

Introduction

Rakić (2010) suggests that in standard Serbian there are some alternations which may be interpreted as trochaic and iambic shortenings. In this paper I examine in more detail the application of trochaic shortening in the context of compounds in Neoštokavian (NŠ). Both standard Serbian and standard Croatian, and since recently standard Bosniak are based on the Neoštokavian dialects which are spread through the central part of ex-Yugoslavia. The defining characteristics of these dialects are four different accents:

short-falling	long-falling	short-rising	long-rising
ri̇ba 'fish'	grâd 'town'	sèlo 'village'	glâva 'head'

The vowel length is marked with $\bar{\text{}}$ in this paper. The difference between these standard languages is mostly restricted to the accenting of particular lexemes, while the general principles are more or less the same (Vukušić et al. 2007: 25-26).

It is traditionally assumed that in NŠ there are two kinds of pitch accents: rising and falling, which are marked by different distributions of stress and high tone. Rising accents are assumed to spread over two syllables, while falling accents extend just over one syllable (Lehiste & Ivić 1986). According to the traditional view, rising accents in NŠ may take any position in the word except the last one, while falling accents redundantly fall on the first syllable. The analysis of the suffixal derivations and simple underived words reveals that rising accents normally fall on of the penult or antepenult syllable. Rakić (1991) proposed the following accent rule:

- (1) a. If the last syllable is heavy, the stress falls on the penult (e.g. *jèlen* 'deer', *àpri:l* 'April');
b. If the penult is heavy, the stress falls on it (e.g. *slúga* 'servant');
c. If neither a) nor b) are fulfilled, the stress falls on the antepenult (e.g. *lívada* 'meadow'), but in lexically determined cases the penult is stressed (*adrèsa* 'address').
In bisyllabic words, the penult is accented (e.g. *vòda* 'water').

The rule proposed by Rakić applies to words, mainly in the word-building, while in inflection usually with some restrictions imposed by extrametricality of some suffixes and segments or paradigmatic leveling. For example, the application of such a rule (1) to indefinite adjectives is somewhat complicated because the final light syllables in these adjectives are not extrametrical in oblique cases. Similarly, the application of rule (1) to definite adjectives is complicated by the fact that the ending of these adjectives are usually extrametrical.

Rule (1) could also be applied to verb forms, but we must take into account that the suffixes added to the verbs with monosyllabic stems usually are not extrametrical. However, there are some examples in which these suffixes are extrametrical as, for example, in the forms of verb *jesti* 'to eat' (e.g. in the present *jèdēm* 1ps, *jèdēš* 2ps, *jèdē* 3ps., *jèdēmo* 1pp, *jèdēte* 2pp, *jèdū* 3pp). In all persons here the accent must be short-falling because the suffixes are extrametrical, and the same holds for all other forms of the verb *jesti* 'to eat'. Thus the rule (1) must be checked for all forms of the verb *jèsti* which make it not very useful. Still it is true. In general, when we apply rule (1) we must be aware that extrametricality in NŠ is lexically conditioned; it may include almost a whole category as, for example, the definite adjectives, whose final syllable are extrametrical, or some particular subgroups or even individual lexical items (s. Rakić 2013 for some details).

References

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Trochaic Shortening

In an important paper Prince (1990) formulates a general principle that, in quantity sensitive metrical systems stress falls on a heavy syllable (the Weight-to-Stress Principle):

- (1) If a syllable is heavy, it is stressed. By contraposition, from (1) follows (2):
- (2) If a syllable is unstressed, it is light. Taking into account that syllables can be light (L) or heavy (H), Prince (1990) suggests the following hierarchy of feet for trochaic systems:
- (3) Iamb: (LH)_F > (LL)_F > (L)_F
Trochee: (LL)_F, (H)_F > (HL)_F > (L)_F

Hierarchy (3) implies that the optimal iambic foot is (LH)_F, and the optimal trochaic feet are (LL)_F and (H)_F. The optimal trochaic feet are therefore binary because they contain two syllables or two moras. In iambic systems, the stressed syllable in the foot (LL)_F may be lengthened in order to achieve the optimal iambic foot (LH)_F, while in trochaic systems the complementary process of shortening stressed syllables in the foot (HL)_F creates an optimal trochaic foot (LL)_F.

In Middle English trochaic shortening was a productive process, but in Modern English trochaic shortening is lexicalized. Now we have some remains of this process in the example *sane* /seɪn/ - *saniti* /senɪti/, *omen* /əʊmən/ - *ominous* /əˈmɪnəs/. Here is important that Trochaic Shortening applies before the cyclic suffixes which begin with a vowel, so that the second syllables in the feet /sé:ni/_F and /a.mi/ remain open. In English the antepenultima is shortened because the final syllable is extrametrical. Before the second order suffixes (neutral suffixes) *-age*, *-ship*, *-ness* there is no shortening in the derivations *parsonage* /ˈpɑ:sənɪdʒ/, *dealership* /ˈdi:ləʃɪp/, *laziness* /ˈleɪzɪnɪs/. These examples show that Trochaic Shortening is lexicalized in Modern English.

In Fijian (Austronesian language of the Central Pacific) Trochaic Shortening is productive as can be seen from the examples (4):

- (4) mbú: ‘grandmother’ – mbu+ŋgu ‘my grandmother’.
nré: ‘to pull’ - nré+ta ‘to pull’ trans.
ta: ‘to shop’ - ta+y-a ‘to chop’ trans.

In Fijian the penultima is shortened because the final syllable is not extrametrical.

In Fijian the Trochaic Shortening has the form V: → V/_CV#, so that no stems in Fijian end in CV:CV (Hayes 1995: 145).

Similar shortenings of antepenultimate syllables are also found in Nš (e.g. *sôm* ‘sheatfish’ - *sòmina* aug. and pejor., *crép* ‘brick’ < *crèpara* ‘brick plant’) because of the extrametricality of final light syllables. In Nš Trochaic Shortening is also lexicalized. It regularly applies in the comparative forms of adjectives as for example in (5).

- (5) *mlâd* ‘young’ > *mlăđî* ‘younger’, *ljût* ‘hot’ – *ljućî* ‘hotter’, *slân* ‘salty’ – *slănijî* ‘more salty’.

Here we see that C \bar{v} in Nš counts as light. In poster I describe in detail how the length of the first compound components are shortened both by Trochaic Shortening and Trisyllabic Shortening.

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How in Neoštokavian the vowel quantity of the first compound components in can be shortened

Stanimir Rakić (Beograd)

Neoštokavian (NŠ) is a common name for the Standard Serbian, Standard Croatian, and since recently Standard Bosniak. The prosody of these standard languages is almost the same. All these languages are a pitch-accent language characterized by four different accents: short-falling (*rība* 'fish'), long-falling (*grād* 'town'), short-rising (*sèlo* '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. The accent assigned to the antepenult is usually short-rising, not long-rising. This accent rule applies in tandem with the shortening rule mentioned below.

It is well-known that in a trochaic system Trochaic Shortening can shorten the foot (HL)_F into the optimal foot (LL)_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 prosodic 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 *štīh-próba* 'spot check', *gól-rázlika* 'goal difference', *prāh-šěčer* 'powdered sugar'. In these examples there is no linking vowel which would make the previous syllable open, and Trochaic Shortening is impossible. In NS, if the compounds make prosodic words and have a linking vowel, Trochaic Shortening often can apply as in (1):

- (1) *křv* 'blood' + *o* 'linking vowel' + *tōk* 'flow' → *křvotōk* 'bloodstream',
vīd 'sight' + *o* 'linking vowel' + *krūg* 'circle' → *vīdokrūg* 'field of vision'

In (1), the linking vowel forms a foot with the first components to which Trochaic Shortening can apply as in (vīdo)_F(krūg) → vīdokrūg. The linking vowel *o* crucially provides a required 'derived environment' for Trochaic Shortening.

The shortening of the first components of compounds 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 long-rising accent of the independent forms is shortened into the short-falling one in compounds (2):

- (2a) *zīm(a)* 'winter' + *o* + *līst* 'leaf' → *zīmōlīst* 'a woody perennial plant'
rūk(a) 'hand' + *o* + *pīs* 'the stem of the verb *pīsati* 'to write' → *rūkopīs* 'handwriting'
- (2b) *vòd(a)* 'water' + *o* + *pād* 'fall' → *vòdopād* 'waterfall'

In (2) two-syllabic first components are replaced with one-syllabic stems *zīm*, *rūk* and *vòd* bearing a falling accents plus a linking vowel, and then only in (2a) Trochaic Shortening 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 scenario has not been given. They simply assume that there is a special rule – 'Initial High' which on the first component without tone inserts a short-falling accent (̂).

The rising accents in NŠ 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: *zīma* - *zīm*, *rūka* - *rūk*, *vòda* - *vòd*. It is well-known from tone languages that tone can spread to the left or to the right of original syllable. In Serbian and Croatian grammars is usually mentioned that falling accents can spread to the left for one syllable. We can now note a complementary direction of tone spreading which occurs in many examples of back-formation as in (3):

(3) *dúžiti i* 'to make longer' – *dūž*, f. 'a segment of a straight line', *glásiti* 'to pronounce' – *glâs* m. 'voice', *hódati* 'to walk' – *hòd* m. 'walk', *ráditi* 'to work' – *râd* m. 'work'.

The rising accents on bisyllabic 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 *kūla* 'tower' - *kūlskī* adj. 'of the tower', *zīma* 'winter' - *zīmnjī* adj. 'of the winter' (Rakić 1991). Neutral suffixes do not allow the spreading of tone, it must shrink, and become falling. This shrinking of tone accounts for the change of tone in (2). The segment *pīs* in (2a) is also derived from *pīsati* '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 so called '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) *blàgdan* (< lit. *blâg* 'gentle' + *dân* 'day') 'holiday',
čuvârkuća (lit. *čùvār* 'watchman' + *kùća* 'house') 'janitor',
generàlštáb (lit. *genèrāl* 'general' + *štáb* 'headquarters') 'general staff',
krèmpita (lit. *krêm* 'cream' + *pīta* '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 follow from the general rule that the rising accent on the closed syllable must be a short one (Rakić 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. *bérba* ‘vintage’, *vóska* ‘army’, *tórba* ‘bag’, *brvno* ‘log’, *gájtán* ‘braid’, *péršun* ‘parsley’).

Alternatively, the shortening can be also accounted by some generalization of the rule provisionally noted by Rakić (1996) in the following form:

- (5) 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 *blâgdan*.

In this paper, I explain under which conditions the shortening of the length of the first compounds components and also account for the change of tone in the compounds (2). I discover the particular set of short compounds in which shortening general rule (5) 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. Now it is clear why the semi-compounds cannot shorten the length of their first component - they do not have linking vowels which provide for ‘derived environment’. The same reason also shows that Klajn (2003)’s claim that the proper compounds tend to have bisyllabic first components is true.

References

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