Language and Mind
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Module – 03
Lecture – 13
Language and Mind
Words

Today, we will look at Words. We will look at how we make words and the role of sounds that we have seen in the formation of words. We have looked at the mechanism of sound production in little bit detail and we have also looked at some of the features of sounds, which make them a distinct unit. Now, our attempt is to look at how a combination of those sounds works to form a word.

Now, let us put this in the context first. Again, we are looking at the formation of words for us to understand the underlying pattern of rules in the formation of words. Such an understanding will again substantiate and help us understand the role of human mind in understanding language, in understanding language as a system. And we will be able to see the relationship between language and mind and the role that human mind plays in learning and understanding language.

We have made claims about learning language; we have said it happens automatically. We have said that our subconscious human mind, from a very earlier stage, keeps figuring out rules and with the patterns underlying words, rather formation of words, you will be able to see, what are those rules that our minds keep on finding, figuring out regularly, continuously. So, let us see those patterns. So, what are the questions that are significant for us to understand sound, understand words?

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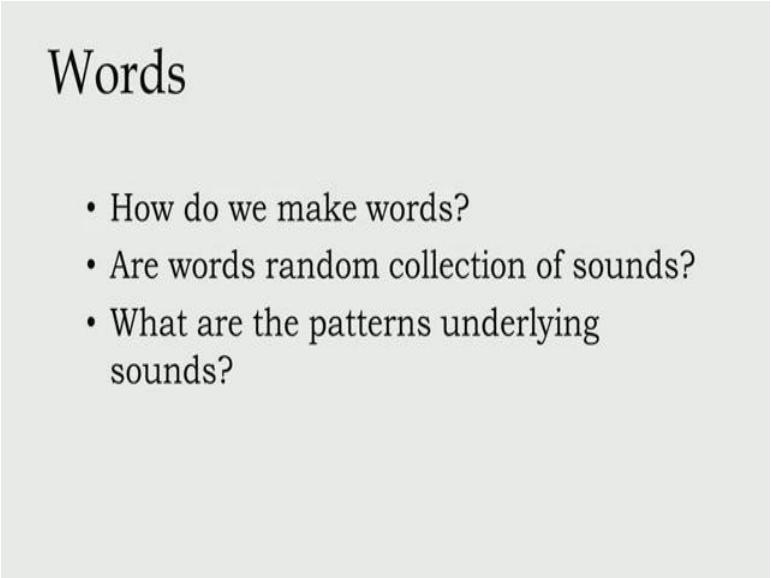

How do we make words? Have you … have you thought about this question; that is to say, we know that words… we cannot put any number of sounds together to make a word. And this is exactly what we mean, when we ask a question, are words a random collection of sounds. Our answer is very clear - No. We cannot put any sounds together to make a word. We know that there is a pattern, but we do not know those patterns vividly.

So, a clear answer is No. Words are not random collection of sounds. Actually, not all sounds are possible to put together to make a word. Let us see how that works and finally, what are the patterns underlying these sounds. What are the patterns underlying sounds in the sense that, how do those sounds work to form a word? Let us see how they work. So, by now, it is clear to us with the discussion that a word is a collection of sounds. We only need to find out, how does this combination of sounds work? What are therefore sounds that are allowed and what are the patterns that are not allowed?

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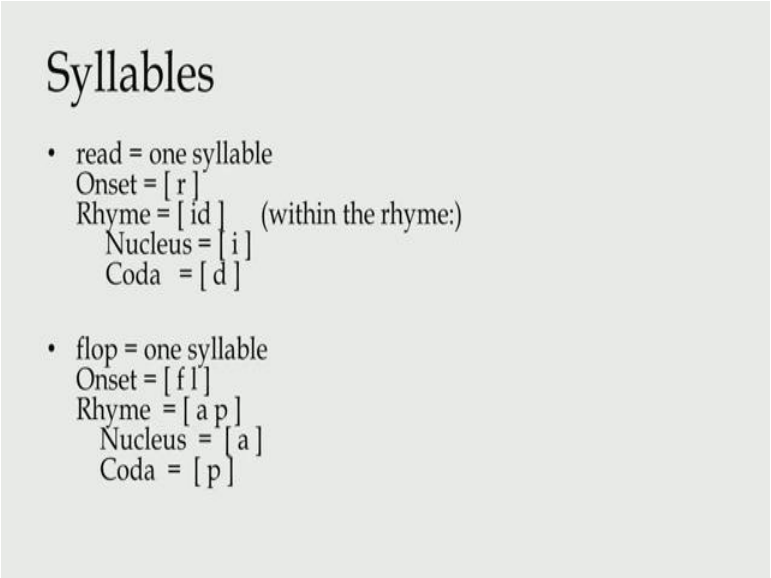

So, let us look at that. But one more point that we need to make before we look at those underlying patterns - there is a smaller unit called syllables. So, we understand syllable better in the following sense, in the following way. There are two things; one, sounds and then words. Syllables are in the middle of the two; that is, a syllable is part of a word, a syllable is smaller than a word. It could be a sound by itself; also, it could be again a combination of sounds, but remains smaller than a word.

Syllables do not have independent existence, they do not attain meaning. In human language, we find that we do not assign meaning to syllables. So, very briefly, let us see the combination of a syllable. Wait a minute. One more point that we need to make here is a word by itself could be made with just one sound and we will look at that as well. So, keeping those things in mind, keeping the role of sounds in the formation of a word, let us look at the definition of a syllable and I would rather want you to understand the construction of a syllable.

So, see there are two parts of a syllable; we will try to understand this with the example of a word like - read. There are two parts of a syllable; first is onset and the other is rhyme. So, the way we could define onset is, onset is the first sound. Well, we will call it first sound for the time being, and then, rest of it is rhyme. And then, there are two parts of rhymes: one is nucleus and the other is coda; and the nucleus is the vowel in the syllable, coda is what is left after nucleus.

So, there are three terms that we need to know to understand a syllable: onset, rhyme and as part of rhyme, we will need to see, nucleus and coda. Once again, a syllable has two parts: onset and rhyme; rhyme again has two parts: nucleus and coda. So, with the examples that you see on this slide, there are two words - read and flop, both are monosyllabic words; that is, we are treating this word as one syllable.

So, the word read has onset; on the onset, we have the sound ra; and ead is the rhyme of this syllable. And when we try to look at rhyme, we find e, as a vowel; it is the nucleus of this syllable and the final sound da is the coda. Similarly, in the word flop, we see onset as flop, the nucleus; and then when we look at rhyme, we see the nucleus as aa or it will sound like auh and coda as pa.

Now, only on the basis of these two examples, you can see that onset does not have to be just the first sound. Onset is the chunk before we hit nucleus; therefore, the first thing in the rhyme is the nucleus and the vowel that becomes the nucleus. And then, we have coda. This is just for you to understand what does syllable mean. Here you see the two examples as monosyllabic words, which means, one syllable could be a word. Well, we have said one sound could be a word. So, these are not surprising things for us.

When children learn words, they have to figure out these things. They have to figure out individual sounds, then they have to figure out syllables, and then finally they figure out the possible and not possible combinations of sounds to make a word. Now, let us go and see words.

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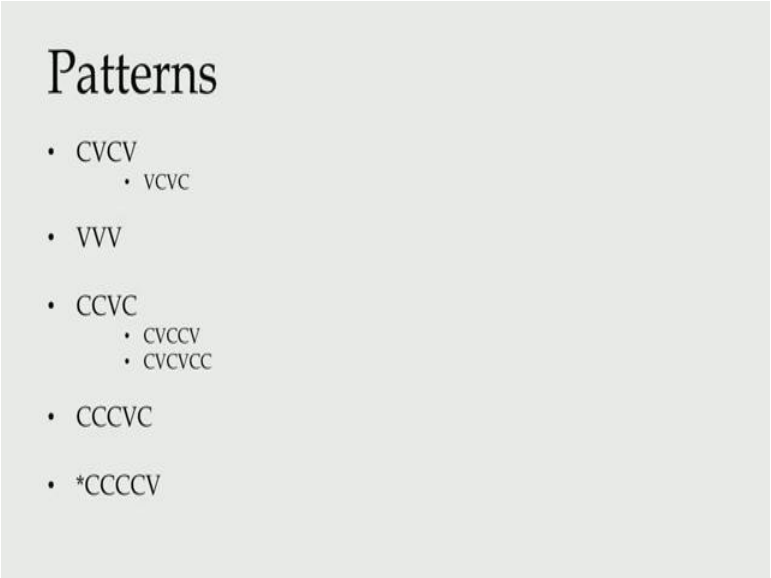

Once again we will look at the patterns. What we see here are patterns; we have only patterns and no words. I will help you understand these patterns with examples. And before we look at these patterns again, what you see here, there are just two things: consonants and vowels. C denotes consonants and V denotes vowels. Remember two types of sounds: consonants and vowels - all the languages will have sounds divided in these two categories.

Sounds are consonants and vowels and we know the definition of these two types of sounds. We know what they mean; we know how they are produced, and so on. So just now you have seen words could be monosyllabic and for a syllable, whatever… the parts of syllables that you have seen as on certain rhyme, and rhyme, within the rhyme, we have nucleus and coda.

And just in two examples, you have seen a nucleus in both. So the point is, to make a word, we must have a syllable and to make a syllable, we must have a vowel. Therefore we can say, the sound vowel is the fundamental requirement for the construction of a word. We do not have a word without a vowel; we can also say that therefore, vowels are fundamental to words.

Now, apply these to understand any word that comes to your mind; from any language of the world - this is going to be true that we do not have a word without a vowel. Such a restriction on the pattern of words help us understand the role that human mind plays in

recognising these patterns and making, what could be a possible word and what type of collection of word, collection of sounds may not be a possible sequence to qualify as a word.

So, what have we seen so far? Besides a discussion on syllables, I hope you understand now very well; we have seen so far as one thing that we need to remember is, we do not have a word without a vowel. And like I said, please check this with any language that you speak: English, Hindi, Tamil, Telugu, Malayalam, anything that you speak. Take a word that comes to your mind and check whether that word that comes to your mind has a vowel in it or not.

And if you wish to play with this more, you can try making a word without a vowel in any language again, and the claim is, you would not be able to come up with such a word. Such is the restriction. This is an important part for us to understand and then, it will help us understand these patterns more. We will be coming back to such a discussion, such a restriction once more; but let us look at the patterns now.

So, given the requirement of a vowel, what follows is, we can have a word only with vowels. The fact that vowels are required for words also could be extended to mean that, we can have a word only with a vowel or only with combination of vowels, but not just with consonants. So, let us look at the first pattern. We have too many words in any language, which could be made out of the pattern that you see as C V C V.

Well, C V C V simply means an alternation of a consonant, vowel, consonant, vowel. What are the words that we can come up with such a pattern? We have a word like, let us say, if we take a word from English - Papa; take a word from Hindi - Kaka, Chaachaa. Take any word from any language, you can find… besides consonants and vowels, you can find alternation of consonants and vowels as being one of the most frequent patterns. This is why I am putting it as the first pattern.

Now, such a pattern can also be seen as, permutation of these things as, vowel, consonant, vowel, consonant; and this is, we have words with such a pattern as well. You can make words with these patterns and check whether this is possible or not. Then, you have the pattern that we have just seen - a word, just with vowels. Again, you can pause and think. Is this possible? I can give you a word from Hindi. The word is Aa which

means, come. This word has just got one sound and it too… it should not surprise us that that sound has to be vowel – Aa.

Now, with these two patterns, you can have too many words possible in any language. This is why we also say, these are the most frequent combinatorial patterns for the formation of words. But, we also know that not all the words in any given language is going to follow just these patterns. What this means is, we are going to have words, where we have a combination of sounds in C C.

Look at the third one on the slide. You have C C V C; this means a cluster of two consonants in the beginning of a word and then follows a vowel and then a consonant and then there could be more. You also see, it is also possible that the cluster falls in the middle of a word, where you begin with a consonant, then follows a vowel and then you have a cluster of two consonants and then follows a vowel again.

You can also have the possibility, where the cluster of two consonants is the final constituent of a word, where you begin with a consonant, then follows a vowel, then again follows a consonant, follows a vowel and then you have a cluster. So, these are possible combinations. What you see with these combinations is you have most of the words taken care of with these patterns.

Therefore we can say, an alternation of two sounds give us words. As long as we do not have a cluster… well, let me put it this way; words without clusters are more in number in any language. And the moment we start talking about words with clusters, the number of possible words in any language is far too less, far, far limited. And therefore, this becomes a big time restriction on the pattern. Nonetheless, it is a pattern; it takes care of too many words.

So, what would be an example of a word with this cluster? So, let me take a very simple word from Hindi, the word is Kya, which means - What. It has got a cluster of two consonants in the beginning of the word and the two sounds, two consonant sounds are ka and ya and then follows a vowel. And likewise, you can come up with more words.

At this point, I would want to mention one more particular thing that we need to keep in mind that when we talk about words and sounds, we are not looking at the written symbols, which is also known as alphabets. They are just a way to transcribe sounds

from languages. There could be too many alphabets possible, too many ways of writing possible, but they do not change sounds. It is not complicated; it simply means sounds are common in many languages. For example, a sound like ka is possible in most of the languages of the world. However, the way to write this sound is going to be different depending upon the alphabet or the way of writing that we choose.

So, the point here that I am trying to make for you to understand the process of word formation is, we need to pay attention to sounds and not really the writing system. So every time a word comes to your mind, try to say the word, say it for yourself and then, pay attention to the sounds possible in the word. And then, you will understand this combinatorial process and this alternation of C V C V and so on.

So, we have seen two of them so far; one pattern, which is alternation of C V C V without clusters with several permutations; two, where we can have only vowels, just V V or VV or maybe more than two vowels. And then, we have also looked at a pattern, where we are going to have cluster of two consonants. Such a cluster could be in the initial position of the word, in the middle position of a word or in the final position of a word.

And while looking at words with clusters, we will need to look at more; we will need to look at clusters of two. The example that I gave you was cluster of two consonant sounds. It is also possible to have a cluster of three sounds and then, we need to check whether a cluster of four sounds is possible or not. We will be looking at these clusters next time.

Thank you.