

Language and Mind
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Module – 06
Lecture - 29
Sentence
Case

While looking at the structure of a Sentence, today we want to look at one of the abstract properties of a sentence and this is known as Case. We will look at what we mean by case, how it gets represented; and how the structure of a sentence that we have understood so far in terms of the phrasal structure and how hierarchical representation of elements in a phrasal structure is helpful in understanding the structure of a sentence, for us to understand how sentences could possibly be represented in human mind. We will add one more thing to this – that, such a thing helps us understand some of the abstract properties of sentences in terms of cases.

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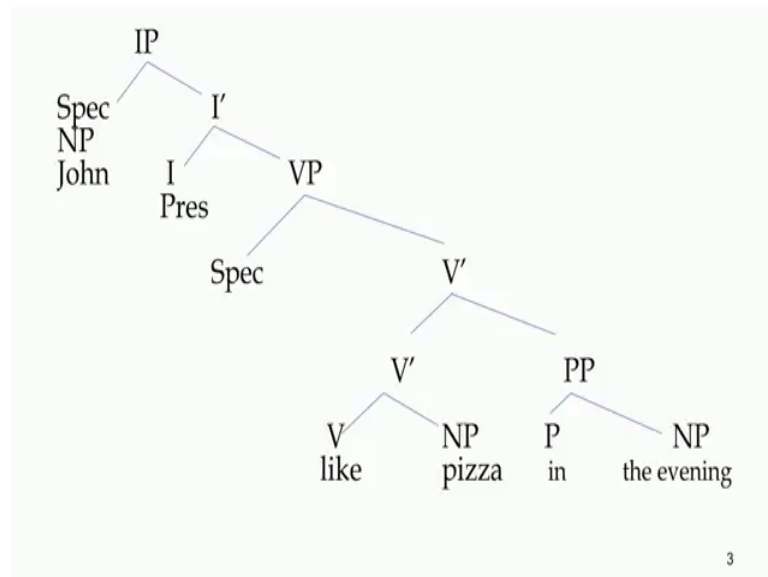
Questions

Structure and Meaning

So, what have we seen so far? The sentence that looks... that is represented in this phrasal structure is something like this that we have seen so far. Again, we are sticking to the same sentence for us to see several components of it in details. So, the sentence here is - John likes pizza in the evening, where 'John' is the subject of the sentence, 'likes pizza in the evening' is the predicate, verb is 'like' and 'pizza' is the object of the verb,

because, the nature of the verb is transitive; ‘in the evening’ is a post positional phrase which is an example of an adjunct which is there to provide some additional information about the predicate, about the verb.

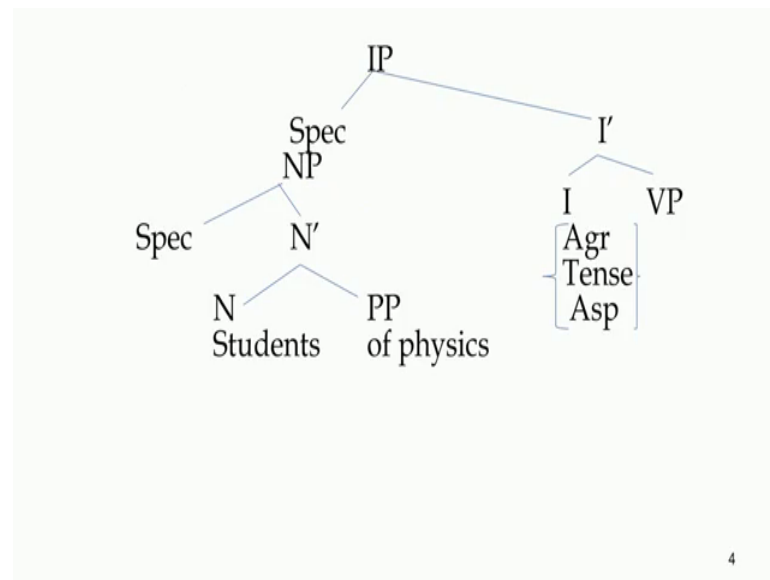
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We see the representation of these elements in this structure, in the sense that the notion that subject is outside the predicate is beautifully captured by representation of elements in X bar theory, X bar structure, which is also known as phrasal structure.

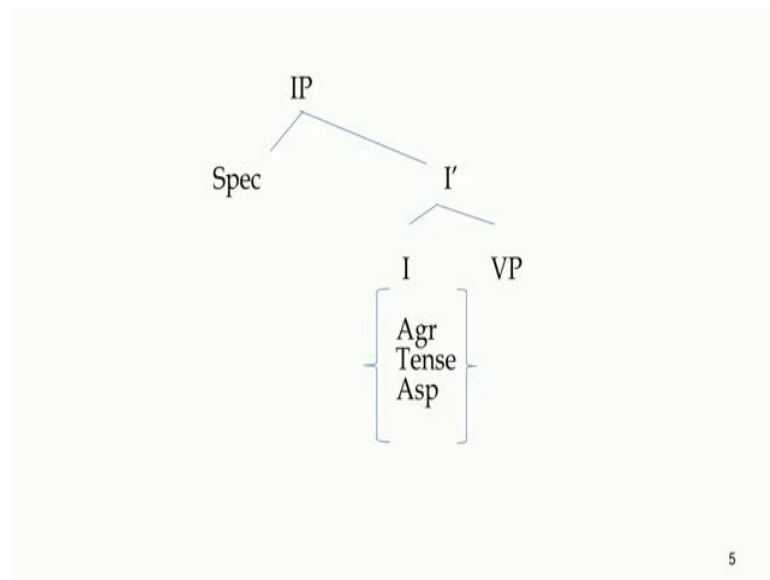
Subject occupies the specifier position of the IP, where the subject is in the specifier position and ‘I’ heads the functional categories in the sentence and the whole predicate as VP is the complement of the head ‘I’. And then further we see, maintaining the integrity of the phrasal structure, several elements are represented, where the verb ‘like’ and the NP ‘pizza’ are in ‘complement – head’ relationship indicating the complement, indicating that the NP ‘pizza’ is the complement of the verb ‘like’; it is sub-categorized by the verb ‘like’ and the PP ‘in the evening’ which is there to provide us some additional information, is represented in the structure by adjunction.

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Next that we want to see is a point that, a bigger phrase can also be a subject of a sentence. We have seen an instance of this thing, when we were looking at ‘Students of physics’ as this, the whole phrase as the subject of a sentence. That is one part of this that we want to understand. And in the other side, we want you to understand that the head ‘I’ actually hosts a bundle of features; it retains features of agreement like person, number and gender. It also contains tense and aspects. Therefore, the head ‘I’ is actually not just one single element; it is not heading just one single element. It encodes all items that are connected with inflection that are part of functional category. So, that is an important part which we have been looking at.

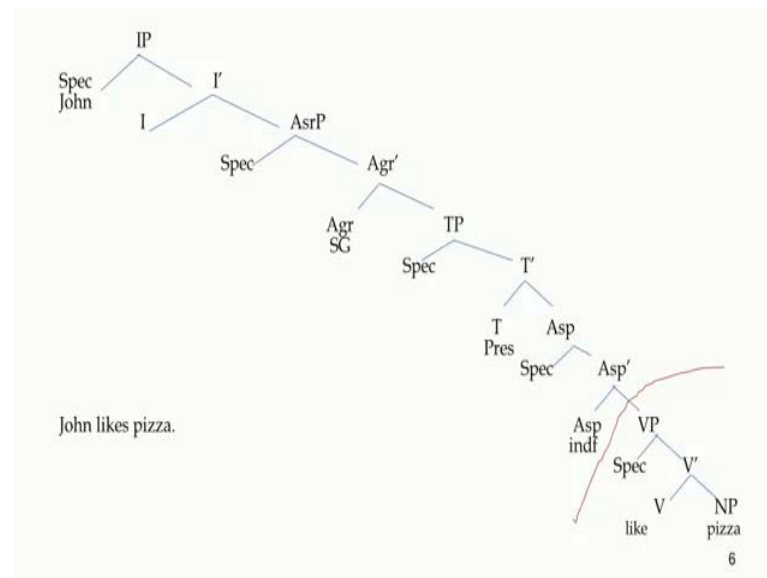
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This clearly shows you that all elements like agreement, tense and aspects are part of 'I'. This is an important part of the structure of sentence; this is an important thing for us to understand. We probably would not go into the details of this, but this has led to further advancement in the study of language. For us here to understand besides 'I' being bundle of features is also that IP is a sentence, and maintaining there again the integrity of phrasal structure, we want to call a sentence also as an IP.

And then, we have VP as the complement of 'I' and subject in the specifier position of the IP; and when we expand 'I', which has been proposed in some other parts for the study of structure of language, when we expand 'I', it is likely that we can expand it with Agr phrase or tense phrase or aspect phrase before we go to the verb phrase.

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So, everything a verb... the verb phrase is part of functional domain and the difference between the previous one like this in this picture on the screen that you see, everything that is part of the functional layer before we hit VP which is demarked by a red line on the screen, they are part of functional domain and from VP onwards, we see the functional layer. That is an important distinction.

And again, it raises a question which we will answer some other time; it raises a question - How come something which is part of the lexical category, lexical domain which is subject, occurs in the spec position of IP which is actually inflectional domain or functional domain? But, we also need to keep subject in a position, where it can retain its distance from the predicate. Now, this is beautifully represented here; it is beautifully captured. It raises several questions which are not important for us to look at this time.

We have looked at big part of what we have discussed so far; we understand them with clarity now, hopefully. The reason why we wanted to look at this whole structure again is because we wanted to look at the abstract properties of nominals like 'case'.

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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.

And then, we want to see how this structure helps us understand the assignment of cases to different NPs. Right in the beginning, let us look at a new sentence - John plays football in the playground. It is a canonical sentence, it is an example of a nice sentence, where you see 'John' as subject, 'plays football in the playground' as a predicate and again you can see the verb is 'play' which is the transitive verb has got an object 'football'; and then, 'in the playground' that you see in the green is an adjunct which is there for an additional information.

Now, what we have seen so far is how 'John' is represented in the structure and how 'football' is represented in the structure as two different NPs and with two different types of grammatical relations. Now, when it comes to case, we know that 'John' has nominative case being the subject of the sentence and 'football' has got an objective case being in the object position of the verb. Does this structure help us understand this thing...Can we capture the notion of nominative and accusative or objective case is being assigned to two different NPs in this sentence? Yes, the argument is yes and this is how we do.

So, first we look at the fact that there are two things in natural language: like verbs and prepositions or postpositions as the case may be, assign accusative cases to their NPs that are their complements; that they govern and that they C command. I will briefly mention that the notion of government and the notion of C command are technical notions under

this theory. It is not really too crucial for us to understand in order to see the structure of sentence for the purpose of understanding the underlying patterns. We are only looking at these things for us to see underlying patterns.

When we look at the details of the theoretical descriptions and explanations of these phenomena, then these terms become very crucial. So once again, verbs and prepositions or postpositions assign accusative cases to their complements. It also happens that they... that is, verbs and prepositions also govern and C command their complements; and as we very well know that the verbs and prepositions are heads. We have seen the verb heads VP and preposition heads PP.

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- John [*plays* *football* *in* *the playground.*]
 - John Nominative
 - Football Accusative
 - Playground Accusative
- V *play* assigns accusative case to *Football*.
- P *in* assigns accusative case to *the playground*.

So, 'John' is a nominative case, 'football' as an accusative case and 'playground' also as an accusative case, where verb 'play' assigns accusative case to 'football' and the post preposition 'in' assigns accusative case to the NP 'the playground'; this is pretty clear.

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- V *play* governs and commands the NP *Football* and assigns accusative case.
- P *in* governs and commands the NP *the playground* and assigns accusative case.

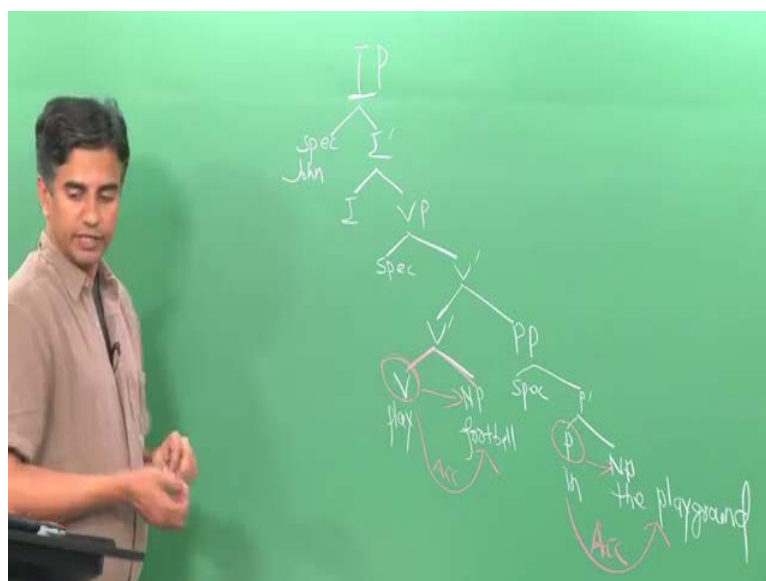
What we need to see - How does this happen? How does the structure help us understand assignment of these cases?

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- Heads assigns cases to the complements under the notion of government and c-command.
- Heads like V and P assign accusative cases.
- I as a head of IP assigns nominative case.

So we know, and the theory tells us the understanding of the structure of sentences with the notion of, with the idea of phrasal structure tells us, that heads assign cases to the complements under the notion of government and C command, where V and P are heads and they assign cases to their heads; and I will show you how that actually works. So, look at the following.

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In a sentence in this structure of IP, where we have specifier 'John' as the subject and in this VP we have specifier and then v bar...Actually we get... because we have an adjunct in this case; so we will need an adjoined position; therefore, we will need an extra space V bar for representing this PP which is again specifier P bar, P and NP. Now, here we have V and NP; so here is the verb 'play' and here is the NP 'football'. In this phrase we have 'in the playground'.

Now, this is the structure of this sentence that you have seen. So, see now...what I want you to know that the argument is, this V and this P being heads assign accusative case to its complement; accusative case or objective case to the complement. In both the cases, the complement of V is 'football' and the complement of P is 'playground'.

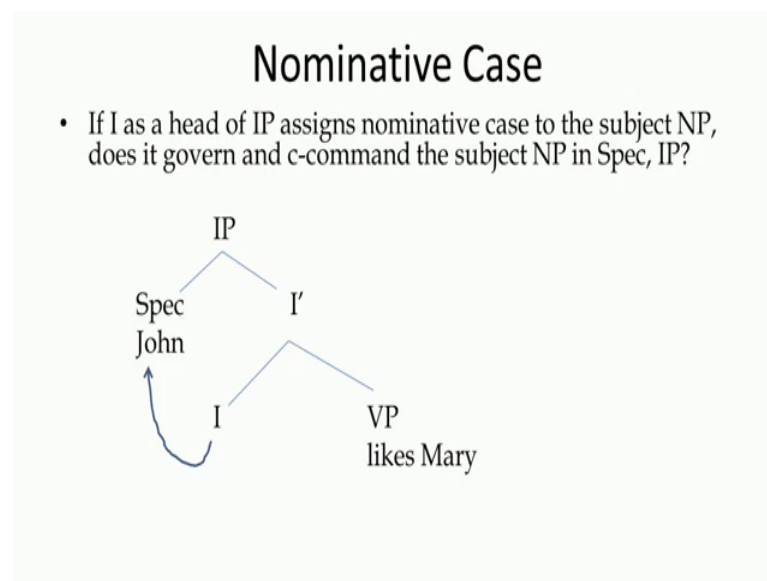
Discussing a sentence, the fundamental point is, one of the fundamental points is, all the NPs in a sentence must be case marked. And because they must be case marked, they must be governed by a legitimate governor. We have found a governor for the NP 'football' and the NP 'the playground' and therefore they assign cases to them. The extended understanding of this is, which I will briefly mention for you, that which we have also mentioned earlier that this head C commands this NP which is its complement and it also governs this.

And very briefly in a very rudimentary way I would like to mention this to you that this happens... we can also simply say that heads govern their complements. Because in a

little bit more elaborated way we actually say, heads C command their complement. So, without going into the details of C command, I simply want to say that the head is a governor, and it governs the complements also because they are part of the same node; they get branched from the same node. And that applies to the other NP as well. Here, P governs the NP 'the playground' because the NP 'playground' is the complement and P is a governor, is a head.

So, it is pretty simple for us to understand and we are saying that heads assign accusative case, because it governs their complements which retains in a way, captures the notion that, every NP must be assigned a case in a sentence; that is a principle. Then the question is... and we will only discuss two parts: accusative cases and nominative cases for our understanding today; then the question is - How does the nominative case get assigned?

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How do we assign nominative case to the subject NP? You can see the example on the screen that has a different example. But, the same notion is captured also in every case and this phrasal structure helps us understand this domain in a beautiful way, which is the head in this case is 'I' and 'I' assigns nominative case to the subject NP, which is in the spec position.

This much is good enough for us, because we can say that each of the noun phrases in the sentence 'John plays football in the playground' has been assigned case; nominative case by 'I' and accusative cases by their governors, by their heads, to the NPs.

There is a small issue here which is handled, which is described, and explained with couple of other elements in the theory. I only want to underline this thing here for you to see that it is...and not that we want to put it aside; but, like I mentioned, we are not getting into the details of this. You can read things about this and understand this. But I still want to mention this for you to see so that you can look for this and see...we are only looking at and we will stop here because, we are only looking at the phrasal structure for us to see the underlying patterns and how this structure helps us understand the structure of a sentence, the formation of a sentence, and captures several things which are underlying, which may be abstract, but structurally we can capture those things in a beautiful way.

So the point is, here the head assigns accusative case to its complements. But in this case, the head is not assigning nominative case to the complement, but the head is assigning nominative case to its specifier. So, as long as... there are more to say about this thing; but I will simply say this much, because this one I have defined in terms of its head and complement. So I will simply say, as long as it is within the same phrase and in the configuration of a 'spec – head' relationship through the notion of M command, which again we will leave it there; through the notion, under the notion of M command, this head under the configuration of a spec and head, assigns nominative case to the subject.

We will leave it there, but just a brief point to mention. The notion of C command very briefly applies to the head when it is dominated by the same node. The notion of M command applies to the head when the head and the specifier both share the same maximal projection - in this case IP.

This is how we capture the distinction between the assignment of nominative cases and accusative cases and we also retain, can explain through this structure, that every noun phrase in a sentence must be case assigned, must be case marked.

Thank you.