

Course Name: 'Introduction to Pāṇinian Grammar'
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Welcome, I welcome you all to this lecture in the course Introduction to Pāṇinian grammar. We are now studying the Process of Speech Production as described in the Pāṇinian grammar. And the source that we are studying right now is Pāṇinīyaśikṣā and there are a few verses that we are studying they are "ātmā buddhyā sametyārthān mano yuñkte vivakṣayā manaḥ kāyāgnim āhanti sa prerayati mārutaṁ mārutastūrasī caran mandraṁ janayati svaram sodīrṇo mūrdhnyabhīhato vaktramāpadya mārutaḥ varṇān janayate"

These are the verses and then we analyzed these verses and said that these are the stages described in these verses, the stages of speech production. And they are enlisted on this slide there are 8 stages ātmā buddhyā sametyārthān is the 1st one, mano yuñkte vivakṣayā, the 2nd one, manaḥ kāyāgnim āhanti, the 3rd one, then comes sa prerayati mārutaṁ, the 4th, 5th is mārutastūrasī caran mandraṁ janayati svaram, the 6th is sodīrṇo mūrdhnyabhīhato, 7th is vaktramāpadya mārutaḥ and lastly you have varṇān janayate.

In describing these stages we have kept the wording as it is without changing any euphonic combination and so on for the obvious reason. Right now we are studying this 1st stage in detail ātmā buddhyā sametyārthān and we are going to spend some more time on this primarily because in the next stages lots of work has been done so far, not that much work has been done have found about this one particular stage. We will spend some more time to understand what this means. So, ātmā buddhyā sametyārthān is the first stage and we understood what this line means, having collected the meanings by the intellect. So, in the last lecture we looked at buddhi, we looked at the concept of ātmā, we looked at the concept of artha and then what is collection, but this needs to be elaborated little bit more.

So, let us study in some more detail what is meant by this collection of meanings and as we shall proceed we will study the simple aspect of it, the derivate aspect of it and super derivates. Let us also study briefly what is the concept of congruity which exists between the meanings and which also features in the collection of meanings. Also let us study the concept of mutual expectancy that is part of this collection ah.

In order to do so let us try to understand the basic human cognitive apparatus that is accepted in general by all the Indian philosophical systems and also including the grammatical system, the Pāṇinian grammar.

So, the human cognitive apparatus which will be studied from now on will be used also for explaining these concepts and we shall also understand the concepts of ātmā, buddhi and manas involved in the process of speech production little bit more. So, there are 5 sense organs also known as jñānendriya. These are the outer most part of this cognitive apparatus and the remaining three they are the internal ones, manas that is mind, intellect that is buddhi and ātmā that is soul. This is how these three are generally translated and this is what is a generally acceptable translation.

Let us look at what are these 5. These are the sense organs which give us some kind of cognition some perception. So, they are noted down on this slide śrotra ah means ear, tvak skin, cakṣuṣ eyes, jihvā tongue, and ghrāṇa nose. These are the 5 jñānendriya and these jñānendriya function in their respective domains of experience also known as viśaya. So, here are the 5 viśayas, they are śabda sound, sparśa touch, rūpa form, rasa taste and gandha odour. The correlation between the domains and the sense organs is what is displayed now. So, śrotra functions in the domain of śabda namely the sound, skin tvak functions in the domain of sparśa that is touch, cakṣuṣ functions in the domain of rūpa that is form. jihvā functions in the domain of rasa that is taste, ghrāṇa that is nose functions in the domain of gandha that is odour.

There are some important points to note in this correlation. The first and the foremost point is that it is not possible to have a across link this is not possible. The domains specified in this slide śrotra related to śabda, tvak related to sparśa, cakṣuṣ related to rūpa and so on and so forth. This is what is fixed, this is what is natural, this is what is in a sense eternal and what we are saying here is that there is no possibility to have a cross link between the sense organs and the domain. For example, rūpa or form can never be a domain of śrotra, one can never use the ear to get the cognition of rūpa that is not possible.

If one uses the śrotra then the domain in which this sense organ functions namely the sound only that cognition can be obtained. Similarly, śabda or sound can never be a domain of cakṣuṣ eyes and so on and so forth. So, if you say I cannot hear what you say as I am wearing glasses this is only a poor joke and is made to lighten the mood that is all, this is not a reality, this is not what is correlated. If you are wearing glasses then that enhances the capacity of your eyesight, it has got nothing to do with your hearing capability your ears.

So, every sense organ operates only in its domain that is what is the conclusion of this. Every sense organ operates only in its domain and never operates in the domain of the other sense organ, never this is never done. And that is the reason why the concept of language according to the Indian philosophical tradition is primarily restricted to the domain of śabda that is sound that is the domain of śrotra that is ear.

So, language is correlated with ears. Now, in modern age we say that I read a particular language. So, reading involves using eyes and when you use eyes what you are looking at is a form which is symbolically related to the sound that is audible through the ears. This is how when we say I am reading a particular language text and so on and so forth, this is what is understood, this is what is the internal arthākāśa semantic process, semantic space.

The point to remember here is that every sense organ operates only in its domain and never operates in the domain of the other sense organ, this is very basic, very fundamental and very primary. This will determine our simple, derivate and super derivate meanings and arthākāśa.

The next thing to remember is that these domains are located mainly in the external world. So, a human being who gathers his experiences of the external world can be classified in these 5, either of these 5 or all of these 5, that is how a human being gathers the experience. Fortunately or unfortunately the human being is not endowed with another sense organ in which the experience of the external world can be classified. So, the sense organs they are located on the external side of the cognitive apparatus and since the domains are located in the external world and the sense organs are located on the external side of the cognitive apparatus, they are in direct contact with the domain. The sense organs are in direct touch with the domain, they are open to the domain and in constant contact with the domain. Even then we can say that unless closed they are 'in the domain' so to speak. Now, this closure, natural closure is possible only for eyes and tongue they can be closed so to speak.

Artificial closure is also possible for ears as well as skin, but that too only partially, but no closure is possible for nose as far as an individual is living and cognizing the external world. It is not possible to close the nose that will amount to the end of the cognitive process.

In conclusion we can say that the sense organs are in direct contact with their respective domains, this is a very important fact to remember and also to note down. And it is on this basis that we shall study how collection of meanings happen and what is the base for this collection of meanings and there are some meanings which are simple which are already collected together. Some meanings which can be said to be the derivates of these simple meanings and then there will be some meanings which can be considered as super derivates, which are derivates of these derivates. And there could be some further classification that is possible, but at least these three are broad classifications that are possible. This is how the meaning gets collected.

Now, let us diagrammatically represent the domains and the cognitive apparatus. So, here are the 5 domains śabda, sparśa, rūpa, rasa and gandha and there is a line drawn between these and the rest on the slide to indicate that śabda, sparśa, rūpa, rasa, gandha; these are the 5 domains in which the external world is experienced by the human being.

And it is experienced through these 5 sense organs, it is experienced through these jñānendriyas: śrotra, tvak, cakṣuṣ, jihvā, ghrāṇa and it is these 5 sense organs which are the external part of this entire cognitive apparatus; that means they are in constant touch with the external world and the domains. We can also see that it is these external domains which are constantly coming towards the sense organs. So, there is a constant touch in this direction, the external domains they keep on touching the sense organs because these sense organs are open these are not closed so to speak, they can some of them can be closed naturally and even artificially but they are not always closed. And it is they which are open they come into contact with these or rather they the domains come to these and then the next step of the cognitive process that happens.

But this is the first stage, first step of the cognitive process, the sense organs or the pañcajñānedriya. It is important to remember this correlation because this will give us further idea because this influences the arthākāśa and the collection of meanings. So, as we notice as we notice this cognitive apparatus consists of manas which comes after the 5 sense organs followed by intellect and followed by soul. So, soul can be considered to be the internal most part of this cognitive apparatus and manas and buddhi they are the parts which come in between the the most internal and the most external. And these two also have certain functions that we shall study later in this lecture.

Now, let us look at the concept of manas and the role it plays in this entire cognitive apparatus and we are also going to study this directly in the process of speech production as well. Now, it is described and generally agreed in the Indian philosophical systems that the duty of the mind or the function of the mind is to receive signals from the sense organ and send them to the intellect for further processing and there is a line drawn in between these two because they indicate the directions. So, first job is to receive signals from the sense organs and pass them on to the intellect. Now, the intellect takes some further decisions and processes this entire signal and then probably takes some kind of decision about the information processed and then these decisions are passed down from the intellect to the mind.

So, the mind now receives the decisions taken at the level of intellect about the signals sent earlier and then the mind passes them on once again to the sense organ. This is what is generally considered to be the function of the mind in the cognitive process. So, to represent this fact diagrammatically we can say this that śrotra, tvak, cakṣuṣ, jihvā, and ghrāṇa; the 5 sense organs they send their signals from the respective domains to the mind and then the mind sends those signals to buddhi. This is the process from the world to the individual cognitive apparatus, the person who cognizes. So, this is how it reaches buddhi. And then from the world what happened we saw in the last slide. So, what happens when the buddhi sends back the signals to the world. So, it is the soul that is ātman which is the internal most after which comes the buddhi and buddhi now studies the signals that have been sent by the mind and then takes a call on them, decides whether those signals are to be acted upon, used for some purpose or not. Whether it is a positive

reaction or a negative reaction or a neutral no action kind of reaction that is all decided at the level of intellect and the and the decision is sent back to mind.

And then mind sends back such a decision, such signals to the 5 sense organs śrotra, tvak, cakṣuḥ, jīhvā and ghrāṇa; obviously, these are in touch with the 5 respective domains, but the mind sends the signal in terms of the decision back to these 5 sense organs, as simple as that. This also involves the notion of control due to this signal, the mind is supposed to also control the sense organs. Obviously, they are in the domains respective domains, but then the mind through these decisions conveyed forward also is able to control the sense organs behaving in their respective domains. In filtering information which object in the respective domain is to be cognized and which is not to be cognized, which is to be cognized again and which is not to be cognized, which is to be ignored, which is to be left alone and so on and so, forth. Even if cognized which should not be filtered down further, which should not be influencing this apparatus all these things they are part of the process of this control that happens at the level of buddhi and manas. And manas plays a very crucial role an important role in the entire cognitive process.

Let us now look at what happens at the level of buddhi or intellect. So, buddhi receives the signals of domains from sense organs through mind, the buddhi studies them, it shifts them and while doing this it consults the nature of the soul, takes a call or a decision whether to continue to cognize or to stop cognizing. Whether the object in the domain is beneficial to this cognitive apparatus or is harmful to this cognitive apparatus.

This feature of being beneficial or harmful is decided upon the fact that the cognitive apparatus should sustain, should continue to live. Something that offers the continuity of the cognitive apparatus is primarily considered to be beneficial and something that does not offer such a continuity is considered to be harmful. And so obviously, a call is taken, a decision is taken about such harmful and beneficial objects which are part of the cognitive process. These calls or these decisions are primarily of these two types pravṛtti and nivṛtti. Should we proceed towards the object cognized in this manner or should we back off nivṛtti from the object cognized in this particular manner going through this cognitive apparatus? So, if the object of cognition is beneficial; that means, if it is going to help, sustain, continue this cognitive apparatus then it is thought that we should proceed towards this particular object of cognition.

But, if it is considered that this particular object of cognition is not helpful in the continuity of this process of cognition then it is considered to be harmful and then a decision is taken, then a call is taken to stop cognizing it, the nivṛtti aspect that comes in. And it is these two are very which are very primary as far as any cognitive process is concerned pravṛtti or nivṛtti. Whether to proceed towards cognizing whether to continue cognizing or whether to back off, whether to stop cognizing a particular object and whether to obtain a particular object or whether not to obtain a particular object and whether some contact should be established or not. This is what pravṛtti and nivṛtti

function in this entire cognitive apparatus. And it is these two which are part of the intellect which then influence this entire process. So, the intellect then sends back the decisions to the sense organs because they are the external most and they are to be controlled, they are to be controlled through the mind. The decisions are conveyed to the sense organs through the mind. And then sometimes we see that the sense organs follow these decisions and then we say that there is control over sense organs.

But, sometimes it so happens that these sense organs do not seem to follow such a decision, then we say that the control is less. Why? That is a different question altogether, it can also be cognitively explained, but that we shall not deal with in this course. We want to study the process of speech production in which ātman ātmā and buddhi they play an important role and we are trying to understand what role they play in overall human cognitive process cognitive apparatus. So, we are studying them. The second purpose why we are studying this cognitive apparatus in general is that when we say that the ātmā collects the meaning in the intellect by the intellect it is through this intellect that the ātmā collects the meanings which are primarily related to this cognitive process and cognitive apparatus. So, we are taking this as an example of how the meanings get collected and we will take some more details in this regard, for our own purpose of studying this process.

Now, coming back to the process where buddhi is involved, the signals are consulted by the buddhi with the ātman, with the nature of the ātman and then those signals are sent from buddhi to ātman. And obviously, the pañcajñānendriya and manas and intellect they are there, but that at this stage buddhi is looking forward to the ātman. And then from the ātman, the buddhi gets motivated and inspired to take these calls, whether to proceed towards something or whether not to proceed towards something, whether to back off. So, pravṛtti and nivṛtti are then correlated with this concept of ātman and the interrelation between the buddhi and the ātman. Now, let us look at the nature of the soul which is the backbone of this entire process and as ah we have seen the ātman also is considered to be the substratum of responsibility for the speech production.

So, ātman is considered to be the nature, the true nature of a human being because it possesses these three features, namely that it is 'cit' chetan or animate as opposed to something which is 'acetan' inanimate. It exists so it has existence as its important feature, there is not a space where it does not exist and it is of course of the form of ānanda namely joy and bliss. These are the three features of the concept of ātman, I am aware that in the Indian philosophical tradition there are some schools which do not have the concept of ātman, but as I said to you this is what generally on the whole the Indian philosophical systems agree upon. So, there may be some exceptions, but this is what generally is agreed upon. The nature of ātman is of these three kinds. Now, this nature of ātman also determines the process of speech production. The process gets affected as far as the degrees of these three that get expressed in an individual personality. Now this ātman propels the intellect to function in the way we described earlier to take decisions to proceed or not to proceed

and so on and so forth. It is because of the animate nature of this concept of ātman that a human being is called an experiencer. Now, as far as the Indian philosophical traditions are concerned the ātman is generally considered to be the akartā, the non-doer of the actions. However, we have also seen that the sources that we are studying the Pāṇinīyaśikṣā, they consider this ātman to be the kartā of the action of the speech production.

So, we shall study this further and we summarize what we have studied so far. To summarize we can say that the cognitive process described above serves the base for description of the collection of meanings which is part of the process of speech production. Now, this process of collection of meanings at the level of intellect by the ātmā is considered as the cause of the effect in the form of the audible speech. The audible speech is the effect and this collection of meanings is considered as the cause, this is extremely important. This cause and effect relationship will be shed more light on in the coming lectures. It is with this process at the background that we shall explain what is the collection of meaning in detail, it is with this process at the background that we shall also explain what is arthākāśa, which is made up of lexicon and the rules, it is with this process at the background that we shall explain what is congruity in the coming lectures. Thank you for your attention.