

On Some Recent Changes in Bulgarian Conjugation¹

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The present paper focuses on two topics that, evidently, have not been treated in recent literature on Bulgarian verb morphology (except in Manova 2006):

1) Since publication of the Bulgarian Academy Grammar (henceforth BAG) in 1983, some verbs have changed their conjugation, i.e. verbs originally belonging to the *e*-CONJ³ have moved to the *i*-CONJ, e.g. *mămrja* '(I) murmur', *mămreš*, etc. according to the BAG, but *mămrja*, *mămriš* now (cf. the New Spelling Dictionary of Bulgarian, henceforth NSDB, published in 2002); and

2) Since 1983, there has been a clear tendency toward preservation of the stress pattern of the present in the aorist, i.e. PRES *píša*, *píšeš* etc. and AOR *písax*, *písa*, etc. rather than *pisáx*, *pisá* etc, with an end-stress (cf. BAG and NSDB).

This paper examines the implications of the two changes above for the organization of Bulgarian verb inflection. I contend that these changes are evidence for root-based phonological organization of Bulgarian verb inflection, i.e. the paper contradicts the classical stem-based classification of Bulgarian (and Slavic) verbs.

The paper is structured as follows: section 1 establishes the number and phonological properties of the verbs with altered conjugations; section 2 treats the stress patterns of the present-day paradigm of Bulgarian verbs; section 3 discusses the implications of the changes accounted for in the previous two sections and subsequently defines a system of inflection class assignment rules; and in section 4 conclusions are drawn.

1. Verbs in transition: from *e*- to *i*-conjugation

In Bulgarian, the citation form of a verb can terminate in *-a*, *-ja* or *-m*. Generally, verbs ending in *-a* belong to CONJ I (*e*-verbs), verbs ending in *-ja* to CONJ II (*i*-verbs), and verbs ending in *-m*, with very few exceptions (e.g. *znam* '(I) know', *znaeš*; *dam* '(I) give', *dadeš*), belong to CONJ III (*(j)am*-verbs), cf. Table 1 below. While the conjugation assignment rule for *(j)am*-verbs has nearly no exceptions, the same cannot be said for the rules for *e*- and *i*-verbs. A few *-ja* verbs follow the *e*-pattern, instead of the expected *i*-pattern, and verbs terminating in *-ža/ -ča/ -ša* can be found in both CONJ I and CONJ II.

According to the BAG, 23 verbs terminating in *-Cja* belong to CONJ I (subclass 3 in BAG (Bg. *razred* 3)) with aorist inflection *-ax*, cf. the class of *pijna* (CONJ I, class 2 in Table 1 below). Examination of the current present pattern of those verbs, however, reveals that 13 of them have moved to CONJ II: *bă'blja* '(I) bable', *bă'brja* '(I) chatter', *dă'drja* '(I) jabber', *zóbja* '(I) feed', *kă'krja* '(I) simmer', *mă'mlja* '(I) mutter', *mă'mrja* '(I) scold', *pă'plja* '(I) creep', *trep'erja* '(I) tremble', *tă'trja* '(I) drag', *fă'flja* '(I) lisp', *xă'xrja* '(I) wheeze', and *că'crja* '(I) trickle'. Note that all these verbs terminate in *-ja* and are stressed on the penultimate syllable, i.e. their citation forms exhibit exactly the same phonological characteristics as those of CONJ II, class 3 (i.e. the class of *míslja*) in Table 1 below. Thus according to the BAG, PRES *bă'brja* '(I) chatter', *bă'breš* / AOR *bă'brax* and PRES *trep'erja*

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³ Abbreviations: AOR – aorist, BAG – Bulgarian Academy Grammar, Bg. – Bulgarian, C – consonant, CONJ – conjugation, PRES – present, IMP – imperfect, IMPER – imperative, IND – indicative, NSDB – New Spelling Dictionary of Bulgarian, PL – plural, SG – singular, TM – thematic marker, V – vowel.

‘(I) tremble’, *trepéřeř* / AOR *trepéřax*, but PRES *bă’brja*, *bă’briř* / AOR *bă’brix* and PRES *trepéřja*, *trepéřiř* / AOR *trepéřix*, according to NSDB (cf. the *mislja* aorist pattern in Table 1).

Somewhat related to the above case of the 23 verbs in *-ja* are verbs such as *glóždja* ‘(I) gnaw, pick’ (subclass 4, CONJ I in BAG). Originally from the first conjugation, such verbs have developed alternative forms with a semantic split (a fact noted in BAG and other sources on Bulgarian verb morphology). Consider:

- (1) Old pattern: *glóždja* ‘(I) gnaw, pick’, *glóždeř* / AOR *glóžgax* (cf. CONJ I, class 2, Table 1)
 Current patterns: *glóždja* ‘(I) pick’, *glóždiř* / AOR *glóždix* (cf. CONJ II, class 3)
glóžgam ‘(I) gnaw’, *glóžgař* / AOR *glóžgax* (cf. CONJ III)

As already mentioned, a problem for the above formulated *-a* / *-ja* conjugation assignment rule are verbs terminating in *-žal* / *-čal* / *-řal*. Since in Bulgarian **žja* / **čja* / **řja* are impossible for phonological reasons, *-žal* / *-čal* / *-řal* verbs occur in both the *e*- and the *i*-conjugations. The CONJ I *-žal* / *-čal* / *-řal* verbs, however differ from those in CONJ II morphologically, namely CONJ I *-žal* / *-čal* / *-řal* verbs depalatalize in the aorist, whereas CONJ II *-žal* / *-čal* / *-řal* verbs preserve *ž*/*č*/*ř* in their aorist forms, as demonstrated in the next examples:

- (2) CONJ I: PRES *káža* ‘(I) say’, *kažeř* / AOR *kázax* / IMP *kážex* / IMPER *kaží*
 CONJ II: PRES *ležá* ‘(I) lie’ / AOR *ležáx* / IMP *ležáx* / IMPER *leží*

The following 27 verbs (26 in BAG), terminating in *-žal* / *-čal* / *-řal* depalatalize in the aorist, i.e. are CONJ I verbs:

- (3) *ž* : *z*: *blíža* ‘(I) lick’, *vă’rža* ‘(I) tie’, *káža* ‘(I) say’, *líža* ‘(I) lick’, *máža* ‘(I) spread (on)’, *níža* ‘(I) string’, *réža* ‘(I) cut’, *xariža* ‘(I) give away’,
ž : *g*: *lă’ža* ‘(I) lie’, *striža* ‘(I) cut’, *stă’rža* ‘(I) scrape’
č : *k*: *báuča* ‘(I) bark’, *dă’vča* ‘(I) chew’, *mjáuča* ‘(I) mew’, *pláča* ‘(I) cry’, *smúča* ‘(I) suck’, *súča* ‘(I) spin; suck’, *tă’pča* ‘(I) tread on; stuff’
ř : *s*: *brířa* ‘(I) wipe’, *bă’rřa* ‘(I) wipe’, *mířiřa* ‘(I) smell’, *o-pářa* ‘(I) gird (on)’, *pířa* ‘(I) write’, *réřa* ‘(I) comb’, *ujdířa* ‘(I) fit (in)’, *ujdurdířa* ‘(I) fabricate’, *čéřa* ‘(I) scratch’

The rest of the *-ža*, *-ča*, *-řa* verbs belong to CONJ II. A handful of all *-ža*, *-ča*, *-řa* verbs, however, manifest in both CONJ I and CONJ II:

- (4) CONJ I: *reřa* ‘(I) comb’, *reřeř* / AOR *résax* / IMP *reřex* / IMPER *reři*
 CONJ II: *reřa* ‘(I) comb’, *reřiř* / AOR *reřiix* / IMP *reřex* / IMPER *reři*

NSDB lists both patterns of *reřa* as existing in the current Bulgarian. Actually, examples such as those in (4) demonstrate that the ongoing nature of the transition under scrutiny in this paper.

2. On the role of the stress in Bulgarian verb inflection

We argue that in contemporary Bulgarian there is a clear tendency for preservation of the stress pattern of the present tense in the aorist, except in the class with *-ox* aorist (CONJ I, class 1, cf. Table 1). The tendency for preservation of the stress pattern affects all three conjugations. Consider:

- (5) CONJ I: PRES *să'xna* '(I) dry', *să'xneš*, *să'xne*
 CONJ II: PRES *rabótja* '(I) work', *rabótiš*, *rabóti*
 CONJ III: PRES *risúvam* '(I) paint', *risúvaš*, *risúva*

and the respective AOR forms:

- (6) CONJ I: AOR *să'nax*, *să'xna*, *să'xna*
 CONJ II: AOR *rabótix*, *rabóti*, *rabóti*
 CONJ III: AOR *risúvax*, *risúva*, *risúva*

rather than:

- (7) CONJ I: *să'xna*-3SG PRES and *săxná*-2&3SG AOR
 CONJ II: *rabóti*-3SG PRES and *rabóti*-2&3SG AOR
 CONJ III: *risúva*-3SG PRES and *risúva*-2&3SG AOR

Cf. the forms of these verbs in NSDB.

In other words, one of the often-cited, very detailed classifications of Bulgarian verbs, that in Maslov (1982: 220ff), recognizing 10 stress patterns (5 in CONJ I, 3 in CONJ II, and 2 in CONJ III) with 21 subtypes and depending entirely on the stress changes through the paradigm, is now out of date.

It should be mentioned that in contemporary Bulgarian, forms with end stress in the aorist appear stylistically marked as either archaic or dialectal. Actually, the only stress change still of importance to the paradigm of Bulgarian verbs is that in the imperative: verbs with roots terminating in a *-C* receive stressed inflection (2 SG *-í* / 2 PL *-éte*), i.e. regardless of the stress pattern of their citation forms, such verbs always have imperative forms stressed on the inflection (see Table 1, CONJ I and CONJ II).

Note that the stress pattern of the present tense (citation) form of a verb determines the TM of the imperfect tense, since the imperfect TM is *-ja*, i.e. if the inflection of the citation form of a verb is stressed, this verb has *-ja* TM in the imperfect and, if the root is stressed, *-ja* alternates with *-e* (cf. the imperfect forms in Table 1 below).

3. Discussion: the inflection class assignment rules of Bulgarian verbs

Thus far, we have demonstrated that since publication of the BAG, two significant changes have taken place in the inflection system of Bulgarian verbs: 1) 13 out of 23 CONJ I verbs (class 2) terminating in the-unusual-for-this-conjugation *-ja* have moved to CONJ II (class 3), where *-ja* is the typical inflection of the verb citation form; and 2) there is a clear tendency for preservation of the stress pattern of the present in the aorist (except in the class with *-ox* aorist). These changes/tendencies evidence a single base classification of Bulgarian verb inflection, i.e. an analysis based on the present tense root (cf. Stump 2001) rather than one which assumes (i.e. lists) two bases, present stem and aorist stem⁴ (each with a stress pattern of its own). The latter option is actually the classical description of Bulgarian (and Slavic) verbs. A root-based inflection class⁵ assignment, as offered here, differs from conventional (morphological) assignment criteria in that it is entirely phonological. Consider: 1) termination of the citation form, whether *-a*, *-ja* or *-m*; 2) termination of the root (= the form that remains when the inflection *-a/-ja/-m* is removed), i.e. whether *-C* or *-V*, and if *V* whether *-o* (cf. CONJ I, class 3 and class 4 and CONJ II, class 2 in Table 1); and 3) the stress pattern

⁴ Some authors, e.g. Pašov (1976: 49ff), speak even for three stems – present, aorist and imperfect.

⁵ We define inflection class with Aronoff (1994: 64) as “a set of lexemes whose members each select the same set of inflectional realizations”.

of the citation form, i.e. whether on the root or on the final syllable (cf. CONJ I, class 1 vs. class 2 and CONJ II class 1 vs. class 3 in Table 1). Thus, 1 SG PRES IND, i.e. the citation form of the Bulgarian verb, serves as input for inflection class assignment, but the generation of the verb forms is root-based. (Note that citation forms are the only ones in the paradigm of Bulgarian verbs that can distinguish between the three conjugations, cf. Table 1 below). The precise procedure includes the following steps:

1) According to the termination of their 1st singular present indicative forms, we distribute Bulgarian verbs into three groups, corresponding to the three traditional conjugations, i.e. taking into consideration that *-a*, *-ja* and *-m* are all possible inflection suffixes of citation forms, we automatically assign verbs terminating in *-a* to CONJ I (i.e. TM *-e* in the present), verbs terminating in *-ja* to CONJ II (i.e. TM *-i* in the present), and verbs in *-m* to CONJ III (without a TM in the whole paradigm), see Table 1 below. These rules hold almost without exception for CONJ III verbs but have some exceptions with CONJ I & II verbs, the most important being:

- 1.1) that *-Vja* is a typical termination for a CONJ I verb,⁶ unless the vowel is *-o-*. Verbs terminating in *-oja* belong to CONJ II; and
- 1.2) that *-ža*, *-ča*, *-ša* verbs behave in an exceptional manner and should be listed, but stressed *-žá*, *-čá*, *-šá* occur only in CONJ II. (Recall that in Bulgarian **žja*, **čja*, **šja* are impossible);

2) Of importance to the further classification of the verbs are the forms that remain after deletion of the three inflection suffixes *-a*, *-ja* and *-m*. In other words, CONJ III constitutes an inflection class of its own, as the base left over after deletion of *-m* remains unchanged (i.e. no thematic material is added) in all verb forms. Conjugations I and II, however, are subdivided further into inflection classes, and every verb “detects” its inflection class depending on:

- 2.1) whether its root terminates in a *-V* or in a *-C*;
- 2.2) whether the verb root is stressed or not⁷ (cf. classes 1 and 2 in CONJ I and classes 1 and 3 in CONJ II), the stress pattern being preserved in the whole tense paradigm (except in CONJ I, class 1) and determining the imperfect forms; and
- 2.3) how many syllables the verb root has (cf. classes 3 and 4 in CONJ I).

The following facts support the correctness of the system of inflection class assignment rules offered here: some of the forms in the paradigm of Bulgarian verbs lack TMs, which favors root-based analysis; our analysis successfully accounts for the recent changes taken place in the paradigm of Bulgarian verbs; and finally, there is the evidence of a phonologically governed inflection class system, with the eight inflection classes suggested herein (cf. Table 1), generally matching the traditional stem-based systems available in the literature (Pašov 1966 with 10 classes; Andrejčin 1978 with 11 classes; and the BAG with 12 classes)⁸, in particular that of Maslov (1982: 220ff) with 7 main classes.

4. Conclusion

The present paper accounts for two recent changes in the conjugation of Bulgarian verbs: 1) the shift of verbs terminating in *-Cja* from CONJ I to CONJ II, and 2) the tendency for the preservation of the stress pattern of the present tense in the aorist in the whole tense paradigm, except in the *-Cá* class (with *ox*-aorist, i.e. CONJ I, class 1 in Table 1). Also, the implications

⁶ In Bulgarian verbal morphology, *-Va* is always realized as *-Vja*. (In word-final position, *-a* combines with another vowel only in loans (nouns); and of all combinations, only *-oa*, as in *buržoa*, and *-ua*, as in *Padua* are possible, cf. Tilkov & Bojadžiev 1990).

⁷ Homographic citation forms evidence the importance of stress placement as assignment criterion. Consider: *vă'rvja*, *vă'rviš* ‘(to) string’ / *vă'rvix-* AOR/ *vă'rvex-*IMP/ *vărví-*IMPER and *vărvjá*, *vărvíš* ‘(to) walk’/ *vărvjác-*AOR/ *vărvjác-*IMP/ *vărví-*IMPER.

⁸ The different number of classes is because of the different treatment of exceptions.

of these changes for the verb paradigm have been discussed, and, consequently, root-based phonological inflection class assignment rules for Bulgarian verb morphology have been proposed. I assign a default status to the verb root but start with the citation form of the verb. Since the citation form consists of a ROOT and an inflection suffix, the verb root is extracted after removal of the inflection, the latter being *-a*, *-ja* or *-m*. The main assignment criteria are termination of the citation form (+/- C), termination of the verb root (+/-C), stress placement and number of syllables of the citation form. The analysis straightforwardly captures the two recent changes in the paradigm of Bulgarian verbs discussed, and the postulated inflection class system conforms to traditional stem-based descriptions.

Finally, the postulation of a system of phonological inflection class assignment rules for verbs leads to unification of the inflection class assignment rules in Bulgarian. In other words, based on the phonology of the citation forms of nouns, adjectives (it is well-known that the inflection of Bulgarian nouns and adjectives is largely phonologically governed, cf. Manova & Dressler 2001; Manova 2003) and verbs, one can predict all their inflection forms.

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Table 1: Bulgarian verb inflection

Conjugation	I conjugation				II conjugation			III conjugation
PRESENT	1.	2.	3.	4.	1.	2.	3.	1.
1SG	<i>četa</i> '(I) read'	<i>píjna</i> '(I) drink- SEMELF'	<i>igrája</i> '(I) play'	<i>lája</i> '(I) bark'	<i>visjá</i> '(I) hang'	<i>strojá</i> '(I) build'	<i>míslja</i> '(I) think'	<i>organizíram</i> '(I) organize'
2SG	<i>četěš</i>	<i>píjnes</i>	<i>igráeš</i>	<i>láeš</i>	<i>visíš</i>	<i>stroíš</i>	<i>míslíš</i>	<i>organizíraš</i>
3SG	<i>četé</i>	<i>píjne</i>	<i>igráe</i>	<i>láe</i>	<i>visí</i>	<i>stroí</i>	<i>míslí</i>	<i>organizíra</i>
1PI	<i>četém</i>	<i>píjnem</i>	<i>igráem</i>	<i>láem</i>	<i>visím</i>	<i>stroím</i>	<i>míslím</i>	<i>organizírame</i>
2PL	<i>četéte</i>	<i>píjnete</i>	<i>igráete</i>	<i>láete</i>	<i>visíte</i>	<i>stroíte</i>	<i>míslíte</i>	<i>organizírate</i>
3PL	<i>četát</i>	<i>píjnat</i>	<i>igrájat</i>	<i>lájat</i>	<i>visját</i>	<i>stroját</i>	<i>mísljat</i>	<i>organizírat</i>
AORIST								
1SG	<i>čétax</i>	<i>píjnax</i>	<i>igráx</i>	<i>lájax</i>	<i>visjájx</i>	<i>stroíx</i>	<i>míslíx</i>	<i>organizírax</i>
2SG	<i>čete</i>	<i>píjna</i>	<i>igrá</i>	<i>lája</i>	<i>visjá</i>	<i>stroí</i>	<i>míslí</i>	<i>organizíra</i>
3SG	<i>čete</i>	<i>píjna</i>	<i>igrá</i>	<i>lája</i>	<i>visjá</i>	<i>stroí</i>	<i>míslí</i>	<i>organizíra</i>
1PL	<i>čétaxme</i>	<i>píjnaxme</i>	<i>igráxme</i>	<i>lájaxme</i>	<i>visjájxme</i>	<i>stroíxme</i>	<i>míslíxme</i>	<i>organizíraxme</i>
2PL	<i>čétaxte</i>	<i>píjnexte</i>	<i>igráxte</i>	<i>lájaxte</i>	<i>visjájxte</i>	<i>stroíxte</i>	<i>míslíxte</i>	<i>organizíraxte</i>
3PL	<i>čétaxa</i>	<i>píjnaxa</i>	<i>igráxa</i>	<i>lájaxa</i>	<i>visjájaxa</i>	<i>stroíxa</i>	<i>míslíxa</i>	<i>organizíraxa</i>
IMPERFECT								
1SG	<i>četjájx</i>	<i>píjnex</i>	<i>igráex</i>	<i>láex</i>	<i>visjájx</i>	<i>strojájx</i>	<i>mísléx</i>	<i>organizírax</i>
2SG	<i>četěše</i>	<i>píjneše</i>	<i>igráeše</i>	<i>láeše</i>	<i>visěše</i>	<i>stroěše</i>	<i>míslěše</i>	<i>organizíraše</i>
3SG	<i>četěše</i>	<i>píjneše</i>	<i>igráeše</i>	<i>láeše</i>	<i>visěše</i>	<i>stroěše</i>	<i>míslěše</i>	<i>organizíraše</i>
1PL	<i>četjájxme</i>	<i>píjnexme</i>	<i>igráexme</i>	<i>láexme</i>	<i>visjájxme</i>	<i>strojájxme</i>	<i>mísléxme</i>	<i>organizíraxme</i>
2PI	<i>četjájxte</i>	<i>píjnexte</i>	<i>igráexte</i>	<i>láexte</i>	<i>visjájxte</i>	<i>strojájxte</i>	<i>mísléxte</i>	<i>organizíraxte</i>
3PI	<i>četjájaxa</i>	<i>píjnexa</i>	<i>igráexa</i>	<i>láexa</i>	<i>visjájaxa</i>	<i>strojájaxa</i>	<i>mísléxa</i>	<i>organizíraxa</i>
IMPERATIVE								
SG	<i>četí</i>	<i>píjní</i>	<i>igráj</i>	<i>láj</i>	<i>visí</i>	<i>strój</i>	<i>míslí</i>	<i>organizíraj</i>
PL	<i>četéte</i>	<i>píjnéte</i>	<i>igrájte</i>	<i>lájte</i>	<i>viséte</i>	<i>strójte</i>	<i>míslíte</i>	<i>organizírajte</i>

Shades and frames indicate coinciding patterns.