow, pleasant owing to production of grave thunderings possessing appearance like that of collyrium wetted with oil, drunk by eyes of village women that would be full of affection felt through pleasure enjoyed by them owing to discharge of drops of your water, should proceed hurriedly."

Pampa I, the great Jain poet of 10th c.A.D. belonging to Karnataka, in his Ādi Purāṇa<sup>17</sup> [14.97] speaks of bluish clouds. In his Vikramārjunavijaya known as Pampa Bhārata<sup>18</sup> he speaks of various types of clouds like Droṇa, Mahādroṇa, Puṣkala, Āvarta and Suvartaka [5.95]. Kumudendu, the author of Kumudendu Rāmāyaṇa<sup>19</sup> dated to 13th c. A.D describes clouds resembling herd of elephants with their roar being thunder and lightning [9.87].

'Rattamata', a work on meteorology by Ratta, a Jain poet of Karnataka gives description of clouds shaped like a whisk, pot, elephant, Gopura of Jain temple or like color of moon, crocodile, flower, mountain, peacock and so on (Chapter VIII)<sup>20</sup>. It is also speaks of clouds that are of colors of white [8.15], golden hued [8.20], reddish, black and blue colors. It also gives several prognostications of clouds of different colors. Other details of Science of Clouds by Jain poets of Karnataka have been discussed recently.<sup>21</sup> Thus several Jain texts deal on cloud science.

## Conclusion

Detailed description of clouds in ancient texts is so vast that

modern cloud meteorologist may have to do so mach research on them. Since Nature displays different types of clouds, research into their shapes, colours and interdisciplinary studies into their predictions and associated events may open up new scope into the science of clouds. With rainfall forecasting also becoming difficult in accuracy, one may have to go through the ways of predicting these events through the aid of these texts. Also, further exploration other *Jain canons, kavyas and associated Jain scientific literature* may throw further light on science of clouds.

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## **Ancient Jaina Art and Architecture**

## Dr. Renuka Porwal\*

The Indian art history is well preserved in its cultural trends and religious thought expressed through art objects, shrines, and literature. The contribution of Jainas towards art and architecture is amazing in view of the magnificent artistic creations in the form of stupa, cave-temples, shrines, images, wall paintings, miniature paintings, murals, etc.

Art is an integral part of society and culture in all the civilizations of the world. The craftsman is able to communicate his theme of particular art object through its outer look by creating manifestation of feelings/Bhāva in his creation. The significant aspect of the same is the aesthetic experience i.e. Rasa, which is created by their visualization. The conspicuous feature of Jain art is its meaningful purpose to invoke precise emotions in its viewers. The artists of Indian schools have maintained their art and aesthetic standards by conveying the message of ethics, comprehended by seers and philosophers, through their creations. This is the reason while adoring peaceful liberated Tirthankara images, one feels calmness and serenity.

It would be relevant to make a general view of all aspects related to ancient art and architecture in its historical and archeological frame work with special reference to Jain stupa at Mathura.

Jaina antiquity is scattered at many places in the world. The prehistoric sites of India does not give a clear picture about a particular faith as both the ancient traditions-Vedic and śramaṇa, share common aupspicious symbols like *Swastika*, śrivatsa, a pair of fish, etc. besides the process of meditation. A headless red stone statute from

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Harappa is analogous in style to the Morya polished (like Ashoka's pillar). torso obtained from the plinth of an ancient Jaina shrine, Lohanipur at Patanā. This indicates that the construction of Jaina shrines and images were already in vogue in Morya period. The indicates that the construction of Jaina shrines and images were already in vogue in Morya period. The close similarity in both statues except two circular marks on Yaksa image establishes the continuity of an Indian art down to the Morya period1. A standing image of Pārśvanātha in bronze with a primitive look in P.W. Museum (accn. B. 32) Mumbai, is very close in style with the terracotta figure from Mohan-jo-daro<sup>2</sup>. The Jain art is based on religious principles like non-violence, spirituality, and austerity. The Bāhubali image is the best example of showing extreme austerity/Tapa performed by him in his life time displayed through the creepers entwined around his arms and legs. The anthills, creepers, snakes, lizards and plants suggest human coexistence with nature. As a rule Jina images are carved in two postures only--

- 1. Padmāsana or Ardhapadmāsana.
- 2. *Khadgāsana*. These both Yogic postures suggest severe austerity.

They are depicted as a single Jina, *Dvitirthi*- having two Jinas on a stele, *Tritirthi*- Sarvatobhadra, Panchatirthi, and Chobisi-24 Jinas where the centre image is a chief idol. The concept of Sarvatobhadra/ Chomukhaji image is based on two themes iether-

- i. when the Jina delivers a sermons sitting in Samavasarana or
- ii. It is established on a pillar to spread auspiciousness in all direction i.e. "Sarvatobhadrāni mukhāni yasya".

Rṣabhadeva image is carved with locks on shoulders very often and *Pārśvanātha* with the canopy of Dharanedra deity to show

<sup>1.</sup> Dr. U. P. Shah, Studies in Jaina Art, Parsvanatha Vidyapitha, Varanasi, 1955.

<sup>2.</sup> Ibid.

their particular life event. Moreover the life incidences of Jinas and great personalities are often depicted or painted in the shrines.

#### Jaina Architecture:

Architecture can be elucidated as a science or design of any building or structure. Historical civilizations are often identified with their surviving architectural achievements e.g. the structures found at the site Kankali Tila, Mathura. Jaina sanctuaries are built with various architectural designs and norms. The exmple architecture of North India is built with Nagara style Shikhara while in South they are formed with Dravidian Shikhara architecture. Dravidian style emerged in the 6th and 7th century in Karnataka as well as in Tamilnadu and reached to its best at pattadakkal (Karnataka) and Kanchipuram (Taminadu). This style is further developed in Basadis at Sravanbelagola, Jinanathpura, Humcha, Lakundi, Mudabidri, Karkal, Venur, Halebid etc. Places up to Hoyasala rule. These temples are built in such a way that with their characteristic features one can judge their culture and patronized dynasty. Another special contribution of Jaina is the free standing pillar found in almost every Basadi, known as Manastambha. The entrance to the royal shrine is contructed in very unique manner in southern India called Gopura.

Thie rules of Jaina architecture and iconography is available in Vāstušāstra (by Visvakarma), Apparajitpriccha (by Bhuvandeva), Vastusāra by Thakkar-pheru (a Jaina Engineer), Devyadhikara and Vraksarnara. The features of Jaina shrine as referred in above Vāstu Granthas are--

- 1. The *Prāsāda* (The main shrine).
- 2. The mandapa (Gudhha-mandapa or closed hall).
- 3. The Trika (Mukha-mandapa or vestibule for pradaksina)
- 4. A Ranga-mandapa (A hall where devotees perform rutuals).
- 5. Valanaka or entry hall.
- 6. Surrounding Devakulikās.

The Hindu deities are assimilated in Jaina pantheon as a protec-

tive deity. In this way Navgrahas, Ganeśa, Lakṣmi, Ambika, Kuberā etc. have given a special independent cult as śasana-devatās or Yakṣa-yakṣi of Jinas and protective deities. They are available since beginning of Kuṣāṇa period onwards.

The architectural skill was first developed in the construction of stupa, then in cave temples and later on in shrines.

## The Stupa:

The stupa is a mound built in the memory of great persons. A structure constructed at their Nirvana place, is called "Caitya". The word "Caitya" has gradually develped, its synonyms are-heap of stones, funeral place, Yajña-vedi, adoration place as well as Jaina or Buddha shrines. If Caitya, is dome-shaped, then it is called Thubha/Stupa. In Jainism both traditions - Śvetāmbara and Digambara, have references of erecting Chaitya and stupa in their literature. The stupa at Mathura is described in Thānanga sūtra, Āvaśyaka-cūrni, Vyāvahāra-cūrni, Yaśastilak-champu, Vividha-tirtha-kalpa etc. The existence of stupas are available at three places- Aṣṭāpada, Vaishali and Mathura.

The Stupa at Aṣṭāpada was constructed by Bharat Chakravarti (Simhnishadhya-āyatana) in memory of Rishabhdeva. Another stupa dedicated to Muni Suvratswami existed at Vaishali, which later on was destroyed. The third stupa, at Mathura was in good condition, tell looted and razed to ground by Mohammad Gazani in 1030 A.D. It was renovated within five years as per the inscriptions on three images. Vincent Smith noted that if was the oldest building³ available after Mohen-jo-dero. This site is now known as Kankali Tilā after the name of deity, previously known as Jaini-Tila⁴ by natives. More than thousand sculptures like Āyāgapaṭṭas, pillars, door lintels, Toranas, images, etc. ranging from 200 B.C. to 1200 A.D. were obtained Many Āyāgapaṭṭas assigned to pre Kuṣāṇa period have depic-

<sup>3.</sup> Vincent Smith, Jaina Stupa and other Antiquity from Mathura, pp-inroduction

<sup>4.</sup> Growse, Mathura-A Disrict Memoir, 1882, revised in 1888

tion of Aştamangala or Dharmachakra or Swastika or three jewels as a chief theme. The empty space is covered with Yakşa-yakşi carrying garlands for adoration. Many excavated Sarvatobhadra images are in standing posture show that they were once established at the top of the pillars.

Excavation at K. T. was carried out between 1888 A. D. to 1892 in different seasons. As per V. Smith this was the oldest available structure, after Mohan-J-Daro. The size of K. T. is nearly 500ft, long and 350 ft. broad. The plinth of the stupa was 47 feet in diameter5. Its walls were made of bricks of defferent sizes. The architecture of the same could be judged by the few sculptures obtained from the site containing adoration of stupa by devotees, Suparnas and harpies.

In 14th century, Jinaprabha visited and adored the stupa at Mathura. The account on Mathura is described by him in *Vividhatirtha-kalpa*. Accordingly the golden stupa was constructed by deity Kubera in a single night, at the time of seventh Jina Supārśvanātha. It was covered with bricks and stones as advised by Pārśvanātha. Here *Jinabhadra Kṣamāśramaṇa* had repaired Manuscripts of *Niṣitha Sūtra* damaged by termides. King Ama restored the dame as recommended by Ācārya Bāppābhattasuri. One pedestal of Kuṣāṇa era 79 obtained from the site has an inscription that the same was established at "Deva Nirmita Vodyva Stupa". Thus before 2000 years it was so ancient that it's antiquity is forgotten.

Out of 119 Tīrthankara images obtained from Mathura, 93 are in Padmāsana and others are in Kāyotsarga. Standing figures are without clothes but with open eyes. The inscriptions on them include the genealogy of preceptors embodied in Kalpasutra and Nandi Sutra's Pattāvali. Its bas-relief/pedestal contain a Dharma-chakra in a centre having Sādhus and śrāvakas on its right while Sādhvis and śrāvikās to its left. Here every Sādhu holds a piece of blanket in such a way

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<sup>5.</sup> V. Smith, op. cit.

that it covers privacy of the body. Sādhvi wears a sari. Devotees are standing with folded hands. Here, there is no hint of separation in two main traditions-Svetāmbara and Digambara. As suggested by scholars that difference between the depiction of Jina images in respect of with and without lower linen didn't exist in Kuṣāṇa and in early Gupta period. The distinction in image making of both the sects is subsequent to the Gupta period. After medieval period, a Dharma-chakra has been given a fix position on pedestal i.e. below the Prāsāda devi (deity Lakṣmi) flanked by deer.

#### Jaina Caves:

In ancient period Jaina ascetics were living in natural caves, where they had established *Tirthankara* images for adoration and meditation. Such natural caves, rock cut friezes, and cave shrines are available in Bihar, Orissa, Rajasthan, Gujarat, Maharashtra, Karnatak, Tamilnadu and other states.

Emperor Ashok built **Barabara** cave for the Ājivika tradition and his son Dasharath built caves at **Nagarjuna** for worshipping.

At **Rajgiri**, some caves of 3rd century A.D., still exist with beautiful *Chomukha* and other images.

At **Pabhosha** in U.P. one finds a cave having an image of Padmaprabha Jina, the inscription on wall suggests that it was built by King Ashdhasena in Shunga period.

Udaigiri and Khaṇḍagiri: King Kharwel (200 B.C.) of Chedi dynasty built many caves and shrines near Bhuvaneshvara in Orissa. He engraved an inscription after winning the battle against Magadha. As mentioned by him, he brought back the Jina image carried away by Nanda king. He vonvened the second  $\bar{A}gama\ V\bar{a}chan\bar{a}$ . The Pandya king gifted giant ships useful for carrying elephants. This inscription is important as it strengthens the adoration of image since Nanda period. It is carved at the entrance of the first cave. The same is deciphered after the efforts of scholars for nearly 75 years. Here 33 caves are still in good condition.

**Udaygiri** in M.P. There are two Jaina caves in good condition out of many, now each contain an image of Pārśvanātha of 3rd century.

**Devagadha** in M.P. This place also has Jaina caves and shrines of early Gupta period. A shrine of Śāntinātha is in good condition has main *Garbhagraha*, *Mandapa*, *Ardhamandapa* and Porch/entrance and a *Manstambha*.

In **Gujarat**, Junagadh, Dhank and Talja also have ancient Jaina caves.

In Karnataka, the Chalukyas of Vatapi/Badami had great respect for Jainism as per the inscription at Aihole, in a *Praśasti* of Pulkesin II composed by Jaina poet Ravikirti<sup>6</sup>, preserved in Meguti shrine in the cave. The Meguti temple was built 634 A.D. Menabasti cave has beautiful carving on the ceiling showing the motifs of *Timingala*, *Mithun*, a deity *Naga*, *Swastika*, etc. in Karnataka, Jaina shrines are constructed in two ways (i) a Basadi / Basati and (ii) Betta. In Basadi, Mandapa has many pillars having Garbhagriha but without a space for *Parikrama* except few shrines. The Betta style is available on hills or on small mound; moreover this shrine is surrounded by boundary wall often with a Bahubali image within eg. Karkal and Venur.

**Badami caves** were excavated in 6th to 7th century. Here first time, Bahubali's image was carved with creepers and her two sisters. The Rashtrakuta king Amoghvarsha stayed here after accepting monkhood.

In **Tamilnadu** the earliest architectural activity commences with the Jaina's natural caverns, where sleeping beds for recluses were engraved in the rocks assigned to 2nd B.C. More than a hundred caverns have been brought to light uptill now. There are 89 early

<sup>6.</sup> A seminar on 'Spectrum of Jainism in Southern India' in 2008 by K.J. Somaiya Centre for Studies in Jainism.' Jainism in Karnataka.

Tamil inscriptions in Brāhmi scripts out of them 85 are credited to Jaina affiliation. Mostly they are in the hill ranges around Madurai, Pudukkottai, and Tirunelveli. Pandya kings patronized Jainism, their kingdom Madurai being its centre? The Grantha Nalidiyar was composed by Jaina ascetics while leaving the realm of Pandya king. Ganga Kings ruled over Mysore state between second to eleventh centuries. The Tamil literature is influenced by Jaina ethics. Hiuen-Sang visited **Kanchi** in 7th century. He mentioned its flourishing condition besides nothing, that Digambaras were more at Kanchi and Madurai.

## Ceylon:

As per Mahavamsha (Buddhist) scripture, Pandukabhaya (2nd B.C.), the king of Ceylon patronized *Nirgrantha Śramanas*. There were Jaina shrines at Anuradhapur before Buddhism spread in Ceylon<sup>8</sup>. As researched of Dr. Hampa Nagarajaiya, "Jainism entered Simhala Island through Tamilnadu and Bridged cordialrelationship between Srilanka and Tamil country, as early as in the 4th century B.C."

#### Sittanavastsal:

The cave paintings of Sittanavatsal in Pudukottai district are noteworthy as they are of early period. Even 17 beds for recluses are chiseled here from the rock. The inscription informs us that stone beds were specially made and gifted to Jaina men from Mysore region. This shows the contact between Jaina Sangh with different regions.

#### Ellora:

At Ellora there are five Jaina caves excavated in 8th century under the reign of the Rashtrakuta king Amoghvarsha. The cave nos. 30 to 34 are of Jaina pantheon, out of them three important; Indrasabha no. 32, *Jagannatha-sabha* no. 33 and *Chhota-Kailash-*no. 30. *Indra-sabha* cave has images of *Parsvanatha*, *Bahubali*, *Bramhayaksa*,

<sup>7.</sup> Sathyabhama Badrinath, 'Jaina Archaeological heritage of Tamilnadu'.

<sup>8.</sup> A seminar on 'Spectrum of Jainism in Southern India', op.cit. Jainism In Tamilnadu.

Ambika, Kubera, Mahavira and other Tirthankaras. The Rashtrakutas were great patrons of Jainism as reflected from above caves.

Jaina Shrines: The cave shrines at Udaygiri - Khandgiri, Ellora, Badami, Aihole, Sitanavatsal, Kalinjamalai, Alagarmalai (20 k. m. from Madurai), etc. and medieval shrines at Keshariyaji, Mudabidri, Kesharvadi, Girnara, Delavada, Ranakpura, Satrunjaya, Girnara, Sravanbelagola (Vindhyagiri and Chandragiri), Tirupatikunaram etc. are remarkable and good precedents of art with its architectural grandeur. Most of the rulers of Karnataka and Tamilnadu-Pallava, Pandya, western Chalukya, Ganga, Rashtrakuta, Kalchuri and Hoyashala were devotees of Jinas. They spread Jainism in their regions. Jaina shrines are called Derāsara, Viharas, Basadi, Vasadi, Vasahi, Mandira, Chaitya etc. There is little difference between Brahmanical and Jaina temple architecture.

## Osiaji / Ukesha :

The city is situated about 40 km from Jodhapur, belonging to Pratihara-Chahaman period. This is the native place of Oswal/Ukeshwal shresthis and also the birth place of Ukesh-Gaccha. Here there are 13 shrines, out of them Mahaviraswami shrine is the most ancient. It comprises of a vast terrace/Jagati supporting the main and side structures. The pillars and walls or Mula-prāsada are renovated very finely in 8th century.

## Khajuraho:

The famous magnificent huge Chandella (*Nagara* style) temples belonged to 10th to 11th centuries. Here artists have used the theme of routine life to religious thought. The city is famous for erotic figures carved on many temples of Hindu and Jaina (*Parsvanatha* temple). Previously there were 85 shrines of both tradition but now only 25 are survived. Here Ghantai temple is dedicated to Adinatha belonging to 10th century. The pillars are decorated with hanging bells from chain so the shrine is called by name.

#### Ābu-Delwada:

The temple complex at Abu Delawada built in 11th century A.D. by Vimalashah the minister of Gujarat. The main shrine Vimal-Vasahi has pyramidal shaped Shikhara. The *Trailokya-dipaka-prāsāda* at Rānakpur has Shikhara like Nalinigulma-vimāna.

## Śravanbelagolā:

The Ancient town of Śravanbelagolā is considered as a world's beritage because of beautiful shrines, Brahma-stambhas and inscriptions on two rocky hills of **Chandragiri** and **Vindhyagiri**. The hill Chandragiri attracts Rsis from centuries for Samadhi after the great king Chandragupta and Bhadrabāhu performed Samlekhana there. Magasthenese had recorded Chandragupta's monkhood in Jainism. Here out of 19 shrines one is dedicated to Āchārya Bhadrabāhusvāmi where he attained nirvāna. It is a small curvaceous single celled natural cave where his Pādukā is established. Another significant shrine is Chandragupta Basadi. This Basadi has Pradaksinā-Mārga. It is comprised of three square cells in a row, having thick perforated walled divider. The wall is carved with excellent miniature friezes. Here the story of Bhadrabāhusvāmi and Chandragupta's journey to south is depicted in detail. The three cells have images of deity Padmavati, Parsvanatha and Kusumandi (Ambika) respectively.

At **Vindhyagiri** hill, the Ganga King Rajmala's chief minister Vir Mārtanda Chāmundarāya established the world's unique image of Bahubaliji in 10th century. It is 56 ft. and 3 inch high. The wife of Kadamba king Kirtideva built a Jaina temple '*Brahma Jinālaya*' here in 1077. Later at Karkal, another Bahubaliji image was established in 1432 A.D. which is 41 ft. 6 inch. At Venur, the third Bahubaliji was established in 1604 A.D.

#### Mudabidri:

Out of 18 shrines at Mudabadri, 'Tribhuvan Tilaka Chudāmani' (1430 A.D.) has a typical roof of pyramidal shape with three Mandapas and many pillars. The Bhandāra of the city has very ancient Manuscripts of ṣaṭakhandāgama, Mahabandha and Kashāyapāhuda.

### Jaina Paintings:

Jaina paintings wall paintings, miniature paintings, mural paintings, etc. are available on the doors, walls and ceiling of the caves and shrines, while miniature painting is preserved in Bhandāras in the form of Manuscripts (MSS.) The traces of Jaina paintings are obtainable in the caves at Khandagiri 1st century B.C. They slowly developed in deatures at Sitanavatsal and Ellora. The shrin in the city at Śravanbelgola has mural paintings.

The rulers of Rashtrakuta embellished the Indrasabhā cave no. 32 at Ellora with mural paintings. Here Bahubali is shown in deep meditation, with a couple of *Vidyādhara* flanking him. The cave at Sitanavatsal has a beautiful painting of a dancing lady created in 7th century A.D. She is shown performing attractive postures with her eyes and *Hasta-mudrā* like *Bharat Nātyam*. Here a portait of a king and a queen conversing with a Jaina monk is noteworthy because of its perfection in art. The wall paintings further developed into mainiature paintings.

## Miniature Paintings:

Before the advent of paper in India, Palm-leaf and Bhurja-patra were extensively used as a writing material. The richness in Calligraphy was created by artists using gold and ultramarine ink, it was prepared using traditional norms with natural colour. The palm-leaf was in use up to 1450 A.D. then it was replaced by the paper. During Mogul period this art received great encouragement.

In medieval period Jaina *śresthis* copied their valuable literature and encouraged artists and calligraphers to produce beautiful artistic handmade pages known as *Hastaprata* or Manuscript, decorated with wooden covers. The subjects of *Manuscripts* are *Rāgamālā* paintings (paintings of music i.e. *Rāga-Rāgini*), drama, dance, stories of heroes like Kālakāchārya, king Yaśsodhara's early lives and also of Jinas, etc. Both traditions - Svetāmbara and Digambara have large collection of MSS. The colorful copies of them are available in most of the Indian languages. These are the treasures of Jainism safely preserved in Bhandāras, monasteries, museums in India and abroad.

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I, Satya Ranjan Banerjee, hereby declare that the particulars given above are true to the best of my knowledge and belief.

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Date - 15 July 2015

#### JAIN BHAWAN: ITS AIMS AND OBJECTS

Since the establishment of the Jain Bhawan in 1945 in the Burra Bazar area of Calcutta by eminent members of Jain Community, the Jain Bhawan has kept the stream of Jain philosophy and religion flowing steadily in eastern India for the last over fiftyeight years. The objectives of this institution are the following:

- To establish the greatness of Jainism in the world rationally and to spread its glory in the light of new knowledge.
- 2. To develop intellectual, moral and literary pursuits in the society.
- 3. To impart lessons on Jainism among the people of the country.
- 4. To encourage research on Jain Religion and Philosophy.

To achieve these goals, the Jain Bhawan runs the following programmes in various fields.

#### 1. School:

To spread the light of education the Bhawan runs a school, the Jain Shikshalaya, which imparts education to students in accordance with the syllabi prescribed by the West Bengal Board. Moral education forms a necessary part of the curricula followed by the school. It has on its roll about 550 students and 25 teachers.

#### 2. Vocational and Physical Classes:

Accepting the demands of the modern times and the need to equip the students to face the world suitably, it conducts vocational and physical activity classes. Classes on traditional crafts like tailoring, stitching and embroidery and other fine arts along with Judo, Karate and Yoga are run throughout the year, not just for its own students, but for outsiders as well. They are very popular amongst the ladies of Burra Bazar of Calcutta.

#### 3. Library:

"Education and knowledge are at the core of all round the development of an individual. Hence the pursuit of these should be the sole aim of life". Keeping this philosophy in mind a library was established on the premises of the Bhawan, with more than 10,000 books on Jainism, its literature and philosophy and about 3,000 rare manuscripts, the library is truly a treasure trove. A list of such books and manuscripts can be obtatined from the library.

#### 4. Periodicals and Journals:

To keep the members abreast of contemporary thinking in the field of religion the library subscribes to about 100 (one hundred) quarterly, monthly and weekly periodicals from different parts of the world. These can be issued to members interested in the study of Jainism.

#### 5. Journals:

Realising that there is a need for reasearch on Jainism and that scholarly knowledge needs to be made public, the Bhawan in its role as a research institution brings out theree periodicals: Jain Journal in English, Titthayara in Hindi and Śramaṇa in Bengali. In 37 years of its publication, the Jain Journal has carved out a niche for itself in the field and has received universal acclaim. The Bengali journal Śramaṇa, which is being published for thirty year, has become a prominent channel for the sbvgftr54pread of Jain philosophy in West Bengal. This is the only Journal in Bengali which deals exclusively with matters concerning any aspects of Jainism. Both the Journals are edited by a

renowned scholar Professor Dr Satya Ranjan Banerjee of Calcutta University. The Jain Journal and Śramana for over thirty seven and thirty years respectively have proved by ond doubt that these Journals are in great demand for its quality and contents. The Jain Journal is highly acclaimed by foreign scholars. The same can be said about the Hindi journal Titthayara which is edited by Mrs Lata Bothra. In April this year it entered its 25th year of publication. Needless to say that these journals have played a key-role in propagating Jain literature and philosophy. Progressive in nature, these have crossed many milestones and are poised to cross many more.

#### 6. Seminars and Symposia:

The Bhawan organises seminars and symposia on Jain philosophy, literature and the Jain way of life, from time to time. Eminent scholars, laureates, professors etc. are invited to enlighten the audience with their discourse. Exchange of ideas, news and views are the integral parts of such programmes.

#### 7. Scholarships to researchers:

The Bhawan also grants scholarships to the researchers of Jain philosophy apart from the above mentioned academic and scholastic activities.

#### 8. Publications:

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To achieve a self-reliance in the field of education, a Computer training centre was opened at the Jain Bhawan in Fabruary 1998. This important and welcome step will enable us to establish links with the best educational and cultural organisations of the world. With the help of e-mail, internet and website, we can help propagate Jainism throughout the world. Communications with other similar organisations will enrich our own knowledge. Besides the knowledge of programming and graphics, this computer training will equip our students to shape their tomorrows.

#### 10. Research:

It is, in fact, a premiere institution for research in Prakrit and Jainism, and it satisfies the thirst of many researchers. To promote the study of Jainism in this country, the Jain Bhawan runs a research centre in the name of Jainology and Prakrit Research Institute and encourages students to do research on any aspects of Jainism.

In a society infested with contradictions and violence, the Jain Bhawan acts as a philosopher and guide and shows the right path.

Friends, you are now aware of the functions of this prestigious institution and its noble intentions. We, therefore, request you to encourage us heartily in our creative and scholastic endeavours. We do hope that you will continue to lend us your generous support as you have been doing for a long time.

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