Course Name: 'Introduction to Pāṇinian Grammar' Professor Name: Prof. Malhar Arvind Kulkarni Department Name: Humanities and Social Sciences (HSS) Institute Name: IIT Bombay Week:09 Lecture:42

Welcome. I welcome you all to this lecture in the course Introduction to Pāninian Grammar. In this course, we have reached a stage now such that we can take a look back and see what we have learnt so far and then also look at the plan ahead. In this lecture, we shall be doing precisely the same. Let us look back and review what we have studied so far about Pāninian grammar in this course which is of course, an introductory course as the title also suggests.

At the beginning we studied the historical aspects related to the Pāņinian grammar. We studied the name of the text, then we also studied names of various texts and authors who are part of this tradition of Pāṇinian grammar. It started with Kātyāyana who wrote the Vārtikas, then Patañjali who wrote the great Mahābhāşya, then Bhartrhari, Jayāditya, Vāmana and so on and so forth, and then the great Bhattojī Dīkṣita and the Nāgeśa and so on and their lineage.

We came to the current form of this tradition in which we described how the current tradition handles various issues related to the continuity of this tradition, and how there is also some kind of enrichment happening to this tradition because of the touch with the current developments.

We also took a brief note of the influence of this Pāninian grammatical tradition on the modern branch of linguistics. When linguistics was in its infant stage, when the scholars came into contact with the Pāninian grammatical tradition, how the scientific inquiry that we have studied so far, as far as the process of speech production is concerned gave a huge impetus to them and the new branch of linguistics came into being.

Then, we studied the concept of the Meatalanguage, an extremely important concept as far as the Pāṇinian grammar is concerned and grammar in general is concerned. Meatalanguage is extremely important.

Then, we studied the features of the Meatalanguage of the Pāninian grammar. We studied 3 main features which make this Meatalanguage a unique one and those 3 features are namely, the fundamental principle that the word form is included as part of the meaning conveyed by that word. This is the first feature of the Meatalanguage of Pānini. The second feature was meaning of the cases. This was an additional feature altogether. The third one was the technique of forming the technical term called pratyāhāra very very valuable and very an extremely important tool device designed by Pānini which helped him attain brevity. Then, we studied the technique of forming the pratyāhāra. This technique allowed the Pāninian grammar to attain brevity in grammatical description. And also, this brevity was not at the cost of anything, but rather this

brevity was in contrast with the exhaustiveness of the material that it covered. So, as greater the linguistic material covered by as brief a string is what seems to be the motto line that the Pāṇinian grammar seems to have followed, seems to have achieved when it formed pratyāhāra. This is the strength of the technique of pratyāhāra.

In this process, we also studied the principles involved in the arrangement of sounds in the traditional inventory and they are rearranged in the first 14 sūtras which allows the Pāṇinian grammar to form the pratyāhāra, so what are the principles on the basis of which this rearrangement is made. This is what we studied. We also noted that there are 41 pratyāhāras formed and used in the Pāṇinian grammar. There are a couple of them more which are suggested by some commentators. And so, we saw that there are multiple pratyāhāras additional pratyāhāras that can be formed if need arises. That is if the linguistic usage is to be described using such pratyāhāras then those pratyāhāras can also be generated. Right now the Sanskrit usage demands the description which can be attained using these 41 pratyāhāras.

Then, we moved towards studying the process of speech production as described in the Pāņinian grammar. We studied the source which described various stages. The source was Pāņinīyaśikṣā and the verses which we repeated several times "ātmā buddhyā sametyārthān mano yuṅkte vivakṣayā manaḥ kāyāgnim āhanti sa prerayati mārutaṁ mārutastūrasi caran mandraṁ janayati svaram sodīrņo mūrdhnyabhihato vaktramāpadya mārutaḥ varņān janayate". We noted that there are 8 stages out of which the initial 2 stages correspond to the internal as well as cognitive stage 'ātmā buddhyā sametyārthān', 'mano yuṅkte vivakṣayā'. And the later stages 'manaḥ kāyāgnim āhanti' and so on up to 'varṇān janayate', they correspond to the physical or biological process involved in the process of speech production. And finally, the external speech is produced which is the culmination of this process. So, the external most part is the speech produced and the internal most part is the cognitive stage. And we also said that there is a cause and effect relationship that is stated in between the most internal and the most external part of this process of speech production, the cause and effect relationship. It is the internal part which is considered as the cause and the external part which is considered as the process that a speaker undergoes.

As far as the hearer is concerned, it will be the external part which will act as the cause of the communication and it will be the internal cognitive part which will be which will mark the end of this particular process. However, it is to be noted that when a speaker undergoes this process of speech production he himself in most of the cases is also the hearer, the first ever hearer or the lone hearer if there is not anyone else around. So, he is also the validator. He also counter checks whether the external speech that is thus produced matches with the internal cognitive stages or not. And then if it is not, then he offers a rejoinder or he says I do not mean it or I meant this and so on and so forth. And if there is not any mismatch, there is not any reaction from the speaker as there is no need to give any reaction. So, the point is that it is this internal cognitive process which plays

an extremely important role which is what is given utmost importance by the Pāṇinian grammatical tradition. And then there are several theories as well, based on this particular fact which we shall study in the advanced level course of Pāṇinian grammar. We then studied the properties of sounds which form the basis of grammatical activity in the Pāṇinian grammar. The sounds which are thus produced by the process of speech production.

We studied properties in the form of place of articulation sthāna, then we studied the properties in the form of effort of articulation prayatna. And we noted that there are 2 types of prayatna which are noted by the Pāṇinian grammatical tradition, namely the ābhyantaraprayatna the internal one and the bāhyaprayatna the external one. ābhyantaraprayatna referring to the effort of articulation that takes place inside the oral cavity and external refers to the effort of articulation that takes place outside the oral cavity. We then studied properties of each sound mentioned in the traditional sound inventory. We took each sound separately and noted down the place of articulation of that sound as well as the effort of articulation, both ābhyantara as well as bāhya. We also studied the purpose of ābhyantaraprayatna and also the bāhyaprayatna. The purpose of the ābhyantaraprayatna and the place of articulation is formation of the technical term called savarņa which also helps Pāṇinini and Pāṇinian grammar attain brevity in order to account for a great number of cases as far as the usage is concerned. Big data in brief manner that seems to be the motto line over here. So, we studied these properties and the ābhyantaraprayatna we noted were handy were useful as far as deciding the proximity between the substituent and the substitute in case the sūtra states more than one substitutes.

Then, we also studied the relation of the sounds that are mentioned in the pratyāhārasūtras, the 14 pratyāhārasūtras and all the sounds that part that are part of the sound inventory, traditional sound inventory. So, we noted this relation. We also studied the sūtra in detail namely aņuditsavarņasya cāpratyayah and we noted that this sūtra is called savarņagrāhaka and so on.

After having studied the process of speech production we moved on to study further another important concept which is compositionality. Then, we studied the concept of compositionality in the Pāņinian grammar. We said that this concept functions at 3 levels in the Pāņinian grammar namely meaning or artha word or śabda an accent or svara. We studied these 3 levels together with the components of these three levels and we also studied the examples. We also studied the contrast between indivisibility akhaṇḍatva and compositionality sakhaṇḍatva, and concluded that both views are experienced by the speakers as well as the hearers as far as the process of communication involving speech is concerned. So, sarvasatyavāda as was stated by the śabdasūtra that is what we noted.

This is what we have done so far. This also brings us to an important point namely the purpose of grammar. What is the purpose of grammar according to the Pāṇinian grammatical tradition? This

is what we shall study in today's lecture the purpose of grammar. We shall also study what is the purpose of studying grammar and what follows.

So, compositionality is the base on the basis of which the grammar functions. So, compositionality forms the basic background for the grammar to function. As far as the akhandatva is concerned the grammar has nothing to do with it. One only has to count the number of sentences and one has to note down the meanings of those sentences. The corpus of sentences. But it is impossible to create such a corpus with exhaustiveness and therefore, as a result of this limitation we had to resort to the concept of compositionality.

We studied the concept of anvaya and vyatireka as propounded by the mahābhaṣya where the meaning similarity and corresponding word similarity they are matched together, and the meaning dissimilarity with the corresponding dissimilarity as far as the word is concerned was matched together and it was stated that these are the constituents or these are the components of the sentence. And they were further confirmed by various complementary data and then we also found out that the grammar analyses the indivisible units of meaning word and accent and its components and then it stores them. The units of the indivisible, units of meaning word and accent namely the vākya are analyzed and its components in the form of padārtha word meaning, pada word, and padasvara the word accent, they are all stored by the grammar.

The grammar further analyses these components in the form of padārtha, pada and padasvara, the word meaning, the word, and the word accent, and it arrives at a stage which is non derivable to a certain extent. It stops at these Linguistic Atoms as we call them and stores them as basic units to start the derivation process. These atoms we said are termed as prakrti and pratyaya as far as the word is concerned, prakrtyartha and pratyayārtha as far as the meaning is concerned, and pratyayasvara as far as the accent is concerned.

Then, we noted that the grammar formulates rules which describe combinations of these basic units and also the combinations of the derived units in the form of the padas. So, first the rules tell us the combinations of the prakrti and pratyaya as far as the word is concerned, prakrtyartha and pratyayārtha as far as the meaning is concerned, and prakrtisvara and pratyayasvara as far as the svara or accent is concerned. By joining the prakrtyartha and pratyayārtha, we derive the padārtha. By joining the prakrti and pratyaya we derive the pada. And by joining the prakrtisvara and the pratyayasvara, we drive the padasvara. We have seen examples of this. And now these units which are derived they are further considered to be the units and some other units are constructed. So, these derived units are considered valid units of speech by a community of speakers of that speech.

Now, other combinations of prakrti and pratyaya and the derived units which are not described by the rules of grammar are not considered valid units of speech, by the same community of speakers of that speech. The prakrti and pratyaya bringing about the derivation of the pada and such pada bringing about the derivation of a sentence and such sentences get derived by various such units. So, these combinations are valid units of speech considered valid by a community of speakers of that particular speech and most importantly the other combinations which are not described by the rules of grammar are not considered valid units of speech by the same community of speakers of that speech. So, given that Ram goes to a village is the meaning which is to be expressed, in the format that is shown in the form of an equation below in Sanskrit were you will have 3 words.

The first word consisted of the components Rp plus pT 1 to 3, where root R stands for root, p stands for prātipadika, T stands for termination. So, Rp is the root prātipadika and pT is the prātipadika termination, namely 1 to 3. Plus Rp plus pT 4 to 21 plus Rv plus os plus vT, where v is dhātu or a verbal root, os is other suffix and vT is the verbal termination. So, if this is the structure of a sentence that is to be used to express Ram goes to a village, we shall now fill in the slots. So, Rp can be Rama potentially, pT 1 to 3 could be su, Rp once again could be grama, pT 4 to 21 could be am, Rv could be gam, os could be a and vT could be ti.

So, these are the basic components. These are our linguistic atoms and they express certain atoms in the form of meanings. When these words are collected together to express the meanings then by processing these items with the help of the rules, we get Rāmaḥ as the pada, grāmaṁ as the pada and gacchati as the pada. When we join these padas together, we get the sentence Rāmo grāmaṁ gacchati which is considered as a valid statement. It is a valid sentence and also valid unit of the speech spoken by speakers of Sanskrit.

This is how the grammar constructs the sentence and this is how the compositionality allows grammar to function. Similarly, if you look at the same meaning namely Ram goes to a village and if this is the meaning that is to be expressed once again we will follow the same formulae, Rp plus pT 1 to 3 plus Rp plus pT 4 to 21 plus Rv plus os plus vT 1 to 18. Then, if we have the following combinations Rāma plus am, grāma plus am, gam plus ya plus ti. Now, these combinations will lead to the units namely, Rāmam grāmam and gamyati which will lead to the speech unit called sentence like Rāmam grāmam gamyati. If you have to express Ram goes to a village, if you collect these constituents or components and compose the higher units in the form of words, and then the higher unit in the form of a sentence like Rāmam grāmam grāmam grāmam gamyati, then this is not considered as a valid statement. This is not a valid sentence at all. A Sanskrit speaker will tell you, this is not a valid sentence at all, in order to express Ram goes to a village. So, now, the grammar provides us with the combinations which are considered to be valid combinations by the speakers of Sanskrit.

So, for example, Rāma plus su grāma plus am gam a and ti this is a valid combination which then generates Rāmaḥ grāmaṁ and gacchati, which then generates Rāmo grāmaṁ gacchati this is a valid combination. But Rāma and am, grāma and am and gam ya ti is not a valid combination in order to express the meaning Ram goes to a village. This is not a valid combination. Because it is not stated by, it is not observed first of all by the grammar of Pāṇini and it does not therefore state it in the form of rules. So, Rāmaṁ grāmaṁ gamyati is not a valid sentence as far as Pāṇinian grammar is concerned.

This is the purpose of grammar as far as Pāṇinian grammar is concerned, to tell us the combinations which are valid and the combinations which are not valid in order to express some meanings. And also, as far as the meanings are concerned which combinations are valid, which meaning combinations are valid, based on the principles of yogyatā and ākāṅkṣā and so on and so forth.

Now, once this purpose is clear, the purpose of grammar which tells us the combinations that are valid, we shall now study the sūtras which are part of Pāṇinian grammar. These sūtras will state which combinations of linguistic atoms, word atoms are valid and which are invalid, to express which particular meanings with which accent features in all these 3 levels. The sūtras of Pāṇinian grammar are devoted to this particular cause. This is the main purpose of the sūtras in the Pāṇinian grammar, to explain these combinations, which combinations are valid as far as meanings are concerned, word is concerned, and the accent is concerned.

Now, let us briefly study the purpose of the study of grammar as stated by the Pāṇinian grammatical tradition. The purpose of the study of grammar is to know which are the valid combinations. Primary purpose of the study of Pāṇinian grammar is to get the knowledge of valid combinations of linguistic atoms which constitute units of speech at different levels. Artha, śabda and svara which meanings can be combined as valid in Sanskrit arthākāśa, and which words can be combined to express these meanings namely the śabdākāśa, and which accents can be combined as features of these words. Knowledge of these is what is the purpose of studying grammar, to gain knowledge of these.

Also, to gain the knowledge of the technique of combining compositionality as well as indivisibility is also the purpose of grammar. The current tradition states that the main purpose of the study of grammar is to get the knowledge of the division of the speech into the atoms called prakrti and pratyaya, to the knowledge of the technique of conversion of the compositionality into indivisibility, "Prakrti-pratyaya-vibhāga-niścaya-jñāna-pūrvaka-akhaṇḍatva-jñānam" that is the second one. I repeat the knowledge of the technique of conversion of the compositionality into indivisibility, Prakrti-pratyaya-vibhāga this is compositionality, niścaya the knowledge, jñāna-pūrvaka-akhaṇḍatva-jñānam knowledge of indivisibility. And the third one is the speech utterance with this knowledge that tat-pūrvakam uccāraṇam ca. So, the knowledge of the conversion and the

indivisibility and the uccāraņa uttering the speech with this particular knowledge in hand, this seems to be the primary purpose of the grammar as far as the current Pāṇinian grammatical tradition is concerned.

What is the next plan of action that we are going to undertake? Now, we are going to study the sūtras, various types of sūtras and their examples. So, first of all we shall study what is a sūtra? what are the types of sūtra? Because each sūtra might be assigned some different function. What is the reasoning behind classifying sūtra in this particular way? Then we shall study how to make the meaning of the sūtra? Partly we have studied this when we studied the sūtras defining itsañjnñā, but we shall revisit this.

What is the speech form generated by the sūtra? What are the examples which are part of the linguistic usage? Which is the speech form that is not generated by the sūtra? And how it is not generated? How it is avoided by adding specific wordings in the sūtra? And then we shall also study the derivation process which is supported by the sūtra. Various sūtra account for various stages as far as the derivation is concerned.

We shall study this aspect in detail from here on. This we shall do from the next lecture onwards. But before closing this lecture let us follow our practice and recite the mangalācaraņa from one of the celebrated texts in the Pāṇinian grammatical tradition.

This is Laghuśabdenduśekhara composed by Nāgeśabhaṭṭa a commentary on the Vaiyākaraṇasiddhāntkaumudī and the maṅgalācaraṇa are two verses I have selected. They are "pātañjalamahābhāṣye kṛtabhūripariśramaḥ śivabhaṭṭasūto dhīmān satīdevyāstu garbhajaḥ, natvā phaṇīśaṁ nāgeśastanute'rthaprakāśākaṁ manoramomārdhadehaṁ laghuśabdenduśekharam". I repeat, "pātañjalamahābhāṣye kṛtabhūripariśramaḥ śivabhaṭṭasūto dhīmān satīdevyāstu garbhajaḥ, natvā phaṇīśaṁ nāgeśastanute'rthaprakāśākaṁ manoramomārdhadehaṁ laghuśabdenduśekharam". I atvā phaṇīśaṁ nāgeśastanute'rthaprakāśākaṁ manoramomārdhadehaṁ laghuśabdenduśekharam".

And the 5 sūtras of today they are taken from 6 1. The 6th chapter first subchapter, 6th adhyāya, 1st pada and they are 'ekāco dve prathamasya', 'ajāderdvitīyasya', 'Na ndrāḥ samyogādayaḥ', 'pūrvo'bhyāsaḥ', 'ubhe'bhyastam'. I repeat, 'ekāco dve prathamasya', 'ajāderdvitīyasya', 'Na ndrāḥ samyogādayaḥ', 'pūrvo'bhyāsaḥ', 'ubhe'bhyastam'.

Thank you for your attention.