



IIT Madras

ONLINE DEGREE

So we know how to do, we know the definition of a word. A very generic, simple definition that we follow is a word is a combination of different sounds. We combine several sounds to form a word. Here something worth paying attention to is, can we combine any sound together? Can we put any random sounds together to make a word? Can any sequence of sounds become a word? The answer is obviously no.

And for that purpose, we need to look inside the word to see how is it that these sounds are organized? Is there any pattern in it? There is a mathematical pattern. It is a very simple pattern, and once we pay attention to that, we become careful in understanding that. We become, we know the composition very clearly. So two things, a word is not the random ordering of any set of sounds, number one.

And number two from our discussion on consonants and vowels, what I want you to keep in mind is, every word must have a vowel sound in it. So these are the two parts, two things that will make us understand words properly. So let us look at these things. So what is the order of sounds in a word? If we say, that order of sounds in a word is not random.

If we know that order of sounds in a word is not random, then we must point out what is the order of sounds in a word. Let us look at a word. And let us use our understanding of consonants and vowel sounds. So we start with a very simple word like papa, daddy, mom. So when we look at these words, we see a word like papa, so very simple. Just say the word papa to yourself.

When we say we hear, we hear a sound p. Then we hear a sound aa, and then we hear another sound p and then we hear another sound aa. So there are four sounds in this word, p aa p aa. So this becomes, if we have to identify them, we identify them as consonant, vowel, consonant, vowel. Keep in mind this aa is an example of a long vowel. So p consonant, aa long vowel, another p consonant, aa long vowel.

So this word has this pattern, that is CVCV, that is consonant, vowel, consonant, vowel. So a simple alternation of consonant and vowel gives you this word. You will find this sequence in many words like mama; m, aa, m, aa. Baba; b, aa, b, aa. So papa, mama, baba, chacha, all kinds of words will follow this pattern. Not only just this

relation terms, but there are a lot of words with just this alternation of consonant and vowel possible.

Now a couple of other things to look at. When we know about a consonant sound, we have had a good discussion about consonant sounds, and a vowel sounds. Today, I want to add one more very specific information about consonant sounds. Every consonant sound has one specific vowel inbuilt in it. So take any consonant sound, the vowel that is inbuilt in it is called a. So when we say p, k, ch, t, m take any.

You can try it with all 24 consonant sounds in English. The only vowel sound that you find inbuilt, which becomes slightly prominent at the end of it is a. That is when we say p; we hear a at the end of it. Only that sound. What happens is, when we use this word in a, when we use this sound, that is when we use a consonant sound in a word, that sound gets suppressed.

So when we say papa, we do not say p aa p aa. We say papa. So, p and another vowel aa comes together, and that already inbuilt vowel gets weaker. So that the word becomes papa and we identify it as a sequence of CVCV that is consonant, vowel, consonant, vowel alternation. When you look at this word daddy, you see the sounds are d e d ii daddy. So this is again a sequence of consonant, vowel, consonant, vowel.

As you know this is long ii. And when you look at mom, so you have you can have mommy. So okay, let us look at this word mom. So you have m o and m. This is a sequence of CVC. So now you see you can have d a d, CVC. So look at this sequence, look at this sequence and look at this sequence. So these two are consonant, vowel, consonant vowel.

And these two are consonant, vowel, consonant. So likewise, you are going to see an alternation of these sounds for any word in English. And thus you will also find out at least one vowel sound in every word. There could be more, but at least one vowel sound in every word. So you get to see this alternation. The other important point about a word is you have a vowel sound in every word.

You have one inbuilt vowel sound in every consonant, which gets slightly weaker when they combine with another sound in a word. There is no constraint on which sound comes in the beginning of a word. There is no constraint on which sound comes at the end of a word. And how many sounds must be there in a word. These are not constraints.

Now, this becomes meaningful in understanding why only 24 consonant sounds and only 20 vowel sounds together can make millions of words. Keep in mind. The pattern is not random, but still, we can have millions of words only with these 44 sounds. The answer to this question is, it is possible because there is no limit on how we use these sounds in a word. That is what comes first what comes at the end.

How many times the same sound can come in a word? Please look at this word, papa. A sound like p and aa are coming twice in the same word. Daddy a consonant sound d is coming twice. Dad a consonant sound d is again coming twice. Mommy, mom, consonant sound m is coming twice. So we can have multiple times the same sound, we can have more sounds.

We can have more number of consonant sounds in a word. So we are not talking about a contradictory thing. I want you to understand these two things with clarity. Two things, one is order of sounds is not random in the sense that it will have consonant, vowel, consonant vowel. It could also be and then alternation of these things. So it could also be a consonant, vowel, consonant.

It could also be, a word could begin with just a vowel sound. So these alternations are possible as a pattern. But which consonant comes and which vowel sound comes there is no constraint on that. And that is responsible for giving us millions of words in English. So this gives you some idea about the sequence of consonants and vowels sounds in English words.

So at this stage, based on your understanding of consonant sounds, vowel sounds, and how they come together to make simple words or complex words. A very simple exercise that will help you look into that is keep, okay, I will talk about the exercise in

a minute. But another point that you need to keep in mind is keep looking at them, paying attention to the places of articulation of these consonants also.

So, p is a bilabial consonant d is an alveolar consonant, m is a bilabial nasal consonant. And then you have several types of vowels to make these words. Now the exercise that I wanted you to do is, again take another set of 20 words. Or you can use the same set of 20 words that you have used to do other exercises. It is always a good idea to take another set of 20 words. You can pick some words that we are using in our speech.

You can pick words that we are using in other classes, or you can use your own random words. You can pick any word that comes to your mind. Make a note of that, write them down on a piece of paper in your notebook. And then try to write the sequence of sounds in your words and observe how many sequences, how many types of sequences you see in terms of consonants and vowels alternations.

Also, see if there is a word which comes without a vowel sound. The answer is you will not find one, but just try for that. So you will get to see several alternations. You will get to see the arrangement of consonant vowels in that sequence, and it will also help you pay attention to the places of articulations of those consonant sounds. And it will also help you look at the vowel sound.

Basically, it will help you slow down and look at various components of at least 20 words and that way; you will get to know how these things come together to make a word that we speak. There are several types of several other types of patterns that are underlying a word.

We are going to talk about one or two of such things today for you to see and for you to develop a better understanding of a word. So you will see so here is an example of a word. Look at this, I have been telling you that vowel sounds are more basic in a word. That is a word that is possible only with vowel sounds. So it is possible to have a word like this. But it is not possible to have a word just like this.

So look at this word English word aai. So it has two consonants aa, and it has two vowel sounds aa one, i two and this is the sequence in this word. So this is what we mean, words only with vowel sounds are possible in any language, also in English. So you see several sequences when you do your own exercise of 20 words. You will see a sequence like the CVCV. You will see the sequence like this.

You will also see the sequence of this type. You will see the sequence of this type. I am not giving you examples of these sequences because this is another type of exercise that I want you to do. Once you have done the exercise of finding the arrangement of consonant and vowels as patterns in those 20 words.

Then the next set of exercise that you should do to develop your understanding of underlying patterns of sounds in a word is to find out a word which has this pattern, find out a word which has got this pattern. And then I want to draw now, your attention to what we know as a consonant cluster. We are discussing words, and we are going to discuss one more specific feature of a word which we see in words quite often.

So a cluster is when two consonant sounds come together. What is a cluster? When two consonant sounds come together and what they do is, there is no vowel sound in between that. Not even the inbuilt vowel sound that you have that we have discussed, like p has a inbuilt in it and k also has a inbuilt in it, b also has a inbuilt in it. So when two consonant sounds make a cluster, that inbuilt sound is also gone.

And when that sound is lost, the two consonant sounds come too close, and that is what we call a cluster. So look at the examples like this. This is how you are going to see a cluster. This is how you are going to see a cluster. Meaning, a cluster of two consonant sounds is also possible at the end of a word. And in some examples that we will see at different stages, a cluster of two consonant sounds is also possible in the middle of a word.

So examples like what. So two consonant sounds are making a cluster here. Examples like glass. Remember, we when we speak, we use speech sounds to articulate English words. And when we write, we write it in the form of its spelling. So these when you

apply this understanding, to see the distinction, you will get a better understanding of these words.

So please pay attention to where I am drawing your attention to. Look at this word glass. In this word first two sounds are making a cluster. Glass. G l aa and s. What are the sounds in this word? G l aa and s. That is what we are looking here. So g and l are making a cluster. Say this word to yourself glass. The g sound does not retain the aa inbuilt aa sound in it. It has lost.

That is in a cluster only the first sound loses that inbuilt vowel. L sound has aa vowel on it. So gla. That is how we say glass. And last s sound in English spelling it is written as doubling, but that is not a cluster. That is just one sound s. And this aa is also long vowel aa. So only this one is making the cluster by dropping the inbuilt aa vowel sound of the first member in the cluster.

That is how we make a cluster. Cluster is a very unique and normal pattern of word formation in English in particular, and also in many other languages. We speak several languages. When you pay attention to our languages, we do find a cluster of several sounds in our words. So that is the example of the use of sounds in a word and how several words use clusters as well.

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Consonants

• Sounds produced by modification of the flow of exhaling air in the vocal tract

✓ • /k/ -velar	king, class	/kin/	/kɪns/
↓ ✓ • /g/ -velar	great, glass	cvu	ccvc
✓ • /p/ -bilabial	pink, pure	/pink/	
↓ ✓ • /b/ -bilabial	bliss, bless		

• They have an inbuilt vowel sound 'a' with all of them.

I would like you to look at more examples of these clusters and how words are made. So as we know, sounds are produced by modification of the flow of exhaling air in the

vocal tract. That is how sounds are made. So we have velar sound, k as a velar sound g as a velar sound. Remember, k is not voiced and g is plus voiced. P is not voiced and b is voiced. So these two are velar sounds.

And these two are bilabial sounds. So and this is what I was talking to you that every consonant sound has an inbuilt vowel sound a with them. So look at these words with these velar sound, two velar sounds k and g. King, class. Once more. The first sound in the word king is k. And first sound in the word class is also k. It is a different matter that they are written differently as a matter of spelling in English.

So and this is what will be useful when you have done the exercise that I have asked you to do. So you will get to see when you write king. So you see ki ng. This is a velar nasal sound. When we write class, we are going to see, so this is how we write that, and the sequence here is CVC. When we say class, we have k l aa and s class. This has CCVC sequence. And in this word, the first two consonants are forming a cluster, class.

When you look at the second one great, you will see the first two sounds in this word that they are g and r are again forming a cluster. We have seen this word glass, g and l are making a cluster. When you look at the words like pink. In this one, you have p, short i, n and k, pink. These two sounds n and k pink, n and k they are making a cluster. The word like pure, there is no cluster here.

But this uses bilabial at the initial position, bilabial sound p. Bliss. B and l are making cluster and bless again b and l are making a cluster. So these are simple words that we use in our day-to-day English. You can see the use of velar and bilabial sounds in that. You can pay attention to how they are spelt when we write.

You can also pay attention to them in terms of how we speak, what kinds of sounds are used when we speak these words and what is the arrangement of these sounds in these words? Do they have a cluster in them? Do they have a vowel in this? All these things become clearer when you start paying attention to them. The types of vowels, their places of articulations, their manners of articulations.

Are they bilabial? Are they velar sounds? Are they voiced or not? So when we speak a word in a flow, we do not pay attention to these. But for us to practice a word in English, to become a better speaker, these kinds of nuanced understanding about sounds and sequence of sounds in a word become very useful, very helpful.

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Assimilation

- Impossible
- Incomplete
- Accident

K.S



So much so that we get, we notice a lot of other things as well. What is it that we get to know through that? Look at this a word like how do we say a word like impossible? I want you to do the same exercise with these three words. So try to write the use of the sequence of these words. And you will see that the negative prefix in this word impossible sounds m because it precedes another labial sound p.

So it becomes m, and then we get impossible. The same thing happens when it precedes a velar consonant. Say the word incomplete. The first it has this word has a negative prefix in it, and then the word is complete. So the first sound of the word complete is k. Therefore, the negative, in the negative prefix, the nasal also becomes velar.

And when we speak this sound, this word we do not say incomplete, it becomes incomplete. So this becomes a velar nasal. And in this word, you see you have, in this word accident you have two it looks like a cluster. But this is not a cluster, because the first one is k and the second one is s. So I am using this example to show you there is a huge variation in terms of writing and how we speak English words.

And we get to the nuances of this and the distinction of this when we pay attention to sounds in a word. Make a list of these things, and then you will see that in a better way. So with this, we have just started our discussion on how words are made, how sounds are sequenced in a word, and how words use clusters. And when you do this much of practice, you will get to understand the more detailed nuances of this.

I hope you enjoy doing this exercise and develop your understanding of sounds and words in a better way. Thank you so much.

