

BOOK 4: MAHABHOOTA: ROLE IN HUMAN ANATOMY, AND RELATION TO TRIDOSHA

1. Introduction and Definition of Bhoota and MahaBhoota

The concept of five elements is the foundation of Ayurveda to understand its normal structure, working, [disease](#) causation and [health](#).

Ayurveda believes that everything in this universe is made up of five basic elements. These five elements are [earth](#), [water](#), fire, [air](#) and [space](#).

These are the minute-most elements, which constitute all living and non-living matters. Everything in this universe - [Tridosha](#), [mind](#), all six tastes, human body, drugs, herbs, living or non living - are made of these five basic elements. Every matter contains all of these five elements. No matter can ever be made up of four elements and there is no sixth element.

As per the predominance of either [earth](#), [water](#), fire, [air](#) and [space](#), the matter acquires its address as earthy, fiery, watery, etc. Different concentrations and qualities of these five elements in a given matter determine its properties. One explanation to this ratio is that the predominant Mahabhoota comprises 50% of the given matter and rest of 50% comes from the other four Mahabhoota.

Ayurveda believes in governance of the body functioning by [Tridosha](#): Vata ([Space](#) / [air](#)), Pitta (fire) and Kapha ([water](#) / [earth](#)). These are three basic energies or life forces that are the biological derivatives of the five elements and they control all the functions and structure of the body or its existence as a whole. [Tridosha](#) only exist in living beings.

1.1. Video: Philosophy of Panchamahabhoota

- Watch this video on **Philosophy of [Panchamahabhoota](#)**
https://youtu.be/9y6ig1fb_8M

1.2 Panchamahabhoota create Tridosha

- Watch this video: https://www.youtube.com/watch?v=gNMBi1SB_EY

2. Evolution of Panchamahabhoota

Mahabhoota is the smallest indivisible part of any matter which is further made of five Tanmatras. Tan means subtle and **matra** means elements. The Tanmatras, the subtle elements, are the objects of the five senses. The five Tanmatras are sound, touch, form, taste, and odour; the five senses are hearing, touch, vision, taste and smell. The Tanmatras are the ways in which the objective world is sensed. The five elements have functional integrity with the five sensory organs, which allows us to perceive the external environment. Their presence is the reason for the existence of the senses themselves."

"The Tanmatras form the basis for the expression of the objective universe and the entire universe exists on this base. It is this energy that gives rise to the objective five elements. Each element is related primarily to one Tanmatras but will contain a portion of the others as well.

- According to this principle of evolution, **Space** Mahabhoota is created itself in the beginning of universe from sound Tanmatra. By the term beginning here, Ayurveda states as soon as Triguna are set out of balance. It is subtle and light. Sound is the inherent quality of **Space**.
- Vayu (**Air**) is born out of **Space**. Quality of **Space** i.e. Shabda is also passed in Vayu with its own quality of Touch.
- Likewise **Agni** (Fire) has qualities of Sound, Touch with its own Vision.
- Jala Mahabhoota has qualities of Sound, Touch, Vision with its own quality of Taste.
- And at last Prithvi (**Earth**) has all five qualities i.e. Shabda, Sparsha, Roopa, **Rasa** and Gandha (Smell).
- **Akasha Mahabhoota** is the **space** without which matter cannot exist. Its main sense attribute is Sound and its main property is Non-resistance.

- **Vayu Mahabhoota** evolves from **Akasha Mahabhoota**. Touch (Sparsha) is its chief sense attribute and as it is evolved from Akasha it also inherits attribute of sound (Shabda). Mobility is its chief property.
- **Agni Mahabhoota** evolves next from **Vayu Mahabhoota**. The main sense attribute of **Agni** is Vision (Roopa) and the chief property is heat. It also inherits the sense attributes of sound(Shabda) and touch (Sparsha) from the Akasha and **Vayu Mahabhoota** respectively.
- The next Mahabhoota to evolve from **Agni Mahabhoota** is Jala Mahabhoota. Taste (**Rasa**) is its main sense attribute and liquefaction is the chief property, along with that inherited from earlier Mahabhoota. The last to evolve is Prithvi Mahabhoota. Roughness is the chief property and Smell (Gandha) is the main sense of this Mahabhoota besides properties inherited from the earlier ones.

Mahabhoota/Element	Chief Sense attribute	Chief Property	Triguna
Space / Akasha	Shabda/ Sound	Non Resistance	Satva
Air / Vayu	Shabda/ Sound , Sparsha / Touch	Mobility	Rajas
Fire / Agni	Shabda/ Sound , Sparsha / Touch, Roopa/ Vision	Heat	Satva- Rajas
Water /Jala	Shabda/ Sound , Sparsha/ Touch, Roopa/ Vision, Rasa / Taste	Liquefaction.	Satva- Tamas
Earth / Prithvi	Shabda/ Sound , Sparsha / Touch, Roopa/ Vision, Rasa / Taste, Gandha / Smell	Roughness	Tamas

3. More on the MahaBhoota

All the body channels, pores or emptiness symbolizes [Space](#).

- [Air](#) is mobile and dynamic. This Mahabhoota [Air](#) is different from atmospheric [air](#) around us. The [air](#) we breathe is a gross matter made of all five Mahabhoota & is not the single Mahabhoota [Air](#). A single Mahabhoota cannot compose any matter & cannot be felt or perceived in any way. Conceptually anything that moves or transported does so because of this Mahabhoota. In living beings this Mahabhoota is a major constituent of Vata [dosha](#) which is responsible for movements like that of motor or sensory nerve impulses, food through G.I.T, movements of the joints etc. Vayu or [air](#) follows Akasha in the hierarchy of creation.
- [Agni](#) / Fire Mahabhoota evolves from [Air](#) Mahabhoota as we can see that fire is promoted by [air](#). [Agni](#) possesses power to transform the state of any substance. In living beings, [Agni Mahabhoota](#) is the origin for biological humour Pitta [dosha](#). It is responsible for biotransformation. This [Agni](#) provides the energy required for all activities in our body. Energy can neither be created nor be destroyed, but it can be converted from one form to another. We derive energy from the food we eat. Biological [Agni](#) transforms the energy in the food to the energy which can be utilized by our cells. The vitamins, minerals, carbohydrates, fats etc. we consume, are bio transformed by this [Agni](#) to the substances that can be utilized by our body. All the activities in body are performed smoothly as long as this [Agni](#) is in balance. Any disturbance in this [Agni](#) causes imbalance in the homeostasis and disturbs functioning.
- Evolution of [Water](#) Mahabhoota follows that of [Agni Mahabhoota](#) as fire liquefies most matters. Sense of taste is its chief sense attribute and liquefaction is the main property. [Water](#) symbolizes the liquid state. But again, even container full [water](#) does not contain the single Mahabhoota [Water](#) but contains all the five elements! Such a container can be said to be filled up with a gross matter, [water](#). The main function of this Mahabhoota is cohesion & attachment. [Water](#) Mahabhoota is the main constituent of the biological humour Kapha [dosha](#). Blood, lymph and other fluids bringing energy, carrying away

wastes, regulating temperature, increasing immunity and carrying hormones from one area to another.

- **Earth** represents solid state of matter. It symbolizes stability, permanence and rigidity. In our body, bones, teeth, cells and tissue etc. represent **Earth** element. This is last in the series to evolve. Sense of smell is its main sense attribute and Roughness is its basic property.

These five elements are the basic building blocks of all the matter. They are combined in an infinite variety of relative proportions such that each form of matter is unique. Each element has a variety of attributes.

4. Atomicity of Elements

According to Ayurveda, the Elements **Earth**, **Water**, Energy, Atmosphere and **Mind** are composed of indivisible particles called 'Anu'. In other Words, these elements are considered to be corpuscular. The Elements **Space**, **Time** and **Direction** are continuous and infinite. The structure of the Universe in view of Ayurveda is in conformity with the ideas of the Modern Science according to which the Universe consists of matter in its three forms - Solids, Liquids and Gases and Energy.

A single atom is, in a way, a combination of these five elements- the **earth** element gives structure and mass to neutrons and protons in the atom. The **water** element is represented in the cohesion among protons & neutrons being bound together in the centre. The electric charges of positive at protons & negative at electrons symbolize the fire element. The non-stop movement of electrons represents **Air** element as **Vayu Mahabhoota** is responsible for movement. A certain gap between the electrons and the centre symbolizes **Space** element. In the case of a complex, multi-cellular organism as human being , spaces within the body (mouth, nostrils, abdomen, cells etc.) denotes the **space** element; the gases and the impulses or movements of any sort denote the **air** element; The functioning of enzymes (intelligence, digestive system, metabolism) denotes the fire element; All body fluids (as plasma, blood, saliva, digestive juices) denotes the **water** element; Solid structure of the body (bones, teeth, flesh, hair etc.) denotes the **earth** element.

5. Elemental Theory of Ayurveda

Ayurveda regards Human life as an epitome of the Universe and it is carved out of the Universal elements which closely knit both together. This is the basis of the Ayurvedic theory of 'Five basic Elements' or '[Panchamahabhoota](#) Siddhanta' which is the foundation of Ayurvedic Philosophy. According to Ayurveda, this Universe is made up of nine Causal Elements. They are [Earth](#), [Water](#), Energy, [Air](#), [Space](#), [Direction](#), [Time](#), [Mind](#) and [Soul](#). Out of these, the first seven elements are materials while [mind](#) and [soul](#) pertain to the life. These nine elements are causative factors for the creation of the whole Animate and Inanimate kingdom of the universe. Out of these Nine, the five basic elements namely [Earth](#), [Water](#), Fire, [Air](#) and [Space](#) take active part in the creation of all inanimate objects. The same five elements together with [Soul](#) and [Mind](#) participate in the creation of all Animates - from Microbes to the Man.

6. Causal Theory of 9 Padartha

A discussion on nine Causal Matters is as follow-

1. [EARTH](#) - The [Earth](#) element symbolises the basic structure of the World. It is the platform for the life processes in which Ayurveda is mainly interested. It represents Solid State of Matter.
2. [WATER](#) - This element symbolising viscosity is responsible for the easy flow and cohesion properties for binding of any sort. [Water](#) represents the Liquid State of matter.
3. [FIRE / ENERGY](#) - Fire element is attained mainly from the Sun in the form of Heat and Light. This energy transforms the material states of living and non living to create innumerable unique entities from the five elements.
4. [AIR](#) – [Vayu Mahabhoota](#) is the principle of movement. It performs functions of drying up & producing lightness. [Air](#) represents the Gaseous State of matter.
5. [SPACE](#) - This element is like a hollow where all the other elements are situated and interact. This represents the emptiness, lightness, channel lumen, spaces within each entity; may be a cell or inside a hard rock.

6. **DIRECTION** - This element gives the boundaries to the [space](#). According to Shatapatha Brahmana Text, 'the world is made stable by Directions'. Ayurveda regards 'Dasha Dishas' or Ten Directions' to make the [space](#) balanced. These are North, East, South, West, NE, NW, SE, SW, Up and Down.
7. **TIME** - It is the element which determines Past, Present and Future. It controls the Evolution of Life and Universe.
8. **MIND**- This is the life element. One is guided in worldly actions & attachments through this [mind](#) only & a judicious application keeps one at peace & happiness & vice versa. Most human beings become enslaved by the corruption of [mind](#), leading to vices like anger, greed, jealousy etc. Getting the [mind](#) rid off such evils lays foundation towards [Moksha](#).
9. **SOUL** is Psyche. This is believed to be the cause behind the cycles of birth & rebirth. One has to settle the sins & scores of earlier lives by taking rebirth & paying in different forms of sufferings. Once the [soul](#), in a way, becomes debt-free, one attains [Moksha](#) & gets free from this cycle.

7. Practical Utility of Panchamahabhoota

There is a great deal of clinical practicality in the principle of [Panchamahabhoota](#); it does not confine to the elementary theory & understanding of Ayurveda.

More important of such practical applications are -

1. Panchabhautik Therapy
2. Application of Bhootagni Principle

7.1. Panchabhautik Therapy

Of late, many scholars are coming up with a concept as concrete therapeutically as [Tridosha](#) balancing, called Panchabhautik Therapy.

The classical Ayurvedic medicine is based on [Tridosha](#) theory. Each of these three humours, as with all other things found in the nature, are formed from the five general elements known as [Panchamahabhoota](#).

The equilibrium of these five elements in the body denotes [health](#) while their imbalance or disturbance denotes [disease](#). Panchabhautik therapy is a branch of Ayurveda which bases the analysis and treatment based upon this principle.

The principle of analysis and treatment is as follows-

- To assess the Panchabhautik constitution of the patient.
- To find out the exact cause & symptoms of the [disease](#) in terms of Panchabhautik imbalance.
- To treat the Panchabhautik imbalance, using food and herbal / mineral / animal origin products as per their Panchabhautik composition.
- To ascertain the Panchabhautik balance and stabilize it.

Since the human body or the nature, everything is created from the [Panchamahabhoota](#), Ayurveda considers all substances found in the nature as medicine; provided that it is homogenous & compatible to the patient, is used for specific indications and with appropriate formulations. Therefore, it utilizes a wide range of materia medica mostly natural products viz. herbs, minerals, animal products etc. They are used for indications of deficiencies or excess of [Panchamahabhoota](#) in different conditions of [health](#) and [disease](#) in order to restore the state of balance.

7.2. Bhootagni Principle

Another clinical application of the [Panchamahabhoota](#) is judicious understanding & use of Bhootagni. This important principle is relatively ignored as compared to other popular concepts.

There are 13 types of [Agni](#) (fire / Metabolism) in human body. These are 1 type of [Jatharagni](#) (Digestive juices), 7 types of Dhatawagni (Tissue and cellular metabolism) and five

types of Bhootagni as there are Five Mahabhoota. Thus, we have Akasha Bhootagni, Vayu Bhootagni, Tej Bhootagni, Jala Bhootagni and Prithvi Bhootagni. These five [Agnis](#) decide what can we eat & what not. The explanation is that as all the food / medicines / herbs are made of [Panchamahabhoota](#), the respective Bhootagni, along with [Jatharagni](#) in the human body disintegrates the ingested Mahabhoota & converts this into biological Mahabhoota so that body can now process the same with [Dhatu Agni](#) & nourish the respective Mahabhoota in the cells & tissues for normal anatomical development & physiological activities. If the Mahabhoota is not compatible, it will not be worked upon properly by the respective Bhootagni, becoming inaccessible by [Jatharagni](#), the digestion / assimilation of that Mahabhoota getting difficult & can cause diseases.

The practical application of this information is in experiencing & repeating what is good to eat & avoiding what does not comfort our body. One should not, for mere sake of taste, convenience, conventions or company, repeat to consume what one felt to be bothering on eating. If a person is unable to digest a particular Mahabhoota in one particular form / food, one should change to another food rich in same Mahabhoota and should take some [Agni](#) enhancing herbs as Trikatu, cumin, ajowan etc.

8. Summary: Microcosm--Macrocosm theory

'Yatah pinde tatah brahmande Yatah brahmande tatah pinde-' Charaka [Shareera](#) Stahna

Ayurvedic emphasises that man is basically a representation, miniature of the universe. It uses the theory of five elements called [Panchamahabhoota](#) to point out the similarities between the man and universe.

Ayurveda explains that everything in creation is made up of five elements ([Panchamahabhoota](#)) namely [space](#), [air](#), fire, [water](#) and [earth](#). According to Ayurveda the same five elements make up the human body too.

It should be noted that the five elements have both gross and subtle aspects. By [earth](#) it not only means a solid structure like a bone only but also the quality of strength and mental composure.

In the human body [earth](#) is represented by the solid matter like bones, teeth, nails etc. modern science has shown that human body consists of 60 % of [water](#) & the principle of cohesion, attachment & softness comes from [Water](#) element only. There is [space](#) inside the body cavities. [Air](#) permeates all tissues in the form of gases and governs all the movement, physical or mental thoughts, along with representing the nervous system. Fire is represented by the activity in the nervous system and various chemical processes of metabolism and digestion.