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Welcome, I welcome you all to this lecture in the course 'Introduction to Pāṇinian grammar'. So far we have been studying the features of the meta language of Pāṇini and Pāṇini's grammar. We have studied three important features of the meta language and in the process we started studying the concept of 'it' the marker and then we went deep into the text of Aṣṭādhyāyī and we studied all the sūtras that define the term 'it'.

This is a small section, at the beginning of the third pāda of the first adhyāya to be precise from 1.3.2 to 1.3.8 the itsamjñā is defined. And we studied each and every sūtra in some detail and we looked at some examples, which are derived by the grammatical process and how itsamjñā plays a technical important role in this derivation by triggering a particular kind of grammatical operation.

Now, after having studied the sūtras which define 'it', it is important for us to also study certain important functions of these markers, the 'it' sounds and various operations that they trigger. So, in this lecture the broad theme that we are studying is the Markers in the Meta Language of Pāṇinian grammar and most importantly the specific theme that we study here in this lecture is Markers and their functions, the 'it' sounds and their functions.

So, to recap these are the 8 sūtras. These are the sūtras which define, the itsamjñā on this slide there are 6 sūtras which assign the term 'it' to the consonants, and then there is one more sūtra 'upadeśe ajnunāsika it' which assigns the term 'it' to the vowels. These six sūtras on the slide are 'halantyam', 'na vibhaktau tusmāḥ', these two assign the term 'it' to the consonants in the final position in the initial enunciation.

And the rest, ādirñiṭuḍavaḥ, ṣaḥ pratyayasya, cuṭū laśakvataddhite assign the technical term to the elements occurring in the initial position. Out of which ṣaḥ pratyayasya, cuṭū, laśakvataddhite they assign the term 'it' to the initial consonant mentioned in the sūtra if it occurs as part of a pratyaya; whereas, ādirñiṭuḍavaḥ assigns the term 'it' to 3 clusters ñi, ṭu and ḍu, which appear at the beginning of a verbal root, part of the verbal list.

Now, after having studied these sūtras in details together with the examples. Let us look at certain functions of the markers and on this slide are noted some 7 functions, first prescription of addition of suffixes, second specification of the position of an element that is added,

specification of the position of a substitute, that is the third one. The fourth one is modification in the element to which a suffix is added.

Fifth is negation of certain modifications of an element, sixth is accent marks and seventh is meaning change. All these are indeed the functions of markers and in this lecture we shall concentrate on the first two namely the prescription of addition of suffixes and the specification of the position of an element that is added. And we shall study the next 5 functions in the next lectures.

So, let us concentrate on the first function enumerated on the earlier slide. That is prescription of addition of certain sets of suffixes; here we refer to the dhātupāṭha the list of verbal roots. We have shown you what dhātupāṭha is in the earlier earliest lectures. Now, this list of verbal roots which can also be called as the lexical items, these are tagged with the markers or the it sounds to indicate the set of suffixes that are added after them.

In case of some verbal roots also adding a shade of the meaning, in the list of verbal roots the verbal roots are all stated to end in a vowel. When in the grammatical derivation they become consonant ending and are also generally referred to as consonant ending in the dictionaries and so on. For example, 'edha' together with two vowels 'e' and 'a' is mentioned in the list of verbal roots dhātupāṭha.

Whereas in the grammatical derivation it becomes 'edh' ending in 'dh' consonant ending; and is also referred to in the dictionaries etcetera in consonant ending fashion like this never mentioned like this, but in the dhātupāṭha this root is mentioned in this format edha having two vowels in it. Now, the vowel that is coming at the end of this root is termed 'it' by 1.3.2. So, this is an 'it' vowel occurring at the end.

This 'it' vowel is further assigned three properties of accents udātta anudātta and svarita what they stand for we shall study when we look at the process of speech production in detail. Right now, we should note that these three which are the phonetic features, they are used only as meta linguistic device. So, these markers are not to be pronounced in these fashions, they are just stated to be like that in the meta linguistic fashion as meta linguistic device. And that is not they are not actually implemented. So, no verbal root is actually uttered or written with the accent mark. Nor does this accent have any correspondence with the accent the verbal root has in the object language. So, it should be clear now, that this udātta anudātta and svarita is purely a metalinguistic device and has got no relation whatsoever with the accent the verbal root has in the object language.

Now, let us look at the details. So, a verbal root is then qualified as udattet or anudattet or svaritet. Udattet means a verbal root having udatta accent as it, anudattet means a verbal root having anudatta accent as 'it' and svaritet would mean a verbal root having svarita accent as 'it'. Let us take examples. So, now, what happens to a verbal root, which is udattet. Which means a verbal root which has udatta as 'it'. So, after an udattet verbal root the suffixes termed as parasmaipada are added by the rule 1.3.78 śeṣāt kartari parasmaipadam.

So, for example, the verbal root patha over here which is listed in the dhātupāṭha as a vowel ending patha ends in 'a'. Actually its path when you take it in the grammatical derivation or when you list it down in the dictionaries you mention it like this and not like this, but in the dhātupāṭha it is mentioned like this with 'a' at the end termed to be termed as 'it'.

And then it is also assigned the phonetic property of udātta by convention and. So, this will be called udāttet. And then you add the parasmaipada set of suffixes after this path which are this tip sip and mip etcetera. So, here are the forms we have already seen these forms in the earlier lecture paṭhati paṭhataḥ paṭhanti paṭhataḥ paṭhathaḥ paṭhatha paṭhāmi paṭhāvaḥ. These are the forms having parasmaipada endings ti taḥ anti si thaḥ tha mi vaḥ maḥ, these are added after a verbal root.

Now, how do you decide whether these set of suffixes are to be added after path or not? They will be that will be decided on the basis of the accent conventional accent assigned to this itsamjñā. So, this is udāttet and that is what triggers the addition of these suffixes. So, these suffixes are to be added after only those roots which have this feature namely udāttet.

Let us look at the next example of anudāttet. So, a verbal root which has an 'it' vowel also another phonetic property of anudātta then the root is called anudāttet. And after an anudāttet verbal root the suffixes termed ātmnepada are added by the sūtra 1.3.13 namely anudāttanita ātmanepadam. So, let us take the example of edh once again edha edha which is listed in the dhātupāṭha as a vowel ending element edha, but when you start the grammatical process, it is only edh ending in a consonant.

In the dictionaries it will be mentioned as edh ending in a consonant. In the dhātupāṭha; however, it is mentioned as vowel ending for obvious reasons this a is termed as 'it' and it is also assigned the phonetic property of anudātta. And now this anudāttet verbal root will get the ātmanepada set of suffixes namely ta atām jha and so on. So, you get the form edhate edhete edhante edhase edhethe edhadhve edhe edhāvahe edhāmahe this is what you get. And these forms having the ātmanepada endings they are triggered because of this a being called an anudātta 'it'.

So, this anudattet triggers this addition. Now, let us look at the svaritet. So, a verbal root which has got the final vowel 'it' and also in addition assigned the phonetic property of svarita will be called svaritet. So, after a svaritet verbal root the suffixes termed atmanepada are added only if, the fruit of the action denoted by the verbal root goes to the doer of the action. If this condition is satisfied then you add the atmanepada suffixes by the sutra 1. 3. 72.

For example, yaja yaja ending in a vowel is listed in the dhātupāṭha in this fashion. But if when you take it in the grammatical derivation you have it consonant ending yaj. Similarly in the dictionaries it is mentioned as yaj. So, yaja and yaj. Now the purpose is obvious this 'a' at the end is termed it by 1.3.2 and the property of svarita is also assigned to it. So, this yaj now is termed svaritet.

And then the ātmanepada suffixes are added after yaj. If this meaning conditions is condition is fulfilled. So, eventually after the verbal root yaj, both sets of suffixes are added to indicate the respective meaning. So, for example, you will add the parasmaipada ending and get the forms yajati yajataḥ yajanti etcetera. And you will also get the ātmanepada endings and add them to it and then you will get the forms yajate yajate yajante etcetera.

So, when you use the forms yajate yajate yajante, they will indicate the difference in the meaning namely that, this action of sacrificing has generated a fruit, which goes to the doer of the sacrifice only then you will use yajate. If the doer of the sacrifice is not getting the result of the sacrifice then you will say yajati then you will use the word yajati that is the difference between these two sets of suffixes with reference to certain kinds of verbal roots which are indicated which are differentiated by this property called svarita 'it'. This is one of the important functions of the markers namely the prescription of addition of suffixes, certain kinds of suffixes.

After having studied this function let us proceed further. And look at the second function of the marker namely, the specification of position of element and here we will look at the consonants. The consonants 'k' 't' and 'm' at the end position are termed it by 1.3.3.

And consonants 'k' and 't' at the initial position within a certain domain of pratyaya are also termed as 'it' by 1.3.8 and 1.3.7 respectively, and the elements to which these consonants are attached are called 'kit' 'tit' and also 'mit' when we add the word add the sound 'm' which is 'it' to this list. So, now, the position of the element which is 'kit' is the final addition, the position of the element which is 'tit' is the initial addition. And the position of the element, which is mit is

immediately after the final vowel of that element. That is the position, that is specified by respective sūtras. This is how the markers function.

Let us elaborate on this by citing sūtras and taking concrete examples. So, let us first of all focus on 'k' consonant being termed 'it'. So, the element to which 'k' consonant is termed as marker or as 'it' will be called kit.

Now, that element, which is called kit is added at the end of a particular element and this is stated by 1.1.46 namely ādyantau ṭakitau. This sūtra means an element which is ṭit is added at the initial position of the element to which it is added and an element which is kit is added at the final position of the element to which it is added. The domain of this sūtra is the augment or āgama. And it is important to note here that, āgama becomes a part of the element to which it is added. So, it is stated in combination of the 6th case, which here means of similar to what it means in the object language.

Let us take an example, where k is termed as it. So, the sūtra is āne muk 7.2.82, āne is 7 slash 1 of āna, muk is 1 slash 1 of 'm' in which 'k' is 'it' and 'u' is the stylistic use.

Now, the meaning of this sūtra is immediately before āna, add 'm' as part of a stem that ends in short 'a'. There are words that are continued in this sūtra namely ataḥ 6 slash 1 of at that is short a continues from 7.2.80 and aṅgasya 6 slash 1 of aṅga which means a stem continues from 6.4.1. So, the meaning of this sūtra once again is the following. Immediately before āna add 'm' as part of a stem that ends in short 'a'. Now, here is an example, m as part of a stem that ends in short a that is what is stated the question is where should m be added? And the answer given over here is that because muk is kit, this m is to be added at the end of the stem that ends in short a.

So, you have an example over here, where we take the verbal root yaj followed by the suffix a followed by another suffix āna. In this case now with reference to āna yaj and 'a' is the stem or anga that is why it is put in square brackets. So, now, in this case because this anga ends in short a āne muk would add m as part of this anga, but because it is kit. Now, this m will be added only at the end that is in this place and not before here no. It is to be added only here. And then you get the form yajamāna that is one who does the action of sacrificing that is yajamāna. So, we derive the word yajamāna in this way where m is added at the end of the anga because it is kit.

Now, let us look at the tit element. So, tit element is added at the beginning of the element by once again 1.1.46 ādyantau ṭakitau. And it means an element which is tit is added at the initial

position of the element to which it is added and the element which is kit is added at the final position of the element to which it is added.

Once again the domain of this sūtra is the augment āgama and therefore, and because āgama becomes a part of the element to which it is added. So, it is stated in combination of the 6th case, the āgama is stated in combination of the 6th case. Here is a concrete example luṅlaṅlrṅsvdudāttah.

For example lun is the set of suffixes, which express aorist past tense. lan is a technical name of a set of suffixes which expresses imperfect past tense. And lrn is the technical name of the set of suffixes which expresses the conditional mood. Now, at 1 slash 1 is that of at and which means a and this agama a is called the tit because this t is it by 1.3.3.

So, now there is another word udāttaḥ which means udātta that is high stress. Now, this is the object language udātta we shall study what this means later on. Words continued in this sūtra are aṅgasya 6 slash 1 of aṅga meaning a stem and this word is continued from 6.4.1. Now, the meaning of this sūtra luṅlaṅlṛṅṣvḍudāttaḥ is the following. It means immediately before luṅ laṅ and lṛṅ add a as part of the stem that is all it says.

Now, the question is where should a be added? And the answer given is because this a is tit it is to be added at the beginning of the stem. So, the meaning of the sūtra is the following. Immediately before lun lan and lrn add a as part of the stem. But the question is where should a be added? Should it be in the initial position or at the end position?

But the answer is provided to us by the marker t which is added to at originally it is at. So, t is it. Now, because it is tit because this a is tit it is decided by 1.1.46 that it is to be added at the beginning of the stem. So, for example, we are deriving apathat we start with path and lan. And now the question arises this is lan. So, immediately before lan there is this stem path

Now, the sūtra says add 'a' to this stem, where here at the beginning or at the end that is not specified. But the marker t specifies that this a should be added before at the initial position. And so now we get apath and then lan. Then lan is substituted by tip. So, we have apath plus ti, then this ti is substituted by t, then there is an addition of a in between apath a t and finally, we get the form apathat. The most important point to remember over here is a here is added in the initial position mainly because this has a marker t. This is the function of the marker t to specify the position of this element 'a' which is added to this path. And that position is the initial position.

Let us look at the third example of the consonant 'm' being termed 'it' (Refer time: 27:00) and that element being termed as mit. Now, the position that is specified for a mit element is

immediately after the final vowel. This is specified by 1.1.47 that is midacon'styāt paraḥ. The meaning of this sūtra is an element which is mit having m as 'it' is added after the final vowel of the element to which it is added. The domain of this sūtra once again is an augment and augment or āgama becomes a part of the element to which it is added.

So, it is stated in combination of 6th case which means 'of'. Let us take an example concrete example, the sūtra is tṛṇaha im 7.3.92. tṛṇah is 6 slash 1 of tṛṇah im is 1 slash 1 of im that is i. Now, this im is having m as it by 1.3.3. So, this im now, will be called mit and the real augment real meaning in the object language the augment is i and this m is the marker it.

But now this will be called mit. Now, where should we add this? We have to add this to this tṛṇah should it be before or should it be after where what is the position? That is not specified. But now this marker 'm' will specify that. The words continued in this sūtra are sārvadhātuke 7 slash 1 of sārvadhātuka and we shall see what sārvadhātuka is later on piti we have already seen what this means, piti is 7 slash 1 of pit, piti having p as it.

And hali we also know what this is 7 slash 1 of hal. So, all these three words have the same case same number. So, they will be interrelated. The verbal root used is trh whose stem is trṇah, trh means himsa or to kill or to slay. So, now let us look at the derivation process. So, we begin with trṇah. We are in this at this stage trṇah plus ti. This ti is nothing but pit, 'p' is a marker. So, this is pit.

Now, the meaning of this sūtra is add im that is 'i' as part of the stem tṛṇah, which is placed immediately before a sārvadhātuka suffix, which begins with a consonant and which is pit that is which has 'p' as 'it' or a marker. So, here is tṛṇah stem as indicated by the brackets followed by a suffix ti, which is termed as sārvadhātuka this is also pit and this is also consonant beginning.

So, immediately before a sārvadhātuka suffix which is consonant beginning and which has 'p' as the marker we have tṛṇah stem. So, now, 7.3.92 has a scope of application. And says that add im to this tṛṇah. Where do we add im? That is the question which is answered by the marker mit. Since im is mit it is added after the last vowel of the stem which is a after ṇ. So, in tṛṇah we have two vowels.

One is r immediately after t, one is a immediately after n. So, a is the last vowel in the stem. And so this im is to be added immediately after this a that is what is stated by midaco'ntyāt paraḥ. And so you get this form this is the derivation process. So, you add i here after this a. So, tṛṇa i

ha ti ,then this gets substituted as tṛṇeh ti, then tṛṇeḍh ti, then tṛṇeḍh dhi, then tṛṇeḍh dhi, then tṛṇeḍh dhi, then tṛṇeḍhi and finally, tṛṇeḍhi which means he or she or it slays.

This is the derivation process. And here at this stage our sūtra midaco'ntyāt paraḥ directs triggers the operation of addition of 'i' in this position. So, the position of this 'i' is specified by this marker mit. To summarize two functions of the markers were studied so far. Namely prescription of addition of suffixes to the verbal roots and specification of the position of an element added.

So, 'it' sounds that is markers are effectively used in Pāṇinian grammar to trigger the addition or certain set of suffixes after the verbal rules we have seen this. And they also indicate these markers also will indicate a particular meaning shade. That is if the fruit of the action goes to the door of the action or not. In the process of substitution the position of an added element needs to be specified which is achieved by the use of the 'it' sounds.

What next then? So, we shall study next the remaining functions of the 'it' markers. Namely the specification of the position of a substitute modification in the element to, which a suffix is added, negation of certain modifications of an element, an accent and also meaning change.

Thank you for your attention.