Adverbial Left-Branch Extraction and the Structure of AP in Slavic[*]

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This paper investigates the structure of Slavic traditional adjective phrases (TAPs). I show there is a discrepancy in extraction of intensifying adverbs out of TAPs in the predicative and the attributive position, establishing two generalizations regarding such extraction. I argue that TAPs in different positions have different amount of structure, and that adverb extraction is sensitive to that. In particular, I argue that an adverb can extract out of a bare AP, while the extraction is blocked if there is a functional projection above the AP where the adverb originates.

(1) a. [$_{AP}$ AdvP [$_{AP}$ ….]]   - *predicative and attributive*
     b. [$_{XP}$ [$_{AP}$ AdvP [$_{AP}$ …]]]   - *attributive*

Exploring   prosodic   and   syntactic   differences   between Bosnian/Croatian/Serbian (BCS) short and long adjectives, I provide evidence that TAPs with long adjectives have more structure than TAPs with short adjectives. I also provide an account of prosodic contrasts between long and short adjectives, which at first sight do not look systematic. I argue that these prosodic contrasts also follow from a richer

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structure in TAPs with long adjectives and that the vocabulary item realizing the functional head in long adjectives consists only of a High tone.

1   Adverbial LBE

I start by introducing a context in which intensifying adverbs can extract out of TAPs in which they originate in a number of Slavic languages. Drawing a parallel between adverb extraction and adjectival LBE, I show that what accounts for LBE in most Slavic languages can also be extended to adverb extraction in such contexts.

  While extraction of leftmost elements in the nominal domain has been widely discussed ever since Ross (1967) proposed the Left Branch Condition, which blocks extraction of determiners, possessors, and adjectives out of nominal phrases in some languages [1],   extraction   of intensifying adverbs has not received much attention. However, I show that this operation can give us an insight into the structure of TAPs in different positions. To start with the predicative position, a number of Slavic languages, in particular BCS, Bulgarian, Polish, Russian, and Slovenian, allow adverb extraction out of TAPs in this position, as in (2).

(2) a.   Strašno   je   bila   [t umorna].   (BCS)
          terribly   is   been   tired.$_{F.SF}$
          'She was terribly tired.'
     b.   Užasno   bjah   [t umoren].   (Bulgarian)
          terribly   was   tired
          'I was terribly tired.'
     c.   Okropnie   on   był   [t zmęczony].   (Polish)
          terribly   he   was   tired
          'He was terribly tired.'
     d.   Užasno   ja   byl   [t rad   tebja   videt'].   (Russian)
          terribly   I   was   glad.$_{SF}$ you   see
          'I was very glad to see you.'

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[1] Already Ross (1967) noted that this condition does not hold for Russian; it has been established subsequently that languages may allow LBE of adjectives iff they lack articles (Uriagereka 1988; Corver 1992; Bošković 2012).

e.   Strašansko je   bila [t utrujena].   (Slovenian)
     terribly   is   been   tired
     'She was terribly tired.' [2]

The data in (2) lead to the following generalization:

(3) *Generalization I*: Slavic languages allow adverb extraction out of
     predicative TAPs.

Given that this operation involves extraction of a modifier out of a TAP,
we seem to be dealing here with an operation that is in some respects
similar to LBE in the nominal domain. I will argue below that extraction
of a modifier out of the adjectival domain observes the same locality
restrictions as extraction of a modifier out of the nominal domain.[3] In
what follows, I will discuss some major observations about LBE and a
phase-based account of such extraction before returning to the new
generalization in (3).

1.1   Parallelism with Adjectival LBE
Regarding adjectival LBE in the nominal domain, Bošković (2005, 2008,
2012) establishes a correlation between LBE and the lack of articles
across languages, building on Uriagereka (1988) and Corver (1992):

(4) Only languages without articles allow LBE.

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[2] In addition to Slavic languages that I focus on here, Icelandic and Romanian also allow
adverb extraction out of predicative TAPs (see Talić to appear on these languages).
[3] It is important to note here that the two operations do not make the same cut between
Slavic languages; LBE is allowed only in Slavic languages that lack articles (Bošković
2012), and adverb extraction out of predicative TAPs is allowed in languages that lack
articles, but also in languages with affixal articles like Bulgarian. Due to space
limitations, I will put aside detailed discussion of Bulgarian here, noting that languages
with affixal articles like Bulgarian pattern with languages without articles also in
allowing reflexive possessives (Reuland 2011; Despić 2011), being insensitive to certain
islands (Bošković 2008b), and being able to drop the article in certain cases (Pancheva &
Tomaszewicz 2012). I refer the reader to Talić (to appear), where I discuss this in more
detail (i.e. the work in question discusses why the affixal status of articles matters in
some cases).

Among Slavic languages, Bošković observes that BCS, Russian, Polish, Czech, Ukrainian, and Slovenian, all of which lack articles, allow LBE. This is illustrated in (5) with a contrast between BCS, which very productively allows LBE (5a), and English, which disallows it (5b).

(5) a. Pametni su   oni   [t studenti].   (BCS)
        smart   are   they   students
        'They are smart students.'
    b. *Smart   they are [t students].   (English)

Bošković (2013, 2014) argues that what is behind the split is a structural difference between nominal phrases in the two groups of languages and an interaction of locality constraints on movement, giving an account based on a contextual approach to phases. Chomsky (2000) argues that phases are locality domains. When a phase XP is completed, only the head of the phase and its edge (SpecXP/XP-adjunct) are accessible for later operations, which is referred to as the *Phase Impenetrability Condition* (PIC). Therefore, movement proceeds through phasal edges. While for Chomsky, only vP and CP function as phases regardless of the context in which they occur, there is a more recent line of research arguing that to determine whether a phrase XP is a phase or not, it is necessary to look at its syntactic context (Bobaljik and Wurmbrand 2005; Bošković 2005, 2013, 2014; Gallego and Uriagereka 2007; den Dikken 2007; Despić 2013; M.Takahashi 2011; Wurmbrand 2014, a.o.). One such approach is developed in Bošković (2013), who argues that the highest projection in the extended domain of every lexical category is a phase. Given that the amount of structure in a domain varies cross-linguistically (and within a single language), to determine whether XP is a phase or not, we need to determine whether it is the highest phrase in its domain. E.g., in the nominal domain, DP is a phase in languages with articles. However, DP is missing in languages without articles, as argued by many researchers (e.g. Fukui 1988; Corver 1992; Zlatić 1997; Chierchia 1998; Baker 2003; Bošković 2005, 2008, 2012, 2013; Marelj 2008; Despić 2011, 2013). Then, in BCS, which lacks articles, Bošković argues NP is a phase as the highest projection in this domain. What the generalization in (4) follows from is an interaction of the PIC, which rules out movement that is too long, and a constraint that prevents movement from being too short, termed as *anti-locality* by Grohmann

(2003) (see also: Bošković 1994, 2013; Abels 2003; Saito & Murasugi 1999; Boeckx 2005; Ticio 2003; a.o.). Regarding anti-locality, Bošković (1994, 2005) argues that a moving element has to cross at least one maximal projection (not just a segment). He adopts the traditional assumption that APs originate as NP adjoined. For an AP to move out of a DP phase in languages with articles, it has to move to SpecDP to satisfy the PIC, but this step is ruled out by anti-locality since it crosses only a segment of NP. Thus, in DP languages an AP cannot move out of DP without violating a locality constraint. In languages without articles, the DP layer is not projected, which makes NP a phase as the highest projection in its domain. As a result, an NP-adjoined AP originates at the edge of the phase; hence its movement does not violate any locality constraints.

(6)   a.
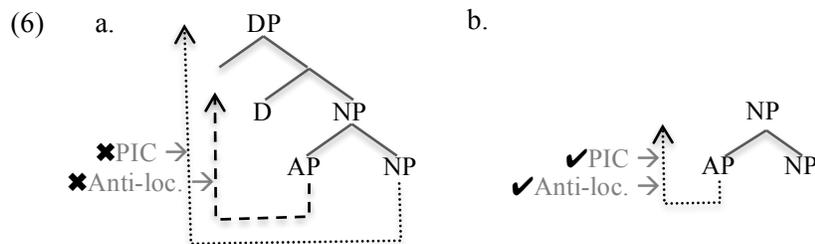
Crucially, even in languages without articles, LBE is not possible if there is a phase projected right above the NP as in BCS examples like (7). In (7), the lower NP1 is a phase and the AP is at its edge, available for movement out of this phase. However, NP2 is a phase projected by the higher noun; since the AP adjoined to NP1 is not at the edge of NP2, it has to move to SpecNP2 due to the PIC. This step, however, violates anti-locality, on a par with AP movement to SpecDP in English.

(7) *Pametnih   on cijeni [$_{NP2}$ prijatelje [$_{NP1}$ t [$_{NP1}$studenata]]].(BCS)
     smart   he appreciates friends   students
     'He appreciates friends of smart smart students.'

Returning to adverb extraction out of predicative TAPs in Slavic, I propose that Slavic languages allow bare AP projections, and that predicative TAPs, in particular, are bare APs. In such APs, there is no functional projection above AP, so under the aforementioned contextual

approach to phases, AP is a phase as the highest projection in the adjectival domain.[4] On a par with APs being NP-adjoined in the nominal domain, I assume that intensifying adverbs are AP-adjoined, i.e. they are at the edge of the AP phase. As a result, an adverb can move out of a predicative AP without violating locality constraints.

(8)

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\begin{array}{c}
\text{AP} \\
\text{✔PIC →} \quad \text{AdvP} \quad \text{AP} \\
\text{✔Anti-loc. →}
\end{array}
$$

We have seen above that adjectival LBE is blocked if a phase is projected right above the NP in which the AP originates (5b)/(7). A question arises here whether the same effect is observed in the adjectival domain. I turn to this next, discussing TAPs in the attributive position.

2   Adverbial LBE with Attributive TAPs

In this section I show that attributive TAPs behave differently from predicative TAPs regarding adverb extraction. I also show this difference correlates with certain morphological differences between predicative and attributive TAPs. At first, adverb extraction appears to be uniformly banned out of attributive TAPs in Slavic languages, as illustrated in (9) for BCS, Bulgarian, Polish, Russian, and Slovenian.

(9) a. *Izuzetno   su kupili [t skupi]   automobil.   (BCS)
         extremely   are bought   expensive   car
      'They bought an extremely expensive car/one of extremely
      expensive cars.'
    b. *Izklyčitelno tya vidya [t visok] čovek.   (Bulgarian)
          extremely   she saw   tall   man
       'She saw an extremely tall man.'
    c. *Niezwykle   widziała [t wysokiego] mężczynę.   (Polish)
          extremely   saw   tall   man.
       'She saw an extremely tall man.'

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[4] In languages like English, where adverb extraction out of AP is not possible, there is a functional projection above AP, which blocks it (see Talić (to appear) for factors that determine when the functional projection is present cross-linguistically).

    d. *Očen' ona   uvidela [t vysokogo] čeloveka.   (Russian)
        very she   saw   tall   man
      'She saw a/the very tall man.'
    e. *Izjemno   je kupila lep   plašč.   (Slovenian)
        extremely is bought beautiful coat
      'She bought an extremely beautiful coat.'

This may lead us to conclude that this type of extraction is uniformly banned out of Slavic attributive TAPs. I will, however, return to a more precise statement of the relevant generalization, after discussing why adverb extraction is banned in these contexts.

   Given that these are attributive TAPs, such examples raise a question what is responsible for the contrast between predicative (2) and attributive (9) adjectives here. Given that in the nominal domain, the presence of additional functional structure blocks LBE, the data in (9) seem to indicate that there is some functional structure above AP in attributive TAPs. Regarding the source of this functional structure in the adjectival domain, it seems plausible that it comes from the modification itself. Specifically, functional structure is needed for the modification relation. It is well known that many languages use a separate adjectival form in the attributive position, and that this form is morphologically richer than the form used in the predicative position. To illustrate this for Slavic, BCS has long and short forms of adjectives (*poznati* – famous.$_{LF.M}$ vs. *poznat* – famous.$_{SF.M}$). The long form can be used only in the attributive position.

(10) a.   poznati   pjesnik.   (BCS)
            famous.$_{LF}$ poet
            'the/a famous poet'
      b. * Mak   Dizdar je poznati.
           Mak   Dizdar is   famous.$_{LF}$
           Intended: 'Mak dizdar is famous.'

Russian also distinguishes long and short forms (*novyj* – new.$_{LF.M}$ vs. *nov* – new.$_{SF.M}$). The long form is also reserved for attributive use (11b). In some cases it appears the long form is used predicatively, as in (11d), since there is no overt noun following the adjective. However, it has been argued that such adjectives are followed by a generic noun meaning

'man', 'woman', 'person', or 'entity' (e.g. Bailyn 1994; Babby 2010). Then, the adjective is attributive, rather than predicative in such cases.[5]

(11) a. *Nov   dom   stoit   na gore.   (Russian)
   new.$_{SF}$ house   stands   on hill
          Intended: 'The new house stands on a/the hill'
      b. Novyj   dom   stoit   na gore.
          new.$_{LF}$ house   stands   on hill
          'The new house stands on a/the hill'
      c. Dom   nov.
          house new.$_{LF}$
          'The house is new.'
      d. Dom   novyj.
          house new.$_{LF}$
          'The house is new.'

                              (Cinque 2010:108 from Pereltsvaig 2000)

Based on such differences between the attributive and the predicative position, it is reasonable to assume that attributive TAPs have more structure. In fact, based on a number of semantic and syntactic differences between long and short adjectives in Russian, following Rubin (1991), Bailyn (1994) argues that attributive TAPs in general must have a functional projection above AP (let us call it XP$_{AP}$). Under the contextual approach to phases, the additional structure extends the domain and changes the phasehood of elements in the domain. Crucially, in the presence of XP$_{AP}$ above AP, AP ceases to be a phase; the functional projection above AP is a phase because it is the highest layer in the domain. As a result, the adverb adjoined to the AP is not at the edge of the phase any more. It is required by the PIC to move to SpecXP$_{AP}$; this step, however, violates anti-locality.

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[5] There is some speaker variation here, which is rather interesting because it may be indicating an ongoing historical change. All but one of my Russian consultants found adverb extraction with a short adjective after a copula better than extraction with a long adjective. One, however, did find such extraction with a long adjective perfectly acceptable and still accepted extraction with a short adjective.

(12)
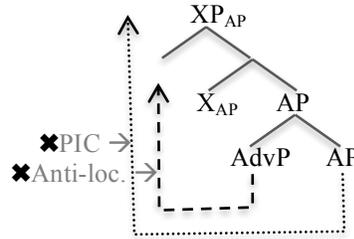
Again, what is happening here is parallel to the blocking effect on LBE in the nominal domain when a phase is projected right above NP (5b)/(7). In essence, the contrast between (2) and (9) follows from a structural difference between TAPs in these two positions and locality constraints on extraction.

2.1   BCS Prenominal Short Adjectives and AdvE
The only Slavic language investigated here that uses two adjectival forms in the attributive position is BCS. Unlike the long form, which can only be used attributively, the short adjectival form in BCS is found in the attributive position in some contexts, although it is typically used in the predicative position. Interestingly, in such contexts adverb extraction discussed above improves. Consider the contrast in (13):

(13)   a. Izuzetno   su kupili   [t skup]   automobil.   (BCS)
             extremely   are bought   expensive.$_{SF}$ car
             'They bought an extremely expensive car.'
         b. *Izuzetno   su kupili   [t skupi]   automobil.
             extremely   are bought   expensive.$_{LF}$ car
             Intended: 'They bought an extremely expensive car/one of
                extremely expensive cars.'

Based on (9) and (13), the generalization regarding adverb extraction out of attributive TAPs is the following:

(14)   *Generalization II*: Slavic languages may allow adverb extraction out of attributive TAPs in the absence of attributive adjectival morphology.

Thus, what seems to be the case here is that a typically predicative adjective (i.e. short adjective in BCS) used prenominally still projects a bare AP, rather than an AP with functional structure above it. The absence of the additional functional layer allows the adverb to move out of the AP without violating PIC/anti-locality. [6][7]

In sum, in most cases attributive TAPs contain functional structure above AP and this blocks adverb extraction out of such TAPs. However, in the absence of attributive morphology in a language that otherwise marks the attributive/predicative contrast overtly, the functional layer is also absent from the adjectival domain and adverb extraction becomes possible. I turn now to examining the morphological difference between BCS long and short adjectives in more detail.

3   Structure-Dependent Tone in BCS Long Adjectives

In this section I examine more closely the prosody of BCS long and short adjectives and show that contrasts between the two forms also follow from a richer structure in the TAPs with long adjectives.

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[6] Note also that such cases actually raise a problem for Hiraiwa's (2005) claim that edge of the edge cannot extract (see Bošković (to appear) for additional problems).

[7] Another language that might be similar to BCS is Polish, which seems to allow such adverb extraction in sentences with the verb 'have', although it is blocked in (9c). Interestingly, BCS uses the short form of adjectives in such contexts, which may imply that Polish uses XP_{AP}s in the attributive position in the cases where BCS uses long adjectives and bare APs in the attributive position in the cases where BCS uses short adjectives, although Polish does not mark the distinction overtly. Regarding Russian speaker variation (see also ftn. 4), all but one of my Russian consultants disallow adverb extraction from attributive TAPs, indicating that they have a functional projection above AP in the attributive position; one Russian speaker has a contrast in the attributive position similar to Polish; i.e. she allows adverb extraction out of an attributive TAP in the cases where a short adjective has to be used in BCS (e.g. TAP within a predicative NP), while she disallows such extraction in the cases where in BCS it is possible to use a long adjective (e.g. TAP within a direct object NP). Pereltsvaig (2008) reports a few Russian examples with an adverb separated from an adjective, which may pattern with this speaker. This contrast implies that for these speakers the presence/absence of a functional projection above AP is not overtly marked, similar to Polish, and that attributive TAPs are bare APs in the same contexts where BCS and Polish have bare APs, but that attributive TAPs are XP_{AP}s in contexts where BCS and Polish TAPs are XP_{AP}s as well.

3.1   Short vs. Long Adjective Distinction – The Pattern

BCS is usually classified as a pitch-accent language. To understand the pattern to be introduced below, we need to keep in mind the following basic accent assignment rules that BCS employs: (i) In a word with multiple inherent High tones, the leftmost High tone is realized; (ii) If the winning High is not preceded by a vowel in the same prosodic word, it is realized as a falling accent; (iii) If the winning High is preceded by a vowel in the same prosodic word, it spreads to the preceding vowel giving it a rising accent (see e.g. Inkelas and Zec (1988)).[8]

Contemporary short/long adjective distinction is almost entirely prosodic (see Aljović 2002). The prosodic differences between the two forms at first do not look systematic. In particular, as illustrated with pairs of adjectives in (15) and (16) (all of which are DAT.SG.F), if the short form has a rising tone it becomes a falling tone in the long form, as in (15a)-(16a), (15b)-(16b); if the short form has a rising tone, it shifts one syllable to the left and remains a rising tone in the long form, as in (15c)-(16c); and the accentual difference is neutralized in (15d)-(16d).

(15) *short*:   a. plá:**vo**:j   b. glá:dn**o**:j   c. visók**o**:j   d. làbavo:j
(16) *long*:   a. plà:vo:j   b. glà:dno:j   c. vísoko:j   d. làbavo:j
                    'blue'   *'hungry'*   *'tall'*   *'loose'*

Only NOM.SG.M (and ACC.SG.M.INANIM) has an overt inflection [-i] in the long form in addition to the prosodic contrast present in other cases:[9]

(17) *short*:   glá:d**an**   -**rising** tone on the 1st syllable
        long: glà:dn-i   -**falling** tone on the 1st syllable
                    'hungry-NOM.SG.M'

Focusing first on the prosodic contrast in (15)-(16), the agreement suffix [o^{H}:j] has an underlying High tone. This is indicated by the rising tone on

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[8] I will use the following diacritic marking in the examples: [´] = rising accent; [`] = falling accent; **bold** = locus of the winning H tone.

[9] Some BCS varieties still have different overt inflections for the two forms in Genitive, Dative, and Locative. Riđanović (2012) reports three forms of adjectives: short (nominal declension endings), long (pronominal declension endings), and mixed (pronominal declension endings). What Riđanović calls the *mixed* form is the only short form some speakers, including myself, use productively.

the vowel preceding it in (15a,b,c), which is a result of High tone spreading from [o^H:j]. In contrast, the High tone of the agreement suffix is not realized in (16a,b,c), so the vowel immediately preceding it does not have a rising tone in these cases. Instead, the vowel preceding [o^H:j] behaves as if it has its own High tone. This is indicated by a falling tone on the vowel preceding [o^H:j] with monosyllabic stems in (16a,b), and by a rising tone on the initial syllable with a bisyllabic stem (16c). Finally, the contrast between the two forms is neutralized in the case where the stem itself has an underlying High tone, which precedes that of the suffix. Hence, even in the short form, High tone spreading cannot take place, and both forms have an initial falling tone.

   Given that this prosodic contrast marks the short/long form distinction in the most contexts, I take it to be the primary difference and for the moment put aside [-i] which occurs only in one context in addition to the prosodic differences. Descriptively, the whole pattern in (15)-(16) can be captured by assuming that there is a High tone between the adjectival stem and the agreement suffix in the long form that is absent in the short form. This raises the question of where this High tone comes from. Crucially, we have seen above that another difference between long and short form of adjectives is that phrases they project have different amount of structure. While short adjectives project bare APs and allow adverb extraction (2a)/(13a), long adjectives have a functional projection above AP that blocks adverb extraction (13b). Given that having an extra High tone and having extra structure are both characteristics of the long form, it is reasonable to suggest that this extra High tone is actually the exponent realizing the functional head X_{AP}. In particular, I take the vocabulary item realizing the functional head X in the complex adjectival head to be a phonemically null item with a High tone.

(18) X_{AP} → ø^H

This High tone is not inherently linked to a vowel, so it links to the first vowel immediately preceding it, i.e. the final vowel of the adjectival stem. If the stem is monosyllabic, this results in a falling initial accent.

(19)   a.   plȁ:v- ø^H- o^H:j   b.   glȁ:dn- ø^H- o^H:j
            A-   X- DAT.SG.F   A-   X- DAT.SG.F
            'blue'   'hungry'

If the adjectival stem is polysyllabic, the High tone links to the final vowel of the stem again, and it spreads further to the vowel preceding it, giving it a rising accent.

(20)   vísok-   ø^H- o^H:j
          A-   X-   DAT.SG.F
       'tall'

Regardless of the presence of the High tone realizing X$_{AP}$ after an adjectival stem with an inherent High tone, the High tone of the stem is realized as the leftmost High tone in the sequence. This results in a falling accent if the stem has an initial High tone (21a), or in a rising accent if the stem has a non-initial High tone (21b).

(21)   a. là^{H}bav-   ø^H- o^H:j   b. márlji^{H}v- ø^H- o^H:j
             A-   X-   DAT.SG.F   A-   X-   DAT.SG.F
          'loose'   *'diligent'*

Having introduced the linear order in which the morphemes occur in the complex adjectival head, I turn to the details of the structure.

3.2   TAPs in the Syntax and in PF
Regarding the structure of the adjectival head, I follow Distributed Morphology (DM) style approaches (e.g. Halle & Marantz 1993; Embick & Noyer 2007), where words are (for the most part) assembled by the syntax. Assuming the syntax provides input to PF and LF, elements that are present in the syntax are expected to have semantic and/or syntactic reflexes. On the other hand, elements that have neither semantic nor syntactic effect can be introduced in PF, as argued for agreement nodes (Embick & Noyer 2007). The paradigm above suggests that complex adjectival heads are partially assembled in the syntax and partially in PF.
   The prosodic contrast discussed above indicates that the functional head X$_{AP}$ is placed between the adjectival stem and the agreement suffix because it disrupts the interaction between the High tone on the agreement suffix and the adjectival stem. This order of morphemes (A-X-AGR) results from the adjectival structure projected in the syntax and from nodes inserted in PF that have no semantic or syntactic effect. In particular, the adjectival stem (A) projects AP with both short and long

adjectives (22a-b). The functional head X_{AP} projects XP_{AP} above AP in the long form (22b), but not in the short form (22a). As discussed above, the presence of the functional layer above AP with long adjectives in the syntax is supported by the blocking effect it has on adverb extraction (9)/(12). The syntax then sends the following structures to PF.
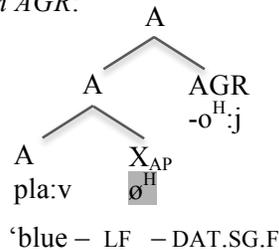
(22)   a.   b

[tree diagram: (a) AP dominating A; (b) XP_{AP} dominating X_{AP} and AP, with AP dominating A, and an *M-Merger* dashed arrow from X_{AP} to A]
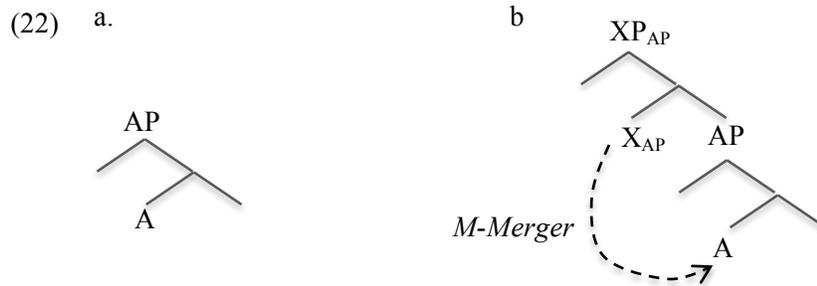
In PF, the functional head X_{AP} lowers to the adjectival stem and yields the partial morphological structure of the long adjective in (23). The lowering can take place by M-merger (Marantz 1984; Bobaljik 1995).

(23) *Long adjective after M-merger*:

[tree diagram: A dominating A and X_{AP}]
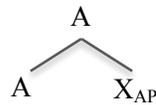
Morphemes marking agreement of the adjective with the noun do not have a semantic or syntactic effect. I hence assume that they are inserted in PF. The final structure of the complex long adjectival head after Vocabulary Insertion is given in (24):
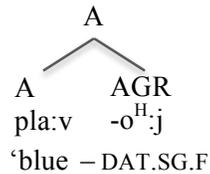
(24) *Long adjective with AGR*:

[tree diagram: A dominating A and AGR ($-o^{H}{:}j$); the lower A dominates A (pla:v) and X_{AP} ($\emptyset^{H}$)]

'blue $-$ LF $-$ DAT.SG.F'

Given that the adjectival stem and the functional head X are assembled before the agreement node is introduced, this structure captures the fact that the interaction between the High tone of the agreement suffix and the final vowel of the adjectival stem is disrupted with long adjectives.

With short adjectives, the functional projection XP_{AP} is not projected. The agreement node is then attached directly to the adjectival stem in PF. With toneless adjectival stems, the first and only High tone is the High tone of the agreement suffix. Thus, the High tone can spread to the final vowel of the adjectival stem, giving it a rising accent.

(25) *Short adjective with AGR*:

$$
\begin{array}{c}
\text{A} \\
\diagup\diagdown \\
\text{A} \qquad \text{AGR} \\
\text{pla:v} \quad \text{-o}^{\text{H}}\text{:j} \\
\text{'blue} - \text{DAT.SG.F}
\end{array}
$$

Thus, the difference between long and short adjectives is that the agreement node is not immediately adjacent to the adjectival stem in long adjectives, but it is immediately adjacent to it in short adjectives. Once accent assignment rules apply, the two forms look different because of the additional High tone in the long form. This then automatically captures the whole pattern in (15)-(16).
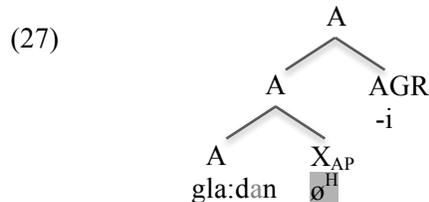
3.3   A Case of Contextual Allomorphy

In this section I return to the suffix [-i] that occurs in NOM.SG.M in addition to the prosodic contrast discussed above. Given that prosody marks the distinction between the long and the short form in most cases, including when [-i] is present, I have argued above that a High tone is the primary exponent for the long form inflection realizing the functional head X_{AP}. The remaining questions are what the suffix [-i] marks and why it occurs in the long form and not in the short form.

In DM, rules of exponence can refer to a structural context under which a particular vocabulary item is inserted to realize some grammatical feature(s). In this respect, I suggest that [-i] is an exponent for agreement that is inserted in the presence of a functional head in the adjectival complex. More precisely, NOM.SG.M has two exponents:

(26)   a. NOM.SG.M → [-i] / X___
       b. NOM.SG.M → ø^H

The exponent in (26a) is specified to occur in the environment of X, while the exponent in (26b) can occur in any environment. The choice between them in NOM.SG.M is determined by The Elsewhere Condition (Kiparsky 1973), so (26a) occurs in the long form and (26b) in the short form. Thus, while it is not the primary exponent for long inflection, the suffix [-i] still occurs only in the presence of the functional head, and can be considered secondary exponent for the long form in NOM.SG.M.

(27)

```
                       A
                      / \
                    A     AGR
                   / \     -i
                  A   X_AP
               gla:dan  ø^H
```

This suggestion is supported by the fact that [-i] does not occur only to distinguish long from short adjectives. Specifically, we also find [-i] in comparatives and superlatives, which are usually claimed to have the long adjectival form. However, the distribution of long adjectives and comparatives/superlatives suggests that comparatives and superlatives are not long adjectives. Crucially, while long adjectives do not occur in the predicative position (28a), comparatives and superlatives do (28b-c).

(28)   a. *Mak Dizdar   je   poznat-i.
          Mak Dizdar   is   famous.LF-AGR
          Intended: 'Mak Dizdar is famous.'
       b. Mak Dizdar   je   poznatij-i   od Abdulaha   Sidrana.
          Mak Dizdar   is   famous.CMPR-AGR than Abdulah   Sidran
          'Mak Dizdar is more famous than Abdulah Sidran.'
       c. Mak   Dizdar   je naj-poznatij-i   od   svih
          Mak   Dizdar   is   most-famous.CMPR-AGR   of   all
          bosanskih pjesnika.
          Bosnian poets
          'Mak Dizdar is the most famous of all Bosnian poets.'

If comparatives and superlatives are not long form adjectives, a question arises why they get the suffix [-i]. I suggest that they provide the environment for the insertion of [-i] which is chosen in the presence of a functional projection. This is precisely what is expected under Bobaljik's (2012) Containment Hypothesis, where the comparative projects a functional layer above the adjective and the superlative projects a functional layer above the comparative. Crucially, although the functional projections in comparatives/superlatives are not projected by the same functional head as the functional projection in long adjectives, they still provide a context for the insertion of the [-i] allomorph for agreement in NOM.SG.M.

5   Conclusion

I have examined the structure of TAPs in a number of Slavic languages, establishing two cross-linguistic generalizations regarding adverb extraction out of TAPs in the predicative and the attributive position. I have argued that such extraction is sensitive to the amount of structure projected in the TAP and phase-based locality constraints on extraction: adverb extraction is possible if the adverb originates in a bare AP, but it is blocked if it originates in a TAP that has functional structure above AP. I have also investigated in more detail prosodic and structural differences between BCS long and short adjectives and argued that long adjectives project TAPs that have more structure than short adjectives. I have also argued that the exponent for the functional head present in the long adjectival form is a phonemically null item with a High tone. This way, I have accounted for a number of prosodic differences between long and short adjectives which on the surface appear to be unsystematic.

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