Welcome. I welcome you all to this lecture in the course Introduction to Pāṇinian grammar. After having studied several basic concepts in the grammar of Pāṇini starting from meta language onwards, we have studied in the previous lecture the concept of sūtra which is at the core in the text of Aṣṭādhyāyī, the basic text in the Pāṇinian grammatical tradition.

We also looked at the types of sūtras, 6 amongst them are the most prominent. Now, we shall devote time to study these types in detail and the first type we take up is the saṁjñā, the technical terms, terms that are used in the Pāṇinian grammar. The purpose of studying these saṁjñā is to understand the system better, because this system identifies certain elements and terms them in a certain manner. And then uses those terms in the sūtras in order to prescribe certain operations.

In a way the saṁjñā use the lexicon that is required for this grammar in an effective manner. This is the reason why we shall study now the saṁjñāsūtras in the text of the Aṣṭādhyāyī and also in the Pāṇinian grammatical tradition. Why I use the word Pāṇinian grammatical tradition will become clearer soon. For example, let us take the core concept of vākya sentence.

This is not explicitly defined in the Aṣṭādhyāyī. This is used in the Aṣṭādhyāyī, but not defined. This concept is defined by the vārtika of kātyāyana and in fact, there are two vārtikas which define this particular concept of vākya and they are ekatiṅ vākyam and ākhyātaṁ sāvyayakārakaviśeṣaṇam vākyam. Let us look at these definitions one by one.

What is the meaning of ekatiṅ vākyam? ekatiṅ vākyam means a unit of elements containing one tiṅ is called a vākya; for example, if we have the if we have a sentence of this kind and we have three subunits of this sentence and they are constructed in this manner, some element in the left hand side plus a right hand side element plus another word which has a left hand side element followed by a right hand side element plus the third word.

Now, in this third word there has to be this right hand side element which has to be a tiṅ, if this is the case then this entire unit can be called a sentence. So, one tiṅ in a group of elements can become eligible to be called a sentence. Now, just as in the first bullet that we saw just now, tiṅ appears in the right hand side of the third word.

Now, there may be a situation where this tiṅ occurs in the second word and there may be a situation where the tiṅ can occur in the first word in this position yet we can call all the three sentence because they have one tiṅ. This tiṅ irrespective of any position does give the status of a sentence to a unit. So, for example, gacchati is a word which consists of this tiṅ. So, this gacchati by itself can be called a sentence, plus if there are other elements to be added then that can also come together to be called a sentence, but gacchati on its own can also be called a sentence.

However, if you have a situation where there are three words and the right hand side element in all the three words is occupied by a sup; that means, that there is no tiṅ then this cannot be called a sentence, as simple as that. So, a a unit a group of elements in which appears one tiṅ is called a sentence. So, all these three they can be called a sentence plus this can also be called a sentence.

So, now we have an expanded form of the formula that we presented in the previous slide. A tiṅ suffix is already always added to a dhātu. So, if you have dhātu plus tiṅ this qualifies to be called a sentence. Now, if you have dhātu plus tiṅ has one word and then there are other words and those words could be of the following kind, dhātu plus tiṅ plus sup and plus sup on the right hand side. Now, this left hand side slot can be filled in by a prātipadika.

So, the finally, expanded version of this formula is dhātu plus tiṅ one word plus prātipadika plus sup second word plus prātipadika plus sup third word and this entire unit can still be called a sentence. But if you have prātipadika plus sup plus prātipadika plus sup plus prātipadika plus sup then this cannot qualify as a sentence, this cannot be called a sentence because it does not contain a single tiṅ. This is extremely important as the definition of vākya or sentence sentence is an important saṁjñā defined in this manner by Kātyāyana.

Now, what does this mean? It means that it is a verbal action which is an essential aspect which makes a sentence an essential constituent, essential path which makes a sentence. Essential condition for a sentence. It is this verbal action together with an ends a fixed tiṅ whose absence will not make the unit to qualify for sentence-hood.

The action denoted by a verbal root is central as far as the description is concerned. It is also a vidheya, a predicate. A speech form is generated primarily to describe entities in the world coming together to accomplish an action, this is what it means. When we say ekatiṅ vākyam, I repeat the last bullet. A speech form is generated primarily to describe entities in the world which come together to accomplish an action. So, it is an action that is to be described, that is the focus of the

description that is part of the meaning of a speech form. Now, let us look at the second and expanded definition provided in the vārtikas.

Refer to above, ākhyātaṁ sāvyayakārakaviśeṣaṇam vākyam the verb indicating an action together with the participants of that action, along with the indeclinable and qualifier is called a sentence. This is what it means, I repeat the verb ākhyata indicating an action ākhyata, together with the participants of that action kāraka, along with the indeclinable sāvyaya and qualifier viśeṣaṇa is called a sentence vākya.

This definition complements the earlier definition by adding certain elements which fill in the slots. These elements delineate the participants of the action denoted by the verbal root. For example, Devadatta gām abhyāja śuklām atra; does this qualify to be called the sentence? Answer is yes. Why? What this mean? What does this mean? This string means oh Devadatta bring the white cow here. abhyāja means bring it involves action of bringing by the verbal root aja. gām is a cow which participates in the action of bringing of cow as an object, śuklām is white qualifier of cow, atra means here this is an indeclinable.

So, now, we have an action with the tiṅ in abhyāja, this is an ākhyata. gām is the kāraka tvam because abhyāja is second person singular. So, tvam is the kartṛpada which is not different than Devadatta over here. So, in indirectly Devadatta acts as the kartṛ, go is the participant in the relation of karma, śuklā is the qualifier of go and atra is an indeclinable. So, we have an ākhyata, we have a kāraka, Devadatta and go, we have a viśeṣaṇa śuklā and we have an avyaya atra. Therefore, now this definition second definition of vākya applies here and this unit qualifies to be called a sentence ākhyātaṁ sāvyayakārakaviśeṣaṇam vākyam.

Now, these are not the necessary conditions. If one of them is dropped the unit can still be called a sentence, but tiṅ is a necessary condition, if tiṅ is not there then that unit does not qualify to be called a sentence. Now, a sentence is made up of words or pada as they call it in Pāṇinian grammar technically. Let us now look at the saṁjñā pada which is defined in the saṁjñāsūtra; suptiṅantaṁ padam what this means is a verbal element at the end of which appears either the sup or the tiṅ suffix is called a pada. This is the explanation of 1.4.14 suptiṅantaṁ padam. I repeat a verbal element at the end of which appears either the sup or the tiṅ suffix it is called a pada.

So, pada is the basic element of a sentence. A sentence is made up of pada and each element can become eligible to be a part of the sentence if and only if they become a pada. So, not any element which is let us say taken out of lexicon can be used in a sentence unless and until it becomes a pada; that means, you add either a sup or a tiṅ to it. Which means that any lexical item cannot be

used on its own in the sentence. The structure of the sentence does not allow such a phenomenon. It has to be a pada, therefore, either a sup or a tiṅ has to be added.

Now, there are some words to which Pāṇinian grammar adds the sup, but then it also deletes them. Such words are indeclinables and avyaya; however, from the point of view of the grammatical theory they are called pada because the sup is added to them. Here are some examples of pada. On this slide there are some padas that are listed which are taken out of the earlier datasets that we have seen, with some accent marks and I am not going to explain the accent marks right over here. But this is still an introduction to those accent marks as well.

Omitting the accent marks if we look at the words themselves we come to know that these are the basic units of a sentence, grāmam for example. grāmam is a pada and therefore, it qualifies to be a part of a sentence, gacchati is a pada. Why grāmam and gacchati is a pada because at the end of grāmam appears am which is a sup, at the end of gacchati appears ti which is a tip or ti. am is part of the suffixes enlisted in 4.1.2 which we have seen before, ti is part of the suffixes which are listed in 3.4.78, these suffixes listed in four one two are called sups these suffixes which are listed in 3.4.78 they are called tiṅs. So, this is a sup, this is the tiṅ which comes at the end of this string and therefore, this string which is called, this is called a pada now. grāmam is a pada, gacchati is a pada, grāma is not a pada, gam is not a pada, Rāma is not a pada, śālā is not a pada, etcetera. But grāmam is a pada, gacchati is a pada, Rāmaḥ is a pada, śālām is a pada and so on.

All the words mentioned on the right hand side they are padas, all the words they are mentioned that are mentioned in the left hand side of this line are not padas. These are the constituents of the padas. padas are made up of these constituents, but these themselves are not padas. This however, grāmam etcetera is a pada, fit to be used in a sentence and a sentence is constructed in fact, out of these padas and this is a mix of subantas and tiṅantas.

However, there are only 2 tiṅantas and 4 subantas. So, if we have Rāmaḥ grāmaṁ gacchati or grāmaṁ gacchati Rāmaḥ here we have 3 words and this unit of 3 words can be call the sentence because there is one tiṅ, over here in gacchati. Similarly, śālām paśyati Mohanaḥ in this string there is one tiṅ in paśyati therefore, this unit of three words can be called sentence.

Now, for your quick reference we have also noted down accents on the padas. Like for example, in grāmam there is a vertical bar on top, in gacchati there are two horizontal bars which get converted into one vertical bar over here. All these are the accents on the padas which are derived from the prakṛti and pratyaya accents.

So, just as the word grāmam is derived from grāma and am. Similarly, the accent of grāmam is also derived from the accent of grāma and am. We have already seen the concept of compositionality before in which we have said that meaning word and accent, these are the three levels that are described in the Pāṇinian grammar.

So, meaning is described which acts as the cause, then the pada and then of course, a accent together with the pada. On this slide we look at the pada, concept and we look at the examples of pada and we also look at the accent given on the pada. This is just by way of introduction, we may not and need not follow this notion of accent right now right here we can bring it back once again.

So, as was shown before a pada is made up of prakṛti and pratyaya. grāma is a prakṛti, am is a pratyaya, gam is a prakṛti, a and ti they are pratyaya. How are they defined in Pāṇinian grammar? But before answering that question, let me also say that there are some additional explanations or definitions of the term pada given in the Pāṇinian grammar which we shall also study later on. Those are called internal pada and those internal pada are not fit to be a part of a sentence, unless sup and tiṅ is added to them. But this internal for the concept we shall see later on right. Now, let us look at the concepts of prakṛti and pratyaya.

They are not explicitly defined in the Aṣṭādhyāyī, neither prakṛti nor pratyya. We find later text modern texts defining those terms, but not the text of Aṣṭādhyāyī, but the specific types of prakṛtis are defined, namely dhātu and prātipadika which we shall study here on. pratyaya is also not defined and no type of pratyaya is also defined.

Apart from these saṁjñā and there are some repetitions these are some other basic saṁjñā which we have seen before. Like pada, suptiṅantaṁ padam we have seen this is 1.4.14, prakṛti not defined, but assumed pratyaya not defined yet assumed and used, the term prakṛti is also not used explicitly in the sūtras of Aṣṭādhyāyī in this particular sense. dhātu and prātipadika they are; however, used and also defined for example, there are two sūtra that we have seen earlier bhūvādayo dhātavaḥ defining simple dhātu and arthavadadhāturapratyayaḥ prātipadikam defining a prātipadika.

Let us look at these in detail now. Let us first of all study the concept of dhātu, the saṁjñā of dhātu the saṁjñā of dhātu is defined by two sūtras. First is bhūvādayo dhātavaḥ 1.3.1 and the second one is sanādyantaḥ dhātavaḥ by 3.1.32. Let us look at the first definition given by the bhūvādayo dhātavaḥ the saṁjñā is dhātu and bhūvadayo this is the saṁjñī to be defined.

What does this mean? It means that the elements in the list which begins with bhū and which denote an action are termed dhātu. There are approximately 2000 elements in this list which denote an action and therefore, they will be termed dhātu. So, we come to know that this is the definition by enumeration, the 2000 items are enumerated and this sūtras says that call these 2000 dhātu.

So, here are some examples. Bhū, edh, paṭh, ci, nī these are all the elements which are part of this list of 2000 elements and they also denote the action. And so, then they will be called dhātus by 1.3.1 bhūvādayo dhātavaḥ. Here is the second definition of dhātu, this is the saṃjñāsūtra and this is sanādyantaḥ dhātavaḥ which means those verbal elements which have the suffixes beginning with san sa for example, at the end are termed dhātu. sanādyantaḥ dhātavaḥ is the saṃjñāsūtra, dhātu is the saṃjñā, sanādyanta is the saṃjñī. So, in this saṃjñāsūtra dhātu is defined as the verbal element at the end of which appears the suffixes beginning with san, san means sa at the end. And so, these terms are called dhātu. These are derived dhātu.

The list of suffixes beginning with san or sa are stated in this section beginning with 3.1.5 up to 3.1.31, they involve both types dhātu plus pratyaya is equal to dhātu and prātipadika plus pratyaya is equal to a dhātu. These are the two types. Let us take some examples and look at these ideas in a clearer manner.

First let us look at dhātu plus pratyaya making a dhātu a derived verbal root. Let us take the first suffix san, in the sense of desire prescribed by the sūtra dhātoḥ karmaṇaḥ samānakartṛkād icchāyāṃ va. So, if we take the example of the action of knowing, we have the verbal root indicating the action of knowing plus we add the meaning desire to it, which means the desire to know. So, the verbal route jñā means to know, there is a suffix sa stated by 3.1.8 which means desire.

So, now if we want to express the meaning desire to know, we have to combine jñā plus sa do the process and we get the verbal root jijñāsā; jijñāsā means desire to know. This is a verbal root derived by adding the suffix sa to the verbal root jñā and now by 3.1.32 jijñāsā becomes a verbal root this is an example of dhātu plus pratyaya giving rise to another dhātu.

Here is another example of dhātu plus pratyaya giving an output of another dhātu. This is an example of the suffix yaṅ, in the sense of repetition given by the sūtra dhātor ekāco halādeḥ kriyāsamabhihāre yaṅ. What this means is the suffix yaṅ is added after a verbal root which has only one vowel and which is a consonant beginning one and this suffix is added in the sense of frequent occurrence.

So, if you have the meaning collection which is the meaning of a verbal root and we have to add the repetition meaning to it, which means repeated action of collection then in order to express this meaning we would choose the verbal root ci which stands for the action of collecting and the suffix yaṅ stated by 3.1.22 in order to express the repetition. And then we join them together and we get the verbal root cecīya which indicates the repeated action of collection, this is a derived verbal root.

The third example is that of ṇic, which means inspiration stated by the sūtra hetumati ca 3.1.26, what this means is the suffix ṇic is added after a verbal root in the sense of an inspiration. So, if we have to express the meaning and action of reading and to which we have to add inspiration together with this, the meaning of the action is inspiration to do an action of reading. Then in order to express this meaning we select the verbal root paṭh and we add this suffix to ṇic to it, which gives us the verbal root pāṭhi. Remember pāṭhi is the verbal root, dhātu plus pratyaya giving us another dhātu and this is to this is added another suffix say ti and we get the verbal form.

Now, let us look at the other type of dhātu which is obtained by adding a pratyaya to a prātipadika. So, we have the suffix kyac here in the sense of one desires for oneself. The sūtra is supa ātmanaḥ kyac 3.1.8 which means immediately after the word ending with the sup is added a suffix kyac in the sense of one desires for oneself.

So, if you have knowledge and we need to add the meaning to desire for oneself and so we get by this combination to desire knowledge for oneself. In order to explain express this meaning we would say jñānam knowledge, ātmanaḥ icchati to desire for oneself. And in order to express this we will say we will use the word jñāna, to which we will add kyac which means ātmanaḥ icchati. Which will be combined then and we get the form jñānīya which is a verbal root derived by adding a pratyaya to a prātipadika. This is the second type of dhātu, but adding a pratyaya to a prātipadika jñānīya.

The second example of this kind is the suffix kāmyac in the same meaning, one desires for oneself stated by 3.1.9, which means that immediately after the word ending with the sup is added a suffix kāmyac in the sense of one desires for oneself. So, in the same meaning jñānam ātmanaḥ icchati we have jñāna plus kāmyac and that gives us jñānakāmya the verbal root which means to desire knowledge for oneself.

This is a second example of the phenomenon in which pratyaya is added to a prātipadika and the dhātu is generated. The third example is that of kyaṅ suffix, which is added by the sūtra kartuḥ kyaṅ salopaśca by 3.1.11, what this means is immediately after the word ending in a sup, which is

a standard of comparison is added a suffix kyaṅ in the sense of one behaves like and the consonant s at the end is dropped, is deleted.

So, we have the meanings like horse plus one behaves and we get the combination in the sense to behave like a horse. And now in order to express this we will say aśva iva and then ācarati to having put them together we will we will get aśva plus kyaṅ. kyaṅ in the sense of iva ācarati and we will get the form aśvāya, this is a verbal root obtained by adding a verbal suffix to a prātipadika, this is a dhātu in accordance with the definitions sanadyānta dhātavaḥ.

What is the output of a dhātu ? There are two outputs, first one is dhātu to which tiṅ is added and so you get the pada foremost and most important function. The other important function is you add a kṛt suffix to a dhātu and you get prātipadika as an output. This is an extremely important function of the verbal root or dhātu.

So, what is the tiṅ? tiṅ is a list of suffixes stated in 3.4.78, we have already seen this when we studied the technique of forming the pratyāhāra. These are the 18 suffixes at the beginning of which comes ti at the end of which comes ṅ we join them together to get the acronym tiṅ the pratyāhāra tiṅ, which stands for all the elements that come in between ti and ṅ and also ti. These are the suffixes stated in the section 3.4.78, these are the suffixes which are stated to be the substitutes of abstract suffixes known as lakāra like laṭ liṭ luṭ lṛṭ etcetera.

These abstract suffixes denote tense and mood, they form initial part of the derivation process and get substituted by tiṅ. tiṅ suffixes mean person number tense or mood and also kartṛ, karma or bhāva. So, here are the 10 lakaras, laṭ which means present tense whose form is paṭhati like, liṭ is perfect tense and whose forms are like papāṭha. luṭ is for future tense tomorrow onwards and whose forms are paṭhitā etcetera. lṛṭ is future again, but a general future, todays future and the forms are like paṭhiṣyati etcetera.

loṭ is imperative mood whose forms are like paṭhatu etcetera. laṅ is past imperfect whose forms are like apaṭhat this past imperfect begins with yesterday and goes on and on. Then we have liṅ, potential mood whose form is paṭhet, benedictive mood, its form is paṭhyāt. luṅ is an aorist a simple past whose form is apaṭhīt etcetera and lṛṅ is the conditional mood whose form is a apaṭhiṣyat etcetera.

What is a kṛt? kṛt is defined by 3.1.93 which says kṛdatiṅ dhātoḥ atiṅ pratyayaḥ kṛt bhavati, a suffix added immediately after a verbal root that is a dhātu and which is not a tiṅ is termed kṛt, very simple definition. The word form thus derived is term prātipadika by 1.2.46, kṛt suffixes denote bhāva and kāraka and 6 kārakas kartā karma karaṇa saṃpradāna apādāna and adhikaraṇa. A

kṛdanta words, kṛdanta meaning kṛd ante yasya such words are primarily adjectives unless specified otherwise as a saṁjñā as a name and noun and so on.

Here are some kṛt suffixes for your reference. kṛtya suffixes notably ya tavya and anīya stated in the section 3.1.95 up to 1.32. Then we have tṛc, tṛn, tṛc is stated in 3.1.133, tṛn is stated in 3.2.134, aṇ is stated in 3.2.1, ghañ is stated in 3.3.18, tumun is stated by 3.3.158 and ktvā is stated by 3.4.26. We shall look at the forms of these pratyayas later on.

To summarise what we have said so far the technical terms in the Pāṇinian grammar reflect the structure of Pāṇinian grammar. dhātu and prātipadika are the basic building blocks which represent the lexicon of Sanskrit language. This lexicon is both derived as well as underived. The derived lexicon is interlinked with the internal lexical items, the derivation of such a lexicon is theoretically infinite. This lexicon is static as well as dynamic. It also reflects the productive capacity of Pāṇinian grammar. This capacity to produce such n number of sequences is the strength of Pāṇinian grammar, using this capacity modern Indian languages derive vocabulary to express newly arriving meanings and so on. We shall study the concept of prātipadika in the next lecture.

Thank you for your attention.