Course Name: 'Introduction to Pāṇinian Grammar' Professor Name: Prof. Malhar Arvind Kulkarni Department Name: Humanities and Social Sciences (HSS) Institute Name: IIT Bombay Week:03 Lecture:12

Welcome. I welcome you all to this 12th lecture in this course 'Introduction to Pāņinian Grammar'. So far, we have studied the very basics of Pāņinian grammar, the core text on which this tradition is based and certain related aspects; we have also studied the difference between the object language and the meta language and in case of Pāņinian grammar, we observed that the object language that is the language to be described is Sanskrit and the language in which the grammar is written is also Sanskrit. However, we noted that there are some differences. We also noted that these differences are the additional differences, which means that certain features which exist in the object language they are also used in the meta language. But in addition to that, these 3 features are used in the meta language, that is what makes this meta language different.

Now, in this lecture, we shall study the third difference between the object language and the meta language and that difference is the technique of 'pratyāhāra'. To recap, we have noted that there are 3 differences in the meta language of Pāṇinian grammar from the object language Sanskrit. They are the meaning of a word and here we noted that in the object language a word conveys meaning which is of two kinds, meaning-meaning and also the word form. And in the object language it is the meaning-meaning which becomes predominant, head, main, whereas the word-form which is part of the meaning becomes subordinate, qualifier. And in the meta language of Pāṇini, we observe that it is this word-form meaning which becomes the main or the head and the meaning meaning becomes subordinate or qualifier.

Then, we also studied the meaning of the cases. Here we said that the meaning of the cases as found in the object language, they are continued in the meta language also. In addition, there are 3 specific different meanings assigned to different cases. Notably, 5th, 6th, and the 7th case and also the first case when in combination with the 6th case. We noted these meanings. We said that these different meanings follow the first fundamental principle which differentiates between the object language and the meta language mentioned also on this slide, the meaning of a word.

So, if in the meta language it is the word form which is going to be main or the head, obviously, it flows from that that the meaning of the cases would be in correspondence with it. So, the 5th case which is translated using the word 'from' in the object language is translated as immediately after in the meta language. The 6th case, which is translated in the object language by using the word 'of' is translated by using the word 'in place of' or 'instead of' in the meta language. And the 7th case, which is translated in the object language by using the words 'in' or 'on' is translated as 'immediately before' as far as meta language is concerned. We have looked at various examples

illustrating all these points. We also noted that the first case when it when in combination with the 6th case means a substitute. So, a substitute which comes in place of something, x substitutes y and so on and so forth. After looking at these meta linguistic features, we also look at the systemic point of view, how does this get translated into the system of Pāṇinian grammar.

And now we come to the third unique difference between the object language and the meta language namely the technique of 'pratyāhāra'. This will be the topic of today's lecture. This is the third difference, the technique of 'pratyāhāra'. What is a 'pratyāhāra'? 'Pratyāhāra' is a technical term used in the Aṣṭādhyāyī to denote a set of sounds undergoing certain grammatical operation in a concise manner. And this does not mean that the word 'pratyāhāra' is used in the grammar of Pāṇini. But 'pratyāhāra' stands for certain technical terms that are used in the grammar of Pāṇini, Aṣṭādhyāyī and they denote a set of sounds undergoing certain grammatical operation in a concise manner. And there are 41 such terms that are used in Pāṇinian grammar.

For example, 'ac', 'ec', 'jhal', 'jhaś', 'jaś', 'ik' and 'yaṇ'. We have come across these terms when we looked at the examples illustrating the use of cases and their meanings in the previous lecture, the 5th case, 6th case, and the 7th case, we have come across these words. These are the technical terms and at that time, we said that the meaning of these terms will be clear in the later lectures. These are the technical terms which are called 'pratyāhāra'.

The next question is how are these terms formed, 'ak', 'ac' etcetera and these are not the features of the object language. Now, there is a particular methodology, particular process which is used to form the 'pratyāhāra' and the methodology is described on this particular slide. So, first you pick up a final sound which is termed as 'it'. And what is 'it'? will be clear later on. Let me repeat. By picking up a final sound which is termed as 'it' and placing it in front of you or on paper somewhere, then selecting any sound that comes previous to it and then placing it before this 'it' and now joining both together, such terms are formed 'at', 'ac', 'ec' etcetera and these are the 'pratyāhāras'. So, doing this entire process makes a 'pratyāhāra'. And this is what is informed also by the sūtra of Pāņini, 'ādirantyena sahetā' which is 1.1.71 and now let us look at the meaning of this sūtra. Let us first of all look at the words that are part of the sūtra.

And there are 4 words in this sūtra, 'ādiḥ', 'antyena', 'saha' and 'itā'. 'Ādiḥ' means a beginning sound, 'antyena' means by the final, 'saha' means together with, and 'itā' means with 'it'. And then having put all these things together, we can say that the final 'it' which is joined with the beginning letter, any letter that is previous to it, this term gets formed which is called the 'pratyāhāra'. Let me also tell you that the word 'pratyāhāra' is also used in the yoga sūtras of Patañjali as one of the 8 limbs which primarily explains the concept of contraction, contracting the cognitive apparatus through the sense organs and so on, delimiting it; something similar is also present in this technique of 'pratyāhāra' used in the meta language of Pāṇini.

Now, the next question is what is an 'it'? 'It' is a marker which has a purely meta linguistic function and it is not part of the object language. And 'it' is not a part of the object language. Literally, 'it' means one who goes, one who goes away and we shall deal with this concept in detail when we will also look at certain sūtras which define what 'it' is. Suffice it to say here for our present purpose that it is together with the final sound which is 'it', any previous letter joined together thus forms the 'pratyāhāra'.

So, here is an example, what is an 'it', and this is the relevant sūtra and we shall see these in detail later on. The sūtra is 'halantyam'. This sūtra is 1.3.3 and it consists of two words 'hal' and 'antyam'. 'Hal' stands for a consonant. How? This will be clear later on. 'Antyam' is final. So, what this sūtra means is in the meta language a final consonant is termed as 'it'. So, once this definition is clear, now we can apply 1.1.71 and form the 'pratyāhāra'.

Now, what does all this presuppose? The sūtras that define 'pratyāhāra', the sūtras that define 'it' and so on and so forth. What does this presuppose? It presupposes an existing set of sounds arranged in such a manner where at the end of each subset will appear a consonant which can be termed as 'it' using 1.3.3 which can be then used to formulate the technical terms called 'pratyāhāra' by 1.1.71 and these 'pratyāhāras' will denote the set of sounds undergoing a particular grammatical operation.

Let me read these 14 'pratyāhāras' here. ' A i u ņ', 'r ļ k', 'e o 'n', 'ai ou c', 'hayavaraţ', 'laṇ', 'ñamagaṇanam', 'jhabhañ', 'ghadhadhaṣ', 'jabagaḍadaś', 'khaphachaṭhathacaṭatav', 'kapay', 'śaṣasar' and 'hal'. Generally, these are recited in a particular speed and let me recite them at one go without stopping in between. They are 'a i u ṇ', 'r ḷ k', 'e o 'n', 'ai ou c', 'hayavaraṭ', 'laṇ, 'ñamagaṇanam', 'jhabhañ', 'ghadhadhaṣ', 'jabagaḍadaś', 'khaphachaṭhathacaṭatav', 'kapay', 'śaṣasar' and 'hal'. These are those 14 sūtras which are the background of the sūtras defining 'it' as well as the 'pratyāhāras'.

These 14 sūtras are called 'pratyāhāra-sūtras' because these are used to form the 'pratyāhāras'. They are also called 'varņa-sūtra', because these 14 sūtras enumerate basic sounds. They are also known as 'caturdaśa-sūtra', because these are 14 sūtras. They are also known as 'śiva-sūtras', because these were conceived from the inspiration of God Shiva. They are also known as 'maheśvara-sūtras', because these were conceived from the inspiration of God Shiva also known as Maheśvara in which a mythological story comes in which says that these were conceived in this particular fashion. This story is described in detail in the Nandikeśwara-Kāśikā. So, these are the various names with which these 14 sūtras are referred to. They are also known as 'akṣarasamāmnāya', 'varṇasamāmnāya' etcetera.

Now, let us look at the 'it' in these 14 sūtras. Applying 1.3.3 we see that 'n' is 'it' in the first sūtra, 'k' is 'it' in the second, 'n' which appears at the end is 'it' in the 3rd sūtra, 'c' in the 4th, 't' in the 5th, 'n' in the 6th, 'm' in 7th, 'ñ' in 8th, 'ş' in 9th, 'ś' in 10th, 'v' in 11th, 'y' in 12th, 'r' in 13th, and 'l' in the 14th sūtra. So, here we have 14 sounds which can be straight away marked as 'it'. So, these are the 'its' primarily, these are the 'its'.

Now, if we compare these 14 sūtras with the traditional sound inventory, we will note various points. Now, here is the traditional sound inventory for you. In the first row, you see all the vowels. These vowels are part of the 14 sūtras that we saw just now. Now, then comes the arrangement of the consonants. This is how the consonants are arranged in the traditional sound inventory, also known as 'mātrkāpātha'. Now, these 5 rows and 5 columns give us 25 consonants. So, these are called this 'sparsa' consonants and we shall look at the description of these sounds in detail when we look at the process of speech production. Right now, we can only say that there are 5 columns, each column mentioned as C 1, C 2, C 3, C 4 and C 5 and there are 5 rows R 1, R 2, R 3, R 4 and R 5. So, each and every consonant can be referred to by this notation R 1 C 1, R 1 C 2 and so on and so forth. We can also refer to consonants vertically by referring to the column in which they are put. This particular arrangement of sounds is based on certain scientific principles, namely, the rows are arranged on the basis of the place of articulation of the sounds and the columns are arranged on the basis of the effort required for articulation of sounds. On these two basis, we see that the traditional sound inventory arranges sounds in this particular fashion, 'k', 'ka', 'g', 'gh', 'n', 'c', 'ch', 'j', 'jh', 'ñ', 't', 'th', 'd', 'dh', 'n', 't', 'th', 'd', 'dh', 'n', 'p', 'ph', 'b', 'bh', 'm'. These are the 25 class consonants as they are called. Next, we have 4 consonants 'y', 'v', 'r', 'l', these are called semi vowels and finally, we have 's', 's', 's' and 'h', these are called the fricatives or the sibilance.

Now, this is what a traditional inventory of sounds looks like and if we take a closer look at the 14 sūtras, we see that these are rearranged in a particular, peculiar fashion. So, if we compare these two, the 14 sūtras and the traditional sound inventory, we can discuss the sūtras in terms of the sound inventory. So, if we look at the first 4 sūtras, namely, 'A i u n', 'r l k', 'e o n' and 'ai ou c', these 4 sūtras consist of vowels arranged in accordance with their places of articulation and what these are? Will be clear when we go to the process of speech production. But we can say here that the first 4 sūtras can be said to describe the vowels that are part of the traditional sound inventory. Then, if we look at sūtras 5 and 6 namely, 'hayavarat' and 'lan', we can say that these sūtras consist of semi-vowels, 'y', 'v', 'r' and 'l', in addition to them, there is 'h' as well. This is what sūtras 5 and 6 consist of.

If we look at sūtra number 7, it is 'ñamagaṇanam'. It is nothing, but the nasal consonants. These are part of different classes representing different places of articulation. Now, these sounds, they form the 5th column representing the effort of articulation, all these sounds, 'ña ma ga ṇa na', these sounds form the part of the 5th column in the traditional sound inventory with some rearrangement. Then, if we look at sūtras 8 and 9, they are 'jhabhañ' and 'ghadhadhaş', 'jhabhañ' and 'ghadhadhaş'.

These two sūtras consist of 4th of the class consonants from each of the class representing the place of articulation which is the row. But now these consonants, these sounds, they form the 4th column representing the effort of articulation of these sounds. So, this effort of articulation will be made clear when we study the process of speech production. Right now, we observe that these two sūtras consist of consonants which are part of the 4th column in the traditional sound inventory.

Then, we look at sūtra number 10, this is 'jabagadadaś'. This sūtra consists of the third of the class consonants from each of the class representing the place of articulation that is described by the row and these 5 consonants, these are the sounds, they form the third column based on the effort of articulation. That is what is described in this particular sūtra, the third column from the sound inventory.

Then, we go to the description of sūtras 11 and 12. This consists of 'khaphachathathacatatav', 'kapay'. 'Khaphachathatha' is put in green and the rest in the black, primarily because these two sūtras consist of the second and the first of the class consonants from each class, representing the place of articulation. The green sounds, they are the second of the class consonants and the remaining ones are the first of the class consonants. These sounds form the second and first column representing the place of articulation. This is their uniqueness 'khaphachathathacatatav' and 'kapay'. Now, 'khaphachathatha' and 'catata', they are made of one sūtra and 'kapa' is part of the second sūtra. We will look at the purpose of this distinction little later.

Now, let us look at the remaining two sūtras 13th and 14th. These two sūtras, they are 'śaṣasar' and 'hal'. These two sūtras consist of the sibilant sounds or the fricatives as they are also called. So, this is the description of these 14 sūtras in comparison with the traditional sound inventory and I request you to take note of this pattern of description, because in the examination we will use both these notations. We may ask you to form the 'pratyāhāras' using the row and column information or we may also ask you to explain a particular 'pratyāhāra' in terms of the rows and the columns that get described by that particular 'pratyāhāra'.

So, this is in a nutshell the description of the 14 sūtras that are used by Pāṇini at the beginning of his grammar and these 14 sūtras can be compared with the traditional sound inventory and the traditional sound inventory can be described in terms of these 14 sūtras. We also note that the sounds are rearranged, in the traditional sound inventory we start the consonants from 'k', 'ka', 'g', 'gh', 'n' and there is a row wise arrangement that is how we read it. In this particular set of sounds known as 14 sūtras, we however, see that the arrangement is different, it is primarily the column wise arrangement and the purpose will become clear later on.

Now, as is our practice, we shall look at the 'mangalācaraṇa'. But before that let me summarize. In this today's lecture we have seen, we have studied the concept of 'it' with one sūtra defining it which is useful to form the 'pratyāhāra'. We have also seen the sūtra which defines, which tells us how to form a 'pratyāhāra'. After that we looked at the sound inventory which gets converted into the 14 sūtras and then we looked at the correspondence between the 14 sūtras and the traditional sound inventory. We also noted the notation used in terms of the class consonants, where they can be described using a particular row and the column. And now we shall study how the 'pratyāhāras' get formed together with the explanation and with some examples in the next lecture.

Let us now conclude today's lecture with the normal practice of reading the 'mangalācarana' from one of the text of Pāninian grammar. This 'mangalācarana' is taken from a text called 'Mādhavīya-Dhātuvrtti' which was composed by Mādhava in around 14th century CE. This reads "vāgīśādyā sumanasah sarvārthānāmupakrame, yam natvā krtakrtyāh syustam namāmi brhaspatim". I will repeat, "vāgīśādyā sumanasah sarvārthānāmupakrame, yam natvā krtakrtyāh syustam namāmi brhaspatim".

And as is also our practice, we will read the 5 sūtras from 2.2 beginning. They are as follows, 'pūrvāparādharottaramekadeśinaikādhikaraņe', 'ardham napumsakam', 'dvitīyatṛtīyacaturthaturyāŋyanyatarasyām', 'prāptāpanne ca dvitīyayā', 'kālāḥ parimāṇinā'. I repeat, 'pūrvāparādharottaramekadeśinaikādhikaraṇe', 'ardham napumsakam', 'dvitīyatṛtīyacaturthaturyāŋyanyatarasyām', 'prāptāpanne ca dvitīyayā' and 'kālāḥ parimāṇinā'.

Thank you.