

Upward P-cliticization, accent shift, and extraction out of PP

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This paper reveals an effect syntactic movement has on prosodic parsing of proclitics and their hosts. I explore certain accent shifts from hosts to proclitics present in Bosnian/Croatian/Serbian (BCS) (1) and establish a novel correlation between the mobility of the host and the accent shifts. I show that this correlation gives a way to tease apart two alternative analyses of P-adjunction to the host suggested for constructions involving extraction of “P+AP” complex, and that the winning analysis can be extended to certain cases of apparent phasal complement extraction.

Accent & LBE. Bosnian is a pitch-accent language in which prominent syllables carry either a *falling tone* (indicated by a grave accent mark [˘] above the vowel in (1)) or a *rising tone* (indicated by an acute mark [˙]). Bosnian prepositions (proclitics) can take over the falling accent from the first syllable of the following adjective (1a), the option without the shift being also available. When two adjectives modify a noun, the shift is degraded if both adjectives are descriptive (1b), but allowed if they belong to different classes: descriptive + possessive (1c); quantifier + possessive (1d) (possessives and some quantifiers are morphologically adjectives in BCS). The accent shift in (1a,c,d) results in a rising tone on P.

- (1) a. **ú**_sta:roj kući (~u **stà**:roj kući) c. **ú**_sta:roj bratovoj kući
in_old house (in old house) in_old brother.poss house
b. ***ú**_sta:roj velikoj kući d. **ú**_svakoj bratovoj kući
in_old big house in_every brother.poss house

Significantly, there is a correlation between this accent shift and left-branch extraction (LB) of adjectives, which BCS allows (2a). When two adjectives modify a noun, LB is degraded if both are descriptive (2b), but allowed if the adjectives belong to different classes (2c-d).

- (2) a. Sta:ru_i je voljela t_i kuću. **cf.(1a)** c. Sta:ru_i je voljela t_i bratovu kuću. **cf. (1c)**
old is loved house old is loved brother.poss house
b. *Sta:ru_i je voljela t_i veliku kuću. **cf.(1b)** d. Svaku_i je voljela t_i bratovu kuću. **cf. (1d)**
old is loved big house every is loved brother.poss house

Given the striking parallelism between (1) and (2), which shows that the accent shift is possible only in contexts where LB is also possible, we reach the generalization in (3).

- (3) A proclitic (preposition) can take over the accent from its host only if the host is allowed to move independently.

For the accent to shift, the P and its host must be one prosodic word, i.e. P needs to incorporate into the host prior to accent assignment. Given this requirement, (3) can tease apart analyses of P-cliticization and extractions from PPs. BCS prepositions are involved in apparent non-constituent extraction where the “P+AP” moves out of PP, referred to as “extraordinary LB” (e-LB).

- (4) a. [Ú_stɑ:roj]_i je živjela t_i (bratovoj) kući. b. *[Ú_stɑ:roj]_i je živjela t_i velikoj kući.
in_old is lived (brother.poss) house in_old is lived big house

Based on a number of parallelisms between ordinary LB and e-LB, Borsley & Jaworska (1988) and Bošković (2012) argue (4a) involves ordinary LB, where P adjoins to the moving adjective. Bošković offers two alternatives for this P-adjunction, downward vs. upward P-cliticization, both of which seem equally plausible without (1). However, the accent shift facts provide us with a way of teasing them apart. First, *downward P-cliticization* involves P-lowering to its host, AP. This would be enough to capture the availability of accent shift in (1a,c,d), but nothing would prevent P-lowering in (1b). If P-lowering were sufficient for the accent to shift, then AP-rising being blocked in a certain context (cf. 2b) should not affect it, so the ungrammaticality of (1b) cannot be captured. In contrast, with the *upward P-cliticization* analysis in which the host first moves to a position c-commanding P (e.g. SpecPP) and then P adjoins to it, we correctly capture the grammaticality of (1a,c,d) and (4a) where AP-rising out of NP is otherwise allowed (cf. 2a,c,d), creating the conditions for P-adjunction and accent shift. And, crucially, we also capture

the ungrammaticality of (1b) and (4b), where AP rising is blocked and the accent shift is blocked as well. P+AP can either stay in SpecPP, yielding (1a,c,d); or move further, yielding (4a).

Extension. In the absence of adjectives, P takes over the accent of the noun following it (5).

(5) *ú_kući* (~u kùći)
 in_house (in house)

We have seen P can take over the accent from an adjective only if the AP moves to its Spec. Then, the only way for P to take over the accent from its NP host should be if the NP raises to SpecPP and P adjoins to it in this position. Just like P+AP can undergo “extraordinary LB” out of SpecPP (4a), it seems extraction of P+NP out of SpecPP should then also be available in BCS.

(6) $P_j + NP_i \dots [PP \ t_j + t_i \ [P' \ t_j \ t_i \]]$

The extractions (4a/6) are cases of movement from PP-islands that is disallowed if P stays in situ.

(7) a. **Sta:roj_i on živi [u t_i kući]*. b. **Sta:roj_i kući on živi [u t_i]* .
 old he lives in house old house he lives in

(7a) shows LB across a P is disallowed, but if the P also moves LB is possible (4a). Bošković (2012) treats this contrast as an instance of a more general mechanism of rescue by PF-deletion. It's been noticed that a locality violation can be rescued if the island is not pronounced in PF (Ross 1969; Chomsky 1972; Merchant 2001). Based on cases where D-to-V incorporation in Galician rescues movement out of island DPs, Bošković (2012) argues a derivation can be saved if merely the head of an island is removed by copy deletion, i.e. if it moves from its base position. He accounts for the contrast in (4a)/(7a) as follows: AP-movement to SpecPP causes a locality violation (7a) (see Bošković 2012 for details of the violation), but the head of the PP-island moves from its base position (incorporates into AP) in (4a), so its copy in P⁰ is removed, rescuing the derivation. The account of (7b) is parallel to (7a) in the system, i.e. extraction of NP out of the PP is disallowed in SC, and the derivation crashes because the head of P is in situ in (7b). What follows from the system is that if the P attaches to the NP moving out of the PP, the derivation should be rescued and the hypothetical extraction in (6) should be allowed. Given that the result of (6) resembles movement of the whole PP, the question is whether we can ever detect such extraction. Interestingly, precisely this mechanism can be used to capture certain cases of phasal-complement extraction that Bošković's contextual approach to phases fails to account for. Bošković (in press) argues that the highest projection in the extended domain of a lexical head functions as a phase. Within the nominal domain, DP is a phase in languages with articles, but DP is missing in languages without articles (Corver 1992; Zlatic 1997; Bošković 2005), so NP is a phase in BCS. The system predicts extraction of a complement of N should be blocked in BCS, due to the interaction of the PIC, which requires extraction out of a phase to proceed through the edge (Spec or adjunct) and *anti-locality* (Bošković 1994/2005; Grohmann 2003; Abels 2003), which bans movement steps that are too short. Bošković argues a moving element has to cross at least one full phrase. Indeed, genitive-marked complements of N are immobile (8a). This, however, is not the case with P-complements (8b), a serious problem for the system since PP is also a phase.

(8) a. **[Kojeg studenta]_i gledaš [NP slike t_i]* b. *[Na koje pitanje] želiš [NP odgovor t_i]?*
 which.GEN student.GEN look-at pictures to which question want answer

However, the upward P-cliticization analysis, where the AP/NP host moves to SpecPP and P cliticizes to it, easily captures the apparent N-complement extraction in (8b), unifying it with extraordinary LB. Parallel to the AP in (1a,c,d)/(4a), *which question* in (8b) moves to SpecPP, violating anti-locality. P then cliticizes to the NP in SpecPP, and the derivation is rescued since the PP-phase is headed by a trace (Bošković shows other anti-locality violations can also be rescued this way). What seems to be PP-extraction is then a moving NP, which carries the cliticized P, its movement proceeding through phasal edges without violations.

Abels, K. (2003) Successive cyclicity, anti-locality, and adposition stranding. ~ Bošković, Ž. (in press) Now I'm a phase, now I'm not a phase. LI 45. ~ Riđanović M. & Aljović N. (2009) On the shift of Bosnian accent from host to proclitic: New insights.