

The Enduring Significance of Jaina Cosmography

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Introduction

During Cāturmās in 1965 in Shravana Belgola, the well-known Digambara nun Jnanamati Mataji had a vision in which she saw the entire structure of the universe, including the various islands, continents, and oceans that make up the middle part of the universe (*madhyaloka*). She later discovered that what she had seen was a perfect match to the cosmographical details laid out in Jaina scriptures (Chandanamati 2010: 6). In 1972 she helped establish the Digambara Jaina Institute of Cosmographic Research (Digambara Triloka Śodha Sansthāna) in Hastinapur which would spend much effort and energy in the field of Jaina cosmography, exploring texts as well as physically manifesting Jaina cosmography in various building projects. The opening question that led me to this particular topic was simply "why?" Why this focus on cosmography? And further, how does it relate to religious practice? If Jainism is a religion that revolves around soteriology, a technique of salvation that puts focus on the individual's actions and soul, why should one spend time on painstakingly detailed descriptions of the geography of the outer physical world?

I suggest that cosmography is an overlooked area in the study of Jainism. Though typically treated as background material for understanding Jaina ontology and soteriology or simply as eccentric historical remains from pre-modern times, Jaina cosmography has had an enduring significance for the Jaina community that continues up until this very date (Dundas 2002: 92). It has implications for religious life in general and for a set of Digambara rituals that are conducted three times yearly in particular. Its relevance covers soteriology, ritual life, and establishment of religious authority. I

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will further argue that cosmography is a contested area in contemporary Jainism related to the ever-demanding presence of modern science.

In tune with my interest in Jainism as a lived tradition my presentation of Jaina cosmography will be based on works of the Digambara Jaina Institute of Cosmographic Research.¹ The short presentation of the middle world that I provide here will not do justice to the near endless details found in Jaina scriptures on cosmography. Jaina cosmography is distinguished by a meticulous systematic and mathematical approach (Bossche 2000: 1); my presentation will not reflect this flavor. I have deliberately left out all details of size and length which takes up significant portions in original Jaina cosmographic material, and so also of all the names of various areas, rivers, mountains, oceans, and islands in the various oceans, gods and buildings on the islands in these oceans, etc. Instead I have tried to highlight those details that are important in shaping Jaina religious life and understanding.

Jaina Cosmography: A map of Islands, Times and Ritual Activity

Jains have showed a remarkable interest in cosmography compared to their Buddhist and Brahmanic counterparts (Bossche 2007: xi). One happy outcome of this interest has been the many Jaina versions of the board game that was later to be known as Snakes and Ladders in the west, an often forgotten Jaina contribution to the world. In terms of sources, basic Jaina cosmography is laid out already in Āgamic literature, but the majority of cosmographical works and detailed expansions on the topic are post-canonical (*ibid*: xi-xii)². The Digambaras have divided their canon into four main parts known as "expositions" (*anuyogas*) that are supposed to cover the entire Jaina doctrine. It is notable that the 2nd exposition, *Karana* ("calculation"³), is in large parts devoted to cosmography. The Jaina doctrine and religion therefore, cannot be understood properly without studying Jaina cosmography. In the words of Bossche, "Jaina cosmography and geography form an essential part of Jainism as a religion" (*ibid*: 1).

In secondary books on Jainism the descriptions of Jaina cosmography are typically focused on various versions of the cosmic man, the keyhole shaped model of the three layers (hellish, human, celestial) with the abode of the liberated souls on its very top. The stylized version of this shape, with a *svastika* and a hand, has become a standard symbol for the Jaina community in the last thirty-five years (Dundas 2002: 92). The cosmographical details of the middle part of this model (*madhyaloka*), in which human beings are found, are typically skipped or only briefly mentioned. Jaini's classic work on Jainism, *The Jaina Path of Purification*, does mention the first two-and-a-half islands (*aḍhāidvīpa*) in this middle world, but does not go beyond this (1998: 29-32). The same is true of Cort's *Jains in the World* (2001: 20-1) and Dundas' *The Jains* (2002: 90-1). One reason for this is simply that human beings cannot live outside these two-and-a-half islands. But to conclude that the remaining parts outside the two-and-a-half islands are unimportant because humans cannot go there or because salvation is not possible there is erroneous and we will soon see why. Further, the soteriological implications of how these two-and-a-half islands are understood should interest us, for although the twenty-four Jinas of our age and place have passed, there are still areas in which living Jinas are operating in this very moment: The Jinas are alive!

The middle world in which we live is believed to consist of innumerable islands which lie in concentric circles around the central island Jambūdvīpa. Jains distinguish between innumerable and infinite. These islands are not infinite in number, and Jaina texts give the name of the first thirteen or more islands and the last sixteen, between which there are innumerable other islands. Between each island there is an ocean, and the last island is encircled by the ocean Svayambhūramaṇa. Our world as we know it (i.e. the countries found on planet Earth) is found in the south of the innermost and central island Jambūdvīpa. Its size is only a 190th part of the entire island. Human beings are not only found here, but also in other areas of Jambūdvīpa. Jambūdvīpa is divided into seven Major Areas (*kṣetra*), which again are divided into various Minor

Areas (*khaṇḍa, bhūmi*).

In the south of Jambūdvīpa we find the Major Area Bharata which is again divided into six Minor Areas, the south most being Āryakhaṇḍa in which India and the city Ayodhya is found. Bharata is but one of the seven Major Areas of the whole of Jambūdvīpa, but it is special because it undergoes certain changes over time that follow a specific pattern. This pattern consists of six periods or "spokes," and their names reflect the general state that prevails during each spoke. This cyclic pattern has always existed, and will continue to do so forever. The first spoke of a declining series of these six spokes (*avasarpinī*) is known as happy-happy. In this time period people experience continues pleasures, do not need to work for a living, live for very long and have no worries. After happy-happy the following five spokes are happy (second), happy-unhappy (third), unhappy-happy (fourth), unhappy (fifth) and finally unhappy-unhappy (sixth)⁴. In this last period humans experience pain and chaos and live for short time periods. It is only when we are in the third and fourth spokes that we can attain salvation and it is during this time that we will have the twenty-four Jinas. These are periods in which true religious actions are possible because they have a suitable mix of pleasures and pains. In all other periods the experience of pain or pleasure is too strong, as is the case in the various heavens and hells where the hellish and celestial beings dwell. Hence, it is not only that humans are the only beings that can reach salvation; they also need to live in the right time to be able to achieve it.

If we divide Jambūdvīpa horizontally in half into a southern and northern part, we will find that it is symmetrical in its two parts. Hence the southern and northern Major Areas, Bharata and Airāvata, look alike and they are the only two Major Areas on Jambūdvīpa that undergo the changes of the six spokes. Hence Airāvata will have its own respective twenty-four Jinas during the passing of the third and the fourth spoke.

According to Jaina cosmography a cycle of six degenerating spokes (*avasarpinī*) will be followed by six new spokes in which the

conditions will gradually increase in quality and go through the six spokes in the reversed order (*utsarpiṇī*): from unhappy-unhappy and all the way up to happy-happy. Shortly after the last Jina of Bharata, Mahāvīra, reached *mokṣa*, that is final liberation at the time his physical body expired, we entered the fifth spoke and hence the last to reach liberation in our series of six spokes (*avasarpiṇī*) was a disciple of Mahāvīra named Jambū. This means that liberation is in fact impossible at this moment of time in our world. The fifth and sixth spokes each last 21,000 years. After these 42,000 years have passed we will start on the first spoke of the upward moving series of spokes (*utsarpiṇī*) starting again with unhappy-unhappy, followed by unhappy. This means 42,000 new years until we finally reach a time period in which the conditions are sufficiently balanced between pleasant and unpleasant so that salvation is attainable. Since this is not just a matter of eccentric details known only by a few mendicants and scholars, but actually widely believed and known in the Jaina community, we can conclude with the rather remarkable fact that although Jainism started out as a soteriology, at present it is a religion that actually does not offer any salvation to the individual person in this world, or at best puts it on a 81.500 yearlong hold.

If one wishes to attain the Jaina salvation in India, one must wait 81,500 years, but India is but a small part of the Major Area Bharata which again is but one of seven Major Areas in the first island of the two-and-a-half islands on which, humans can be born. These two-and-a-half islands are known as the abode of man (*manuṣyaloka*). As mentioned, the first island is Jambūdvīpa. The next one-and-a-half islands are each twice the size of Jambūdvīpa. So far we have learned of Bharata and Airāvata, the two Major Areas, which go through the six spokes, but what of the five other Major Areas? There is an enormous strip covering the central area of Jambūdvīpa in the middle of which we have Mt. Meru. This strip is the Major Area known as Videha and Mt. Meru is the mountain to which the gods bring every new born Jina to bathe and celebrate him.

The Major Area Videha does not go through the six spokes as in Bharata and Airāvata. In fact time stands still, qualitatively

speaking, in the sense that it remains in the unhappy-happy spoke always. Time still exists, people are born and die, but the quality of life remains in a stable mix of happiness and unhappiness. All the remaining Major Areas remain in spokes of pleasures and are therefore known as enjoyment lands (*bhoga-bhūmis*). This is also the case in the central part of Videha, but the rest of Videha remains in the fourth spoke in a declining series (*avasarpinī*). Since it always remains in the fourth spoke it is a land where moral choices or "actions" are possible (*karma-bhūmi*). This is also true for Bharata and Airāvata when they are in the third and fourth spoke as well.

This means that although salvation in Bharata is put on an 81,500 year long hold, salvation is always possible in Videha and there are always living Jinas there who preach the true doctrine of Jainism. So far we have only discussed the first island Jambūdvīpa, but there are still one-and-a-half islands on which humans are born. Each of them also has Bharata, Airāvata and Videha areas, but unlike Jambūdvīpa which only has one each of these Major Areas, these two next islands have two of each. Hence there are in total five Bharatas, five Airāvatas and five Videhas in which humans live. While the Videhas always have living Jinas on them, the Bharatas and Airāvatas will each have twenty-four Jinas during one series of six spokes. At a Jaina Digambara pilgrimage site close to Moradabad known as Ahikṣetra-the place where Pārśvanātha is said to have had his epic encounter with Kamaṭha-the five Bharatas and Airāvatas are in fact displayed in the form of five huge lotus-shaped sculptures showing the twenty-four Jinas of the past, present and future series of the six spokes in all ten areas.

Although humans can only inhabit the first two-and-a-half islands, Jaina texts mention the first thirteen islands. The reason why these thirteen are mentioned is that this is where we find the 458 Natural Jina Temples (*akṛtrima jinaśālaya*). These are temples that have always existed, and that always will exist. They are true testaments to the fact that in the Jaina perspective, Jainism did not start with Mahāvīra, or even the "first" Jina Ṛṣabha. Jainism is eternal. Hence, when the Digambara nun Mataji discovered that the school books in

India presented Mahāvīra as the founder of Jainism she was "deeply hurt" (Mataji 2007: xxxviii). The National Council of Educational Research and Training (NCERT) and even the Prime Minister were contacted by her in order to correct this misconception (*ibid*: xxxix). The exact whereabouts of the 458 Natural Jina Temples are given and each one of them has 108 Jina figures. Most of them, 398 to be exact, are found within the two-and-a-half islands. As many as fifty-two are found on the eighth island Nandīśvara, and the remaining on the eleventh and thirteenth islands. The eighth island, Nandīśvara, is of major importance to the ritual life of Digambara Jains.

Babb has rightly argued that to conclude that gods (in the sense of heavenly beings that live in the upper part of the universe) are unimportant in Jainism simply because they are not liberated and because they have not created the world is a mistake (1996: 76ff.). In Jainism they function as ritual role models for lay devotees. When Jains perform bathing and other rituals on Jina idols they dress up as the gods and re-enact Indra's bathing of the new-born Jina (*ibid*: 79). In the cases Babb explores, Jaina devotees were re-enacting deeds that were done or will be done to Jinās, but on the eighth island Nandīśvara, such rituals are performed by the gods every year.

Thrice a year various Indras and gods gather to worship the Jinās in the Natural Jina Temples on Nandīśvara. They continue this worship for eight days and hence this period is known as the Eight Day Festival (*aṣṭāhnikā*). The Eight Day Festival is also celebrated by Digambara Jains, for they have developed the habit of worshiping the Jinās simultaneously with the gods on Nandīśvara. The actual execution of these three festivals has not yet been studied, but from what I have been told it is similar to other annual Jaina rituals in that the different parts of the ritual are auctioned off to the laity. Hence a layman can bid to perform a specific ritual to a specific set of Natural Jina Temples during this time, and if he wins he will dress up as one of the Indras, while his wife dress as Indra's wife. Specific ritual manuals, such as the *Nandīśvara-dvīpa-pūjā*,⁵ are used in the execution of the rituals. While religious rituals often work as re-enactments of ancient deeds and actions (Eliade 1959: 50ff.), the

Eight Day Festival is a synchronized ritual in the sense that humans worship Jinas simultaneously with the gods. These rituals are performed by both humans and gods in honor of beings that are considered to be completely beyond this world and any possible appreciation of these actions.

Viharamāna Tirthaṅkaras, Religious Authority and Soteriological implications

It is widely believed by Buddhists in Theravādin countries that final liberation is virtually impossible to reach in this age and time, but the authorized closing of the soteriological door, as found in Jaina scriptural teachings, is not found in the Theravāda canon. What could have been the consequences of the doctrine of the six spokes and the establishing of our times as belonging to the fifth spoke? One could speculate that entering the fifth spoke makes our time and place in the universe less important, soteriologically speaking. While the Theravada canon also mentions that there were Buddhas before Siddhārtha Gautama, the Jains were the only of the two to really explore this theological opportunity. The enduring significance of cosmography and the consistent geographical understanding of it as an actual map of the universe, and not as a symbolic representation-as found for instance in Tibetan Buddhism-is perhaps also related to the doctrinal restriction of our world and the importance of time in terms of soteriology. If the Major Area Bharata is in the fifth spoke, it "makes sense" to focus on other areas in time and space where salvation is possible.

The doctrine that no salvation is possible at the present time could perhaps be linked to Max Weber's idea of routinization (1978: 246ff.). If it is established that no new man can be enlightened, religious authority in terms of doctrine will be fixed in the scriptures and new doctrinal inventions are hampered. Authority and legitimacy can more easily be fixed. However, the concept of our times as belonging to a stage of spiritual and societal degeneration is widespread in South Asia and not specific to the Jains.

The doctrine of the six spokes and how they relate to different parts of the two-and-a-half islands closes certain possibilities while

opening others. Since it is established that we entered the fifth spoke at the time of Mahāvīra's death, salvation is not possible in this world. In the region of Videha however, time is qualitatively stable, remaining in the fourth spoke forever. This is where we can find the so-called Viharamāna Tīrthaṅkaras, Jinas that are living at the present moment. Viharamāna refers to the fact that they are "wandering". The idea of Viharamāna Tīrthaṅkaras is an exciting thought, and considering that there are five Videhas, there can potentially be many living Jinas at this very moment. The question is whether or not this has any significant place in the religious imagination of Jains, and to what extent Jains have explored these soteriological possibilities in actual religious life.

It is now believed that the Major Area Videha in Jambūdvīpa has four Viharamāna Tīrthaṅkaras and their names are Sīmaṅdhara, Yugamaṅdhara, Bāhu and Subāhu. It seems that the first of these four, Sīmaṅdhara, is the only one to have developed a proper cult. In terms of textual materials his name appears in both Śvetāmbara and Digambara works as early as the sixth century AD and one such text describes the possibility of visiting him in Videha in order to seek advice on doctrinal matters (Dundas 2002: 305 n.75). This became a possibility that both Śvetāmbaras and Digambaras would explore. In later material Sīmaṅdhara is claimed to have helped various authors with their compositions and portions of the *Ācārāṅga Sūtra* are also said to have been retrieved from him (*ibid*). Even complete texts were attributed to him (*ibid*). Sectarian inventions could also claim authority through him.

The existence of Sīmaṅdhara could effectively be used to establish the religious authority of a given author or text. Ultimately, authority in doctrinal matters is anchored in the omniscience of a Jina. At the present time and place the last Jina was Mahāvīra and his teaching was recorded by fourteen disciples known as the *gaṇadhara*s. Both Śvetāmbaras and Digambaras agree that certain parts of these original works were lost. The Digambara sources even go as far as claiming that almost all the original material from Mahāvīra, that is the fourteen ancient *Pūrvas*, completely

disappeared (*ibid* : 79), and hence authority in doctrinal matters becomes somewhat uncertain. Since all the great Jaina philosophers such as Hemacandra and Kundakunda composed their works long after the time of Mahāvīra and the possibility of gaining omniscience had passed, one could always question their authority. In the case of Kundakunda, a solution to this was to claim that he had visited Sīmaṇdhara in person and heard his sermon in Videha (*ibid* : 269). A similar strategy was used by the important 20th century Jaina reformer Kanji Svami who proclaimed that he had been present in Videha when Kundakunda had come to hear Sīmaṇdhara in his previous life (*ibid* : 268). His female spiritual heir would also proclaim her presence at this meeting in her former life, and a model of the magical meeting place where Sīmaṇdhara held his sermon (*samavasaraṇa*) was built in Songadh under her guidance, not unlike the constructions in Hastinapur led by Mataji (*ibid* : 270).

Besides being a potential source of establishment of religious authority, Sīmaṇdhara, or more precisely Videha, the Major Area in which he lives, is a place where liberation can be achieved. Human beings can be born within the two-and-a-half islands, and the soteriological journey can always be finalized in the Videha areas. One need not wait 81,500 years, instead one can simply be reborn in one of these areas. As far as I know Jains have not developed a specific technique to achieve this goal. Mahāyāna Buddhism saw the development of so-called Pure Lands. Similar to the Jaina view, the general idea that nurtured these developments in Buddhism, was that reaching liberation was becoming increasingly difficult as a result of general degeneration. Instead of striving for salvation in this world, therefore, one could rather be reborn in the Pure Land of a Buddha where salvation would be guaranteed. There are indications of this theological possibility having been developed already in the second century AD in India⁶, and it was later developed in various branches of Mahāyāna Buddhism. In this way several cults around a specific Buddha and his Pure Land evolved, and the method of reaching his land was typically through devotional practices.

Considering the development of the Videhas and the Viharamāna

Tīrthaṅkaras, one is led to wonder if Jainism also developed cults similar to the Pure Land Buddhisms. To my knowledge this has not been the case and there could be several reasons as to why. First of all, Jaina Tīrthaṅkaras were never given the same agency as Mahāyāna Buddhas. Sīmaṅdhara may be a living Jina preaching at this moment, but Jaina theology would not allow him to respond to devotional practices, for if he did, it would imply that he wants to help us and hence he would not be free from passions (*vītarāga*) which, after all, is a defining characteristic of someone who has reached omniscience. Further, to be reborn in Videha does not mean that one automatically will achieve salvation or bump into a Viharamāna Tīrthaṅkara as in the Pure Lands of Mahāyāna Buddhism. The Videhas are areas that remain in a state that makes salvation possible. Our world was also in this state a few thousand years ago, but that did not mean that all who were born in that period reached salvation. Far from it, only a few will be able to achieve that final state of omniscience.

This does not mean, however, that Sīmaṅdhara did not evolve a cult of his own. In fact, one of the biggest temples build in Gujarat in recent times is dedicated to him (Dundas 2002: 269). Dundas also recorded a curious anecdote related to a famous Terāpanthī monk in which a layman committed suicide in order to be reborn in the presence of Sīmaṅdhara (*ibid*: 306 n75). Still, the Videhas have not and cannot evolve into Jaina Pure Lands unless significant doctrinal alterations are made.

The question of how one can reach the Videhas and their Viharamāna Tīrthaṅkara remains open. Rebirth is one possibility. Jains have both claimed to have been in the presence of Sīmaṅdhara in a past life, and also that one can be reborn there. In the case of Kundakunda, it is said that he "visited" Videha and came back within one life. How can this be possible? One answer can be found in the doctrine of the five bodies. They include from the crude, physical body (*audārika-śarīra*) that we perceive in everyday life to the more fine and subtle ones that not everyone necessarily has. The third body, for instance, is known as the "projectile body" (*āhāraka-*

śarīra) and it can only be created by certain ascetics through their practice, and this body can be used to travel long distances while the physical body remains still until one returns (Glasenapp 1999:195). There is also the concept of the *vaikriya-samudghāta*, which refers to a method of achieving the same type of body that heavenly beings have. The Āgama *Bhagavatī Sūtra*⁷ describes how the trained mendicant can travel long distances in such a body (Sikdar 1964: 459). Contemporary Jains have tried to harmonize such ideas with modern space travel, arguing that trained individuals can acquire a spiritual shield of sorts - not unlike "the shield" of a space shuttle - enabling them to travel into space (Mahaveer 2007: 122-6). This interaction between Jaina doctrine as found in scriptures and modern science is the next topic to be discussed.

Jaina Cosmography as a Contested Area

In the following I will suggest that cosmography is a contested area in contemporary Jainism. Modern Jains are generally highly educated, and hence very exposed to modern science and its claims to legitimacy. As a consequence Jains have become very eager to show how their religion and science complement each other. In fact, much of Jaina intellectual energy of today is invested in conjoining discoveries of modern science with certain ideas found in Jaina scriptures (Laidlaw 1995: 72). Both publications and conferences are initiated to this end and the idea of Jainism as being scientific is widespread in the community. Certain ideas in Jaina scriptures are easier to combine with science than others; cosmography is not one of them. The reason for this is that Jaina cosmography deals with the outer physical world, the geography of the universe, an area in which modern science has a lot to say for itself. To take one example, Jaina cosmography holds that the earth is flat. Mataji suggests that the earth might have evolved a bulging shape, and that this could help explain why there is difference in length in night and day in India and America (2010b: 46). The problem of reconciling Jaina cosmography with modern science, I argue, can be understood through a model were a scriptural⁸ Jainism is analytically separated from what I will call modernized Jainism.

When sketching up these two categories we should remember that they are etic as opposed to emic in nature. Most Jains experience them as harmonious and two sides of the same coin most of the time, yet when it comes to cosmography the experience can be very problematic, leading to disbelief and even "disrobing". The purpose of separating them is analytical and can help us see why Jaina cosmography might be a contested area among Jains today. There is a great deal of overlap between the two and the separation between them must be recognized as one that is idealized, simplified and somewhat caricatured. I suggest that they are two important streams in contemporary Jainism that meet at many points, but diverge at others. One is ancient, the other modern. The difference between them can be seen in various areas, but here it will suffice to look at some few aspects, namely orientation, interpretation of *anekāntavāda* and *ahimsā*, and finally the use of scriptures in relation to modern science.

Scriptural Jainism is undoubtedly the older of the two streams. Its main aim is soteriological and its orientation is other-worldly (*lokottara*). Its main bearers and propagators are the mendicants. This is the *mokṣa-mārga*. It views Jainism as the true religion because it follows *anekāntavāda* (the doctrine of manifold aspects). This concept is crucial in epistemology and ontology and is a part of a method that proves the validity of Jaina doctrine above other non-Jaina religious and philosophical doctrines. *Ahimsā* (non-violence) is first and foremost related to soteriology and the karmic influx onto the individual's soul, hence it is typically formulated in the negative. Many scriptures, canonical and post-canonical, are viewed as containing the absolute truth and they are not to be doubted. Such doubt would violate the proscribed right faith (*samyak-darśana*) that one should seek in one's practice. These scriptures are to be taken literally. Statements in these scriptures are to be discovered or verified by science, not the other way around.

Modernized Jainism is more this-worldly (*laukika*) in its focus. It seeks to formulate ethics for the everyday life of lay Jains and typically manifests itself in, for example, seminars on business

ethics. Its propagators are often well educated within secular institutions. *Anekāntavāda* is understood to be a way of appreciating the opinions of others and general diversity. It is the opposite of being dogmatic and can even be used to relativize the Jaina doctrine in relation to other doctrines. *Ahiṃsā* is presented as a rational ethics related to economy, ecology, health and general politics. Here *ahiṃsā* is more about helping others, hence it is formulated positively. Modernized Jainism⁹ is inclined to extract certain parts of the scriptures while ignoring other. Such parts are found to be in harmony with modern science; those that fly in the face of it can be overlooked, understood symbolically or seen in their historical contexts, the latter typically involving arguments about Hindu-influence or general degeneration due to the spokes of time. In Modernized Jainism, scriptural statements are not all true by necessity and some of them can be discarded.

I believe the combination of these two streams of Jainism to be felt as unproblematic and mutually fulfilling in the Jaina community. When we turn to cosmography however, the two can hardly be united at all. The Jaina cosmography, as described in Jaina scriptures, cannot be combined with the Copernican model of the universe. Not unlike how the Catholic Church would not accept that the earth was round, there are still Jains that staunchly defend their view of the universe and titles such as *Is the Earth Round?*, *Did Apollo Go to the Moon?* have been published by the community (Cort 2001: 213 n.12). Religious and secular education presents Jains with two very different models of our cosmos and their reconciliation is sometimes problematic enough to cause individuals to quit their ascetic careers (Dundas 2002: 93). In the case of cosmography, scriptural and modernized Jainism clashes.

In one of the forewords to *Jaina Bharati*, written by a young female ascetic who before joining the Jaina community of ascetics completed a degree in biosciences from a secular university, we see how scriptural and modernized Jainism meet:

Whatever has been said by the Lord Jinendra Deva is the ultimate truth. If we see the other side, the

development by the modern science & technology is also introducing itself to the whole world most remarkably. Then, what to do? If we should accept the principles stated by the Lord even when we cannot testify them or we should fully tune ourselves on the line of modern science, which is present before us with full proofs. Although the latter option is the most approachable for all of us, yet we should accept that modern science is not complete in itself. Completeness lies with the soul who has attained Omniscience. Thus, we have to be guided by the norms stated Jinendra Deva and should be fully convinced about what he has said. We have not to question whether Sumeru mountain, heavens or hells are there or not, yes! They are there because the Omniscient Lord has seen them (2007: xxxvii-viii).

The statement is interesting since it comes from an individual who stands between the two orientations, knowing both modern science and Jaina scriptures. Undoubtedly she is familiar with modern geography of the world and the Copernican model of the universe, but having become a Jaina ascetic, scriptural Jainism is given precedence. In the end, modern science can never beat the omniscience of a Jina.

References:

1. This material includes *Jaina Bharati* and *Jaina Geography* by Jnanmati Mataji and papers presented by the Digambara Jaina Institute of Cosmographic Research in June 2010 (see Bibliography).¹ See- Preface and Bibliography in Bossche 2007.
2. This name reflects the fact that the lengths and sizes of various parts of the world are given thorough mathematical treatment (See e.g. Bossche 2007:68-73).
3. The translation of *kṣetra* into 'Major Area' and *khaṇḍa* and *bhūmi* into 'Minor Area' is not philologically correct, but I have chosen them in order to make the matter as simple and understandable as possible.
4. The terms for *happy* and *unhappy* are *suṣamā* and *duṣamā*.
5. By Mahopadhyay Vinya Sagar (nd), Prakrit Bharati Academy,

Jaipur.

6. See depiction of *Sukhavati* in JAS (Calcutta), vol. 43, no. 4 (2001), p. 26.
7. Also known as the *Vyākhyāprajñapti*, the fifth limb of the Śvetāmbara canon.
8. The use of the term “scriptures” can be misleading in the Jain context (See Dundas 2002:60-3).
9. For some examples of *Modernized Jainism* see articles from the New York based *Jain Study Circle* web page (<http://www.jainstudy.org/>, accessed 08.02.2011), e.g. Jain 2007 and Machwe 2008.

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