

Historical development of Slavic inflectional accent

Matthew Baerman, University of Surrey

(To appear 2014 in P. Kosta, K. Gutschmidt, S. Kempgen and T. Berger (eds) *Slavic Languages (Handbooks of Linguistics and Communication Science)*, pp.1590-1596. Berlin: Mouton de Gruyter.)

1. Introduction

The Slavic languages display a system of inflectional stress alternations of particular complexity, whose relationship to what is found in other Indo European languages, and Baltic in particular, remains a matter of intense debate. Two facts are clear: (i) Proto Indo European had some system of lexically and paradigmatically determined stress placement, and (ii) there was a period (or periods) in between Proto Indo European and late Common Slavic when stress placement was influenced by other prosodic properties, such as syllable length and pitch (roughly speaking, length attracted stress). A review of recent controversies can be found in Lehfeldt (2001) and Olander (2009). Below we will concentrate on developments that can be confidently traced from late Common Slavic to the attested daughter languages. The account in §2 is based largely on the (often conflicting) accounts of Stang (1957), Dybo (1981), Stankiewicz (1993) and Kortlandt (1975).

2. Common Slavic

Following Stang (1957) inflected words in Common Slavic can be divided into three accentual classes, labelled 'a', 'b' and 'c'. The a-class had stress fixed to some stem syllable, and did not undergo stress alternations. C-class stems, on the other hand, were by definition alternating. Dybo (1981) interprets this as the result of the interplay between the accentual properties of stems and affixes. C-class stems were underlyingly unaccented. By default, stress was assigned to the initial syllable of the phonological word, including any proclitics, and realized as circumflex accent (e.g. nominative singular *lěn-ost-b* 'laziness'). However, if the word form contained an underlyingly accented affix or clitic, this received stress (instrumental singular *lěn-ost-b-jǫ*, where the case ending was underlyingly accented). The b-class occupied an intermediate position. Originally it had stress fixed to the first syllable following the root (typically an inflectional ending or theme vowel). However, by late Common Slavic, stress had retracted in some parts of the paradigm (where it is realized as neacute accent), resulting in a limited set of paradigmatic stress alternations. Below we outline some of the major stress alternations associated with the c- and b-class.

2.1 Nouns

In the c-class, end stress associated with underlyingly accented endings was found in: (i) all singular cases of the a-stems except for the accusative, and possibly the dative (nominative *golvǎ* 'head', genitive *golvŭ* versus accusative *golvǫ*, dative *golvě*); (ii) the locative singular of i- and u-stems (dative *kǫsti* 'bone', *sŭnovi* 'son' versus locative *kostŭi*, *synŭi*); (iii) the instrumental singular of i-stems (*kostbjǫ*); (iv) the oblique plural cases of all stem classes (nominative *golvŭy*, *kǫsti* versus locative *golvǎxъ*, *kostŭxъ*); and (v) the neuter nominative/accusative plural -a (nominative/accusative singular *pǫlje* 'field', plural *poljǎ*). In

languages which developed an enclitic definite article (Bulgarian and Macedonian, and similarly in northern Russian dialects), stress fell on the article (indefinite *męso* ‘meat’, definite *męso-tò*).

In the b-class stress was retracted from the ending in: (i) the locative and instrumental plural of (some?) o-stems (nominative/accusative *gnęzda* ‘nest’, locative *gnęzděxъ*); and (ii) all the plural cases of some neuter o-stems (nominative/accusative singular *selò* ‘village’, plural *sela*), possibly the result of an analogical extension of the previous retraction, which coincided with the phonologically regular retraction of stress from the weak jer of the genitive plural ending.

2.2 Adjectives

In the c-class, indefinite adjectives behaved like the corresponding noun classes (o- and a-stem). Definite adjectives are assumed originally to have had stress on the pronominal element (nominative/accusative neuter singular indefinite *mòldo* ‘young’, definite **moldo-je*). However, all comparative evidence points to stress on the preceding syllable (*moldò-je*). C-class comparatives in -ě- have stress on the on this element, while those in -j-, have stem stress realized as an *acute* accent (*mólž-je*). In the b-class, stress retracted from ending to the root syllable in the definite forms (indefinite *belò* ‘white’, definite *bělo-je*), as well as in the comparative.

2.3 Verbs

The c-class is characterised by end stress in most forms. Initial stress is found in: (i) the first person singular present (first singular *lòvjq* ‘hunt’, third singular *lovitъ*); (ii) all forms of the l-participle except the feminine singular, following the pattern of indefinite adjectives (neuter singular *lòvilo*, feminine *lovilâ*); (iii) the second/third person singular aorist (first singular *lovixъ*, second/third singular *lòvi*); and (iv) the masculine/neuter nominative singular of the present active participle (with the ending -e), which turns up as a gerund in the daughter languages (*lòvę*,_feminine *lovětji*). This is something of an idealized picture. Complications arise particularly in the l-participle and the aorist, which fail to show the expected reflexes for some stem types. Secondary vocalic stems typically behave like the b-class, with stress on the post-root vowel in all forms. Obstruent stems typically behave like the b-class in the l-participle, with stress on the ending (as reflected in Russian *nesět* ‘carries’ versus *neslà*, *neslò*, *nesli*), though some stems display stem stress throughout (as in Russian *gryžët* ‘gnaws’ versus *grýzla*, *grýzlo*, *grýzli*), ascribed by Dybo (1981, 254-55) to Hirt’s law, under which stress was retracted onto an Indo European long syllable.

In b-class verbs, as with other word classes, we expect stress to fall on the post-root syllable. However, here too a number of stress retractions are in evidence, namely: (i) in all the present tense forms except the first person singular (first singular *nosjò* ‘carry’~ third singular *nòsitъ*). Note that per Dybo et al. (1990) there is a group of i-stem verbs (causatives and denominals) which fail to show this retraction, and so overlap partially with the c-class; (ii) the past passive participle in -en- (infinitive *nositi*, participle *nòsjenъ*). With the exception of *mog-* ‘be able’, b-class verbs are all vocalic stems.

3. Developments in the daughter languages

3.1 Changes in the realization of stress

In some languages the position of stress in inherited alternations is retained more or less faithfully, while in others it has been altered by sound changes. The sorts of systems which result are exemplified in table 240.1 by nominative forms of c-class a-stem nouns, where end stress in the singular alternated with initial stress in the plural in Common Slavic. Čakavian dialects and the East Slavic languages retain the old position of stress. Western dialects of Bulgarian do as well (the standard language has eliminated this alternation). In other languages the outward realization of this alternation has been transformed. Standard Serbo-Croatian reflects the Štokavian retraction of stress onto the preceding syllable, where it is realized as rising accent. Slovene underwent both stress retraction and stress advancement. Stress was retracted under conditions more limited than in Štokavian (from short final syllables only), yielding rising accent, while a circumflex accent (i.e. the initial stress in c-class lexemes) was advanced one syllable. In the Slovincian dialect of Kashubian, stress was retracted from short final syllables in polysyllabic stems. In nouns, this change was morphologized to the point that original end stress is realized as stem-final stress throughout the paradigm.

A purely morphophonological change which affected all the daughter languages was the reanalysis of absolute initial stress as stem stress, so that stress on proclitics with c-class stems is retained only as a fossilized relic (Russian *nà vodu* ‘into the water’, Serbo-Croatian *nà vodu*). There is also a decided tendency, independently attested in various languages, for final stress to retract from disyllabic endings (Russian second plural present *nesète* ‘carry’ alongside dialectal *nesetè*) and from enclitics (Bulgarian *mesóto* ‘the meat’ from a presumed **mesotò*; see also the behaviour of definite adjectives discussed above).

3.2 Extension of inherited alternations

Certain c-class alternations have been particularly productive, including: (i) stress on the u-stem locative singular ending *-u* has been extended along with this ending, becoming a concomitant feature of the second locative case of Russian (*na aèroportù* ‘at the airport’). Traces of this are found in a- and b-class nouns in Slovene as well (dative *přstu* ‘finger’, locative *přstu*, the mirror image of the original c-class alternation found in dative *grâdu* ‘castle’, locative *grâdu*); (ii) The shift of stress to all neuter plural endings has become a characteristic feature of consonant-stems in many of the daughter language, even where these originally belonged to the a-class (Russian nominative/accusative singular *čúdo* ‘miracle’, plural *čudesà*, or Serbo-Croatian *čùdo*, *čudèsa*). In Bulgarian, this stress shift has been largely generalized to neuters with stem-final stress (singular *svetilo* ‘star’, *svetilà*). In the East Slavic this alternation has been extended beyond neuters, e.g. in Ukrainian, where it is found in masculines (nominative singular *čolovik* ‘person’, plural *čoloviký*) and a-stem nouns (nominative singular *učytel’ka* ‘teacher’, plural *učitel’ký*); note that stem stress is no longer restricted to the stem-final syllable; (iii) Initial stress in the first singular present of perfective verbs has been generalized in Western Bulgarian dialects, as well as adjacent Macedonian and Serbian dialects. Extended to the a- and b-class, this leads to an alternation between the initial (typically a prefix) and stem-final syllable (first singular *râzvesela se* ‘celebrate’, third

singular *razves'eli se*). In Slovincian it has been even further generalized to all verbs, regardless of aspect or prefixation (first singular *č'ervenejā* 'shine red', third singular *č'erveneje*). On the other hand, this alternation is no longer found in any of the East Slavic languages (for Slovene and Serbo-Croatian, see the final paragraph of §3.3); and (iv) Initial stress in the second/third singular aorist has been widely extended to all accentual classes in Serbo-Croatian (first singular *kupòvah* 'bought', second/third singular *kùpova*).

In the b-class, the most productive nominal pattern has been the stress retraction in the plural forms of o-stem neuters, as illustrated with *selò* above in §2.1, which in East Slavic has been widely extended to a-stems (singular *ženà* 'wife' ~ plural *žěny*). In verbs, the stress retraction in the past passive participle in *-en-* has been extended to original c-class stems, either wholly (Ukrainian and Byelorussian) or partly (elsewhere). The stress retraction in non-first singular forms of the present is productive in East Slavic (particularly in the i-stems), where it has a tendency to replace non-alternating ending stress typical of c-class verbs; compare the more archaic Russian first singular *govorjù* 'say', second singular *govoriš'* with the more innovative Byelorussian *havarjù*, *hovòryš'*.

3.3 Loss of inherited alternations

The original c-class alternations have been widely lost, especially in nouns: (i) Outside of Slovincian, c-class alternations are typically retained only in monosyllabic stems; this is especially true of Slovene; (ii) Outside of Slovincian, initial stress in the accusative singular of a-stem has largely been eliminated, typically retained only in inanimates. Initial stress in the dative singular is even rarer; (iii) Stress on the instrumental singular of i-stems has largely been eliminated outside of Slovene and Slovincian; (iv) The alternation between initial stress in the nominative plural and ending stress in the oblique cases has largely been eliminated in the o-stems and a-stems in East Slavic, though it is still common in the i-stems (Russian nominative *mýši* 'mice', genitive *mýšěj*); and (v) The original pattern where stress was attracted to the definite article (or the preceding syllable) in Bulgarian has been retained only where the noun form ends in a consonant, that is, where stress falls on the (synchronic) article itself, (*grad-à* 'the city', *sol-tà* 'the salt'). Otherwise, the alternation has been eliminated, usually favouring the stress of the definite form (*mjàsò* 'meat', *mesò-to* → *mesò*, *mesò-to*). In West Bulgarian dialects the original alternation is maintained.

In adjectives, the c-class shift of stress to feminine singular *-a* in the indefinite form is lost in Serbo-Croatian and Bulgarian, and only marginally retained in Slovene. The cognate alternation in the l-participle is likewise lost in Serbo-Croatian and Bulgarian (though note that Bulgarian has simply generalized stem-stress for all l-participles, including those of the b-class), and is restricted (Russian) or lost in the other East Slavic languages.

The b-class stress retraction in the locative and instrumental plural of o-stems is retained only in Slovene and Čakavian. In b-class verbs, the most significant change has been the loss of end stress in the first singular present, which occurred in all of South Slavic. In Slovene and Serbo-Croatian this was concomitant with the replacement of *-ŏ* with an ending of the shape *-Vm* (where the original ending is retained, so is the alternation, e.g. Serbo-Croatian *mògu*, *mòžeš* 'be able'). This morphological change also accounts for the loss of the first singular c-class alternation in these languages. In Bulgarian, on the other hand, the

generalization of stem stress was independent of segmental morphology (*mògə, mòžeš*).

3.4 Summary

In the earliest reconstructed stage of Slavic, morphemes were construed either underlyingly accented or unaccented, and stress paradigms were simply a by-product of their morphological concatenation. By late Common Slavic phonological and morphological changes produced a system where at least some accentual alternations have become an autonomous morphological device. This is apparent in the models of Garde (1976) and Zaliznjak (1985), where an enriched system of diacritics (beyond accented versus unaccented) is needed to account for the accentual behaviour of morphemes. The individual Slavic languages show a further grammaticalization of stress, often favouring the opposition of single grammatical categories (e.g. number, as in the singular, plural alternation in East Slavic nouns) over compound values (e.g. case + number, as with the almost complete loss of c-class noun alternations associated with singular case forms).

4. Loss of inflectional accent

In spite of the significant differences in the stress systems of the languages discussed above, they all represent a recognizable elaboration of the Common Slavic system. By contrast, the languages which have phonologically fixed stress (all of West Slavic outside of North Kashubian, and Macedonian) represent a clean typological break. At the boundaries of these zones we find transitional dialects which represent a third accentual type. These dialects have received relatively little attention, because they have not formed the basis of any literary standard, nor are they useful for the reconstruction of Common Slavic accent. Nevertheless, they are of typological interest, and in addition provide important clues for reconstructing the genesis of phonologically fixed stress; on the whole, what we witness is the gradual weakening of the grammatical and lexical role of stress, and the increasing importance of prosodic constraints. The following sketch is based on Baerman (1999).

The most extensive zone stretches between the Bulgarian-Macedonian border, where the dialects have an archaic stress system, to western Macedonia, where most dialects have fixed antepenultimate stress. These transitional dialects can be divided into two zones. In the more archaic eastern zone, nominal accentual alternations are eliminated outright. In verbs, accentual class distinctions are eliminated. For all verbs, stress shifts between the root in the present and the following syllable in the aorist, basically corresponding to the original b-class pattern (first singular present *dovèdam* ‘bring’, aorist *dovedòx*). In the more innovative western zone, prosodic constraints largely prohibit stress on any but the penultimate and antepenultimate syllables, and residual lexical distinctions are eliminated: all members of a given word class behave identically. Similar observations can be made about transitional Kashubian dialects. It is important to note that only after the loss of grammatically and lexically conditioned stress do prosodic constraints come to the fore. The rise of phonologically fixed stress appears thus to have been primarily a morphological phenomenon, and only secondarily a phonological one.

5. Cited literature

- Baerman, Matthew. 1999. *The evolution of fixed stress in Slavic*. Munich: Lincom Europa.
- Dybo, Vladimir A. 1981. *Slavjanskaja akcentologija*. Moscow: Nauka.
- Dybo, Vladimir A., Galina I. Zamjatina and Sergej L. Nikolaev. 1990. *Osnovy slavjanskoj akcentologii*. Moscow: Nauka.
- Garde, Paul. 1976. *Histoire de l'accentuation slave*. Paris: Institut d'études slaves.
- Kortlandt, Frederik. 1975. *Slavic accentuation: A study in relative chronology*. Lisse: Peter de Ridder
- Lehfeldt, Werner. 2001. *Einführung in die morphologische Konzeption der slavischen Akzentologie* [second edition]. Munich: Sagner.
- Olander, Thomas (2009): *Balto-Slavic accentual mobility*. Berlin: Mouton de Gruyter.
- Stang, Christian S. 1957. *Slavonic accentuation*. Oslo: Universitetsforlaget.
- Stankiewicz, Edward. 1993. *Slavic accentuation*. Stanford: Stanford University Press.
- Zaliznjak, Andrej A. 1985. *Ot praslavjanskoj akcentuacii k russkoj*. Moscow: Nauka.

Table 240.1: Varying realizations of stress alternations in the daughter languages

	Čakavian (Senj)	Russian	Western Bulgarian	Serbo- Croatian	Slovene	Kashubian (Slovincian)
<i>nominative singular</i>	glāvà	golovà	glavà	gláva	gláva	niedzèla
<i>nominative plural</i>	glâve 'head'	gòlovy	glâvi	glâve	glavê	niédzèlò 'Sunday'

