

Unit 4

1. What are the four orders in nature? Briefly explain them.

If we look around, everything that we see can be put into one of the following four 'orders'.

- Material Order (padārtha avasthā*) – e.g. soil, water, air, etc.
- Plant/Bio Order (prāṇ.a avasthā*) – e.g. grass, plants, trees, flowers, fruits, etc.
- Animal Order (jīva avasthā*) – e.g. Animals and Birds.
- Human (Knowledge) Order (gyāna avasthā*) – Human Beings.

The big land mass of the continents, gigantic water bodies like ocean and seas, mountains and rivers, the atmosphere above, the heaps of metals and mineral below, the dense gases & fossil fuels deep below the surface of the earth – all fall into the Material Order or padārtha avasthā. In fact, if we look around beyond the earth, the material order is visible even in the form of stars, planets, moons and several astronomical bodies.

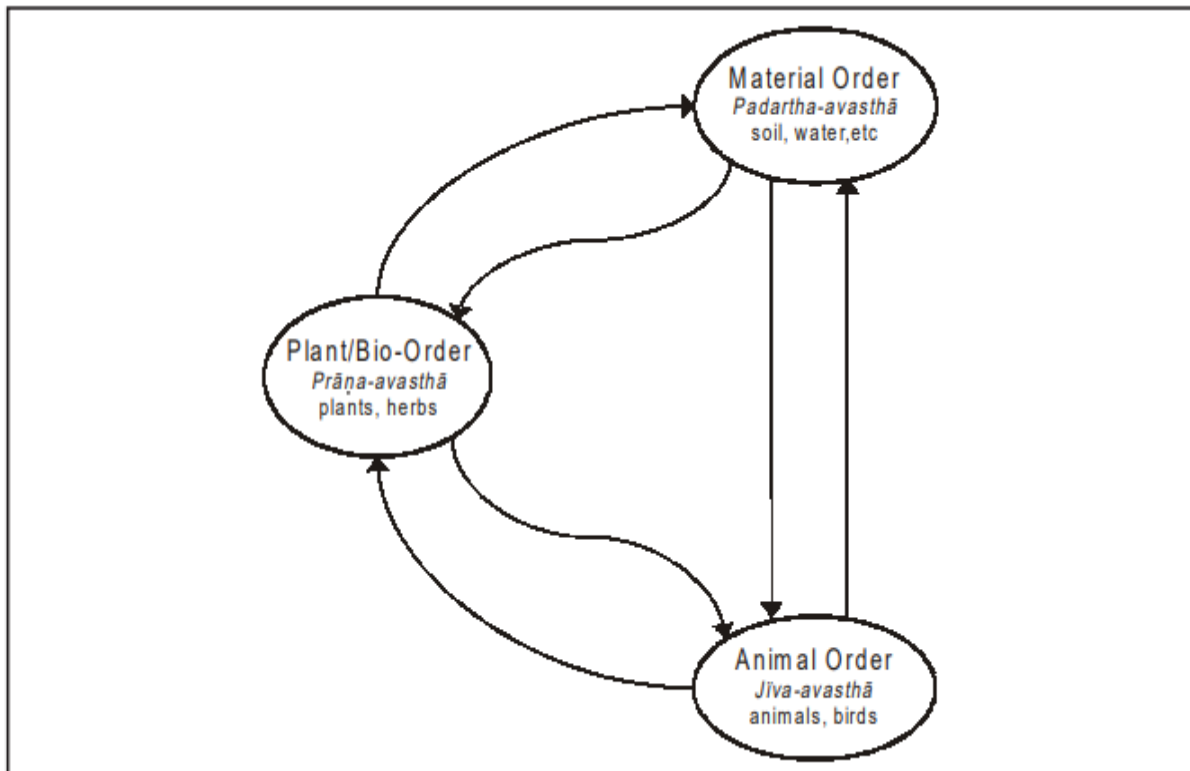
Our land mass is covered with grass and small shrubs and they form the lining on the entire soil. Shrubs, plants, and trees form huge forests along with the flora in the ocean. All of this is the plant/bio order or prāṇ.a avasthā and it is the next big order on our planet. (The material order is far greater in quantity compared to the plant/bio order)

Animals and birds form the third largest order and we call them the Animal Order or jīva avasthā. Here again, we see that the plant/bio-order is far greater in quantity than the animal order.

Humans are the smallest order and they are referred to as Human Order or gyāna avasthā. Animals are far greater in quantity as compared to the human order.

Each one of us can recognize all these four orders around ourselves and see that together these four orders comprise of all the units that we see and understand around us.

Let us look at the first three orders namely the Material, Plant/Bio (pranic) and Animal Order. We can easily see that they are interconnected. Each order is connected to each other order. And the relationship between these orders is in such a way that they all fulfil each other and coexist with each other.



Material Order and Plant/Bio-Order

The Material Order provides the nutrients to the Plant/Bio-Order in the form of soil, minerals,

etc while the Plant/Bio-Order decays and forms more nutrient, thus enriching the soil. The Plant/Bio-Order also decays to substances like oil and coal, which are stored deep within the earth as protection against the heat from the molten core inside the earth as well as the heat from the sun (today, this is the material we are removing and using as fuel!). Plants help move the nutrients through the various layers of the soil. The roots of the plants hold the soil together and prevent the soil from erosion. Plants produce oxygen/ carbon dioxide and thus help in the movement of the Material Order. Thus Pranic order and Material Order, naturally exist in a relationship of mutual fulfilment with each other. They also co-exist, they don't deny the other. There is a mutual interdependency and co-existence we can see here.

Material Order, Plant/Bio Order and Animal Order

The Material Order provides the basis for movement of all animals, birds and fishes. Water, Oxygen and other gases are necessities for both plants and animals. At the same time, the Animal Order helps enrich the soil with its excreta and this excreta helps the plants with nutrients. The Plant/Bio Order provides food for animals, birds and fishes. The Animal Order helps in pollination of the flowers of the Pranic order. The relationship across all three orders is – naturally one of mutual fulfilment. None of these orders denies the other.

Material Order, Pranic Order, Animal Order and Human Order

It is clear that the above mentioned three orders are fulfilling to each other. When we look at the connectedness with human beings, we find that each of these orders is fulfilling to the human order. This we can verify looking at the multiple uses we are drawing out of these entities. We humans also have a natural acceptance to be mutually fulfilling to these three orders. However, we are not able to ensure this mutual fulfilment. We are dependent on the material order for soil and minerals and metals, but only end up polluting the soil and depleting the fossil fuels; we are dependent on plants for our food and holding together the larger ecosystem, but we have destroyed forests and destroyed multiple species of plants and herbs; we are dependent on animals to carry out our production and transportation activities, but have made many species of animals extinct, and are today known for our cruelty towards animals.

2. Describe the recyclability and self-regulation of nature.

There are several cyclical processes that we can see in nature. For example, the cycle of water, evaporating, condensing and precipitating back to water giving the weather phenomena. The quantity of water on the surface of earth remains conserved by itself, no need for human intervention. You have studied cycles of carbon, oxygen and nitrogen in nature in your school. The cycles keep these materials self-regulated on the earth. Breeds of plants and animals are similarly self-regulated in their environment. In a forest, the growth of trees takes place in a way so that the amount of soil, plants and animals remains conserved. It never happens that the number of trees shoots up and there is lack of soil for the trees! The appropriateness of conditions for growth of both plants and animals are self-regulated in nature keeping the population proportions naturally maintained. You will find that the population of grass, deers and tigers remains such that all can continue. This phenomenon is termed as self-regulation. You will appreciate that in a single breed of animals, the number of males and females generated through procreation is such that the continuity of species is ensured by itself. This happens with humans too, but inhuman practices have led to disproportionate numbers of men and women. Nature exhibits self-regulation in various ways across the plant/bio, animal and human orders, but we humans have disturbed it due to lack of understanding. We seldom see a problem of over-population of a species in nature (some of what we see is man created!), nor do we see any instance of some by-product from nature not being absorbed and becoming a source for pollution (ex: nature does not produce plastic and

foam).

These two characteristics namely, cyclical nature and self-regulation provide us with some clues of the harmony that is in nature. These are visible signs we can see with our eyes, and understand. But, there is also more to nature than meets the 'eye'. This is something we shall explore next.

3. Explain the activities in the four orders of nature. How are the activities in the human order qualitatively -different from those of other three orders?

An activity means something that 'has motion' and/or 'has a result'. The material order is active in multiple ways, and the same with the plant order or animal order or human order. You are sitting in a room. But you are active. You are thinking, desiring, the body has breath running, heart throbbing. The air in the room is blowing. The walls standing constantly also have activity. Isn't it? Yes, it is! The chair in your room is also active. It may not be very visible to our eyes but the chair is still active. We can understand this in the following ways

1. Let's say the chair is made of wood. If you leave the chair at rest, for let's say, 70 years, what would happen? You will say, the wood may decay. It means, the chair has been interacting with the environment. Or, the wood in the chair has been interacting with the environment. If it is interacting with the environment, it means the chair, or the wood is actually active, even though we could not immediately see it with our naked eye. This is one way to understand 'activity' in a chair that is not visibly moving when seen by the naked eye. So, even if something is not visibly moving when seen through our eyes, it does not mean it is not "active".

2. Now, if you take the wood in the chair and place it under a microscope, what would you see? You will see that the wood is actually made up of thousands of smaller particles. If you have a very powerful microscope (also called an electron microscope) you will see that there are many thousands of minute particles in the wood that are all 'active' i.e. they will even be visibly moving, when seen through the microscope.

Thus, we can see that:

Things that we see are "visibly moving", through the naked eye, such as a spinning top, a moving bus, a running man, are active, and

All things that are "visibly stationary", or not moving, are also active: like a stationary chair, and the walls and roof in the house, bus at the stand, etc.

All units around us, including ourselves, are active, all the time. They are interacting with the environment. In the activity, there is a state or configuration and motion simultaneously. This remains all the time.

We often look at units around us as a fixed and a solid 'thing'. We can now see that these things are actually active...each unit is made of hundreds of smaller units...and all these units are active. So, when you walk on the road, its not that the road is stationary! The road is active, very active...made of thousands and thousands of particles that are all throbbing, all active.

Activity in the Material Order: All material things (i.e. units in the material order) can be understood as an activity of 'units' coming together to form a bigger unit. We call this 'Composition'. For example, the

chair is made of smaller pieces of wood. Bigger units can also separate from each other to form smaller units and we call this 'Decomposition'. Like a wooden chair can decay after a few years. Thus any unit in the material order can be understood as an 'activity of Composition/Decomposition'.

Activity in the Plant/Bio Order: The plant order is basically structurally made up of the material order. However, an additional activity of 'respiration' is exhibited by the plant order. For example: we all know that plants 'breathe'. Plants are made up of smaller cells that also 'breathe' or 'pulsate'. So, when we look at all the units that make up the plant/bio order we will find that they can be understood in terms of Composition/Decomposition and Respiration. Not only do plants compose (forming new plants) and decompose (decaying), they are also breathing, or pulsating, which we call Respiration.

Activity in the Animal Order: When we explore the Animal Order, we find two fundamentally different set of activities. One set of activities is the 'physico-chemical' or activity of the body and the other is the 'conscious' activity of the Self.

Body in animals – Physico-chemical activities The body displays the same activities that we see in the plant. The body displays respiration, or breathing, or pulsating, as we call it. We can verify this ourselves quite easily and we can see that the body indeed breathes and also decays. The body is also formed at one point in time and keeps building cells as well, i.e. there is composition in the body. Hence, the activities in the body are the same as that in the plant/bio order, which are: composition/decomposition and respiration. Hence, we say that the body belongs to the plant/bio order.

'I' in animals - conscious activities The activities in 'I' are fundamentally different from those in the Body. We have already seen for ourselves that 'I' is a unit that has the ability or capacity of assuming. Animals make assumptions. If you have a dog, and some stranger comes into the house, the dog may start barking at him. If this person stays at your house for a few months, then the dog stops barking at him, but will continue to bark at other strangers. What has happened here is that the dog's 'assumption' about this person has changed, due to which, the way in which it responds to the person has changed. We call this assuming. Only conscious entities or only 'consciousness' has this faculty of assuming. Plants and stones do not have it. This ability to assume is not present in the plant/bio and material orders.

It is important to note that this consciousness or faculty of assuming is not in the Body. The Body belongs to the plant/bio order, and is physico-chemical in nature. It just responds to physico-chemical inputs. The Body does not 'assume' things. The faculty of assuming exists in distinct entity we have been referring to as 'I' and we also call this 'consciousness'. In animals, we can predominantly see the activity of selection/taste in 'I', the activity at number 5 in the discussion in chapter 6. If a cow is given fodder to eat, it is enough for the cow. The cow does not question how the fodder is grown, and why it grows that way only? If a dog is given food from time to time, it does not bother how the house owner earns? So, we can see that in animals, only the activity of Selection/Taste is predominant. There is hardly any thinking and desiring in animals. Also, animals do not have this need to know (natural acceptance) as we humans.

Activity in the Human Order

We have already seen that human beings are co-existence of a physico-chemical body and a conscious Self, or 'I'. The activities in the human body are similar to that in the animal body; and we have seen this in detail as: composition/decomposition and respiration.

When it comes to consciousness or 'I', however, the human displays more than just an ability to 'select' or make choices as animals do. As humans, each one of us also has desires that we pursue, an ability to think and the ability to make choices. In this Desire, Thought and Selection, we exhibit more activities than any unit in the animal order. As a result, humans are in a separate order than animals. We make assumptions, but also have a need to know, or a will to know. Animals just assume, humans can also 'know' or have the need to know.

Thus, in human beings, 'I' has the activities of Desiring, Thinking, and Selecting/ Tasting, with a possibility or need for Understanding and Realization. Only humans have this need to know and that is why it is called Gyāna Avasthā- the Knowledge Order.

Thus, underlying every entity/unit, there are activities like physical activity, chemical activity or conscious activity ('I') and all units/entities can be understood as one of these activities or co-existence of these activities

4. Explain the holistic perception of harmony at all levels of existence and its importance.

The existence is units in space. Space is the empty area all around. The units are of two types: material (insentient) and conscious (the sentient 'I'). The material units are transformable, and their composition keeps on changing, hence these are gathansheel. The other category of units, the sentient 'I', does not transform and are complete in composition, hence gathanpurna. The material units are changeful (with activities of recognizing and fulfilment only) while the other kinds of units are continuous (with activities of knowing, assuming, recognizing and fulfilment). The material units are available in two orders – material order and pranic order. In the material order, an atom combines with another atom to form a molecule; a molecule similarly forms a molecular structure. Molecular structures are found in two forms: lumps and fluids. Fluids give nutrition to pranic order. In pranic order, the smallest units are plant cells which combine with other cells to form plants, animal bodies and human bodies.

The co-existence of 'I' with the animal body becomes the animal order, and the co-existence of 'I' with the human body becomes the human order. Completion of right understanding in human being is called kriyapurnata and ability to live with complete understanding is called acharanpurnata.

If we look at the left side of the chart, the transformation keeps taking place and the transformation is cyclic in nature. But on the right hand side, the transitions are acyclic. This

implies that what we have understood continues to stay with us. We will never miss it. This is a transition in one direction. This is actually called development (vikas).

So, Existence is in the form of co-existence. It is in Harmony. We don't have to create this harmony, it already exists. We only have to understand it to be in it. This means that having the knowledge of self ('I') gives me the knowledge of humane conduct (how to live in existence, with the four orders). With this knowledge, I can live with humane conduct. This is the pending task we have to complete.

5. Differentiate between units and space. How are units self-organized in space?

We had started our exploration at our innermost level of being – with (our) Self ('I'). Our natural acceptance has been a key mechanism for us to explore the harmony of (our) Self and the harmony with the Body. Exploring further, we discovered that we feel related with others and we experience the feelings (or values) in our relationship. We then saw that this feeling of relationship starts from our family, and then slowly extends to the world family. Beyond humans, we explored the harmony in nature and we discovered that every 'thing' that we can see around us can be understood as a part of one of the four orders of nature namely the material order, plant/bio or pranic order, animal order and the human order.

These four orders are interrelated, in harmony, and our natural acceptance is to live in harmony with these orders. So far, we have been discussing what are called 'units'. We define a unit as something that is limited in size. Like a small blade of human hair to the biggest planets we know of, they are all limited in size, i.e. bounded on six sides. So, all the 'things' we have been studying so far: the human beings, animals, lumps of matter as well as various atoms and molecules, are all 'units'. We can recognize them as such, they are 'countable'. But there is another 'reality' we have not yet studied or explored. This is the space (sūnya, or spelt as shoonya for simplicity). Let us try to understand the significance of this reality in order to complete our study of the whole Existence.

If I ask you a question 'What is between you and the book you are reading right now?' Your answer may be "Nothing". If I now ask you what is between the earth and the sun, your answer may still be 'nothing', or, some of you may say 'empty space' or 'space'. If I ask you where is the earth? Where is the sun? What is the answer? That's space.

Yes, we are talking about space! We normally don't pay attention to this 'reality', because it's not a 'unit'. You can't touch it, smell it. We normally just 'see through it'. But the fact is, because you can't 'touch it' or 'see it' as you would see a unit like your body, your friend, or a piece of rock, doesn't mean it does not exist! Space exists everywhere. Note that space does not just exist between the earth and the sun, but is all around you. It is between you and the book you are reading right now, it is inside you, it's around you. When we start paying attention to it, we can each see that what we call as space or emptiness, is actually everywhere! We don't really generally bother about it (except perhaps in an academic sense in subjects like physics or astronomy), because, space does not seem to play any role in our daily life.

So why are we talking about it here then? Well, we want to understand all levels of our living, and when we go to explore that, it turns out that what we call as 'existence' or 'all that exists', includes space as well. We may think that space has no role in our life, but let us ascertain this impression of ours.

6. Existence = Nature submerged in space" - Elaborate this point.

All the units together constitute nature. All the units of nature exist in space which is an important reality to understand. **Existence is nothing but the nature in space.**

Existence = Exist + Essence, whatever exists.

To be harmony

We define unit as something that is limited in size. Like a small blade of human hair to the biggest planets we know of, they are all limited in size, i.e. bounded on six sides. So, all the 'things' we have been studying so far: the human beings, animals, lumps of matter as well as

various atoms and molecules, are all 'units'. We can recognize them as such, **they are countable**.

But there is another 'reality' called 'space'. We normally don't pay attention to this 'reality', because it's not a 'unit'. We can't 'touch it', smell it. We normally just 'see through it'. But the fact is because we can't 'touch it' or 'see it' as we would see a unit like our body, our friends, or a piece of rock, doesn't mean it does not exist. **Space exists everywhere. Co-existence is a state in which two or more groups are living together while respecting their differences and resolving their conflicts non-violently.** Co-existence has been defined in numerous ways:

1. To exist together (in time or space) and to exist in mutual tolerance.
2. To learn to recognize and live with difference.
3. To have a relationship between persons or groups in which none of the parties is trying to destroy the other.
4. To exist together (in time or place) and to exist in mutual tolerance.

EXISTENCE

Nature (Collection of units)	submerged in	Space (Empty)
Limited		Unlimited
Active		No activity
Energized		Equilibrium energy
Recognizes and fulfils the relation		All reflecting, transparent
Self organized		Self organized is available
Unit		All pervasive
Abundance with diversity		All pervasive
Consciousness (I) – Nirantar		Nitya
Material- Anitya		(Unlimited in space and time)
(Niranatar: Limited in space, Unlimited in time, Anitya: Limited in space and time)		

When we look at the existence around, the first thing we see is space. And then we see the units in space. Between every two units there is a space. **The units exist in space.** If we were to define this, we would say that there are two kinds of realities in existence and these are: space and units (in space). So we say,

Existence = space + units (in space)

Since nature consists of the four orders we have been discussing, we can say,

“Existence = Nature submerged in space”.

Nature = Four orders (Material, Plant/Bio or Pranic, Animal and Human Order)

7. Draw the chart showing in detail, the different categories of units of nature in co-existence in space. What is your role in Existence?

Co-existence of Units in Space: Units in Space

When we look at the existence around, the first thing we see is space. You may not note it, but it is there. And then you see the units in space. Between every two units, there is space. As we saw in the example of book and the reader, the same holds true for every other unit, be it material, or plant, or animal or some human being. The units exist in space. If we were to define this, we would say that there are two kinds of realities in existence and these are: Space and Units (in Space).

So, we say, Existence = Space + Units (in Space).

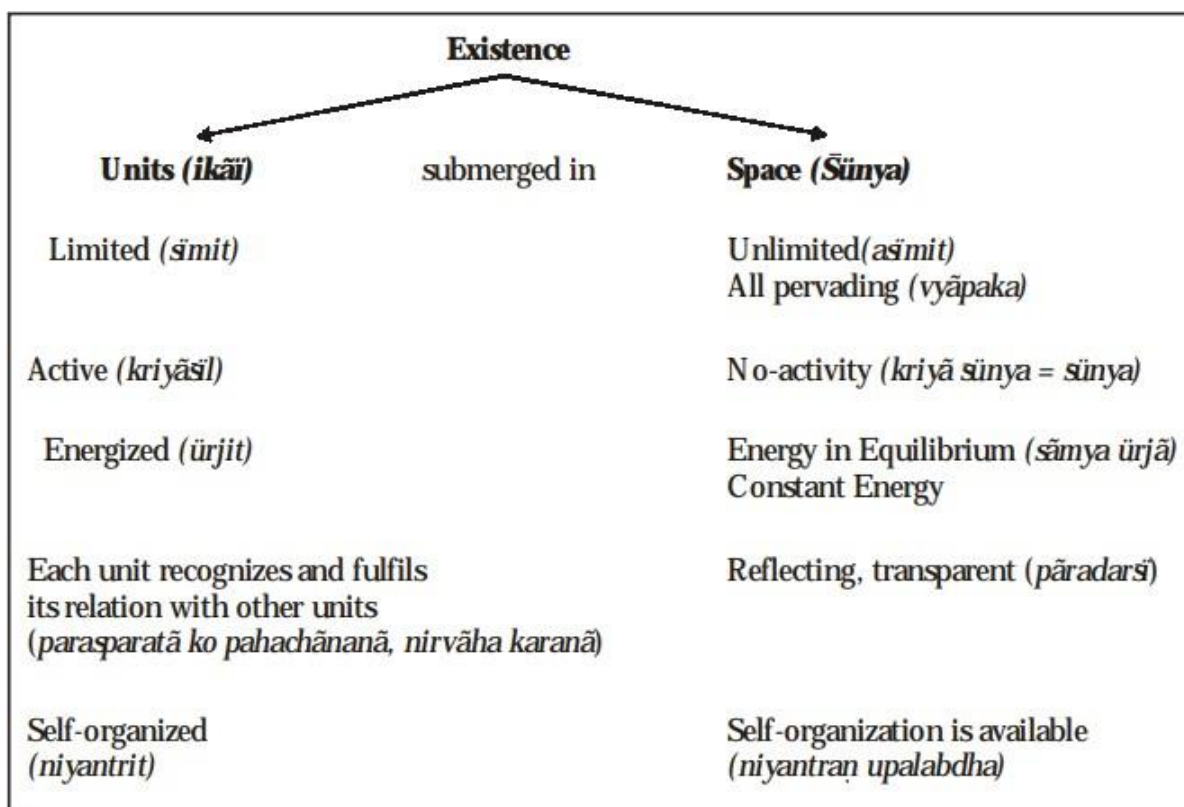
Each unit of every order viz., material, plant/bio or pranic, animal and human order, 'exist in space' or they 'are in space'. We also say they are 'submerged in space'.

Since nature consists of the four orders we have been discussing, we can say,

“Existence = Nature submerged in space”.

Nature = Four orders (Material, Plant/Bio or Pranic, Animal and Human Order)

We can understand this reality from the smallest particle to the largest galaxies. Let's explore this further:



All nature is submerged in space. Space is not a 'unit' but it exists, as a reality. Let us look into the various attributes of units and space

8. What is the role of material order and bio-order in the fulfilment of human needs? How does understanding of existence help in right identification of the above?

Material Units are the basis for all material things – soil, metal, rocks, liquids, gases to the basic cells and all the way to animal and human bodies. The material units undergo changes through physical and physico-chemical processes. In the material order, an atom combines with another atom to form molecular structure. The molecular structures can exist either as lumps (*pinda*), or fluids (*rasa*). Fluids are the basis of a plant cell (*pranic* order) and such cells combine to form plants, the animal body and the human body. Thus, we can see that in the material units, starting from the smallest fundamental particle that is stable, the atom, a sequence of natural events takes place, and solids (like stones, minerals, etc.), fluids (like water, fossil oil, etc.), plant cells (that go on to form the innumerable variety of plants we know of), animal bodies (of various species) and finally the human body, (in which we find a lot of variety in physical appearance) – all these are formed. All these processes are taking place in a self-organized, natural manner. *There is nothing controlling these processes*, these processes occur naturally in co-existence.

These events, these processes starting from the atom all the way to the highly complex human body are all happening in a *self-organized manner*. We humans are not *creating these processes or units*, neither are we responsible for controlling this entire process. When we understand this self-organisation, we are also able to understand our relationship with them and its fulfilment.

Conscious (sentient) units, the animal order and the human order

We have been talking about the material units so far, up to the animal and human bodies. What of animals and human beings? What else is left to have an animal and human being, the way we know them? The answer is: conscious/ sentient units! We also referred to these units as the Self or ('I'). We have already discussed that animals and human beings are as co-

existence of the conscious/sentient ('I') unit and the material body. We have been exploring this in the chapters so far.

Animals or Animal Order = 'I' + Animal Body

Humans or Human Order = 'I' + Human Body

When we have this right understanding, the activities of 1) Realization and 2) Understanding – which are currently dormant in 'I' also get expressed, *hence we also call this 'activity completeness' or 'kriyāpurnatā'*. All the activities in 'I' are now expressed, not only desiring, thinking and selection, as is the case now.

When there is completeness in the ability of 'I' to live with right understanding at all the four levels, leading to mutual fulfilment, *it is called 'conduct completeness' or 'ācharanpurnatā'*. Thus, we can see that each material and conscious unit is submerged in space and being in space, each unit is energised, self-organized and recognizes and fulfils its relationships with other entities. This is the entirety of existence and it is harmonious.

So, Existence is in the form of Co-existence. It is in Harmony. We don't have to create this harmony, it already exists. We only have to understand it to be in it. This means that

having the knowledge of existence and knowledge of self ('I') gives me the knowledge of humane conduct (*how to live in existence, with the four orders*). With this knowledge, I can live with humane conduct. This is the pending task we have to complete!
