

**Applied Linguistics**  
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**Lecture 7**  
**Word Format on Phonotactic Rules**

How do we produce sounds? What is the mechanism involved in that? And then there what is the role of airflow, extra air, voicing that is vibration in the vocal cord and things like that, right. That was the idea that was the idea of that discussion on sounds, so now we will begin with words. Go ahead.

“Professor- Student conversation starts”

Sir, Li languages differ in the number of consonants or consonants that they have for different sounds. What might be the reason that some languages have adopted more sounds as part of their languages, while others have not? Is there a (( ))(00:58) can it be justified by some reason? Why languages differ in the number of sounds?

Say it again, why do you question is, why the languages differ in number of sounds? Why some languages have more sounds, some have less sound, some have specific sounds and others do not have, you were saying something.

I do not understand, every language has same number of sounds.

No, not true. Approximately same for example, you will not find a language with 20 and other with 50, see that. So they will have approximately similar numbers like 42, 46 or 48, no language will have 20 or 25 and then others will have 50 or 70, okay. They do not have same number. At the same time, the differences are not too wide.

They have some languages in Africa which have more than 100 sounds I I cannot remember the name of the language, but they have unique sounds like “kad kad” they also have that part of their language.

Right, right, right, they are called clicks.

Clicks.

Right.

Yeah exclamation.

Right, right.

So what might be the reason?

See, first of all, there are not 100, okay.

“Professor – student conversation ends”

Second, some of those are called Supra segmental features, okay. For example, in our languages, we too have something called nasalization; it is part of many languages. But to give you one example our languages, we have nasalization which is different from nasals, okay.

For example, we have a sound called “ma” right like “mama ma”, but then we have something else which is called nasalization. Now what is nasalization, it is it is something like let us say, when we say a word “Aankh aankh”. “Aankh” is the word for eye; it is the Hindi word for eye. Now the first sound of this word is “aa”, it is not “aakh”.

“Professor- Student conversation starts”

What is it?

“Aankh”

“Aankh”

“Aankh”, the first vowel is nasalized, right.

“Professor – student conversation ends”

The moon and the dot thing is the marker in writing system for nasalization. Now, you may have noticed I do not have it on my schedule to talk about written system, but you may have noticed in some words, you just see a dot and in some you moon and the dot, there is a difference between the 2. I hope we get some time to um, about that.

However, we need to get to principles in more details. Nonetheless, they represent 2 different things, moon and the dot is representing nasalisation, which is a feature on a particular sound. The dot is simply representing another sound, which is nasal, okay. Now how they do those things, I will show you some other time if I find some space for that.

Important thing with reference to your question is, nasalisation is something which is called supra segmental feature. Now it comes on a sound, it is not a sound by itself. Therefore, several of such things may not be, I am I am not denying because I do not know which language you are talking about, I do not know the sound inventory of that language to deny anything outright, but some of them are supra segmental features, okay that is number 1.

Number 2, and those are the things which are responsible for when someone says “Accent” right. “Accent” most of the time is used as a derogatory word to mark the language low. It says, “your language has an accent” right. However, the technical some “Accent” also means differences caused by supra segmental features, okay. So that that is also another aspect of that.

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## Words

- How do we make words?
- If words are not collection of random sounds, then what are the patterns?



There is one more thing, which we need to discuss before we move to words because now we are moving from sounds to words. When we look at words, we know that they are not just random collection of sounds, right that is well established.

We may not know each and every rule, each and every pattern which is responsible for which is responsible for the strings of sounds that we get in a particular word or what are the strings that are allowed and what are the strings that are not allowed. We may not know all of them however; we know that they are not random collection of sounds. They have underlying pattern in it.

We are going to see some patterns today, which is going to answer the question “How do we make words?” But there is a, there is another element which is larger than sounds and smaller than words, okay and this thing is called a syllable. Have you heard this word syllable?

“Professor- Student conversation starts”

What does it mean to you when you hear the word syllable?

It represents certain sound actually.

With reference to sounds.

“Professor – student conversation ends”

Actually what it is is the following, it is more than sound, it is larger than sound and smaller than a word. For example, a word may have 2-3 syllables or maybe 4 syllables, okay. However, 1 sound may also constitute one syllable, okay. But the question of syllable comes in only when we are talking about words.


There are, if we cut the words in different parts, then we get several syllables, this is called syllabification and we know that a word may have may be divided into 2 syllables, then they are called bisyllabic or disyllabic word or a monosyllabic word if we cannot divide them into 2 or 3, then they are called monosyllabic words, okay.

So please keep this thing in mind, there is something called syllable which is larger than sounds, but smaller than words. Syllables do not extend beyond the word boundaries; they stay within words, okay. So now let us very quickly look at these things, my idea is to get 2 sentences by tomorrow, so we have been looking at these things often on, right, where these things simply mean consonants and vowels.

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# Patterns

- CVCV
  - VCVC
- VVV
- CCVC
  - CVCCV
  - CVCVCC
- CCCVC
- \*CCCCV



Now the first pattern that you see “CVCV” right, which tells you several things. Probably, we have referred to these things while discussing other aspects, but for once again let me say this thing. This first pattern simply tells you first and second that the most common pattern for formation of words is “CVCV”. There is, nobody knows how many words we can make with this pattern that simply means a lot, a lot of words.

There is no restriction on many of them can be made. Also it means, we must have a vowel in a word. When we say most common pattern, we mean, if we have a proper alternation or at a regular interval consonant vowel consonant vowel, then we will probably get more right, which also means we can have a vowel consonant vowel consonant alterations, which will mean the same thing.

We can also have simply words with 2 to 3 vowels, okay and again the underlying thing is, no word with only consonants in any language, these are underlying things. The third thing when you see, what this tells you when you see there are 2 consonants in the beginning, right. That is a cluster, it means when 2 of them together, they not necessarily, but they will form a cluster.

“Professor- Student conversation starts”

Does anybody understand what a cluster mean?

Yes.

Cluster is not just the juxtaposition of 2 sounds. What does it mean? Somebody?

A little part of first sound and the starting of second sound (())(11:27)

Exactly.

It might overlap.

No, no overlap.

The part of the previous consonant disappears. It is important to know, which part of that previous consonant, we are talking about a sound and again we are talking about a part of that sound has to disappear in order to make a a cluster. This do you see how what a microscopic look it becomes when we look at words, right? So which part of that sound to we cut or gets disappear?

The second sound.

The vowel part, right.

“Professor – student conversation ends”

We know that every consonant comes with a vowel which is called an inbuilt vowel, which is just one particular vowel, this vowel is “a” a short “a” it is shorter than “a” and definitely way shorter than “aa”. “aa” is a completely different sound and we do not find that anywhere in any consonant. When you see “aa” in a consonant that is an additional sound, right.

In a in a world like “maa maa” or “kaa kaa”, “ka” and “a” are 2 different sounds, right. So the sound like “ka” comes with an inbuilt vowel “a”, which is small vowel. It is called “sho” but let us call it vowel. In order to make it a cluster that goes away, that vowel disappears and then we get the following consonant forming cluster with that that one, okay. And we have seen examples like school, station, scooter right and many more.

This cluster is possible in the beginning of a word, in the middle of a word, also at the word boundary, okay. However, there are couples of things that are that work as constraint, that are important for us to keep in mind. Only the first sound is responsible for forming the cluster that is, in a cluster the first sound that is the first consonant will lose its inbuilt vowel, the second one will not.

If the second one loses its vowel, then it is going to from cluster with the following one. Say that and this can happen at any position in a word; beginning, middle and end with the break

of a vowel, okay. If there is no break, then they are going to form a cluster with 3 consonants. If we say there are some words, which have a cluster of 3 consonants in the beginning of a word, okay. You get this question?

If we say there are some words which have 3 consonants forming a cluster in the beginning of a word, what do we mean?

“Professor- Student conversation starts”

What are the 2 consonants that are losing their vowels?

First and second

First and second

First and second

“Professor – student conversation ends”

third one is not going to lose its vowel, all right. Now before we see some more examples of the first, second, third, fourth one, let us look at the third one again. The difference between first and second put together and the third is striking, which is... Remember, what I told you about the first one, total number of words that we can make with this possible pattern is a lot that is that is finite.

We do not do not know how many therefore, we do not even count. However, the presence of a cluster in a word reduces the number of words way too low. That is, the number of total words in any language with clusters is very few. This very few may not be handful that you can count. But when we say very few, we mean compared to the first one, way too low, okay. What is the meaning of this thing?

If you can look at it, if you can elaborate this thing in little bit more, what does it mean? Which one is more common? Which one is easier? We get unlimited number of words with a pattern, right. Definitely, that pattern has to be an easier pattern only then we are getting so many of them. Now we are getting very few that is way too fewer with clusters, which simply means that is a heavy word.

And for the vocal apparatus, for the word formation process and generative mechanism, that is an expensive word that is a tough one therefore, we have a very few of them. This I very

well aware, I did not completely answer your question that why differences in number of words, but this will tell you something. But one more thing I want to add to your question not necessarily as an answer is.

This question is, “why do we have so many languages?” right, which we do not have clear answer of, okay. It is just that we have so many of them. Similarly, it is an empirical fact that languages differ in terms of number of words.

“Professor- Student conversation starts”

Get this thing?

Sir, can we say that because it is long time ago because of geographical isolation will be different groups or civilizations, there were no civilization if you go long back, but different groups because of geographical isolation, so one group develop their own languages, each group developed their own languages and since they did not communicate earlier, they were not exposed to new sounds or different sounds which can be produced.

Some groups explored their local apparatus more compared to other groups, can we say that?

Probably yes, but you can say the same thing in a different way also, which is or a similar thing in a different way.

“Professor – student conversation ends”

See, we have talked about language continuum even today, right. We have seen the continuum of Assamese, Bangla, Oriya and Telugu. Definitely, Telugu has some sounds, which Bangla does not have and Bangla has some sounds, which Assamese does not have or Odia may not have, right still they form a continuum. It is possible for us to see that today because we are aware of the geography.

Now as you said long time ago, and that is possible just a speculation. Long time ago, when people started moving right. That movement was probably permanent, right. We are also familiar with what we know as Big Bang Theory, right that was way too big and I do not want to go that far, we do not know we do not have evidence of that time if we had language or not.



For if it was there in what shape and all, we do not know. But when people started moving, they probably never met with one another again. So they had one way of communicating, again they separate and then move to some other place, then they had one some other way of communicating. So we see a common ground, but when people separated and they were communicating among them themselves.

They came up with another few sounds, which were specific only to them and then as they moved probably they, some of them were retained, some of them were lost; we do not know how many sounds may have been lost even in the languages that we have today because sound change is one of the big process of language change, okay. Sound change is one of the big indicators.

Remember, I was trying to show you the distinction between 3 kinds of “sa” dental sa that is dental fricative, palatal “sha” and then there was a retroflex “sha”. And I told you that retroflex “sha” has some languages have lost that one and what we have, we only have palatal “sha”. And even between palatal “sha” and dental “sa”, some some languages have one and some languages have other, right.

Which means in a in language A, we may not have both palatal “sha” and retroflex “sha”. In language B, we may we may not have dental “sha” and retroflex “sha”, right. So and this loss is recent therefore, we can put our fingers on it. Some of the losses may not have been recorded, so we do not know what has happened to sound. However, we do know sounds have played great role in language change.

And therefore, some languages in the present form when we see them have a particular set of sounds, some languages have another set of sound. Nobody says that they are going to stay that way, they are going to change to. However, what is predictable is the following and which will probably not change is, all the languages will keep sharing sounds. There will not be a language, which does not share sound with other words.

That will probably not change. I am very well aware that this does not completely answers that question that is probably that question does not have an answer, okay. You can think, you can read, one can speculate, one can write something else, but can never be a complete answer to a question like this, get it. Coming back to our discussion, first and second patterns gives, they give us lots of words.

The moment we start with clusters, we start getting, we start seeing reduced number of words, which simply means that clusters are heavy, okay. Now, the evidence of a cluster being really very heavy is coming from the fourth pattern.

“Professor- Student conversation starts”

Can you think of some words with fourth pattern, where we have 3 sounds 3 consonants forming a cluster to make a word?

(( ))(24:02)

Loud.

String.

String, so what are the sounds here? I suggest please keep writing these words. String and underline the sounds that are part of cluster, you will see magic in this thing. The sounds are “sa, ta and ra, okay. True, this is a cluster “string” “sa, ta and ra” alright, more.

Stray s t a r a y.

Stray. So what are the sounds here? “sa ta and ra”. Alright, more.

Spray.

Spray and sounds here are “sa pa and ra” more.

Screw.

Screw here are...

Sa ka ra.

Sa ka ra.

I I can stop, but for your fun part, can you tell me more?

Sclerosis.

So the sounds are?

Sa ka la.

Sa ka and la, more.

Prawn.

Sorry

Prawn.

Sounds are?

P and R.

It only has 2.

We are talking about 3. You are right that in a word like prawn probably, you thought of this example because you are looking at written writing system where you see a 'W' or something, right. But it has only 2 sounds "pa" and "ra". We are talking about 3.

Throw.

Throw, what the sounds are?

Tha, ra.

Tha, ra and after that you get a vowel, so that is not 3, that is only 2. We are talking about 3. Can you be more imaginative?

(( ))(26:31)

Give me a word, give me a word, sorry.

Stroke.

Stroke alright. So the sounds are "sa ta and ra".

"Professor – student conversation ends"

Now while you are thinking and I am still waiting for few more examples, let me say the following. We are talking about some of these words from English clearly right; you are not coming up with words from our languages. What we are going to see as generalization applies to our languages also; it is just that you are not giving those sounds, those words, okay.

So generalizations derived from English words are applicable to all languages, so do you see anything common in what you have seen, what you have given so far? Anything common in the examples that you have given so far?

“Professor – student conversation starts”

All of those starts with sa.

Starts from the front and goes (())(27:41).

That is very nice true, but look at the sounds. What is the first sound in all of them?

Sa.

Sa.

Do you see, this cannot be a coincidence? That the moment you want a word with 3 clusters, you cannot have one beginning with any other sound, any sound other than “sa” okay. And this is this is no not big time discovery or anything, it is just pretty obvious. We speak these words every day, we learned these things the way I am telling you. This is the process called reinventing.

We are not inventing anything; it is called reinventing or making something little bit more obvious, right. It is not that these words you did not know, these are your examples, and it is just that we did not pay attention to these things.

Sir did the words come first and then we found out that the bunch of rules fit into them or have the word formed according to the rules.

This is like chicken and the egg story.

Yes.

So a good question though you are saying, did we have first sounds and then we made words?

Did we have words and then we figured out the way us form words by following the bunch of rules or did we make the words based on bunch of rules then created.

No, we have words. Okay, let me put it into following way. These things that I am trying to show you, when somebody came up with these definitely, they looked at huge dataset and then they came up with this pattern. It must have been very exciting at that time when

someone figured out that you cannot have a word without a vowel. Sounds very generally and a matter of general knowledge, but must have been very exciting for them.

Why is it that we cannot have words with different sounds like instead of starting with “sa”? Is it that we have it or is it difficult...

That answer I can give you, but let me let me talk about the question that you raised before; it is a very interesting question. So these patterns were made explicit definitely on the basis of large datasets, where the claim is not this fun. The claim is, there is an underlying pattern of word formation. Now, these patterns are part of principles and parameters, which are part of universal grammar.

And which are part of language acquisition device that we are born with. We trigger them with these examples and therefore we speak the way we do, see this thing. So it is it is not that we have a set of sounds in one compartment and then rules in the other. And rules apply to sounds and then we get words. So altogether okay and definitely the generative process is that we need to trigger those rules to get these things.

That is the answer I can give for that. Now let us let us look at more and then you will see why we have all begin only with “sa” okay. What is the second sound in these clusters?

Ta.


Ta.

“Professor – student conversation ends”

(Refer Slide Time: 32:56)

CCCVC

- Spring (C C C = S P R)
- String (C C C = S T R)
- Screw (C C C = S K R)
- Splash (C C C = S P L)



Second sound is, they are either “pa” or “ta” or “ka”. You can come up with 100 words, but they all are going to have sounds like second one can only be “pa” “ta” “ka” okay one of the 3. So what is common in one of the 3, we are going to look at that in a moment. And the third one can only be either “ra” or “la”. Now again the underlying idea is this constraint is very strict. The stricter the constraint, the heavier the word.

By heavy, you understand what we mean by heavy. The heavier the word for the apparatus therefore, fewer in number alright. Now these words with 3 consonants, if you compare them with words with cluster of 2 consonants are again in way too few in numbers in any language. They could be handful of them, okay. And this being handful, I am not concluding on the basis of you not giving more examples.

Okay, we do not come up with more examples have nothing to say that we have established well before, okay. They are very few in number, you can count them I mean you would not be too wrong if you say English may not have let say more than 100 or 150 like them. By 150, I am I am not trying to put a number on that, it could be 200. But or even for that matter is 500, what is the big deal about that?

Which is not true, definitely 500 is not true. But the point is, if you can come up with 5000 with one pattern and then the third pattern which just makes another string little bit tighter and gets reduced to 10%. And if you look at the previous one, which were millions and you added 1 constraint on that and what reduced to let us say 5 lakhs or for that matter, 1 lakh.

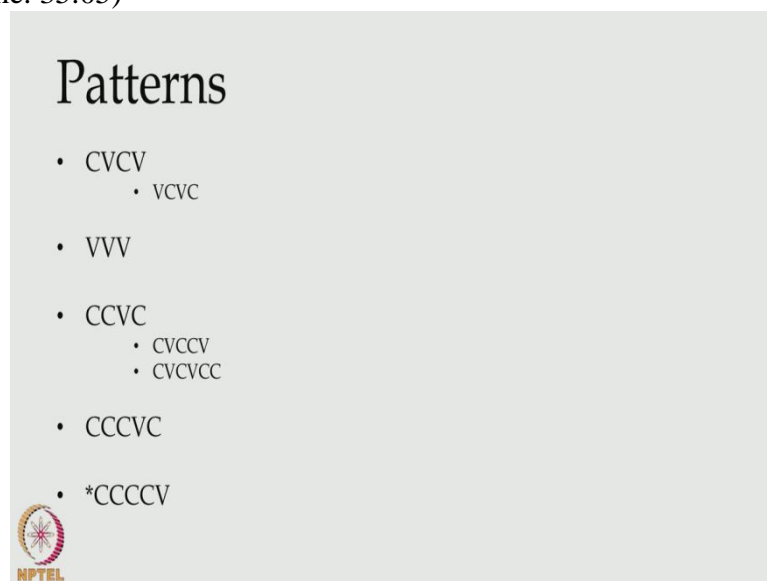
That that is too heavy a constraint, just put one small constraint, it gives you, it becomes such a heavy that it has dramatic change in total number of words. That is the constraint we are looking at, right. I am coming to this in a moment to conclude this thing.

“Professor- Student conversation starts”

(( ))(23:10)

Yeah, I am coming to that in a moment, I am coming to that that slide in a moment again. See the last one.

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4 consonants as a cluster, do you see star in the beginning of that? For your information, this star means not possible, 4 consonants as part of the cluster not possible. And this answer could be simple for you; answer must be simple for you, why?

Extremely heavy.

“Professor – student conversation ends”

Extremely heavy, not possible that will become too heavy for processing, therefore not possible okay. And this is not possible in any language. No language gives you 4 clusters of consonants. Now for you in the interest of time, I should add “in the beginning of the word”. There are few words in English where at the end of the word, a cluster of 4 consonants is possible, okay.

I think the word sixth has probably 4 clusters or there are couple of couple more, again not a significant thing to discuss. However, the point is even if it is possible at the end, it is possible only for few words, not more than 5 definitely and 5 I am being generous, okay. In the beginning of the word, definitely not possible in any language.

Now the point for us to take from here is see the weight of these constraints and see the patterns involved in the formation of some of the words, these are called phonotactic rules. By no means I am giving you all the possible patterns and all the possible rules of word formation, I am just giving a flavour of these things.

“Professor- Student conversation starts”

Yes sir.

You told, everyone has to start with this if it has the cluster of 3.

If it has cluster of 3 consonants, the first consonant must be “sa” not ‘s’.

There is a word suppose, there is a word called “Fcron” f c r o n f c r o n.

F c r o n fron.

F c r on fcron.

What is, how is that pronounced?

Fcron.

So the first one is “saa”.

No, ‘F’ ‘F’.

But what is the first town? I hear you saying is Scron. I am I am I am not familiar with that word. What I am asking you is you tell me what is the first sound?

Fa.

Fa.

Yes.

So the word is Fron.



F c r o n.

So how do we say this word, tell me?

Fcron fcron.

You cannot say this thing.

Saying “fa” fully without eliminating the (( ))(38:10)

Facron, something like that Facron?

Yes.

Yes.

You can do that, is there a word like that?

No, I am just asking if there is a word like that?

“Professor – student conversation ends”

No, you are artificially creating one, where the where the where the problem is right like someone said, in the in the sound “fa”, that “shua’ is not deleted. The sound “aa” is not deleted therefore, you are having difficulty saying this, I am having difficulty saying that. And imagine, we drop that; we would not be able to say that. I I invite you to say that word. So you are you are right, on the paper we can do anything, but that is not going to be word.

And definitely, that word is not going to be available in the inventory of words to be assigned meaning. See the see the see the point. See, the formation of word is one part and how such words if they are legitimate words based on this pattern get meaning is a completely different process. And that that also I have I have, I think I have told you that the relationship between a word and its meaning arbitrarily matched.

Is arbitrarily put together. Why this thing is called a pointer has got no rational behind it. We could have called it aeroplane; it would still mean the same thing. I mean if in the beginning if everybody called it aeroplane, we will call it an aeroplane, would not make any difference.

It it sounds ridiculous today because the moment we say an aeroplane, we have something else in our mind because we know that word aeroplane is assigned for something else. Get this thing? So that that is a different process. Coming to this, you can do it on paper, but we

would not be able to say that. In order to be able to say a word, this is what has been derived. This is not a prescriptive that you must say “sa”. If you happen to say 3 clusters in a word, the first one must be “sa” or first one appears to be only “sa”, let us put it that way that is the point okay so now yeah.

“Professor- Student conversation starts”

What about words like “Accreditation” where a k r together.

So tell me now what the word is, it is accre...

Accredit.

A.

That is a vowel, accreditation.

When you say “ccvc”, that means we can only do 5 better words or any kind of word.

It again it takes long time to get out of this thing, when we say 5 letter words, we are not talking about letters, we are talking about sounds.

Does this arrangement generally made only for words with 5 sounds or words that start with these 5 sounds?

No, first of all we are talking about this these words, this cluster of 3 in the beginning of a word, that that is the thing that I am trying to show you. I am saying something more than that also. What I am saying is, when we look at a word, we are talking about looking at sounds involved in the word, not the letters involved in the word.

My question is those rules apply only to 5 sound words or...

No, it could be any number of sounds in a word.

But this type of pattern that means, starting of the word you can generalize it to starting of a word, they can make as a new model. For example, he said “string” it is “stringing”. The same rule applies to stringing as well?

Sure definitely true that I heard your question as a different one and that is important to clarify. When you say words like accreditation, right what are the sounds involved in that?

Aa ka...

The first sound is a vowel, so that it out. second one is...

Kra.

Ka and ra. So that is a question of only 2 sounds, right. The the following sound becomes a vowel.

What about words like Kripa?

Kripa, so what is that tell me?

Ka ra pa.

“Professor – student conversation ends”

Before you say pa, there is an intervention of a vowel, right. Before you say the the third one “ka ra and pa” before that there is a vowel, see that true. So you must get 3 of them, okay. If you have a break, then you can have any because we are not talking about words with 2 clusters, words with cluster of 2 sounds. If we are talking about 2 sounds in a cluster, then we can name any 2 sounds.

We are talking about cluster of 3 sounds, in that 3 you must have first one “sa” please think about more words, I I invite you this is not the only 50 minutes, where we can talk about this. Think about more words, but just keep in mind that we are talking about sounds, not letters okay. So the worst one must be “sa”, second one can only be either “pa” “ta” or “ka”.

“Professor- Student conversation starts”

Yes sir.

Sir you said that the second sound can only be “sa” “ka” or “ta”.

No, second sound can only be “pa” “ta” or “ka”.

But it could also be “ta” right. It may not be possible in English, but it is possible in...

Yeah, yeah.

“Professor – student conversation ends”

See, this is why we discussed both retroflex and dental and then we have also discussed something called alveolar, the English “ta”, they are all from the same region, therefore I am saying “ta”. So in a in our language it could be either “ta”, which is complete dental or in other languages it could be an alveolar “ta” softer right. In a word like let us say “string”.

It is not a retroflex “ta”, it is “ta” therefore, I am putting it that way. This is the reason why we discussed the differences between remember do do remember here the difference between “ta” as a dental, “ta” as a retroflex and the intermediate alveolar, which are the sounds that we get an English, very nice. Now what is the common between these 3 sounds; “pa” “ta” and “ka”.

It is not all of them are from the front of the vocal apparatus, “ka” is velum, see that. What is common between all 3 of them is they are all stop sounds. Stop sounds mean total closer and then release of air “pa” “ta” “ka”. The common in the matter of articulation in all 3 of them is they are all stops sounds, okay. And the common between “ra” and “la” is, these 2 sounds are called liquid sounds okay.

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## Cluster of three consonants

- The first consonant must be a s (dental fricative)
- The second one must be one of the following:
- P T K are stop sounds. Stop means a total closure before the release of air flow.
- The third one must be either R or L. These are liquid sounds.



Now liquid does not mean much, liquid is not something like physical liquid water or oil. However, it is something of that sort in nature do not do not have much to say about them at this moment, but I can simply give you one generic example that you may find some people who who interchange these 2 sounds, okay. When they would want to say “ra”, they would end up saying “la” or the other way round.

Some of such things are also attributed to some kind of speech disorder and some of these things are very commonly known as metathesis or thing like that. But the point is whether it is a speech disorder or not is not our job to hint at. Our thing is this even in this speech disorder, the alternation is between only these 2 sounds. So some people...

Can you think of some examples I have found, instead of "rail", I have found some people saying "lail" okay. And when they are supposed to say "la" for example, "laal" instead of "la", they put "ra". Okay, now this may not give the answer, but this is just an application of what I am saying, which is these 2 sounds are liquid therefore, this interchange. Now the third one of this cluster must only be either one of the 2.

Therefore, you get sounds like spring, string, screw, splash and many other words that you gave.

"Professor- Student conversation starts"

(( ))(48:13) it is to start with the beginning.

Most of them have been seen in the beginning of it, yes. Beginning of a word, it is it is difficult to get a cluster of 3 sounds somewhere else. However, that is not denied.

Somewhere else is quite common.

Someone else is quite common?

I mean, at the end it is common.

Come up with some of the words probably there also it will be "sa" "pa"... Sorry.

Pangs, p a n g s.

Again, you are talking about written things, written letters. If you say those sounds and pay attention to them, there will be a break with a vowel.

You are saying n g specific.

Yes, and if at all that that counts, there is one consonant which is "na" velur nasal "na na" okay, alright.

"Professor – student conversation ends"

That is all that is what I have to say for to tell you today. There are there are couple of other things about words which I do not want to bring to your attention because this is the, so far we have seen some patterns, now we are going to see some additional rules applicable for formation of words and then we go to sentence right away from there to see more rules of why and how sentences are not simply cluster of words okay.

They will make more sense when we look at those things through the intermediate rules that are applicable in formation of words and then a better understanding of sounds is definitely going to help us what we see little later, alright, we stop here.