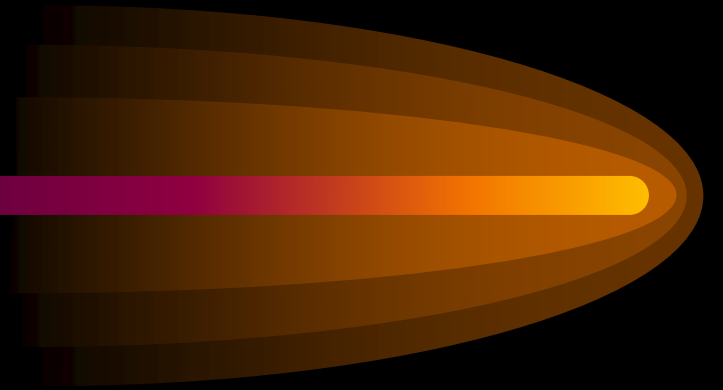


# *Universe and its Substances*



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# *Universe and its Substances*

**Universe is made-up of six eternal and independent substances:**

## **Six Universal Substances (Entity/Dravya)**

- |                   |                             |
|-------------------|-----------------------------|
| <b>1. Jiva</b>    | <b>Soul or Living being</b> |
| <b>2. Pudgal</b>  | <b>Matter</b>               |
| <b>3. Dharma</b>  | <b>Principle of Motion</b>  |
| <b>4. Adharma</b> | <b>Principle of Rest</b>    |
| <b>5. Akasa</b>   | <b>Space</b>                |
| <b>6. Käl</b>     | <b>Time</b>                 |



# Characteristics of a Substance

**Utpäd**

**Origination**

**Vyaya**

**Destruction**

**Dhrauvya**

**Permanence**



# Universe and its Substances

## **Dravya -**

**The Permanent Characteristics / qualities of a Substance is known as Dravya of a Substance.**

## **Paryäya -**

**Every substance continuously going through Origination and Destruction. This is known as Transient Characteristics or Modification of a Substance also known as Paryäya. While going through continuous changes, certain qualities of a substance remains unchanged is known as substance.**

***❖ Dravya and Paryäya are inseparable.***



# Soul - Living Being

**Every Soul is Individual, Independent, and Eternal**

## **Three Types of Souls**

- 1. Free or Liberated Souls (Siddha)**
- 2. Bonded or Worldly Souls (Samsäri)**
- 3. Avyavahär\_räshi Nigod Souls (Virgin souls - not migrated in Samsar)**



# Free or Liberated Soul

- **Known as Siddha or God in Jainism**
- **Possesses Infinite (Perfect) Knowledge, Vision, Power, Bliss**
- **Free from Pain and Pleasure**
- **Free from all Karma**
- **Free from Cycle of Birth and Death**
- **Has No Physical Body**
- **Infinite number**
- **Lives in Moksha**



# Worldly (Samsäri) Soul

- Possesses Mithyätva (ajnan) and Kashäya (vices)
- Possesses Limited Knowledge, Vision, Power, and Conduct
- Feels Pain and Pleasure
- Doer of all Karma (Actions)
- Recipient of Fruits of Karma
- Covered with Karma (Matter)
- Possesses Physical Body (Matter)
- Wonders in a Cycle of Birth and Death
- Contraction and Expansion
- Infinite Number
- Capable of becoming Free/Liberated



# Worldly Souls (Continued)

- **Possesses One to Five senses**  
(association with Matter/Karma)

<b>1.</b>	<b>Touch</b>	<b>One Sense</b>
<b>2.</b>	<b>Taste</b>	<b>Two senses</b>
<b>3.</b>	<b>Smell</b>	<b>Three Senses</b>
<b>4.</b>	<b>Sight</b>	<b>Four Senses</b>
<b>5.</b>	<b>Hearing</b>	<b>Five Senses</b>





# One Sense Soul

**One Sense Soul is called Ekendria**

- **Earth as body - Prithvikaya**
- **Water as body - Apakaya**
- **Fire as body - Agnikaya**
- **Air as body - Vayukaya**
- **Plant as body - Vanaspatikaya**



# One Sense Soul (Continued)

**Vanaspatikaya (Plant as body) - two types**

## **1) Pratyek Vanaspatikaya**

- **Above ground vegetables, fruits, beans, etc.**
- **Each plant has innumerable cells**
- **Each cell is occupied by one soul**
- **Hence such Plant has Innumerable souls**



# One Sense Soul (Continued)

## 2) Sadharan Vanaspatikaya

(Nigod or Kandmul ... Potatoes, Onions, Carrots etc..)

- Under ground vegetables
- Each plant has Innumerable cells
- Each cell is shared by Infinite souls
- Hence such Plant has Infinite souls



# Two to Five Sense Souls

- **Two Senses**
    - worms, leeches
  - **Three Senses**
    - ants, lice
  - **Four Senses**
    - flies, bees
  - **Five Senses**
    - animals, birds, human, heavenly, hellish etc.
- **Beindriya**
- **Treindriya**
- **Chaurendriya**
- **Panchendriya**



# Five Sense Souls

- **Five sense beings (Panchendriya) are of two types**
  1. **Living beings without Mind**
    - **Cannot attain Samyaktva**
  2. **Living beings with Mind**
    - **Can attain Samyaktva (Removal Mithyätva)**
      - **Animals, Heavenly, and Hellish being cannot attain proper Conduct and hence cannot attain Liberation**
      - **Human beings can attain proper Conduct and hence Liberation**



# Matter (Pudgal)

- **Non-living Substance**
- **No Consciousness, No Knowledge**
- **Infinite Number**
- **Possesses Body**
- **Possesses Senses**
  - **Touch, Taste, Smell, Sight, and Hearing**
- **Color**
- **Occupies Space**
- **Skandha, Skandha-desa, Skandha-pradesa, Paramanu (Atom)**



# Eight Vargana (Matters)

All matters are classified into eight categories

- **Audārika Varganā**      **Physical body**
- **Vaikriya Varganā**      **Vaikriya body - small or large**
- **Āhāraka Varganā**      **Āhāraka body - small in size**
- **Tejas Varganā**      **Tejas body - heat, digestion**
- **Karman Varganā**      **Karmic or Causal body**
- **Speech Varganā**      **Provides speech**
- **Breathing Varganā**      **Provides breathing**
- **Mind Varganā**      **Provides mind for thinking**



# Five Bodies

## Matter composes five different bodies

- **Audärika body** - Physical body
  - Human and Tiryancha possess this body
- **Vaikriya body** - can be converted into small or large
  - Heavenly and Hellish beings possess this body
- **Ähäraka body** - very small in size
  - Only spiritually advanced monks possess this body
- **Tejas body** - performs heat, digestion functions
  - Every soul possesses this body
- **Karman body** - Karmic or Causal body
  - Every worldly soul possesses this body





# Karma

**Karma is a matter (Pudgal) and hence it possesses all characteristics of matter**

- **No consciousness / knowledge**
- **Possesses Body**
- **Occupies Space**
- **Very fine particles (smallest particle in the universe)**
- **Can not be seen/feel/verified**
- **Entire Universe is filled with Karma Particles**



# Principle of Motion (Dharma) and Principle of Rest (Adharma)

- **Non-living Substance**
- **No Consciousness**
- **One and Whole**
- **No Senses, Color, and Body**
- **Exist in Lokakas.**
- **Dharma helps - Motion of Soul/Matter**
- **Adharma helps - to Rest Soul and Matter**



# Space (Akasa)

- Space (Akasa)
- Non-living Substance
- No Consciousness
- Everywhere (infinite)
- One and Whole
- Self Supported
- Provides room/space to All Entities
  - Soul, Matter, Dharma, Adharma, and Time
- No Form, Color, Touch, Taste, Smell, Sight, or Hear
- Lokakas - Dharma /Adharma Exist
- Alokakas - Infinite Empty Space



# Yojan and Rajlok Measurement

## ▪ Yojan

- 1 Danda or Bow = 6 feet
- 2000 Danda or Bow = 1 Kosha
- 4 Kosha = 1 Yojan (@ 9.0 miles)
  - Another book gives different measurement
- 1 Dhanu = 6 feet
- 4000 Dhanu = 1 Yojan (@4.5 miles)
- 1000 Yojans = 1 Mahayojan

## ▪ Rajlok or Rajju

–The distance traveled in six months by a ball of iron weighing 1,000 bhar (1000 tolas or 25 lb.) let fall freely from heaven (Indralok) or

–A distance traveled by a deva (heavenly being) in six months at a rate of 2,057,152 Yojan in one Samay (Samay = unit of time = @ 1/4 second)

= @ 1.15 x 10E21 miles



# Universe (Lokakas)

- **Total Height** = 14 Rajju
- **Upper world Height** = 7 Rajju
- **Middle world**
  - **Width** = 1 Rajju
  - **Height** = 1800 Yojan
    - \*900 Yojan up and 900 Yojan down from surface
- **Lower world Height** = 7 Rajju
- **Loka Volume** = 343 Cubic Rajju (Digambar)
- **Loka Volume** = 239 Cubic Rajju (Swetambar)



# Time (Kal)

- **One View -**
  - **Imaginary thing**
  - **No real existence**
- **Another view -**
  - **Real existence**
  - **Innumerable time atoms**
- **Measures changes of Soul and Matter**
- **Not a cause of changes**



# Time (Samay or Kal)

**Smallest indivisible portion of Time  
is called one Samay**

- Innumerable Samaya = One Avali
- 256 Avali = One Kshullak\_bhav
- Approx 17.5 Kshullak\_bhav = One Breath (inhale + exhale)
- 3773 Breaths = One Muhurat (48 minutes)
- 16,777,216 Avalis = One Muhurat
- 2 Ghadi = One Muhurat
- One Muhurat = 48 minutes
- 30 Muhurat = One Day
- 15 Days = One Fortnight
- 2 Fortnights = One Month



# Time (Samaya) Continued

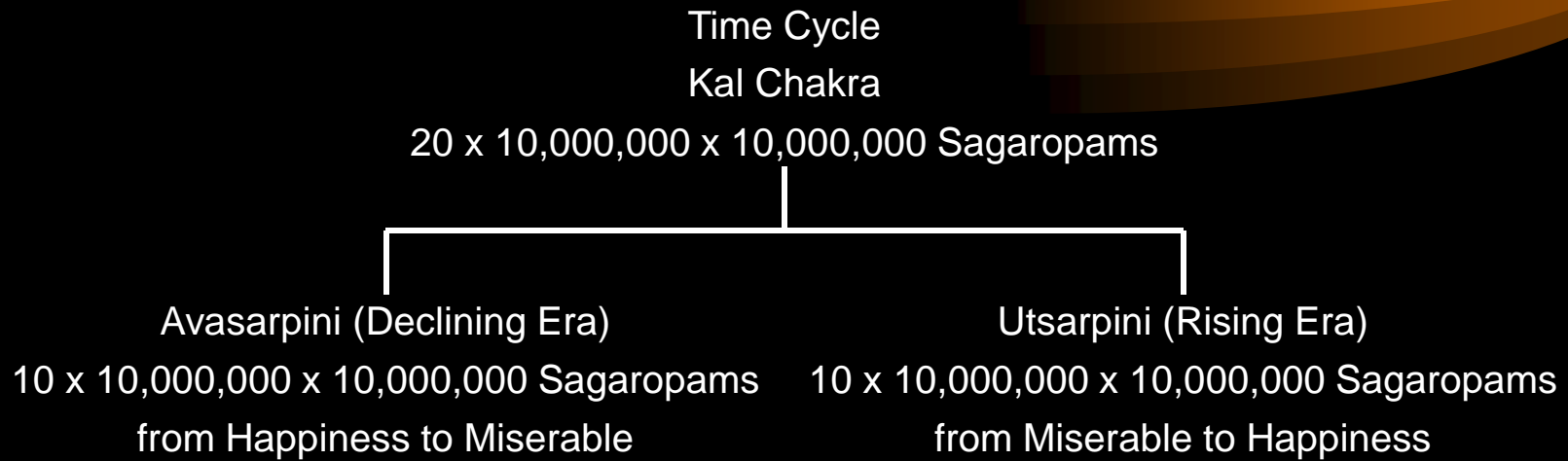
- **12 Months** = **One Year**
- **5 Years** = **One Yuga**
- **8,400,000 x 8,400,000 years** = **One Purva (70,560,000,000,000 Years)**
- **Innumerable Years** = **One Palyopama**
- **10 x 10,000,000 x 10,000,000 Palyopama**  
= **One Sagaropama**
- **20 x 10,000,000 x 10,000,000 Sagaropama**  
= **One Time Cycle**
- **One Palyopama**

**The time required to empty Sixty Four cubic Gau (512 cubic miles) deep well completely filled with hairs of a seven day old newly born baby and one hair is removed every 100 years.**





# Time Cycle



Time is a continuous Cycle of Decline and Rise Era

Declining Era (Avasarpini) Time Cycle

Human virtues, Natural conditions decline over time

Rising Era (Utsarpini) Time Cycle

Human virtues, Natural conditions improve over time



# Time Cycle (continued)

## Six parts of Declining Era (Avasarpini) Time Cycle

1. Happy\_happy  $4 \times 10^{14}$  Sagaropama
2. Happy  $3 \times 10^{14}$  Sagaropama
3. Happy\_unhappy  $2 \times 10^{14}$  Sagaropama
4. Unhappy\_happy  $1 \times 10^{14}$  Sagaropama - 42000 years
5. Unhappy 21000 years (present 2500 years)
6. Unhappy\_unhappy 21000 years



# Time Cycle (continued)

## Six parts of Rising Era (Utsarpini) Time Cycle

- |                    |                                    |
|--------------------|------------------------------------|
| 1. Unhappy_unhappy | 21000 years                        |
| 2. Unhappy         | 21000 years                        |
| 3. Unhappy_happy   | 1 x 10E14 Sagaropama - 42000 years |
| 4. Happy_unhappy   | 2 x 10E14 Sagaropama               |
| 5. Happy           | 3 x 10E14 Sagaropama               |
| 6. Happy_happy     | 4 x 10E14 Sagaropama               |