Merging Modifiers of an NP before Its Arguments

The aim of this talk is to present a theory of merge order between arguments and modifiers of NPs. In the light of (new) data from five languages, I propose that modifiers of a noun merge before its arguments—even before its theme argument in an antisymmetric syntax. The observed surface variation can then be accounted for by Cinque’s [4] [5] theory of DP internal movement.

Whether arguments of an NP merge before its modifiers has largely gone unquestioned. For example, Cinque [5] (a.o.) provides a merge order for different modifiers of an NP but does not include arguments in the picture. Similarly, Longobardi [9] and Grimshaw [6] (a.o.) suggest hierarchies for arguments in a nominal phrase without any comparison to modifiers. As summarized by Alexiadou et. al. [2], the general view has been that arguments merge before modifiers due to the strict locality of thematic relations [6]; a lexicalist view remained unquestioned for a long time. Two recent analyses that consider arguments and modifiers in tandem are Adger [1] and Larson [8]. They converge on the claim that modifiers of an NP merge before its arguments. Aligning with Adger and Larson, I show that modifiers of an NP merge before its arguments in an antisymmetric syntax. The analysis proposed here explains the crosslinguistic facts which [1] and [8] fail to capture.

Across languages, when N is final, the unmarked order is consistently ARG>MOD>NP. There is no known language with an unmarked MOD>ARG>NP order. In post-nominal position, both orders are attested: NP>ARG>MOD and NP>MOD>ARG. (1) illustrates unmarked word orders from five languages.

(1)  
<table>
<thead>
<tr>
<th></th>
<th>AGENT</th>
<th>THEME</th>
<th>ADJ</th>
<th>NOUN</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>AGENT</td>
<td>THEME</td>
<td>ADJ</td>
<td>NOUN</td>
</tr>
<tr>
<td>b.</td>
<td>AGENT</td>
<td>NOUN</td>
<td>THEME</td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>NOUN</td>
<td>AGENT</td>
<td>THEME</td>
<td>ADJ</td>
</tr>
<tr>
<td>d.</td>
<td>NOUN</td>
<td>ADJ</td>
<td>AGENT/POSSESSOR</td>
<td></td>
</tr>
</tbody>
</table>

Turkish, Mandarin
English
Kurmanji
Persian

The asymmetry discussed above is reminiscent of Cinque’s generalization on DP internal elements and is captured in a similar way, with a variety of movement types as proposed by Cinque [4] [5]. The outcome of the analysis is instructive because it reveals that merging modifiers of an NP before its arguments fares better on capturing the crosslinguistic facts in (1) than theories where arguments are merged first.

Adopting Cinque [4] [5] and extending it to arguments, I show that all the languages in (1) can be generated from an ARG>MOD>NP order. Core assumptions are the following. All adjectives and arguments are introduced in the specifiers of dedicated functional (F) phrases, as claimed by Cinque [4] [5] and Borer [3] respectively. Each of these FPs is dominated by an AgrP which plays a pivotal role in the extended projection of the NP by transferring the [+nominal] feature of the N via agreement ([4] [5]). Independent morphological evidence for AgrP comes from Kurmanji nominal phrases where each modifier/argument is followed by an ezafe morpheme agreeing with the head NP in gender. The surface word order variation among arguments and modifiers in the DP is then the result of parametric variation in the natures of the agreement probes and goals. The first parameter concerns the agreement probe (Agr) and determines whether to move a projection containing [+nominal] to the Spec, AgrP or not. The second parameter determines whether the movement targets only the NP or the largest phrase with [+nominal] feature, resulting in two types of movement, stack-up and roll-up.

Given these theoretical tools, one has to determine the base structure from which all the surface forms are derived. Two logical possibilities are arguments before modifiers (ABM) or modifiers before arguments (MBA). There are several reasons why MBA does better than ABM. I list some of them here.

First, ABM cannot account for languages like in (1a), which is the only unmarked possibility attested with pre-nominal arguments and modifiers. With ABM, agent and theme have to move around the adjective in order to obtain (1a). Nevertheless, there is no motivation for such movement. Arguments and adjectives cannot move to the exclusion of the NP in this theory except for reasons like topic/focus. Consider the following example from Turkish illustrating this order.

(2)  
Ali-nin yol-u kötü tarif-i  
Ali-GEN way-ACC bad description-POSS  
Ali’s bad description of the way

(2) is the unmarked order in Turkish without any contrastive topic/focus. The highest argument gets genitive case which is only found in DPs. Therefore, one could argue that the agent moves around the adjective to a
position where it gets genitive. However, the theme does not get genitive case and there is no similar motivation for it to move. The ACC on the theme is not specific to DPs so, cannot be a high DP position. The best that the ABM can do is to get us AGENT>ADJ>THEME>NOUN order, which is not attested in any language. On the other hand, MBA gets (1a) directly, since it is the base order. ABM with no movement predicts ADJ>AGENT>THEME>NOUN, which is not attested.

Second, ABM cannot account for Persian (1d). In Persian, the adjectives on the right have scope over the adjectives on the left (7). In the right descending syntax suggested here, this is only possible with roll-up movement. If ABM were correct, we would never get Persian (1d), as any combination of roll-up movements would yield an order where the argument is not at the rightmost end of the linear order. In contrast, MBA yields the desired word order since the roll-up of adjectives yield the desired scope facts. After the roll-up of the adjectives, the whole N+Adj_1+Adj_2 unit stacks-up above the argument.

More generally, MBA can account for all the languages listed in (1) as depicted on the tree in (3).

The analysis presented here fares better than Larson [8] as well. Larson claims that postnominal modification languages represent the universal base order where no movement is needed. So, either (1c) or (1d) should not exist. On the other hand, the analysis provided here captures both NP>ARG>MOD and NP>MOD>ARG orders.

In sum, crosslinguistic variation in the order of modifiers and arguments in a nominal phrase is best captured by a theory where modifiers merge before arguments in a right descending antisymmetric syntax.

Selected References