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Welcome. I welcome you all to this lecture in the course Introduction to Pāṇinian grammar. In the previous lecture we studied the basics of accent in Pāṇinian grammar. Today we shall continue studying the subject in slightly more detail.

In the previous lecture we saw how the accent is marked on the basic units namely prakṛti and pratyaya and with the help of the rules how the pada accent gets derived and how then it gets transformed in the form of the sentential accent. In this lecture we shall study in detail how the pada accent gets constructed from the prakṛti and pratyaya and how the dynamics comes into being comes into play.

So, let us study this simple derivation first. We start with the verbal root kṛ meaning to do on both sides and then we add the suffix tṛc on the left hand side and the suffix tṛn on the right hand side. Both these suffixes mean kartā, but because this tṛn suffix falls in the adhikāra 'tacchīlataddharmatatsādhukāriṣu', this adds an additional shade of meaning.

So, the derivation kartṛ means one who does that is a doer, but the same word kartṛ means one who whose habit it is to do. That means, a skilled doer how does this distinction of meaning get recorded as far as the word is concerned and here we see the accent playing an important role. So, now, this accent is derived with the help of the markers in the Pāṇinian grammatical system as we see 'c' is a marker over here and 'n' is a marker over here.

What this c Marker does is, c is a marker because of 1.3.3 and then it gets deleted and 7.3.84 applies and kṛ becomes kar and so, we have kartṛ. Now this c marker indicates that this final vowel gets accented by the sūtra citaḥ. So, in this case tṛ becomes udātta therefore, this ka becomes anudātta and marked with the horizontal bar below ka.

Whereas, in case of this tṛn, this n marker triggers the operation of ñnityārdinityam which makes the initial vowel udātta so, this ka, 'a' becomes udātta and this tṛ therefore, becomes anudātta. But it is coming immediately after an udātta therefore, it is marked as svarita with a vertical bar on top of the letter. This is the difference.

Now when you have the word kartr with the svarita sign on r indicates that the meaning of this word is a skilled doer and when the tr is not marked that shows that it is udatta, this means just a doer; doer of an action. This is how the accent distinguishes the meaning this could be said to be the minimal pair as far as the accent is concerned.

Now we take up the derivation of kartṛ with the final vowel being udātta meaning one who is a doer. So, here is the derivation, here are the 21 forms subanta forms and then the accent is also marked. So, in most of the forms this final udātta seems to be retained kartā this ā is udātta kartārau kartāra everywhere the final of the word kartṛ is retained except in the forms which are shown in blue kartrā, kartre kartroḥ and kartroḥ.

What happens in these cases is the word is kartṛ followed by this suffix \bar{a} and \bar{a} is anud \bar{a} tta and now because of this \bar{a} this ṛ is getting substituted by a vowel. So, an ud \bar{a} ttasvara is getting substituted by a consonant r on account of, in the condition of, in the environment of an anud \bar{a} tta vowel. This is what is happening in all these four cases.

And so as a result this anudatta vowel becomes the udatta and so therefore, this retains the udatta as is shown over here without any mark. This seems to be an important dynamics that plays a very crucial role as far as the accent of kartr with final r udatta.

So, here the rule 'udāttayaṇo halpūrvāt' comes into play where the vibhakti suffixes known as a 'asarvanāmasthāna' starting from the 6th, suffix in this case and elements known as nadī which come immediately after a yaṇ substitution, after a consonant in place of an udātta vowel are substituted by an udātta vowel.

So, here is kartṛ an anudātta which for is followed by an anudātta vowel, now here we have this ṛ becoming r preceded by a consonant, so t is a consonant which is also preceded by r. So, we have three consonants over here 'r t and r' as is shown here also 'r t r', this final r is a substitute that comes in place of ṛ a vowel which is an udātta vowel.

Now this is 'asarvanāmasthāna-vibhakti' which is anudātta, now when this yaṇ substitution takes place in place of an udātta vowel, this anudātta asarvanāmasthāna vowel gets anudātta. So, this anudātta is replaced by an udātta vowel, this is what happens here and so we get kartrā finally, accented 6.1.174 has a crucial role to play in this derivation.

Now let us look at the derivation of the word kartṛ which is initially accented. What this means is a skilled doer. What happens in this case? The forms are more or less same where initial accented vowel is retained, everywhere without a fail. So, kartā kartārau everywhere you will see ka initial vowel remains accented. So, the next vowels all of them they become anudātta in the case of kartṛbhyām etcetera the vowel that comes immediately after udātta the namely ṛ is termed as svarita bhyā which is an anudātta which comes after the udātta is not mark, but this is a pracaya this is an ekaśruti. So, is the case with all the vowels in the table of the 21 forms listed on this particular slide, remember the word kartṛ over here denotes a skilled doer.

This is how the forms will get accented in all the cases and so the distinction of accent will obviously, indicate the meaning distinction. The accent distinction determines the meaning distinction, this will help in the interpretation of the word.

Now, what happens if we derive a feminine form from both these for example, kartṛ which is finally accented which means a doer and kartṛ which is an initial accented word and which means a skilled doer, to these two words we have add this feminine suffix not pwhich means ī by 4.1.5 and so now, not and p in not pare markers by 1.3.3, 8 and 9 deletes them and so we have now kartṛ plus ī in both the cases. Now, once again we have this ṛ being substituted by r by iko yan aci caused by this ī which is an anudātta because it is a pit, once again we apply 6.1.174 which then substitute this anudātta ī by an udātta ī and so kartrī in this case becomes finally, accented.

And similarly in this case where ka initial vowel is udātta. Here there is no change initial vowel remains an udātta. So, in kartrī where final vowel is udātta means she who is a doer and where the initial vowel is udātta means she who is a skillful doer.

Now, let us look at the pada forms derived of kartrī. So, this is the word kartrī with final accent indicating that this is a doer of an action and here are the forms kartrī kartryau kartryaḥ and so on and so forth kartryā etcetera. Now in these cases we will have 6.1.174 applied once again. And the forms of the word kartrī which have initial accent will not differ. They will have the initial vowel accented in all the forms.

What is so, special about these forms is that we also have the application of 8.2.4 which says 'udāttasvarityoryaṇaḥ svarito'nudāttasya' an anudātta vowel which comes immediately after the yaṇ substitution replacing anudātta or a svarit vowel is substituted by a svarita vowel. So, here we have kartrī having this final vowel accented followed by an anudātta vowel au because of this au now this ī is getting substituted by yaṇ that is y. So, we have kartrya 'r t r y' 4 consonants; now this au which is an anudātta will now be substituted by 'a' svarita vowel. So, now, here we have kartryau

with this au marked as a svarita preceded by an anudatta vowel this is the svatantrasvarita we were talking about in the previous lecture.

So, if we go back and look at the forms where we have the svatantrasvarita, kartryau kartryah and kartryau, these are the forms where we get the svatantrasvarita and these are the forms in these are the forms in green which get the udatta. Because these are the asarvanāmasthāna-vibhaktis and these three they are the sarvanāmasthāna-vibhaktis, that is the reason why they are getting the svarita svatantrasvarita and in these the anudātta vowel is getting the udatta by the application of 6.1.1,74.

So, 6.1.174 applies in all the forms shown in green what this means is once again the vibhakti suffixes known as sarvanāmasthāna starting from the 6th suffix in this case and elements known as nadī which come immediately after a yan substitution after a consonant in a place of an udātta vowel are substituted by an udātta vowel. So, we have kartrī plus ā, ā is a 3/1. So, kartrī plus ā, ā is anudātta, this is udātta, because of this a this ī will now be substituted by a consonant 'y'. Therefore, now this a will be substituted by an udātta vowel. So, kartryā we will have an udātta vowel placed over here.

Going back to the forms, we note that these three forms have svatantrasvarita and the green ones they have the udatta in place of the generally non accented sup form over here. This is how the accent dynamic plays a very very important role in the derivation of the words. Nothing of this sort will happen in the word kartrī where the initial vowel will be accented.

To summarise we can say that the accent that was stated on the suffix tr records different meaning conditions. As well as different accent when added to a verbal root and a prātipadika is derived and the difference in accent is also visible when a feminine suffix is added. This is how history of an accent plays a crucial role in explaining accent at different levels.

Now, we shall study another important example which is of the second person pronoun yuşmad and the accent marks on it. This is based on another important Sanskrit text that was composed by this person yours truly called prakṛti-pratyaya-vibhāga-niścaya composed in the 1990s. So, here you have yuṣmada and all the accented forms for you and let us see how they get derived each one of them.

The important sūtra to remember over here is 'maparyantasya' which substitutes only the part up to 'm' of yuṣmad and also asmad. So, the substituent could be said to be yuṣm ending in m or asm ending in m. So, yuṣmad plus am and tva is substituted in place of yuṣm. So, you have tva plus ad

which remains over here from yuşmad plus am and so then tva a becomes v and so on. Similarly yuva replacing yuşm and ad remains yuy and ad remains and so on.

Another important sūtra is śeṣe lopaḥ, so śeṣe lopaḥ states that d is deleted in remaining cases when it appears immediately before the following suffixes which are the remaining cases that is 1/1 and 1/3, 4/1 and 4/3, 5/1 and 5/3 and 6/1 and 6/3. Otherwise there are 2 substitutes stated by 7.2. 86, 87 and 88 and 89. D is substituted by ā in following cases 1/2, 2/1 and 2/3, 2/1 and 2 and 3, 3/2 and 3/3, 4/2, 5/2 and 7/3 and d is substituted by y in the following cases 3/1, 6/2, 7/1 and 7/2. So, leaving these cases in the other cases d is deleted by śeṣe lopaḥ.

Now let us look at each step yuṣmad su and here we have yuṣmad am and then we have tva ad am and tvad am then d is deleted. So, we have tvam similarly we will have accent marks yuṣmad is marked finally, accented. So, yu is shown as anudātta with the horizontal bar below it, su is a consonant, so not marked which is replaced by am, but because this is a sup 'a' is marked as anudātta and so now, yuṣm will be replaced by tva and so we have tva ad, tva is anudātta and ad has got anudātta and am is anudātta.

Now, this 'a' and this 'a' and anudātta 'a' and udātta 'a', they become one 'a' by sandhi ato guṇe and so now, the 'a' substitute which comes in place of both of these is also udātta by the sūtra ekādeśaḥ udāttena udāttaḥ. So, we get tvad with udātta marking and am anudātta, now this d gets deleted and so, we have tva followed by am where 'a' is anudātta and so there is sandhi once again ami pūrvaḥ pūrvarūpasandhi. So, in place of an udātta and anudātta one vowel comes which is udātta, therefore tvam is marked as udātta which is not marked by any symbol. This is how the accent on tvam will get derived from yuṣmad su.

Similarly, when we derive the 1 slash 2 form yuṣmad plus au this is how it will get derived. On the left hand side you will have the derivation of the word and on the right hand side you will have the accent derivation as well. So, you have yuṣmad plus au where is wherein yuṣmad is marked with the final udātta, au is anudātta, au gets substituted by am. am is anudātta yuṣm gets substituted by yuva which has got two vowels both of them are anudātta because they come in place of an anudātta. ad is marked with udātta then there is a sandhi and because of ekādeśa udāttena udāttaḥ this is an udātta vowel. So, you have yuvad plus am then this d gets substituted by ā which is marked as anudātta. So, a consonant which is substituted by a vowel which is an anudātta primarily because this is already marked as an udātta, but now there is sandhi va and ā, udātta and anudātta and their resultant form is a sandhi ā, this will be udātta because of ekādeśa udāttena udāttaḥ and then once again this udātta and this anudātta their sandhi is marked once again as udātta because of ekādeśa udāttena udāttaḥ. So, yuvām will have this particular accent at the end This is how yuvām will be derived and this is how the accent on yuvām will be derived.

Next we go to 1/3 which is yūyam. So, here we have yuṣmad plus jas. jas is anudātta on in which place am is the substitute comes in and am is also anudātta. Now, yūya comes in place of yuṣm as a substitute, yūya both vowels are anudātta, ad has got 'a' udātta. Now there is a sandhi between this 'a' and this 'a', 'a' in yūya and 'a' in ad in place of both of them this 'a' in ad remains which is an udātta.

So, you have yūyad with final 'a' udātta now this d gets deleted. So, we have yūya plus am finally, this 'a' in yūya and 'a' in am they have a sandhi pūrvarūpasandhi and so this is ekādeśasandhi. So, ekādeśa udāttena udāttaḥ so this 'a' remains udātta. This is how yūyam will get the udātta form.

Similarly, we have yuṣmad plus am and here also we get an important case where this yuṣmad plus am, yuṣm gets substituted by tva which is anudātta and so then there is sandhi tva ad ekādeśasandhi. So, tvad becomes udātta this d gets substituted by ā which is an anudātta and so tva ā we get an udātta vowel tvā which is udātta and then there is this sandhi of this tvā with 'a' and that is also ekādeśa, so it will get udātta. So, tvām has an udātta vowel.

Similarly yuvām so, you have the similar steps in derivation where yuva is substituted in place of yuṣm and then there is ekādeśa. So, this yuva becomes udātta, d get substituted by 'a' which is an anudātta and so it gets ekādeśa with 'a'. So, it gets udātta and once again there is an ekādeśa of ā and 'a' which is udātta because of ekādeśa udāttena udāttaḥ. This is how we will derive yuvām.

Similarly now we go to yuṣmad plus śas to derive 2/3. So, we have yuṣmad plus śas and then this initial vowel get substituted by n and then this d gets substituted by ā which is anudātta so then there is ekādeśa. So, you have yuṣmā plus ns then this s gets deleted and you get the form yuṣmān.

Similarly 3/1 yuṣmad plus ṭā and this is; obviously, anudātta because of sup and then yuṣm gets substituted by tva which is anudātta and ad which is udātta. So, there is ekādeśa which makes it udātta this ā is anudātta. It remains anudātta this d gets substituted by y and finally, we get tvayā which is initially udātta.

Then we have yuvābhyām derived in this fashion yuṣmad plus bhyām yuṣmad gets substituted by yuva which is anudātta 'a' is udātta then we have yuvad where final 'a' is udātta. Then we have d substituted by ā which is anudātta and so this udātta and this anudātta have a sandhi. So, we get ā as udātta. bhyām is anudātta this anudātta comes immediately after an udātta therefore it gets a svarita. So, you have yuvābhyām with ā as udātta as yu anudātta bhyā as svarita.

Similarly, yuṣmābhiḥ very simple in this case yuṣm d becomes anudātta ā and then it gets sandhi is yuṣmā ā is udātta this is anudātta obviously. So, yuṣmābhiḥ is middle accented.

Similarly in the tubhyam we have yuṣmad plus ṅe. pratyaya is all anudātta. tubhya is the substitute in place of yuṣm which is anudātta and so then there is a ekādeśa with 'a'. So, this 'a' gets udātta d is deleted and so we get tubhya with final udātta followed by 'a' then there is a ekādeśa. So, we get the form tubhyam with final 'a' udātta where 'tubhyamahyau ṅayi' comes into play and this anudātta is then converted into an udātta. Similarly, yuvābhyām same as before.

Now we have 4/3 yuṣmad plus bhyas where bhyas is substituted by bhyam. So, bhyam is also anudātta now this d gets deleted. So, we get yuṣma and bhyam with middle vowel accented udātta yuṣmabhyam.

In 5/1 we have nasi replaced by at and so yuṣm gets replaced by tva which is anudātta then there is ekādeśa as usual. So, tvad plus at, d is deleted and then there is once again a ekādeśa udāttena udāttaḥ. So, we have tvat accented. Yuvābhyām as before, yuṣmabhyam, as before.

6/1 you have yuṣmad plus ṅas and so now, we have tava plus ad. Now here we have 'tavamamau ṅasi' coming into play and therefore, this tava which was derived as before that gets transformed into tava with initial accent same was the case with tubhyam where 'tubhyamahyau ṅayi' comes into play and this anudātta is then converted into an udātta, tava.

Then yuvayoḥ and here you have the same procedure yuva substituting yuṣm, ad retaining it is accent and then there is ekādeśa, yuvad has an accent, d is substituted by y and so os is anudātta. So, yuvayoḥ is middle accented.

Then we have yuṣmākam and we have yuṣmad plus ām and ām is substituted by ākam, both these vowels are anudātta now and so we get this d deleted, yuṣmākam is middle accented.

In tvayi you have similar process yuṣmad has yuṣm getting substituted by tva which is anudātta, 'a' is udātta. Then this d getting substituted by y and so tvayi retains the initial vowel as accented, in yuvayoḥ the same procedure as before. Yuṣmāsu also more or less same procedure where this d gets substituted by ā which is an anudātta vowel and then there is a ekādeśa. Therefore, this ā becomes udātta so yuṣmāsu has middle vowel accented.

Here are some observations a substitute of bigger size inherits the accent properties of smaller substituent. A vowel substitute in place of a consonant is anudātta in this case as there is already an udātta in the prātipadika. Even if ad which is an udātta is deleted other accent rules come into play and the same accent is achievable. There are some grammarians which delete the ad and not d just, even then same accent is derivable by some other dynamic accent rules.

To summarise the accent on pada forms of the first and second person pronounce can be derived thus in detail. In the similar fashion forms of all words can be derived; accent rules go hand in hand with word derivation rules. Multiple interpretations of the wordings in the rules are accommodated with the accent derivation rules as well. This is how we can derive accents of padas and then using some using such dynamic rules we derive the accent on the sentences. We will study the details of such accents and accents on compounds when we do the advanced course of Pāṇinian grammar.

Now before we close let us have the maṅgalācaraṇa composed by yours truly at the beginning of Śabdasūtra and this is "vāmanaṁ śivarāmaṁ ca śrīgurū abhivandya ca, devīṁ vācaṁ sarojasthāmamalāṁ śabdarūpiṇīṁ, śabdasūtrābhidhaṁ grantham apūrvaṁ vibudhapriyam, malhāraḥ kurute mātāpitrorāśīḥprasādajam" and I repeat, "vāmanaṁ śivarāmaṁ ca śrīgurū abhivandya ca, devīṁ vācaṁ sarojasthāmamalāṁ śabdarūpiṇīṁ, śabdasūtrābhidhaṁ grantham apūrvaṁ vibudhapriyam, malhāraḥ kurute mātāpitrorāśīḥprasādajam".

And today's 5 sūtras taken from 8.3 and also 8.4, first of all 8.3 they are matuvaso ru sambuddhau chandasi, atrānunāsikaḥ pūrvasya tu vā, āto'ṭi nityam, anunāsikāt paro'nusvāraḥ and samaḥ suṭi. I repeat, matuvaso ru sambuddhau chandasi, atrānunāsikaḥ pūrvasya tu vā, āto'ṭi nityam, anunāsikāt paro'nusvāraḥ and samaḥ suṭi.

And 8.4 raṣābhyām no ṇaḥ samānapade, aṭkupvāmnumvyavāye'pi, pūrvapadāt samjñāyāmagaḥ, vanam puragāmiśrakāsidhrakāśārikākoṭarāgrebhyaḥ and pranirantaḥśarekṣuplakṣāmrakārṣyakhadirapīyūkṣābhyo'samjñāyām api and I repeat, raṣābhyām no ṇaḥ samānapade, aṭkupvāmnumvyavāye'pi, pūrvapadāt samjñāyāmagaḥ, vanam puragāmiśrakāsidhrakāśārikākoṭarāgrebhyaḥ and pranirantaḥśarekṣuplakṣāmrakārṣyakhadirapīyūkṣābhyo'samjñāyām api.

Thank you for your attention. This is the last sūtra of the Aṣṭādhyāyī, 'a a'. With this we close this course on the introduction of Pāṇinian grammar.

At the end I would like to thank all of you for your patient hearing. I would also like to acknowledge the debt I am in of my gurus whom I mentioned in the maṅgalācaraṇa. The debt of my parents whose blessings have taken me thus far and the support I have received from all my students and family without which I could not complete this course. I thank you all and thank all these from the bottom of my heart, thank you so much and a special thanks to NPTEL and all Ravi, Vijay, Devendra and Tushar, thank you and Bharathi madam.