

Basic of Language Science

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Lecture 32

Motivation for Movement of Language Constituents

Last time we were looking at reasons for displacement and we looked at two to three, two to three particular instances, particular issues, which tells us that there definitely appears to be some sort of displacement of certain elements from one place to the other.

So far, the reasons that we have seen, for example we saw that, the first reason was they are looking at X-bar schema, there appears to be a clear distinction between functional layer and lexical layer and if we go ahead with the subject NP in the specifier position of IP or with the expansion of the head I, which breaks into agreement, tense and aspect and maybe a few more, the spec position of AGRP seems to have, seems to host subject NP.

So, if we go ahead with that idea, then we are running into difficulty that how come a lexical item originates in a functional layer, there appears to be no motivation for that. So, the point is, it originates in the lexical layer, but we cannot let it be in the lexical layer, because that is the NP which has to take care of agreement features with the agreement features on the verb, which is part of the predicate. So, they are looking at this scheme, so far, there appears to be a contradiction that a subject NP cannot be in the functional layer, it must originate within spec VP.

Once it originates in the spec VP, it cannot stay in this spec VP it must be in the functional layer to take care of the agreement. So, to resolve that issue, we need to look at, we need to allow some sort of displacement. In other words, such an example shows us that there is definitely some sort of displacement. That is one very strong motivation for displacement.

So, we saw some of the things and in particular evidence for motivation and then we are continuing with the motivation and instances, further instances of movement and we are going to see that with the example of, with example from CP and what we call Wh-movement.

So, we saw that, when the element appears to dislocate from its original position to the other, there is a compelling reason for us to believe for such an operation.

This is how a sentence looks like in a normal situation, for which the idea was we can, we should not, there does not seem to be a more compelling reason for us to allow agreement, tense and aspect under one bundle. So, the split was allowed in this particular way, where IP was not, we

got rid of IP and then the story that I have told you, there appears to be two categorical layers of functional layer and lexical layer and these are the things that we have seen. So, this is how a sentence looks in a canonical order. Then, whether we look at IP or AGRP, this is how a sentence looks like.

While looking at another module, which was case theory, we looked at several other aspects. For example, in particular we looked at the relationship between abstract relationship between heads and their complement that is a head V or a head P appears to assign cases to their complements in a particular configuration that they seem to govern their complements and thus assign cases to them.

So, then we introduced the notion of government and C-command. With the assignment of case to, we saw a difficulty and the difficulty was, there does not seem to be a clear theoretical straight line answering the question of case assignment, that is whether it is assignment of accusative cases, assignment of nominative cases, there does not seem to be a straight answer to that.

We have different patches to take care of accusative case assignment and nominative cases, on the top of that, even a couple of patches do not seem to solve all the problems, the problem is when we run into complement clauses, which is when we have a whole sentence, a whole clause as the complement of some head, then we see some difficulty with the assignment of case.

So, assignment of cases is also one particular motivation, motivating factor for split of functional layers and then the idea is the case assignment must work in a different way in a more systematic and unified fashion. The earlier at some earlier theoretical apparatus does not seem to take care of case assignment properly. Since we have not looked at the interactions of case assignment and then this split of functional head where I am going to drop that for the time being and go ahead with the examples of movement in particular.

However, difficulties in taking care of assignment of cases in the theoretical apparatus that we have been discussing so far is definitely one of the factors for such kind of abstract displacement. Then, we bring in a notion of CP, which is a complementizer phrase and we have looked at the composition of CP, that is, what does a CP, what is a CP, (how) what does a CP look like? and then we see that sometimes head C takes the whole IP as its complement.

And then the recursiveness of language also allows sometimes CP appearing in the subject position or in the object positions. So, how does a CP look like when it appears in a subject position and how does the CP look like when it appears in an object position is what we want to look at and this will also give us one more chance to look at assignment of cases particularly the assignment of except, assignment of cases in exceptional way that is, we have to allow a new patch.

Remember exceptional case marking, so this is going to show us one more example of exceptional case marking. So, is this sentence okay. For her to laugh is difficult is that sentence good. Now, the whole sentence is in the bigger sentence for her to laugh. Does it appear like a subject to you? This sentence is just like John is running or John is tall. Do you understand when I say this sentence is just like John is tall.

What I am saying is, in place of the chunk in the red that you see on the screen, which appears to be a clause. We can also replace the whole clause with a simple NP and we can say John is tall and the sentence is, sentence, the two sentences are similar in their composition. The point is, we find a CP in place of the specifier position of an NP, of an IP, do we, do we see that? Does everyone see that?

What you might be wondering about, why is that a CP? Why not an IP? For her to laugh could also be an IP? Is that the, is that the question which is bothering you or there is something else?

Student: It is non-finite.

Professor: It is non-finite, IP for sure. Whether it is a CP or an IP it is definitely non-finite. So, because there is no, there does not appear to be any tense in that.

So, let us go ahead and look at that. I am coming to that sentence in a minute. Let me first show you a CP in the object position. I think we had talked about that. But let us refresh this thing. John knew that Mary did not drink. The verb know, in the main clause has a complement, which is a CP, the whole thing that Mary did not drink is a full CP, this clear and in this CP in the red that you see. C is the head that and then the complement is the whole IP. Mary did not drink. Mary in that little IP, which is the head of, which is the complement of C. Let me show you a little bit. To make my point clearer.

What I am trying to show here to you is we have an IP, I am going to, I am going to put it in short, we have a V and a CP here. This C, this is the CP in the red that we are talking about that. So, we have a C-bar, C and then an IP. Here we have that and then we have, this is the structure that we are dealing with. This is what we have on the screen.

I am talking about, in particular, this CP. This V as a head, which is know takes the whole CP as a complement and it needs to assign its accusative case, which it does through the notion of C-command and it assigns accusative case to the CP, it is done. Now or let us drop this thing, the point is this assignment is satisfied. There is no issue here.

When we look at the bigger sentence, which we are calling CP, do we have enough reason to believe that is not an IP that is more than an IP and that is a CP. So, the first point is a CP can be a, can be a complement of C that is clear. Now, in the CP, when we look at a complementizer phrase, a complementizer takes the whole IP as a complement. Is that also clear? And you see the recursiveness of sentences how one sentence is inbuilt in another.

Now, let's look at this sentence. This IP, is this a good kind of IP where we have Mary in this position and this I plus finite I. This is a plus finite I. So, Mary gets a nominative case from here and this is taken care of, so good, good sentence. See this thing, now why I wanted you to see these things that we need to make sure that in the grammaticality of this sentence, the fact that case assignment is taken care of is an important issue.

Now, let us look at the sentence that we were looking at before. A fresh where a CP is in the subject position. Our argument is that CP is in the subject position and when we expand that CP and we look at it carefully, what do we see? What is there in the position of C? The post-position for, now you may have a question in your mind.

So far, every time we have been talking about a preposition, we are saying this is a PP, why are we saying here that the preposition can be in this, in the C position? Which is a complementizer, we are essentially saying that this (post)-preposition is a complementizer and which we are saying categorically, because we are saying that this preposition is not a preposition.

Is this a preposition? This is not a preposition. It looks like a preposition, but it has a complementation function. That is the point number one, therefore it is not a PP, it is in the position of C and there are a couple of other aspects that we are going to look at, hang on for a moment, then we see in the complement position of this C, we see a sentence and the sentence is hard to laugh.

And then her is in the spec position of that IP. We see that, I want everybody's attention here on the screen, her is in the spec position of that IP, what is the problem with that her?

Student: (())(17:20)

Professor: It gets an accusative case and our problem is how does it get an accusative case particularly when the I is non-finite. See, in this case, I is a finite I. Therefore, it assigns nominative case, under whatever modifications and patches that we have discussed. So, this is okay, this configuration is okay. No problem.

But in this one, we have her which is clearly an accusative case marked NP and the I below is a non-finite. So, the problem is, this a spec IP should not have had any case and that will also be a problem, we cannot say for she to laugh is difficult, the sentence is ungrammatical. So, there is no assigner of case that is an accusative case to this NP. At the same time, if it does not get a case the sentence is not allowed.

Do you see the paradox? Therefore, what we are going to say again as a new example of exceptional case marking is the C for assigns an accusative case to that NP under the notion of government that we have seen the modified government. For exceptional case marking, which is we are allowing this C to C command the NP her, with the, with clarity that maximal projection IP could be a barrier.

But because this IP is a non-finite IP we can allow that non-finite IPs are probably not barriers. Therefore, we have this kind of sentence which is allowed and this is the reason why we must have a complementizer for in this sentence. If we do not have the for in this kind of sentence, then the sentence is not good, can we say her to go, her to laugh is difficult. We cannot say this kind of sentence because and now I hope you can see the point with clarity that the reason why we are not, we are unable to say her to laugh is difficult or she to laugh is difficult.

These sentences are not allowed, because there is no case assigner and these kinds of sentences are difficult for the theoretical apparatus and they need to be taken care of within CP, with the barrier within now, non-finite IP and these are the critical terms. When you saw the last, just last point about this issue, when you saw the last example of exceptional case marking how did we, what was the case assigner in that case, in that example, when we were looking at the last example of exceptional case marking which had assigned accusative case to the spec of IP, which is non-finite verb.

Student: Verb.

Professor: What was the sentence?

Student: I want him to go.

Professor: I want him to go. So, in that case, we do not need anything like a CP or a for, because we already have a case assigner, which is the verb and it can assign case crossing the barrier, which is, which we are saying is not a barrier, because it is a non-finite IP and assign accusative case to the spec position of non-finite IP.

Now, when we have a non-finite sentence as the, in the subject position of a sentence, then there is no way for this to assign a case. So, we need a case assigner, therefore a complementizer is allowed in that place and without a complementizer the sentence is not good. So, to wrap it up again.

The reason why I wanted to bring in the notion of exceptional case marking, there are two reasons for that, one, I briefly wanted to go through case marking, particularly exceptional case marking again, then I also wanted you to see, that the idea of exceptional case marking is important, it is not just one particular instance that we need to take care of, we can see sometimes non-finite clauses in the subject position, which needs to be taken care of and then the existence of CP that the whole notion of CP is not just a small modification which theoreticians have just brought in. It is an important device, which helps us take care of exceptional case marking also.

It is definitely taking care of complement positions, where sometimes we do see that the complement of a V is more than an IP, then we say it is a CP, we run into difficulties when we have a CP in the subject position or a bigger clause in the subject position, we do not know how to take care of that, then a CP comes in for rescue. So, let us keep the idea of CP active and then see how does this CP work for displacement from where we started? How does it help us take care of displacement and this is where I want you to get your attention. Hold on. What did you want?

Student: Previous one.

Professor: This one.

Student: (())(24:35) In the example, I want him to go. We wrap it up at VP, VP is to go.

Professor: So, here also VP is to go.

Student: To laugh.

Professor: To laugh, yes. Because I had a space so I expanded that VP. You see that?

We have a spec head and complement and what is that in the head position comes to laugh. So, there is nothing in the spec position of VP and nothing in the complement position of VP, I just wanted you to see the whole expanded structure of CP and an IP within it.

Student: (0)(25:21) As in noun phrase is also possible

Professor: Which noun phrase?

Student: The noun phrase that we, that is at the last.

Professor: Anything is possible see, the only problem is we do not have any NP, because the word is non-finite. So, the question of that verb being transitive or intransitive does not arise.

Student: If there is a transitive verb?

Professor: Definitely, then there will be a compliment to that term transitive verb there and that compliment could be anything and this is what I am trying to show you that the complement of a V could be an NP, could be IP or could be a CP too. Similarly, in the subject position, we can have an NP, we can have an IP and we can have a CP too.

So, the paradox that I want you to see is that which one is heavier, IP is heavier or CP is heavier. It depends on what we are looking at. Sometimes the CP could be heavy, because the CP takes an IP as a compliment. So, it is and clearly, I hope and not only I hope, I believe that the point should be clear to you that we are not talking about circularity, we are talking about examples of recursiveness and these are the things which make people conclude that sentences could be infinitely long. It is not just a slogan, it is not just a nice idea, this is what tells you that a sentence could be infinitely long.

Can we look at these sentences now, I do you want to retain this thing and then we will come to another restructure in a moment. But for the time being, I want you to look at these sentences very carefully. First of all, do you agree that these are pretty simple English sentences?

We use these sentences several times a day. But if I ask you, if I ask you a couple of questions, then along with me, you will be able to see the complexity of these sentences. So, let me put the theoretical apparatus aside for a moment and let us look at some empirical facts of English. Very briefly and then we need to come back to this point.

What are the empirical facts of English, by empirical facts, we mean, things that we can see in a sentence. The theoretical device could be abstract, for which we need to understand X-bar, case assignment and all kinds of things, but empirically and let me give you one example and then I will ask you other things. So, if someone asks me what is a question word in English? What would be my answer? What is a question word in English?

Student: (0)(29:08)

Professor: There no, you are saying how, you are answering the question, how many types of questions are there in English and then the answer could be two, which is not a correct answer. I will tell you why, it is not a correct answer and what is the correct answer also, but now, my question is, what is a question word in English? Can you give some examples of question words in English?

Student: What, why, how.

Professor: What, why, how, where, when, who. What is common among all these words? What is common among all these words? Can we say that all of them begin with Wh, you are right, there is a problem with this, do you see the reason wh in how also, it is just in a scrambled order.

Now that jokes apart with the exception of how which is not in the order, question words of English are called wh words, question words of English are called wh words, because most of them begin with wh and if we are to argue in a little bit funny way, we can say this also has wh but it is just a problematic we can go ahead and argue that this is not a serious technical argument, we can also say the reason why this is scrambled because the moment we try to put it in order, it becomes something else.

That is not a serious thing. The serious point is question words of English are called wh words. If I am asking you to look at your own question, question words in your own language, what is the question word in Hindi? Kaun, kab, kaha, kya. If we call them wh words, then what do we, what are we, what do we have to call Hindi question words?

Student: Ka words.

Professor: Ka words. You will be surprised that most of the languages of Indo-Aryan family have question words beginning with K. Hindi, Kashmiri, Gujarati, Marathi, Punjabi, Oriya almost all of them. Likewise, if you look at the Dravidian languages, Tamil, Telugu, Kannada, Malayalam and few more, what is the question word in Malayalam? What does it begin with? A or, A right. How about Tamil?

Student: A. (A)(32:18)

Professor: There are going to be some discrepancies like we have seen wh, but they do have the sound A in common and that is that common thing is available in Telugu, Tamil, Kannada and Malayalam. See, with the help of this point, I want to emphasize and I want you to understand these reasons, these languages are called the Dravidian family of languages, they are put in one group and that is not for no reason.

There are underlying reasons behind it and this is just one example. We, the goal of our discussion was something else and continues to be something else. So, we did not go into the classification similarities and differences of specific languages like different language families and so on. Therefore, we have not looked at such aspects.

But if you were to take examples of question words, you can see the classification of languages categorically. With that example, moving ahead we can say question words in English are called wh words.

Student: (A)(33:37)

Professor: I am coming to that, so now we say there are two types of questions. At least two types of questions. Do you see that? The first one and the last one are two different types of questions. First one needs a different kind of answer and the last one needs a different kind of answer. So, what could be a possible answer to the last one?

Student: Yes or no.

Professor: Can only be yes or no. I mean, you can say something beyond that, but you must say either yes or no? First, so if someone asks you, did you buy your phone? You can say yes, I did or you can say no, I did not. But you must have, you must say yes or no. Therefore that kind of question is called yes-no type of question. What is the answer to the first question? What did you buy? You must answer with content.

In answer to the first question, we cannot use yes or no. Can we use yes or no? No. So, that is a different kind of question. You must answer that question with the content. Someone asked you what your name is? We cannot say yes. We cannot say no. In other words, that type of question is a content question. That type of question is called a content question because you must answer such questions with the content-full word.

Now, these are two types of questions in response to one of the questions I just said, English or for that matter any other language will have more than two types of questions. So, such questions are called rhetorical questions, sometimes they are called eco-questions, sometimes there are questions like question tags.

When we say you bought a phone, didn't you? Didn't you buy a phone? Did you buy a phone? No, no, you did not buy a phone? Did you? So, such small questions that you see at the end of a sentence is called a question tag. Which is to confirm something. They are not really a question. They are called question tags. My point is, I do not mean to go into the whole inventory and typology of questions available in natural languages. These are the two prominent types of questions available in any language.

Yes-no question and content questions. I do not think we will have time to look at other languages for the purpose of understanding theoretical apparatus, which works under principles and parameters. So, let me focus on English and if we have time we will take up some questions from Hindi or some other language? What kind of similarity, do you see in the two questions of English? Two types of questions of English? Do you see any similarity or what kind of differences do you observe between two sentences?

Student: (())(37:14)

Professor: Loudly.

Student: Verb is same.

Professor: Verb is the same. Well, that is not really the same, but go ahead, what else did you see?

Student: Did you buy? Article.

Professor: What is the article? Where do you see the article in that. Did you buy a phone that article is with NP? So, the point is if you have an NP in the sentence, that is a different story. If you do not have an NP, then the a is out. Tell me about the question part. What are the similarities in both the questions and what are the differences that you see?

Student: Sir, why are the dashes there? What is the use?

Professor: Well, let us forget that for the time being. The dashes mean, there was something there, which is not there anymore.

Student: That is a perfectly fine question.

Professor: Yes, that is a perfectly fine question without the dash also. So, forget the dash for the time being, I will come back to that. That means that I need to talk about that. So, I come back to that later. So, that is a perfectly fine question. So, just look at sentence number one and sentence number three now, I have put sentence number two in between, just for reference.

That sentence number two could be an answer to sentence number one and sentence number three, could be a question made out of sentence number two. I bought a phone, someone can ask me a question. What did you buy? Someone could ask me a question, did you buy a phone? So, both the questions could originate from sentence number two. Therefore, I have put that for reference and I am not discussing sentence number two, because that kind of sentence we have already discussed.

Declarative nice looking sentence. Everything is fine, transitive, verb, a complement, case assignment is done, everything is clear in that type of a sentence, good? So, you are not telling me anything about this one and three. The differences and similarity between two types of questions.

Student: (())(39:54)

Professor: Okay, which is? Four in the second case, did you buy a phone, you see the object and in the first case you do not see the object very nice. That is an important thing. But, let us talk about more basic stuff, more basic.

Student: Sir, in the first sentence you have the explicit word what, to make it a question, while in the second sentence, you have the tense marker, did.

Professor: So, we do not have what, first thing is we do not have what. Do you see that very clearly? That in a content question, we need a question word and in a yes-no question we do not need a question word, is that clear? Very nice.

Student: One observation, what is just replaced by phone and it moves to the end of the sentence, but the phrase 'did you buy' remains the same. So, what is like a placeholder for the unknown object.

Professor: You are right, all of you are saying things that are making sense. My job is only to expand what you are saying in such a way that the same thing makes sense for everybody. You are, I think you are getting there and also the point is, probably I am looking for more basic things and you are talking about advanced stuff.

What as a content question word is only for content type of question and it is not there for the second type. How, that is the difference between the two, two types of questions. The similarity

between two types of questions is, Did. Do you see that? If I tell you in a summary, that English listen to this carefully, English questions are made by fronting tenses. The role of tense is very prominent in making a question in English.

Is this making sense? I will, I want you to see that carefully on the screen, on the board. That is, that is not on the screen. Look at this, look at the question number, look at sentence number two. Everybody, the sentence is 'bought a phone', what is the tense of that sentence, past.

So, everybody agrees that when we say a word like bought, this is buy plus past agrees. Now, if you remember earlier discussions, where I have also told you that sometimes tenses are visible and sometimes tenses are not visible and we left our discussions right there. In this case, we have tense and the verb buy, with the question sentences, we can see that the past tense which was mixed completely with the verb, it is like the, this verb it is like the dough. I know, we need to stop in a couple of minutes. But you understand when I say what I mean when I say dough, have you seen the dough made for making roti.

The water and flour are mixed with proper proportion. In such a way that it is going to be almost impossible to remove water from that dough. You can throw them, throw everything apart. But you cannot really extract water and leave the flour exactly the way it was before. If you look at the verb (buy) bought, the tense and the verb is mixed in such a way, like water and dough.

But in a language like, in a language, it is possible to extract tense and leave the verb apart. That is what happens in question sentences. When we say did you buy a phone, the verb is never going to have any sound or any tense on it after that, then therefore, we leave the verb as buy, we can never say did you bought a phone.

So, the point is, the did in the beginning of the sentence that you see is actually removing tense from the verb and extracting that to the front. The tense is an invisible category, it cannot stand on its own. So, it needs support of a lexical word. So, when we put do, do is a word, which comes in support of a verb, in support of tense. Now do means what? If I asked you the question do what does the word do mean in Hindi? How will you translate that in Hindi?

Student: Kar.

Professor: Kar and Tamil?

Student: (())(45:33)

Professor: No, how do you say, how do you say? How do you say do work?

Student: (())(45:48)

Professor: I will give you more examples. I think there is another word for that in Tamil. I will come back to that. We are not finishing up this discussion today. We will come back with this tomorrow and then I will bring the other word for that, but hold on before I wind it up.

Do you see so in English the word is do and this do is not the verb, this again is a functional word now, it does not remain a lexical word. So, do plus past becomes did and when there is no,

when there is no past tense there is just present tense then it remains just do. So, in a way what we are saying is this word is carrying tense. So, the common thing between both types of question words in English is the fronting of tense.

So, let me let me stop here and I want you to think more about the question words and then we come to question words and movement, tomorrow. Think about the equivalent of do in Tamil. More words for that in Tamil. Let me stop here.