On the shortening of the first components of compounds in Standard Serbian Stanimir Rakić (Beograd)
Standard Serbian (SS) is a pitch-accent language characterized by four different accents: short-falling (rïba 'fish'), long-falling (grà:d 'town'), short-rising (sélo 'village') and long-rising (glá:va 'head').Falling accents can occur only on the word initial syllables, while rising accents are traditionally assumed to occur on any syllable of the word except the last one. Rakić (1991) has however proposed a general rule according to which the rising accent may fall on the penult if the final syllable is heavy; if the final syllable and the penult are light, the antepenult is preferred in trisyllabic words, but in bisyllabic words the penult is accented. In some lexically marked case last syllables or segments can be extrametrical.

It is well-known that in a trochaic system trochaic shortening can shorten the foot $(\mathrm{HL})_{\mathrm{F}}$ into the optimal foot (LL) $)_{\mathrm{F}}$ (Prince 1990). In English, the vowel length of the first components of English compounds cannot be shortened by trochaic shortening because the principle of strict cyclicity bans the alternation of lexical units if the condition of 'derived environment' is not satisfied (Rakić 2015). In Serbian and Croatian grammars is usually distinguished between the 'proper' compounds which bear just one accent and are classified as phonological words and the so-called 'semi-compounds', which do not fulfill this condition because each component in these word-constructions keeps its own accent as in the examples štih-prò:ba 'spot check', gò:lrá:zlika 'goal difference', prà:h-šéčer 'powdered sugar'. In these examples there is no linking vowel which would make the previous syllable open, and trochaic shortening is impossible. In SS, if the compounds make prosodic words and have a linking vowel, trochaic shortening often can apply as in (1):
(1) $k \grave{r}: v$ 'blood' +o 'linking vowel' $+t o ̀: k$ 'flow' $\rightarrow k r ̀ v o t o ̄ k ~ ' b l o o d s t r e a m ' ~$
vì: $d$ 'sight' $+o$ 'linking vowel' $+k r u ̀: g$ 'circle' $\rightarrow$ vìdokrūg 'field of vision'
In (1), the linking vowel forms a foot with the first components to which trochaic shortening can apply as in (vì:do) $)_{\mathrm{F}}(\mathrm{krù}: \mathrm{g}) \rightarrow$ vìdokrūg. The linking vowel $o$ crucially provides a required 'derived environment' for trochaic shortening.

The shortening of the first components which as independent words have a rising accent involves the change of tone which so far has not been satisfactorily explained. Comparing the accent of the first compound components with its independent forms, we notice that the longrising accent of the independent forms is shortened into the short-falling one in compounds (2):
(2a) zî:m(a) 'winter'+o+li:st 'leaf' $\rightarrow$ zìmolīst 'a woody perennial plant'
rú: $k(a)$ 'hand'' $+o+p \grave{i}: s$ 'the stem of the verb pî:sati 'to write' $\rightarrow$ rùkopis 'handwriting'
vód(a) 'water'+o + pà:d 'fall' $\rightarrow$ vòdopād 'waterfall'
In (2) two-syllabic first components are replaced with one-syllabic stems zì:m, rù:k and vòd bearing a falling accent plus a linking vowel, and then only in (2a) trochaic shorting applies. Inkelas \& Zec (1987) tried to account for the change of tone in (2b) by proposing that there is a special rule which cancels the tone of the first compound components. They did not specify to which type of compounds this rule applies, so any supporting evidence for this proceeding is missing. They simply assume that there is a special rule - 'Initial High' which on the first syllable of the compounds without tone inserts a short-falling accent.

The rising accents in SS are generally considered to extend over the stressed syllable and the post-stressed one, while falling accents extend just over the stressed syllable. This means that the falling accent on the one-syllabic stems of the compound's first components in (2)
corresponds to the rising accent of the two-syllabic independent words. Therefore, the following replacement in (2) are made: zî:ma-zì:m, rú: $k a$ - rù: $k$, vóda-vòd. It is well-known from tone languages that tone can spread to the left or to the right to neighboring syllables. In Serbian and Croatian grammars is usually mentioned that falling accents can spread to the right for one syllable. We can now note a complementary alternation of tone shrinking which is obvious in in many examples of back-formation as in (3):
(3) dú:žit i'to make longer' - dù:ž, f. 'a segment of a straight line', glá:siti 'to pronounce' glà:s m. 'voice', hó:dati'to walk' - hò:d m. 'walk', rá:diti 'to work' - rà:d m. 'work'.
The rising accents on polysyllabic stems are replaced with falling accents on monosyllabic stems. The same alternation also happens if the ending -a of the nom.sg. of the feminine nouns is replaced with neutral suffixes as, for example, in kú:la'tower' - kù:lskl adj. 'of the tower', zî:ma 'winter' - zì:mnjı adj. 'of the winter' (Rakić 1991). Neutral suffixes do not allow the spreading of tone, it must shrink, and become falling. This shrinking accounts for the change of tone in (2). The segment pì:s in (2a) is also derived from pî:sati 'to write' by backformation.

The presence of the linking vowel is crucial for trochaic shortening in (1) and (2). There is however a small set of compounds which occur without a linking vowel and belong to the socalled 'proper' compounds because they have just one accent, i.e. form prosodic words. These compounds are usually very short with second components having maximally two-syllables as in (4):
(4) blágdan (lit. blà:g 'gentle’ + dà:n 'day’) 'holiday’,
čuvárkuća (lit. čúva:r 'watchman' + kùća 'house') 'janitor',
generálštab (lit. genéra:l'general' + štàb 'headquaters') 'general staff',
krémpita (lit. krè:m 'cream' + pìta 'pie') 'custard-slice'.
In (4), the shortening of the length of the first components applies although no linking vowel is present. The compounds in (4) make up a prosodic word and have a rising tone falling on the penult or antepenult syllable of a whole compound. The shortening may follows from the general rule that the rising accent on the closed syllable must be a short one (Rakic 2008). This is however the hypothesis which should be further examined in this paper. The only exception to this rule are some sporadic cases in which the accent falls on a syllable closed by a sonorant (e.g. bé:rba 'vintage', vó:jska 'army', tó:rba 'bag', br':vno‘log', gá:jtan 'braid', péršun'parsley'). Alternatively, the shortening can be also acounted by some generalization of the rule provisionally noted by Rakić (1996) in the following form:

The length of the last syllable of the stem is shortened before a) bisyllabic or polysyllabic suffixes or, b) closed monosyllabic suffixes which do not contain unstable $a$. These lexical rules can be generalized so to apply to any prosodic word as well as to the compounds like blágdan.

In this paper, I account for the change of tone in the compounds in (2) and I discover a particular set of compounds in which the general rule of shortening applies. The part a) of this rule has a similar form as the well-known rule of trisyllabic shortening in English phonology. The compounds (4) also effectively illustrate the application of the accent rule mentioned above.

## References

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