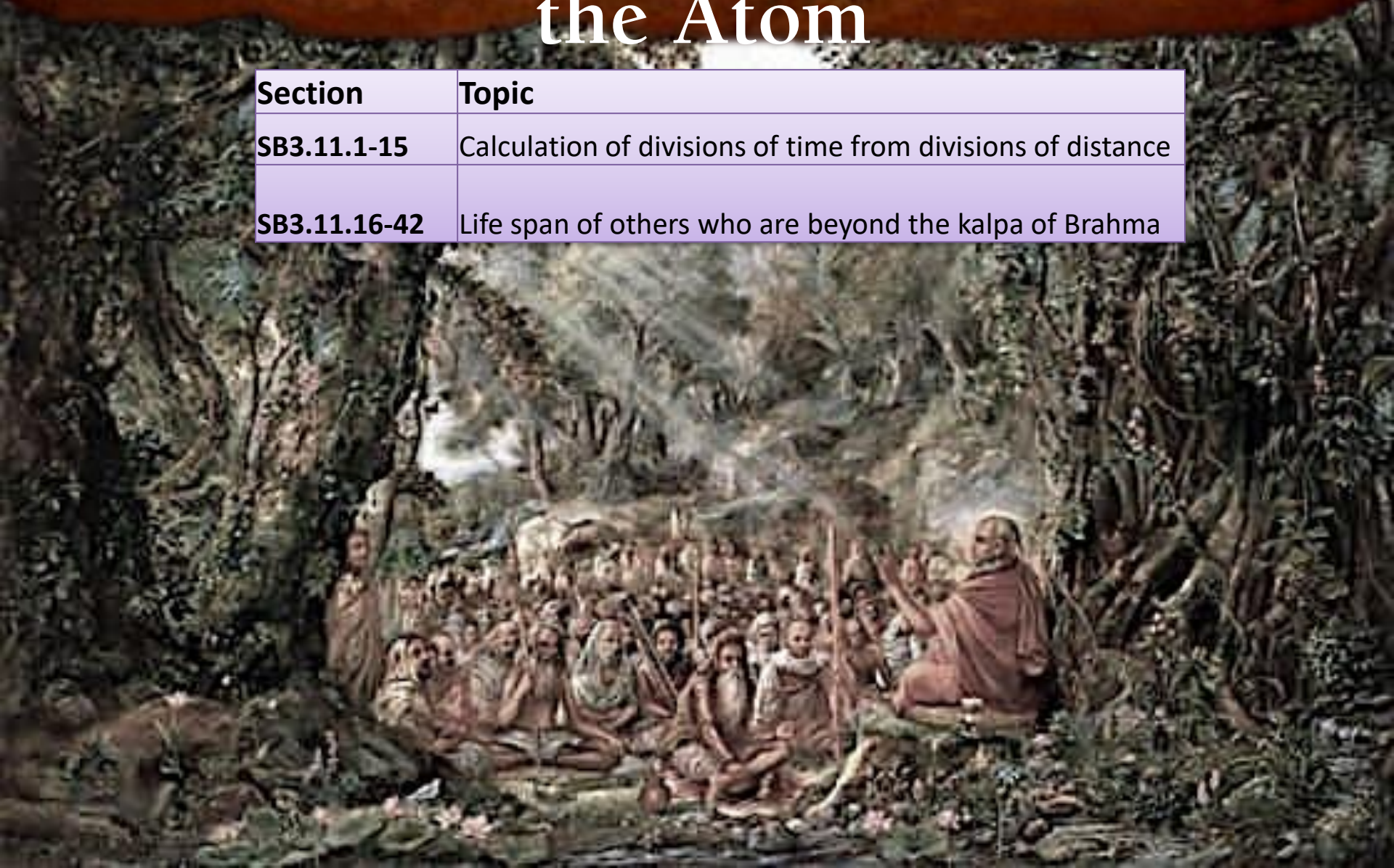


3.11. Calculation of Time, from the Atom

Section	Topic
SB3.11.1-15	Calculation of divisions of time from divisions of distance
SB3.11.16-42	Life span of others who are beyond the kalpa of Brahma



Part-I

Calculation of divisions of
time from divisions of
distance

(3.11.1-15)

Section: SB 3.11.1-15 :

Calculation of divisions
of time from divisions
of distance

|| 3.11.1 ||

maitreya uvāca
caramaḥ sad-viśeṣāṇām
aneko 'saṁyutaḥ sadā
paramāṇuḥ sa vijñeyo
nṛṇām aikya-bhramo yataḥ

Maitreya said: The paramāṇu is understood (**paramāṇuḥ sa vijñeyo**) to be the smallest particle of the material elements (**sad viśeṣāṇām caramaḥ**). There are innumerable such particles (**anekah**) and they are always uncombined (**asaṁyutaḥ sadā**). Because of their small size, men are mistaken, identifying them with small particles they can see (**nṛṇām aikya-bhramo yataḥ**).

Definition of the smallest unit of distance: The Paramanu of distance

Finding the nature of subtle time difficult to describe, Maitreya first describes the division of matter.

The smallest division (caramaḥ) of parts (viśeṣānām) of material elements (sat) is called the paramāṇu.

Why is carama in the singular, indicating only one particle when there are many?

Though the particles are many, to understand about the subtle nature of time, it is appropriate isolate one particle and thus the singular is used.

But still the one particle should by its nature be either combined or uncombined.

The verse therefore says it is not joined.

This particle is understood to be the paramāṇu.

This means that it cannot be seen.

Then what is its size?

From these particles which arise, men make a mistake concerning what constitutes a single particle.

One perceived the very small particles of light which are seen in the rays of sun shining through a lattice window and thinks “Here is one particle, here is another fine particle.”

A sixth part of that light particle is a paramāṇu, but it is invisible.

Men are mentioned because some small insects the size of a trasareṇu can see this particle.

Section: SB 3.11.1-15 :

Calculation of divisions
of time from divisions
of distance

|| 3.11.2 ||

**sata eva padārthasya
svarūpāvasthitasya yat
kaivalyaṁ parama-mahān
aviśeṣo nirantaraḥ**

The totality (**kaivalyaṁ**) of all the paramāṇus (**satah eva padārthasya**) which exist separately before dissolution (**yat svarūpa avasthitasya**) is called parama-mahān (**parama-mahān**), with no examination of particular qualities (**aviśeṣah**) and separate objects (**nirantaraḥ**).

Definition of the largest unit of distance: The Parama-mahan of distance

The paramāṇu has been described as the smallest particle.

Now the greatest state of matter is described.

The state of oneness (kaivalyam) of the paramāṇu, of the particles of matter (sataḥ), which is its state previous to transformation into the condition of pralaya, is called parama-mahān.

How can all objects which are mutually different with various qualities become one?

There is no sense of distinct qualities (aviśeṣaḥ) and no sense of different particles or objects (nirantaraḥ). It is the totality of all matter.

That is the meaning of parama-mahān.

Section: SB 3.11.1-15 :

Calculation of divisions
of time from divisions of
distance

|| 3.11.3 ||

evam kālo 'py anumitaḥ
saukṣmye sthaulye ca sattama
samsthāna-bhuktyā bhagavān
avyakto vyakta-bhug vibhuḥ

O best of men (**sattama**)! Just as matter (**evam samsthāna**) has been understood to have very fine and very huge states (**saukṣmye sthaulye ca anumitaḥ**), time should also be understood to have such divisions (**kālah apy anumitaḥ**). Pervading the states of paramāṇu and parama-mahān by his śakti (**samsthāna-bhuktyā**), the Lord, though invisible (**bhagavān avyaktah**), delimits this material realm (**vyakta-bhug**) and pervades it (**vibhuḥ**).

Just as matter has small and big divisions time also has small and big divisions

Time can be understood in a manner similar to the existence very fine and very great particles of matter.

How do these extreme dimensions arise?

By pervading (bhuktyā) through the finest and greatest states of matter (samsthāna) by his śakti, the Supreme Lord, by nature unseen (avyaktaḥ), limits the whole universe (vyakta-bhuk).

He then pervades it all (vibhuḥ).

Vibhuḥ can also mean that he is skilful in matters of creation and other acts.

Section: SB 3.11.1-15 :

Calculation of divisions
of time from divisions
of distance

|| 3.11.4 ||

sa kālah paramāṇur vai
yo bhuṅkte paramāṇutām
sato 'viśeṣa-bhug yas tu
sa kālah paramo mahān

The time expended for the sun to go distance of one paramāṇu (yah bhuṅkte paramāṇutām) is called a paramāṇu of time (sah kālah paramāṇuh) and the time expended from one dissolution to the next (yas tu sato aviśeṣa-bhug) is called parama-mahān time (sah kālah paramo mahān).

Definition of Paramanu and Parama Mahan of time based on the time taken by sun to cover paramanu and parama mahan of distance.

This verse explains the phrase “by pervading the smallest and largest elements (saṁsthāna-bhuktyā).”

That time which elapses for the sun to pass over the form of the paramāṇu (paramāṇutām) is called the paramāṇu time.

As will be understood from the explanation in relation to the planets and constellations in verse 13, whatever time it takes the sun to cross over a paramāṇu is called a paramāṇu of time, or the smallest division of time.

That time which pervades the whole material realm without distinction (aviśeṣa-bhuk)--time in the form of the sun, by expenditure of years and yugas, starting with the creation and ending with dissolution of the universes--is called parama-mahān time.

Since there is an equivalent name given to the divisions of time and the material particles of paramāṇu, anu and trasareṇu, there are also equivalent name given to the time and the material substance called parama-mahān.

However there is difference in the terminologies and sizes of time and objects between these extremes.

Section: SB 3.11.1-15 :

Calculation of divisions
of time from divisions
of distance

॥ 3.11.5 ॥

**aṅur dvau paramāṅū syāt
trasareṅus trayah smṛtaḥ
jālārka-raśmy avagataḥ
kham evānupatann agāt**

Two paramāṅus make an aṅu (**aṅur dvau paramāṅū syāt**). Three aṅus make a trasareṅu (**trasareṅus trayah smṛtaḥ**). The trasareṅu is perceived by the eye (**avagataḥ**), when the sun rays (**arka-raśmy**) enter through the lattice (**jāla**). One can see it moving up towards the sky (**kham eva anupatann agāt**).

Definition of Anu and Trasarenu.

Two paramāṇus makes one aṇu.

Three aṇus make one trasareṇu.

The trasareṇu can be perceived.

It can be known as it follows after the air because of its lightness, in the rays of the sun entering through a lattice.

Another version has na tu gām agāt: it does not go to the earth. It remains moving about.

What is the evidence of the aṇu and paramāṇu?

The trisareṇu is the evidence.

It is a common rule that without having dense and numerous parts, the possessor of the parts cannot be seen.

The trisareṇu is the possessor of parts, with three gross aṇus as its parts.

However the paramāṇus are not gross at all.

Solidity involves many objects.

Thus the grossness of the anu depends on the paramāṇu.

This proves the existence of the paramāṇu.

The visibility of the trisareṇu is not possible without solid parts.

Making the aṅu solid requires only two paramāṅus, not three or four, using the logic of accepting the first possibility.

Just as Jaimini argues that three partridges are the minimum requirement for sacrifice, [Note: Kapiñjala-nyāya] so a minimum of three aṅus produce density so that the trasareṅu can be seen.

Section: SB 3.11.1-15 :

Calculation of divisions
of time from divisions
of distance

|| 3.11.6 ||

trasareṇu-trikaṁ bhunkte
yaḥ kālaḥ sa truṭiḥ smṛtaḥ
śata-bhāgas tu vedhaḥ syāt
tais tribhis tu lavaḥ smṛtaḥ

The time it takes for the sun to pass over three trasareṇus is called a truṭi (**trasareṇu-trikaṁ bhunkte yaḥ kālaḥ sa truṭiḥ smṛtaḥ**). A hundred truṭis make one vedha (**śata-bhāgas tu vedhaḥ syāt**). Three vedhas make one lava (**tais tribhis tu lavaḥ smṛtaḥ**).

Definition of Truti, Vedha and Lava.

According to Surya-siddhānta, a truṭi is defined as the time taken for a needle to pierce a lotus leaf.

Section: SB 3.11.1-15 :

Calculation of divisions
of time from divisions
of distance

॥ 3.11.7 ॥

nimeṣas tri-lavo jñeya
āmnātas te trayah kṣaṇah
kṣaṇān pañca viduḥ kāṣṭhām
laghu tā daśa pañca ca

Three lavas make one nimeṣa (**nimeṣas tri-lavo jñeya**). Three nimeṣas make one kṣaṇa (**āmnātas te trayah kṣaṇah**). Five kṣaṇas make one kāṣṭhā (**kṣaṇān pañca viduḥ kāṣṭhām**). Fifteen kāṣṭhās make one laghu (**laghu tā daśa pañca ca**).

Definition of Nimesa, Ksana, Kasha, and Laghu.

Section: SB 3.11.1-15 :

Calculation of divisions
of time from divisions
of distance

|| 3.11.8 ||

laghūni vai samāmnātā
daśa pañca ca nāḍikā
te dve muhūrtaḥ praharaḥ
ṣaḍ yāmaḥ sapta vā nṛṇām

Fifteen laghus make one nāḍikā (**laghūni vai samāmnātā daśa pañca ca nāḍikā**). Two nāḍikās make one muhūrta (**te dve muhūrtaḥ**). Six or seven nāḍikās make a prahara or yāma for humans (**praharaḥ ṣaḍ yāmaḥ sapta vā nṛṇām**).

Definition of Nadika, Muhurta, and Prahara.

Six or seven nāḍikās make a prahara or yāma.

Day and night are divided into four parts.

When the day or night is short then there are six nāḍikas in a prahara.

When the day or night is long then there are seven nāḍikas in a prahara.

This does not include the nāḍikā at the two sandhyas.

Because it is impossible to list all the differences for each day of the year, the time is not fixed.

Section: SB 3.11.1-15 :

Calculation of divisions
of time from divisions
of distance

|| 3.11.9||

**dvādaśārdha-palānmanam
caturbhiḥ catur-aṅgulaiḥ
svaṛṇa-māṣaiḥ kṛta-cchidram
yāvat prastha-jala-plutam**

The measuring pot (**unmānam**) for one nāḍikā, or daṇḍa, can be prepared with a six-pala-weight [fourteen ounce] (**dvādaśārdha-pala**) pot of copper, in which a hole is bored (**kṛta-cchidram**) with a gold probe weighing four māṣa (**svaṛṇa caturbhiḥ-māṣaiḥ**) and measuring four fingers long (**catur-aṅgulaiḥ**). When the pot is placed on water, the time before the water overflows in the pot is called one daṇḍa or nāḍikā (**yāvat prastha-jala-plutam**).

Experimental setup to measure one Nadika.

This verse defines the length of the nāḍikā.

Unmānam means that by which something is measured. Here it refers to a copper pot weight of six palas.

Sixty-four māśas make one pala.

One should make a hole in the pot using a gold needle four fingers in length and weighting four māśas.

Five guñjas make one māśa.

The time it takes for one prastha of water to enter the vessel and fill it is a nāḍikā.

If the weight of the vessel is more or the hole is larger, the pot will sink more quickly.

If the vessel is lighter and the hole smaller, the pot will sink more slowly.

Thus the exact weight of the pot and the size of the hole are specified.

If the needle is made of silver and the same length and weight, the hole will be bigger.

Section: SB 3.11.1-15 :

Calculation of divisions
of time from divisions
of distance

|| 3.11.10||

yāmāś catvāraś catvāro
martyānām ahanī ubhe
pakṣaḥ pañca-daśāhāni
śuklaḥ kṛṣṇaś ca mānada

For the human beings, there are four yāmas in the day and four yāmas in the night (**yāmāś catvāraś catvāro martyānām ahanī ubhe**). There are fifteen days in the waxing phase of the moon (**śuklaḥ pakṣaḥ pañca-daśā ahāni**), and fifteen days in the waning phase of the moon (**kṛṣṇaś ca mānada**).

Definition of Ahani and Paksa.

Section: SB 3.11.1-15 :

Calculation of divisions
of time from divisions
of distance

|| 3.11.11-12||

**tayoḥ samuccayo māsaḥ
pitṛṇām tad ahar-niśam
dvau tāv ṛtuḥ ṣaḍ ayanam
dakṣiṇam cottaram divi**

**ayane cāhanī prāhur
vatsaro dvādaśa smṛtaḥ
samvatsara-śataṁ nṛṇām
paramāyur nirūpitam**

The two fortnights are one month (**tayoḥ samuccayo māsaḥ**). This total is a day and night for the Pitṛs (**pitṛṇām tad ahar-niśam**). Two months make a season (**dvau tāv ṛtuḥ**). Six months makes a southern half year and northern half year (**ṣaḍ ayanam dakṣiṇam ca uttaram**). Two half years make a day and night for the devatās in heaven (**divi ayane cāhanī prāhur**). Twelve months make a year (**vatsaro dvādaśa smṛtaḥ**). One hundred years is described as the duration of life for human beings (**samvatsara-śataṁ nṛṇām paramāyur nirūpitam**).

Definition of Masa, Rtuḥ, Ayana, Vatsara and Parama-ayuh

Section: SB 3.11.1-15 :

Calculation of divisions
of time from divisions
of distance

|| 3.11.13||

graharkṣa-tārā-cakra-sthaḥ
paramāṇv-ādinā jagat
saṁvatsarāvasānena
paryety animiṣo vibhuḥ

The sun, a portion of the Supreme Lord in the form of time (**animiṣah vibhuḥ**), situated in the zodiac belt (**cakra-sthaḥ**) among the planets, twenty-seven constellations and other constellations (**graham rkṣa-tārā**), travels in a circle through the universe (**paryety jagat**) with measurements of time from the paramāṇu to the full year (**paramāṇv-ādinā saṁvatsara avasānena**).

Sun decreases the life of living entities spanning from Paramanu to Paramayuh.

This verse explains that the sun decreases the life span by rising and setting.

The sun is situated in the circle of the planets such as the moon, the constellations such as Aśvini, and the stars, meaning the other constellations not included in the twenty-seven constellations.

The sun, a portion of the Lord (vibhuḥ), the form of time (animiṣaḥ), travels around the universe.

Section: SB 3.11.1-15 :

Calculation of divisions
of time from divisions
of distance

|| 3.11.14||

saṁvatsaraḥ parivatsara
idā-vatsara eva ca
anuvatsaro vatsaraś ca
viduraivam prabhāṣyate || 14 ||

O Vidura (**vidura!**) The sun's full revolution through the zodiac belt is called a (**saṁvatsara**). The full revolution of Jupiter through the zodiac is called (**parivatsara**). The year for twenty-seven constellations is called a (**vatsara**). The lunar year is called an (**anuvatsara**). The remaining constellations have a year called (**idā-vatsara**).

Definition of Samvatsara, Parivatsara, Idavatsara, Anuvatsara and Vatsara.

- The planets, constellations and other constellations have been described.
- This verse gives the different names of the years for the orbiting sun and other heavenly bodies.
- One year for the sun is called a samvatsara (365.25 days).
- One year for Jupiter is called a parivatsara (11.87 years).
- One year for the moon is called an anuvatsara (327.6 days). [Note: A lunar year is twelve lunar months from full moon to full moon.]

- Since there is no orbital motion of the constellations time is measured using the moon's movements.
- For the twenty-seven constellations, twelve months of twenty-seven days makes a vatsara (324 days).
- Because of there is no measuring system in relation to the remaining constellations, they have a year called idā-vatsara with solar months of thirty days (total of 360 days).

Section: SB 3.11.1-15 :

Calculation of divisions
of time from divisions
of distance

|| 3.11.15||

yaḥ sṛjya-śaktim urudhocchvasayan sva-śaktyā
pumso 'bhramāya divi dhāvati bhūta-bhedah
kālākhyayā guṇamayam kratubhir vitanvamś
tasmai balim harata vatsara-pañcakāya

The sun (**yaḥ**), made out of particular material elements (**bhūta-bhedah**), moves in the sky (**divi dhāvati**), displaying with force (**urudhā ucchvasayan**) the ability of plants to germinate (**sṛjya-śaktim**) through his energy of time (**sva-śaktyā kālākhyayā**), and producing material results (**vitanvan guṇamayam**) by means of ritual actions according to proper calculation of time (**kratubhir**), in order to dispel illusion of men (**pumso abhramāya**). O performers of dharma! You should make offerings to the sun for promoting the five types of year (**tasmai balim harata vatsara-pañcakāya**).

One should offer respects to sun once every 5 years because the sun:

- Displays the ability of plants to germinate
- Bestows material results to rituals
- Dispels illusion of men.

- One may ask the purpose of having five different types of year.
- The religious acts accomplished by the various calculations of year are described in this verse.
- The sun, a particular form of the elements (bhūta-bhedah) in the form of a ball of fire, moves in the sky (divi), revealing (uchvasayan) strongly in the form of time (svaśaktyā) the ability of plants to germinate.

- Why does it move in the sky?
- He increases the results, such as attainment of Svarga (guṇamayam) of those with material desires in order to destroy confusion for men, by actions performed with knowledge of the correct time for those actions, according to the saṁvatsara and other types of year.
- O followers of dharma!
- You should offer articles of worship such as arghya (balim) to the sun in order to set in motion the five types of year.

Part-II

Calculation of divisions of
time from divisions of
distance

(3.11.16-42)

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.16||

vidura uvāca
pitṛ-deva-manuṣyāṇām
āyuh param idaṁ smṛtam
pareṣām gatim ācakṣva
ye syuh kalpād bahir vidah

Vidura said: You have described the maximum life span of a hundred years of the Pitṛṣ, devatās and humans (**pitṛ-deva-manuṣyāṇām āyuh param idaṁ smṛtam**). Please describe (**ācakṣva**) the lifespan of others who (**ye pareṣām gatim**), being wise (**vidah**), exist beyond the kalpa of Brahmā (**kalpād bahir syuh**).

Please describe the life span of others who are beyond the kalpa of Brahma.

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.17||

**bhagavān veda kālasya
gatiṁ bhagavato nanu
viśvaṁ vicakṣate dhīrā
yoga-rāddhena cakṣuṣā**

O master! (**bhagavān**), You know the movements of the Lord in the form of time (**nanu veda bhagavato kālasya gatiṁ**). The wise see the universe (**dhīrā vicakṣate viśvaṁ**), through eyes perfected by yoga (**yoga-rāddhena cakṣuṣā**).

You know the movements of the Lord in the form of time

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.18||

maitreya uvāca

**kṛtaṁ tretā dvāparaṁ ca
kaliś ceti catur-yugam
divyair dvādaśabhir varṣaiḥ
sāvadhānaṁ nirūpitaṁ**

Maitreya said: The four yugas of Satya, Treta, Dvāparā and Kali (**kṛtaṁ tretā dvāparaṁ ca kalih ceti catur-yugam**), are described (**nirūpitaṁ**), as twelve thousand years of the devatās (**divyair dvādaśabhir varṣaiḥ**), including the sandhyā portions (**sa avadhānaṁ**).

- Satya yuga is four thousand devatā years and the sandhyās at the beginning and end of the yuga totally eight hundred years. Treta yuga is three thousand six hundred years, and the others are similarly calculated.

1 Catur Yuga = 12,000 Devata Years.

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.19||

catvāri trīṇi dve caikaṁ
kṛtādiṣu yathā-kramam
saṅkhyātāni sahasrāṇi
dvi-guṇāni śatāni ca

The yugas starting with Satya (**kṛtādiṣu yathā-kramam**), are calculated (**saṅkhyātāni**), by multiplying 1200 (**sahasrāṇi dvi-guṇāni śatāni ca**) by four, three, two and one (**catvāri trīṇi dve ca ekam**).

The 4 Yugas in terms of Devata Years

- Satya yuga is four thousand devatā years and the sandhyās at the beginning and end of the yuga totally eight hundred years.
- Treta yuga is three thousand six hundred years, and the others are similarly calculated.

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.20||

**sandhyā-sandhyāṁśayor antar
yaḥ kālah śata-saṅkhyayoḥ
tam evāhur yugaṁ taj-jñā
yatra dharmo vidhīyate**

The period between the sandhyās (**sandhyā-sandhyāṁśayor antar yaḥ kālah**) which are calculated in hundreds of devatā years (**śata-saṅkhyayoḥ**) is called the yuga by the wise (**tam evāhur yugaṁ taj-jñā**). During this period the particular dharmas of the yuga are performed (**yatra dharmo vidhīyate**).

Yuga = Time between two Yuga Sandhyas

- The juncture at the beginning is called sandhyā and the juncture at the end is called sandhyāṁśa. What are these? They are counted in hundreds of years.
- The period between these two is the yuga.
- In these yugas the special dharmas of meditation, sacrifice, deity worship and chanting are performed.
- The regular dharmas are secondarily performed. These are practiced as well in the sandhyā and sandhyāṁśa. But even in the sandhyās, the yuga dharmas are more prominent.
- One year of the devatās is 360 years of humans.
- The four yugas are described in the scriptures to be 4, 320,000 human years. Satya-yuga is 1,728,000 human years. Treta-yuga is 1,296,000 human years. Dvāpara yuga is 864,000 human years. Kali-yuga is 432,000 human years.

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.21||

**dharmas̄ catus̄-pān manujān
kr̄te samanuvartate
sa evānyeṣv adharmeṇa
vyeti pādena vardhatā**

In Satya-yuga (**kr̄te**) mankind (**manujān**) properly and completely maintained (**samanuvartate**) the principles of religion (**dharmah catus̄-pād**), but in other millennia (**sa eva ānyeṣu**) religion decreased by one fourth (**vyeti pādena**) as irreligion was proportionately admitted (**adharmeṇa vardhatā**).

Dharma decreases 1/4th from Satya to Kali.

- In Satya-yuga, complete (catuḥpāt) dharma is aimed at mankind.
- Because adharma gradually increased by a fourth in the following yugas, dharma gradually decreased by a fourth.

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.22||

tri-lokyā yuga-sāhasram
bahir ābrahmaṇo dinam
tāvaty eva niśā tāta
yan nimīlati viśva-srk

O Vidura (**tāta**)! Beyond Svargaloka and extending to Brahmhaloka (**tri-lokyā bahih ābrahmaṇo**), one day is equal to one thousand yuga cycles or 4,320,000,000 years (**dinam yuga-sāhasram**). The night (**niśā**) when Brahmā sleeps (**yan nimīlati viśva-srk**) is the same duration (**tāvaty eva**).

Above svarga, i.e. in Mahar, Jana, Tapa and Satya Lokas, duration of one day = 1000 Catur Yugas.

- Beyond the three worlds (tri-lokyāḥ baḥiḥ), above Svarga, from Maharloka to Brahmaloḥa, one thousand cycles of four yugas equals a day.
- In the night Brahmā falls asleep.
- He sleeps following the sleep of Garbhodakaśāyī Viṣṇu.
- Thus a day and night of Brahmā is equal to two thousand yuga cycles.
- For mankind that is 8,640,000,000 years.

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.23||

**niśāvasāna ārabdho
loka-kalpo 'nuvartate
yāvad dinam bhagavato
manūn bhuñjams catur-daśa**

At the end of the night (**niśā avasāna**), the creation of the planets (svarga to patala) takes place (**loka-kalpah ārabdho**) and remains (**anuvartate**) for fourteen Manvantaras (**catur-daśa manūn bhuñjan**). This is a day of Brahmā (**yāvad bhagavatah dinam**).

At the end of Brahma's night creation starts during which 14 Manus rule

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.24||

**svam svam kalam manur bhunkte
sadhikam hy eka-saptatim**

Each Manvantara extends for a little over seventy-one yugas (**svam svam kalam manur bhunkte sadhikam hy eka-saptatim**).

Ruling time of 1 Manu = little more than Seventy one Catur Yugas.

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.25||

**manvantareṣu manavas
tad-vamśyā ṛṣayaḥ surāḥ
bhavanti caiva yugapat
sureśās cānu ye ca tān**

In the Manvantara (**manvantareṣu**), the Manus (**manavaḥ**), the seven sages, the devatās (**ṛṣayaḥ surāḥ**), Indra (**sureśāḥ**) appear simultaneously with Manu (**yugapat bhavanti**), and the descendents of Manus appear gradually (**tad-vamśyā anu ye ca tān**).

- A Manu rules for a little more than seventy-one yuga cycles. This is a little over 852,000 devatā years or 306,720,000 human years.

During the Manvantara the Sages and the Demigods also appear with the Manu and the descendents of manu appear gradually

- The dynasty of Manu, the protector of the earth, gradually appears.
- The seven sages and others however appear simultaneously with Manu.
- The Indras and Gandharvas who follow them, appear simultaneously.

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.26||

**eṣa dainan-dinaḥ sargo
brāhmas trailokya-vartanaḥ
tiryañ-nṛ-pitr-devānām
sambhavo yatra karmabhiḥ**

The daily creation of Brahmā (**eṣa brāhmah dainan-dinaḥ sargah**) involves producing the three worlds (**trailokya-vartanaḥ**), in which the animals, humans, and devatās (**tiryañ-nṛ-pitr-devānām**) appear according to their karmas (**sambhavo yatra karmabhiḥ**).

The daily creation of Brahma includes the creation of the three worlds.

[Section: SB 3.11.16-42:](#)

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.27||

**manvantareṣu bhagavān
bibhrat sattvaṁ sva-mūrtibhiḥ
manv-ādibhir idaṁ viśvam
avaty udita-pauruṣaḥ**

In all the Manvantara periods (**manvantareṣu**), the Lord (**bhagavān**), supporting material sattva-guṇa by his avatāras (**bibhrat sattvaṁ sva-mūrtibhiḥ**) and the Manus (**manv-ādibhir**), thus revealing his form as a human (**udita-pauruṣaḥ**), protects this universe (**idaṁ viśvam avaty**).

During the Manvantara the universe is protected by the Manus and the Manvantara Avatars.

[Section: SB 3.11.16-42:](#)

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.28||

tamo-mātrām upādāya
pratisamruddha-vikramah
kālenānugatāśeṣa
āste tūṣṇīm dinātyaye

Accepting a small portion of darkness through a form of Śiva, Kālāgni-rūdra (**kālena tamo-mātrām upādāya**), who covers the three worlds with fire (**pratisamruddha-vikramah**), and merging the jīvas of the three worlds in his body (**anugat aśeṣa**), the Lord remains silent at the end of the day (**āste tūṣṇīm dinātyaye**).

The Lord, by accepting a small portion of Mode of Ignorance, through the form of Kalagni Rudra, destroys the 3 worlds at the end of Brahma's day.

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.29||

**tam evānv apidhīyante
lokā bhūr-ādayas trayah
niśāyām anuvṛttāyām
nirmukta-śaśi-bhāskaram**

Conforming to that (**tam eva anu**), the three worlds disappear (**lokā bhūr-ādayas trayah apidhīyante**) in the night which follows (**anuvṛttāyām niśāyām**). That condition is devoid of sun and moon (**nirmukta-śaśi-bhāskaram**).

During that time the three worlds disappear and are devoid of the sun and moon.

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.30||

tri-lokyām dahyamānāyām
śaktyā saṅkarṣaṇāgninā
yānty ūṣmaṇā maharlokāj
janam bhṛgv-ādayo 'rditāḥ

When the three worlds are burned (**tri-lokyām dahyamānāyām**) by the powerful fire emanating from Saṅkarṣaṇa's mouth (**śaktyā saṅkarṣaṇāgninā**), the sages headed by Bhṛgu (**bhṛgv-ādayah**), being pained by the heat (**ūṣmaṇā arditāḥ**), leave Maharloka and go to Janaloka (**maharlokāj janam yānty**).

During this time, the residents of Maharloka, pained by the fire emanating from the mouth of Sankarsana, move to Jana Loka..

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.31 ||

tāvāt tri-bhuvanam sadyaḥ
kalpāntaidhita-sindhavaḥ
plāvayanty utkaṭāṭopa-
caṇḍa-vāteritormayaḥ

Then (**tāvāt**), the oceans, swelling with water at the end of Brahmā's day (**kalpānta edhita-sindhavaḥ**), violently disturbed (**utkaṭa aṭopa**) with waves (**urmayāḥ**) blown by strong winds (**caṇḍa-vāta irita**), immediately cover the three worlds (**including Svarga**) (**plāvayanty tri-bhuvanam sadyaḥ**).

The oceans then swell and cover the three worlds

[Section: SB 3.11.16-42:](#)

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.32||

antaḥ sa tasmin salila
āste 'nantāsano hariḥ
yoga-nidrā-nimīlākṣaḥ
stūyamāno janālayaiḥ

The Lord, lying on Ananta (**anantāsano hariḥ**), remains in that water (**antaḥ sa tasmin salila āste**) with his eyes closed by his śakti called yoga (**yoga-nidrā-nimīlākṣaḥ**), while being praised by the sages inhabiting Janaloka (**stūyamāno janālayaiḥ**).

Garbodakasayi Visnu remains in that water, lying on Ananta Sesa, while being glorified by the residents of janaloka.

- The Lord has many expansions of his cit-śakti starting with Vimalā. The fifth śakti is called Yogā.
- She takes the form of Nidrā or sleep.
- The Lord's eyes are closed by his śakti Yogā in the form of Nidrā. Janālayaiḥ means the sages of Janaloka.
- [Note: The sixteen energies are described by the Vaiṣṇavas according to the scriptures. The sixteen principle śaktis are śrī, bhū, kīrti, ilā, līlā, kānti, vidhyā, (seven) and nine others starting with vimalā.
- Vimalā and others will be listed in the description of Mahā-vaikuṅṭha. They are vimalā, utkarṣiṇī, jñānā, kriyā, yogā, prahvī, satyā, īśānā.]

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.33||

evam-vidhair aho-rātraiḥ
kāla-gatyopalakṣitaiḥ
apakṣitam ivāsyāpi
paramāyur vayah-śatam

By such days and nights (**evam-vidhair aho-rātraiḥ**) characterized by movement of time (**kāla-gatyā upalakṣitaiḥ**), even the maximum life of Brahmā (**asya api paramāyuh**) consisting of a hundred years (**vayah-śatam**) comes to an end (**apakṣitam iva**).

Thus, days and nights pass for Brahma also and thus his life also comes to an end.

|| 3.9.18 ||

yasmād bibhemy aham api dviparārdha-dhiṣṇyam
adhyāsitaḥ sakala-loka-namaskṛtaṁ yat
tepe tapo bahu-savo 'varurutsamānas
tasmai namo bhagavate 'dhimakhāya tubhyam

I used to fear time (**yasmād aham bibhemi**), even though I am situated on Brahma-loka (**dviparārdha-dhiṣṇyam adhyāsitaḥ api**), which is offered respects by all planets (**yat sakala-loka-namaskṛtaṁ**) and, desiring to bring time under control (**avarurutsamānah**), I performed many sacrifices (**tepe tapo bahu-savo**). Now, in pure bhakti, I offer my respects to the Supreme Lord (**tasmai namo bhagavate**), controller of sacrifices (**adhimakhāya tubhyam**).

- Even Brahmā, fearing time, giving up enjoyment of material objects, worships the Lord constantly.
- Humans of short life intensely enjoy material objects and do not worship the Lord.
- They must make efforts in bhakti and detachment.
- For that reason, it is necessary to describe the nature of time.

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.34||

yad ardham āyusas tasya
parārdham abhidhīyate
pūrvah parārdho 'pakrānto
hy aparo 'dya pravartate

A half of Brahmā's life is called a parardha (**yad ardham āyusas tasya parārdham abhidhīyate**). The first parardha has passed (**pūrvah parārdho apakrāntah**) and the second parardha has begun at present (**hy aparo adya pravartate**).

50 years of Brahma's life is called a Parardha. The first Parardha is over and the second has begun.

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.35||

pūrvasyādau parārdhasya
brāhmo nāma mahān abhūt
kalpo yatrābhavad brahmā
śabda-brahmeti yaṁ viduḥ

In the beginning of the first half of Brahma's life (**pūrvasyādau parārdhasya**) there was a millennium called brāhma kalpa (**brāhmo nāma mahān kalpah abhūt**), wherein Lord Brahma appeared along with the Vedas (**yatra abhavat brahmā śabda-brahmeti yaṁ viduḥ**).

The first day in the first half of Brahma is called the Brahma Kalpa, during which Brahma appears along with the 4 vedas.

- As described in the Prabhāsa-khaṇḍa, there are thirty days starting with the waxing pratipat-tithi and ending with the dark moon tithi, with names starting with Śveta-varāha-kalpa and ending with Pitṛ-kalpa.
- This makes one month of Brahmā.
- These months are repeated twelve times to make one year.
- Fifty of those years is called a parardha.
- The first day in the first parardha is called Brahma-kalpa or Śveta-vārāha-kalpa.
- It is called Brāhma-kalpa because it is Brahmā's birth tithi. It is described in the astronomical scriptures as occurring on the śukla-pratipat of Caitra month.

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.36||

**tasyaiva cānte kalpo 'bhūd
yaṁ pādmam abhicaḡate
yad dharer nābhi-sarasa
āsīl loka-saroruham**

The kalpa at the end of the first half of Brahmā's life is called the Pādma-kalpa (**tasya eva ca ante kalpah abhūd yaṁ pādmam abhicaḡate**) because the planets took the form of a lotus in the navel lake of the Lord (**yad harer nābhi-sarasa āsīd loka-saroruham**).

Padma Kalpa is the Last day of the first half of Brahma during which the Lotus comes from the Navel of Garbodhakasayi visnu.

- Pādma-kalpa.
- The reason why it is called Pādmakalpa is given.
- It is understood from this that in every kalpa a lotus which forms all the planets does not appear.
- It appears only sometimes.

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.37||

ayaṁ tu kathitaḥ kalpo
dvitīyasyāpi bhārata
vārāha iti vikhyāto
yatrāsīc chūkarō hariḥ

O Vidura (**bhārata**)! The first day in the second half of Brahmā's life (**ayaṁ tu kathitaḥ dvitīyasyāpi kalpah**) is called Vārāha-kalpa (**vārāha iti vikhyāto**), during which Varāha appeared (**yatra āsīt chūkarō hariḥ**).

First day of the second half of Brahma is called the Varaha Kalpa during which Varaha dev appears.

- This verse describes the first day in the fifty-first year of Brahmā, in the second half of his life.
- The Pādma-kalpa (the previous day) is described in verses such as pādman kalpam atho śṛṇu (SB 2.10.47) and the verses after udāplutaṁ viśvam idaṁ (SB 3.8.10), with a description of a lotus in one ocean of water.
- The appearance of one Brahmā with no one else present is described in vilokya tatrānyad apaśyamānaḥ (SB 2.9.7)
- Thus, Brahmā did not see Sanaka and the others who live for the whole of Brahmā's life.

- Because of these verses, some have another explanation for the Pādma-kalpa.
- They say that Mahaloka, Janaloka, Tapoloka and Satyloka, which remain without being destroyed until the end of the second half of his life, become covered with water at the end of the first half of Brahmā's life (thus no planets or the great sages are visible to Brahmā on the first day of his fifty-first year).
- Those who live till the end of Brahmā's life on those planets enter into Nārāyaṇa along with Brahmā during the night at the end of the first half of Brahmā's life.

- They say that the first day in the second half of Brahmā's life (when he appears on a lotus and sees no planets and no sages) is called Śveta-vārāha or Pādma-kalpa.
- As well, in the next chapter it will be explained that Sanaka, Marīci and others appeared from Brahmā.
- This is similar to the Brahmā-kalpa.
- That day cannot be called Brāhma-kalpa since it comes after this description of the Pādma-kalpa.

- In verse 36 of this chapter, describing Pādma-kalpa, the word ante can mean “at the end of the first day.” Thus the second day after Brahmā’s birth could be called the Pādma-kalpa.
- Ayam tu in this verse then means that the Pādma-kalpa is also a name for the Vārāha-kalpa, the first day in the second half of Brahmā’s life.
- It is called Vārāha-kalpa because Varāha avatāra appeared during that kalpa.
- The word api after dvitīyasya indicates that even the first kalpa of Brahmā’s life is called the Pādma-kalpa. This is the explanation of some persons.
- Thus Padma-kalpa can refer to the first or second day of Brahmā’s life, the last day of the fiftieth year of his life, or the first day of his fifty-first year.

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.38||

kālo 'yaṁ dvi-parārdhākhyo
nimeṣa upacaryate
avyākṛtasyānantasya
hy anāder jagad-ātmanah

The span of two parardhas (**kālo ayam dvi-parārdhākhyo**), the life time of Brahmā, is represented by a moment of time for the Supreme Lord (**nimeṣa upacaryate**) who is beyond change (**avyākṛtasya**), without end (**anantasya**) or beginning (**anāder**), and the cause of the universe (**jagad-ātmanah**).

This Dvi-Parardha time is only a nimesa for the Lord

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.39||

kālo 'yaṁ paramāṇv-ādir
dvi-parārdhānta īśvaraḥ
naiveśitum prabhur bhūmna
īśvaro dhāma-māninām

Time is the controller (**kālah ayam īśvaraḥ**), from the duration of a paramāṇu to Brahmā's complete life of two parardhas (**paramāṇv-ādir dvi-parārdhānta**). But time cannot control the Supreme Lord (**na eva īsitum prabhur bhūmna**). Time controls even the inhabitants of Satyaloka (**īśvaraḥ dhāma-māninām**).

Time is the controller of anyone with life spans between Paramanu till Dvi-Parardha. But, this time cannot control the Supreme Lord.

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.40-41||

**vikāraiḥ sahito yuktair
viśeṣādibhir āvṛtaḥ
āṇḍakośo bahir ayam
pañcāśat-koṭi-viśṛtaḥ**

**daśottarādhikair yatra
praviṣṭaḥ paramāṇuvat
lakṣyate 'ntar-gatāś cānye
koṭiśo hy aṇḍa-rāśayah**

Within the pore hole of Mahāviṣṇu, the universe composed of sixteen transformations and eight elements (**vikāraiḥ sahito yuktair**), measuring 500,000,000 yojanas (**pañcāśat-koṭi-viśṛtaḥ**), covered by seven layers of elements (**viśeṣādibhir āvṛtaḥ**) which are ten times thicker than the previous layer (**daśa uttara adhikair**), appears like a paramāṇu (**paramāṇuvat lakṣyate**). Millions of other universes also (**anya koṭiśo hy aṇḍa-rāśayah**), within the Lord's pores (**antar-gatāḥ**), appear small as well.

The universes with 500 crore yojana size look as small as a paramanu when they come out of the bodily pores of Mahavisnu.

Section: SB 3.11.16-42:

Life span of others who
are beyond the kalpa of
Brahma

|| 3.11.42||

**tad āhur akṣaram brahma
sarva-kāraṇa-kāraṇam
viṣṇor dhāma param sākṣāt
puruṣasya mahātmanah**

That body of Mahāviṣṇu (**viṣṇor dhāma param sākṣāt**), the supreme soul (**mahātmanah**), the puruṣa (**puruṣasya**), is said to be the indestructible Brahman (**tad āhur akṣaram brahma**), the cause of all causes (**sarva-kāraṇa-kāraṇam**).

That body of Mahavisnu is non-different from the Brahman, which is the cause of all causes.