Appreciating Linguistics: A typological approach
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Lecture - 22
Morphological Typology: A Cross Linguistic Study - Part 2

With this, let us move to the other type. So, considering we are talking about morphological typology, we will try to find out what are the other morphological typology available in the world's languages.

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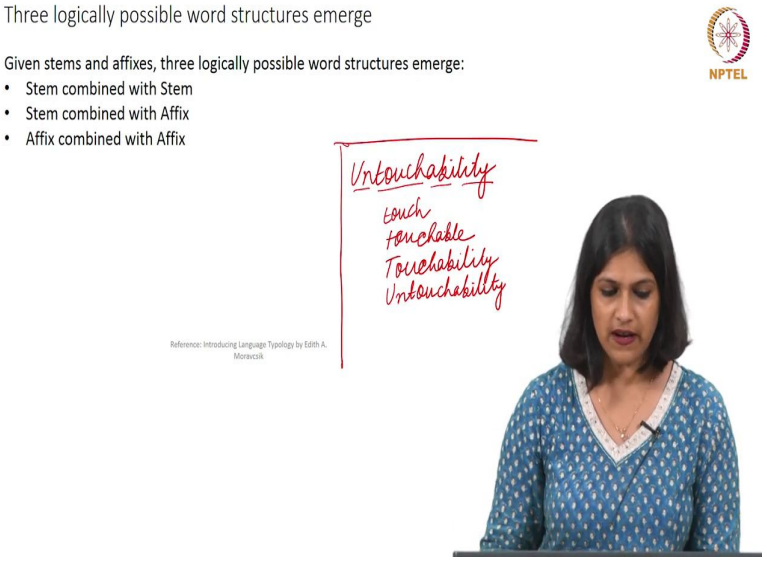

Now let us see, we did discuss how the analytic and synthetic morphological typology works and which category does your language belong to. So, with this information, let us move to another domain of morphological typology, that is the logically possible word order or what sort of logically possible word order structures that emerge from the world's languages. I am going to talk about a few combinations. Again from Moravcsik's book, we are getting data and then we are referring to the examples that have been given over there.

Then we will see the three basic combinations that have been discussed here, whether your language would fall into one of these categories or the languages that you know that can fall into one of these categories. But, crosslinguistically these are the three types that you see at

the morphological level. Before that, I would just help you to recall what all we talked about when we discussed what is a stem, what is an affix and how affixes will have prefixes and suffixes. Primarily prefixes are derivational morphemes and suffixes could be either derivational or inflectional depending on the situation.

So, in such cases, the three logically possible word orders are emerging. So, what are the three logical possible word orders? If it is a complex word, or even a compound word, anything other than simple; because if it is a simple word, there is only one morpheme and that is the free morpheme. So, that is not going to bother us as far as word order is concerned because, the moment you say word order, the first thing that should strike your mind is that we have multiple morphemes here, then only we are going to put it in order. If there is only one morpheme, there is absolutely no need to worry about what is happening in the word order thing.

These three categories or these three types are going to be considered on the basis of the polymorphemic words that we have in hand. When I say polymorphemic, I am primarily referring to multiple morphemes. So, yes, as I was talking about, can you recall for yourself how we discussed affixation as well as the stem things like in a word you might have roots, you also might have stems. Sometimes the stems can also be considered as roots, but not always.

The example if I remember I gave you I forgot exactly what was the example, but then I will give you a fresh example how to understand whether a stem can be a root or not. Let us say untouchability. This is a little complex word, but let us try to figure out what is the root here and what is the stem here. So, when it is untouchability, let us count the morphemes first. That is what we are doing most of the time, as far as morphological typology is concerned. Here is one morpheme touch, another morpheme -able, another morpheme then -ity another morpheme, so at least four morphemes that we see.

Let us start from the root word touch, then we have touchable, then we have touchability, that is wrong, then we have untouchability. So, in this connection, we will see touch is the root word. Why it is the root word? Because that is a head word or that is the main thing in this word, in this entire morphemic division. From touch we are getting touchable. So, the part of

the word that can host a bound morpheme is treated as stem for that bound morpheme. So, touch is the stem for -able. So, in touchable, touch is the stem.

In touchability, touchable is the stem for -ity and in untouchability, the entire touchability can be the stem for un-. So, the stem and then you can keep on adding morphemes and you can keep on creating stems. What is a stem then? A morpheme or a part of the word which can actually host a morpheme here. However, if you compare touch as a stem and touchable as a stem, there is a difference.

Touch as a stem, can also be considered as a root, but touchable as a stem, cannot be considered as a root, because it has another morpheme associated with it. So, that is how we need to understand when we are trying to figure out what other typologically possible word orders ,again it must be logical also.

The first thing that we have or the first type that I am going to talk about is when one stem is combined with another stem. That is the first type. The second type, when we are combining stem with an affix, whether it is a prefix or a suffix, will decide on the basis of the selection of the word. Then, the third one we have when we have an affix combined with another affix, which is actually a rare thing in most of the world's languages.

Stem combined with affix, in most of the cases we do encounter such kind of constructions. Stem combined with stem, not much frequently available, but yes, it is not that rare. But, when you have a word only with the affixes, that is a rare phenomenon if you try to explore it or if you try to find out the statistics or or the quantificational thing in a crosslinguistic perspective.

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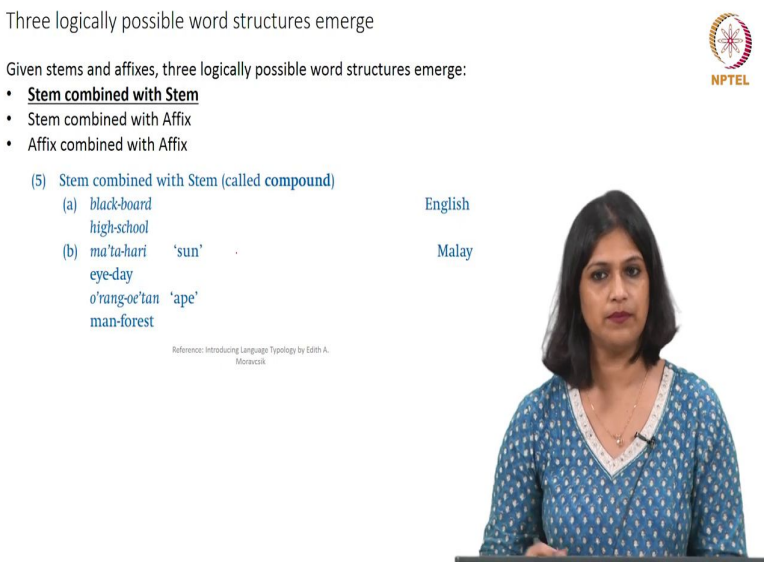

So, now let us look at the first possible combination first. This is a stem combined with a stem. I hope you understand what is a stem. A stem can be considered as a root to add instances and all the roots for that matter can be considered as stems. Also if they have an affix holding ability. All stems cannot be roots, but all roots can be stems, if they have an affix holding ability.

Now let us look at the data given in English and then there is another data given in Malay. These are typologically unrelated languages, so, obviously, we expect a lot of difference as far as syntactic structure is concerned, morphological selection is concerned. However, as far as stem combined with the stem formula is concerned, they behave almost similarly.

Let us look at the example given in 5 a. We have black-board. So, when you say black-board, there are two stems here: one is black, the other one is board. So, black also can be considered as a root, board can also considered as a root, but otherwise they can also be treated as stems primarily because of their affix holding ability. To make the understanding clearer for you, can you give me an instance where black can actually be considered as a stem?

So, I just said it is a root, no problem. It can stand alone. It is a free morpheme and then you can call it a root, that there is absolutely no issue about it. But calling it a stem; that means, it

must have an affix holding ability. I can say blacken, I blackened the wall. That means, from black we got blacken and from blacken we got blackened. So, that means, this example gives you an idea that this has the affix holding ability.

Same is the case with board. Board could be a root word, it can also be a stem. I can say I boarded the bus. That also has an ability to be considered as a stem. So, black-board or high-school; so, high, height, heightened that can be possible, school-schooling all these words they have the stem holding capacity; that is why this is the first type when you are talking about the logically possible word order.

The first type stem combined with stem, English allows it, Malay also allows it. Malay data given in 5. So, ma'ta-hari which means sun. So, ma'ta is eye and hari is day. Both of them are stems in Malay, that is why stem combining with stem type is valid in this language. The other example is also man-forest which is primarily ape like the forest dwelling people in that sense, in the early stage of early humans. The apes o'rang-oe'tan. So, o'rang means man oetan means forest. So, together this becomes ape.

English and Malay, these two languages for sure they allow the first type when the stem is combined with the stem and these are the compound words. When two independent stems are joined together, we call it compound words. We have already had a discussion on this in the previous classes. Now, can you think about the languages that you speak; does it allow this category or the first category? Do let me know when we have a live session later. If you think your language falls in the first category.

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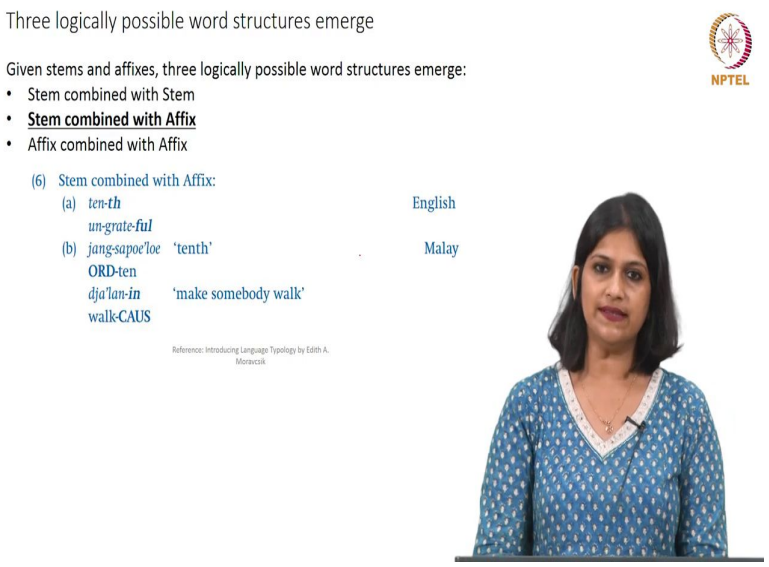

Now, let us go to the second category. The second category is when the stem is combined with affix. If you remember affixes could be either prefixes or suffixes or infixes also. Prefixes and suffixes are more common; infixes are generally a rare occurrence. In my discussion, I gave you the example of Bonto Igorot, which is a Filipino language, where Kayu and Kinayu example if you remember it correctly; kayu means I think wood and Kinayu is wood cutter. So, -in- is the infix.

Before that, affixes, prefix and suffix, untouchability example that I have given. Now, let us see how the combination of a stem and a suffix or a prefix is going to be in the second category again the same data from English and from Malay. The English example tenth; ten is the stem and -th is the affix. Similarly, ungrateful: in case of ungrateful, – ful is the affix and great in that sense when you say grateful, this is considered as a stem. Great is going to be considered as a stem here.

In this case, ungrateful and tenth, these belong to the second category when the stem is combined with the affix. And, now let us look at the Malay data. This is jang-sapoe'loe. Again, I am not a native speaker. I am not even a speaker of this language, forget about native. This means tenth. So, in this case, the first morpheme is what? The first morpheme is

the affix, like the bound morpheme and the second one is ten. The root morpheme is the second or the stem is the second morpheme, the first one is a prefix.

So, in English, it is the suffix, but in Malay, this is the prefix. Irrespective of whether it is a prefix or a suffix it will be considered as an affix which we are going to put in a broader terminology. So, this one, in this case, this is also the second type stem combined with affix is going to be this is correct for this instance. Then walk and with the causative marker; that means, you are making somebody walk. So, dja'lan-in so, in this case dja'lan-in is the is the root morpheme which is the stem here and -in is the causative marker which is the suffix.

So, irrespective of whether it is a prefix or suffix, the stem and affix combination works both in English and in Malay. And, I am sure it works for most of the world's languages, be it Indo-Aryan, Dravidian, Tibeto-Burman, Austro-Asiatic. Tibeto-Burman I am keeping it aside for a while because these are mainly analytic languages.

But, at least Indo-Aryan and Dravidian and for that matter English, German, French, Hungarian all these most of the world's languages will allow stem-affix combination. Now, let us move to the third combination that we have in hand or the third type. First type stem and stem; second type stem and affix; third type affix and affix. So, that is all about morphological typology.

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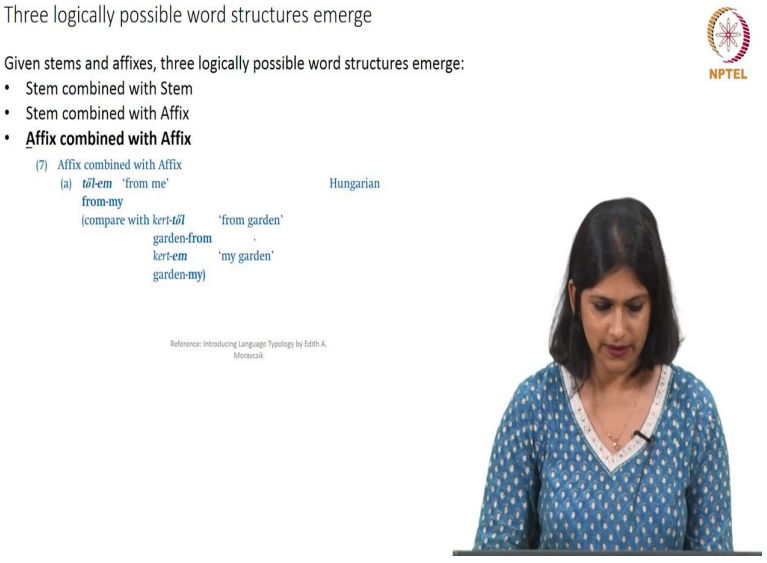

Let us see the third category here. When we look at the third category, this is an example from Hungarian. The Hungarian example here as given in data 7, tolem or tol-em; that means, from my. So, from, in English, these are not really affixes; from is a root word or a free morpheme, my is also a root word and a free morpheme. Both of them are what? Open class or closed class? Can you think about it? Can you recall what we discussed? From is a preposition. So, it will be open class or closed class? It should be closed class. And, my is a pronoun. So, it is open class or closed class? It should be closed class.

When we are talking about this tol which means from in Norwegian and m which means my in Norwegian, these two apparently are not free morphemes. Both of them they are considered to be affixes. So, how are we going to understand whether it is affix or not, where is the data? The data here is you have to compare it with words like kert-tol which means from garden and you see that is a hyphen here kert and tol there is a hyphen. So, this hyphen means it is one word.

You cannot keep them separate or you cannot put them separately. That is why -tol here is also what, prefix or suffix? Can you tell me, looking at the data here? Tol should be the suffix; that means, from the garden. And kert-em; that means, it is my garden. So, -em is also written with a hyphen; that means, this is also a suffix. When the hyphen is before the morpheme it is a suffix, when the hyphen is after the morpheme it is prefix, just remember. So, in this case -tol and -em both of them they are going to be the suffixes. Taking the data from here or taking the instances from -tol and -em we are going to figure out or we are convinced that these are affixes.

And, -tol and -em together, this combination is possible in Hungarian. So, that is the third category. When two affixes are joined together, this results in morphological typology. Now let us wind up. Initially what are the three logical orders that we discussed? The first order that we discussed stem with the stem primarily compound words; second one, stem with an affix, primarily complex words and both these combinations or both these types are available in most of the world's languages.

The third one is a little rare, not many languages allow it. Crosslinguistically it is not a much common phenomenon, like the other two. You cannot really put both the affixes together.

However, at least in the context of Hungarian, it is true. This type is available in a language like Hungarian.

So now, my suggestion for you would be the languages that you know, please try to find out how many types are allowed in your language – type 1 or type 2 or type 3 or all of them or some of them? Find out which ones are possible or which type of logical word order is possible in your own language. Besides that, you should also be able to find out in English what are the other examples. For our discussion we did talk about blackboard, we did talk about let me just see what all.

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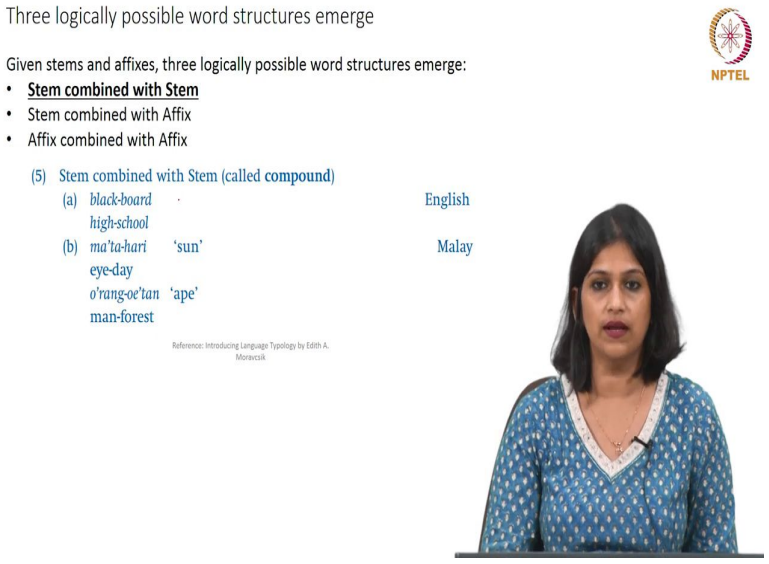

We talked about high school. Can you give me some other examples of stem – stem combination in English? This could be an assignment question.

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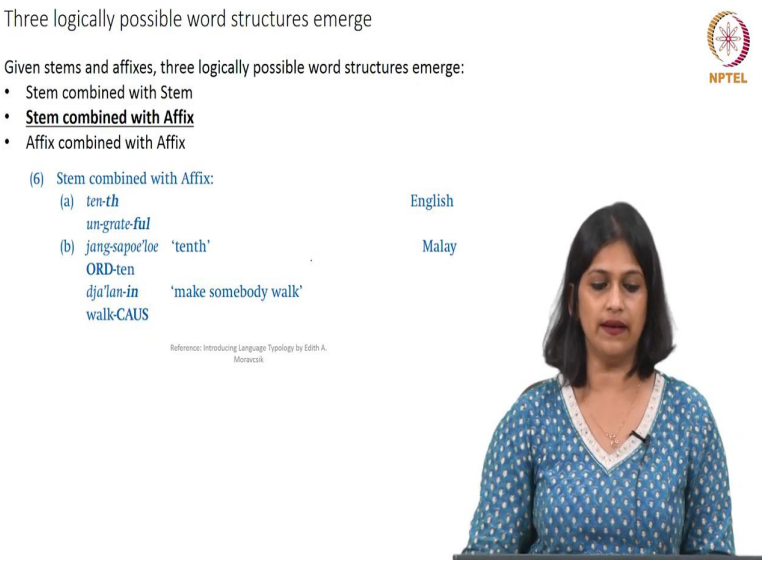

And, then you should also think about stem-affix combination in English something like tenth, ungrateful, educated. Think about more examples in English as well as in your language.

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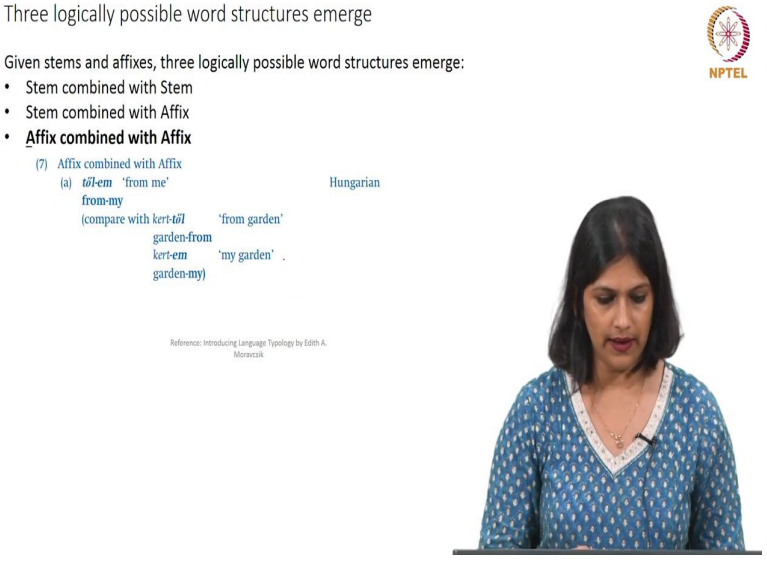

And, then finally, affix with an affix where there are two different bound morphemes. So, my suggestion for you would be find more English examples and find examples of the languages that you speak.

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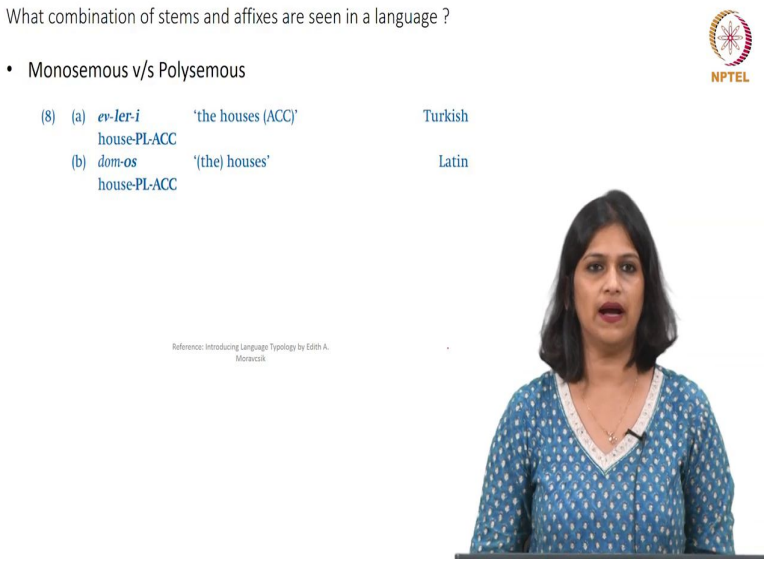

These are the three possible combinations that we have in the word order. So, what have we discussed until now? We did talk about synthetic versus analytic type, then we talked about what are the possible word orders. After the synthetic and analytic division, then stem-affix, stem-stem, affix-affix type, we will move to what combination of stems and affixes are available in any given language.

In some languages there is actually no limit for the accommodation of morphemes in a given language. It could be two morphemes, it could be three morphemes depending on the nature of the language that we talk about. In this connection, we will see if the affixes are many in number or if affixes have multiple meanings to convey or multiple loaded informations they have, then how we are going to account for it as far as the typology is concerned?

Do we have separate types of words depending on the monosemous or the polysemous nature of the morphemes? When I say polysemous morpheme, that means, one morpheme can have multiple informations; when it is monosemous, one morpheme will have only one information, and primarily these are related to the affixes. So, this type of or this kind of

typology has been narrowed down. We are primarily talking about the second type stem-affix combination.

Look at the data given in Turkish, and then the second 8 b example in Latin. Now, let us see how to identify which morpheme or which kind of combination would be monosemous and which ones are going to be polysemous. In 8 a ev-ler-i, so, there are three morphemes here and what does it mean? Houses, so that is ev is house, -ler- is the plural marker and -i is the accusative marker. Accusative case marking in that sense.

When you say ev-ler-i, so, that means, each of the morphemes they have their independent interpretation, independent meaning. The first morpheme means house, the second morpheme indicates it is a plural marker, the third muffin indicates it is an accusative marker. That is how you will get the word the houses with accusative. In case of Latin however, you see there are only two morphemes; so, the root morpheme that will always be there because that is the house.

So, ev is house in Turkish, dom is house in Latin. With dom we have only one morpheme that is -os. So, -os will have plural marking as well as accusative marking. One morpheme will have two different domains of information associated with it and in the first one, two different sets of informations would be associated with two different kinds of morphemes. So, how we are going to segregate this?

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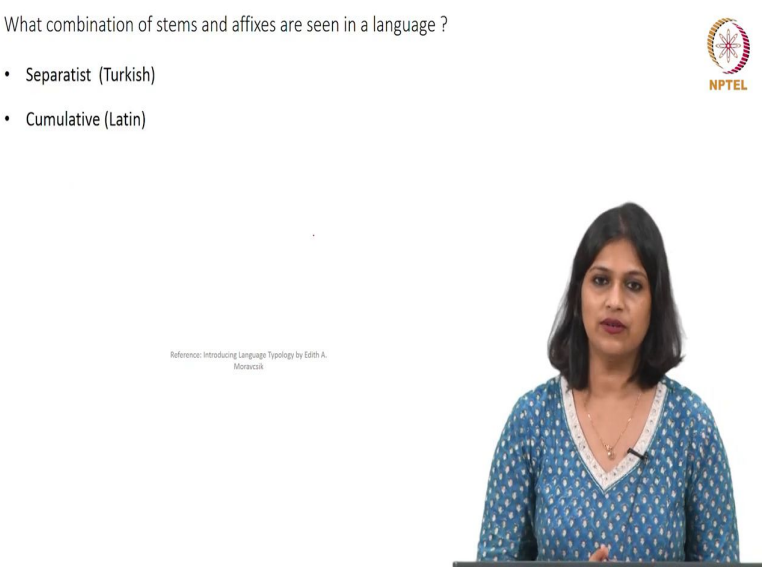

There are two different terms for it. When you have each morpheme having a different set of information or having different information, we call it separatist language. And, when one morpheme might have many informations loaded with it, we call it cumulative language. Let us remember the words separatist and cumulative.

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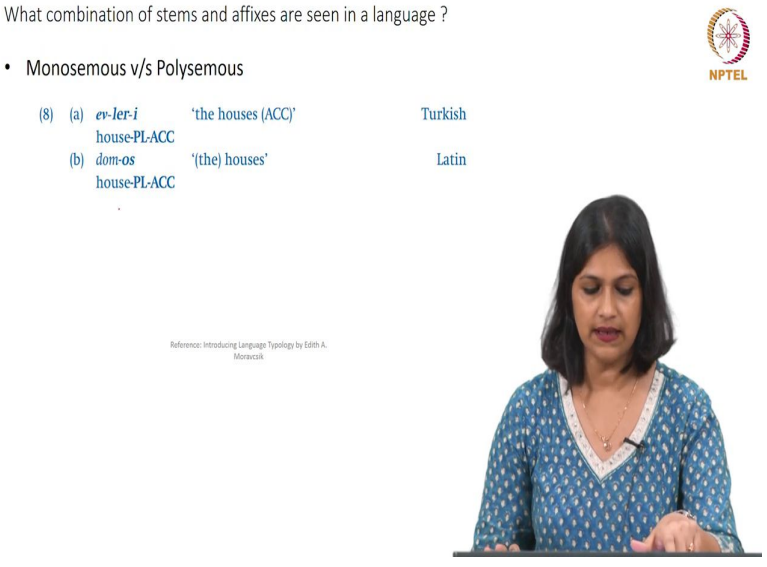

Separatist means each morpheme, look at the Turkish data, each morpheme has its own information; -ler- has its own information plural marking, -i it has its own information

accusative marking. That is why Turkish is a separatist language, which has separate information for each of the morphemes. However, for Latin, it is a cumulative language or it is a cumulative morpheme. Why it is cumulative? One morpheme has multiple informations loaded to it.

This is also another morphological typology or a morphological type that you encounter in this section.

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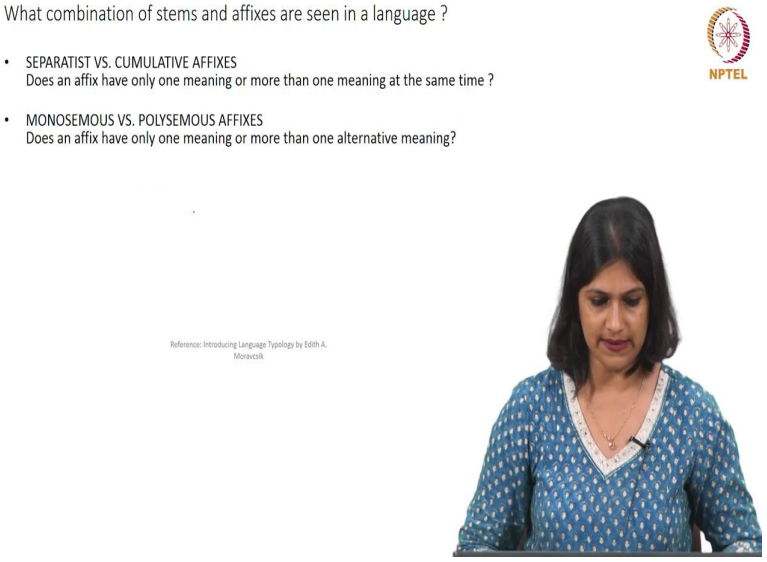

This is a little more detailed information about separatist and cumulative affixes. So, the question that you have to answer does an affix have only one meaning or more than one meaning at the same time? If it has only one meaning it will be separatist affix; if it has more than one meaning at the same time it will be cumulative affixes. This will have a connection with monosemous and polysemous affixes. So, if it has only one meaning it would be monosemous, if it has an alternative meaning it will be polysemous.

So, each morpheme or each affix having an alternative meaning would be considered as polysemous affixes. But, if it has only one meaning then it will be considered as monosemous affix.

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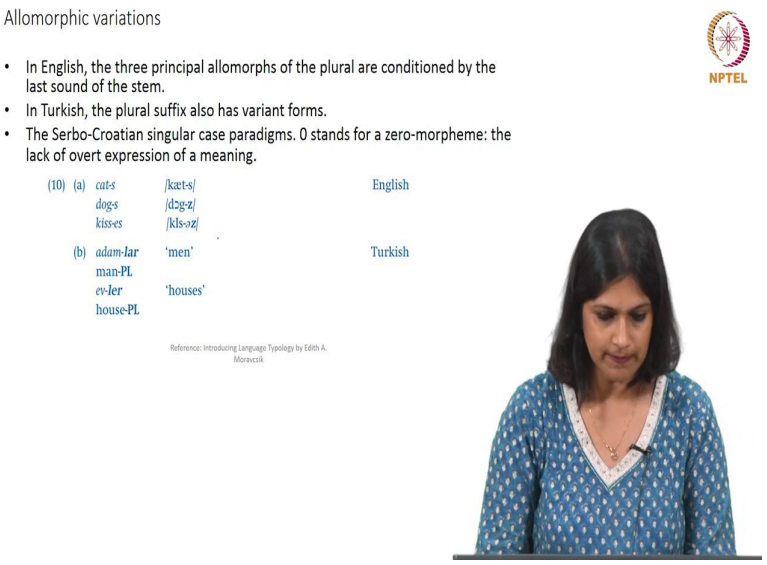

So, I will just briefly talk about another domain of morphology here which has a connection with polysemy and monosemy. When I was talking about monosemous and polysemous words, you need to understand a morpheme if it has multiple meanings, it will be a polysemous affix. But, if it has multiple forms then it will be known as allomorph. So, that is why we would say there is a function in morphological typology, we call it allomorphic variation.

So, what is an allomorph? An allomorph would be two different morphemes, where the forms are different, but they indicate the same meaning. So, the meaning remain same, but forms are different allomorph; the meaning is different, but the form is same, that will be polysemous. So, these are two different domains or two different types to understand when you were trying to figure out what is morphological typology.

In English, the three principal allomorphs are conditioned by the last sound of the stem. So, primarily the plural marking in English is considered to be allomorphs. However, in Turkish, there are three different plural suffixes for three different forms. Let us check that; first we will check English and Turkish, and later we will think about the Serbo-Croatian languages. That is a different story altogether which has a zero-morpheme. We do not have the data for the Serbo-Croatian here, but I will just briefly tell you what it is.

First analyze the English data given in 10 a. In 10 a, when the word is cat, the morpheme is cats; when the word is dog, the morpheme is dogs; when the word is kiss, the morpheme is kisses, the plural morpheme. In cats the plural morpheme is -s or /s/, in dogs the plural morpheme is -s or /s/ again. However, in kiss the plural morpheme is -s. So, -s and -es are the allomorphs in English, also phonetically they are different. When it is cat, it becomes cats, /s/ sound; when it is dog, it becomes dogs, /z/ sound, and when it is kiss, it become kisses /iz/ sound.

So, phonetically also they are different and morphologically you will see -s and -es the meaning remains same, but the forms are different, then you call them allomorphs -s and -es remember. My question for you would be: can you find out another plural morpheme which can also be considered as allomorph here? Think about it. We have already discussed. You just need to give me an idea. So, that is the story of English.

Let us compare this with Turkish, and how Turkish is different. The first example in 10 b is men; men is the plural of man. So, adam-lar so lar adam, adam is the man and -lar is the plural marker. When it is ev which means house, we have already checked it in the previous Turkish data, with ev it becomes -ler. So, -lar and -ler these are also the plural suffixes having variant forms. However, they mean the same. So, that is also going to be in the category of allomorphic variations. So, when the root word is adam, the morpheme is -lar; when the root word is ev, the morpheme is -ler. So, the forms are different, but the meanings are the same. That is why both English and Turkish will have allomorphic variations.

In Serbo-Croatian languages, there are some zero-morphemes. In English also we have zero-morphemes like sheep. When you say sheep, then obviously you do not have have the plural form like sheeps. You generally have sheep-sheep and deer is deer, when it is plural then also it remains deer. So, that is a zero-morpheme associated with it. This morpheme does not really have any phonetic form or any phonetic representation.

So now, we saw different kinds of morphological typology in our hand. To begin with, we have synthetic-analytic variation; then we went to stem-stem, stem-affix, affix-affix variation and within the stem-affix, we have the restrictive or the separatist type, and then the accommodative or the cumulative type. And after that, we also have

monosemous-polysemous difference and allomorphic variations also. So, all of this they contribute to make morphological typology an interesting discipline to study. So, whatever functions I have discussed by now, my suggestion for you would be please try to explore whether your language also behaves in the similar way with any of these.

We have discussed Malay data, English data, Turkish data, Latin data, at least these four languages have been discussed here. Do you think your language has some kind of similarity with any of these, or it is a very different language and then probably we can claim that look the crosslinguistic divisions which have been given in Moravcsik's book or in the literature itself or in the literature as a whole, is insufficient, here is a language which does not follow any of these categories. Then another category or another type is going to be introduced.

I will stop it here for today with more examples and more typological discussions in morphology. We will meet in the next session.

Thank you.

Keywords: word order, stem, root, stem-stem, stem-affix, affix-affix, monosemous and polysemous morpheme, separatist and cumulative morpheme, allomorphic variation, zero morpheme.