

Course Name: 'Introduction to Pāṇinian Grammar'
Professor Name: Prof. Malhar Arvind Kulkarni
Department Name: Humanities and Social Sciences (HSS)
Institute Name: IIT Bombay
Week:08
Lecture:40

Welcome, I welcome you all to this lecture in the course Introduction to Pāṇinian Grammar. We are looking at the concept of compositionality; we have studied the concept of compositionality with respect to artha and right now, we are studying the compositionality with respect to śabda.

In this lecture we continue to study this concept with respect to specific śabda, the components of the pada namely the prakṛti and pratyaya the roots and the suffixes. So, we are studying the compositionality with respect to śabda. So, we said that vākya is the basic unit of the speech sound as far as the śabda level is concerned; this vākya can be said to be composed of pada. So, if we take vākya one for example, we can say that it is composed of pada 1 plus pada 2 plus pada 3.

Now, the plus signs over here are marked in red ink; the purpose for using red ink over here is to show that it is this combination which is what is exclusively a sentence. pada 1 is independent, pada 2 is independent, pada 3 is independent as a constituent. But they are combination which is shown by these red marks this is what is the sentence. pada 1 can occur in another combination; so, also can pada 2; so, also can pada 3 and that combination will be considered as a sentence. This precisely corresponds with the sentence meaning which we said can be exclusively pointed out to these plus marks over there as well.

Similarly, the padas which are the constituents of the vākya in their term can be also shown to possess certain other constituents namely prakṛti and pratyaya. So, pada 1 can be said to have prakṛti 1 and pratyaya 1 as the constituents, pada 2 can be said to have prakṛti 2 and pratyaya 2 as constituents pada 3 can be said to have prakṛti 3 and pratyaya 3 as constituents.

Once again, these plus signs between the prakṛti 1 and pratyaya 1 etcetera are shown with blue marks precisely to highlight the point that it is this mark which exclusively can be called as pada. prakṛti and pratyaya are independent components and they can come together in different combinations, but it is this combination which is what is called as pada; so, this is over and above these clearly demarcated components.

This is same as the padārtha which is also over and above the meanings of its constituents. The padārtha was also pointed out towards to these plus signs which is over and above the meanings of the prakṛti and the pratyaya; correspondingly even in the case of pada the same thing happens.

Overall, we can say that prakṛti 1 and pratyaya 1 is the constituent in a way indirectly of the vākya. The direct constituent of vākya is pada and the direct constituents of pada is prakṛti and pratyaya, but prakṛti and pratyaya therefore, can be said to be the components or the constituents of vākya in general in Sanskrit. So, the sentence structure which is made up of these prakṛti and pratyaya can be shown in the following manner.

Sentence one is of this kind, Rp; where, R stands for root, p stands for prātipadika T stands for termination, v stands for dhātu os stands for other suffix. So, the first sentence structure is of this kind Rp plus pT and 1 to 3 plus Rp plus pT 4 to 21 plus Rv plus os plus vT 1 to 18. 1a can be shown with a order change; where, Rv plus os plus Vt 1 to 18 they occupy the first position, plus Rp plus pT 1 to 3 in the second position, and Rp plus pT 4 to 21 in the third position.

And the similar kind of construction can be shown in the following manner, Rp plus pT 1 to 3 plus Rv plus os that is here, plus vT 9 to 18. And if the order is changed then Rv plus os that is here, plus vT 9 to 18 plus Rp plus pT 1 to 3 this is how the sentence structure that can be shown in the form of the prakṛti and pratyaya. We shall study the examples of these in detail later on when we look at the concept of sentence as well as pada later on when we look at the saṃjñāsūtra.

Right now, let us look at the prakṛti and pratyaya there are two types of roots; dhātu and prātipadika, dhātu is the verbal root and prātipadika is the nominal root. Now, let us look at dhātu, a dhātu is of two kinds simple as well as complex. The simple one is listed in the lexicon and it is stated by 1.3.1 bhūvādayo dhātavaḥ. What this means is, the verbal elements in the list beginning with bhū and which denote action are termed as dhātu. And the complex ones which are derived rule based are stated by 3.1.32 which is sanādyantāḥ dhātavaḥ; which means the verbal elements at the end of which appear a list of suffixes beginning with san are termed as dhātu. These are the two explanations of the term dhātu simple as well as complex.

The simple dhātu has 10 groups, bhvādi adādi juhotyādi divādi sunotyādi tudādi rudhādi tanādi kryādi and curādi is a list at the beginning of which appears bhvādi is a list at the beginning of which appears bhū, adādi is a list at the beginning of which appears ad, juhotyādi is a list at the beginning of which appears hu, divādi is a list at the beginning of which appears div, sunotyādi is the list at the beginning of which appears su, tudādi is a list at the beginning of which appears tud, rudhādi is a list at the beginning of which appears rudh, tanādi is a list at the beginning of which appears tan kryādi is a list at the beginning of which appears krī and curādi finally, is a list at the beginning of which appears cur; these are the 10 groups of simple dhātu.

The complex dhātu are sanādyantāḥ dhātavaḥ stated by this rule that is suffixes stated from 3.1.5 to 3.1.31. Now, these suffixes they are again of two kinds there are certain suffixes which can be

added to simple dhātu and we can form a complex dhātu. And the second types of suffixes are such which can be added to prātipadika and they can be converted into the dhātu.

Let us look at them, the complex dhātu in which suffixes are added to simple dhātu are the following णिच् namely णिच् stated by 3.1.26 which means inspiration, सन् which is actually सन्च् stated by 3.1.5 which means to desire, यान् which is यान्च् stated by 3.1.22 means repetition, यान् लुक् stated by 3.1.22 and 2.4.74 once again means repetition. यक् stated by 3.1.27 यान्च् and ञान्च् stated by 3.1.28 are some other examples of suffixes which are added to simple dhātu and the complex dhātu are formed.

Similarly, complex dhātu are formed by adding suffixes to the prātipadika the nominal roots; they are, क्यच् meaning यान्च् क्यच् which is यान्च् added by 3.1.8, कान्च् which is कान्च् added by 3.1.9, क्यान्च् which is यान्च् added by 3.1.11, क्यञ्च् which is यान्च् once again added by 3.1.13, णिञ्च् which is णिच् added by 3.1.20 and णिच् which is णिच् it is added by 3.1.21 in various senses; these are the suffixes which are added to prātipadika and then the output form is a dhātu.

If we look at the prātipadika once again we can have two types of prātipadika, one is a simple prātipadika which is provided to us by a list or a lexicon and a complex prātipadika derived or a rule based prātipadika. The simple prātipadika is defined by the sūtra A 1.2.45 arthavadadhāturapratyayaḥ prātipadikam and the complex is defined by 1.2.46 kṛttadhitasamāsāśca.

The complex prātipadika can be formed by adding the suffixes to dhātus; for example, 3.1.91 to 3.4.76. In this section of the Aṣṭādhyāyī there are suffixes which are added to verbal roots which make the prātipadika, these suffixes are termed here as 'K', these suffixes are shown here by the notation 'K'. Similarly, suffixes are added to simple or other complex prātipadika which are called the taddhita suffixes which are shown by the notation 'Ta'. Then there are also compounds samāsas shown here by the notation C; and finally, Indeclinables shown here by the notation 'I' or avyaya, these are all complex prātipadika.

So, now using this more information we can rewrite the sentence structure shown earlier and that could be of this kind, root prātipadika which is formed by adding a kṛt suffix after a verbal root Rv plus K plus pT 1 to 3 plus Rp which is formed by adding it the taddhita suffix to prātipadika that is Rp plus Ta plus pT 4 to 21 plus Rv 1 to 2000 plus os plus vT 1 to 18.

Similar structure can be shown by changing the order Rv 1 to 2000 plus os plus vT 1 to 18 plus Rp which is composed of the verbal root plus the kṛt suffix. So, Rv plus K plus pT 1 to 3 plus Rp

which is composed of a prātipadika and taddhita suffix. So, Rp plus Ta plus pT 4 to 21 and the second structure can be rewritten as Rp plus pT 1 to 3 plus Rv plus os plus vT 9 to 18. The order change will impact the same structure as Rv plus os plus vT 9 to 18 plus Rp plus pT 1 to 3 this is how the sentence structure can be rewritten.

We should note some features of the derivation process as well; in the derivation process the root meaning occupies the initial position. In the entire sentence the only verbal root occupies the initial position, then are added suffixes to these roots verbal first and then the nominal ones then some other suffixes intermediary which get added. Then augments get added, then the process of substitution comes into being and then the output is returned.

The word order can be expressed in this manner, if we have a meaning Ram goes to a village it can be expressed by grāmaṃ gacchati Rāmaḥ or Rāmo grāmaṃ gacchati or gacchati grāmaṃ Rāmaḥ or gacchati Rāmo grāmaṃ there is not any change in the meaning at all. Primarily because, the relations of the left hand side root elements with the other root elements are determined by the right hand side elements also known as pratyayas or suffixes which remains same in all the four cases. And that is the reason why the change of order does not bring about the change in the meaning.

To summarize like the sentence meaning the sentence is also compositional, from the sentence meaning word meanings are extracted correspondingly from the sentence the words are extracted. From the word meanings root and suffix meanings are extracted, correspondingly from the words the roots and suffixes are extracted. The size and shape of these atoms is fixed by the grammarians after a lot of work and it namely the markers are used to assign several functions related to these prakṛti and pratyaya.

A sentence with the word orders say, a b c or b c a or c b a is still considered as a valid sentence in Sanskrit; it conveys the same meaning namely x y z. In case of accent; however, the order would be relevant as the verb appearing at the sentence initial position would have a different accent than when it appears in other positions. Now, we shall study the compositionality with respect to accent in the next lecture.

But before we finish, let us follow the tradition we have been following of reciting the maṅgalācaraṇa at the beginning of the celebrated texts. Here it is vaiyākaraṇasiddhāntamañjūṣā whose maṅgalācaraṇa is "nāgeśabhaṭṭaviduṣā natvā sāmbaṃ śivaṃ laghuḥ, vaiyākaraṇasiddhāntamañjūṣaiṣā viracyate" and I repeat, "nāgeśabhaṭṭaviduṣā natvā sāmbaṃ śivaṃ laghuḥ, vaiyākaraṇasiddhāntamañjūṣaiṣā viracyate".

And we end with reciting the five sūtras of today. These are taken from the fourth sub chapter of the fifth chapter, fourth pada of the fifth adhyāya they are pādaśatasya saṁkhyādervīpsāyām, daṇḍavyavasargayośca, sthūlādibhyaḥ prakāravacane kan, anatyagatau ktāt, na sāmivacane. I repeat, pādaśatasya saṁkhyādervīpsāyām, daṇḍavyavasargayośca, sthūlādibhyaḥ prakāravacane kan, anatyagatau ktāt, na sāmivacane.

Thank you for your attention.