

Convergent Evidence for Rolling Up Catalan Adjectives

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1. Prenominal/Postnominal Asymmetries

As pointed out by Bonet et al. (2008), in the Northeast Central (NC) dialect of Catalan, adjectives show an asymmetry in their agreement: prenominally, plural agreement is optional, while postnominally, it is obligatory:

- (1) uns autèntic(s) marciàns
some.pl authentic.pl martians
- (2) uns marciàns autèntics
some.pl martians authentic.pl

These facts are related to general postnominal/prenominal asymmetries in agreement, such as the ‘lazy Concord’ phenomenon of Friulian and Ladin (Haiman and Benincà, 1992; Rasom, 2008) and those reported for count/mass agreement in Spanish dialects (Hualde, 1992). NC Catalan has no general process of *s*-deletion before nouns, as evidenced by (3), where the /s/ is part of the adjectival stem:¹

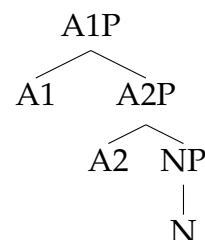
- (3) un fals conseller
a false counselor

Finally, as adjectives are prosodically phrased together with the noun whether prenominal or postnominal in Romance (Dehé and Samek-Lodovici, 2009), the explanation for this pattern must be found in a difference in the syntactic structure between (1) and (2).

2. Three Accounts of Postnominal Adjective Order

Many Catalan adjectives can either follow or precede the head noun. In this squib I present evidence from NC Catalan based on both the scopal interpretation and the inflectional agreement on adjectives in order to constrain the space of analytic possibilities for postnominal adjective word order. In prenominal position, let us begin with the structure in (4), where A1 and A2 stand for adjectives that are heads and ordered A1 before A2 before N in their prenominal variant. I omit possible additional functional structure for the purposes of simplicity of exposition, and assume that A1 selects A2:

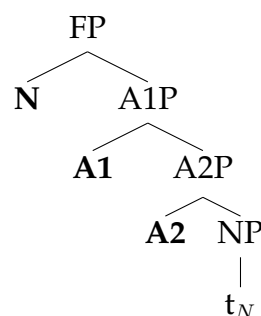
- (4) Prenominal Adjectives:



With (4) as a fixed point in the analysis, let us turn to the three main accounts for postnominal adjectives in the literature: one involving movement of the noun alone, one involving no movement at all, and one involving movement of both the noun and an adjective phrase.

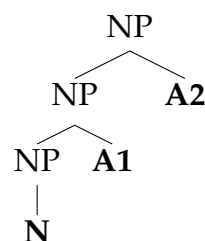
The *Head-Movement-of-N* view of postnominal adjectives holds that N moves to a high head position above both A1 and A2. It can potentially account for agreement asymmetries between prenominal and postnominal adjectives. However, it would not be able to account for the scope interpretation differences between prenominal and postnominal position, since the adjectives are in the same hierarchical relation with respect to each other, whether the N moves or not.

(5) Postnominal Adjectives if derived by Head-Movement:



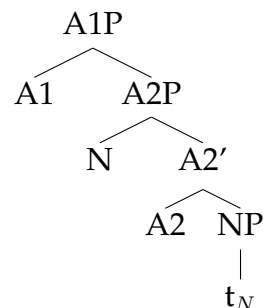
The *Adjunction-of-Adj* view holds that adjectives can be right-adjoined to NP to allow for the postnominal word order. It can thus account for the scope interpretation of adjectives according to the order of adjunction (where the lower postnominal adjective precedes the higher one). However, an adjunction account would not be able to account for agreement asymmetries between prenominal and postnominal orders, since adjunction (direction) could not affect agreement realization. This approach, as shown in the tree below, is representative of a family of “symmetric” approaches to postnominal adjectives (e.g., Abels and Neeleman (2010)).

(6) Postnominal Adjectives if derived by Adjunction:

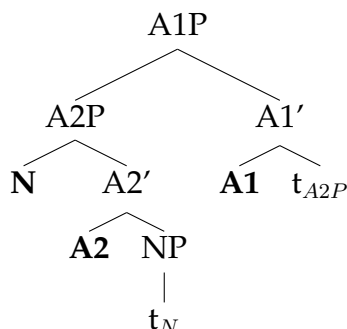


The *Roll-Up-of-N* view (see Cinque (2005)) holds that N moves through the Spec of A2, and pied-pipes A2 to the Spec of A1. Scope interpretation is determined by c-command in the base order. Agreement asymmetries are determined by the principle that Spec-Head agreement is obligatory, while downward Agree agreement is optional. (See Franck et al. (2006) for an explicit statement that the morphological realization of Agree is weaker than that of Spec-Head agreement; see also Samek-Lodovici (2002)).

(7) Postnominal Adjectives if derived by Roll-Up. Step 1:



Step 2:



In (7), the Noun and the Rolled-Up Adjective Phrase A2 (of which it is a specifier) constitute a complex specifier of A1.² A2 acquires [+plural] via spec-head agreement, and its projection, A2P, inheriting [+plural], subsequently undergoes spec-head agreement for [+plural] with A1.

Given the standard view on obligatory reconstruction of rolled-up phrases, the Roll-Up view predicts a scope asymmetry: prenominally, A1 before A2 will show a scope of A1 over A2, but postnominally, A1 before A2 will show a scope of A2 over A1. Similarly, given the standard view that spec-head agreement is stronger than long-distance agreement, the Roll-Up view predicts an agreement asymmetry: prenominally, adjectives may suppress the realization of agreement achieved via *Agree*, but postnominally, they cannot suppress the realization of Spec-Head agreement.

In the two sections that follow, I will show that only the Roll-Up derivation can account for both the simultaneous PF and LF asymmetries between prenominal and postnominal adjectives in NC Catalan.³

3. Postnominal Adjectives Show Obligatory Agreement

In the sections that follow we examine cases of two adjectives. We start with the agreement asymmetries. Inflection by plural -s is optional on all adjectives in Northeastern Central Catalan in the context C_C (between two flanking consonants) when prenominal (8-a-b), (9-a-b), but is obligatory when postnominal (8-c), (9-d):

- (8) a. uns falsos bon(s) **marcians**
 some.pl false.pl good.pl martians

- b. uns bon(s) falsos **marcians**
some good.pl false.pl martians
 - c. uns **marcians** falsos bons
some.pl martians false.pl good.pl
 - d. uns **marcians** bon*(s) falsos
some.pl martians good.pl false.pl
- (9)
- a. uns autèntic(s) bon(s) **marcians**
some.pl good.pl authentic.pl martians
 - b. uns bons autèntic(s) **marcians**
some.pl good.pl authentic.pl martians
 - c. uns **marcians** autèntic*(s) bons
some.pl martians authentic.pl good.pl
 - d. uns **marcians** bons autèntics
some.pl martians good.pl authentic.pl

I treat the absence of inflectional -s in prenominal position as lack of agreement⁴. By hypothesis, there is no spec-head relation between the adjectives and the noun when they are in prenominal position, and long-distance agree (or its realization) are optional from this position. However, postnominal adjective word order is the result of the noun moving through the specifier of the adjectives, thus triggering obligatory agreement as each specifier is passed-through in (7).

The agreement asymmetries above rule out an Adjunction-of-Adj view – or indeed, any “symmetric” approach to prenominal vs. postnominal orders – as no existing theories of agreement predict pure directionality to have an effect on agreement realization.

4. Postnominal Adjectives Show Reversed Scope

The agreement data thus far are consistent with either the Head-Movement-of-N view or the Roll-Up-of-N view. However, the scope data that follow maintain the agreement asymmetries while investigating scope interaction among A1 and A2. In particular, the following four sentences all show scope of ‘authentic’ or ‘false’ over ‘good’. They are used in a context in which martians are generally known to be evil, and finding good martians is rare; hence ‘authentic good martians’ and ‘fake good martians’ characterize disjoint sets of individuals. In the postnominal adjectives, (10-c-d), the scope is authentic/false > good, even though the linear order is the opposite.

- (10)
- a. uns falsos bon(s) **marcians**
some.pl false.pl good.pl martians
 - b. uns autèntic(s) bon(s) **marcians**
some.pl good.pl authentic.pl martians
 - c. uns **marcians** bon*(s) falsos
some.pl martians good.pl false.pl

- d. uns **marcians** bons autèntics
 some.pl martians good.pl authentic.pl

The following four sentences all show scope of ‘good’ over ‘authentic’ or ‘false’. They are used in a context in which martians are generally known to be fake/impostors, and finding authentic martians is rare. When authentic martians are found, they can be good or bad authentic martians. Likewise when false martians are found, they can be good or bad false martians. In the postnominal adjectives, (11-c-d), the scope is good > authentic/false, though the linear order is the opposite.⁵

- (11) a. uns bon(s) falsos **marcians**
 some good.pl false.pl martians
 b. uns bons autèntic(s) **marcians**
 some.pl good.pl authentic.pl martians
 c. uns **marcians** falsos bons
 some.pl martians false.pl good.pl
 d. uns **marcians** autèntic*(s) bons
 some.pl martians authentic.pl good.pl

These data show that the relative scope and the linear order of postnominal adjectives do not coincide. The Roll-Up-of-N view accounts for these straightforwardly, as the roll-up movement has changed the linear order of A2 and A1 but has not introduced a new c-command relation between them.

In sum, the Northeastern Central Catalan data allow one to use both PF and LF criteria in order to determine the c-command and spec-head relations in the syntax. The space of options point to a configuration between A1 and A2 in which more-to-the-left cannot be unequivocally equated with higher, and in which inflection realization with the noun is not symmetric pre- and post- nominally.

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Endnotes

¹The head noun itself does not even need to be phonologically present for nonagreement/deletion to occur. In (12), number-agreement non-realization obtains on the prenominal determiner *el(s)* even though the head noun is non present.

(12) El(s) meu(s) libres y el(s) teus <libres>
 the.pl my.pl books.pl and the.pl yours.pl <books>

Note that the /u/ of *meu*, *teu* is a glide, and hence provides the C_C context in *meu(s)*, and that sentence-final context is insufficient for the interconsonantal context in *teus*.

²In the account of Cinque (2005), rolled-up phrases are not directly specifiers of adjectives, but of Agr projections. The modification in the text does not affect the overall argument.

³I thank Susanna Padrosa-Trias and Gemma Rigau for their judgements and discussion, and Eulàlia Bonet and Joan Mascaró, whose research on these data sparked this line of further inquiry. An earlier draft of this paper benefitted from comments from three anonymous reviewers and from discussions with Klaus Abels, Guglielmo Cinque, Vieri Samek-Lodovici, Ad Neeleman, and Roberto Zamparelli.

⁴See Bonet et al. (2008) for an account in terms of zero allomorphy in prenominal position.

⁵(11)(c) has an additional, “irrelevant” reading, in which *falsos* and *bons* form a constituent. This reading can be prosodically distinguished from the one in the text, in which a slight pause follows *falsos*, as would be expected given a structure such as (7) with Truckenbrodt’s (1999) Wrap-XP approach to phrasing.