

DP-Exfoliation, Lowering, and Local Dislocation: LBE in Bulgarian and Macedonian

Jelena Stojković, University of Leipzig, jelena.stojkovic@uni-leipzig.de

Claim. Contrary to previous reports, novel data presented here show that Left-Branch Extraction is allowed in Bulgarian and Macedonian, but it is blocked when there is more than one modifier of the noun. I argue that LBE is allowed when the DP layer is syntactically removed via Exfoliation (Pesetsky 2016). Taken that post-syntax can interleave narrow syntax (Martinović 2017), Exfoliation is fed by post-cyclic Def-Lowering, but counter-fed by post-linearization Local Dislocation.

Data. Bošković (2005; 2008 et seq.) argues that there is a parametric distinction between languages with articles and languages without them: only the latter allow Left-Branch Extraction. Bulgarian (BLG) and Macedonian (MKD), the only Slavic languages with articles, were first reported by Uriagereka (1988) as not allowing LBE, because they project a DP. After consulting 11 native speakers of BLG and MKD, I have found that they do in fact allow LBE, but only when extracting the only modifier of a noun (1)–(4). In configurations with two modifiers LBE is blocked (5)–(12).

- | | |
|---|---|
| <p>(1) Crvenite_i gi kupi [_{DP} t_i čevli] ? red.DEF them bought shoes 'Did you buy the red shoes?' (MKD, Stanković 2013: 11–12)</p> <p>(2) Červenite_i gi kupi [_{DP} t_i obuvki] ? red.DEF them bought shoes 'Did you buy the red shoes?' (BLG)</p> <p>(5) *Crni_i gi prati [_{DP} šest-te t_i torbi] black them sent six-DEF bags</p> <p>(6) *Crni-te_i gi prati [_{DP} t_i šest torbi] black-DEF them sent six bags</p> <p>(7) *Šest-te_i gi prati [_{DP} t_i crni torbi] six-DEF them sent black bags</p> <p>(8) *Šesti_i gi prati [_{DP} crni-te t_i torbi] six them sent black-DEF bags</p> | <p>(3) Šest-te_i gi zaboravi [_{DP} t_i torbi] ? six-DEF them forgot bags 'He/She forgot (all) the six bags?' (MKD)</p> <p>(4) Šest-te_i gi zabravi [_{DP} t_i čanti] ? six-DEF them forgot bags 'He/She forgot (all) the six bags?' (BLG)</p> <p>(9) *Malki-te_i gi sčupi [_{DP} t_i beli čaški] small-DEF them broke white cups</p> <p>(10) *Malki_i gi sčupi [_{DP} beli-te t_i čaški] small them broke white-DEF cups</p> <p>(11) *Beli-te_i gi sčupi [_{DP} t_i malki čaški] white-DEF them broke small cups</p> <p>(12) *Beli_i gi sčupi [_{DP} malki-te t_i čaški] white them broke small-DEF cups</p> |
|---|---|

The summary of the data in Table 1 shows that LBE depends on the number of modifiers: if there is one, LBE can be performed, if there are two, it cannot. This is a problem for the existing analyses of LBE.

Proposal. I follow the original proposal from Bošković (2005) that DP, projected as the highest

phrase, is a phase, and that LBE is blocked due to the *PIC* (Chomsky 2000) and *anti-locality* (Abels 2003; Grohmann 2003). In the case of BLG and MKD, the article is a phrasal morpheme originating in the DP, placed via two operations: post-cyclic Lowering (Embick & Noyer 2001; Martinović 2017), performed by targeting the [+N] constituents within the DP (the natural class of nouns, adjectives and quantifiers; Cornilescu & Nicolae 2011; Schürcks & Wunderlich 2003), and Local Dislocation, a PF-operation, which places the article when Lowering fails to do so. Similar behaviour of adjectives and quantifiers w.r.t. LBE indicates that they might be projected in Spec,NP. When there is only one of them, D finds a single [+N] goal higher than the noun and Lowering applies. With two adjectives, or an adjective and a quantifier, D fails to locate a single goal due to equidistance of the two specifiers (Chomsky 1995, 2000; Ura 1996). *Lethal Ambiguity* (McGinnis 1998) arises and Lowering fails. After Linearization, Local Dislocation places the article to the leftmost constituent. Evidence comes from cases when an adverb modifies an adjective. Should Lowering apply also in the case of two specifiers, (13), with an intervening adverb, would be grammatical; instead, the full pronoun is inserted (14).

- (13) *mnogo hubavi-te dve momičeta *[Adv Adj+D Q N]
very beautiful-DEF two girls

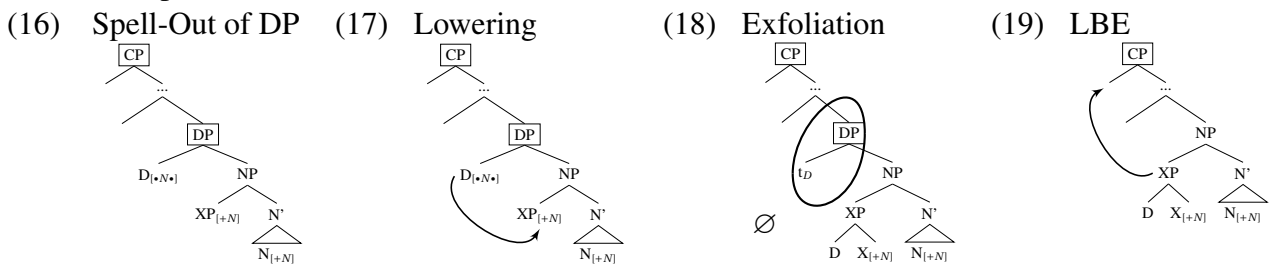
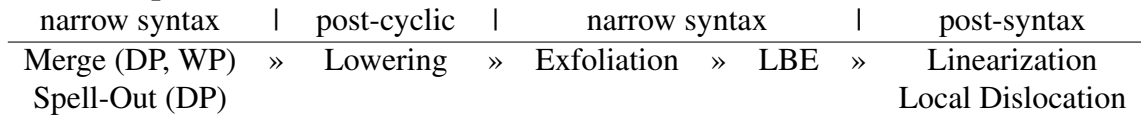
Table 1: Availability of LBE in BLG and MKD

| structure | LBE |
|---------------------------|-----|
| [_{DP} AP NP] | ✓ |
| [_{DP} QP NP] | ✓ |
| [_{DP} QP AP NP] | ✗ |
| [_{DP} AP AP NP] | ✗ |

- (14) tija mnogo hubavi dve momičeta [D Adv Adj Q N]
 th(es)e very beautiful two girls

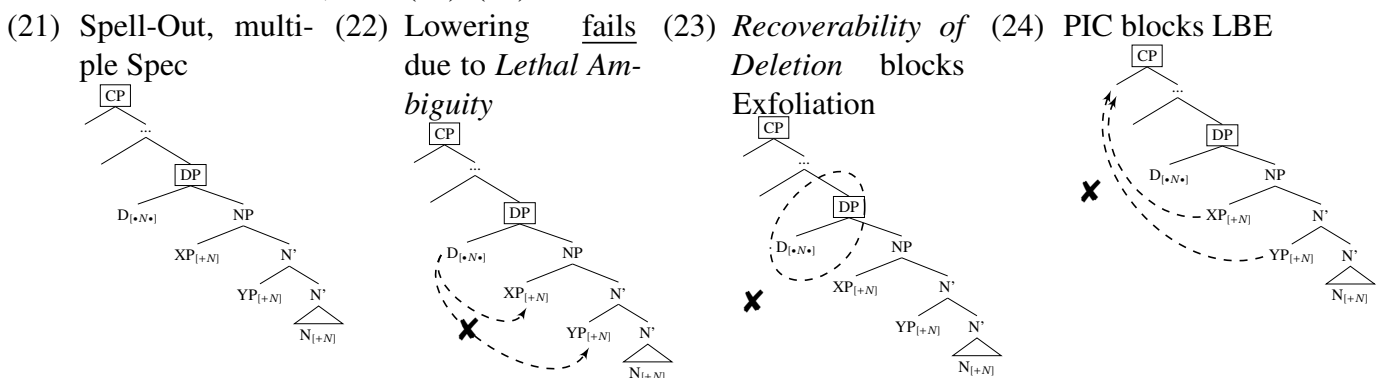
I propose the following order of operations: Lowering applies when DP is spelled out, and the structure is fed back into Narrow Syntax (Calabrese & Pescarini 2014; Martinović 2016; 2017). Exfoliation (Pesetsky 2016) applies as a Last-Resort operation, by removing the blocking phase layer in order to make a higher operation (in this case LBE) possible, as in (16)–(20).

(15) **Order of operations**



- (20) post-syntax: Vocabulary Insertion & Linearization [X+D C ... N]

In the case with equidistant specifiers, as mentioned, Lowering fails to apply due to D failing to locate a single [+N] goal. When the structure is fed back into narrow syntax, Exfoliation is blocked by the constraint on *Recoverability of Deletion* (Chomsky 1981; Chomsky & Lasnik 1977), since the information cannot be recovered from the rest of the structure. Blocking of Exfoliation subsequently renders LBE unavailable, as in (21)–(25).



- (25) post-syntax: Vocabulary Insertion, Linearization, **Local Dislocation** [C ... D X Y N]

Summary and outlook. Taking from the novel data, I argue that the availability of LBE in BLG and MKD depends on the presence/absence of DP, which can be syntactically removed via Exfoliation (Pesetsky 2016), but not if the information is not recoverable. Following (Martinović 2016; 2017) that post-syntactic operations which refer to the hierarchical structure could interleave narrow syntax, I have shown that Exfoliation (and subseq. LBE) is fed by Lowering in the cases with one modifier. With two modifiers the article is placed via late Local Dislocation, which in turn counter-feeds Exfoliation and LBE. This proposal does not over-generalise to other DP languages, where LBE is strictly prohibited, since, e.g. the article in English does not lower, thus Exfoliation cannot apply as in (23). Scandinavian languages have an affixal article, but no LBE, which follows from Martinović’s (2017) claim that interleaving post-syntax is language-specific: in a language which does not have the interleaving post-syntax DP-Exfoliation, and LBE, would not apply.

Selected references. Bošković, Ž. (2005). On the locality of left branch extraction and the structure of NP. Embick, D. & Noyer, R. (2001). Movement operations after syntax. Martinović, M. (2017). Interleaving syntax and postsyntax: Spell-out before syntactic movement. Pesetsky, D. (2016). Exfoliation: towards a derivational theory of clause size. Schürcks, L. & Wunderlich, D. (2003). Determiner-Possessor Relation in the Bulgarian DP.