

**Domain mismatches in syntax and morphophonology:
The case of Bosnian/Croatian/Serbian adjectives**

Marantz (2001, 2007) proposes that phases should be recognized both above and below the ‘word’ level. He assumes that phases below the ‘word’ level (henceforth, DM phases) are phases *à la* Chomsky 2000. This conclusion is adopted in Embick 2010 and much other work in Distributed Morphology and supported by the fact that the Phase Impenetrability Condition 2 (PIC2) in (1) largely makes the correct predictions for both DM phases and Chomskyan phases (e.g., Chomsky 2001, Sigurðsson 2002, Embick 2010). As I show, however, different diagnostics are used to identify the two types of phases, raising the question of whether these types should be equated. This leads to the question of whether the inventory of phase heads is identical in the two domains. Using data from Bosnian/Croatian/Serbian (BCS), I argue that the answer to this question is negative: adjectives (*aPs*) are DM phases, but not Chomskyan phases.

(1) **Phase Impenetrability Condition** (PIC2) (Chomsky 2001:14)

Given the structure [ZP Z . . . [HP α [H ’ H YP]]], where H and Z are phase heads, the domain of H is not accessible to operations at ZP; only H and its edge are accessible to such operations.

If A’-movement proceeds through phase edges (Chomsky 2000, 2001), we should see the effects of this movement, for example, in reconstruction for binding purposes (Legate 2003). In (2), the *wh*-PP needs to obey binding conditions A (*svojoj* ‘self.M’) and C (*Marija* ‘Mary’), but the only position in which this would be possible is spec *aP*. In spec *aP*, *svaki čovek* ‘every man’ could bind the anaphor *svojoj* ‘self.M’, and *Marija* ‘Mary’ would not be in a c-commanding relationship with *njom* ‘her’. The ungrammaticality of (2) shows that BCS *aP* cannot be an intermediate position for *wh*-movement; it is therefore not a Chomskyan phase. At the same time, both a declarative and a *wh*-question similar to (2) are possible, so long as the binding-sensitive elements are in positions where no binding violations occur (these examples are omitted for space reasons).

- (2) *[Na kojoj svojoj_i žurci na kojoj je bila Marija_k]₁ je **X**₁ pronađen svaki čovek_i
 at which self.M party at which AUX was Mary AUX found every man
 [*aP* **X**₁ izuzetno pijan sa njom_k **X**₁]₁?
 extremely drunk with her
 ‘At which of his parties Mary was at was every man found extremely drunk with her?’

Note also that A’-movement from within BCS *aP* is generally possible (3).¹

- (3) [Čij-e pažnj-e]₁ je Marko vredan t₁?
 whose-GEN attention-GEN AUX Marko worthy
 ‘Whose attention is Marko worthy of?’

While BCS *aP* does not meet the criteria for Chomskyan phasehood, its presence (i) blocks root-conditioned allomorphy for higher phase heads, and (ii) mediates stress assignment via spell-out, suggesting that it is a DM phase. With respect to (i), if *a* is a DM phase, we predict that *a*, but not the root below it, may interact with higher phase heads (e.g., *n* or *v*) for the purposes of determining form or meaning (4).

- (4) [xP $\overset{\text{phase head}}{\uparrow} \text{X} \dots [aP \text{ a} \dots [\sqrt{P} \text{ root} \dots]]]$
 $\xrightarrow{\text{phase head}}$

BCS has a considerable number of productive nominal suffixes, but the number of those that attach to non-roots is strikingly small. For example, adjectives in *-lživ* only give rise to property-denoting nouns with the suffix *-ost* (5); all other nominal suffixes are impossible.

¹ *Čij-e pažnj-e* ‘whose-GEN attention-GEN’ is not base-generated clause-peripherally, as evidenced by case connectivity and the ungrammaticality of *[*Čije pažnje*]₁ je Marko vredan [t₁ i Marijine ljubavi]? ‘Whose attention is Marko worthy of and Mary’s love?’, which violates the Coordinate Structure Constraint.

- (5) a. prilagod-ljiv-ost ‘adaptiveness’ b. pronic-ljiv-ost ‘perceptiveness’ c. vid-ljiv-ost ‘visibility’
 d. oset-ljiv-ost ‘sensitiveness’ e. izdrž-ljiv-ost ‘durability’ f. svar-ljiv-ost ‘digestability’

I argue that this is because BCS *a* is a phase—once the nominalizer merges, the complement of *a* is spelled-out; the identity of the root cannot influence the form of the suffix or vice versa.² It is worth noting that, per (1), *a* is not spelled-out when *n* is merged; therefore, the identity of *a* can influence the choice of *n*: passive deverbal adjectives in *-n/-t* can form nouns with the suffix *-je* (in addition to *-ost*), as seen in (6).

- (6) a. reš-e-n-je ‘solve-*vpass* -A-N’ ‘solution’ b. prs-nu-t-je ‘rupture-*vpass* -A-N’ ‘a rupture’
 c. iscel^l-e-n-je ‘heal-*vpass* -A-N’ ‘healing’ d. nadah-nu-t-je ‘inspire-*vpass* -A-N’ ‘inspiration’

With respect to (ii), we can show that BCS *a* mediates lexical stress via spell-out, which is expected if it is a DM phase (Marvin 2002). In BCS, prominent syllables of prosodic words carry a tone, which can be rising or falling.³ Inkelas & Zec (1988) argue that only High tones are represented in the BCS lexicon; a falling tone results from word-initial High tone and a rising tone from a non-word initial High tone that spreads to the preceding syllable. BCS roots and affixes are lexically marked or unmarked for High tone; if no morphemes in a prosodic word carry a lexical High tone, a High tone is inserted on the first syllable as a default. In (7)–(8), we can observe that the nominalizer *-ik*, which is lexically marked with a High tone, can influence the stress of a word if it attaches to a root (7), but not if it attaches to an already adjectivized stem (8) (translations are irrelevant and are omitted for space reasons).

- (7) **ROOT-N** a. bāgrem → bagrém-ik b. sòkrat → sokrát-ik c. pró:za → prozá-ik
 (8) **ROOT-A-N** a. nèsrec(a) → nèsrec-**n**-ik b. ime → ime-**n**-ik c. pró:met → pró:met-**n**-ik

These differences cannot be explained by the phonological properties of the items in (7)–(8); the difference obtains even when the number of syllables, type of accent and syllable structure (e.g., consonant clusters) are controlled for. In (7), *-ik* introduces a High tone, which spreads to the preceding syllable (see Inkelas & Zec 1988 for details). In (8), the root is spelled out once *n* is merged (per (1)), and the High tone of *n* is therefore unable to influence the stress pattern of the resulting word. This analysis accounts for the patterns we observe, but it is only feasible if we assume that BCS *a* is a (DM) phase. In the talk, I show that other (exponents of) *as* and *ns* in BCS show the same behavior as that observed in (7)–(8).

In sum, we have evidence that Chomskyan phases and DM phases should be distinguished. This is a novel conclusion which highlights the need for a more sophisticated understanding of phase theory. This finding raises further questions, in particular: How do we draw a line between domains subject to DM phasehood and those subject to Chomskyan phasehood, given the established problems with the notion of ‘words’ (e.g., Marantz 2001)?

References: Bešlin, M. 2023. Passive *vP* is not phasal in Bosnian/Croatian/Serbian. Handout, LSA. Chomsky, N. 2000. Minimalist Inquiries: The Framework. *Step by step: Essays in minimalist syntax in honor of Howard Lasnik*, 89–155. MIT press. Chomsky, N. 2001. Derivation by Phase. *Ken Hale: A Life in Language*, 1–52. MIT press. Embick, D. 2010. *Localism versus globalism in morphology and phonology*. MIT Press. Inkelas, S. & Zec, D. 1988. Serbo-Croatian pitch accent: the interaction of tone, stress, and intonation. *Language*, 64(2), 227–248. Legate, J. A. 2003. Some interface properties of the phase. *LI* 34, 506–516. Marantz, Alec. 2001. Words and things. Handout, MIT. Marantz, A. 2007. Phases and words. *Phases in the theory of grammar*, 191–222. Dong-In Publishing Co. Marvin, T. 2002. Topics in the Stress and Syntax of Words: MIT thesis. Sigurðsson, H. Á. 2002. How to Be an Oblique Subject: Russian vs. Icelandic. *NLLT* 20, 691–724.

² “Non-local” allomorphy is possible in the language, so long as the intervening head is non-phasal; see Bešlin 2023.

³ The following diacritic marking is used in the examples: [ˈ] = rising accent; [ˋ] = falling accent; [:] = length.