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BSc Degree

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English-1 (Basic English)
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Aspiration in English Words-2

Welcome to the class. Today we are going to talk about aspirations in English words. We are going to discuss English words, we are going to discuss certain specific features of English words. And we are going to see how these features help us improve the way we speak, how these features help us sound emphatic, how these features, how our understanding of these features can improve when we speak English, that is English words and English sentences.

It is important to pay attention to these features as they have tremendous impact on learning how to improve. Let me get to these features and let you decide how important it is to know about these things.

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Elements of words

- Aspiration – A feature of sound
- Syllable – A unit of words
- Stress – A feature of vowels in a syllable



We are going to talk about certain underlying features. We are going to talk about certain things that are prerequisite for understanding this special aspect of speaking. There are three things that we will put together today. One is our understanding of syllables. We know that English words

or for that matter words in many languages, can have multiple syllables in them. So, words have 1, 2, 3, 4 syllables in them.

There are some words that are possible with 5, 6, and 7 syllables as well but beyond 4, the number of syllables you increase in a word, the chances of possibility of such a word is really very low. We have very few words with 6, 7, 8 syllables. When we say very few words, we mean compared to possibility of a word with 2, 3 and 4 syllables. So that is about the syllabification. So, we want to bring in the idea and our understanding of syllabification to understand stress patterns in English language.

When we mix the two, we realize that one of the syllables is more stressed than others. That means one of the syllables is more prominent than others in English words. With these two we notice yet another thing that we need to pay attention to if we want to improve our speaking and the way we sound. A footnote here: the more we put in efforts in improving ourselves that adds to our confidence and such confidence, such improved improvised confidence makes us sound better and impressive.

And that is prerequisite for effective communication. I keep mentioning this for you to underline this fact that in order to reach the ultimate goal of effective communication, we need to look backward and see to participate in effective communication we need to have good language. Which is, which requires two things: it must be flawless, that is, it must not be ungrammatical, we must have grammatical sentences and it must sound proper.

So, fluency and appropriateness, correctness, they add to the confidence and together they build effective communication. These are components of effective communication. So, moving beyond this note, to achieve that we need to look at this feature meaning we understand syllables and syllabification. We understand how syllabification helps us understand stress patterns, that is, one of the syllables is more prominent.

And when we put the two together, we see that certain sounds in certain syllables are also aspirated. We are going to discuss that part today and therefore understanding aspiration and the sounds that can be aspirated or not aspirated requires good understanding of syllabification and stress patterns in those syllables. So, we are going to work on these things together. Let's see how it works.

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Take a piece of cake.
 T^hake a p^hiece of c^hake
 P ← K



Take for an example, this sentence. It is just a sentence that is, that I have created for impact. It is a very simple sentence, imperative sentence, 'take a piece of cake'. That is how we speak. When you hear some others speak the sentence, it is possible to say, 'take a piece of cake'. You do not have to make yourself sound artificial. The first step is to understand when some people speak that way, why do they speak that way and when we hear them, what is it that we need to pay attention to? And once we pay attention to that part we know why others do it and we can also improve our own language. Without understanding the underlying pattern if we try to do that, that is called copying. And without understanding, copying will make you sound ridiculous, that is the word which comes to mind. So let us look at the underlying pattern.

What do we see here? In this sentence we see that we have a, we have three words in this sentence 'take', 'piece', and 'cake'. It, in the first one, first sound is 't', in the second, in this word, first sound is 'p', and in this one, this is 'k' that is 'k'. When we look at it, we notice that 't', 'p', and 'k' at initial positions of these words are getting aspirated when we pronounce them. This marker small superscript 'h' indicates additional flow of air which marks aspiration.

So, it becomes 'take', 'piece' sounds as 'piece', and cake sounds as 'cake'. So, some people speak English this way. That could be British variety of English, American variety of English, Australian variety of English, Canadian variety of English and so on. They, mind it, they do have internal variations as well. So, in Indian variety of English, we usually do not aspirate these

sounds. When we do not aspirate these sounds, that makes English Indian variety. That is perfectly fine.

There is nothing problematic or bad about Indian variety of English. So, understanding this part first makes us understand the distinction between different varieties, at least the two. And if we want to learn, this is what we can learn. So let us move ahead. Keep in mind each one of these words like 'take', 'piece', and 'cake' they are monosyllabic words. There is only one syllable in these three words. So, what we see?

Certain sounds at the word initial position or in these, in this case, that is, for all these three words we can very comfortably say at word initial position or syllable initial position, sounds like 'p', 't', and 'k' are getting aspirated. That is what the observation from this.

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[p], [t], [k] Voiceless stop sounds

• -asp ✓	• +asp
• -voice ✓	• -voice
• [p]	• [p ^h]
• [t]	• [t ^h]
• [k]	• [k ^h]

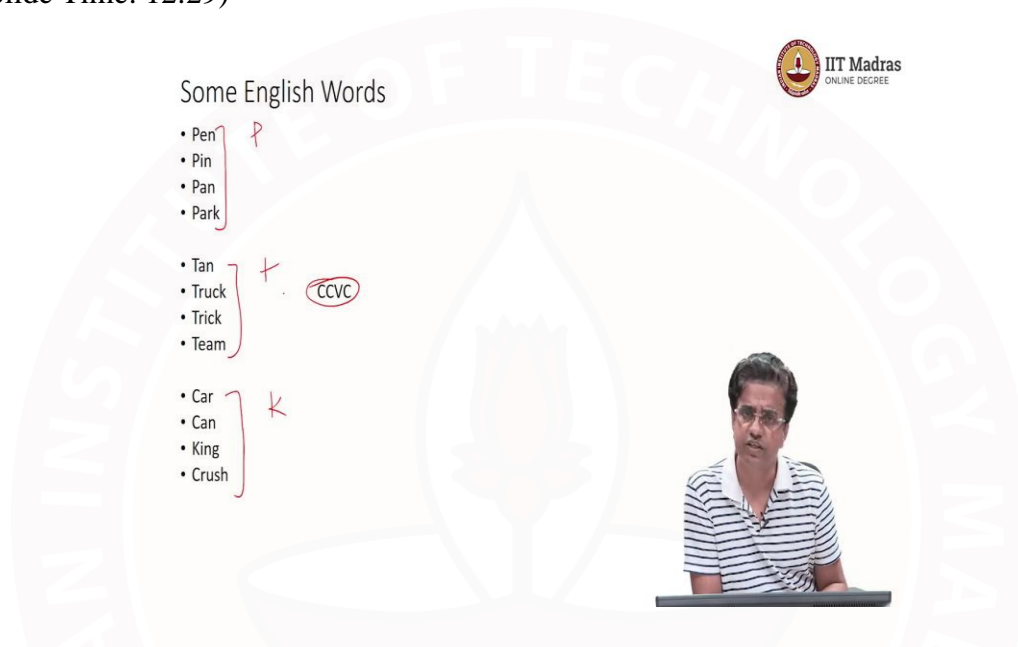


Let us see these sounds 'p', 't', and 'k' as you know these are, it will help you to find your understanding about these three English sounds that these are voiceless stop sounds. Meaning, 'p' is a bilabial voiceless sound, bilabial voiceless and aspirated sound. 'T' is alveolar unaspirated voiceless sound and 'k' is velar unaspirated voiceless sound. Each one of them is, they form one class which is called because they come from three different places of articulations, they do share their features of being voiceless and unaspirated but each, but they form a class call a stop because in the production of these sounds there is a total blockage at their respective places of articulations and sudden release of the flow of air. So they are also called

stop sounds. So, you see here they are all 'p', 't', 'k' unaspirated voiceless, that is minus voice minus aspiration. At the initial position what we see is that it gets aspirated, so minus voice becomes plus voice.

And therefore we were only talking about voiceless stops. So, look at this, it became, its sounds are 'p^h', 't^h', 'k^h'. This is an important aspect of English language.

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The slide is titled "Some English Words" and features a large, faint watermark of the IIT Madras logo in the background. It lists three groups of words, each with a handwritten letter in red to its right:

- P**
 - Pen
 - Pin
 - Pan
 - Park
- T**
 - Tan
 - Truck
 - Trick
 - Team
- K**
 - Car
 - Can
 - King
 - Crush

A red circle labeled "CCVC" is drawn next to the "Truck" word. In the bottom right corner, there is a small video inset of a man with glasses and a striped shirt, sitting at a desk.

So let us go back to the basics again and see some of the words in English. So, what are word, we have lot of words in English we will either, which will begin with either 'p', 't', or 'k'. So, look at this words like how do we say these words? So, I will try to say these words without aspiration, they are 'pen', 'pin', 'pan', 'park'. This is how we say these words 'tan', 'truck', 'trick', 'team', 'car', 'can', 'king', 'crush'.

So, you see that at the initial position of each one of these words you have 'p', 't', and you have 'k' in these three sets. You can check the pattern of consonants and vowels in depth. So, what happens is these words, when we pronounce, the initial sounds get aspirated and you can take, you can write the aspirated sound and these words once again for your practice. They sound like 'pen', 'pin', 'pan', 'park', 'tan', 'truck', 'trick', 'team', 'car', 'can', 'king', 'crush'.

So, the initial sounds in these words are going to be, going to get aspirated. This is an important rule, important things, thing to observe in English words. So, we are very much tempted to say

that the way it works is 'p', 't', 'k' as a stop sounds, become aspirated when they occur at the initial position of a word. That is what we generalized until this point. So, we need to know about words and we need to know about sounds and we observe and we form this rule that sounds like 'p', 't', 'k' in English become aspirated at the initial position of words.

That is what you have seen so far in this discussion but keep in mind this is half of the story. When we look at more words and when we bring in words with multiple syllables, then we see a slightly different story. This still holds true that is 'p', 't', and 'k' do get aspirated in English words. But when we bring in syllabification, that is we have words with two syllables, we see a slightly different story.

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Aspiration in stressed syllable

• Potato	/pa T ^h AE to/	(3) ✓
• Hotel	/ho T ^h EL/	(2)
• Nepal	/ne P ^h AL/	(2)
• Intense	/in T ^h ENS/	(2)
• Intension	/in T ^h EN shan/	(3)
• deeper	/DIIP er/	(2)
• Institute	/IN stii tute/	(3)



Let us look at these words. We have words like 'potato', 'hotel', 'Nepal', 'intense', 'intention'. Now look at this each one of these words like this one 'potato' has three syllables in them. One, two, and three. In this word 'hotel', one, two. In this word 'Nepal', one, two. In this word we have two syllables again. And in this word, we have three syllables that is 'intention'. Now see what happens here, notice that 'p', 't', and 'k' are getting aspirated not at the initial position of the word but they are getting aspirated at the initial position of stressed syllable. They get aspirated at the initial position of stressed syllable. So, the reason why they sound the reason why we have the rule that 'p', 't', 'k' get aspirated in the initial position of a word, is because we were looking at monosyllabic words. So, when a word is monosyllabic this rule is perfectly fine.

This rule is still fine, that is these sounds do get aspirated but we have multi syllable words, then these words, these sounds get aspirated at the initial position of the stressed syllable. Remember, whenever we have 2 or more than 2 syllables, one of them is going to be stressed. And if we have 'p', 't', 'k' at the syllable, initial position at the syllable initial position in the words and if those syllables are stressed, then they get aspirated only at the initial position of stressed syllables.

So, to repeat this part one more and final time: in multi syllable words, that is words with at least 2 and more syllables, these sounds get distressed only at the initial position of a stressed syllables. So, in this word you see in the first word we see the 'p', as a sound is there at the syllable initial position that it is not getting aspirated because in the next syllable which is a stressed syllable we have a 't' sound.

So, this 't' sound will get stress, will get aspirated because it is at the initial position of the stressed syllable. The question here is can we not apply both the rules together, that is if these sounds are there at the initial position of the word, they will get aspirated and they will also get aspirated at the initial position of the stressed syllable? That is not how it works because two aspiration, two sounds getting aspirated at two syllables, that is, one after the other will not be possible, will not be easy in speaking. Therefore, that rule does not work.

So, as a result, we get words like 'potato', 'hotel', 'Nepal', 'intense', 'intention'. So these are in caps stressed syllables. And we have 't' or 'p' at the initial position of the stressed syllables and therefore we get them aspirated. If these sounds are not at the initial position, then even in the stressed syllable they are not at the initial position, they will not get aspirated. Look at this one 'deeper', here we have 'p' but this 'p' is not at the initial position of this stressed syllable. Therefore, this is not getting aspirated.

We have 'IN stii', 'institute', so depending upon, I think this is stressed syllable therefore this will get aspirated.

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Aspiration in stressed syllables

- attention /aet T^hEN shan/ (3)
- retain /rii T^hEIN/ (2)
- retention /rii T^hEIN shan/ (3)
- Impossible /im P^hOS si bal/ (4)
- impatient /im P^hAE shaint/ (3)



If you look at more words then we see like 'attention'. I am purposely making it little more prominent for you to see. 'Retain' look at this, these sounds are getting aspirated. 'Retention', 'impossible' in a four syllable word, this sound is getting aspirated because this syllable is stressed syllable. 'Impatient' this sound is getting stressed because this syllable is, this sound is getting aspirated 'p' in this word because this sound 'p' occurs at the initial position of the syllable that is being stressed.

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Aspiration in stressed syllables

- department /di P^hAART ment/ (3)
- competition /kom pii T^hii shan/ (4)
- decrease (v) /di K^hRIIZ/ (2)
- decrease (n) /DI kriiz/ (2)
- Institution /in sti T^hyu shan/ (4)




‘Department’, three syllable word ‘p’ at the initial position of a stressed syllable. ‘Competition’, in this word, this is the syllable that is getting stressed. There is a ‘t’ sound at the initial position of the stressed syllable, therefore this is getting aspirated. ‘Decrease’, ‘k’ at the initial position of the stressed syllable, hence aspirated. ‘Decrease’ now look at it, this is a noun. In this word, this is not the stressed syllable so even though we have a ‘k’ sound at the initial position of this syllable, it is not getting aspirated because it is not stressed syllable. ‘Institution’ here ‘t’ is at the initial position of the stressed syllable therefore it is aspirated.

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Stress on 1st syllable – 2nd syllable unstressed and unaspirated

•Purple	/P ^h AR pal/
•Practice	/P ^h RAK tis/
•Circle	/SAR kal/
•Turtle	/T ^h AR tal/
•Sample	/SAM pal/
•Temple	/T ^h EM pal/
•Happy	/HAP pi/



Look at here. ‘Purple’ here you have ‘p’ at the initial position of the stressed syllable hence aspirated. This syllable also has ‘p’ at the initial position but since it is not aspirated, since it is not stressed this is not aspirated. ‘Practice’ here ‘p’ at the initial position of the stressed syllable, hence aspirated, ‘t’ initial position of this syllable but not the stressed one, hence not aspirated. ‘Circle’, ‘k’ at the initial position of this syllable but hence this is not a stressed syllable, not aspirated.

‘Turtle’ this is a stressed syllable, it has ‘t’ at the initial position hence aspirated. ‘Sample’ this is a stressed syllable not the second one. All of these words are two syllable words. Here stressed on the first syllable, second syllable is unstressed and unaspirated. What we are trying to show you through these examples, that there are ‘p’, ‘t’, and ‘k’ at the syllable initial position in the second syllable but we are not getting aspirated because they are not stressed syllables.

They are not at the initial position of stressed syllables. In each one of these words you can see ‘temple’, ‘t’ at the initial position but only this ‘t’ gets aspirated because this is at the initial position of the stressed syllable. ‘Happy’ look at this, you have two ‘p’ sound in this word, one at the final position of the stressed syllable the other at the initial position of the unstressed syllable. None of the two gets aspirated.

So, these examples gives you much clearer idea of the point that I am trying to make and you see this combined understanding of sounds, syllabification in words, stress pattern, understanding of stressed pattern in word. They combined together contribute to our understanding of which sounds, which sound gets aspirated at which position in a word and why the same sound does not get aspirated at other positions.

So, when we understand this and we would want to practice aspiration in our English, it is highly likely that we will get it right and we will, we have now in, we have now developed capacity in us to practice aspiration in our own English as well and that is not copying.

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2nd syllable stressed – first sound aspirated

- Platonic /plae ThoN ik/ (3)
- Iconic /aai KhON ik/ (3)
- Atomic /ae ThOM ik/ (3)
- Compassion /kom PhAE shan/ (3)
- Complete /Kom PhLIIT/ (2)

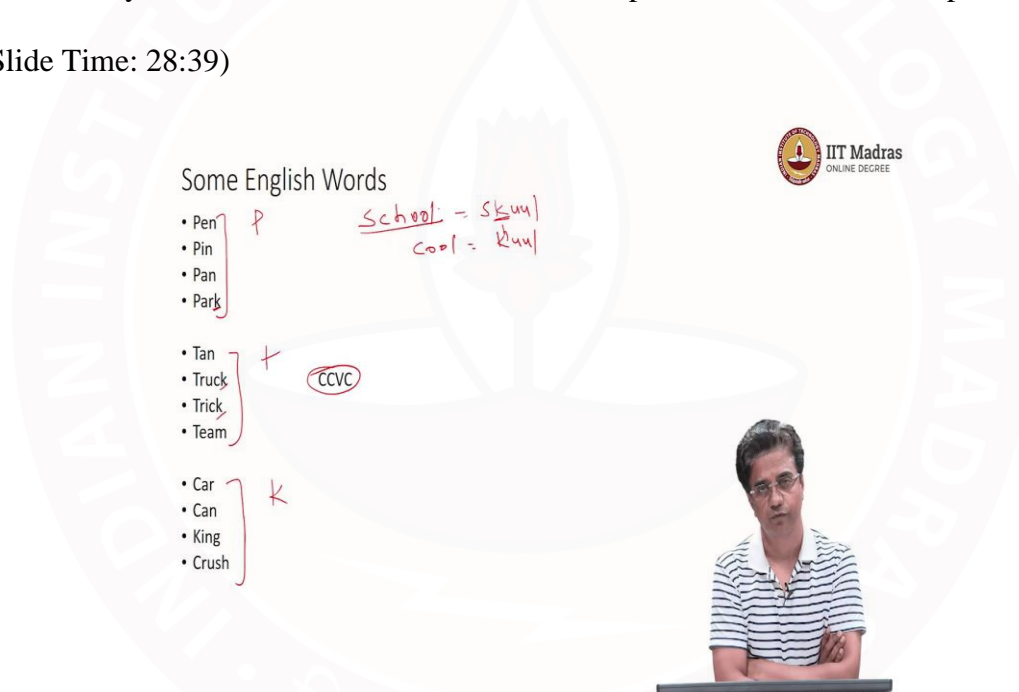


Look at more. Second syllable here are stressed and first sounds are aspirated in those so ‘platonic’ this is aspirated, ‘iconic’, ‘atomic’, ‘compassion’, and ‘complete’. Look at this. In this word ‘compassion’, ‘k’ at the initial position; in this word ‘complete’, ‘k’ at the initial position but not aspirated because these are not stressed syllables.

Here 'p' at the initial position but not aspirated because this not at the stressed syllable rather you see 'p', 't', 'k' getting aspirated at the initial position of stressed syllable in the same words most of these words, first four words are three syllable words, and last one is two syllable word. So, we get to see these things in more details when we look at words with two syllables, three syllables, and four syllables, four words.

So, if we form the rule backward like 'p', 't', 'k' gets aspirated at the initial position of stressed syllable. This applies alright, it is just that in monosyllabic word, there is no question of stress, hence they get aspirated. They sound like they are getting aspirated at the initial position of the word. That is also initial position of the syllable but there is no question of getting stressed syllable in monosyllabic word. Therefore, this rule takes precedence over a stress pattern.

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Some English Words

- Pen
- Pin
- Pan
- Park

p

t

- Tan
- Truck
- Trick
- Team

CCVC

- Car
- Can
- King
- Crush

k

Handwritten notes:
 School = skul
 cool = kul

So, a clearer understanding takes us in a, at a place where we can understand syllabification. There are points that one can check. Look at this, in monosyllabic words, here is how you can do exercises with these things and pay more attention to these things. These are, I come back to this slide one more time, these are all monosyllabic words. They have 'p', 't', 'k' at the initial position of these words hence they are all aspirated.

And there is no question of prominence of one syllable over the other because there is just one syllable in these words. So 'p', 't', 'k' will get aspirated. Now, if you notice, in a word like 'park', we have 'k' sound but 'k' sound is not getting aspirated because this is not at the initial

position. Here again you have 'k' sound, here you have 'k' sound. So, you, at least there are three examples here where you have 'k' sound at non-initial position.

So, aspiration of 'k' is not uniform. Aspiration of 'k' only at the initial position of monosyllabic words and initial position of the syllable that is getting stressed in words with two or more syllables, pretty simple rule. So, you can take words like 'school'. Why is this word important? It has, 'school' it has 's', 'k', 'skuul'. You have a sound 'k', but remember this is not at the initial position, so it will sound as 'school'.

But if you had any word like 'cool', then for some speakers of English, this will get aspirated, 'kuul'. And that is the reason why, that is how aspiration works for native speakers of English. This is why this is more intuitive to those who speak English as their first language. Many of us do speak English as, many of us do sound as English is our first language but keep in mind that English is also Indian variety of English.

So, if we want to pay attention, if we want to sound like British speakers or American speakers or we want to make our English more impressive and if we understand these patterns, we are going to learn this once for all. And not just we learn to do that, not just we compel ourselves to practice, we work on this practice with a proper understanding of underlying patterns that work in the language.

Therefore again, as key point, understanding underlying patterns of language, in particular English, in this case English, is going to be key in helping us enhance and improve our language. That has impact on our subconscious which gives us fluency, appropriateness, and accuracy that build our confidence and we do effective communication without flaws with these things. So, we work on these parts, we become much better.

We look forward to your questions. We wish, I suggest you to do some practice of these things and check yourself, check some words, sounds and see if these rules work. Do you find examples where we break these rules? We are looking forward to a discussion on these things with you. With that, thank you so much.