



Chapter 3

Bhū-gola Varṇanam

By Śrī Vādirāja Tīrtha

INVOCATION

(Verses 1-8)

I bow down to the feet of Lord Narayana who appears with His Horse-headed form (Hayagriva), who is both far and near and is dear to those who always remember Him. He is not fully comprehended even by the Upanisads. He has afforded lodging in His heart to Kamaladevi (Sri Maha Laksmi) who knows Him and yet knows Him not. He is verily the lake wherein the fish-like eyes of adoring devotees move about sportively. He is indeed Lord Hayagriva. I bow down to Sri Vyasamaharsi, who is the sun that dispels the darkness of our hearts. He is the originator of all the sacred sciences. He is none other than Lord Sri Narayana, the Creator of all. Lord Vedavyasa is like the thunderbolt that strikes at those who choose the wrong path and mislead others.

My salutations to Sridevi, the highest in intellect and the model of modesty, but fearless at heart. Her looks are tenderly kind in bestowing wealth; and at the same time they make our hearts free from all sorts of afflictions. My salutations to Bhudevi, sister-like to Sridevi. She blesses us with wisdom. She was graciously lifted up by the tusk of Lord Varaha (God who appeared in Boar form). She is the abode for saints who find joy in the scriptures. She makes the god-minded souls happy. I bow down again and again to Acarya Sri Madhva whose glory finds praise in the beginningless Vedas, who is without any flaw and is quite pure, whose intellect is the highest, always engaged with the memory of the Almighty Lord, whose glory is the subject matter of the Vedas. His form is quite enchanting





and if fills one's heart with the milk of kindness. Similarly, I offer my salutations to Bharati devi, fully endowed with female virtues, custodian of the principle of intellect, a bee of devotedness at the lotus feet of Sri Hari, the foremost among the souls of her kind and the bestower of opulence to the devotees of God.

My salutations to all spiritual masters who discard the evil-minded ones as enemies and help the good souls to sail across the ocean of life; and who bestow boons like the wish-fulfilling tree to those who serve them faithfully.

THE BRAHMANDA

(14–17)

The Brahmanda or the hollow golden shell containing the universe is fully round in every direction, east to west or north to south. In it, twice its inner complement is Ghanodaka (solidified water) and the region of darkness is circular in shape, lying as it does within the Ghanodaka stretch. It is twice as wide as the circular earth which occupies the middle part. Upanisads describe the earth as 'Prithvi' - that which is spacious with abundance of wealth for living beings. The earth is said to stretch from sea to sea as the brahmin seers conceive it. It has the Meru mountain at its very centre and it contains seven islands and seven oceans stretching around the Meru centre. They are circular in form. The three together - earth, dark region and Ghanodaka - measure fifty crore yojanas from end to end. This is factual and not fictitious.

DISTRIBUTION OF THE REMAINING ONE CRORE YOJANA

(18–54)

As detailed heretofore, 49 crore yojanas are distributed among the three regions, (7+14+28 = 49). The remaining one crore yojana should be converted into lakhs. Of the 100 lakh yojanas, 14 go to earth, 28 to the dark region and 56 to Ghanodaka. Thus, 98 lakh yojanas are distributed leaving a balance of 2 lakh yojanas. This should be converted into Thousands (two hundred thousand). Of these, 28 thousand for earth, 56 thousand for dark region and 112 thousand for Ghanodaka are distributed. 196 thousand being





thus distributed, the remaining 4 thousand should be converted into hundreds (40 hundreds). The earth takes 5 hundred, the dark region 10, and Ghanodaka 20. Now the total is 35, leaving a balance of 5 hundred yojanas (500). This is distributed in the ratio of 70:140:280, making total of 490, with a balance of 10 yojanas. This 10 is distributed as 1:2:4; only yojanas now remain.

An intelligent person converts the yojanas into 12 krosas (1 yojana = 4 krosas) Now, the distribution is as follows - 1 1/2:3:6.

Thus, 10 1/2 krosas having been distributed, 1 1/2 krosas still remain. The table of measurements being-1000 dandas = 1 krosa and 4 krosas = 1 yojana, 1 1/2 krosas means 1500 dandas (staff length). Distribution - earth 214, dark region 428, and Ghanodaka 856, thus making a total of 1498 dandas. The remaining 2 dandas convert themselves into 8 hastas (4 hastas or cubits = 1 danda). Distributing as 1:2:4 for the three regions respectively, the balance will be 1 hasta which is equal to 24 angulas (inches). Again, after distributing as 3:6:12, three inches still remain to be distributed. 3 Vrhis make 1 angula (Vrhi means a paddy seed). Therefore 3 angulas are equal to 9 vrhis. Distributing as before - 1:2:4, the length of 2 vrhis still remains to be distributed. One vrhi being equal to seven sarsapas (mustard seeds), now we are left with a stretch equal to 14 sarsapas put side by side. The distribution being as 2:4:8, no balance remains.

The Vedic mode of measurements being in this manner, measurements in all other respects must follow suit. Lord Sri Hari who came down incarnated as Sri Vyasa Maharsi, has thus shown the mode of distribution in the ratio of 1:2:4 - each unit being a seventh of the whole. Therefore the Puranas tell us that the hollow of Brahma-manda measures exactly fifty crore yojanas. The fractional parts being added to 7, 14, and 28, the total will be 50 crore.

The earth was created in the Krta yuga and therefore its measurements agree with the standards of that age. Lord Sri Maha Visnu created the earth during the first Krta yuga of the first 'Kalpa'.





THE TERRESTRIAL REGION (55–58)

Basing our concept on the measurements indicated here-to-fore, the earth should be understood as consisting of the seven islands and the seven oceans, the middle most island Jambudvipa measuring one lakh yojanas, and each of the outer islands being twice as large as their inner complements. Similarly, the seven surrounding oceans too should be considered. Thus, the diameter of the circular earth measures 5 crore and 7 lakh yojanas up to the encircling land of gold, which itself is surrounded by the land of diamond.

The last two are known as ‘Antyadhyardha sthala’ This point will now be discussed.

ANTYADHYARDHA STHALA (Land of gold and land of diamond)

With reference to the location of Lokaloka parvata (which surrounds the entire terrestrial region) the measurement of earth other than ‘Brahma bhumi’ is said to be 6.08 crore yojanas. To reach the full measurement of 7.14 crore yojanas, we still require 1.06 crore yojanas. The measurement given for the region around Sudhodaka ocean being 1.28 crore yojanas, the land of gold should therefore measure 64 lakh yojanas on each side.

‘Adhyardha’ does not actually mean half; but it means ‘with a little addition to half. Therefore, a little more than half of 64 should be taken as 42 instead of 32 in order to satisfy the scriptural statement.

If this position is not maintained, the measurement of the Brahmanda interior would be more than 50 crore yojanas. If the Land of gold is taken to measure 96 lakh and the land of diamond, half of that - 48 lakh, then the terrestrial region would measure $5.07+0.96+0.96+0.48+0.48 = 7.95$ or 8 crore yojanas. Following the ratio of 1:2:4, the Land of darkness will have to measure 16 crore and Ghanodaka, 32 crore. The total would be 56 crore yojanas; and this is entirely wrong.





What has been said herein about the Land of gold and Land of diamond is in agreement with the opinion of Acarya Purnaprajna. If the fringes of the earth were just earthy, it being prone to denudation, the measurement, given as exact to a mustard seed would not remain constant. Hence Lord Sri Hari has created the hard diamond land around.

ANDHANTAMAS **(Region of complete darkness)**

(79–83)

The pit of darkness known as ‘Andhantamas’ is situated below the earth level, sunk in Ghanodaka. This region surrounds the Lokaloka parvata and is termed as ‘Adhogati’ or the downward path. Because ‘Andhantamas’ is below the level of Ghanodaka, it is possible for sinners to go down into it to some extent and to come up again. That they go down and come up has been stated by Sri Vyasa maharshi, the author of Brahma Sutras.

The principle of darkness extends even higher than the Lokaloka parvata which is 51 lakh yojanas high. It is petrified darkness like water turned into ice. If it were not so, where was the need for Sri Krsna, Lord of the Yadus, to create a tunnel through it by means of his Cakra (disc weapon)?

THE NETHER WORLDS

(93–98)

Within the hollows of the earth down below are seven worlds ranged one below the other. They are Atala, Vitala, Sutala, Talatala, Mahatala, Rasatala and Patala. Each of these is 10,000 yojanas in extent (width and height). Thus they occupy a total area of 70,000 yojanas. The Meru mountain has its base into the earth to the extent of 16,000 yojanas. The gaps between the seven nether worlds make a total of 3,000 yojanas (500 yojanas in each case). The earth extends still further below to a depth of 11 thousand yojanas; it is all rocky in nature. $(16+70+3+11 = 100 \text{ thousand})$





ADI SESA

(99–102)

Adi Sesa is worshipped by all the serpents of Patala loka. He has his situation in the Ghanodaka down below; and he is immortal. He finds himself supported by ‘Vayu Kurma’ - Mukhya Prana in tortoise form. Adi Sesa’s tail rests thereon. He is quite strong. Lifting one of his thousand hoods he supports the worlds above him so that the earth does not sink into Ghanodaka. Hence he is hailed as ‘Sarva loka dhurandharah’.

Adi Sesa by himself, is not competent to support the worlds. His strength is derived from the Supreme Lord ‘Samkarsana’, whom he worships in his heart. The space occupied by Adi Sesa in Ghanodaka is 99,000 yojanas.

LOCATION OF HELLS

(103–107)

On the left hand side (south, in this instance) lower than the visible earth level, there is a big moat, many yojanas wide and deep. At its edge is “Samyamanipura,” god Yamadharmas city, where he is always attending to his duties. There are thousands of his servants who are very cruel by appearance. The ‘Vaitarani’ river is here; and it is a terror to sinners. After crossing this river with a foretaste of the sufferings in store, they are taken down into hells like ‘Raurava’, which are horrible. Thousands of such hells are there for punishing sinners of different kinds. These hells are in the southern direction, at the level of the ‘Astadiggajas’ beneath Patala loka.

Another capital city of Yamadharmas kingdom is also in Heaven. It is the harbinger of happiness to those who have done meritorious deeds here on earth.

VISNU KURMA

(106–109)

Underneath the earth borne by Adi “Sesa, Ghanodaka extends to a depth of 24 crore, 99 lakh: yojanas, where it touches the golden shell of Brahmanda. That shell itself is 100 crore yojanas in thickness; and it rests on the back of Visnu Kurma, almost like an atom.





THE UPPER WORLDS

(110–123)

Including the visible terrestrial world, the upper” worlds are seven in number, the seventh and the uppermost being “Satya loka.” The “Antariksa loka” begins one lakh yojanas above the earth. The ‘Svarga loka is at an altitude of 50 lakh yojanas. It is beautiful with divine Palatial buildings. Antariksa loka and Svarga loka are one crore yojanas breadthwise. Above Svarga loka is- ‘Mahar loka’, at an altitude of 75 lakh yojanas above the former. It is populated by Siddhas and rsis in large numbers. Above it is ‘Jana loka’ at an altitude of 11,250,000 yojanas. Then comes ‘Tapo loka’, 16,875,000 higher up. This loka is fully populated with Siddhas and rsis; and provides abundance of amenities of all kinds. The three lokas now spoken of - Maharloka, Janaloka and Tapoloka, have abodes beautified with varieties of gems in plenty. The extent of these three lokas is similar, each measuring a third fraction of 50 crore 166,666,666 yojanas and 2 krosas.

Putting together the altitudes of all the lokas spoken of and adding the gaps in between the adjacent lokas, the total altitude will come to 40,625,000 yojanas. Having a similar distance in between, the ‘Satya loka’ begins. Therefore, it is at an altitude of 81,250,000 yojanas above the earth. That is where Brahma’s abode is situated. Its extent is similar to that of the three lokas beneath it. The Satya loka itself has an altitude of 41,250,000 yojanas. (The total altitude of all the upper worlds will be 162,500,000 yojanas).

The Satya loka of Brahma is shaped like a tuber at its base. It is somewhat thin in the middle like a stalk and, at the top, it spreads out all round like the petals of a lotus flower. It is very very wide.

The lokas of the universe, being all shaped to resemble lotus flowers, the whole thing looks like a huge lotus blooming upon the Ghanodaka.





THE THREE ABODES OF VISNU (133–149)

Upon the Ghanodaka on the northern side is the Abode of Visnu, known as ‘Anantasana’. It is Sridevi who is in the form of that loka where the released souls are. The learned say that it is at a height of one lakh yojanas. A similar Abode is in the milk ocean (Ksira Samudra) at an altitude of one and a half lakh yojanas with reference to its neighbouring earth. This Abode is called ‘Sveta dvipa.’ The three Abodes - Vaikunta, Sveta dvipa and Anantasana are only the forms of Sridevi. (They are non-material). They are thronged again and again with limitless numbers of released souls; and yet, they afford more and more accommodation. They are never completely filled up. Even a hall constructed by Visvakarma (the architect of gods) is able to accommodate limitless number of persons and things. Then, is it any wonder that the Abodes of Visnu are ever more and more accommodative? The belly of a sage (Sage Agastya) could contain the ocean. As such, the three Abodes of Visnu certainly possess wonderful capacity since they are no other than Maha Laksmi, the source of all abilities. During the period of ‘Maha Pralaya’ the released souls enter the womb of Visnu; and there too, they are happy since their non-material bodies are just the stuff of joy. During the period of creation, they return to the said Abodes. Their joy consists in praising the Lord’s glory - Joy Galore, prostrating at His feet and looking at His admirable form, often and often. They also enjoy different kinds of pleasures - of course, non-material.

The capital city of Vaikunta, Ayodhya by name, lies within seven fortifications and only the released souls enter into it. This city brightens the directions all around on account of its beautiful terraced quarters, adorned with wonderful gems. This city area is called ‘Parama Vyoma’ - non-material space. Around this city of Ayodhya flows the ‘Viraja’ river which rids the souls of the burdens of their causation bodies when they, take a dip in its waters. The river is like a moat encircling the city. No unreleased soul can ever cross it. Up to the seventh inner gate of the outer fortifications there is fear of bondage on account of the ‘Pradhana Vyoma’ (material sky) there. Within the bounds of the Viraja River, this sky is





powerless. Hence it is declared in the Puranas that it does not exist there. Therefore, the Viraja River is said to flow between the material sky and the non - material sky. Brahma takes a dip in that river with the other eligible souls at the time of release from bondage. The causation bodies of all of them are got rid off; and then they get into the inner city, Ayodhya. Even Brahma goes only up to the seventh gate of the outer fortification before release; he does not enter the inner city. Then who else can?

NINE OUTER ENVELOPES

(150–152)

The golden Brahmanda is the earthy envelope surrounding the universe. It is one hundred crore yojanas thick. Surrounding it are nine other envelopes, each ten times bigger than its inner complement. They are the envelopes made of the subtle material principles - water, fire air, sky, ego (ahamkara tattva), intellect (mahat tattva), Tamas, Rajas and Satva. The fourteen worlds of the universe are all contained at the core of these envelopes. Such is our wonderful universe. But, with all its envelopes, it is so tiny that it is not enough to occupy fully a single hair-pit on the body of Lord Sriman Narayana. Then, who else among the gods can stand comparison with Him? Let the learned ones find out.

THE MERU MOUNTAIN

(153–163)

The golden Meru mountain is one lakh yojanas high. It is surrounded by the nine Khandas (Varsas of Jambu dvipa). It is the abode of Siddhas (souls who have attained a high degree of perfection). For all measurements concerning the universe, the Meru is the central point of reference. This mountain is thin at the base and goes on broadening gradually towards its top which is quite broad. The mountain resembles the 'Unmatta' flower. At the surface base it has a width of 16,000 yojanas and it goes down into the earth to the extent of 16,000 yojanas. From the base up to ,the top, the Siddhas and yogis dwell.

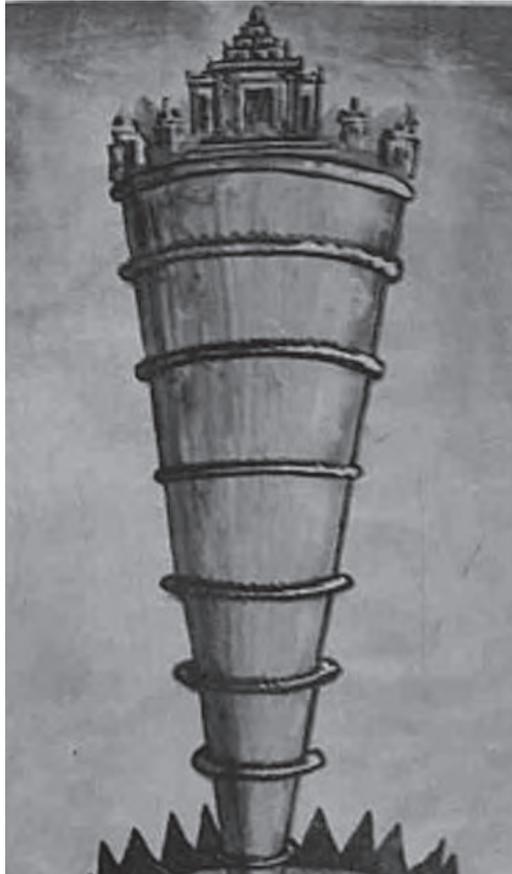
At the top, the mountain has a width of 32,000 yojanas. It is round at the top and three sided at its base (like the cornered base of





a nail). From the base to the top the mountain measures 84,000 yojanas. The circumference at the top is 96,000 yojanas (in round figures). There, in the middle, is the city of Brahma, known as ‘Satakaumbhi.’ Its palatial mansions are beautified with rare gems. The city is 10,000 yojanas long and equally broad.

There, the Gandharva chiefs, the prominent ones among the Siddhas, sages like Vasista and gods headed by Indra worship Brahma seated on the throne of gems. At the edges of the Meru top there are eight cities of the directional gods, one in each of the eight directions. The Meru mountain supports them all.





THE RIVER GANGA

(164–171)

River Ganga pours down constantly in the open courtyard of Brahma's palace such that he might use the waters for his 'Sandhya vandanā' (worshipping Surya Narayana thrice a day - morning, afternoon and evening). The other gods there, also use it. By Brahma's behest the river Ganga takes four courses to come down to earth from the Meru top and to purify the denizens here. Even now we can see it. The branch 'Sita' joins the sea (Lavana Samudra) on the east. 'Alakananda' pours into the southern sea and is quite famous as the purifier of the world. The branch 'Caksu' reaches the western sea and 'Bhadra' joins the northern sea. This river purifies those who use its waters in worshipful manner where ever they be in the four quarters (of Jambudvīpa). The river was again brought to our earth in another form by the efforts of Bhagiratha. This river is called 'Mandakini' in the Himalayas. When it began to pour down in the Himalayan region, "Siva locked it up in the meshes of his knotted hair. (This was to mitigate the force with which Ganga came down; hence the name 'Mandakini'). Being let down from the knotted hair and following Bhagiratha the fresh flow of waters joined the original course of the river; and after crossing the point at 'Devaprayaga', the river went down into the bowels of the earth to reach 'Kapila asrama' in the nether world to sanctify the ashes of the 60,000 sons of Sagara cakravarti, burnt down by the angry look of Sage Kapila.

ILAVRṬA KHANDA

(171 - 183)

This Khanda (Varsa) spreads around the Meru base which measures 8,000 yojanas from its centre, in every direction. There are four supporting mountains on each of the four sides around the base. These mountains are each 2,000 yojanas wide and 10,000 yojanas high. Beyond these mountains there is a stretch of 5,000 yojanas, and this makes up the 9,000 yojanas from the Meru base. The four supporting mountains are Mandara, Merumandara, Kumuda and Suparsva, in the four directions commencing from the east.





There are four gigantic trees on the four mountains - Cuta (mango), Jambu (rose apple tree), Plaksa (Indian fig) and Nyagrodha (banyan) respectively. Each of these trees is 100 yojanas high and the spread of the branches is to the extent of 1100 yojanas. The fruits of the trees resemble- mountain peaks. The ripe jambu fruits of the tree upon Merumandara (south) drop down and the juice flows as the Jambu river. The juice spreading on its banks, when dried up, becomes the finest gold which is known as 'Jambunada'. The divine beings, who visit this region, drink the juice and make different kinds of ornaments for themselves out of 'Jambunada' (gold).

In this Varsa we find only the fair sex moving about day and night. No male person enters it for fear of Bhavanidevi's curse. If any one





trespasses, he is transformed into female form like Ila, the son of Manu. The female attendants of Gauridevi are one hundred million ('arbuda') in number. Siva, along with Gauridevi, worships the form of Lord Samkarsana, one of the 'caturmurtis' Vasudeva, Samkarsana, Pradyumna and Aniruddha. Lord Samkarsana is the SUN brightening the hearts of yogis.

This Ilavṛta Varsa is bounded by four mountains on the four sides. On the eastern side is the Gandhamadana mountain stretching between Nila and Nisadha mountains. It is 2000 yojanas in width. Of the same width, on the southern side, is the Nisadha mountain. It stretches from the eastern ocean up to the western. (This refers to the Lavana Samudra around Jambudvipa). On the western side is the Malyavan mountain, lying between Nila and Nisadha even like the Gandhamadana. On the northern side of Ilavṛta is the Nila mountain, as wide and as long as Nisadha. Siddhas inhabit- these mountains.

BHADRASVA KHANDA **(183–193)**

The eastern part of Jambudvipa is occupied by only one Varsa, the Bhadrasva. It stretches up to the ocean on the east. Bhadrasvas, the son of Dharma, is there worshipping Lord Hayagriva; and he is the ruler of that Varsa. It is fully populated with his subjects. There are two other boundary mountains within the Khanda - Jatara and Devakuta, to the east of Gandhamadana. The two mountains extend between Nila and Nisadha, each being 2000 yojanas wide and 18A)00 yojanas long. Barring the space occupied by the three mountain ranges (Gandhamadana, Jatara and Devakuta) the Bhadrasva Varsa measures 27 thousand yojanas from west to east. Although Bhadrasva is a mentioned, have been created by the Omniscient Lord to maintain symmetry on all the four sides. A similar arrangement is there in the western Varsa. With the two additional mountain ranges the Bhadrasva Khanda is divided into three stretches, each nine thousand yojanas in width. It should be thus construed because it is said in the texts that each of the nine Khandas of Jambudvipa is 9000 yojanas in width. Symmetry is thus maintained.





THE THREE SOUTHERN VARSAS

(193–208)

To the south of the mighty Nisadha mountain lies the Hari Varsa Khanda. It is 9,000 yojanas wide. Here the great devotee, Prahlada and the denizens of the Varsa worship the Narasimha form of the Supreme Lord. The boundary mountain on the south is Hemakuta, 2,000 yojanas wide and 10,000 yojanas high. (Its length is 10% less than that of Nisadha. Therefore, it is 90,000 yojanas in length). To the south is Kimpurusa Varsa, 9,000 yojanas in width. It is bounded on its south by the Himavan mountain, similar to Hemakuta in breadth and height. The length is less by 10,000 yojanas (in round figures) on account of the circular shape of Jambudvipa and the ocean surrounding it. Along with the inhabitants of the Varsa, Hanuman (the greatest of devotees) worships Sri Ramacandra, Lord of Sitadevi. Then comes Bharata Varsa (to the south of the Himavan mountain), having the same width as that of the neighbouring Varsa. It stretches up to the ocean on the southern side. This is the Varsa that provides opportunities for human beings to earn merit. On a peak of the Himavan mountain, the sacred 'Badarikasrama' is situated. Here, Narayana with Nara (Lord Nara-Narayana) is worshipped by expert yogis. Sage Narada and the seven rsis too worship Nara-Narayana, day after day. It is here too that the Lord in the form of Vedavyasa is served by Acarya Sri Madhva, the third 'avatara' of Sri Vayudeva. There are many other 'munis' following his example. In between the boundary mountains, each of the three Varsas is 9000 yojanas in width. The same concept holds good in the cases of the three northern Varsas also. If it is not thus conceived, the measurement of 50,000 yojanas on every side from the Meru centre cannot be maintained. If the Ilavrta Varsa is taken to measure 34,000 yojanas, each of yojanas allowing space for the boundary mountains. The same concept holds good in the cases of the three northern and the three southern varsas, each being 9000 yojanas wide and the boundary mountains occupying 2000 yojanas each. ($9 \times 3 + 2 \times 3 = 33$ thousand).





KETUMALA VARSA

(208–213)

On the western part of Jambu dvīpa there is only one varsa, the Ketumala (resembling the Bhadrāsva on the east). This extends up to the sea on its west. Here, Lord Viṣṇu is worshipped with the name ‘Kamadeva’. He is like crores of ‘Manmathas’ combined in one. (Manmatha and his spouse Ratidevi are well-known for beauty). Our Lord’s beauty is par-excellence. The life-span of man on earth is limited to 36,000 days and 36,000 nights. There are as many (72,000) daughters of Brahma, lording the life-courses of human beings. They serve Sri Rāmadevi who worships her Lord Kamadeva with ‘mantras’ of which she is the life spirit and the meanings of which she is fully aware.

Here too, as in Bhadrāsva Varsa, there are two extra mountains in proper positions, maintaining the 9000 yojanas measure regarding the widths of the Varsas. Pavana and Pariyatra are the two mountains. Lord Sri Hari has created them to make the island look symmetrically beautiful.

THE THREE NORTHERN VARSAS

(214–224)

To the north of the Nīla mountain is the Rāmyaka Varsa. This is also 9000 yojanas in width. Here, Vaivasvata Manu and the sages of the Varsa worship Lord Sriman Narayana in His ‘Matsya’ (fish) form. The boundary mountain on the north is ‘Sveta’. It extends between the eastern and the western oceans; and its length is 1/10 less than that of the Nīla mountain. Width is similar. To its north is the ‘Hiraṇmaya Varsa’ and its northern boundary is formed by ‘Sringavan’ mountain. It also extends between sea and sea and is comparable to the ‘Sveta’ mountain in this respect. But its length is 10% less than that of ‘Sveta’. There are many Siddhas and ṛsis here. In this Varsa the Supreme Lord is worshipped in His Tortoise form (Kurma) by Aryama, the chief among manes, and by the other inhabitants.

Beyond Hiraṇmaya Varsa is the Uttara Kuru Varsa, inhabited by divine beings and ṛsis. It extends up to the ocean on the north. With





reference to its boundary mountain Sringavan, this Varsa also has an extent of 9,000 yojanas. It is like its counter-part - Bharata Varsa on the south. Here, Lord Sri Narayana is always worshipped in His Yajna Varaha (Boar) form by Bhudevi and the occupants of the Varsa. Hari varsa and the other two to the south of Ilavrta varsa are similar to Ramyaka, Hiranmaya and Uttara kuru on the northern side. Each of these six varsas extends from ocean to ocean, length-wise.

FOUR OTHER MINOR MOUNTAINS

(224–227)

On the eastern side of Himadri there is another Kailasa mountain where resides the three-eyed god Siva, spouse of Umadevi. On the western side of Himavan there is the Karavira mountain. In the same way there are two mountains on each side of Sringavan to the east and to the west. They are Trsrnga and Makara. Here too there are siddhas and rsis in large numbers. With these four mountains the Meru appears to be strong with four arms.

LAVANA SAHUDRA

(227–229)

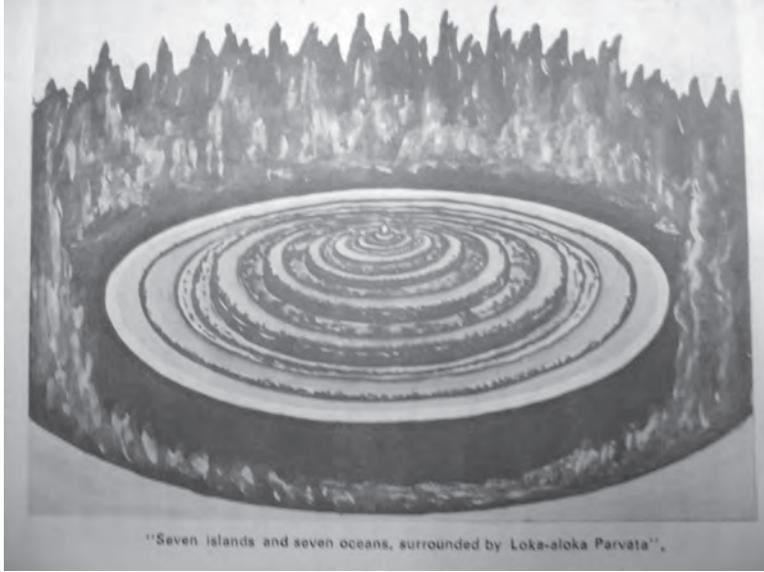
The Jambudvipa is vast containing as it does the nine varsas. Having the golden Meru mountain at its centre, it is the midmost island, with a diameter of one lakh yojanas. It is surrounded by the 'Lavana Samudra'*(Ocean of brackish water), the width of which is also one lakh yojanas.

THE OTHER SIX ISLANDS

(230–241)

Surrounding the Lavana Samudra there is the 'Plaksa' island (which is so called because it abounds with Plaksa trees – Indian fig trees of gigantic size). It is double the width of the ocean of brackish waters (two lakh yojanas). Of similar width is the 'Iksu Samudra' (ocean of waters with the taste of sugarcane juice) around Plaksadvipa. It is populated by Siddhas (the highly qualified souls). Around it is the Salmala dvipa, four lakh yojanas in width and the 'Sura Samudra' (of wine-like waters), of the same width,, spreads around it. After





that is 'Kusadvipa' (where Kusa grass clusters grow very very tall like blazing pillars), it has double the width of "Salmala dvipa." It is surrounded by 'Sarpi Samudra' (ocean of waters with the qualities of ghee) having the same width. Then we have 'Krauncha dvipa' (which derives its name from the mountain of the same name). This island and the 'Dadhi Samudra' (with waters of yogurt quality) have double the widths of their inner complements. Each of these is 16 lakh yojanas wide. The next is 'Saka dvipa' surrounded by 'Ksira Samudra,' (ocean of milk-like waters), each 32 lakh yojanas in width. The last of the seven islands is 'Puskara dvipa' (island of huge lotus flowers of gold), 64 lakh yojanas wide. It is surrounded by the ocean of pure waters - 'Subhodaka Samudra,' having the same width. The entire earth is surrounded by the land of gold - 'Hema bhumi,' along with the adjoining land of diamond - 'Vajralepa'. The Lokaloka mountain goes round the whole stretch of earth described so far. The limit of the earth is marked by this mountain ring. In this way the earth spreads round the Meru centre on all sides and it is there to provide all the needs of living beings including the divine class, the sages, the manes, the sovereigns





as well as human beings. This earth provides happy conditions to one and all. The presiding goddess, 'Bhudevi' is most dear to Lord Sri Narayana. The earth is plentiful with all kinds of plant life and holy forests, crowded with the hermitages of 'munis' (sages). Rivers with holy waters are also there. Mother earth keeps the living beings happy and contented.

There are rich mines containing precious and useful metals and the rarest gems. It is for this reason that the earth gets its name 'Vasundhara'. She is indeed the mother of the world displaying proverbial quality of forbearance. Being seated on the lap of Lord Varaha, she looks quite pretty.

KALA CAKRA (THE TIME WHEEL) **(242–256)**

The limitless Time (Mahakala) is rendered possible to be reckoned by the human beings since it is made countable as 'ghatika', day and night, 'Paksa' (fortnight), 'Masa' (month), 'Rtu' (season) and 'Ayana' (course of six months) and, finally 'Varsa' (year). The wonder-working Lord has formed this 'Kala Cakra' in order to create facility for the courses of the nine planets, the Rasis (constellations of stars), the 'Taras' (stars), the seven sages (Saptarsis) and the divine, dazzling star-like vehicles of Gandharvas, Siddhas and the merited human souls. The courses are located differently in space and the Lord holds them all in their courses at all times. The courses are all circular at different distances and altitudes, and they look quite brilliant with the lustre of rare gems. The courses are thousands and thousands of yojanas apart.

The wheels of the 'Kala Cakra' are twelve —nine for the nine Planets, one for the 'Saptarsis', one for the stars and one for the 'Rasis' (constellations). The knowers of scriptures call this as 'Kala Cakra'. Since the 'Hemanta' and the 'sisira' seasons are considered together, the Cakra is considered as having five spokes; and, with reference to the twelve months, it is also said to be having twelve spokes.

Since the mechanism helps the counting of time divisions, it is known as 'Kala Cakra'. The 'Vamana sukta' speaks of 'Dvadasara' and





‘Pancara’ only for the said reason. This Kala Cakra extends over crores of yojanas in the wide, wide sky. Above the Meru mountain, the Supreme Lord, in the form of ‘Simsumara’ (the scorpion form) stands to a height of 36 lakh yojanas, with his pretty face turned downward and his tail end held up to touch the ‘Dhruva Mandala” (Pole star orbit). The body of this form is ringed in the middle and the tail part goes up. The brilliance of this form of Lord Simsumara is much more than that of a thousand suns. It is He who makes the Time Wheel to go round and round as if it is a part of Himself. The main shaft-like powerline has its starting point atop the Meru mountain and extends outward to the extent of crores of yojanas.

THE MAIN WHEEL (DHARA) OF KALA CAKRA

(257–265)

There is one horizontally placed wheel of gold (not the gross material gold with which we are familiar), located just above the Man-





sottara mountain in Puskara dvipa, the outermost of the seven islands. This wheel always goes round and round and it is meant to take the entire Kala Cakra with it.

Our saint asks, “How can the horses running upon the main wheel, dragging the sun’s chariot, also make the wheel to move with them? Also, how can we account for the slower movement of the sun’s chariot as compared to the faster movement of the Time Wheel? In the world of mechanical devices we are familiar with two wheels - one horizontal and the other vertical upon it for two kinds of movements simultaneously. The same rule should be applied here also.

The movement of the sun’s chariot is similar to the movements of the other celestial chariots - those of the planets, the stars and the like. Every one of these chariots has its own circular golden path befitting it.

THE SUN’S CHARIOT

(266–295)

Upon the main wheel of the Kala Cakra runs the sun’s chariot drawn by seven horses. This chariot has only one wheel and its course upon the Kala Cakra is right above the Mansottara mountain ring. This is also of gold, brightening every direction with the brilliance of gems. The diameter of the circular course is many, many yojanas and it is held dear by Lord Sri Hari.

The Kala Cakra or Jyotiscakra is comparable to a huge chariot; and it is motivated by Sri Hari in His “Simsumara form. Day after day it moves with great velocity, having the Meru mountain at the centre. This Kala Cakra covers a distance of nine crore and fifty one lakh yojanas every day, taking the stars and planets along with it. The changes in seasons - cold, warm and hot, occur on account of this Jyotiscakra. (This is due to the northern and the southern courses manipulated by the lifting and lowering of the Time Wheel by the tail end of Lord Simsumara). Because of the three seasonal changes effected, this Cakra is said to consist of three sections of its hub (‘Trinabhi’). This Cakra (main wheel) itself is made to run without the need of horses to draw it; hence it is called ‘Anarva’ (Horseless). But, as it makes use of seven modes of learning, it is also said





to be drawn by seven horses (This is in a metaphorical sense); and the seven horses are also considered as one. The Cakra is said to be drawn by seven horses or seven-in-one because of its fast motion resembling the gallop of horses. But it should be remembered that this Cakra (main wheel) is different from the sun's chariot which is indeed drawn by seven horses.

GHATIKA AND MUHURTA

(277–288)

The statement, that day and night are equal to thirty, thirty means that they are equal to the periods of thirty 'ghatikas' each. In word-compounding in Sanskrit language there is what is known as 'Lupta madhyama samasa' - missing the middle term in compounding the words. (Similar is the case in question. The missing word is to be understood from the context. Therefore, 'thirty' here means thirty ghatikas). A 'ghatika', then, will be equal to 24 minutes ($12 \times 60 / 30$). The 'ghatika' concept is there to arrive at the concept of 'Muhurta' which is reckoned for going through auspicious rituals ($2 \frac{1}{2}$ ghatikas = 1 Muhurta. $24 \times 2 \frac{1}{2} = 60$ minutes. Here we find the 24 hours-a-day concept). It is thus to be conceived cleverly, not simply clinging to the word meaning. This is the verdict of the Divine Lord Vedavyasa. This almost equal division of day and night of 30 ghatikas each is true only when the sun is in conjunction with the 'Tula' (Libra) and the 'Mesa' (Aries) constellations.

These two months do not clearly witness the increase or decrease in the durations of day or night. During the months 'Tula' (Libra) and 'Mesa' (Aries), a day consists of 12 muhurtas; and twelve muhurtas make a night. When the sun's position goes on changing towards the upper five or the lower five constellations, the durations of days and nights also vary. It is for this reason that Sri Suka Maharsi said in Srimad Bhagavatam that the twelve muhurta concept should not be applied to months other than 'Tula' (Libra) and 'Mesa' (Aries).

MOVEMENTS OF THE PLANETS

(288–294)

The Sun's chariot covers a -distance of 3,400,800 yojanas in a muhurta, this being its velocity day after day. In this way, the total





distance covered will be 81,620,000 yojanas (to the nearest thousand). This is what Sri Suka Maharsi has said about the lagging of the sun's chariot. Hence there is no contradiction involved in his statement. The sun's chariot, along with 'Aruna' and the seven horses, is at an altitude of one lakh yojanas above the earth. Moving slower than the Kala Cakra, the sun touches the constellations behind, gradually, one after the other. The constellations move faster, almost with the same velocity as that of the Kala Cakra. They too lag to a slight extent, but the sun's lagging is perceivably more. This is known as 'Vamagati' (retrograde motion). The sun takes one month to cover each constellation by the retrogression, as it were.

THE OTHER PLANETS

(295–309)

The moon's motion being much slower than that of the sun, it remains far behind the sun every day; and by its quick retrogression every constellation is covered just in 2 ½ days. The velocity of the moon's chariot, therefore, exceeds that of the sun so far as retrograde motion is concerned.

'Guru' (Jupiter) takes one year to cross each constellation by retrogression. Similarly, "Sani" (Saturn) takes two years to touch each successive constellation behind. Its velocity being slower than that of the other six planets, the name "Sanaiscara" (slow-mover) is appropriate. In this way, the movements of the planets are said to be in the backward direction. (But, that is with reference to the constellations). This backward movement resembles that of an ant going round upon an oil machine wheel in the same direction. During every round it finds itself more and more backward with reference to the hub at the centre. (The fact to be noted is that the ant does not move backward; but it only falls behind; and this is like going backward with reference to a companion starting at the same point as another, but out-stripping the latter and making that other to fall behind). If all the planets really move in the backward direction, at sunrise we can see the back of the Sun god instead of his front; and how then is it possible to offer him 'arghya' (water to wash his hands)? Therefore, the movements of the planets must be understood only as explained by us. It is in agreement with what is said in Srimad Bhagavatam, stating that the Sun keeps the Meru mountain





both to his right and to his left as he moves upon the Kala Cakra in the same direction. We should also know that the deities of the planets do not misbehave by circumambulating Lord Simumara in the wrong direction. They do certainly go one full round along with the Kala Cakra every day, keeping the Lord (and the Meru below) to their right. They also fall behind with reference to the Kala Cakra itself on account of their lagging; and this is as if they are keeping the Lord to their left.

A thick shaft of gold, projecting from the Pole star point, holds the mechanism of the Kala Cakra in position without allowing it to drop down upon the earth. The deities in charge of the constellations, who determine the 'ghatikas', have greater velocities while moving upon the Time Wheel; but the planets are prone to fall behind.

PLANETS RAHU AND KETU

(309–320)

The Rahumandala (the route of Rahu's circuit) is situated upon the lowest wheel of the Kala Cakra, at an altitude of 90,000 yojanas above the earth (10,000 yojanas below the level of the sun's path). The planet Ketu, with a hundred tail-like projections, planets are twins whose bodies are joined together, back-to-back). The glorious Lord cut off the head of the demon Rahu (as also the head of Ketu) when he attempted to share nectar stealthily at the time of 'Amrtamanthan'. The heads of the two demons have occupied the status of planets having just tasted a few drops of nectar. They are there only to torment the sun and the moon. However, their spiritual presence in the planets is negligible. The oblations offered to Rahu and Ketu are accepted by divine presences dwelling in those two planets; and the Lord Himself accepts the offerings through those divine presences and blesses the worshippers. The Sun's route lies on a different wheel of the Kala Cakra, one lakh yojanas above the earth. He is there to bless the world with his bright auspicious rays. On another wheel, one lakh yojanas still higher, the moon moves upon its own path. On the occasions of eclipses, the sun and the moon face each other, moving as they do on their own paths. On the new-moon day they are towards the same constellation; and on full-moon days too, they face each other being exactly towards





opposite constellations. If Rahu also takes position at similar longitudes, then an eclipse takes place. What is known as 'Pancagraha yoga', also happens under similar conditions (Five planets ranged towards a common constellation).

THE STAR WORLD

(320–345)

Above the moon's orbit, the star world extends up to 30 lakh yojanas. In the middle areas the merited souls - Gandharvas and Siddha class of divine personalities, along with their consorts, enjoy life, moving as they do in their divine vehicles. They eat nice food, drink sweet juices and they sing and dance. They drink the sweet waters of the Ganga pervading in the sky (Akasa Ganga). Their vehicles are crores and crores in number and they are in the forms of stars. (They are stars of their own kind). Even now men can see them. Because of the brilliance of these star-like vehicles and of the stars and planets, the Time Wheel is called as "Jyotiscakra" - the 'Wheel of Light'. The location of the constellations is in between the moon and the stars (the 27 star groups).

The planet Sukra (Venus) is two lakh yojanas higher than the stars. Budha (Mercury) is two lakh still higher; Kuja (Mars), another two lakh higher; another two lakh higher is Brhaspati (Jupiter), the divine priest. Two lakh yojanas above Jupiter is Sanaiscara (Saturn). The 'Saptarsi mandala' (great bear) is 11 lakh yojanas above Saturn; and 'Dhruvamandala' (Pole star) is 14 lakh yojanas above the orbit of the Saptarsis. Thus, the Pole star is at an altitude of 37 lakh yojanas above the earth.

As the planets go along their courses, Gandharvas and Apsaras sing and dance and go with them in front. They make themselves merry again and again with sweet scents, flowers, delicious food and nice drinks. The learned brahmins on earth chant hymns in their praise and offer oblations and salutations. These divine beings bless the good souls with auspicious things and curse the bad ones with disastrous effects.

Thus the glory of the Kala Cakra has been described. The Puskaradvipa surrounds the Milk ocean (Ksirabdhi). In its middle part runs the Manasottara mountain ring brightening all directions. In





between the opposite sides of this mountain ring, the distance is 2 crore, 51 lakh yojanas. The Kala Cakra extends thus far. Some say, out of ignorance, that the sun sinks into the western ocean and enters the Nether worlds and then rises in the east. This is against Vedic information. It should not be accepted. On account of the terraced formation of the seven islands, Puskara dvipa is the lowest; and therefore the setting point and the rising point of the sun are at lower levels in comparison with the location of our part of the earth. Hence it looks as though the Kala Cakra goes down and comes up.

In Mahabharata it is said that there is another Time Wheel in Patāla loka upon which move another sun and another moon. The denizens of that region swoon down during day time on account of the hot rays of the sun and are revived when the cool rays of the moon strike them. This Time Wheel also is said to be lifted and lowered. The ignorant ones have confused this Time Wheel for the Kala Cakra of the 'Antariksa' above the earth. This is like mistaking a rope for the snake. We should believe only in the words of Sage Vedavyasa who is none other than Lord Sri Narayana.

That the terrestrial Kala Cakra goes round and round circumambulating the Meru mountain, can be understood by observing the 'Saptarsi Mandala' which goes round the polar axis, as every one can see.

THE ENVELOPES COVERING BRAHMANDA (345–348)

The Brahmanda (the golden shell covering the universe) is 100 crore yojanas thick. It is surrounded by the watery envelope which has a thickness of 1000 crore yojanas (Arbuda). Around it is the envelope of the fire element with a thickness of "Nirbuda" yojanas (10,000 crore). Similarly, there are other seven envelopes, each ten times thicker than its inner complement. They are - Air element, 'Kharva' (100,000 crore); Sky element, 'Maha Kharva' (1,000,000 crore); Ego element (Ahamkara), 'Padma' yojanas (10,000,000 crore), Mahat tatva element (principle of intellect), 'Maha Padma1 (100,000,000 crore); Tamoguna (principle of igno-





rance), 1,000,000,000 crore - 'Ksoni'; Rajoguna (principle of activity), 10,000,000,000 crore - 'Maha Ksoni'; and Satvaguna (principle of light and knowledge), 100,000,000,000 crore yojanas - 'Sankha'. But the extent of the universe within the Brahmanda is only 50 crore yojanas.

CONSUMPTION OF THE UNIVERSE

(348–358)

As the "Sruti" declares, "Yasya bramhaca Ksatranca ubhe bhavati odanam", the living beings of the four castes, the great sovereigns, ordinary human beings and the other creatures as well as divine beings, demons, serpents, yaksas, gandharvas, aquatic creatures, pisacas in crores - all, all are sanctified by the ghee of their bodies and are consumed by the Lord at the time of dissolution. He has a variety of drinks in the oceans. Vegetation and fruits of different kinds form the herbal medical stuff. All these are cooked in the fires of "Pralaya" and the Lord Himself is the cook. Having consumed everything, he mixes the ashes of the golden Brahmanda into the surrounding water envelope and drinks it up like a digestive potion. He then rests upon the banyan leaf like an innocent child, tasting the thumb of his lotus-foot, inserted into his lotus-mouth, the foot being held by his lotus-hand.

*"kararavindena padaravindam
mukharavinde vinivesayantam,
vatasya patrasya pute
"sayanam balam mukundam manasa smarami."*

'SAMARPANA' (DEDICATION)

(358–361)

Thus, a description of the universe has been offered that the Lord may be pleased with this act. This is authored by Vadiraja Bhiksu, the devotee of Acarya Sri Madhva. Let the gods find pleasure in going through it. The writing of the text was occasioned by the debate regarding certain details about the universe. My salutations to Lord Laksmipati who is the resort of the yogis; and my salutations to Acarya Sri Madhva, who knows the Sastras perfectly.

Sri Krsnarpanam astu

