

**Basic of Language Science**

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**Lecture 27**

**Concept of Case in Natural Language**

We looked at thematic relations yesterday, right. And now we are coming back again to structural relations and we will be looking at the case.

But before and these are the two questions which we need to understand. So, what is the case? And how do we understand them configurationally? If I ask you this question, what is the case? Have you heard this word case before? Yes? Can you give a couple of examples of that? In which context did you hear this term case?

Student: Name.

Professor: Name, what is that?

Student: Karta.

Professor: Karta, karta is the name of a case and karak is the Hindi word for case, ok, anything else? Anybody wants to add anything else? No, ok. So, there are several of them, case simply means that in different positions in a sentence, ok, different NPs have different cases. What are the different positions in a sentence that you have seen so far? According to grammatical relations the different positions are subjects and objects, right.

Semantically speaking, we saw yesterday, agent, theme right sometimes patient, sometimes experiencer and several other themes. Again talking about grammatical relations, a subject is supposed to have a different case and an object is supposed to have a different case, ok. And this happens through structural relations and this is what we are going to look at, ok.

Give it a moment I wanted to talk to you about these sentences where we stopped yesterday. And then we are going to come back to structural relations in a moment. Remember these sentences? Simple ones right. Now what I want to know, what I want to ask you before is did I talk to you about two types of there? Two types of that and I talked to you that one is a demonstrative pronoun and the other was anybody?

There was another one too right which was not a demonstrative pronoun, do you remember that much? There are two types: one is a demonstrative pronoun when we say that men or that room, that boy these are examples of demonstrative pronouns if we are talking about that. But there are

certain places where the same element does not have the same meaning. So, you know at least this much right.

So, that is a different type of that. So, we can say there are two types of such elements. Similarly, there are others, other elements in a language like English which has at least two different functions and two of them are it and there. What do these two words mean, it and there? They are also sort of pronouns right which and as we know about the canonical definition of a pronoun, pronouns are replacing nouns right. So, in a way they are nouns.

But if you look at this sentence it rained, what is the meaning of the word it? You know the sentence if someone asks, ok, how do we say these sentences in Hindi, say varsha hui thi, the same sentence right. How do I say it is raining, ho rahi hai right. How about Telugu?

Student: Varsha padutondi, it is raining or it rained. Which sentence?

Professor: Either way is fine for me. It is raining, how do you say?

Student: Varsha padutondi.

Professor: Ok same sentence of Telugu can be translated this way it is raining right. Now what is the meaning of it in English, in this sentence of English? All of us, all of you know these sentences right. If someone asks you and the reason why I am spending a minute on this sentence, someone asks you how you, you know how to say the same thing in your language. If someone asks you to translate or say the same thing in English you are going to say this way.

It is raining or it rained or it rains, right. You do not have any difficulty with that. Keeping that in mind that you have no difficulty with that if someone learning English asks you this question what is the meaning of it? How will you answer that question? Does it have any meaning? We need to move? Does it have any meaning? No, I am not interested in nouns, pronouns or anything. I am only asking what the meaning of the word it is.

I have a sentence. I have heard this sentence somewhere it rained. You know English and I do not know what the meaning of this word it is.

Student: It implies the happening of an event.

Professor: Is that the meaning? Is that the meaning of the word? If someone asks you what is the meaning of a Gulab Jamun you say you get this in bigger stores and it looks red, it is sweet. Is that the meaning of this word?

That is in a way description of the word right. Now let us move, what is the point? So at least you can tell me something. No? What is the object?

Student: It cannot be used as a sentence, it should have some subject.

Professor: It should have some subject for that right. Very nice.

Student: It is a complementizer I guess.

Professor: It is a complementizer? You have heard the word complementizer before when I was discussing that right, alright, not everything is complementizer, right. Not everything is going, the complementizer is not going to be a solution for everything ok but very nice, very nice.

Student: ( ) (8:05)

Professor: Yes, very nice absolutely, you are right but that is the next step, right. I am not hung on this question but I want you to understand that if someone asks you the question what is the meaning of it right and without having 25 classes on principles and parameters if you tell them that because the sentence needs to have a subject the person is going to lose interest, right. However, you are absolutely right. There is absolutely no problem with what you are saying.

What I am trying to tell you is that it is the second stage. The first step and that is the very difficult step, difficult in the following sense. To understand well what I meant by difficulties it is very difficult to say no, ok. This word does not have any meaning and this is why probably you have difficulty saying anything about it, right. When I am saying look at the sentence anything you have difficulty saying anything about it. In this sentence, does the word have a meaning? Yes in the sentence that I just said you have difficulty saying anything about it.

Student: ( ) (9:47) it might become sort of repetitive. In this case, in this first sentence if you put the rain rained, it becomes very repetitive. So we need something which does not explicitly say the rain rained or something like that but something else to substitute.

Professor: Sort of ok but his answer is better yeah you see no I understand. I understand what you are trying to say but I want you to understand what he said and before that I want you to understand what I am saying. What I am saying is this word does not have any meaning in this sentence. Why it is there and what else could have been there and what why something else could not be there are the stages later.

Given the sentence this is a grammatical sentence of English. In this grammatical sentence, this word does not have a meaning, ok. Now the second stage is if it does not have a meaning what is it doing, ok. What is it doing here? It is doing exactly what he is trying to say: every sentence irrespective of English, Hindi, Telugu, Malayalam every sentence must need a subject. Now and here comes what you are saying it is there is no point saying rain raining right.

The same thing we can say by raining but we cannot say raining and he gave you another example. A very nice example when we say rain falls it is a good sentence rain is the subject fall is the verb, right. It is a good, it is, that is a transitive verb but let us move ahead with that, that is a good sentence it has a subject, it has a predicate the sentence seems to be alright. But when we say raining or rains does not mean much.

Does not mean much in the sense that it is not grammatical because it does not have a subject and remember it is not even a sentence like go home, right. Go, we can say go, can we say rain, right. We are using this as a word it is raining but we cannot say rain because when you say go you are telling someone.

When you say rain, who are you talking to? You understand the point? We just cannot say rain so it is not an imperative sentence either. Therefore it needs a subject and in certain cases when there is, it is just not possible that we do not have a subject.

This sentence is not allowed in English or for that matter in any language. We know that this sentence was ok because we have this right. This is ok but this is not ok sentence. Therefore the words do you see here in blue it is written expletive, ok. So, there are two elements in English both of them are listed there.

They in their expletive forms are used to fulfill the requirement of a subject without any meaning. So, we say it rains it just fulfills a grammatical function supplying a subject to the sentence making the sentence grammatical without any meaning of the word it. So, the word so in that case the sentence is it rains or it is raining or it rained or whatever where this sentence is semantically null. Semantically vacuous, semantically zero, grammatically it is a subject and it is only fulfilling the grammatical function of providing a subject. That is the point being made here.

Now Sandeep, about complementizers so that was a complementizer in the case where we saw and the name of this thing is again something like what is the name. It is not a pronoun, expletive, or there is another term pleonastic does not matter whatever you call it.

I want you to understand that this is semantically zero which fulfills only grammatical function. The other term there has sometimes the same function I am, I have digressed a little bit from what we were going to do but this is an important point. Can you give me a sentence with there, where there functions as a subject of the sentence. There has been a class, ok. There are 20 students here right.

There are 20 students here. Can we say simply are 20 students here? No, we can say 20 students are here. That is fine in that case 20 students become the subject but we cannot say are 20 students here. In that case we have to use a word with which is semantically zero again to fulfill the requirement of the subject. And then the sentence becomes there are 20 students in the class ok and the sentence becomes good.

Again now think about the same sentence with the question that I have been asking you what is the meaning of there in that sentence. There are 20 students in the class. What is the meaning of there? The answer is nothing though that word does not have its meaning and therefore semantically zero.

These elements are called the word that without its demonstrative meaning is a complementizer. The words there and it without their meanings are called expletives. So, complementizers and expletives are in a language only to fulfill grammatical functions, clear? Ok now I have put the term extended projection principle for that, ok.

I just wanted to bring in this term when the subject must be present in a sentence, the principle is called extended projection principle. That is known, and by name you can see it is a principle. So, no language is allowed to violate this thing. Every language must follow that which means every language must have the subject and this principle is called extended projection principle.

And in order to obey this kind of a principle English in such cases uses a different term but does not leave the subject position empty. It copies the same it becomes semantically zero and uses this term in this place. It makes a word copies a word there, uses this in a sentence in the subject position and does not leave a language like English does not leave the subject position empty, ok.

Also keep in mind that these sentences are not like (English) not like Hindi sentences or sentences from our languages where we can say ghar ja raha hu. Understand my question? Understand my sentence? When we say ghar ja raha hu, in this sentence of Hindi the subject position is not really empty.

What is the subject position? Subject in this sentence, mai therefore not an empty subject therefore the sentence is good and grammatical and subsequently not violating extended projection principle. But if we leave these sentences raining or rained, the subject is not recoverable from the context or anything else from the inflection. Subjects are not recoverable from inflection.

Therefore, it needs an overt subject, how do you manage that is the language internal problem and language finds a way to resolve this issue and this is how it resolves clear? Do we understand the extended projection principle? Go ahead. No, no but I want you to answer one more question. In the response to your question if I say no right what is the basis of me saying such an emphatic no.

Student: Native speaker.

Professor: No no no not just the native speaker, that is fine because I am a native speaker I can say no no no here I want you to allow me a minute of digression again. A native speaker's capacity or capability is to give you a judgment about the sentence. The native speaker's capability is to identify a sentence whether a sentence belongs to Hindi or not. A native speaker's capability is to give you judgment about whether a word belongs to Hindi or not.

For example, you use this word expletive, ask any Hindi speaker whether they know Hindi or not. I am sorry whether, even if they do not know even if they do not know a single word of English they will tell you at least that this word does not belong to Hindi. Am I right? So, that is the capacity of a native speaker. The capacity of a native speaker does not include telling you does it have any expletive. You understand the question does not belong to native speakers.

Now the question is grammatically motivated and I am saying no, why am I saying no? Because a language like Hindi, ok, by now you have seen complete IP right. By now you have seen what I is, what we call inflection and you have seen the role of inflection in a sentence. So when we say ghar ja raha hu, the subject I which is mai is recoverable from inflection. The inflection tells you that the subject is recoverable.

That sentence can only have the subject mai. If a language has a rich inflection system it is highly likely that the language will not have expletives. Expletives are used only when subjects are not recoverable. See it is plain logic. If we do not have rich inflection to recover subjects then we need expletives in a language like Hindi or Telugu or Malayalam why would you need an expletive.

However, like I said most likely no there might be a context or two in which something may be used as expletives. So, it will be too tall and clean to deny that right away, right. But most likely it will not have an expletive like situation all right. Expletives extended projection principles requirement of a subject revisited are these things clear, inflection, good. Let us move.

So, along the same lines I just wanted to repeat one more point which we have discussed from time to time and because we are talking about inflection before this we were talking about inflection expletives and extended projection principles. In this context, let me make one more point about the autonomy of syntax. Even yesterday I guess we were talking about the autonomy of syntax, am I right?

Yesterday or maybe the day before yesterday we were talking about the autonomy of syntax. In the sense that so there are going to be 2 positions. One is that syntax is completely autonomous, that is there is no overlap between syntax and semantics. Semantics is an independent thing and syntax is independent of semantics, ok, that is one position and we have sentences like colorless green ideas sleep furiously or the (will) building, the building is walking slowly.

These are the sentences which can tell us that these sentences irrespective of the meaning are grammatically good, right, which tells us syntax seems to be autonomous. However, the other position that to some extent syntax may be autonomous so that we are not denying the first position but it does not seem to be autonomous all the way.

And that was the position which I introduced to you yesterday when we were talking about thematic relations, right. There is one I want to give you one syntactic argument in support of this second position that syntax does not seem to be completely autonomous. It is autonomous to a great extent but not all the way.

Look at the two sentences. John hit Peter, ok, and John, I am sorry, the first one is John hits Peter, right, and John hit Peter and the third sentence is John and Mary hit Peter, ok. Now these are pretty simple sentences. Can I quickly ask you to draw the structure of this very simple sentence John hit Peter in terms of its IP.

The structure will be, we have an IP alright, VP and we have, so in this specifier position of the IP we have an NP which is John right and then we have the word hit and it has an object which is an NP and this object is Peter. Do we have this structure? Everybody, I have purposely elaborated this thing, the object NP for you to make to reiterate one more point which is the object of this head.

The object of this head is this entire NP. The object of this head is the entire NP not just Peter and as long as we know the whole NP is the whole, Peter is the whole NP we can, we do not need to draw we can just write it here. But conceptually we need to understand this with clarity that the object of this head V which is hit is the entire NP not just the head of this NP.

Because in such a case suppose we say John hit the monkey that was running on the road in the evening, ok. John hit the monkey that was running on the road in the evening. In this case what is the object of the verb hit? What is the object of the word, verb hit? The monkey that was running on the road in the evening, the entire chunk and what is that chunk, configurationally speaking what is that chunk? An NP, ok.

It will have an N and then it will have a complement whatever rest of the things will be complement of that N, all right. So, that and that this becomes clearer only when we know that the complement of this head V is the NP not the N, ok, all right. So that was another point in this context. Now keeping this elaborating on the second point of this argument about autonomy of syntax I want to tell you, I want to ask you this thing.

So, if the first sentence John hits Peter what do I put here? In terms of agreement, singular and which is S right. Now in terms of the second one, so hold on, hold on so and what is the tense here? Present tense, singular agreement present tense and then there is some kind of aspect also. Can I ask you this question, which aspect is here? Indefinite aspect, right alright. So this is sentence number one.

Tell me about sentence number two. Singular, past tense. So we have singular agreement and tense is past, right, all right. How about third? Third sentence, John and Mary hit Peter plural present. So, agreement is plural and tense is present. Why not past? It is a pretty simple sentence. I am asking a simple question. Why not past? Why can't it be both present and past? That is what my questions are. No no no a sentence at a time cannot be both.

Student: The context may ( ) (30:29)

Professor: That is a precise point I am trying to make. Hold on for a moment, hold on, why not just look at the sentence and remove the context that is the exact point we are trying to make. Remove the context and just look at the grammar of the sentence. Looking at the grammar of that and I must I am repeating this because that is the exact point we are trying to make.

Looking at the sentence grammar of the sentence it is difficult to say about sentence number 3 whether it is present or past, understand this? In order to say that here, we need to talk about its extra sentential features that is context. The moment we need to depend on context right context is not grammatical. We will have to say that syntax cannot be totally autonomous, get my point?

Look at the simple sentence and kinds of clarity it gives us at a conceptual level. So, one we it is a nice sentence colorless green ideas sleep furiously and we get a nice point that now syntax seems to be autonomous. The sentence is still good even if it does not mean much. We are not denying that point. We are saying that to a great extent syntax seems to be autonomous of semantics.

Syntax seems to be autonomous but only to some extent in a lot of sentences it is not very clear. And as long as we have one example available we can very well make a claim that it does not seem to be completely autonomous. We do not need to have a quantitative lot of examples to demonstrate the point that is the beauty of science that is the beauty of a theoretical point. We do not need quantitatively a lot of examples.

It is not a quantitative survey where 70 percent of people respond, 70 percent of responses is yes and 30 percent responses is no then we take it as yes, right. It is not a quantitative survey. It is a theoretical point, it is a scientific investigation and any principle, let us not lose the track we are talking about principles and parameters of natural language. A single point must be explained in order to dismiss that completely.

So, if someone wants to keep just one position, position number one they must answer this question and as long as this question is not answered the second point remains valid and clear all right. So, that is about autonomy of syntax and once again we kind of revised our thing for IP. Go ahead.

Student: One language which has stricter grammatical rules can have complete autonomy of syntax.

Professor: Could have, you are right. So, for example in a language like Hindi you will not get this sentence at all, this kind of sentence at all, sure. So, with Hindi it is difficult to show that syntax is not autonomous, you are right, absolutely right. But that does not contradict the point but because there exists a human language which has exactly which accepts such ambiguity which shows such a situation.

The point is taken care of. And see here we are also not saying that because we found one point, the first point is dismissed. We are not saying that we are saying that to a great extent it seems autonomous to some extent it seems autonomous all right. We can give up and say to a great extent it seems autonomous but not all the way that is the point and that is all we want to accommodate in the principle that (can) cannot say all the way, ok.

And this thing is, this thing we when I talked to you about autonomy of syntax for the first time we were not ready to get this point. It would not have made much sense at this at that stage. I am sure it is making more sense now alright ok.

Now with that we are coming to more structural relations, ok, more we are coming to a discussion on case and with these structural relations, with these terms we will talk about case. So, these are the terms we need to understand. And these terms like precedence and dominance, government, C-command and M-command.

These are the few terms which we need to understand with respect to the structure right, with respect to a structure precedence, dominance are simple terms. They do not have much meaning in that. Government, in day to day language, we understand something else with government. We need to add a specific meaning to what we mean by government in terms of a structure and a sentence, we will talk about that.

And then C-command, the term means constituent command, ok, like in a sentence we have several constituents like NP, VP and again NP and PP these are the constituents of a sentence. So, they simply, the term C-command simply means constituent command, ok. And the term M-command means maximal command. So, people do not use the words like constituent command or maximal command, in short people use terms like C-command and M-command. We will elaborate on these terms as well.

Very simply let me first, so, I had this sentence our good old sentence for the purpose of a sentence but now we will work with the sentence that we have on the board, right. We have just seen the sentence. So let us look at the terms of precedence and dominance. It is a simple term if I tell you that IP in this structure ok dominates everything.



Should not be difficult to understand right, IP in this structure on the board dominates everything which means dominates everything below it. And this is exactly what we say a node A dominates a node B if and only if A is higher up in the tree than B. And there is a line tracing A to B downward right. Thus, the second condition is just to restrict it, ok. So, node A dominates node B only, if and only if A is higher up in the tree than B and there is a line tracing A to B downward.

This is exactly what we were saying when we said IP dominates everything. By everything, what do we mean by everything? IP dominates NP, I bar, I, VP, spec V bar, V, NP and likewise, ok. NP, the spec position, this NP clearly does not dominate IP but does it dominate I bar given this definition? No.

So, this is how we need to understand dominance, ok, and this term becomes important only in the sense that if we want to say in language right like the subject dominates the object. That statement is not going to be true. So, we cannot say the subject dominates objects, understand this? So, we need to define the term dominance only for such regions and this way we are not adding or deleting anything from the actual meaning of the term dominance.

This is what it means, right. When in general also when we say dominance, dominance only flows downward, dominance does not even flow at the equal level or upward right that is all it means. We are only restating the same thing configurationally. Same thing about precedence look at that, any difficulty with that?

And node A precedes node B if and only if A is to the left of B and A does not terminate B and B does not dominate A, understand this? So, in that terms what, can we say this NP right precedes VP? Can we say that? Spec NP, NP in that position of a spec IP precedes VP, we can say that right. We can also say this NP precedes I bar. Therefore, this NP precedes everything else right but the moment the more we go downward we cannot say the spec of VP precedes I.

I mean that sounds a little bit ridiculous also but just to make a point I precedes everything else, this spec IP, spec VP precedes V NP, V and NP right. And again V precedes NP likewise. So, we need to understand that these terms precedence and dominance in this term.

Student: Do we mean that it has to be at the top of the line or going down, say for example there is NP John and then there is this VP, I can also go from like this, going downward.

Professor: Yes, why do we need to say that downward? The question that you have in mind just to eliminate that question, if we do not say downward then what you are saying will be allowed then it will be allowed that this NP dominates this VP. Because there is a line tracing, after all there is a line tracing this VP but from this NP there is a line tracing this VP but not downward. First it has to go upward.

We want to restrict that kind of a situation where the spec of IP will be dominating VP. We do not want to say that. IP dominates VP, I bar dominates VP not even I, I precedes VP. NP precedes VP but does not dominate, does not dominate VP. Just to restrict these kinds of situations we are defining it this way, right.

This is a very carefully crafted definition. I mean I have not done this. This is if you look at your book these definitions are there in chapter 2 or in some place, ok. Just to and again it has been restricted just to mean what we want it to mean that is all right, ok.

I, we already have the...

Student: (())(44:17) then we cannot compare the elements of one branch, one branch with the element of another branch right.

Professor: Say it again, say it again please.

Student: Suppose, binary tree.

Professor: We only have binary structure; we cannot have more branches.

Student: Yes, we cannot compare the elements of one branch with the other one. Suppose the noun phrase has more than one element. Suppose there is also an adjective describing the noun then those elements cannot be compared with the elements of this branch right?

Professor: No, absolutely not. Yes, more than that I think I understand what you are saying but to summarize that any element in the structure we will decide whether that element precedes or follows, proceeds or dominates only on the basis of this.

And it is never going to have more than binary but I do understand what you say even in the binary branching. What if, can that 2 things be compared. The question is not of comparison. The question is of whether a node dominates the other one or not and whether a node precedes the other one or not, (will) can only be decided with these restrictions.

These are not in a way definitions, these are restrictions added to them. We already know precedence and dominance. We are only putting some restricting conditions on them keeping the structure in mind, ok, all right. Then we have, I only had these things to show you precedence and dominance.

I need to talk to you about a spec head agreement that I want to skip for today and I will talk to you about it when I discuss, I do want to spend another 5 minutes or 5 to 10 minutes talking to you about IP and expansion of IP. Remember?

We have, I think we have talked to you about how we can separate the features of features bundled under IP and have a bigger structure. And then it is clear to see that there is a functional layer and there is a lexical layer and then we then we get to see or the question comes up that how come the spec, where does the subject go in that case and how can a subject be part of the inflectional layer.

It should be part of a lexical layer. And then I also talk to you that in such a situation the proposal is that the subject of a sentence actually originates within the VP, right. And it was at that point where we can see with clarity the notion of deep structure. What does it mean when we say deep structure? And then let us not forget that we are talking about all these things under one

simple rubric which is I-language, understand this thing? So, let me come back to agreement, sorry spec and head agreement and why a spec and head agreement is really important.

What I mean by that is this. This is the head and this is the spec. It is not clear here but there are cases when we expand IP then we understand why this kind of configuration is important, why a specifier position is important to a head and how can we maximally exploit it to understand certain more nuances of natural language.