Indian Institute of Technology Madras
Presents
NPTEL
NATIONAL PROGRAMME ON TECHNOLOGY ENHANCED LEARNING
Introduction to Modern Linguistics
Lecture-36
Syntax: Case Assignment

Prof. Rajesh Kumar
Dept. of Humanities and Social Sciences
IIT Madras

Okay let us look at J's assignment I will talk a little bit more about a accusative case assignment and then we go to nominative case assignment and we will see the relevance of a structural relations of c command that we were discussing is that we were discussing yesterday so a couple of preliminaries to repeat to you nominative cases are for subjects accusative cases are for objects any configurational structure head positions assign cases and they assign cases to their complements which entails that heads are case assigners .

(Refer Slide Time: 01:17)

Case Assignment

- John [plays football in the playground.]

- Verbs and Prepositions assign accusative case to the NPs that they govern and c-command.

- Verbs and Prepositions are governors/heads.

What assigns case to the Subject.

They are governors and also cases are assigned to a particular position and   NPs by virtue of being in that position   receives such cases making sense NPs do not come with cases loaded on them inherently however some theoretical approach talks about such possibility as   well but we will restrict   ourselves to the position that NPs do not come with cases assigned   already to them what we can accept or as far as we can accept that probably   there are all kinds of cases in NPs   on only a particular kind of case gets activated in particularly reason.

 And what activates such case for example accusative in the complements of work that is objects and nominative in subjects is simply because they happen to be in these positions   okay and then I will talk about then how this assignment works so let me help you draw this tree for this sentence can you also   do this in your note book please with what   you understand now how to get the structure of a sentence please draw this structure .

And then we see their configurational relation try to try to   draw the structure of this sentence in as much details as you think   is possible because that helps us   understand the notion of c-command   where I think there were some issues   yesterday okay so let us look at   that.

(Refer Slide Time: 03:23)
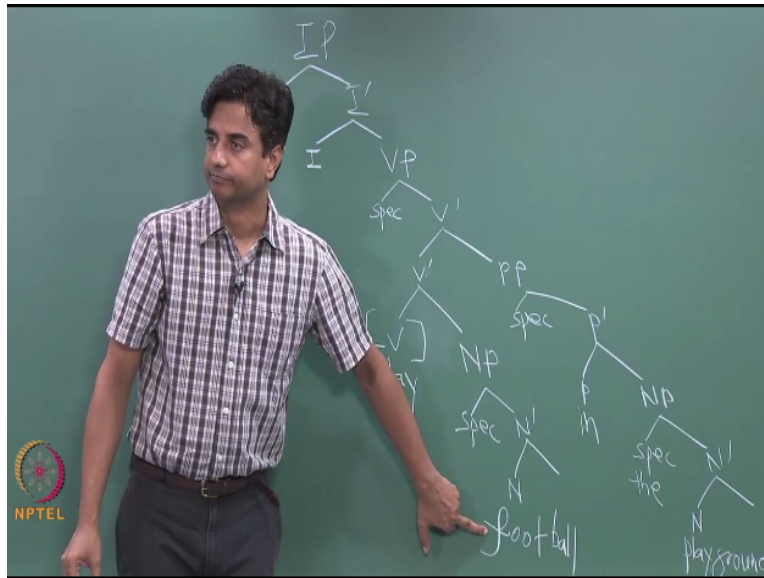
So we have and this is the structure of the sentence this is the subject NP here and this is I and then we get specifier of VP v bar and we have v this sentence is this happens to be the subject of this sentence and this is the word play now the oh wait a minute wait a minute we have an adjunct in this sentence which is what is the adjunct in this sentence in the playground is the agent is the is an adjunct in this sentence so we need this structure and this becomes the complement and this becomes the adjunct .

So we have play and what we have as the complement is again and this is the compliment right are we good so far with this structure okay now we have a adjunct here which is specifier okay do we have this structure yes everybody more than that do we understand this structure do you see anything contradicting anything else that you have learned so far from this structure no does it maintain it is a simple sentence we have not gone to a relatively complex sentence so far this is a very simple sentence this retains integrity of every phrase that you have learnt so far does it okay.

When I say integrity of a phrase what I mean is every phrase has spec head and its complement and they are related to one another by virtue of being complement to a head and then we still maintain the distinction between the complement and an adjunct of the predicate and then we maintain recursiveness non-recursiveness and all kinds of distinctions that we have seen no we want to look at this structure today with another specific structural understanding which is we are trying to say.

That this head V happens   to assign accusative case to this NP   football okay we have looked at the   distinction between morphological case   and abstract case yesterday I want to drop from there that the case assigned   to this happens to be abstract case that   is we do not see any morphological   marker on this NP if we had a   pronominal NP in this position then we   see some changes however this is an   abstract case now as a foot note here please remember that we see more   examples of abstract cases and very few   examples of morphological cases.

That is also because we are talking about English maybe other languages demonstrate a different pattern in some other language we may have more examples of morphological cases and very little examples of   abstract cases nonetheless that does not   change our which is okay so we are saying this assigns accusative case to this NP we looked at two configurational relations yesterday they were about dominance and precedence   right.

Now based on your understanding   please tell me does this V at head   precede this football this NP football   what we mean by precedence is   structural precedence not on the linear order does it precede the NP yes does it dominate that NP it is crucial   for us to understand does it dominate that NP no what do we need to know when we say dominate.

(Refer Slide Time: 09:55)

Let me put that slide again for you to see for a node to dominate   another node it has to be higher up   in the tree than the other node right   maybe this is higher up right if this is node A and this is node B this is higher   up but the second condition is there   should be a line tracing

A going downward to B there is no line tracing this one going downward to B in fact if you want to go from here to B you have to go up and then down therefore it is not dominating the simple reason for this definition is just to be clear that there is no dominance relationship between this one and this one it is only precedence .

Is this clear to everybody what dominates this now this one whatever okay let us now talk about N what are the nodes that you think dominate this N this one is dominating this what else NP V bar another we V bar VP and I clear this does not end up dominating this one this is why these two configurational relations are significant. Now on the basis of this.

(Refer Slide Time: 11:32)

(Refer Slide Time: 11:36)

C-Command and Government

- C-Command:
  - Node A C-Commands Node B iff:
    - A does not dominate B and B does not dominate A; and
    - The first branching node dominating A also dominates B.

- Government
  - A governs B iff
    - A is a governor; and
    - A c-command B and B c-commands A

This one let us look at so we so now we want to say not only V precedes N we want to say V c commands N okay where C commands simply means a constituent command you know that these two terms V play and N football these are two constituents of this sentence are you with me these are the two constituents of this sentence yes sure word sorry the V play and football N football are the two constituents of this sentence to be more precise these are the two constituents of the predicate predicated structure is that clear these are the two constituents independent constituents in that sentence c commands stands for constituent command.

And it helps us trade relationship between one and the other so what we are saying now is if V assigns activity of case to this N it assigns through the notion of C command that is V c commands N football does this definition work in sync that V c commands football good thing is this John plays football so you only play no not that no I am saying , I first of all we have not finished the whole thing to understand that C command means constituent command right there are like , I have like I told you there are the V and N are two constituents are in this sentence.

There are more constituents in the sentences we are we are only giving you I am only giving the examples of two of them each constituent of a sentence is in some or the other relationship with the other constituent okay the constituent that assigns case to another one that assignment takes place through the notion of C command okay the constituent that assigns case to another one this assignment takes place through the notion of C command .

What is the restrictions in node A c commanding node B through the   definition that you see here of C command do you think the node V commands N sorry   that is see what I am saying is this is A let us say this is A and this one is B   this. A c command B through this   definition does it we have we saw   this one yesterday okay where that the   definition says A does not dominate B   and B does not   dominate A both the   conditions are met are we meeting these two conditions does A dominate B no B does not   dominate A now we just talked about that .

 But in for A to dominate B you should   have a line tracing directly to that so   IP dominates N I bar dominates N VP   dominates N V Bar dominates N this V   bar dominates N this NP dominates N   this N bar dominate N but not this   V right get this so the first condition   is met what is the second condition the   first branching node dominating A also dominates B what is the first branching   node dominating A, B what does it nominate   B does it dominate B yes it does so this   condition is met.

 Therefore we can say A c commands B now if we look at the look at   the virtue of A being a governor for B   do we meet that condition A governs   ,A is a governor and A c commands B and B c commands A this B also c command A   here simply be too difficult for you to   figure this out   it does not why first branching node   dominating B does not dominate A see this thing we will see I saw there were some confusions yesterday and that   confusion was because when we look at a simplified structure okay .

We simplify any structure some simplify   a structure for the purpose of not leaving too many empty nodes everywhere   but that does not mean those nodes   are not available like if we are looking   at just let me give you another   one   and try to remove this confusion   from yesterday because I saw some people approaching me with that confusion .

(Refer Slide Time: 17:48)
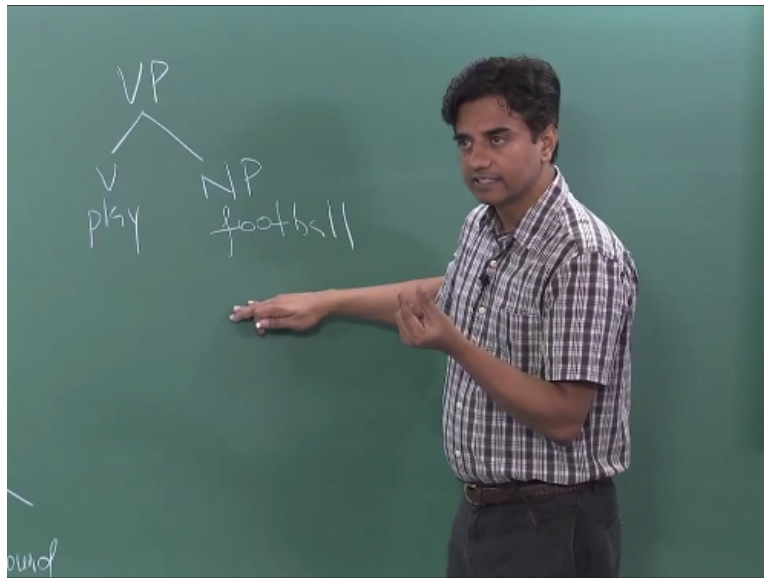
We have a VP and we have V and NP okay and then we   have play and football see this thing when we are talking about this NP being   football actually this NP this football is not football is eventually an NP but it is a constituent of NP which   is at zero level category which is a   head of this NP that that is N if we   leave this structure here then it seems   like in the larger V c commands NP and this c commands this one.

 I am helping remove the confusion or am I confusing it further because the   other reason is this three people who   were talking about this confusion I   do not see them here it is it is helping you understand this the   confusion was when , I say V c commands NP okay. If you leave this structure this way then it also says NP c commands me because the first branching   node dominating V also dominates and NP whereas actually this needs to be   further elaborated and then .

You see that   the first branching node dominating A dominates B but the first branching node dominating B does not dominate A therefore A c commands B but B does not c command A right and then thus this   government relationship is also met and   then we see A in this structure of IP we   see A assigning case to B with this   notion of with the help of this notion of c command   .

 If this is clear then we can move little   further yes people from this side okay   now we can we can make we can restrict   this definition a little further   yeah A governs B yes that means yeah this is why I said we need to restrict   this further.

(Refer Slide Time: 20:25)

- C-Command:
  - A C-Commands B iff:
    - A does not dominate B and every X that dominates A also dominates B;
    - X is the first branching node.

- M-Command:
  - A M-Commands B iff:
    - A does not dominate B and every X that dominates A also dominates B;
    - X is the maximal projection.

What you are saying is according to the definition of c-command it is okay but in order to say A governs B right the both the conditions are not meeting that is what your question is for that we need to redefine c command redefine the notion of government .And this is why I am giving you this one and have one more restricted definition of government.

(Refer Slide Time: 21:14)

- Government
  - A governs B iff
    - A is a governor; and
    - A m-command B and no barrier intervenes between A and B.
    - Maximal projections are barriers to government.
   - Heads are governors.

And then the idea is not just to take you through these definitions the idea is for you to understand that A c commands be A case assign B and A also governs B without A being a

governor this assignment of case does not work and the reason why we want to restrict it so much is because we do not want to end up saying that any element that c-commands another one also assigns case to that no now we want to look at so it will be really very helpful to understand the assignment of nominative case if this much is clear to you so far right .

Now let us look at nominative cases what which constituent in a sentence gets nominative case which constituent of a sentence gets nominative case we just talked about that subjects get nominative case and if hence are governors right and if case is assigned through the notion of c-command right then we need to apply the same definition to define to assign nominative case to the subject .

(Refer Slide Time: 23:03)
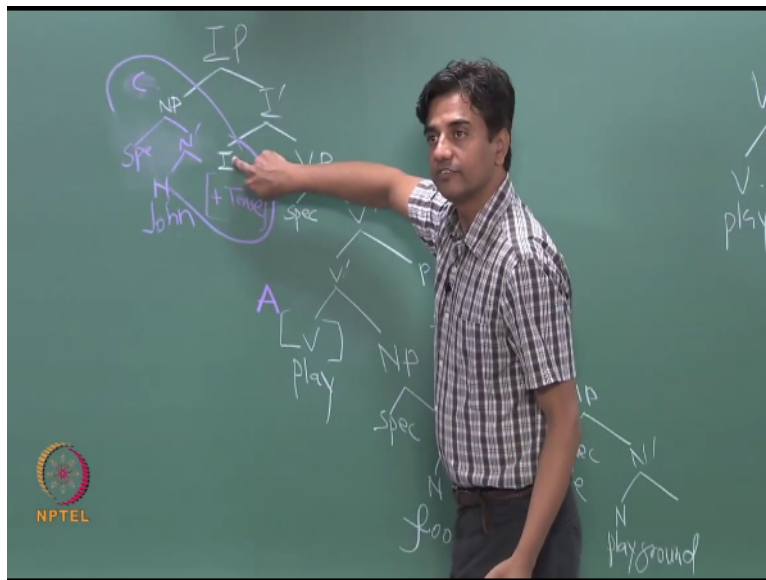
Now look at the subject here right we have this being subject and now I am putting A here or I should put something else let me put C and then for the time being let me only put C so this is the subject and we are saying this gets nominative case there is a problem applying the same rule for the assignment of nominative case do you see that problem there is a problem saying that the same principle of case assignment assigns nominative case to the subject do you see the problem go ahead John being the sentence John being the subject .

So if we say a sentence like   John's pen subjected on rate depends on   what I s the full sentence its genitive case that okay genitive case but which there are two   NPS in that that whole thing John and Pen John is definitely genitive case   and then Pen is something else now   there are two different NPs as   part of one bigger NP okay so depending   upon what how you are going to construct   the whole sentence the assignment of   case works so if you say John's pen is good right   John's pen is green what is the subject   of the sentence .

What comes in the it is little bit   difficult type of a question but not   a difficult one from the rational point of view it is this   sentence is just like John is a doctor   what is the sentence of this what is the   subject of the sentence no hold on   John is a doctor what is the subject of   the sentence John John's pen is green   what is the subject of this sentence John's pen the whole thing becomes the subject know which one gets nominative case which one should get nominative case whole phrase gets nominative case .

And then within that whole phrase you   have two NPS one genetic one with the   genitive case so that further substantiates our point that nominative   case is related to instructional   position nominative case is not   necessarily related to an element point   number one point number two nominating   cases are not assigned or   for that matter any case is not assigned   to elements it is assigned there to   the whole phrase get this thing you can very well ask this question why do we need to draw this whole structure   when we are only talking about one   element football.

 You will see the I am   glad you gave this example now you see   the Johns pen the whole NP has got   nominative case this whole NP gets accusative case okay so how this structure of that kind of sentence works in fact that   reminds me to ask you this question did   you get a chance to look at Lillian Hangman's book the case theory describing   these things in Lillian Hangman's book   talks about examples like what you are   asking okay, now let me go back to nominative case assignment at least   we should be able to finish that up.

 How   does this one get nominative case   what is the head that assigns nominative   case to this and how does that head   assigns nominative case is the question   that we need to address and only then we can see we can talk about case   assignment being a theoretical thing in languages because you understand this point that, I am   saying the assignment of   case as a theoretical aspect of language   can only be seen when assignment of two   cases are identical the identical   process is taking care of two cases.

If we have if we have components a different module for accusative case and a different module for nominative case then we are not really talking about theory we are talking about patterns then it becomes a theory only when several case assignments become part of one one theoretical aspect so how do you look at look at this now NP and tell me how which head will which head is C commanding this NP do you see any C commanding this NP no any head C governing this NP no anything C commanding this one forget about head any element C commanding this one.

No right and we are saying this gets nominative case for this definitely we need to do something now if I say this is the head which assigns nominative case to this one okay actually what happens is I as a head and the particular feature of I which is being tensed remember this part that this host stems the tense feature of I when I has tense what is it called we talked about it yesterday it becomes it when I has tense it becomes a finite clause right so the finiteness element of this head assigns nominative case to John .

The inference of that is a subject of a non-finite clause will not have nominative case and I am going to show you some examples of that but let us very quickly look at how this works does if now if I am saying this head I assigns nominative case to this I is definitely not c commanding this spec does it no given the definition and given the definition of c command that you have on a screen it does not.

However if we modify this definition of c command little bit then we end up saying that I M commands this NP subject NP and this M command is in modification of C command does it help what is there on the screen or we need to go through there too stepwise I bar dominates I sorry this I bar dominates I but I bar does not dominate NP and that is true so therefore it is not in C command relationship okay now we are saying these are in M command relations with one another where we are trying to say that X that dominates A should dominate B provided that X is the maximal projects that is a phrasal category.

What is the first this all the phrasal categories like IP V P NP are maximal projections so they remember there are three levels one is a zero level X intermediate level X bar and then phrasal level which is XP all the phrasal level categories are called maximal projections so in the trick that is being played here to convert C command into M command the trick is the

first maximal projection must incorporate both of them so we are saying the first branching node of course we are talking about the first branching node .

But that first branching node should be the first maximal projection so this modification this tweaking of this definition helps us say that this element of course does not c command I does not c command NP but I M commands this NP because the first maximal projection dominating I also dominates spec of this NP get this thing first maximal projection dominating this eye dominates this NP therefore I under the notion of M command being the finite head assigns nominative case to its subject.

And we are doing this modification because we do not want to retain the idea that heads assign cases hence our governor and hence assign cases under certain structural configuration hence do not assign case to an element arbitrarily under no relationship with one another I bar c-commands John no because the first branching oh sorry I bar c-commands John yes John but I does not c command John what we are the reason why we are saying that X is the first branching node because we want to keep it open to define the first branching node.

 In this case what is the first branching node and what and we want to define the first branching node in terms of m command as the maximal projection this is the difference between C command and m command in the M command the X is a maximal projection we just want to keep that open to account for nominative case assignment otherwise we will have no way to account for nominative case assignments .

When we say we will have no way we will have to say something else and then the theory falls apart so in order to maintain theoretical integrity of heads being assigning cases and hence being assigning heads being a position to assign case under certain configures configurational relationship is the reason why we do this trick this NP m commands I and vice-versa no you cannot say that because the first max first maximal projection dominating this NP is no this NP this is also a maximal projection so only this one M commands.

 This because the first maximal projection dominating this I is which one everybody please look at this configuration the first maximal projection dominating I is what first maximal projection dominating IP and there is nothing ever that IP so this is going to M command

this one but if we want to say this M commands this one then the first maximal projection dominating this NP is this MP let her finish that is because again I did not elaborate this one.

If you expand this thing John it becomes just like football that sounded that M so let me show you this thing and this is important thing for us to understand do you see this NP we just established that John's pen can also be the subject we can have much bigger things in subject positions sometimes not only NP sometimes IPs can be subjects okay those examples little later okay but look at this example first this is a spec this is n bar and this is N and it is complement and John is here.

Now does this John M command this I am I still trying to answer your question you are saying do they m command and one another in a reciprocal fashion the answer is no I am commands John but John doesn't M command I and we need to keep this restriction otherwise we won't be able to say that the head governs the case assignor sorry head is a case a signer and it governs the element that it assigns case two this is all mathematical or rational gymnastics we only want to say heads are assignor heads are governors .

And they govern they govern their case assignees and they assign cases under certain configuration configurational notion therefore this tree I am hoping that things are clear okay so this these are the two things through which this assignment works linguistic theorists would have been happier or this theory would have looked even better if we did not have to devise the notion of Sigma sorry no sign of m command.

If both assignment of nominative cases an assignment of a accusative cases both worked through the notion of C command the theory would have been stronger the fact that for the assignment of nominative case theoreticians working with this model had to devise a new term called M command is a little bit weakness of the theory do you understand this aspect because we are trying to devise something some trick just to account for one single phenomena in the sentence and if you understand things about theory any modification to account for one or two phenomena's makes theory weaker .

Okay nonetheless it retains the components of case assignment it takes care of this however it does become weak now very quickly so this becomes an assigner this becomes a governor this is a governor and this is a preposition assign nominative cases sorry prepositions assign

accusative case to its complement   to because this NP otherwise this NP   will remain non case assigned NP which   NP this NP needs a case and assigner of case to this NP is this head and this   preposition assigns accusative case to this NP .Under the notion of c command and get it now.

(Refer Slide Time: 41:33)

So far we have seen just two   things c command, M command and how   these two notions take care of   nominative cases and accusative case we   will we were supposed to have covered couple of other things as well by now   but nonetheless it is   more important   for us to understand how it how it works   then to cover more topics again tomorrow we have the last class   here okay I want you to talk about something else some new topic   tomorrow but I want to I do not want to   bring in a new topic new topic in syntax for tomorrow I want you to be able to apply this these two structural   notions to account for more type of   sentences.

Do you see the sentence on the   screen right now for John to attack bill   would be surprising do you see the   sentence what is the subject of the   sentence subject of the sentences is John to attack bill right now is this a   finite sentence or non-finite sentence   finite sentence non-finite finite or not finite   this happens to be a sentence right so the first thing that I will talk about these things later I just want to draw   your attention to what we are going to   be discussing tomorrow and what you should keep in mind .

So the first thing   is this NP does not need to be NP alone   that is in subject position we do not have only NPs we can also have if we   are saying this is sentence then I P in   the subject position we can have IP and   once this is an IP we have can we   say John to attack bill would be   surprising   no we need to say   for John to attack bill would be   surprising why do we need this for I   mean even a native speaker of English   would not be able to answer this question because and more.

 So because native speakers are not supposed to answer these questions people is studying this need to answer such questions why do we   need far in this sentence we will look at   it tomorrow one more question do you see   sentences like the three   sentences that you have below John believes the story good sentence John   believes him to be a liar what is the   object of the sentence him to be a liar   right   is that an IP is it a finite clause or a   non-finite clause him to be a liar   non-finite clause right which means that is an IP right.

  What is the   subject of that IP him and him is what   nominative case or accusative case accusative case so can an accusative   case marked NP be the subject of a   sentence no that is what we have seen so   far and it is true but no structures   should allow a subject as anything other   than nominative case get it so there   seems to be some problem with the   sentence then the similar kind of problem with the third sentence I want   him to learn English same thing him to   learn English is a non finite clause IP   the subject of that IP is him which   happens to have accusative case from what we know so far accusative case margin NPs cannot be   subjects of IPs.

 The reason why I am   raising these issues to you is there are two reasons it will be too   much for me to expect that you will come   up with these examples to counter what   we have seen so far number one at the   same time I want to assure that when you   talk about nominative and accusative   cases and you and there happens to be a   situation when people figure out that you know how case assignment works   .
Someone who knows it just little bit better than you should not be able to   give you this question and tell you   don't know it completely so you are   telling me as a parrot which has memorized something that subjects   get only nominative cases, I can give you   an example of a subject which does not   have a nominative case   how will you account for this I do not want you to be answerless therefore.

I am   not bringing a new topic tomorrow I will   talk about little bit of these topics   tomorrow so that we can wind up this   whole session knowing that we understand   structural relations and case theory in   a way so that we understand X-bar and   introductory syntax properly okay see   you tomorrow. Thank you.

Jason Prasad
Jayanthi

Kamal Ramakrishanan
Lakshmi Priya
Malarvizhi
Manikandasivam
Mohana Sundari

Muthu Kumaran
Naveen Kumar

Palani
Salomi
Senthil
Sridharan
Suriyakumari

Administrative Assistant

Janakiraman .K.S

Video Producers

K.R Ravindranath

Kannan Krishnamurthy

IIT Madras Production