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Welcome. I welcome you all to this lecture in the course Introduction to Pāṇinian grammar. In this lecture we shall study further the Process of Speech Production. We have been studying this process as described in the Pāṇinian sources in some lectures now and we continue to study this further. It is very important to study this process as described in the Pāṇinian grammatical tradition because the entire analysis in the grammar is based on this description of the process of speech production. So, we studied this source called Pāṇinīyaśikṣā. And the verses from it: "ātmā buddhyā sametyārthān mano yuṅkte vivakṣayā manaḥ kāyāgnim āhanti sa prerayati mārutaṁ mārutastūrasi caran mandraṁ janayati svaram sodīrṇo mūrdhnyabhihato vaktramāpadya mārutaḥ varṇān janayate"

And we said that in these verses we can note down the following stages of speech production: ātmā buddhyā sametyārthān that is the 1st stage. mano yuṅkte vivakṣayā is the 2nd. manaḥ kāyāgnim āhanti is the 3rd. sa prerayati mārutaṁ is the 4th. 5th is mārutastūrasi caran mandraṁ janayati svaram. 6th is sodīrṇo mūrdhnyabhihato. 7th is vaktramāpadya mārutaḥ and 8th and the final stage is varṇān janayate. Amongst these 8th, we have been studying the very first stage so far and we shall study this in today's lecture as well.

We can note that within these 8th, these first two they describe the internal cognitive process, whereas, the rest rest of the stages they describe the physical process or the biological process of the speech production. So, it is important to spend some time and study this process in little bit detail in the internal cognitive apparatus.

So, let us study in some more detail what is meant by this collection of meanings ātmā buddhyā sametyārthān; simple derivate and super derivates etcetera. We have studied this first bullet in the previous lecture. Let us also study briefly what is the concept of congruity and also study the concept of mutual expectancy. We shall study these two in this lecture.

To take a recap, the human cognitive apparatus is endowed with the sense organs on the external most side and they function in their respective domains. śrotra - ear functions in the domain of sound or śabda. tvak - skin functions in the domain of sparśa or touch, cakşus - eyes function in

the domain of rūpa or form. jihvā - tongue functions in the domain of rasa or taste, ghrāṇa - nose functions in the domain of gandha.

This is what we have seen and we also saw that there is a one-to-one relation between these domains and the sense organ. Now, based on this let us study the concept of congruity also known as yogyatā. The basis for the principle of congruity exists on the basis of the cognitive process that we described thus just now and the cognitive apparatus as well. And the specificity about the clearcut divisions of the sense organ and the respective domain pairs that we saw in the description so far.

Let us analyze it further. Let us study this further. At the simple level of the arthākāśa, items that form the link between the sense organ and its respective domain are said to have congruity. They are said to possess yogyatā. An items that do not form the link between the sense organ and its respective domain are said not to have congruity. They are said not to possess yogyatā and we shall study this aspect with examples.

For example, the action of hearing and sound being the object of it in which the ear is involved and soul being the doer. This is the example of simple yogyatā, congruity. The action of touching and the spatial element being the object of it and also soul being the doer with the skin as the sense organ. These are said to possess yogyatā. These are said to have congruity.

Then the action of seeing and colour, for example being the object of it where in soul is the doer of the action of seeing and the eyes as sense organs involved in the process. This is said to possess yogyatā or congruity. All these meanings are parts of arthākāśa. Similarly, the action of tasting and sweet object for example, being the object of it, soul being the doer and tongue the sense organ involved. They all are said to possess yogyatā or congruity.

Similarly, the action of smelling and odour being the object of it, soul being the doer and nose being the sense organ. They all are said to be congruous. They all are said to possess yogyatā congruity. Now, if we look at the derivate part of the arthākāśa we can say the following. The action of hearing and let us say the components of speech which where earlier listed down as the derivatives of the arthākāśa related to the sense organ ear. They will have congruity no doubt, but this is not the direct congruity direct yogyatā simple yogyatā.

They will have congruity via a certain path that goes to the goes through the simple arthākāśa. Action of touching and emotions related to touch they will have congruity, but this is not a direct relation direct congruity. This yogyatā or congruity will be via a path that goes through the simple arthākāśa related to the action of touching. Similarly, the action of seeing and say mixed colour.

For example, we will also have some congruity, but this will be again via a path that goes through a simple arthākāśa. Action of tasting and food ingredients will have congruity certainly, but via a certain path that goes through the simple arthākāśa.

Action of smelling and animals working on odour for example will also have congruity or yogyatā, but this will be again via a certain path that goes through the simple arthākāśa that is related to the action of smelling and the sense organ nose. This is how the derivate arthākāśa will be said to possess the yogyatā with respect to the sense organ and its domain.

Now, if we look at the super derivate part of the arthākāśa and the yogyatā we can say the following. Action of hearing and written symbols of speech for example, can have congruity via an extended path that goes through the simple as well as the derivate arthākāśa. There is a possibility of having no congruity that cannot be negated. So, possibility of having no congruity cannot be entirely negated. Similarly, action of touching and the figurative use of touch can have congruity via an extended path through the simple as well as the derivative arthākāśa. Possibility of having no congruity cannot be entirely negated. Similarly, action of seeing and philosophizing can have congruity via an extended path that goes through the simple as well as the derivate arthākāśa. Again possibility of having no congruity cannot be negated.

Similarly, the action of tasting and the aesthetic principle described earlier can have congruity, yes, but via a certain extended path that goes through the simple as well as the derivate arthākāśa. Once again, possibility of having no congruity cannot be entirely negated. Similarly, the action of smelling and the figurative use can also be said to have congruity via an extended path that goes through the simple as well as derivate arthākāśa related to the action of smelling. Again possibility of having no congruity cannot be entirely negated. This is how the yogyatā is related in or within the arthākāśa that is simple derivate as well as super derivate that is related to the five sense organs and their respective domains. This is the core, this is at the base related to the human cognitive apparatus.

Similarly, let us study the concept of ayogyatā now. Because we studied the concept of congruity or yogyatā we looked at the very basic the very core of arthākāśa which is possessing yogyatā with what? With in relation to the sense organs and the domains. Now, in order to make it more clear let us also look at which items cannot be said to possess yogyatā with respect to others as far as the arthākāśa is concerned, the arthākāśa related to this cognitive apparatus is concerned. So, the action of hearing and ear namely the sense organ and sound the domain can be said to have incongruity ayogyatā with the following. Say action of touching plus skin plus touch and its derivates and its super derivates. The action of hearing plus ear per sound can be said to have incongruity with the action of seeing and eyes and form and its derivates and its super derivates.

Similarly, the action of hearing plus ear plus sound can be said to have incongruity with the action of tasting plus tongue and taste, where tongue is the sense organ, taste is the domain and it derivates and super derivates. Similarly, the action of hearing and the sense organ ear and the domain sound as part of the arthākāśa can be said to possess ayogyatā or incongruity with the action of smelling and the sense of the nose and the domain odour and its derivates and super derivates as part of the arthākāśa.

Similarly, the action of touching which has skin as the sense organ and touch as the domain can be said to have incongruity with the action of hearing and ear and sound and its derivates and super derivates. Similarly, the action of touching and skin and touch can be said to have incongruity with the action of seeing an eyes as the sense organ and form as the domain and its derivates and super derivates.

Similarly, the action of touching and skin as the sense organ and touch as the domain can be said to have incongruity with the action of tasting where tongue is the sense organ and taste is the domain and its derivates and super derivates. Similarly, the action of touching and skin and touch can be said to have incongruity with the action of smelling where nose is the sense organ and odour is the domain and its derivates and super derivates.

Similarly, the action of seeing, where the sense organ is the eye eyes and the domain is the form can be said to have incongruity with the action of hearing, where ear is the sense organ and sound is the domain and its derivates and super derivates. The action of seeing where eyes is the sense organ and form is the domain can be said to have incongruity with the action of touching, where skin is the sense organ and touch is the domain and its derivates and super derivates.

Similarly, the action of seeing an eyes as the sense organ and form as the domain can be said to have incongruity with the action of tasting, where tongue is the sense organ and taste is the domain and its derivates and super derivates. And the action of seeing with eyes as the sense organ and form as the domain can be said to have incongruity with the action of smelling with nose as the sense organ and odour as the domain.

Similarly, the action of tasting with the tongue as the sense organ and taste as the domain can be said to have incongruity with the action of hearing, where ear is the sense organ and sound is the domain. The action of tasting with tongue and taste can be said to have incongruity with the action of touching with skin as the sense organ and touch as the domain and its derivates and super derivates.

The action of tasting with tongue as the sense organ and taste as the domain can be said to have incongruity with the action of seeing with eyes as the sense organ and form as the domain and its derivates and super derivates. The action of tasting with tongue as the sense organ and taste as the domain can be said to have incongruity with the action of smelling with nose as the sense organ and odour as the domain and its derivates and super derivates.

And finally, the action of smelling, where nose is the sense organ and odour is the domain can be said to have incongruity with the action of hearing, where ear is the sense organ and sound is the domain and its derivates and super derivates. Similarly, action of smelling with nose as the sense organ and odour as the domain can be said to have incongruity with the action of touching, where skin is the sense organ and touch is the domain and its derivates and super derivates.

Similarly, the action of smelling with nose as the sense organ and odour as the domain can be said to have incongruity with the action of seeing with eyes as the sense organ and form as the domain and its derivates and super derivates. Similarly, the action of smelling with nose as the sense organ and odour as the domain can be said to have incongruity with the action of tasting with tongue as the sense organ and taste as the domain.

So, these are the examples clear cut examples where the incongruity exists within the arthākāśa related to the cognitive apparatus the human being possesses; the sense organs and the domains and the respective actions involved. So, in conclusion we can say that in this way items in the arthākāśa can be showed to be arranged in a structure. It is this structure which is at the base of the collection of meanings. Generally only those meanings are collected which have congruity. Generally, those meanings are not collected which do not have congruity. When meanings which have no congruity are collected such a speech is either termed as invalid or becomes subjected to correction or is considered as having the poetic form. This is how the yogyatā structures the arthākāśa. This is the very basic very core aspect of arthākāśa and this is how the yogyatā then rolls down into derivates and super derivates and so on and so forth.

And then as we can see we can also define what is poetic in terms of this yogyatā that structures this arthākāśa. After having studied yogyatā congruity that shapes the arthākāśa, let us now closely take a look at what is mutual expectancy or ākāṅkṣā as it is called ākāṅkṣā. So, when we talk about ātmā buddhyā sametyārthān when the meanings are collected by the atma or soul as the first stage of the process of speech production, we said that in this collection of meanings as part of the arthākāśa meanings which have congruity behave in combination.

One of them let us say X can be said to have an expectancy of the other namely Y. So, those items, which have congruity the action of seeing and form and the sense organ eyes and its derivatives and super derivates. If one of them is termed as X and the other one is termed as Y then X can be said to have an expectancy of the other that is Y. And the other Y can be said to have an expectancy of the one namely X. And X and Y can be said to have mutual expectancy. They can be said to have a ākāṅkṣā of each other. Generally, the atma the soul collects meanings which have such mutual expectancy such an ākāṅkṣā.

This mutual expectancy creates a template of meanings to be collected. Meanings which are part of simple arthākāśa are natural examples, the one that I described just now. The other example would be the action of hearing with ear as the sense organ and sound as the domain and this is the description of the simple arthākāśa and so, meanings related to them they will have mutual expectancy they are the natural examples.

Now, meanings which are derivate can be said to be the real examples where there is some distance where the congruity is existent through certain path that goes through the simple arthākāśa. Yet, it is expecting some simple arthākāśa to fall back upon. And so, these derivates can be considered as the real example where there is some distance yet there is some expectancy.

So, the simple arthākāśa would obviously, expect the simple arthākāśa as well as derivate arthākāśa as well as super derivative arthākāśa and vice versa. Meanings which are super derivates may not always explicitly have expectancy from simple as well as derivate arthākāśa. This is just in case. Otherwise in general even the super derivatives will have expectancy.

Now, sentences with only one of the elements of the arthākāśa expressed in audible speech are able to still communicate. Because the mutual expectancy will give rise to the other elements in the arthākāśa, this is a common experience. And this mutual expectancy giving rise to the other elements in the arthākāśa be it simple or derivate or super derivate will complete the required link even though the word expressing that required link is still not explicitly expressed in the audible speech.

For example, if in the explicitly expressed audible speech only white is the meaning that is expressed now that can give rise to the action of seeing because white is the description of a colour which is related to the form which is then related to the action of seeing and the sense organ eye or eyes etcetera. And so, in this fashion we can say that a sentence having only the meaning white expressed by a word can still complete the action of communication because the mutually expected meanings will be given rise to and the expectancy will be fulfilled. So, to summarise in this lecture we have studied in brief the yogyatā as well as ākāṅkṣā, congruity as well as mutual expectancy as important principles which structure the arthākāśa.

To summarise what we have discussed in this lecture we can say that yogyatā, congruity and ākāṅkṣā mutual expectancy are very much part of the arthākāśa which is located in the buddhi. So, yogyatā and ākāṅkṣā can also be said to be located in the buddhi or cognition. Meanings which possess both yogyatā and ākāṅkṣā are collected by the ātmā as a first step of process of speech production. This is a by default situation and this is the programming of the expressed speech that is audible.

This is also said to be the cause of the process of speech production and that is why spending time understanding this particular stage is extremely important. Because this is the cause and what is audible is just an effect. So, we should understand the cause and then we shall be able to understand the effect as well relatively easily. So, this stage also serves as the crosscheck reference for the selfvalidation.

So, the audible speech which is produced can be heard by the same speaker and if something goes wrong because of some external conditions and. So, the audible speech deviates in a way. Then the speaker can cross check that audible speech with the internal programming structured by the concept of yogyatā and ākānkṣā which is stored in this first stage.

Now, this stage also involves control how we shall see see later. One thing is sure that clarity at this stage causes clarity in the subsequent steps of process of speech production. So, if you want the clarity as far as the externally audible expressed speech you need to bring in clarity at this internal cognitive first stage of the process of speech production.

And finally, reaching this stage of arthākāśa in understanding a communication is indeed an aim of communication, but we observe that in the reality this remains a distant dream is in most communications resulting in people not understanding what other people want to say which is a very sad state of affairs which causes lots of problems and so on and so forth. So, if we understand this cognitive stage we will be able to understand what the communication wants to communicate. We should note this down as a very important point.

Thank you for your attention.