# The interaction of adjectival structure, concord and affixation

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Theories of adjectival structure differ in whether the adjective is merged as an adjunct (Svenonius 1994), a specifier (Cinque 1994) or a head (Abney 1987). In the analysis of Ingason (2016), adjectival structure reflects interpretation; in Icelandic, low restrictive adjectives are adjoined to nP and combine directly with its denotation at LF whereas higher adjectives with additional meaning components combine with the noun phrase via functional projections, a semantic contrast which has morphological consequences in Icelandic as discussed below. This paper shows that such a theory with variable adjectival structure can be extended to allow for two specific theoretical reductions while maintaining empirical coverage. Contra Baier (2015), we subsume all types of agreement/concord under Agree – and contra Embick & Noyer (2001) (E&N), we subsume head-to-head lowering under Local Dislocation under linear adjacency.
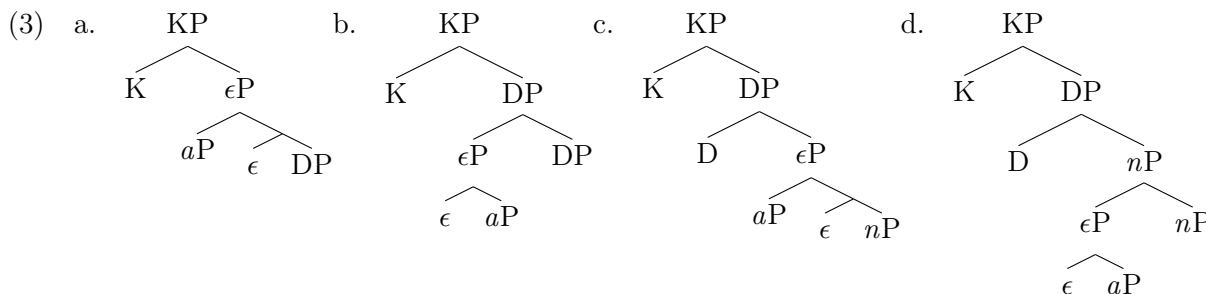
Structural typology of adjectives: We assume a KP/DP analysis of the noun phrase (Lamontagne & Travis 1986, Abney 1987) and Persistent Bidirectional Agree (cf. Baker 2008). An unvalued probe A is valued by a goal B if A c-commands B or B c-commands A at any point in the derivation.

Low restrictive adjectives are either adjoined directly to nP (1a) where their denotation combines semantically with nP via Predicate Modification (Heim & Kratzer 1998) or they are merged as specifiers of a Modifier Phrase (1b) which is realized at LF as a conjunction operation (2).

(1) a. [nP [aP] [nP]] b. [ModP [aP] [Mod Mod nP]]
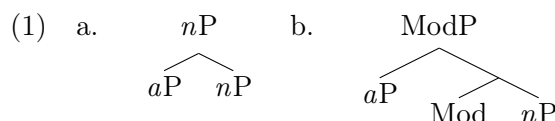
(2) $\llbracket$ Mod $\rrbracket = \lambda P_{\langle e,t\rangle}.\lambda G._{\langle e,t\rangle}.\lambda x.P(x)\wedge G(x)$

The meaning of high adjectives combines with the noun phrase via functional projections ϵ which express their relevant extra meaning, e.g., the Icelandic evaluatives discussed below. High adjectives can be specifiers of an ϵ on the nominal spine (3a) or complements of ϵ which is adjoined to the noun phrase (3b). Following Pfaff (2015), we assume that high adjectives can merge either between K/D (3a-b) or D/n (3c-d), but always above the restrictive type in (1).

(3) a. [KP K [ϵP [aP] [ϵ ϵ DP]]] b. [KP K [DP [ϵP [ϵ aP]] DP]] c. [KP K [DP D [ϵP [aP] [ϵ ϵ nP]]]] d. [KP K [DP D [nP [ϵP [ϵ aP]] nP]]]

Concord vs. Agree: Baier (2015) argues on the basis of data from Noon that two types of nominal concord mechanisms are needed. Attributive adjectives in Noon show gender, number and definiteness concord (4) but predicative adjectives only show gender and number concord (5).

(4) kann-faa   fi-yak-*(faa)
    house-2SG.DEF 2SG-big-2SG.DEF
    'the big house' (2=2nd class/gender)

(5) kann-faa   ∅   fi-yak-(*faa)
    house-2SG.DEF COP 2SG-big-2SG.DEF
    'The house is big.'

In our system, gender, number, (and case) enter unvalued at K where the relevant values are collected via Agree and percolate to the KP level (cf. Norris 2014). KP c-commands a predicative aP in (6) but the locus of definiteness is DP which does not c-command predicative aP.

(6) [PredP [KP [K] [DP]] [Pred Pred aP]]
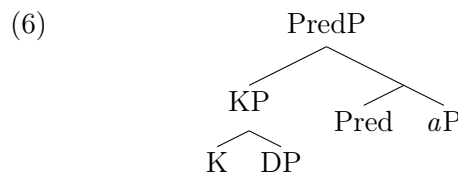
This accounts for the attributive/predicative asymmetry in Noon (and parallel facts in, e.g., Icelandic) without a split concord theory, but our uniform Agree raises questions about appositive aP in Icelandic (7); it merges between K/D and escapes definiteness concord (Pfaff 2015), getting the strong Germanic inflection like indefinite adjectives. For us, appositives are of type (3b) in Icelandic and thus not in a c-command relationship with D, assuming +DEF is not a percolation feature.

(7) Ég horfði upp í $[_{KP} [_{\epsilon P} [_{aP}$ bláan$]]$ $[_{DP}$ himin-inn$]]$.   (Thráinsson 2007:3)
    I   looked up   in $[_{KP} [_{\epsilon P} [_{aP}$ blue.STR$]] [_{DP}$ sky-the$]]$
    'I looked up into the sky, which happened to be blue.' (STR=strong inflection)

Lowering vs. Local Dislocation: For E&N, post-syntactic affixation splits into head-to-head Lowering of a head onto the head of its complement and Local Dislocation under adjacency. We only adopt the latter. The Bulgarian definite article is a prime example of lowering for E&N because it attaches to the highest element in the DP which is a noun (8a) or an adjective (8b), skipping adverbs (8c-d). Here, adjoined adverbs are invisible but adjectives, often also analyzed as adjuncts, are not. Our solution is that D targets either a complex a head or an n head to its linear right [+N] and that all adjectives in Bulgarian are specifiers. Restrictive adjectives in Bulgarian are type (1b) and high adjectives are types (3a,c). Thus, Bulgarian adjectives are never invisible even if the adverbs are. Adjunct invisiblity in Local Dislocation is supported by English *do*-support, see below.

(8) a. kniga-ta
         book-DEF
         'the book'

     b. xubava-ta kniga
         nice-DEF   book
         'the nice book'

     c. *mnog-ət star teatər
         very-DEF old theater
         'the very old theater'

     d. dosta glupava-ta zabeležka
         quite stupid-DEF remark
         'the quite stupid remark'

In contrast, the structure of Icelandic adjectives depends on their function. Appositives between K/D are of type (3b) (analyzed above). Following Ingason (2016) on aP between D/n, D suffixes onto a noun to its linear right and evaluative adjectives, which are specifiers (3a), block adjacency and yield a free article *hinn* or a demonstrative (9) depending on discourse, but restrictives, which are adjuncts (1a), do not block adjacency, and yield a suffixed article (10).

(9) hinn/þessi ótrúlegi veraldarvefur(*-inn)
     the/this amazing$_{eval}$ www(*-the)
     'the amazing world wide web'

(10) guli   bíll-inn
     yellow$_{restrictive}$ car-the
     'the yellow car'

English *do*-support is analyzed as lowering by E&N because it skips adjoined adverbs. T normally suffixes onto v (11a). Negation blocks T/v locality (11b) and triggers *do*-support (11c) but v-adjuncts like *completely* are not T/v interveners and therefore suffixation takes place in (11d). We adopt the solution that adjuncts are invisible for the purpose of linear adjacency in Local Dislocation (Bobaljik 1995), e.g., due to Late Adjunction (Lebeaux 1988). Adjunct invisibility is also crucial for the Bulgarian and Icelandic DP.

(11) a. John agree-d.

      b. *John not agree-d.

      c. John di-d not agree.

      d. John completely agree-d.

Conclusion: We re-examine the case for a split theory of concord (Baier on Agree vs. Morphological Feature Copying) and a split theory of affixation (E&N on Local Dislocation vs. Lowering) and show that both complications are redundant once we adopt our structural typology of adjectives.

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