

# MSc Introduction to Syntax

## Lecture 7: More on movement to subject position

In the previous lecture we saw that the subject of the complement clause to a verb like *to seem* moves to the subject position of the main clause. In this lecture we will (i) discuss another type of construction in which a constituent moves to the subject position of the sentence (ii) show that there are certain restrictions on this type of movement in the sense that you cannot always move any eligible constituent to the subject position (iii) discuss a possible answer to the question *why* there is movement to the subject position in the relevant sentences.

### 1. *Passive*

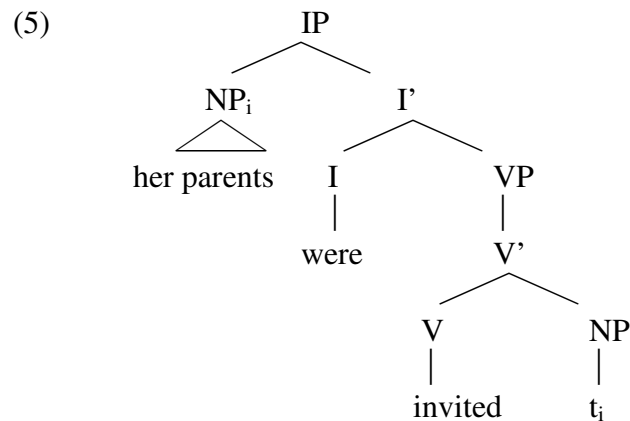
Many languages (though not all) know a sentence type known as the *passive*. In English, the passive of a verb is formed by using a combination of the past participle of the verb and an auxiliary verb (namely *to be*):

- (1) a. Mary invited Boris to the party  
a'. Boris was invited to the party by Mary
- (2) b. Joan has fed the elephants  
b'. The elephants have been fed by Joan

We saw previously that a verb can impose so-called selectional restrictions on its arguments. A verb like *invite*, for example, only goes well together with human objects, while a verb like *feed* only goes together with objects that refer to things that can take food. It turns out that the selectional restrictions on the object in an active clause are exactly the same as the selectional restrictions on the subject in the passive counterpart of the clause:

- (3) a. Mary invited her parents / #the clouds / #three bottles of wine  
b. Her parents / #the clouds / #three bottles of wine were invited too
- (4) a. Joan feeds her cat / #her bike / #her shoe  
a'. Her cat / #her bike / #her shoe is regularly fed by Joan

One may hypothesize, therefore, that the subject of the passive clause actually is still the object argument of the verb. What happens in a passive, then, is that the object is moved to the subject position in the clause:



[NB: SK analyse passive participles as adjectives, and consequently have an AP rather than a VP as complement to the passive auxiliary. There is arguably some evidence that passives can actually come in two types, one in which the participle is verbal and one in which the participle is adjectival, but we are going to ignore this issue here and simply treat all passives as verbal structures]

As with all traces left by moved constituents, the trace in (5) shares all properties with its antecedent (*her parents* in this case). The trace can thus function as the object of the verb *invited* and satisfy the selectional restrictions of that verb. Note that no other element can occupy the object position, an indication that this position is indeed filled:

- (6) \*Her parents were invited his parents as well.

*her parents* in (5) functions as the grammatical subject of the clause. This is shown, amongst other things, by the fact that it shows agreement with the finite verb:

- (7) a. Her father was/\*were invited  
b. Her parents \*was/were invited

The type of grammatical subject we see in passives, and in sentences with a raising verb (cf. lecture 6), which starts life as an object or as the subject of a lower verb, and is then 'promoted' to a higher subject position, is called a *derived subject*.

The type of object-to-subject movement we see in passives must be distinguished from other types of movement, such as that of question words (*wh-movement*). Wh-movement does not change the grammatical function of the moved element: in (8b) *who* is the direct object of *invite* just like *her parents* is in (8a), it is just in a different position (namely in the first position in the clause, in front of the subject position which is occupied by *Mary* in both cases).

- (8) a. Mary has invited her parents  
b. Who<sub>i</sub> has Mary invited t<sub>i</sub>?

The type of movement we see in passives and in raising constructions, which moves a constituent to the subject position of the clause, is called *A-movement* (or *NP-movement*). A here indicates that the position to which is the NP is moved is a type of position in which in principle an argument can directly be placed as well. The subject

position is an A-position, since non-derived subjects can occupy this position as well. The type of position to which a Wh-phrase moves, on the other hand, can never host an argument directly (we will see in the next lecture which position this is). This type of position is called an *A'-position* (pronounced as A-bar position), which means a non-A-position. Movement to an A'-position is called *A'-movement*.

Above we saw a direct object undergoing A-movement in a passive, but other constituents can undergo this type of movement as well. In a *double object construction*, for instance, it is (in many, though not all, varieties of English) the indirect object that is chosen to be promoted to the subject position under passivization, rather than the direct object:

- (9) a. I gave Mary those books  
 b. Mary<sub>i</sub> was given t<sub>i</sub> those books  
 c. \*Those books<sub>i</sub> were given Mary t<sub>i</sub>

In (10) we see that the subject of an a.c.i. complement clause becomes the subject of the main clause when the verb of the main clause is passivized:

- (10) a. They expected [Bill to win the race]  
 b. Bill<sub>i</sub> was expected [t<sub>i</sub> to win the race]

## 2. Locality

As it turns out, it is not possible to A-move a constituent across arbitrarily long distances. In particular, it turns out that

- (i) you cannot A-move a constituent to a subject position across another subject position  
 (ii) you cannot A-move a constituent to a subject position P if there is another constituent that could also A-move to P and that is closer to P

(i) is known as the impossibility of *superraising*. Its effect is shown by an example like (11d).

- (11) a. It seems [that it was believed [that Sean plays the piano]]  
 b. It seems [that Sean<sub>i</sub> was believed [t<sub>i</sub> to play the piano]]  
 c. Sean<sub>i</sub> seems [t<sub>i</sub> to have been believed [t<sub>i</sub> to play the piano]]  
 d. \* Sean<sub>i</sub> seems [that it was believed [t<sub>i</sub> to play the piano]]

The effect in (ii) (you cannot move A to C if you can also move B to C and B is closer to C than A is) is known as *superiority*. Superiority is discussed most often in connection to A'-movement (on which more later) but A-movement is subject to it, too. Consider (12). When (12a) is passivized, it turns out that only the subject of the embedded clause can be A-moved to the subject position of the main clause; the object of the embedded clause cannot A-move across the subject. (Note that the object can A-move step by step to the subject position of the higher clause if there is no subject in the way, as in the double passive in (12d)).

- (12) a. Everyone expected [Maria to sing that song]  
 b. [Maria]<sub>i</sub> was expected [t<sub>i</sub> to sing that song]

- c. \*[That song]<sub>i</sub> was expected [Maria to sing t<sub>i</sub>]
- d. [That song]<sub>i</sub> was expected [t<sub>i</sub> to be sung t<sub>i</sub> by Maria]

### 3. Burzio's generalization

We have now seen a number of instances of A-movement to the spec-IP subject position of a finite clause -- but so far we have been silent on the question of *why* A-movement takes place. One area where people have looked for an answer to this is *Case theory*.

In languages with visible case morphology, we see that the different arguments of a verb carry different case endings. Typically, subjects show up in a nominative case form (which actually often consists of the absence of any morphological marking), direct objects in an accusative case form, and indirect objects in a dative case form. Apparently, if some NP receives a particular thematic role of the verb, it must carry a particular case. Case is therefore said to make the thematic role of an NP 'visible' for the interpretative component of the grammar (the semantic component):

- (13) *Visibility condition*  
An NP that receives a thematic role from a verb must be assigned case

There is no reason to assume that in languages without overt case morphology (such as modern English) the requirement in (13) can just be voided. The difference with languages showing morphological case is that the case-marking must involve abstract, nonvisible, case. To indicate the difference with morphological case, this abstract case usually gets the distinction of being written with a capital C, i.e. as *Case*.

There is a general tendency that languages without morphological case have a stricter word order than languages that have it. We can account for this by assuming that the conditions for abstract Case assignment are quite strict, more specifically that a Case can only be assigned in a particular structural configuration. The following restrictions on structural Case assignment have been proposed:

- (14) a. Verbs and prepositions can assign abstract structural Case, but nouns and adjectives cannot
- b. Verbs and prepositions can assign structural Accusative to an NP that they govern (where, roughly, V or P governs an NP if the NP is lower in the structure and there is no other Case-assigner intervening between the V or P and the NP)
- c. Finite inflection on finite verbs can assign structural Nominative to the element in the associated spec-IP position

Returning now to the question of why there is A-movement, let us first consider what passivization does to a verb. How does making a passive participle out of a verb affect the properties of this verb? For one, this process must involve suppression of the assignment of the regular external theta-role of the verb. Suppose now that another effect is that the Case-assigning capabilities of the verb are lost under passive participle formation. In that case, if the internal argument would remain in the complement position to the verb, it would remain Caseless - which would violate the Visibility condition in (13). Given that passive clauses do contain a verb that carries

finite inflection (namely the auxiliary), Nominative Case is available in the spec-IP position. Therefore, the object moves to spec-IP to get this Case and thereby satisfy (13).

If so, we know what a defining characteristic of raising verbs must be. Despite being active verbs, they must have deficient Case-properties; they are not able to assign Accusative to the subject of their non-finite complement, like an Exceptional Case Marking verb can. (Nor can the subject of a non-finite sentence get Nominative, because finite inflection is needed to assign that). Like the object in a passive, then, the subject in the complement to a verb like *seem* raises to the spec-IP position of the finite main clause in order to get Case (Nominative) there.

We see that, in this approach to the rationale of A-movement, it must be the case in general that verbs that do not assign a thematic role to their subject position (passives, raising verbs) lack the capacity to assign Accusative Case to something in their complement position. This correlation is known as *Burzio's Generalization* (after the Italian syntactician Luigi Burzio).

- (15) *Burzio's Generalization*  
If a verb does not assign a thematic role to its subject position, it does not assign Accusative Case to its complement position, and vice versa.

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The account outlined above is far from unproblematic, however. As people (including Burzio himself) have pointed out repeatedly, (15) is quite stipulative: why should a verb's capacity to assign abstract Case be dependent on its assigning a thematic role to the subject position or not? Also, consider what happens with other elements that cannot assign abstract Case to their complements, namely adjectives and nouns (apparently, there is no structural counterpart to the genitive case we typically see showing up on complements of N and A in languages with morphological case):

- (16) a. \*The mayor the city  
b. \*Fear dogs

As and Ns also do not carry finite inflection, so their subject position will not receive Nominative either. Does this mean that As and Ns cannot take a complement NP in languages without morphological case? Clearly not. What happens is that a meaningless preposition *of* is plugged into the structure, the only function of which seems to be to assign Case to the complement:

- (17) a. The mayor of the city  
b. Fear of dogs

But if this preposition is available to save Caseless NPs, and if lack of Case is what causes the problems with complements to passive and raising verbs, it should be possible to use this preposition in passives and with raising verbs as well – contrary to fact:

- (18) a. \*There has been invited of Mary  
b. \*It seems of John to have left

Instead of appealing to Case, there are other accounts (including a more recent one by Burzio) which make use of the fact that, quite independently of A-movement, we already need a principle in English that states that every clause must have a subject, namely the Subject requirement we have encountered before. Perhaps that is what triggers object-to-subject movement in a passive. If so, what is needed is an account of why we cannot satisfy the Subject Requirement by an expletive subject in sentences in which we have an NP available that can fill up this position via A-movement (as in (18)), but we will not go into this here any further.

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#### Exercises

SK Exercise 10.3, Problem 10.1