# Applied Linguistics Professor Rajesh Kumar Indian Institute of Technology Madras Lecture 11 Grammaticality and Acceptability

We have looked at 2 types of categories that is, one is that one is lexical category and the other is functional category. Lexical categories are words in sentences and you can see those categories, they are, they have their physical appearances. And then we looked at then we looked at and we saw that some of such categories have their physical appearances and some of them do not have.

It is not that all of them that is agreement features like number, person and gender and tense, aspects and some more will never appear. And it is also not true that if they appear once, they are going to appear all the time. So the same thing may appear sometimes and may not appear at other times. Is this much making sense to everybody? Are you with me so far? Alright.

And then we have seen examples of all these things like if we have a word let us say a proper name, right. The markup of gender is not visible in that for example, if you have a name like "Raju" or "Sandeep" there is no visibility of gender on that. However, sometimes you may see you may assign certain markers as gender markers on a word like "ladka" or "pankha" or "kamra"

At the same time, you can look at other words like "seb, ghar" if we are talking about Hindi. Then such nouns do not category show their gender markers, okay. At the same time when we looked at tense in a language like English or for that matter other languages too, if you have a simple sentence "I am a doctor" or "I'm a student" you have a tense marker, you have word that you can attest as tense marker.

At the same time when you say other things like "I eat Pizza" or "I live in Chennai" "I like movies". In such sentences, gender tense is not categorically visible. And we have seen examples of these things. The point is there are there are several points to keep in mind. 1<sup>st</sup>, alone lexical word do not make words. So when we when we may make statements like this that you have that that you have on the screen.

(Refer Slide Time: 03:55)

#### Sentence

- · How do we make a sentence?
- Are sentences random collection of words?
- If not, what are the required components of a sentence?



Like, "Are sentences collection of random words?" The answer to such questions are expectedly no, right. Then if not, what are the required components of a sentence. When we talk about required components, what we mean is we are talking about some visible, invisible interplay of functional category that is the point we are trying to make, okay.

And does other things, which makes sentence this is why sometimes you may have a pretty long sentence and still could be called just one sentence. And you may have just a word "go" or "come" or "sit" could also be a sentence because they fulfill the requirements that we expect functional categories in a sentence to fulfill, clear? Alright.

We we also saw that there are some sentences, which do not have tense at all like when we say a sentence like "come", this sentence does not have a have tense on it, these are called tense less sentences. And with the examples of sentences with tense, sentences with visible tenses, sentences with invisible tenses and sentences which do not have tense.

We have seen that by all such things and by all such things I mean tense and aspect. And then when we combine the interplay or the role of agreement features in a sentence put to when we put everything together, we see that all such activities take place around verbs in a sentence. Therefore, verbs are called Powerhouse in a sentence that is everything is controlled by verbs.

Therefore, verbs are most significant lexical part of a sentence. Remember, we talked about sentences for the 1<sup>st</sup> time and even now I gave you an example, we established that if we say just "lo" that constitute a sentence, you may put 200 words together if there is no verb and no

agreement taking place, they do not make a sentence, right? This is the reason why it works that way.

So, can I can I take it at this time that we may understand role of different types of operations and different types of relationships between lexical categories in a sentence. Can we take this much right now? Okay alright. We have been have already looked at the 2 types of negation.

(Refer Slide Time: 7:11)

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Negation

• Mainly two negative markers: nahiiN and mat:

5. raajuu skuul nahiiN/*mat jaayegaa
Raju school neg go-FUT-M.S.

'Raju will not go to school.'

6. mat/nahiiN jaao
neg go-IMP
'Don't go (please).'
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And I I wanted you to see this with the I wanted you to look at these examples and 5 and 6 just to refresh your memory that these things help us establish whether a sentence has tense or not because a particular type of negation marker can occur only with the tense less sentences namely "mat", we have looked at some Tamil examples.

And I am sure you must have thought about examples of some other damages as well, right. There are certain other things where we did not come but I I can tell you while moving ahead um, but I need to move to some other point about the sentence today. However, this point is going to be crucial little later, okay and I will establish why I am showing you this sentences.

(Refer Slide Time: 8:26)

## Negation

- 7. aap-ne kahaa aap aais-kriim khariidenge you-erg said you ice-cream buy-fut 'You said you will buy ice-cream.'
- 8. maiN-ne kab kahaa I-erg when said 'When did I say?'
  Imp: I did not say so.
- 9. maiN-ne kahaaN kahaa I-erg where said 'Where did I say?' Imp: I did not say so.



Can you please take a look at these sentences? Even those do not speak Hindi could understand these sentences, please take a look at them carefully.

"Professor- Student conversation starts"

What is the firstsentence? Speak loudly, what is the first sentence?

"Aapne kaha aap aaiskriim khariidenge"

"Aapne kaha aap aaiskriim khariidenge". What does this mean?

You said you will buy ice cream.

You said you will buy an ice cream, right? What is the reply in sentence 8?

"Maine kab kaha?"

"Maine kab kaha?" What does this sentence literally mean?

"When did I say?"

"When did I say?" right. But what is the, what I am supposed to understand out of this? What is the implication of this?

"I have not said it".

"That I did not say so". Or "I do not remember saying that".

Or "I do not remember saying that".

"Professor – student conversation ends"

The point is, when you see the reply right, and the reply is "Maine kab kaha?" Do you see any negative element in this sentence? If at all this sentence is a question sentence right, "when did I say so?" And remember this is not about Hindi alone, same thing applies in English when you say "when did I say so?" Means "I did not say so". A question sentence gives you negative reading.

Not necessarily, a question sentence is going to give you negative reading all the time, but in a context, a question sentence gives a clear negative reading, where there is no negation word, there is no negation word in the sentence, right. When someone says "come", does it mean "do not come"? Right. If you want to tell someone do not come, then you have to say "do not come" that is, you have to use the negative word.

Now look at this sentence, there is no negative word in it means no. And again I will remind you like I have promised you I will keep reminding you about these things, it is not something new that I am telling. I mean, I I may be saying something that you are looking at in a context for the first time, but it is not that you do not know this; you see these things many a times.

Not we say such things? The and if you look at the sentence in 9, it is not just about one question word "when", you can use several types of question word and still the meaning is negative. Even when we say, use the question word "where" "when did I say" or "when did I say so" means I did not I did not say that, right.

Now it is just, I just want you to look at the implications of replies. And what such questions sentences are capable of, what is the implication involved in such answers, clear? Now I will talk about little bit more about these implications little later, okay.

Now there is there is one more thing which I wanted to discuss before I come to the definition of Syntax. So there are 2 things in a sentence, right, 2 things that are important; one is the verb, right and the other is, what agrees with the verb subject, then we can call that roughly subject.

We have seen in the last couple of classes that sometimes, subjects may be something which we do not usually think could be a subject, right? That is, we have different notion of a subject in our mind however, when we take a look at a sentence, take a careful look at a sentence, we realize that the actual subject is something else.

And this actual and non-actual business begins only when we keep in mind that subjects are the elements that agree with the verb, right. I am trying my best to talk about these complicated issues in simple terms I I am trying my best not to use too technical terminology for these things. Am I still making sense to you? Okay.

So, looking at the same phenomenon now we derive that nouns that end up agreeing with verbs are subjects in one form of their definition, right. So we talked about subject in verbs.

"Professor- Student conversation starts"

Have you heard the verb predicate? What does this mean to you when someone says predicate?

The rest part of the sentence.

Rest part of the sentence, rest part, which rest part? I mean leaving what?

Sentence minus subject.

Sentence minus...

Subject.

That is, you want to say subject minus sentence or sentence minus subject you think is a verb, nice. And everybody understands this thing? Have you heard this thing or have you read this somewhere?

I thought like that.

You thought like that, good.

"Professor – student conversation ends"

And that its true, subject minus everything else is predicate. Now this is a nice definition, but we need to understand implication of this definition, which is subject is not part of predicate, please keep that thing in mind, we will come back to this thing. And this particular luncheon or description has huge role to play in many things that we are going to discuss.

So, you can see now at least at this point, why agreement has to take place between subject and the verb. That is, one element from within the predicate and one element outside the predicate. And you have just established that because subject is not part of the predicate therefore, it has to agree only with subject, see that okay.

So we know terms like subjects, verbs, predicate, right, at the same point before I move out of curiosity, I want to check about one more term, which is objects. Have we heard about that? Subjects, objects and verbs, right we have been talking about them, we have just introduced a new term "predicate" and I am so happy that you understand the notion of predicate.

"Professor- Student conversation starts"

How about how about objects? Anybody?

What is a sentence referring to?

What is a sentence referring to? It is little bit vague type.

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What? Loudly.

Yeah, thing on which the verb the action is done.

Something that the action is being done on right will be object. These are these sounds like very textbook type of definition, I want you expand them in such a way that people could understand without books and all that, but you are too close; we just need to say little bit more.

Okay, so hold on with this these definitions. Where is object located? Is it part of the predicate or outside of predicate?

Part of the predicate.

"Professor – student conversation ends"

Part of the predicate. Now, it follows from what you just said, if predicate is everything except subject, and then object has to be part of predicate, right. No no surprises here and if it is part of the predicate, then we come to this as an action and all these things little later. If it

is part of predicate, it is around verb. And in still simpler terms, we can say objects are more closely related to verbs.

That is, the existence of an object depends on the nature of the verb. Whether an object will be allowed in a sentence or not, by allowed I mean whether an object will be required in a sentence or not depends on nature of verbs, Right. And again with this we will need to talk about what we mean by nature of verbs, alright.

So hang on to that, little bit more on the relationships between subjects and predicates, relationship between verbs and their objects and nature of verb, we will discuss little later, okay. Let me let me talk about something that I want to introduce to you and then bringing those notions and move forward together, okay. As you know, we started to understand principles and parameters of language, right.

So far things we have been discussing, they are part of they are part of principles and parameters in the sense that a nice background of such helps us understand how principles and parameters play in language, how principles and parameters really work in language understand? We have been able to understand in a better way, notions of things like knowledge of language and principles of economy, okay.

We can understand notion of knowledge of language only when we understand how we acquire language, right? And before we understand how we acquire language, it is imperative for us to know what is it that we acquire? How does it really work? Beginning from how we begin speaking sounds and then how they work together in a sentence in a word, understand this?

So this is why we have spent little bit time on such things, what I want to see is I I this is this is not an apology to why we have spent so much time on that, it is just to bring you at this point to appreciate more of what we are going to be discussing. Point number 2, we can appreciate the appreciate an understanding of principles and parameters more at the level of sentences, right.

So now we are at the level of sentence, now we understand what we know about sentences so far the things that we have established about sentences, I do not mean to repeat them again, okay. Such an understanding in short is called syntax, okay. Which is again, it is a set of rules operating at the level of sentences, okay.

So, principles and parameters are visible more apparently at the level of sentences and this is what we are going to be looking at from now onwards. And again, for understanding such principles and how they operate, it is important to understand the relationships between subjects and objects. And the moment we want to understand the relationships between subjects and objects, we first need to know what subjects and objects are, right.

(Refer Slide Time: 22:06)

## Syntax

- Syntax is the study of the rules governing the way words are combined to form sentences.
  - \*garden the in
  - \*table on
  - \*Children are
  - playing



5

The more clarity you have about these things, the better appreciation of these things develops now onwards, alright. So look at these things, these are fragments, are not they? And even in the star marks before these fragments indicate that they are not good combination of fragments. Star represents ungrammaticality or unacceptability in the study of language, okay.

So everywhere now onwards you are going to see star either before a word or before a small fragment or before entire sentence, which means it is not an acceptable sentence. So see, these fragments are not acceptable not good. If I ask you the question why, it is very simple to answer that this is they are not in right order, right?

This is what we want to discuss, what is right order? And how do we know about right order? How elements must be in a particular order is part of principles, and parameters determined that, which is the first one must be, how are we going to remove stars from there? "In the garden" Why? That is the parametric adjustment of English that in a language like English.

I am saying English because I do not want to say more think about it. In a language like English, an element which we call prepositions must proceed the noun. So we must say "in garden". Then the question is, if we say "in garden the", still not a good string. Can we say "the in garden"? Still not a good string.

"Professor- Student conversation starts"

So not good strings tell us what?

Wrong syntax.

Wrong sentence, but more than that what does this tell us? That that is the conclusion of that.

"Professor – student conversation ends"

What it tells us that the proximity between "the" and "garden", right is a required proximity for this spring to be grammatical, right? Anything or nothing can interrupt that proximity. The moment you interrupt that proximity, you are going to result into ungrammaticality, right. So what governs this proximity? That is, why such proximity are so required?

Such rules are what we call syntax. Any question any difficulty? And the same applies in rest of the examples too, right. This is this is one sentence, right, a fragment of one sentence, it is not a complicated sentence, all of us know this sentence.

"Professor- Student conversation starts"

How do we put it so that the sentence will be grammatical?

"Children are playing in the garden".

"Children are playing on the table in the garden".

"Children are playing on the table in the garden" right?

"Professor – student conversation ends"

Now, "Children are playing on the table in the garden". This sentence may not be a great sentence, still you can ask your questions about certain meaning that is semantic aspect of this sentence, and how could several children play on a table in the garden. But then it could be possible they could be playing something which is possible for 5 children to play on a table, right?

That is a possibility. However, making them ungrammatical in a smaller fragment help us understand the requirement of proximity of their elements. So it is it is not a coincidence that we arrange words in a particular order in a particular language. And when we are looking at the order of words in a sentence, only the order of verb is not important.

Of course that is important in the sense that verbs in a language like English must be in the middle of the sentence. That is, English is not a verb final language and it must be in the middle of the sentence. Actually, now we can say it in a better way, we can say, "the verbs must precede the object" or "objects must follow the verb in English" okay therefore, they become verb medial language.

Our languages are verb final, the moment we say verb final, it means objects must precede the verb; it is just the mirror image relationship between or mirror image difference between English and Hindi. Verbs follow objects in our languages and verbs precede their objects in English.

Same thing applies to prepositions, prepositions precede nouns in English, and prepositions follow nouns in our languages, right and many such languages. Such are parametric variations and they are not the only parametric variations, they are parametric variation at the level of arrangement of words, we will talk about more of them. Is this much clear?

That besides verb, other elements also require proximity, okay. Some of the elements can allow disruptions in their proximity and some are not going to allow. Again, we will look at all these things later. So that is about syntax, what does syntactic knowledge means?

(Refer Slide Time: 28:54)

### Syntax

- Syntactic knowledge:
  - Humans can understand & produce an infinite number of sentences they never heard before
    - "Some orange ants are starting to dance on microwave"
  - Our grammar can understand and produce long sentences
    - "John said that he thought that the esteemed leader of the house had it in mind to tell the unfortunate vice president that the calls that he made from the office in the White House that he thought was private....."
  - Determine the grammatical relations in a sentence
    - · Mary taught Bill.
    - Bill taught Mary.





Syntactic knowledge very closely refers to what we have been talking about knowledge of language or at least syntactic knowledge is also part of knowledge of language. But what does this mean in particular, look at it. The first thing that this it guarantees us that we can understand and produce and infinite number of sentences that we have never heard before, we have this capacity alright.

What is the most fundamental property of a sentence, we have just seen, most fundamental property of a sentence of course their elements and everything, agreement, right? Just one simple feature guarantees infinite sentences as long as your agreements are taken off, right. You can keep producing sentences; there is no limit on that.

We can produce or we can understand an infinitely long sentence. Not only we can produce, we can understand an infinitely long sentence. Full stops define a sentence and it is possible that you may have to leave that topic. You have a seen smallest sentence smaller sentence possible and smallest sentence possible, but we do not know a long sentence.

It could be literally infinitely long. The fact that we call it infinitely long assures you that you are never going to get an example of that, right? You can try and you see the example. I mean this is just an example, you can make a sentence of your own and that is the point.

Also, such rules that a syntactic knowledge determined relationship between sentences and just now we talked about this and I told you that we will talk about subjects and objects and verbs little more with reference to nature of verbs later. But look at look at this, these are the the verbs is the same in the 2 sentences, the last 2 sentences. Are not they? Right.

And nouns are also almost similar, right. What is the difference in these 2 sentences then? Meaning wise these 2 sentences are completely different, right.

"Professor- Student conversation starts"

They are same set of people and same verb, what causes the different in the meaning then?

Arrangement of words, arrangement of words.

"Professor – student conversation ends"

Arrangement. We refer to that as arrangement of words because that is visible, right? What is not visible to us is the relationship between verb and the subject and verb and its object. Which is "Mary" in number 1 is a subject. "Mary" in number 2 is the object therefore, the difference in the meaning and whatever the meaning these 2 sentences give us.

That is, lexical items are going to be grammatically related with verbs and grammatical relations are called subjects and objects. A word by itself is not in handle a subject or an object. A word or a noun becomes a subject or object in a sentence. A word may be a subject in one sentence could be or could not be in the other one.

So these 2 terms like I asked you in the beginning, have you heard these terms? You have heard these terms, but additionally I want you to know that these 2 terms mean grammatical relationship in a sentence, right. Like it is like human beings, one person could be brother, right uncle, father or if we are talking about women, mother, sister, and all kinds of relationships could be attested.

But depends on with reference to what, Right clear? Alright. So these are part of what we say syntactic knowledge. There is one more point which I want you to know in order to understand syntax which is called independence of syntax, okay it is called independence of syntax.

(Refer Slide Time: 34:12)

# Independence of Syntax

- A sentence with clear syntax but no meaning:
  - Colorless green ideas sleep furiously.
  - A dog was reading a newspaper in the library.
  - I gave the question to dancing flies.
  - \*Furiously sleep ideas green colorless.
  - \*Reading dog newspaper was library in.
  - \*flies dancing questions I gave to.
- Sentences are composed of units that are combined by rules. These rules explain how speakers store infinite knowledge in brain.



If you just look at these examples, you can understand what we mean by independence of Syntax, right? Do you see these examples? Right. Look at the 1<sup>st</sup> example, have you heard this sentence before? First sentence, "Colorless green ideas sleep furiously". This is one sentence which is completely meaningless and probably this is the only meaningless sentence which has been discussed in this study of language more than the meaningful sentences, okay.

Every time you talk about Independence of syntax, this sentence comes up. We can do the same thing with the other 2 sentences as well, the rest of the 2 sentences tell you almost similar stuff. What it means is, you can have a clear syntax but still no meaning, alright. A sentence that is a good-looking sentence.

"Professor- Student conversation starts"

What do we mean by good-looking sentence?

Grammatical sentence.

Acceptable sentence.

"Professor – student conversation ends"

An acceptable sentence may not have any meaning, right. Do these sentences have any meaning? They are completely grammatical, are not they? "Colorless green ideas sleep furiously" there is nothing wrong grammatically with this sentence. "A dog was reading a newspaper in the library" it is a completely grammatical sentence, have you seen this ever?

You may have seen such things in films, but have you seen this thing ever? No. Have you said this sentence before until now? No. But is this not a good sentence? No. Now refer back to just what we have seen on the slides that we have the ability to understand sentences that we have never said before we have never heard before that is the capability which is making you understands these sentences.

"I gave the question to dancing flies" I mean it is not difficult to come up with these sentences. All you want to do is what, you are trying to retain the grammatically of the sentence, but you are trying to remove the meaning from it. In normal speech when we speak, when we interact in society, that is called 'E' language, remember.

If we if we if you are talking about the difference between 'I' language and E' language, then the role of independence of syntax is important. In E' language, independence of syntax does not have much meaning, alright you made the point right. E' language will tell you okay fine established that syntax is independent, which is independent of what? Independent of its semantics.

That is independent of its meaning. In other words, not necessarily a sentence which is grammatical must be meaningful also. Therefore, if someone tells you meaning is arbitrarily assigned to sentences, this is what the proof of that is. Meaning is not something which makes the sentence grammatical, you can say this is meaningless, these are not mean anything.

You must have heard this thing several times; this does not mean anything, right. But nobody says that thing ungrammatical, right. Independence of syntax simply means, meaning is not a required component of a sentence to be grammatical, right. However, these sentences may not be good in E' language.

That is, we can make our point with these things, but people do not speak these sentences, right. Suppose you meet with your friend in the evening and you tell him even in the context "you know what, I saw a dog reading newspaper in the library" what is going to happen? If you say this thing to 5 different people, they will make different kinds of conclusions about you, right.

Has this person gone really mad? Or is he trying to spread some rumors? Or all kinds of people will make all kinds of conclusions, right. So these things have different meaning in E' language. Right now we are not talking about language and at this point I should also bring in syntax and its properties that is syntactic knowledge and the other aspect of this, which is independent of syntax.

All these things and whatever you are going to see more, the grammatical relations their principles, they are all part of 'I' language, okay they are all part of 'I' language. And therefore, in generative grammar which follows from Chomsky syntax, he only talks about 'I' language. He makes it abundantly clear that look the language that I am discussing has nothing to do with the language in the real world.

(Refer Slide Time: 40:28)

## Independence of Syntax

- A sentence with clear syntax but no meaning:
  - Colorless green ideas sleep furiously.
  - A dog was reading a newspaper in the library.
  - I gave the question to dancing flies.
  - \*Furiously sleep ideas green colorless.
  - \*Reading dog newspaper was library in.
  - \*flies dancing questions I gave to.
- Sentences are composed of units that are combined by rules. These rules explain how speakers store infinite knowledge in brain.



7

That is E' language, that might get my point? Alright. Now, the strings in blue is just distorted strings therefore, ungrammatical. Not, they have nothing about, they are not ungrammatical because they are not meaningful, right. So again this establishes that we must have sentences combined by rules that is the proximity of elements are outcome of certain rules.

Um the position of a post-position, the position of a determinant whether an element is going to allow a determinant or not, all these things are going to rule governed. And such rules are going to tell you that how we "store" may not be the right word, how we have language in our mind that is the language in our mind is not in the form of either fragments or sentences.

This also establishes that language is not stored as sentences, okay. Language is an outcome of rules and that rule is called generative rules, which is an outcome of generative capacity. We do not have words and we do not have ready-made sentences to be used. Remember, I have asked you these questions, do we plan everyday that we are going to speak 200 sentences today?

Imagine how difficult life would be, right. How many assignments do you have to submit every day? Sometimes nothing, you may have just a quiz, right. Imagine, how our life is going to be if we have to make a list of 200 sentences every night before we go to sleep that we are going to speak tomorrow. Imagine that life; probably we cannot imagine such a life, right.

If we have to study, how do we speak or how do we say so many things? This is an example of that. Also, I have shown you or at least we have discussed that human brain is empty, nobody has found any evidence in it. There have been huge attempts to study human mind from variety of perspectives.

Not that they are not significant or anything, rules of language or the study of language throws serious light on how human mind works. That is, at least these things retrospectively tell you that human mind comes up with language with application of rules. And those rules are finite in nature remember, I am not saying finite in numbers, those rules are finite in nature, but they have infinite capacity.

(Refer Slide Time: 43:57)

#### Generative Grammar

- Noam Chomsky 1950s
- *Generative* = a very explicit system of rules specifying what combinations of basic elements result in well-formed sentences.
- Defines the syntactic structure of a language.



8

Right. Finally this is how generative grammar is defined. 1950 onwards this came into existence and it simply means a very explicit system of rules specifying what combinations of basic elements results in a well formed sentence, defines the syntactic structure of a language. So the structure underlying sentences is called syntactic structure.

We are going to see more of it from now onwards that is, when we say more of it, now we are not going to be looking at structure of sentences per se, we are going to see searcher of these underlying rules. Can you can you keep this thing in mind, not the structure of sentences per se.

That is, we are not we will be looking at sentences, but not really the relationship between words or choice of lexical items or for example, choice of a particular rule. We are going to be looking at with the help of examples, underlying structure of syntactic rules, okay, which in turn become fundamental principles of language.

And we are going to begin with several components of it. I know, the 1<sup>st</sup> place is x bar theory, which is how do we guarantee that lexical items require proximity and how they are related with one another and how it is captured with the application of rules in human mind, we are going to be looking at that, alright, that we begin from Wednesday, okay thank you.