Appreciating Linguistics: A typological approach
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Lecture - 30
Phonological typology - Part 1

Hello, everyone. Welcome to this session of my course Appreciating Linguistics: A typological approach. We have been discussing Phonology and Phonological Typology. I begin the discussion with some basic concepts of phonology in natural language. We did find out what is a phoneme, what is an allophone and then how many consonant sounds are there in English, how many vowel sounds are there in English. So, primarily we have been focusing a lot on English as far as the introductory portion is concerned.

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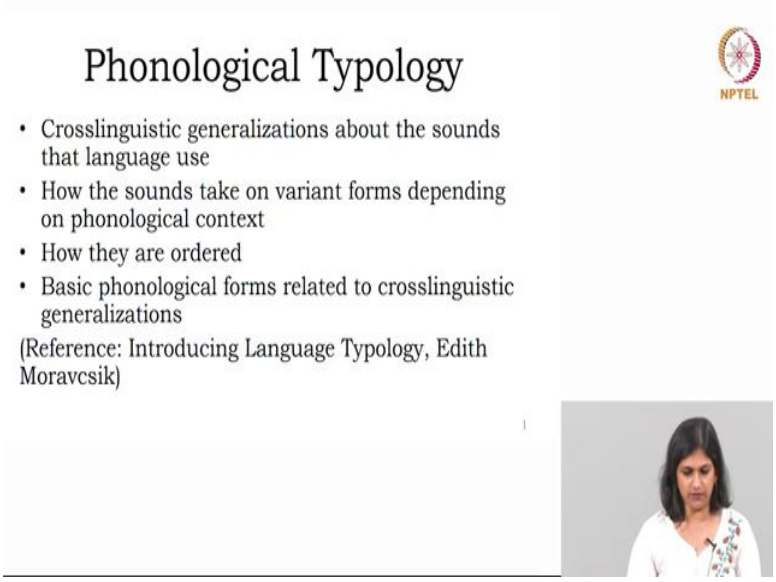

Now what I am going to do, I am going to proceed as I did for the previous unit which is morphological typology. Since I finished the discussion on the basics of phonology, I am moving to the phonological typology section. And here, I am going to address a few concepts or the key terms of this unit of the course.

Again, I primarily get the data in the discussion points and a lot of inputs are heavily borrowed from Edith Moravcsik's book, Introducing Language Typology published by Cambridge University Press. I have always been referring to this book and I want the

participants to go back and check the book. The PDFs are available online or you can buy that if you can, but make sure you get a copy and then do go back to the data that you would find in the book and then you can relate to the typological generalizations that we have been talking about for all the units of linguistics that I have been discussing.

So, these are the issues in this particular section. I will talk about the crosslinguistic generalizations about the sounds that languages use. As I have mentioned, every sound every L1 let us say the language with a small l, independent languages or individual languages English or Hindi or Odia or Chinese or Japanese or Korean. all of these languages independently or individually, what are the crosslinguistic generalizations that we can draw as far as the sounds that natural languages use? That is one question which we would try to discuss in this section.

I will also talk about how the sounds take on variant forms depending on the phonological context. Every sound will have a phonological context, on the basis of that context how the forms are being shaped as far as the phonological items are concerned. After we focus on their form, we will focus on their order, how these phonological units are ordered in the world's languages. And finally, we will talk about a few phonological forms related to crosslinguistic generalization.

So, when I am talking about crosslinguistic generalization, what are the basic phonological forms that help us to decide or to focus on any given generalization that we are going to discuss? The flow of the discussion is going to be the same as it happened in morphology. We will start with the choice of phonological units, then we will move to the forms of phonological units, and finally, we will go to the order of phonological units. That is how we have been proceeding so far; choice, form and then order. And, finally, we will talk about what are the basic things related to crosslinguistic generalizations.

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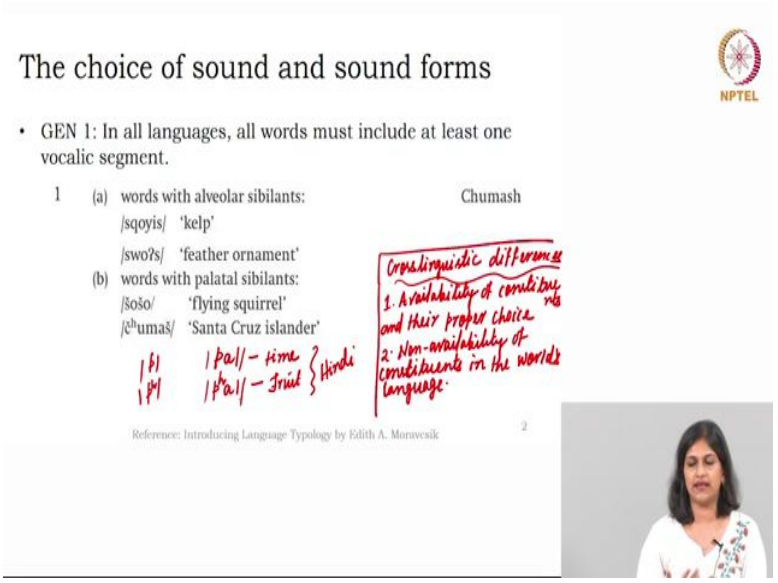

As I did for the previous unit or for the previous section, I will discuss the typological generalizations that languages might have or the languages would have. On the basis of this, we will find out how many generalizations are there, and how these generalizations have been formed. My suggestion for you as I always say please find out if the languages that you speak fall in the same category.

In the morphology chapter also we were talking about the well-formedness of a linguistic object and what does it depend on. It depends on the choice and the arrangement of its parts. Something similar is also happening here in case of phonology and we will primarily find out how these forms are considered, how these forms are ordered, so that we can have a typological approach .

Just to begin with the discussion, languages greatly differ both in which the sounds are allowed to co-occur with each other and also in what sounds are individually allowed to begin with. So, whether a particular sound can begin with a retroflex, or whether it can begin with a palatal fricative like /ʃ/ or not, whether it can occur with a nasal sound like /ŋ/ or /n/ or /m/.

So, which particular sound is allowed to occur at the word initial position or you can talk about what are the different sounds which can co-occur, what should be the order. These are a

couple of basic things we need to figure out or we need to find out when we discuss phonological typology. To begin with, we have two kinds of crosslinguistic differences. Before I move to the generalizations, let me talk about the crosslinguistic differences, the first two major types and when we have we discussed the crosslinguistic differences, the first thing is the availability of constituents and their choice in a given context.

So, one, availability of constituents and their proper choice. One crosslinguistic generalization is going to be drawn from here. We will talk about what are the examples in a while, but the second type of constraint or the crosslinguistic generalization that we will have is a type of constituent main. So, this one is which constituents are available which constituents are not available, these are the two things: non-availability of constituents in the world's languages.

These are the two major crosslinguistic differences that we find in the literature of linguistic typology. Now, let us see how these generalizations are accounted for. As I mentioned the first one is which constituents are available and which constituents are not available. When we think about the availability of constituents and these constituents are not syntactic ones rather the phonological constituents.

Crosslinguistically let us say the sound /ʃ/ is very likely to appear at the sentence initial position. Generally in the language inventories, when I say inventories, basically the storehouse or the repository in case of the sound system. So, crosslinguistically, the use of sound /ʃ/ in the word initial consonant cluster is analogous to the example of phonology. Languages make different choices as far as the use of the segment /ʃ/ is concerned.

There are certain languages which have the /ʃ/ sound at the beginning of the word or we can call it word initial consonant cluster. So, languages can be divided in two categories: category A; that allows /ʃ/ which is a fricative in the word initial consonant cluster and there are certain languages which do not allow the use of /ʃ/ in the word initial consonant cluster.

In most of the cases you see /ʃ/ as a sound is not very frequently used, but that does not mean that it is not; it could be rare, but it is not something which is impossible. For example, South Asian language like Bangla would have certain words which would start with /ʃ/.

Then the other kind of constraint that we have here is what are the possible combinations or what are the possible sounds which may not be available in any language. The first one we saw /ʃ/ can be possible or is very likely possible as a part of the word initial consonant cluster. But there would be certain instances, there would be certain conditions which are not going to ever be possible in case of categories on the basis of the consonant clusters.

I will give you an example, let us say front high rounded vowel which are not much commonly found in the word initial position, but in case of a language like let us say Turkish, you might find something like this. There would be certain constraints which would not be allowed by many of the languages.

But, this kind of a pattern may not be universal. Considering the availability and non-availability of sounds that depend on the available phonemes in the language inventory, it is not very easy to claim that availability of /ʃ/ or availability of /p/ or the availability of high round vowel. Tthe question comes what is the language sample that you have in hand. Depending on the language sample you might draw this generalization.

But, if you talk about the absolute universality or the absolute universal feature it might not be possible. For example, let us say Hindi; considering I do give examples from South Asian languages. Hindi, one of the most widely studied South Asian language, there are two different kinds of plosives, and these two plosives are actually considered as allophones.

Considering they are considered as allophones, it is not really possible for us to claim that the word initiality could have similar meaning not really. Before I make it a little more complex, let me just give you the example. In Hindi you will have something like pal and phal. So, pa and and pha apparently these are allophones, not in Hindi, but in a language like English. But, in case of Hindi, they do not work like allophones, they do not have the same meaning.

When we write this, this means time, kuch pal, like some time or the other one I am writing plosives, that would be fruit. These are the Hindi examples. So, pa and pha might be allophones in a language like English, but it is not going to be considered as an allophone in Hindi because in English it could be allophones, but in Hindi it will not be because they cannot be used as a substitute to each other.

They are not like the complementary distribution, rather when you have the plosive pa which is unaspirated, it has a different meaning and the plosive pha with an aspirated sound, it will have a different meaning. When it is pal, it is going to be considered as time, and when it is phal, the meaning is fruit. That is the reason why it is not that easy to find a pattern which is absolutely universal, which would be considered as absolute universals in most of the world's languages.

However, in spite of all the restrictions that we have at the sound level, the typologists still are trying to find out at least some generalizations which can be considered in phonological typology literature. In spite of the constraints, in spite of the restrictions that we have and the sample size that has been considered, in most of the cases it is like that.

Now, we will start with the generalizations one by one. Let us read it first and then we will see how we are going to consider the data. In all languages, all words must include at least one vocalic segment. When I say vocalic segment, you may also call it a syllabic segment, primarily the presence of a vowel sound in the sentence.

There is no word in any of the world' s languages which will not have a syllabic or a vowel sound in its syllables. Here we have the data from a couple of languages, for example, a language like Chumash, you will have words with alveolar sibilants.

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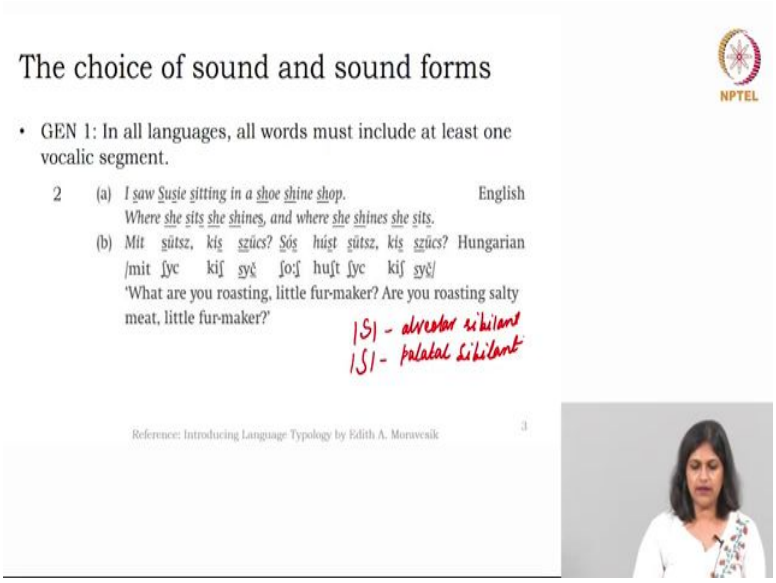

If you look at the phonetic representation, there is a sound which is a syllabic one or the vocalic one. The words which have the palatal sibilant, this one is alveolar sibilant and in the 1b the example is the palatal sibilant. In the palatal sibilant also, you will also have the /au/ kind of a sound. Same is the case with the other language, one of the most widely studied languages that we have is English and this says I saw Susie sitting in a shoe shine shop and the second example where she sits she shines and where she shines she sits. So, these are a lot of tongue twisters.

Basically when you analyze the English data, the sound this one, look at this. This stands for alveolar sibilant and this stands for palatal sibilant. So, in this case, /s/ and /ʃ/ are also palatal, but when you have the /ʧ/ sound it is palatal, but a plosive rather than a sibilant.

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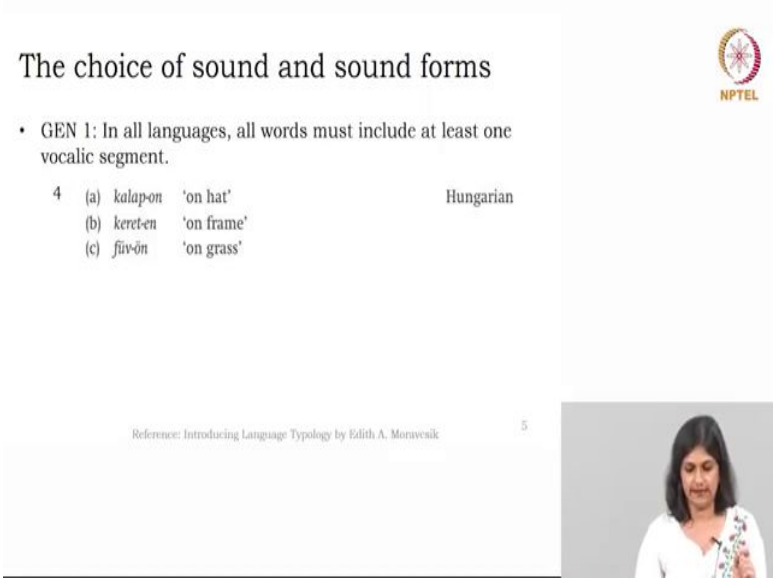

In this case also, the Hungarian example, you see that no matter how many words you have here, in each unit or in each segment or in each syllable you would surely have a vocalic sound and, this vocalic sound will have either an alveolar sibilant or a palatal sibilant. In English, the alveolar sibilant is /s/ and then the palatal sibilant is /ʃ/. So, the English and Norwegian data is going to tell you that.

In case of Turkish what happens, Turkish is interesting because it has allomorphs that differ in whether the vowel is at the front or back. So, if the vowel is at the front that is a different

kind of allomorph and at the back that is a different kind of allomorph; and, it depends on the stem of the vowel. We are not going into the morphological details here, we will rather focus on the phonological generalization which says that all words must include at least one vocalic segment.

Something similar is also happening here. The Turkish counterpart for children, look at the data number 3a, in each unit there would be a vocalic segment or there is a vowel. So, cocuk and then lar and then kopek-ler the a sound the e sound that is for dogs; village, photo, straight and restaurant all of them. If you look at the data carefully you would surely find the vocalic segments in each of the data.

Similar is the case with Hungarian. Hungarian data is given here kalap-on, keret-en or fuv-on. In these cases also for each syllable you have a syllabic sound or a syllabic or a vocalic segment.

So, that is about the first generalization of the world's languages.

Keywords: phonological constituents, consonant cluster, constraint, vocalic segment