

Mate Kapović
Odsjek za lingvistiku
Filozofski fakultet Sveučilišta u Zagrebu
Ivana Lučića 3, HR-10000 Zagreb
mkapovic@ffzg.hr

ON THE RECONSTRUCTION OF THE COMMON SLAVIC PROSODIC SYSTEM

The aim of the paper is to present the reconstruction of the Common Slavic accentual system. After the introductory discussion on Proto-Slavic and Common Slavic, the stress is on providing and examining reasons for reconstruction of Common Slavic prosodemes, including their provisory phonetic nature. Then the nature of this system is discussed, with some typological comparisons and various possible interpretations in different periods.

1. Introduction

In this paper,¹ the Common Slavic accentual system will be reconstructed. Firstly, we shall try to discern the difference between Proto-Slavic and Common Slavic (and their reconstruction) and illustrate some problems when discussing the nature of what exactly is reconstructed when speaking about reconstructing a Common Slavic or Proto-Slavic accentual system. Then the Common Slavic prosodemes/tonemes/accents will be reconstructed, with emphasis on presenting the data underlying their (phonetic) reconstruction, which are often skipped or underdiscussed in scholarly literature, where more emphasis often tends to be put on reflexes of Common Slavic prosodemes in various Slavic languages and dialects and their later historical development (or, on the other hand, on trying to connect Proto-Slavic with Proto-Indo-European). After that, we shall

¹ I would like to thank Mislav Benić, David Mandić and Mikhail Osłon for reading the first draft of the text, as well as Siniša Habijanec for his Slovakist expertise.

discuss the nature of the reconstructed system, while also providing some typological comparisons to other accentual systems,² and with emphasis on various possible interpretations of the Proto-Slavic/Common Slavic accentual systems. In the end, certain changes/aberrations concerning the original (post)valence system are discussed. The aim of this paper is manifold – it partly presents an introduction and overview of the already known facts of the reconstruction of the Common Slavic accentual system (as reconstructed primarily in Dybo 1981 and widely accepted across the board), including references to recent research, while also trying to provide certain new interpretations and details concerning the topic in the frame of a wider systemic reconstruction and possibilities within it.

Proto-Slavic is traditionally reconstructed (cf. e.g. Carlton 1991 or ESSJ) in a form which is very similar to the attested Old Church Slavic (the oldest attested Slavic language – since the 9th century CE) with a couple of key differences: there is no metathesis of liquids (e.g. *gordъ ‘city’ as opposed to OCS *gradъ*), jers before liquids are preserved (e.g. *vьlkъ ‘wolf’ as opposed to OCS *vьlvъ/vьlvkъ*), palatalized consonants and clusters are unchanged (e.g. *nokъ ‘night’ as opposed to OCS *noštъ* in the Bulgarian and *nocъ* in the Moravian variety), etc. Also, jers are all reconstructed as expected etymologically (in OCS they often mix in practice in later manuscripts) and there are no OCS orthographic peculiarities (e.g. *kraјъ ‘end’ and not OCS *krai*). This way of reconstructing Proto-Slavic has a couple of advantages: it is traditional and well-known, very similar to Old Church Slavic and, to an extent, to modern Slavic languages (cf. e.g. modern Croatian *grad*, *vuk*, *noć*). However, there is also one big disadvantage – that is not actually Proto-Slavic, meaning the real ancestor of all Slavic languages. Abstract words and forms that are reconstructed in this way actually represent a language phase which would more precisely be called Common Slavic, from around 7-8th to 10-11th century CE, which was phonologically rather close to OCS but which was not anymore a unitary language from which all modern Slavic languages developed because there were already some dialectal differences in Slavic in that period (e.g. most dialects had *čělъ* ‘whole’ but Novgorod type dialects had *kělъ*, only some dialects had *-ra-* in words like *gradъ*, etc.). If one is to reconstruct a realistic Proto-Slavic, the real ancestor of all Slavic languages, this would have to be Proto-Slavic spoken around the year 600 CE, during the time of the great Slav expansion – when the territory inhabited by Slavs exten-

² One has to agree with Villanueva Svensson (2023:302) that »putting Balto-Slavic accentology in closer connection with the wider field of accent typology« seems to be »one of the major tasks awaiting scholars specializing in this area«.

ded all the way to the Peloponnese in the south and to the Elbe and present-day east Austria to the west (including present-day Hungary). However, this realistic Proto-Slavic looked quite different from what we know from OCS and modern-day Slavic languages because of later and wide-reaching Common Slavic sound changes. For instance, instead of **oko* ‘eye’ there was **aka* in a realistic Proto-Slavic, instead of **golǫbъ* ‘pigeon’ there was **galambi*, instead of **zǫbъ* ‘tooth’ there was **zambu*, etc. – for such a reconstruction of Proto-Slavic, as well as the previously mentioned differentiation of Common and Proto-Slavic cf. e.g. Holzer 2020. With this in mind, in this article we will nonetheless stick with the traditional anachronistic and abstract OCS-style reconstruction for practical reasons, but also because we will usually discuss the accentual system of the later Common Slavic period. To keep things simple and because it is accent and not the exact phonological shape of Slavic that interests us, we will sometimes write even the earlier Slavic forms in this OCS-style traditional reconstruction. We name these traditional reconstructions Common Slavic and take it to represent a period when Slavic already had dialectal differences, though it was still clearly one mutually intelligible language, from around late 7th to 10th (or even 11-12th) century, as opposed to Proto-Slavic from around the year 600 CE.

2. Proto-Slavic and Common Slavic Vowels, Accent and Relative Chronology

Common Slavic accentuation system was a system with free (e.g. **vǫrna* ‘crow’ but **golvá* ‘head’) and mobile stress (e.g. **golvá* but acc^{sg} **gǫlvǫ* – **nâ gǫlvǫ* ‘onto the head’), as well as distinctive pitch-accent (e.g. **vǫrna* ‘crow’ but gen^{sg} **vǫrna* ‘raven’ and **stǫrža* ‘guard’). The Common Slavic system was rather more complex than in later Slavic languages, of which some have preserved some traits of it, but usually simplified and with a lot of changes.

The question of distinctive length is complex. Proto-Slavic (around the year 600 CE) certainly had distinctive length (cf. Holzer 2020:51), though real minimal pairs are not so easy to find because of additional prosodic characteristics – cf. e.g. **platu* ‘fence’ but **plātu* ‘cloth’ (later **plotъ* and **platъ* respectively). In Common Slavic period, the old quantitative oppositions changed into new qualitative oppositions. Old short vowels **a*, **e*, **i*, **u* changed to **o*, **e*, **ь* (phonetically probably [ɪ] > [i] depending on dialect and period³), **ь* (phonetically probably [ʊ] > [u] depending on dialect and

³ Centralization must have occurred after the second palatalization because the

period) respectively, while old long vowels **ā*, **ē*, **ī*, **ū* changed to **a*, **ě* (phonetically probably [æ:] or [e:], depending on position in a word, time and dialect⁴), **i*, **y* (phonetically probably [ɨ] > [u:]⁵) respectively.⁶ Thus, the new opposition of **plotъ* ‘fence’ and **platъ* ‘cloth’ emerges, where, at least for a certain period (though perhaps a short one), there was no real distinctive length because length was redundant⁷ or at least marginal – **platъ* was still phonetically [pla:tʉ], because the old length was preserved, but it was not so relevant for the opposition to **plotъ* [plotʉ], which was not only short but also had a different vowel quality.⁸ Of course, this is not an unusual thing in phonemics – phonemes are often distinguished by redundant features as well, e.g. in many languages the opposition of voiceless and voiced stops is strengthened by additional (redundant) aspiration of voiceless stops. However, in such cases it is often difficult to interpret what is actually phonemic and what is just redundant (if e.g. aspiration helps in distinguishing /p/ and /b/, is it really completely redundant for the opposition even if it is completely predictable?) and this may vary from one system to another (i.e. the situation may slightly differ in different languages). Of course, if we are talking about Common Slavic, it is impossible to go into precise phonetic details and the exact workings of a complex system (which may have even had diatopic differences).

centralized **i* would be unlikely to cause palatalization (which occurred before **i* > **ĭ* in loanwords).

⁴ Due to later reflexes, a closed [e:] has to be reconstructed for e.g. Western South Slavic, Czech, Ukrainian, while an open [æ:] should be reconstructed for Polish and Bulgarian.

⁵ Jery (the long counterpart of jor) was written in Glagolitic and Cyrillic script as a combination of a jor and <i> and thus originally certainly a diphthong. Later it yielded centralized reflexes in Russian and Polish. In Russian, jery can still be pronounced as a diphthong similar to something like [ɨ] in some environments (cf. e.g. Jones and Ward 1969:33).

⁶ There were additional changes, like the change of Proto-Slavic diphthongs (**ei* > **i*, **aj* > **ě* or **-i*, **au* > **ō* > **u*), which we shall disregard here.

⁷ Typologically speaking, this would have been similar to modern American English, where some vowels are predominantly phonetically long in most positions (/a/, /i/, /u/, /ɔ/ + /æ/) while others are short (/ə/, /ɐ/, /ɪ/, /ʊ/), but there is no phonological length distinction.

⁸ It is typologically quite common for lects with a short/long opposition to reinforce the opposition through a qualitative opposition, e.g. in the Croatian Štokavian dialect of Dubrovnik the long /a:/ is famously closed (pronounced as [p̚:]). In certain Čakavian dialects (e.g. in some local dialects on the southern Croatian islands of Brač, Hvar and Vis), this [p̚:] further changes to a [q̚:], which can later shorten in some positions. Cf. also the typical opposition of short [ɪ], [ʊ] and long [i:], [u:] in Germanic languages.

Later, in many – or perhaps originally even in all – dialectal Slavic systems, the old phonemically short (and still redundantly phonetically short) vowels lengthened in some conditions, while the old phonemically long (and still redundantly phonetically long) vowels shortened in some conditions. Thus, the length became fully distinctive again and was not predictable. So, as we have seen, we start e.g. with Proto-Slavic (around the year 600) short *ǣ and long *ā (cf. Holzer 2020:57–62). These change to early Common Slavic */o/ [o] (phonetically always short) and */a/ [a:] (phonetically always long) and in that period length was more redundant than distinctive – this means that the phoneme /o/ was phonetically short and the phoneme /a/ was phonetically long but this length was not strictly speaking distinctive since the phonemes in question were also different qualitatively (like American English /ɪ/ [ɪ] and /i/ [i:]). After later lengthenings and shortenings, a new system emerges where the new phonemes *o and *a could both have been both short and long and thus a »normal« system with distinctive length is formed again. That is why e.g. in modern Croatian we have *plôt* ‘fence’ with a new long syllable (but *gen^{sg} plòta* with the preserved old brevity), while in Croatian *pòt-plat* ‘sole’ we see the now short vowel from the originally long *ā.⁹ The whole process is summarized in the following table (we are leaving the original diphthongs out):

Table 1: Proto-Slavic quantity to Common Slavic quality

PSI	early CSI	early CSI phonetics	later CSI
*a	*o	[ɔ]	*o ~ *ō
*e	*e	[ɛ]	*e ~ *ē
*i	*b	[i] > [ɪ] > [i]	*b ~ *b̄
*u	*b	[u] > [ʊ] > [u]	*b ~ *b̄
*ā	*a	[a:]	*a ~ *ā
*ē	*ĕ	[æ:] / [e:]	*ĕ ~ *ē
*ī	*i	[i:]	*i ~ *ī
*ū	*y	[u:] > [y:]	*y ~ *ȳ

⁹ The exact details of shortenings and lengthenings are quite complex. Lengthenings are usually connected with the development of Common Slavic prosodemes or with later compensatory lengthenings in final syllables in various languages (e.g. Czech *bůh* ‘god’, Polish *bóg*, Ukrainian *kin* ‘horse’, etc.). For details of reflection of Common Slavic pretonic and posttonic length cf. Kapović 2015:413–550.

Some modern systems without phonemic length, like Bulgarian/Macedonian,¹⁰ might have developed directly from the early Common Slavic systems with redundant length. Or at least, for those systems, there is no indication that they had a post-Proto-Slavic system of distinctive length. However, for others, like East Slavic, we do know, as we shall see, that it had had distinctive length even after the Common Slavic shift of quantitative into qualitative distinctions (because East Slavic shows certain traces of old long vowels, mostly but not exclusively in vocalism). In West Slavic, the loss of distinctive length, where it occurred (e.g. in Polish) was rather late, which is clear from both historical attestations (e.g. Old Polish had distinctive length) and modern reflexes (traces of old length in vocalism). This means that East and West Slavic systems with no distinctive length stem from post-Common Slavic systems with reinstated distinctive length and not directly from the early Common Slavic system with redundant length. Thus, the direction of changes in North Slavic was complex: distinctive length (Proto-Slavic) > redundant/non-distinctive length (early Common Slavic) > distinctive length (late Common Slavic and early North Slavic systems) > no distinctive length (some modern North Slavic systems). In South Slavic, the loss of length perhaps occurred early in the south-east (Macedonian/Bulgarian) and in the west distinctive length was preserved (and subsequently lost in some dialects very late).

The following table shows how general accentual features (free/unpredictable stress, distinctive tone and distinctive length) are distributed in modern Slavic languages. The languages are named according to official standard varieties (the *Štokavian* official standard languages are separated in the table in order to show differing dialectal situations¹¹). In general, it is helpful to acknowledge that the division of Slavic languages (and languages in general) is often a matter of politics and not dialectology. If one would to do a table with strictly linguistic units (according to accentual systems), this would have to be done often by dialects and subdialects, which would be very complicated to follow. In any case, dialectal systems can significantly differ from standard varieties.

¹⁰ One can wonder whether the same could be posited for Torlak in southern Serbia as well or whether its linguistic balkanization was of a later date.

¹¹ However, note that Bosnian in the table pertains only to Bosnia and Herzegovina and not to various other dialects of Muslim Bosniaks outside of Bosnia and Herzegovina. If Bosnian were taken to encompass the dialects of the e.g. Muslim (Bošnjak) speakers of southern Montenegro, then Bosnian would also be »+ (dial. –)« in the Tone column. The standard accent of Bosnian, Croatian, Montenegrin and Serbian is in all cases traditionally based on Neo-Štokavian, but in Montenegrin a parallel Old Štokavian accentuation is currently in the process of being standardized as well.

Table 2: Synchronic overview of Slavic accentual systems

languages	free stress	tone	distinctive length
Bulgarian	+	–	–
Macedonian	– (dial. +)	–	–
Croatian, Serbian	+	+ (dial. –)	+ (dial. –)
Montenegrin	+	+/–	+
Bosnian	+	+	+
Slovene	+	+/–	+ (dial. –)
Czech	–	–	+ (dial. –)
Slovak	– (dial. +)	–	+ (dial. –)
Upper Sorbian, Lower Sorbian	–	–	–
Polish	–	–	–
Kashubian	+/–	–	–
[†]Slovincian	+	(+)	–
[†]Polabian	+	–	–
Russian, Belarusian, Ukrainian	+	–	–

As can be seen from the table, free stress is preserved in most of the South Slavic, the whole of East Slavic and marginally in West Slavic. It is an archaism in marginal north-western West Slavic dialects (Polabian, Slovincian, northern part of Kashubian), while lost in the majority of West Slavic (with the exception again on the extreme south-east of West Slavic with Sotak in eastern Slovakia¹²). In South Slavic, Standard (Western) Macedonian has a fixed stress on the third syllable from the end, but other (Eastern) Macedonian dialects can also have free stress. In all Slavic languages/dialects with free stress, this free stress originates in Common Slavic free stress. West Slavic generally has fixed stress (Polish on the syllable second from the end, Czech/Slovak and Sorbian/Lusatian on initial syllable), with the exception of North Kashubian (together with the now extinct Slovincian), Polabian (also extinct) and the Sotak dialect of Slovak.

¹² For Sotak cf. Schallert 2011.

What is typical for Slavic free stress is that it is originally also mobile – i.e. the accent can change place in the paradigm of a word, as in Russian *golová* ‘head’ – acc^{sg} *gólovu*.¹³ Distinctive tone appears only in Slovene, Kajkavian, Čakavian and Štokavian (not in all dialects) and marginally in the now no longer living Slovincian.¹⁴ Distinctive tone can either be a result of preservation of Common Slavic tone oppositions (as it is in some Western South Slavic dialects) or an innovation (as in other Western South Slavic dialects – typically due to accent retractions – and marginally in Slovincian¹⁵). Only Czech/Slovak and Western South Slavic (Slovene, Kajkavian, Čakavian, Štokavian) retain distinctive length, but not in all dialects (the length in standard Slovene is marginal in most dialects¹⁶). Distinctive length in Slavic languages also always has its origin in Common Slavic.

To get back to reconstructing the Common Slavic (and Proto-Slavic) system, it is important to note that one of the reasons why that is not simple is because it is hard to pin-point what exactly is being reconstructed – it can be said that one is reconstructing not one precise synchronic state but rather a continuing process. Let us give an illustration. If we reconstruct the word for ‘woman’, we can reconstruct *žěnā’ with the accent on the first syllable and the unstressed second syllable still »acute« (probably prosodically glottalized – see below for that). We can also reconstruct it in the later phase as *ženā with the progressive shift (either by de Saussure’s¹⁷ or by Dybo’s law¹⁸) and the so-called »old acute« accent (see below) on

¹³ One thing that has to be kept in mind is that free stress does not mean that the accent is always unpredictable (e.g. Russian prefix *vyj-* is always accented in perfective verbs like *vyjvesti* ‘to lead out’; Croatian verbal suffix *-irati* always has the long rising accent, etc.), just like the fixed/predictable stress does not mean that there are no exceptions to that rule, i.e. that the accent is always predictable (cf. also Sussex and Cubberley 2003:179–184) – e.g. the stress in Polish is almost always penultimate, but there are some exceptions like *czteryśta* ‘four hundred’.

¹⁴ Nikolaev (e.g. in Dybo–Nikolaev 1998:5–39, Nikolaev 2002:142–149) reports on possible tones in some East Slavic dialects, like the Chernigov dialects on the Ukrainian-Belarusian border. Vermeer (2001:158–159) is somewhat sceptical though open to the possibility, but Nikolaev’s presentation has otherwise been mostly ignored in the literature.

¹⁵ Stankiewicz 1993:292, Bogatyrev 1995:22–23.

¹⁶ Cf. e.g. Greenberg 1987:179–180, IPA 1999:136.

¹⁷ De Saussure’s law states that the accent shifts from a non-acute syllable (e.g. *žen-) to an acute one (e.g. *-a). The existence of this law in Slavic is controversial – see Kapović 2020c.

¹⁸ Dybo’s law can be defined as a general progressive shift of the neo-acute accents (e.g. *žèn-) to a following syllable (see Kapović 2020c). In »classical« interpretation, this is supposed to occur in all cases, but according to the new approach of the Moscow accentological school (from 1993 onwards – cf. Hendriks 2003), this is

the final syllable. And we can reconstruct it as *ženà with a shortened vowel in final open syllable. In a similar manner, we can reconstruct *jestb 'is' with the old accent at the final syllable, or we can reconstruct it with the accent retracted from the final weak jer as *jèstb (the so-called Ivšić's rule). We can also reconstruct the word for 'tooth' as the original *zǫbъ – gen^{sg} *zǫba¹⁹ (the so-called accentual paradigm *b*), as the younger *zǫbъ – gen^{sg} *zǫba (the pre-Dybo's law »mixed« accentual paradigm *d*), as even younger *zǫbъ – gen^{sg} *zǫbà (the post-Dybo's law »mixed« accentual paradigm *d*²⁰), or as the youngest *zǫbъ – gen^{sg} zǫba (with a younger accentual paradigm *c*). Likewise, if we consider the Moscow accentological school²¹ concept of valences (see below), we can reconstruct additional high (+) and low (–) tones on all syllables and we can have e.g. *žèṇā' > *žēṇā' > ženà, etc. Additional problem with this is that it is very difficult, and necessarily speculative, to connect prosodic changes with changes of phonemes. We know more or less what the accentual changes are that occurred (though there are certain disagreements, different possibilities and diverse approaches), but it is hard to be sure at what stage of phoneme changes they occurred.

Next, we shall take a look at the prosodemes/tonemes that can be reconstructed for Common Slavic, while trying to show what the basis is for such a reconstruction – the emphasis being on the reconstruction of Common Slavic and not on the reflection of the reconstructed prosodemes in Slavic languages.

3. Common Slavic prosodemes

The Common Slavic accentual system is reconstructed by using the material, including dialects and old accentuated manuscripts, of all Slavic languages that preserve traces of older stages of the accentual system – either in tones, stress position and quantity themselves or stress/tone/quantity relicts in vocalism (vowels can change/behave differently depending on where the accent is, the type of the accent and whether the syllable is short or long). The only Slavic language, if looking at modern national standard Slavic languages, yielding absolutely no information for the

only a tendency, which occurs only in some positions and depends on various conditions and dialects (Dybo–Zamjatina–Nikolaev 1993:16, 18–21; Kapović 2015:95–97, 103–134).

¹⁹ This may have realistically been rather *zāmbu – gen^{sg} *zāmbā.

²⁰ For accentual paradigm *d* cf. e.g. Kapović 2020f.

²¹ For the Moscow accentological school see below footnote 106.

reconstruction of Common Slavic accentuation is standard Macedonian (with Lower Lusatian being almost there),²² which, as we have seen, has an innovative fixed stress and no traces of earlier long vowels.

Three prosodemes (tonemes) – traditionally called the circumflex, the acute and the neo-acute – can be reconstructed.²³ The names are due to their reconstructed pronunciation – the circumflex is falling, the (old) acute is rising and the neo-acute was interpreted as a new rising accent (that is why the acute is sometimes called the old acute in opposition). As we shall see, the probable phonetics/phonology of the first two is a bit more complex, and the »neo-acute« is at least partially a misnomer – despite old hypotheses on its origin, it is actually not more recent than other prosodemes in many positions (though in some situations it is indeed of later origin), just like the »old acute« is not actually older than the neo-acute in most cases. In reality, both the »neo-acute« (marked *[˘] on short and *[˜] on long syllables) and the »old acute« (marked *^ˊ) can be both of older (Balto-Slavic) and more recent (Proto- or Common Slavic) origin. For instance, the neo-acute seems to be old in *mòžete ‘y’all can’, *nòvъjъ ‘the new’, *slònъ ‘elephant’ but new in *jèstъ ‘is’ < *jestъ, *něsъ ‘I carried’ < *něsъ (originated via accent retraction from a weak jer – the already mentioned Ivšić’s rule) and *gotòvъ ‘ready’ < *gòtovъ, *bělīna ‘whiteness’ < *bělina (originated via progressive shift of the accent – the already mentioned Dybo’s law). The (old) acute is old in *ǫrtъ ‘war’, *kǫlda ‘log’ but new in *ženǎ ‘woman’ < *žena, instr^{pl} *ženǎmi < *žènamī (originated via progressive shift of the accent, probably de Saussure’s law – there are also some originally retractional acutes, like in *mǎti ‘mother’ and instr^{pl} *golvǎmi ‘with heads’ but these are pre-Proto-Slavic²⁴).

While we can speak of only three different prosodemes, these are usually marked by five symbols, because short and long circumflex and short and long neo-acute are marked by separate symbols (just like in modern Western South Slavic dialectology). These traditional five symbols, which can be regarded as five prosodemes (encompassing both tone – and phonation in case of the acute – and length), will be marked as such also in this paper. This is not only because of tradition, but also because it is practical – short and long circumflexes and short and long neo-acutes sometimes behave differently. At first, they appear only on originally short and long vowels respectively but that changes in Common Slavic era at one

²² This is also true for some microlanguages, e.g. for Pannonian Rusyn language.

²³ Cf. e.g. Stang 1957:21–13, Dybo 2000:17, Kapović 2015:67–68, Kapović 2020a.

²⁴ Cf. e.g. Dybo 1981:18, 27–34.

point, and they have very different reflexes in later Slavic languages.²⁵ Because of all this, it does indeed make (practical) sense to speak of five prosodemes or at least mark them differently. This is also the reason why they were reconstructed as such in the first place.

Table 3: Common Slavic prosodemes

symbol	traditional name	probable phonetic value	example	most important reflexes
*''	old acute	long rising glottalized	*kǫrva 'cow'	Štok/Čak/Kajk. <i>krǎva</i> , Sln/Cz <i>kráva</i> , Russ. <i>koróva</i> , Blg <i>kràva</i>
*"	short circumflex	short falling	*slǫvo 'word'	Štok/Čak/Kajk. <i>slǫvo</i> 'letter', Sln <i>slovô</i> , Russ. <i>slóvo</i> , Blg <i>slòvo</i>
*~	long circumflex	long falling	*zôlto 'gold'	Štok/Čak/Kajk. <i>zlâto</i> , Sln <i>zlatô</i> , Cz <i>zlato</i> , Russ. <i>zóloto</i> , Blg <i>zlâto</i>
*`	short neo-acute	short rising	*bǫbъ 'bean'	Štok/Čak/Kajk/Sln <i>bǫb</i> , Slk/Russ. dial. <i>bôb</i>
*~	long neo-acute	long rising	*kǫrlъ 'king'	Croat. dial. <i>krǎlj</i> , Sln <i>králj</i> , Cz <i>král</i> , Slk <i>král'</i> , Pol. <i>król</i> , Russ. <i>koról'</i>

In some sources and with some authors, different symbols can be used. Thus, some scholars will use ' for the long neo-acute and others will use ' for the old acute. The two circumflexes and neo-acutes could theoretically be marked with one symbol respectively (e.g. *^ and *~)²⁶ without an additional mark for length (in traditional, Old Church Slavic-like, reconstruction of Common Slavic) because it is predictable, at least originally, where

²⁵ Cf. e.g. Dybo 2000:18–20, Kapović 2020a.

²⁶ E.g. Nikolaev 2012.

the short and long prosodemes will appear, but this is rarely done. Short prosodemes (*[˘] and *[˙]) were possible only on originally short vowels (*e, *o, *ъ, *ь), while long prosodemes (*[˝], *^ˆ, *[˜]) occurred only on originally long vowels (*a, *ě, *i, *y, *u, *ę, *ǫ) and short vowels as parts of diphthongs (these are *el, *er, *ol, *or, *yl, *yr, *yl on Common Slavic level).

There are two other symbols that are used. One is *^ˆ for the so-called neo-circumflex (e.g. in dialectal Common Slavic gen^{pl} *kôrvъ ‘cows’), which is a dialectal younger prosodeme.²⁷ The other is *^ˊ, the neutral symbol usually used for marking the stress place in final open syllables (e.g. in gen^{sg} *bobà ‘bean’, *zimà ‘winter’, instr^{pl} *bogŷ ‘with gods’) – used because the original tonemes in final open syllables cannot be reconstructed just from internal Slavic material (i.e. one needs Baltic material to distinguish the original old acute from long neo-acute in open final syllables), because originally long final open syllables were often shortened and because the original accent in final open syllables is not always clear (this is the problem with originally long open final syllables in the so-called accentual paradigm *b* – cf. 4 below for the concept of accentual paradigms). Open final accented syllables can be found in two basic cases – in the so-called accentual paradigm *c*, where that is the old accent (e.g. in *zimà, instr^{pl} *bogŷ, *tręsetè ‘y’all shake’), and in the so-called accentual paradigm *b* (e.g. in gen^{sg} *bobà, *ženà ‘woman’, *selò ‘village’), where this is the younger accent made by a progressive accentual shift (the older forms being *bòba, *žèna, *sèlo). In this paper, we follow the following principle for marking accent in final open syllables:

a) the old end-stress in accentual paradigm *c* is marked with the neo-acute symbol in short (e.g. *tręsetè) syllables and with either the old acute (e.g. *zimà) or the long neo-acute (e.g. instr^{pl} *bogŷ) in long syllables²⁸ – however, the old end-stress in accentual paradigm *c* is marked with *^ˊ if the tone of the final syllable is not clear (e.g. inst^{sg} *golvojò)

b) in accentual paradigm *b*, where the end-stress is secondary, we mark the short vowels with the short neo-acute (e.g. *selò – from older *sèlo), the long acute vowels with the long acute (e.g. *ženà – from older *žèna²⁹)

²⁷ Cf. e.g. Dybo 2000:21–34, Kapović 2015:272–399.

²⁸ Cf. Lithuanian žiemà ‘winter’ and instr^{pl} dievaĩs ‘with gods’ for the distinction. The original acute end-stress in Lithuanian is also shortened in words like žiemà (the so-called Leskien’s law) but the original acute ^ˊ (corresponding to Slavic *[˝]) can be seen in definite adjectives: cf. Lithuanian gerà ‘good [fem. sg.]’ with shortening but geróji ‘the good’ without it (with the same accent as in móte ~ Slavic *māti ‘mother’).

²⁹ The final syllable was, of course, long and acute (glottalized) before the progressive shift of the accent, but the reconstruction here is formal for the purpose of simplicity.

and the long non-acute vowels with the neutral mark (*bobà, nom^{Pl} *popì ‘priests’, instr^{Pl} *popỳ ‘with priests’ – all from older *bòba, *pòpi, *pòpy)

The reasons for such marking are the following. In forms like *tręsetè, the reflexes are the same as with short neo-acutes in other (non-final) positions, and the »neo-acute« (the so-called dominant circumflex in the terminology of the Moscow accentological school) is the expected reflex here from the Balto-Slavic perspective, just like the long »neo-acute« is the expected reflex in long non-acute (non-glottalized) syllables like instr^{Pl} *bogỹ. The old acute in forms like *zimǎ is clear with regards to its Balto-Slavic and Indo-European origin. While the difference of the old acute (*zimǎ) and the long neo-acute (instr^{Pl} *bogỹ) in final open syllables cannot in any way be reconstructed from Slavic-internal evidence³⁰ they are clearly distinguished from short original end-stress like *tręsemò ‘we shake’, dat^{Pl} *bogomì ‘to the gods’, etc. because in forms like *zimǎ and *bogỹ we see both short and long reflexes in later Slavic languages/dialects, while in forms like *tręsemò we see only short reflexes. The stress marking in accentual paradigm *b* is a bit more complicated. We mark the stress as the neo-acute in short syllables (*selò) because this is what its reflexes tell us – cf. Russian dial. *selô* < *selò, which is the same as *kôža* < *kòža (cf. 3.4 below). The old acute in acute/glottalized syllables in accentual paradigm *b* (*ženǎ < *žèna) is marked in such a way for the same reason – the reflexes are the same as in the type *zimǎ (again both short and long), and the progressive shift was presumably earlier than in other positions (de Saussure’s law³¹). In non-acute old long syllables like gen^{Sg} *popà, nom^{Pl} *popì we mark the neutral *’ because the reflexes are always short in some forms (as in those two) – one could also write these as *popà, *popì, but this would mean using the short neo-acute symbol on old long vowels, which would be possible only post-shortening (and it is difficult to know when the length shortened in this position). In forms like inst^{Pl} *popỳ we do find both short and long reflexes and thus one could write this as *popỹ, but it is unclear whether that was ever a real pronunciation of phonetic (and not analogical) origin or whether length here is only secondary under stress (by analogy to unstressed length or the accentual paradigm *c* type *bogỹ). Thus, we write *popà, *popì and *popỳ, while admitting that this may not be ideal.

Next, we shall look at each prosodeme by itself (disregarding the dialectal neo-circumflex) and how and why it is reconstructed. We shall also

³⁰ Cf. e.g. Kapović 2020e:331–334.

³¹ Cf. e.g. Dybo–Zamjatina–Nikolaev 1993:13–15, Kapović 2015:117–119, Kapović 2020b.

try to briefly illustrate difficulties in accentological reconstruction, various changes that can happen in some words and all the data that has to be included in the reconstruction (dialects, older language attestations, paradigmatic accent, variation, etc.). Each example of prosodic correspondences, of course, represents tens and hundreds of other examples like that one. It should be pointed out that here not all the details of all reflexes in Slavic languages and dialects are discussed – the focus is just on the main points that illustrate how and why Common Slavic prosodemes are (to be) reconstructed.

3.1. The old acute

symbol	traditional name	probable phonetic value	example	most important reflexes
*´	(old) acute	long rising glottalized	*kǫrva ‘cow’	Štok/Čak/Kajk. <i>kràva</i> , Sln/Cz <i>kráva</i> , Russ. <i>koróva</i> , Blg <i>kràva</i>

The old acute appeared only in originally long syllables (i.e. on *a, *ě, *i, *y, *u, the nasals *ę, *ǫ, the diphthongs *el, *ol, *er, *or and *ьl, *ьl, *ьr, *ьr).³² Judging from the reflexes in Slovene and East Slavic, it was a rising toneme.³³ The accent in Slovene is rising (Slovene *kráva*) in non-final syllables of polysyllabic words. This length in Slovene (´ – a long rising accent) is young – in some Slovene dialects one can still find the short rising tone as the reflex in polysyllabic words,³⁴ e.g. in *bàbica* ‘grandma’ with a short rising ` (but cf. standard Slovene *bábica* with lengthening) < *bābica. In East Slavic the stress is on the second syllable of *polnoglasie*: (Old) Russian³⁵/Ukrainian *koróva*, Belarusian *karóva*. Rising tone can be analyzed as high tone or stress on the second mora of a long vowel – thus, when the

³² The reasons for this are historic – the old acute originates in either Proto-Indo-European long vowels (as in *i*-stem loc^{sg} *-ēi > Slavic *-ī), from laryngeal lengthening (from Proto-Indo-European *VH sequences, e.g. in *meh₂tēr > Slavic *māti ‘mother’) or from Winter’s-law lengthening (e.g. Proto-Indo-European *h₁ed- > Slavic *ěsti ‘to eat’). Thus, old acute appears only on long or lengthened syllables.

³³ This is the traditional reconstruction, cf. the references in Villanueva Svensson 2023:99.

³⁴ Cf. e.g. Greenberg 2000:128.

³⁵ Old Russian is cited mainly from Zaliznjak 1985/2010 (the list of words according to accentual paradigms is at pages 131–140), 2019.

sequence of vowel + resonant (Common Slavic *er, *or, *el, *ol) yields the pleophonic sequence of vowel + resonant + vowel (East Slavic *ere, oro, olo*), the rising tone of the original resonant-diphthongs yields the stress on the second part of *polnoglasie* (East Slavic *eré, oró, oló*). The trace of the original rising tone of the old acute can also perhaps be seen in dialects around Kladanj in Bosnia, where one seems to find, according to some reports, a special short rising accent in *kráva* (see 3.4 below for more details). The rising tone can also be seen in Latvian, outside of Slavic, in cognates with Slavic old acute, e.g. Latvian *māte* ‘mother’ with a rising accent ~ Slavic *māti. Czech seems to have preserved the length of the original acute (Czech *kráva* [kra:va], Old Czech *kráva*³⁶) in monosyllabic and disyllabic words, just like Upper Lusatian (*kruwa* < *krówa³⁷) but with no limitations to the number of syllables.³⁸ Length at the place of the old acute in old Slavic loanwords seems to be present in Hungarian as well, even in positions where it is never preserved anywhere in Slavic, e.g. Hungarian *szomszéd* ‘neighbor’ < *sqsědъ, *beszéd* ‘speech’ < *besěda, *ebéd* ‘lunch’ < *obědъ, *barát* ‘friend’ < *brāt(r)ъ ‘brother’, etc. If these lengths are reliable, this would probably point to the acute still being long in Pannonian Slavic at the time of the coming of Hungarians in 9–10th century.³⁹ The short falling toneme in Štokavian/Čakavian/Kajkavian⁴⁰ *kràva* is innovative but a regular reflex of the old acute (for the reflex in Križanić’s language – cf. 3.4 below). It may be that the glottalization was a factor in the shortening⁴¹ – if glottalization was or became the main differentiating trait of old acute, length might have been lost as irrelevant, before prosodical glottalization was subsequently lost as well. In most modern Štokavian/Čakavian/Kajkavian dialects short syllables have no old tone distinction (the only exception perhaps being the Old Štokavian dialects around Kladanj in Bosnia and historically Juraj Križanić’s language) so the falling tone is actually

³⁶ Old Czech is cited mainly from Gebauer 1970.

³⁷ Upper Lusatian has no distinctive length in modern language but it has the reflex <ó> [ʊo]/[uo] from the old long *ō (for instance from Common Slavic *ōr, *ōl) and <ě> [ie] from the old long *ē (for instance from Common Slavic *ěr, *ěl). This <ó> regularly yields *u* before *w*, thus *krówa > *kruwa* (cf. Carlton 1991:262). The reflex <ó> can be seen in e.g. Upper Lusatian *wróna* ‘crow’ (~ Czech *vrána*, Štok/Čak/Kajk. *vràna*, Russian *voróna*).

³⁸ Cf. Upper Lusatian instr^{sg} *wrónu* ‘with the crow’, instr^{pl} *wrónam* ‘with the crows’, *plóšić* ‘to frighten’, *mróčić* ‘to darken’ with length but Czech instr^{sg} *vranou*, instr^{pl} *vránami*, *mračiti* ‘to frown’, *plašiti* ‘to scare’ from *vŕnojo, *vŕnami, *mŕčiti, *pŕlšiti (Carlton 1991:262).

³⁹ Kapović 2015:230.

⁴⁰ Also in north-east Slovene Pannonian dialect (Prekmurje, Prlekija, Haloze).

⁴¹ Cf. e.g. Brozović–Ivić 1988:7.

irrelevant historically. Also, the »short falling« tone is not always phonetically neither short nor falling in modern dialects, especially in Kajkavian.⁴² The same reflex is seen in Slovene monosyllables, e.g. Štokavian/Čakavian/Kajkavian/Slovene *brāt* 'brother' < *brǣtrъ. The shortening of the old acute in western South Slavic can also be seen in the oldest Latin/Romance loanwords, e.g. Croatian toponym *Čavtat* < *Сѣбѣтѣтъ < *kivītāte- (Latin *civitās* 'city'). In Neo-Štokavian, we see the Neo-Štokavian retraction in words with the original old acute, as in *nàkravu* 'on the cow', while there is no retraction in Old Štokavian and Čakavian *na krāvu*⁴³ (compare this with *nānogu* 'on the leg' in words with the original circumflex in both Neo-Štokavian and Old Štokavian/Čakavian). In Russian, the reflexes of the old acute originally never have a stress shift to a proclitic – in *koróva* this is not possible because the accent is on a newly medial syllable, but this also goes for initial stress. E.g. (Old) Russian *sító* 'sieve' < *sǐto has no stress shift to a proclitic (preposition⁴⁴). Bulgarian has an initial accent in *kràva* and the form with the article *krāvata* 'the cow' (unlike e.g. *glavà* – *glavàta* with a final accent), which point indirectly to the old acute. While Czech and Upper Lusatian show the length from the old acute (in monosyllabic and disyllabic words in Czech and generally in Upper Lusatian), other West Slavic languages show a simple short syllable as a reflex from the old acute: (Old) Polish⁴⁵ *krowa*, Kashubian *krova*,⁴⁶ Slovak *krava*.

⁴² Cf. Kapović 2015:47, 57, 59, 61.

⁴³ This is the original and expected reflection. In some cases, an innovative accentuation can occur. E.g. in some Old Štokavian dialects, the word *blāto* 'mud' < *bǫlto, which originally has the old acute (cf. Neo-Štokavian *ùblato* 'into the mud'), can have a secondary form *ùblato* with a stress shift. The art of historical accentology is to compare all available data and ascertain which forms are archaic and which are innovative. In case of *blāto*, it is clear that this is a reflex of the old acute because of the shortened -ǣ- (a theoretical **bǫlto with the long circumflex would yield Štokavian **blāto) – no other Common Slavic prosodeme could have yielded that in a disyllabic word with a first long syllable (*-ol- was a diphthong and thus long).

⁴⁴ Of course, there are also cases of secondary shift to a preposition in Russian, e.g. in *náleto* 'in the summer' (also *na léto*). This is an old innovation, Old Russian (Zaliznjak 2019:525) has both the old *na léto* and the innovative *náleto*. On the other hand, Štokavian *ljěto* 'summer' clearly points to *lěto (**lěto, with a long circumflex which would provide an original shift to a proclitic, would yield Štokavian **lijěto **[ljê:to]), though an adverbial *nāljetu* 'next summer' with a secondary accent can also be found in Neo-Štokavian.

⁴⁵ Old Polish words are quoted mainly from SS.

⁴⁶ Slovincian ¹*krova* (Stankiewicz 1993:295) has a secondary accent that shifts to a proclitic (which Stankiewicz marks with ¹ in front of the whole word). This kind of secondary mobility is frequent in many words in Slovincian so Slovincian is not very reliable in this regard – it is archaic in the sense that it preserves the shift of the stress to the proclitic as a possibility and as a process in general, but it is quite innovative

The acute is connected with one phonologic change in North (West and East) Slavic. In North Slavic, the initial **or-/ol-* yields *ra-/la-* (metathesis with lengthening) if it had the old acute, but *ro-/lo-* if the root was non-acute (i.e. if it had the circumflex, neo-acute or was unaccented). In reality, the short initial **ar-/al-* (written traditionally as **or-/ol-* in the reconstruction, though this was probably prior to the Slavic **a > *o* change) changed to **rā-/lā-* (written traditionally as **ra-/la-*). As for examples, cf. e.g. the acute in **ōrdlo* ‘plow’ > Czech *rádlo*, Polish *radło*, Russian *rálo*, **ōlbōt/ds* ‘swan’ > Czech *labuť*, Polish *łabędź*; **ōlčьnъ* ‘hungry’ > Czech *lačný*; **ōlnъ* ‘doe’ > Russian *lan’*, Czech *laň*; **ōrkъ* ‘crayfish’ > Russian/Czech/Polish *rak*; **ōrmę* ‘shoulder’ > Old Russian *rāmo*, Czech (arch.) *rámě*, Polish *ramię*; **ōrtъ* ‘war’ > Russian (arch.) *ratъ*. For the circumflex cf. e.g. **ōlkъtъ* ‘elbow’ > Czech *loket*, Polish *łokieć*, Russian *lókot’*; **ōlsъ* ‘elk’ > Russian *los’*, Polish *łoś* (cf. also **ōlni/olnī*⁴⁷ ‘last year’ > Czech *loni*, Old Russian⁴⁸ *lonī*). For the neo-acute cf. e.g. **ōldъj-* ‘boat’⁴⁹ > Czech *lod’*, Polish *łódź*, Ukrainian dial. *lódja* (Old Russian⁵⁰ *lodīi* – acc^{sg} *lódьju*); **ōrzьnъjъ* ‘various’ > Czech *různý*, Polish *różny* (Russian *ráznyj* is from Church Slavic). For the pretonic syllable cf. **orkýta* ‘brittle willow’ > Czech *rokyta*, Polish *rokita*, Ukrainian *rokýta*; **orstī* ‘to grow’ > Czech *růsti* (with length, cf. 1^{sg} *rostu* without it), Ukrainian *rostý* (Russian *rastí* has a Church Slavic spelling); the prefix **orz-* ‘dis-, un-’ > Russian/Czech/Polish *roz-*. Slovak is often excluded from the rest of North Slavic in this regard – it mostly has *ra-*, *la-* from a non-acute **or-/ol-*, e.g. *v-lani* ‘last year’, *lakeť* ‘elbow’ and the prefix *ráz-* in nouns but *roz-* ‘dis-, un-’ in verbs and deverbatives. Slovak *los* ‘elk’ is surely a loanword and *lod’* ‘ship’ could be as well. However, *rôzny* ‘various’ has *ro-*.

It is not completely clear whether at the time of this change all unaccented syllables were already always non-acuted (i.e. non-glottalized) or not. Holzer (2005:43–44) tries to provide some examples of North Slavic *ra-/la-* with the supposed unaccented acute syllables, but none of them are actually reliable enough to prove that. The word **ortajъ* ‘plowman’ points to both initial and medial accent – e.g. Montenegrin Neo-Štokavian (Vuk) *ràtaj* but Croatian Čakavian Orbanici (Kalsbeek 1998) *ràtaj*, Slovene

(unlike e.g. Russian or Neo-Štokavian/Čakavian) when it comes to the distribution of words in classes which shift and do not shift the accent to a proclitic. Massive analogical later spread of the accent shifting to a proclitic is also a feature of Montenegrin Old Štokavian (Kapović 2022h:294–296), e.g. the original *nā glāvu* ‘onto the head’ but also the innovative *nā lāđu* ‘onto the boat’.

⁴⁷ For the accent cf. Štokavian variants *lāni* and *lāni*.

⁴⁸ Zaliznjak 2019:287.

⁴⁹ **oldī* – gen^{sg} **ōldъjъ* – acc^{sg} **ōldъjъ*.

⁵⁰ Zaliznjak 2019:273 (with other forms).

(Pleteršnik) *rátaj* < *ratāj and *ratáj* (could be from *ōrtajъ or analogical from earlier Slovene neo-circumflex *râtaj < *ōrtajъ), Russian/Ukrainian/Bulgarian (cf. e.g. ESSJ) *rátaj* and *ratáj*, etc. The word *orměnrъ ‘fast’ also has both initial and medial accent – Russian (arch.) *ramjányj* ‘strong’ but also Russian (dial.) *rámyj* ‘beautiful’ (ESSJ) and Slovene (Pleteršnik) *rámeno* ‘very’. The word *olnita ‘cheek’ (Old Czech *lanitva*) also points to both medial accent (Old Russian⁵¹ *lanita*, etc.) and the initial one (Orlec Čakavian⁵² *lānita* < *lānita). What is more, while usually *olnita is reconstructed, the pre-form *lanita is actually also possible.⁵³

The original additional glottalization of the old acute, where the glottal stop is the additional phonation of the rising tone, is reconstructed by comparison to Baltic languages – Latvian⁵⁴ and Lithuanian Žemaitian »broken« (glottalized) tones⁵⁵ (cf. Latvian *brālis* ‘brother’ ~ Slavic *brātrь). The traditional »acuteness«⁵⁶ has to represent something phonetically real and glottalization is the most likely choice.⁵⁷ Originally, this glottalized phonation could be present in all long syllables – whether stressed or not (more on that below). A typological comparison for a glottalized rising »old acute« is the Vietnamese rising glottalized tone as in *mũ* [muʔ] ‘hat’. It is not clear how long this supposed glottalization might have remained present in Slavic – the fact that the old acute appears in many of the old Romance loanwords in Croatian, e.g. in the oronym *Matòkit* < *Matokīt in Dalmatia in Croatia < Romance *mont(e) akūto (Latin *mōns acūtus*),⁵⁸ might point to it not being glottalized already by that early time because one would perhaps not expect it from simple long Romance vowels.⁵⁹

⁵¹ Zaliznjak 2019:215.

⁵² Houtzagers 1985.

⁵³ Cf. also Villanueva Svensson (2023:95⁶⁰) for a critique of Holzer (»inconclusive at best«).

⁵⁴ Cf. e.g. Endzelīns 1971:26.

⁵⁵ Villanueva Svensson (2023:63, 108) is doubtful concerning the archaic nature of the Žemaitian glottalized tone.

⁵⁶ Terminologically, it is important to note that this »acuteness«, meaning probably glottalization (glottalized phonation), is connected to the old acute (*”), but has nothing to do with the neo-acute.

⁵⁷ Villanueva Svensson (2023:10, 100–102 – with references) states that the glottalic interpretation of the »acute« is almost the current communis opinio, stemming all the way to André Vaillant in 1936.

⁵⁸ Cf. Kapović 2015:73¹⁷⁷.

⁵⁹ However, jery was very often »acute« (*ŷ) in Slavic so the prosodic glottalization may have been its regular feature even in loanwords (at least in a word such as *Мѣтокътъ – but cf. also e.g. *bъlъ, *bъlǎ ‘was’). But that kind of explanation would not really work for loanwords such as the already mentioned Croatian toponym *Càvttat* < *Сѣвѣтѣтъ < *kivitate-.

If old acute was not glottalized in the last stages of Common Slavic, then it was just a different kind of rising toneme than the long neo-acute – cf. e.g. typologically two distinctive rising tones in Slavonian Old Štokavian in Croatia⁶⁰ or two rising tonemes in Cantonese, etc.

3.2. The short circumflex

symbol	traditional name	probable phonetic value	example	most important reflexes
*"	short circumflex	short falling	*slòvo 'word'	Štok/Čak/Kajk. <i>slòvo</i> 'letter', Sln <i>slovô</i> , Russ. <i>slóvo</i> , Blg <i>slòvo</i>

The short circumflex appeared only in originally short syllables (i.e. on *e, *o, *ъ, *ь). Its falling tone can to a point be reconstructed from the reflex in Štokavian/Čakavian/Kajkavian, where the reflected toneme is indeed in many dialects short and falling and written the same as in common Slavic (Štok/Čak/Kajk. *slòvo*). However, one should be careful here as well because this is a more complicated affair than is sometimes claimed.⁶¹ The toneme /˘/, as already mentioned, is not phonetically short and falling in all modern-day dialects (though its short falling variant seems to be the oldest/original one), and even where it is, it is of various origins (not stemming only from the Common Slavic circumflex but also from the old acute and the old short neo-acute) and has no tone opposition in the most archaic dialects (except possibly in the dialects around Kladanj). Thus, tonologically it is simply a short accent, not really a short falling accent. The falling intonation can really be considered as relevant only from the Kladanj area.

In other languages, the reflexes are not so conclusive for the reconstruction of a falling tone, but the parallelism of the short *" with its long counterpart *˘ (the long circumflex), for which there are more indications that it was falling, also points to the falling phonetic character of *". The fact that the (short) circumflex shifts to a proclitic (*slòvo – *nî_slovo 'not a word', *nâ_slovo 'onto a word', *nî_nâ_slovo 'not even onto a word') also points to a falling tone – in such word-forms, the accent is always falling on the absolute first syllable, which is why it moves to the absolute first syllable in a phonetic word (more on that in 3.7). Slovene has *slovô*, with the long falling tone on the next syllable – this progressive shift of the circumflex is reg-

⁶⁰ For instance, *sûša* 'drought' and *sûha* 'dry' (feminine indefinite singular).

⁶¹ Kapović 2015:73¹⁸¹–74¹⁸¹.

ular in Slovene (in standard Slovene and in most Slovene dialects), however it does not tell us anything directly about the tone of the original accent – one can theoretically suppose that the lengthened falling tone was copied on the next syllable but that would be completely ad hoc because prosodic features often change when shifting syllables (e.g. retraction of falling tones most often results in rising tones). Bulgarian *slòvo* only shows us the stress position, but the plural *slovà/slovesà* points to the mobile accentuation, which presumes the original circumflex in singular. Russian *slóvo* (Ukrainian *slóvo*, Belarusian *slóva*) also points only to initial accentuation. However, Russian also shows a shift of the accent to a preceding preposition, signaling the old circumflex: cf. Russian *povérit' ná slovo* ‘entrust on a word’ and *slóvo zá slovo* ‘one thing leads to another’. The shift can also be seen in Štokavian (*nĭ slovo* ‘not a letter’) and the accent is mobile in Sловinian as well (¹*slovo*). Other languages just have a non-informative short vowel (Czech/Slovak *slovo*, Polish/Kashubian/Lusatian *słowo*).

3.3. The long circumflex

symbol	traditional name	probable phonetic value	example	most important reflexes
*~	long circumflex	long falling	*zôlto ‘gold’	Štok/Čak/Kajk. zlâto, Sln zlatô, Cz zlato, Russ. zóloto, Blg. zlàto

The long circumflex appeared, as is clear from its name, only in originally long syllables (i.e. on *a, *ě, *i, *y, *u, the nasals *ę, *q, the diphthongs *el, *ol, *er, *or and *ьl, *ьl, *ьr, *ьr). As the short circumflex, judging from the reflexes in Štokavian/Čakavian/Kajkavian and East Slavic, the long circumflex had a falling tone. In Štokavian, Čakavian and Kajkavian, the reflex (in monosyllables and disyllables) is a long falling toneme (*zlâto*). Here it must be noted that the falling tone which is most relevant is the one from the archaic dialects (i.e. many but not all Old Štokavian, Čakavian and Kajkavian dialects), where it still opposes the long neo-acute as in *sûša* ‘drought’, i.e. where the old Common Slavic tone opposition on long vowels has been preserved. In innovative dialects, like Neo-Štokavian, modern circumflex can encompass also older long neo-acute (thus *zlâto* = *sûša*), which makes it historically much less reliable (in Neo-Štokavian the

modern tonological falling intonation is opposed to the tonological rising tone, which is innovative and stems from retraction, e.g. Neo-Štokavian *zlāto* as opposed to Neo-Štokavian *vīno* < older/dialectal *vīnò* ‘wine’). In conservative (Old and Neo-) Štokavian and Čakavian dialects, this toneme also shifts to a proclitic (preposition, conjunction or a particle), e.g. *nā zlāto* ‘on the gold’, *ī zlāto* ‘gold as well’, gen^{sg} *ōd zlāta* ‘of gold’. In East Slavic, the falling intonation in Common Slavic is indicated by the stress on the first part of pleophonic *-ére-*, *-óro-*, *-ólo-* as in Russian/Ukrainian *zóloto* (Belarusian *zólata*).⁶² This accent in East Slavic also originally shifts to the proclitic, e.g. Old Russian⁶³ *nā zoloto* ‘on the gold’, as in Štokavian, though mobility is lost in modern Russian in this particular word⁶⁴ (however, cf. e.g. modern Russian *pód golovu* ‘under the head’). Slovene, as with the short circumflex, shows the progressive shift of the circumflex in *zlatô*, which thus neutralizes with *slovô*. Bulgarian only shows the initial accent in *zlāto*, but the its mobility, shown by the plural form *zlatà*, points to the original circumflex. In West Slavic, the long circumflex is always shortened and thus we see shortened originally long vowels there (Czech/Slovak *zlato* without length, Polish/Kashubian/Lusatian *zloto* without vocalic traces of old length) – as opposed to length or traces coming from other sources (e.g. from the long neo-acute). The tonological interpretation of the circumflexes will be discussed further in 3.7.

⁶² A typological parallel to this can be seen in BCMS, where north-western Croatian and Bosnian Neo-Štokavian dialects (which is standardized in standard Croatian and Bosnian) usually have accents like *tjēlo* [tjê:.lo] ‘body’ (written orthographically as <tijelo>), where [jê] is the reflex of the old long jat (*tĕlo), stemming from an older diphthong *je. In Vukovian (Vuk Karadžić’s) Neo-Štokavian (»classical Serbo-Croatian«), as well as in present-day Montenegro Old and Neo-Štokavian (standardized in standard Montenegrin), this shifted to a disyllabic *tjelo* [tĭ.je.lo], with the original long falling diphthong splitting to two short vowels with the stress on the first of them. Similarly, in the Čakavian dialect of Susak in Croatia, one sees the diphthong /ie/ pronounced both as diphthongal *iê* and, more innovatively, as disyllabic *ī.e* (Kapović 2020a:523–524).

⁶³ Zaliznjak 2019:523.

⁶⁴ Many modern (Neo-)Štokavian dialects also lose *preskakanje* (the original Common Slavic accentual shift to a proclitic), e.g. the modern urban dialect of the city of Osijek in eastern Croatia or Belgrade in Serbia – unlike e.g. the dialects of southern Croatian cities of Split, Šibenik, Zadar or Dubrovnik or in Bosnia and Herzegovina and Montenegro in general.

3.4. The short neo-acute

symbol	traditional name	probable phonetic value	example	most important reflexes
*`	short neo-acute	short rising	*bòbъ ‘bean’	Štok/Čak/Kajk/ Sln <i>bòb</i> , Slk/Russ. dial. <i>bôb</i>

The short neo-acute appeared only in originally short syllables (i.e. on *e, *o, *ъ, *ь). It is traditionally reconstructed as a (short) rising toneme, but direct reflexes that actually point to a rising tone are not very numerous so such a reconstruction is mostly structural. The rising tone appears in Slovene tonemic dialects in non-final syllables, e.g. in Slovene *kôža* ‘skin’ < *kôža (the length in Slovene is younger). In this position, the short neo-acute merges with the reflex of the old acute (Slovene *kráva*). In monosyllables in Slovene both merge in the short falling tone: e.g. Sln *bòb* = Sln *rāk* ‘crab’ < *rākъ (the same as Štok/Čak/Kajk. *bòb* = *rāk*). The only evidence for a rising tone outside of Slovene would seem to come from the aberrant Old Štokavian dialects around Kladanj in Bosnia, described by Slobodan Remetić,⁶⁵ where one supposedly finds e.g. *kôš* ‘basket’ < *kôšъ, with a rising accent distinct from both the short falling (˘) and the Neo-Štokavian short rising (ˊ) accent. While regular Štokavian (and Čakavian) have acc^{sg} *vòdu* ‘water’ < *vòdъ, *bāba* ‘old woman’ < *bāba, *kôža* ‘skin’ < *kôža, Kladanj is reported to have *vòdu* with a falling accent but *bāba* and *kôža* with a special rising accent (and *vòda* ‘water’ with a normal Neo-Štokavian younger short rising accent).⁶⁶ Outside of Slovene and this recent, and still to a degree certainly questionable, Kladanj discovery, there are very few indications in the whole of Slavia that would directly point to a rising tone of the Common Slavic short neo-acute. In Kajkavian,⁶⁷ we see that *` yields

⁶⁵ Remetić 2004 – cf. also Kapović 2015:219–221.

⁶⁶ The reason that Remetić’s observations (confirmed by other Serbian dialectologists, including the late Pavle Ivić – cf. Remetić 2004:652) seems relatively plausible is that many dialectologists have been remarking the existence of an unexpected ˊ (or a prosodeme perceived as such) in some Eastern Bosnian Old Štokavian dialects for more than a century now in words like *šūma* ‘woods’ instead of the expected and normal Štokavian *šūma*. Still, further research and experimental phonetic confirmation (or refutation) would be much welcomed in this regard, although it is questionable whether speakers of such a variety can be found anymore in Kladanj.

⁶⁷ Also in Slovene – but there the process is harder to observe due to other later developments.

the long neo-acute, which is indeed a long rising tone, when lengthened in specific positions⁶⁸ in an early process called the neo-acute lengthening (e.g. Kajkavian *snȍp* ‘bundle’ < **snȍpъ* but *snȍpje* ‘bundles’ < **snȍpъje*) – this could be indicative, but is not strictly speaking a direct evidence of the tone of the original Common Slavic short neo-acute. For instance, in many Čakavian dialects the toneme “ (phonetically often a very sharply falling tone – but without a distinctive tone opposition in short syllables) also lengthens to a long neo-acute (a rising or level long tone), e.g. *krāva* > *krāva* ‘cow’.⁶⁹ However, the Kajkavian neo-acute lengthening in question is very early, occurring at the time of the loss of the weak jers,⁷⁰ unlike these much later Čakavian lengthenings.

As for other reflexes of the Common Slavic short neo-acute **ˀ*, they are sometimes (but not always or in all languages/dialects) different from the reflection of the other short Common Slavic prosodeme, the short circumflex **ˁ*, but they never show any direct trace of being originally phonetically rising. It must be said, however, there is hardly a way a language can show a direct trace of this short rising tone if it does not preserve the rising tone itself (and no Slavic language/dialect preserves the tone opposition on short vowels). Also, a short rising tone may experience a tendency to lengthen since a tone opposition is more easily maintained in long syllables (since there is more time in long syllables to realize the distinctive tone contour) – cf. many Western South Slavic dialects, Latvian or Lithuanian, which have a tone opposition only with long vowels. Indeed, the short neo-acute **ˀ* does show a tendency to lengthen (i.e. to yield long, or originally long, reflexes) in basically the whole of Slavic (cf. the mentioned regular development in Kajkavian, the so-called neo-acute lengthening as in *snȍpje* < **snȍpъje*, and the developments below in other languages), which may have something to do with its original rising tone. Typologically, rising tones are known to be somewhat phonetically longer than falling ones⁷¹ (this is, for instance, the case with the Neo-Štokavian rising accents) and this might have been a reason why the Common Slavic short neo-acute lengthened in a number of cases in later Slavic. One also has to mention that the neo-acute length was the only diachronically stable length in the whole of Slavic (cf. 3.5 below).

The additional reason for the reconstruction of the short neo-acute as rising is structural – the short neo-acute is largely complementary to its

⁶⁸ Kapović 2015:377–396, Kapović 2017a:610¹⁶–611¹⁶.

⁶⁹ Cf. Kapović 2015:606–619.

⁷⁰ Kapović 2015:621–633.

⁷¹ Cf. e.g. Gordon 2016:232.

longer counterpart, the long neo-acute (which is easily demonstrated as being originally rising – cf. 3.5 below), as they usually appear in the same contexts (mostly in accentual paradigm *b*). Cf. e.g. *bòbъ – gen^{sg} *bobà like *kōrlъ ‘king’ – gen^{sg} *korlâ; *nošò ‘I carry’ – *nòsišъ ‘you carry’ like *bornò ‘I defend’ – *bōrnišъ⁷² ‘you defend’; *gòlъjъ ‘the naked’ like *bělъjъ ‘the white’, etc. One other reason why the short neo-acute is traditionally regarded as a rising tone is related to its name – it is traditionally⁷³ regarded as being of younger, retractional origin. The retractional origin is indeed valid in the case of retraction from a weak jer, e.g. in *jestъ > *jèstъ ‘it is’ or *pečešъ ‘you bake’ > *pečèšъ in accentual paradigm *c*⁷⁴ (however, the often supposed retraction from the jer in the **bobъ > *bòbъ type in accentual paradigm *b* probably never happened), where the original final accent retracts from a weakening jer, and in case of the dialectal retractions of the neo-circumflex, as in *pytájěšъ ‘you ask’ > dialectal *pytâšъ > dialectal *pŷtašъ. However, the supposed retractions due to »Stang’s law«, ⁷⁵ e.g. **nošišъ > *nòsišъ ‘you carry’, that encompass the majority of cases with the neo-acute, though still widely accepted by many scholars, are not sustainable.⁷⁶ Why a retractional origin of the neo-acute would be connected to a rising tone is clear – the rising tone means a prominence on the end (or second mora in case of a long vowel) of a segment, which is thus closer to the next syllable. Because of this, in cases of stress retraction (the phonetic shift of the accent to a preceding syllable), the newly accented syllable often becomes rising, thus preserving in a way an indication of the old stress position. This is seen – as a typological parallel – all over the Western South Slavic tone systems, e.g. in Neo-Štokavian *žèna* ‘woman’ with a short rising accent from the dialectal/older *ženà* (cf. also Slovene *tàma* ‘darkness’ together with *tàma* with a short rising accent).

To get back to the actual reflexes of the short neo-acute, Štokavian, Čakavian and Kajkavian have e.g. *bòb* with a short falling toneme (we

⁷² In some cases, forms like these will be written as *nòsišъ, *bōrnišъ with a long posttonic vowel. However, in this paper we will generally not do so, except occasionally to stress that a syllable was long, because it is superfluous – *i, like other originally long vowels, was always originally long.

⁷³ »Traditionally« has to be taken with a grain of salt because there were various explanations and hypotheses in the history of Slavic accentology. Here by »traditionally« we mean the Stangian tradition since the late 1950’s (Stang 1957), considering also earlier interpretations – Ivšić 1911 was the first one to posit a retractional origin of the neo-acute.

⁷⁴ Cf. ahead the section 4 for accentual paradigms.

⁷⁵ Cf. Kapović 2020d.

⁷⁶ For a short overview (with further references) cf. e.g. Kapović 2017a:390²¹–391^{21, 22}.

have already mentioned the Kajkavian lengthening in some positions above). This is also the reflex in Slovene in monosyllables – Slovene *bôb* (cf. Slovene *kôža* but Štokavian/Čakavian *kôža* stemming from **kôža* for polysyllabic words⁷⁷). Thus, these reflexes merge with the reflex of the old acute in Western South Slavic (in monosyllables) – cf. Štokavian/Čakavian/Kajkavian/Slovene *bôb* < **bòbъ* and Štokavian/Čakavian/Kajkavian/Slovene *mráz* ‘frost’ < **môrzъ* (the reflex is also the same in polysyllables with the old short circumflex in Štokavian/Čakavian/Kajkavian, cf. *slôvo* < **slôvo*). However, the reflexes of the short neo-acute seem to still have been partly different from the reflexes of the old acute in the Croatian Čakavian-Kajkavian dialect of Juraj Križanić (1617/8–1683). There, in prepausal monosyllables one can see the distinction of <*kôš*> < **kôšъ* ‘basket’ and <*mráz*> < **môrzъ*.⁷⁸ This distinction is not preserved in any living Štokavian/Čakavian/Kajkavian dialect⁷⁹ (not even Kladanj). There also some instances of a sporadic lengthening of pre-resonant **`* as in Neo-Štokavian *dvôr* < older/dialectal Štokavian *dvôr* < **dvôrъ*,⁸⁰ which may have something to do with the mentioned lengthening tendency. The reflexes in West Slavic are quite complex. In monosyllabic and disyllabic words long reflexes are often found (except in Polish) in originally short vowels with the (short) neo-acute, especially on old **ò*, e.g. in Slovak *bôb* [bʊob] or Czech *kůže* ‘skin’. However, these long reflexes were apparently later often replaced with a short vowel by analogy, e.g. in Czech/Sorbian *bob* (the length in Polish *bób* [bup] is due to the originally final voiced -*b* and not the original neo-acute), and there are exceptions like Slovak *koža*.⁸¹ In East Slavic and Bulgarian, the only thing that can be seen is the stress position – e.g. Russian *kôža*, Bulgarian *kôža*. However, in some Old Russian manuscripts and the so-called Leka-type dialects we find a special reflex of **ò*, usually written as <*ô*> and pronounced as a diphthong [uo] in the mentioned dialects: e.g. Russian dialectal *bôb*, *kôža*, *selô* ‘village’ (it also appears from other sources in such dialects, e.g. in *korôva* < **kôrva*, *korôl* < **kôrлъ*, i.e. it actually represents all non-circumflex **o*’s). The originally short neo-acute does not shift to a proclitic in Russian, e.g. *na kôžu*

⁷⁷ In *jā*-words with an initial original **`*, Kajkavian famously has a neo-circumflex, e.g. *kôža*, of non-phonetic origin (cf. Kapović 2015:396–399).

⁷⁸ Dybo 1968:221, Dybo 1981:264, Olson 2012, Kapović 2015:218–219.

⁷⁹ In Kajkavian, the distinction is seen indirectly with lengthening – e.g. *pěrje* ‘feathers’ < **pěrbje* (from *però* ‘feather’ < **però*) with the neo-acute lengthening but *zřnje* ‘grains’ < **zřnbje* (from *zřno* < **zřno* ‘grain’), cf. Kapović 2015:392 (the distinction was often secondarily obfuscated in Slovene – Kapović 2015:339).

⁸⁰ Kapović 2015:400–406.

⁸¹ Cf. the examples e.g. in Kapović 2015:407–412.

‘onto a skin’ (the same as in Old Štokavian/Čakavian *na kōžu*, while Neo-Štokavian *nà kožu* has a younger, Neo-Štokavian, retraction). In Bulgarian, alternations like *bòb* – *bòbat* ‘the beans’, with the accent remaining on the same syllable, point to the original *ò (and not *ö – cf. Bulgarian *nòs* ‘nose’ – *nosàt* ‘the nose’ < *nòsь).

3.5. The long neo-acute

symbol	traditional name	probable phonetic value	example	most important reflexes
*~	long neo-acute	long rising	*kōrlь ‘king’	dial. Štok/Čak/Kajk. <i>krāl̃j</i> , Sln <i>králj</i> , Cz <i>král</i> , Slk <i>král’</i> , Pol. <i>król</i> , Russ. <i>koról’</i>

The long neo-acute appeared, as is clear from its name, only on originally long syllables (i.e. on *a, *ě, *i, *y, *u, the nasals *ę, *ǫ, the diphthongs *el, *ol, *er, *or and *ьl, *ьl, *ьr, *ьr). Like the short neo-acute, judging from the reflexes in Western South Slavic and East Slavic, the long neo-acute was a rising tone. While the (old) acute and circumflex length were not very diachronically stable in Slavic, and they shortened in various ways in all dialects in at least some of the positions (in some dialects both were shortened, in others only one of them was shortened⁸²), the long neo-acute length was very stable and yielded length in all Slavic languages/dialects that preserved distinctive length or its traces in vocalism in almost all positions – this means that the syllable with the long neo-acute remained long regardless of the number of syllables in a word (the only position where the original long neo-acute did shorten in certain cases is the final open position⁸³). The long neo-acute is a long rising tone in words like *krāl̃j* in archaic Old Štokavian, Čakavian and Kajkavian dialects⁸⁴ (in other dia-

⁸² There is no Slavic dialect/language that has preserved the length from either the long circumflex or the old acute (let alone both) in all positions – in Štokavian/Čakavian/Kajkavian (and Slovene dialects with partial progressive shift of the circumflex) the long circumflex is shortened in polysyllabic words (e.g. Štokavian *šin* ‘son’ – pl. *šinovi* ‘sons’) and in Czech the same occurs with the old acute (e.g. Czech *kráva* – instr^{pl} *kravami*). In Upper Lusatian, traces of the old acute length seem to be preserved regardless of the number of syllables but only in syllables with the metathesis of liquids.

⁸³ Cf. again Kapović 2020e:331–334.

⁸⁴ The neo-acute has a different rising tone than the Neo-Štokavian younger retractional ‘. The neo-acute is not always phonetically rising – it is also often a level tone and can even be a mildly falling tone (but can still be distinct from the long cir-

lects, including standard Neo-Štokavian, it merges with the long circumflex and yields *krāl̩j*). The long rising reflex of the neo-acute appears also in Standard Slovene *krāl̩j* (this toneme in Slovene can be also of other origin: cf. the already mentioned *kráva* < **kōrva*, *kōža* < **kōža* and the retractions *žēna* < **ženā*, *tráva* ‘grass’ < *travā*). The old rising tone is also proven by East Slavic, where the stress is always on the second vowel of *polno-glasie* (*eré*, *oró*, *oló*), as in Russian/Ukrainian *koról*’ and Belarusian *karól*’. In West Slavic, the long neo-acute always yields length or traces of old length in all languages and positions, where this can be seen (Czech *král*, Slovak *král*’, Polish *król*, Kashubian *król*) – excluding the special case of open final syllables. In Bulgarian, the absence of stress alternation in *krāl* – *krāl̩jət* ‘the king’ points to a non-circumflex (cf. *vràg* ‘devil’ – *vragət* ‘the devil’ < **vōrgъ*).

3.6. Common Slavic tonemes by quantity and position

As we have seen, Common Slavic formally has five prosodemes (if tone/phonation distinctions are coupled with length):

- **brātrъ* ‘brother’ – the (old) acute
- **kōšъ* ‘basket’ – the short neo-acute
- **pōtъ* ‘path’ – the long neo-acute
- **bōgъ* ‘god’ – the short circumflex
- **gōrdъ* ‘city’ – the long circumflex

The old acute appeared only in long syllables and did not have a short counterpart,⁸⁵ while the neo-acute and the circumflex could appear with both short and long syllables:

cumflex, which has a more abrupt fall). Cf. e.g. Langston 2006:38–64, Vlašić Duić and Pletikos Olof 2014, Kapović 2015:373–375.

⁸⁵ Though, as we shall see, the short neo-acute was a sort of a »stand-in« for the short counterpart of the old acute in some (apparently innovative, cf. section 5 below) cases, e.g. in nominal and adjectival prefix derivatives like **podōba* ‘manner’ – **poxvāla* ‘praise’ or nominal and adjectival compounds like **bosonōgъ* ‘barefoot’ – **golobōrdъ* ‘barefaced’.

Table 4: Common Slavic prosodemes and quantity

symbol	name	IPA	short vowels	long vowels
*ˊ	old acute	[ˊː]	–	+
*˘	short circumflex	[˘]	+	–
*ˆ	long circumflex	[ˆː]	–	+
*ˋ	short neo-acute	[ˋ]	+	–
*ˋˊ	long neo-acute	[ˋˊː]	–	+

Long prosodemes can seemingly appear on short vowels which are first parts of liquid-diphthongs, e.g. in words like *vĭlkъ ‘wolf’, *gōlsъ ‘voice’, *kōrlъ ‘king’, *vĭlna ‘wool’, *pōrgъ ‘threshold’. The exact phonetics of these is difficult to know, so writing them as *kořlъ and *pořgъ in case of the rising prosodemes (where the second part of the diphthong could have been more prominent as in Lithuanian *vilkas* ‘wolf’) is also legitimate (writing them like *gōlsъ, *kōrlъ or even *kořlъ, with the marking of a short prosodeme on one part of the diphthong, is also imaginable, though not really used in practice⁸⁶). In this article, we mark the long prosodeme on the first part of the liquid-diphthongs in all cases.

The distribution of the prosodemes was not completely free, i.e. not all of them could have appeared in all positions in a word. The following were the possible positions of prosodemes in a word in Common Slavic (final syllables were always open due to the law of open syllables):

Table 5: Possible positions of Common Slavic prosodemes in a word

	initial syllable	medial syllable	final syllable
old acute	+	+	+
circumflex	+	–	–
neo-acute	+	+	+

As is clear from the table, the acute and the neo-acute were completely free – they could appear in all positions in a word. Cf. the following examples:

the acute: *rǎna ‘wound’ – *govědo ‘head of cattle’ – *røkǎ ‘arm’

the short neo-acute: *vòla ‘will’ – *pokòra ‘repentence’ – *pečetà ‘y’all bake’

⁸⁶ Since the reflexes of *ōr are long (cf. Croatian dialectal *krāl̩j* for *kōrlъ) it makes most sense to write the Common Slavic prosodeme with the long mark as well.

the long neo-acute: *sŭša ‘drought’ – *obŏrnite ‘y’all defend’ – *polniny̋ ‘of the mountain’

However, the circumflexes appeared only in the initial syllable, as in *bŏgъ ‘god’, *sŭnъ ‘son’.⁸⁷ More precisely, the circumflexes could have originally appeared only in the absolute initial syllable of phonetic words (i.e. combinations of proclitics and words), which is why words which had an initial circumflex lost it to proclitics (prepositions, conjunctions and particles) or to the first of the multiple such proclitics: e.g. *bŏgъ ‘god’ – *nŭ bogъ ‘not even god’, *sŭnъ ‘son’ – *ŭ synъ ‘the son as well’, acc^{sg} *gŏlvŏ ‘head’ – *vŭ golvŏ ‘into the head’ – *nŭ golvŏ ‘onto the head’ – *nŭ na golvŏ (cf. conservative Štokavian *nŭ bŏg*, *nŭ sŭn*, *nŭ glŭvu*, *nŭ na glŭvu*). The reconstruction of the prosodic values in final open syllables is always indirect and was subject to later complex changes – this will be discussed later (4.4). For more on the nature of the Slavic toneme system see 3.8 below.

3.7. Accentless words

The word-forms with an initial circumflex (*˘ and *ˆ), like *bŏgъ ‘god’ or *gŏrdъ ‘city’, are often considered to actually be accentless.⁸⁸ This means that they, unlike word-forms with other prosodemes (like *bŏbъ ‘bean’, *sŏdъ ‘court of law’ or *pŏrgъ ‘threshold’), did not have an inherent accent. In Slavic, words with an inherent accent are called *orthotona* and words without inherent accent *enclitomena* in the terminology of the Moscow accentological school.⁸⁹ This accentlessness is often perceived as being an abstract phonological (tonological) analysis only,⁹⁰ but it seems that it was, at least in certain positions, also a phonetical (tonetical) reality at one point, which can be observed in some remnants in certain conservative Slavic dialects, meaning that such accentless words were indeed

⁸⁷ Many researchers reconstruct medial falling tones, presumably for a short time, prior to the supposed and already mentioned »Stang’s law« – however, these, even if they had actually existed, would probably not have had been identical to initial circumflexes, but to the dialectal Common Slavic neo-circumflex, which might not have been phonetically the same as regular circumflexes.

⁸⁸ Jakobson 1963:160–161.

⁸⁹ Cf. e.g. Zaliznjak 1985/2010:119.

⁹⁰ Such analysis, that word-forms with an absolute initial circumflex (*zŏlto ‘gold’ – *nŭ zolto ‘on the gold’ – *nŭ na zolto ‘not even on the gold’), are actually abstractly phonologically unstressed appears in other languages as well. For instance, in Tōkyō Japanese the words considered to be phonologically unaccented obtain an automatic absolute final ictus (in reality the low tone in the first syllable and the high tone in all other syllables).

phonetically unaccented (without their own stress) in some positions. In Proto-Slavic, words like *bogъ and *gordъ seem to have been unstressed in some positions (e.g. when connected with words which have an inherent accent) but stressed – with an automatic initial circumflex (including proclitics, e.g. *bōga ‘of god’ – *dō_boga ‘next to god’) – in other positions (e.g. in isolation or where there was no nearby word with an inherent accent). The exact positions when such word-forms are stressed and unstressed phonetically is not always easy to reconstruct because in later languages the initial circumflexes (or their reflexes) became fully-fledged prosodemes, just like all other prosodemes. In Old Russian⁹¹ we find examples such as *въ бѣлѣ́ городѣ* ‘in the white city’ (*bělъ + *gordъ/gōrdъ), *сѣ́ рѣчь* ‘this speech’ (*sĭ + *rěčъ/rěčъ). Some such examples, like Old Russian *odĭnъ nā desjate* (literally ‘one on ten’), *спасѣ́ bogъ* ‘god save’, *segō_dьne* ‘this day’ made it into modern Russian as *odinnadcatъ* ‘eleven’, *spasĭbo* ‘thank you’, *segōdnja* ‘today’ respectively. Cf. also Old Russian multiword enclenomena (which Zaliznjak marks with ⁻⁹²) *nā tri_dьni* ‘on three days’ (*trĭ + *dьni/dьni) (see section 5 as well) or Štokavian *nĭ nā_zĭmu* ‘not even in winter’. In Štokavian, we find e.g. dialectally in Bosnia *svŭ zĭmu* ‘the whole winter’ (*vьsŭ + *zimŭ/zĭmŭ – with the inherent accent on the first word), *dāo_bŭg* ‘god give’ (*dalъ/dālъ + *bogъ/bōgъ – the enclenomenon made of two tonologically accentless words)⁹³, in Montenegrin *od_Ilĭna_dne* ‘from Elijah’s day’⁹⁴ (the word with an inherent accent + the originally unaccented *dьne/dьne).

3.8. The nature of late Common Slavic toneme system

The concept of having five Common Slavic tonemes (*brǣtrъ; *kòšъ, *pŕtъ; *bōgъ, *gōrdъ) is useful when discussing their separate reflexes in later Slavic dialects/languages, because the short and the long neo-acute and the short and the long circumflex did not have identical reflexes. For instance, the short neo-acute and the short circumflex lengthened in some case and the long circumflex shortened, while the long neo-acute was never shortened outside of the final open syllable. Because of these different reflexes, it is useful to have different symbols at disposal for Common Slavic reconstruction. But if one is talking of the (Common or Proto-) Slavic system in itself, then it is an entirely different thing.

⁹¹ Zaliznjak 1985/2010:121.

⁹² Zaliznjak 1985/2010:119. Cf. also Dybo 1981:52.

⁹³ Brozović 2007:105.

⁹⁴ Šušanj 2023:112–113 (but with length in :151, cf. Kapović 2015:234 for the length).

The above five prosodemes can be tonologically (phonologically) easily reduced to just three by taking the length out of the equation and with *~ and *^ marking both the short and long variants: thus, we could have *brǎtrъ (acute); *kôšъ, *pôťъ (neo-acute); *bôgъ, *gôrdъ (circumflex). And then one can use only two symbols if one analyzes, as is often done, the circumflex as just the phonetic realization of accent in actually tonologically unstressed forms – thus with the accented *brǎtrъ and *kôšъ, *pôťъ, but with the unaccented *bogъ, *gordъ. That would leave Proto-Slavic with the tonal opposition of just the »old acute« and »neo-acute« (both terms are, as we have said, more or less traditional misnomers) – if both *~ and *^ were phonetically rising (as traditionally supposed), these would have to be different types of rising tones (cf. typologically two types of rising tones, ~ and ´, in many modern Old Štokavian and some Čakavian dialects). However, an opposition between two rising tonemes as the only two distinctive tonemes hardly looks very enticing typologically, though the existence of a phonetic falling tone (i.e. the circumflex) might have made the system more reasonable. But if we analyze the old acute as glottalized, then one could say that an inherent accent was automatically rising and then these could be glottalized or not if long.

Thus, if we analyze the »acute« as having a prosodic glottal stop, one can, perhaps just at an earlier stage, even analyze the system as having only the opposition of accented and accentless/unaccented⁹⁵ forms, with the »acute« being just the »neo-acute« plus the additional glottalic phonation – thus with the accented *brǎʔtrъ, *kôšъ, *pôťъ and the unaccented *bogъ, *gordъ.

Table 6: Different possible symbols and analyses for Slavic prosodemes

	system 1 (five prosodemes)	system 2 (three prosodemes)	system 3 (two prosodemes)	system 4 (two pros- odemes)
acute	*brǎtrъ	*brǎtrъ	*brǎtrъ	*brǎʔtrъ
neo-acute	*kôšъ	*kôšъ	*kôšъ	*kôšъ
	*pôťъ	*pôťъ	*pôťъ	*pôťъ
circumflex/ unaccented	*bôgъ	*bôgъ	*bogъ	*bogъ
	*gôrdъ	*gôrdъ	*gordъ	*gordъ

⁹⁵ Tonologically accentless (without an inherent accent) and tonetically stressed in some positions and unstressed in others.

According to what we have said, the Common Slavic traditional prosodemes can be analyzed in the following way:

Table 7: Distinct Common Slavic prosodemes and their features

	tone	phonation	length	phonological stress
old acute	rising	glottalization	+	+
neo-acute	rising	–	+/-	+
circumflex	falling	–	+/-	–

All this would mean that Slavic, at least at one point of its development, actually had a rather simple system – the opposition of words with inherent stress (orthotona), with one syllable stressed in a word, and those without it (enclitomena), with no syllables stressed in a word (which would get an automatic absolute initial stress in positions where the actual phonetic unaccentedness was not possible). The syllables with an inherent stress were all phonetically rising⁹⁶ and could be short or long. If long, they could have the glottalization (the »acute«) or not (the »neo-acute«). The glottalic phonation originally appeared not only under stress – any long syllable could be either glottalized (»acuted«) or not (cf. the Danish *stød* to that⁹⁷).

However, even at the Common Slavic stage, one might still have had to deal with valencies (probably high and low pitch), for which see below (5). In late Common Slavic, however, there seems to have been no more unaccented glottalization, the valencies disappeared as well and all that was left were the five or three prosodemes – depending on the analysis. At one point the circumflex must have become a more or less »regular« toneme that could no longer be analyzed as accentlessness. This system did not survive in its completeness anywhere and has been best preserved in some conservative Western South Slavic dialects.

⁹⁶ Although rising tones are marked when compared with falling ones (and that is why in most Western South Slavic dialects that lost distinctive tone the stressed syllables are phonetically falling and the neo-acute always neutralizes to the circumflex and not the other way around), it is not inconceivable that a rising intonation would be the generic one – this is the case, for instance, in the modern Čakavian dialect of the island of Susak (Kapović 2020g:530–532). Typologically, this could also be compared to voiced stops being the main allophones in many Australian languages or voiceless stops being redundantly aspirated in many languages, although voiced and aspirated stops are more marked than simple voiceless (unaspirated) stops.

⁹⁷ In that sense, the glottalized phonation was different than in languages like Vietnamese, where the glottal stop occurs together with a toneme only.

4. Paradigmatic accentuation

One of the most important concepts in analyzing Slavic historical accentuation (but also in analyses and descriptions of modern Slavic languages/dialects with free stress and sometimes even systems with distinctive and alternating length) are the so-called accentual paradigms. What we call »accentual paradigm« is, in short, a pattern of accentual behavior in a morphological paradigm (e.g. declension or conjugation). Thus, in one word the accent will behave in one way (for instance, it will remain on the root/stem in all forms), while in other it will behave differently (for instance, the accent will in some forms be on the root/initial syllable and in other it will be at the end/ending). For Common Slavic, three basic paradigms are reconstructed: accentual paradigm *a* (the fixed/immobile accent on the stem), accentual paradigm *b* (the accent on the final syllable of the stem or the first syllable after the stem) and accentual paradigm *c* (the mobile accent, which is in some forms on the initial syllable of the word and in others on the ending – whether it be the first/internal syllable or the second/final syllable of the ending). This approach to Slavic accentuation started with the so-called Stang's revolution (cf. Vermeer 1998), i.e. with the seminal book *Slavonic accentuation* (1957) by the Norwegian Balto-Slavist Christian Stang (1900–1977). Stang was the first to not only introduce a structurally sound concept of accentual paradigms in order to describe and analyze the complex accentual patterns of Slavic languages, but also to connect different types of accentual patterns in nouns, verbs and adjectives, where the connections were superficially not always too apparent.

As already said, paradigmatic accentuation means that all inflected words (nouns, adjectives, pronouns, numerals, verbs) belonged to a certain accentual paradigm – pattern of accentual behavior in a specific paradigm. These patterns (accentual paradigms) ruled how the accent in a word will change (or not) not only in paradigms but also derivation (when affixes were added to a stem). Thus, accentuation in (Balto-)Slavic is connected not only to prosody (phonology) itself, but is also inextricably related to morphology and derivation as well.⁹⁸ Three basic accentual paradigms are usually reconstructed for the last stage of Proto-Slavic: *a*, *b* and *c* (its reflexes in later Slavic languages/dialects are often, including this paper, written as A, B, C).

Accentual paradigms had some common basic properties in general – *a* having fixed stem-stress, *b* having the accent that alternates between

⁹⁸ Cf. the programmatic name of Lehfeldt 1993¹/2001², where he talks of »die morphologische Konzeption der slavischen Akzentologie«.

the last stem-syllable and the first post-stem syllable, and *c* having a mobile stress (initial or ending-stress) – but the exact realization of accentual paradigms differed in different morphological paradigms due to different endings and their differing prosodic properties. For instance, in nominal *ā*-stems like *ženā ‘woman’ most cases had end-stress in a. p. *b*, while in *i*-presents like *ženite ‘y’all wife’ most persons had stem-stress in a. p. *b*. Likewise, in a. p. *c* of nominal *o*-stems nominative singular had an initial accent like *bōgъ ‘good’, while nominative singular of *ā*-stems had end-stress like *vodā ‘water’.

The prototypical accentual paradigm *a* has a fixed (immobile) *’ (old acute) on a stem syllable (*brātrъ ‘brother’, *kōrva ‘cow’, *bogātъ ‘rich’). Words with immobile neo-acute (*zakōnъ ‘law’, *sūša ‘drought’, *gotōvъ ‘finished’) are usually also considered a sub-type of a. p. *a* (a. p. *a*’) due to being immobile, though their historical origin is often completely different than the one in words with the fixed *’.

Accentual paradigm *b* has the neo-acute accent either on the last syllable of the stem (*bōbъ ‘bean’, *kōrlъ ‘king’, *dōbrъ ‘good’, gen^{pl} *ženъ ‘women’, pres. 2^{pl} *mōžete ‘you can’) or the neo-acute or old acute (or the non-specified accent in case of some final open syllables) on the first syllable of the ending (instr^{sg} *ženōjō, fem. *dobrā, nom^{sg} *ženā, 1^{sg} *mogō ‘I can’, gen^{sg} *bobā, gen^{sg} *korlā) (the only exception is perhaps the vocative, which might have had an a. p. *c*-type initial accent). Only the first syllable of the ending (i.e., the first post-stem syllable) can bear the stress in a. p. *b* (unlike a. p. *c*, where any part of the ending may be accentuated).

Accentual paradigm *c* has the circumflex on the initial syllable of the stem (*bōgъ ‘god’, acc^{sg} *nōgō ‘leg’, *zōlto ‘gold’, 1st *pēkō ‘I bake’) or the accent (old acute or neo-acute) on one of the syllables, first or second, on the suffix/ending⁹⁹ (instr^{pl} *bogỹ, *nogā – instr^{sg} *nogojō – dat^{pl} *nogāmъ, nom^{pl} *zoltā, 2^{pl} *pečetē ‘you bake’). The initial circumflex shifted to the absolute first syllable, i.e., to (what would otherwise be) a proclitic: *nā_zolto ‘on gold’ (: *zōlto), *pērko_nofi ‘during the night’ (: *nōfi), *nī_otъ_boga ‘not even of god’ (: *bōga), *nē_pekō ‘I don’t bake’ (*pēkō), etc. The accent can also shift to (what would otherwise be) an enclitic: *bogъ_žē (this phenomenon is called Vasil’ev-Dolobko’s rule¹⁰⁰).

⁹⁹ Here we provisionally call e.g. nom^{sg} *-a in *nog-ā ‘leg’ or loc^{pl} *-axъ in *nog-āxъ the ending, while we call *-i- in *lov-ī-ti ‘to hunt’ the suffix (with *-ti being the ending proper, as in *pek-tī ‘to bake’).

¹⁰⁰ Cf. e.g. Dybo 1981:47–54.

Table 8: Common Slavic prosodemes by position

	initial/only stem-syllable	medial/last stem-syllable	suffix/ending (first/medial syllable)	ending (final open syllable)
a. p. a	*''	*''	—	—
a. p. a'	*˘, *~	*˘, *~	—	—
a. p. b	*˘, *~	*˘, *~	*˘, *~, *''	*'' *˘
a. p. c	*˘, *˘	—	*''	*˘, *~, *''

Table 9: Common Slavic prosodemes by position (examples)

	initial/only stem-syllable	medial/last stem-syllable	suffix/ending (first/medial syl- lable)	ending (final open syllable)
a. p. a	*rǎkъ 'crab' *rǎna 'wound' *jǎgoda 'strawberry' *gǎzite 'y'all step on'	*jezykъ 'tongue' *lopāta 'shovel' *lopātica 'little shovel'	—	—
a. p. a'	*vòla 'will' *sūša 'drought'	*naròdъ 'peo- ple' *orbòta 'work' *mokrīna 'wet- ness'	—	—
a. p. b	*kòňъ 'horse' *pòtъ 'path' *nòsite 'y'all carry' *bòrnite 'y'all defend'	*živòtъ 'life' *kovāčъ 'black- smith' ¹⁰¹	*ženòjъ 'with a woman' dial. *ložite 'y'all lay' *nosīte! 'y'all carry!'	*ženā 'woman' gen ^{sg} *žený *selò 'village'

¹⁰¹ In a. p. b, the accent can be placed only on the last (or only) stem-syllable, not on the medial stem-syllable.

a. p. c	*bǫgъ 'god' *gōrdъ 'city' acc ^{sg} *nǫgъ 'leg' acc ^{sg} *gōlvъ 'head' *zōvъ 'I call'	–	*nogǣmъ 'to the legs' *zъvǣti 'to call'	*zovetē 'y'all call' gen ^{sg} *nogŷ 'leg' *nogǣ
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As already said, the nature of the stress in open final non-acute syllables in a. p. *b* is not clear and it is hard to mark properly due to inconsistencies in Proto-Slavic formal reconstruction and problems with various chronological layers – probably it was identical to *[˘] (e.g., gen^{sg} *ženŷ, gen^{sg} *bobà 'bean' like *selò – the ending most likely obtained the stress only after it was shortened). Additionally, in a. p. *c*, very often only the place of stress is reconstructed in final open syllables (i.e., just *[˘], thus *nogǣ, gen^{sg} *nogŷ) since the accentual developments in this position are complex and the exact tones in open final syllables cannot really be reconstructed from Slavic data alone (i.e. comparison with Baltic is needed).

We shall briefly illustrate the basic nature of the three accentual paradigms with some examples of Common Slavic nominal *ā*-stems and verbal *i*-stem present tense. These were the Common Slavic paradigms in *ā*-stems:

Table 10: *ā*-stem accentual paradigms

	a. p. a 'cow'		a. p. b 'woman'		a. p. c 'head'	
	singular	plural	singular	plural	singular	plural
nom	*kǫrva	*kǫrvy	*ženǣ	*ženŷ	*golvǣ	*gōlvy
gen	*kǫrvy	*kǫrvŷ	*ženŷ	*ženŷ	*golvŷ	*golvŷ
dat	*kǫrvě	*kǫrvamъ	*ženě	*ženǣmъ	*gōlvě	*golvǣmъ (*golvǣmъ)
acc	*kǫrvъ	*kǫrvy	*ženǫ	*ženŷ	*gōlvъ	*gōlvy
voc	*kǫrvo!	*kǫrvy!	*žěno!	*žěny!	*gōlvō!	*gōlvvy!
loc	*kǫrvě	*kǫrvaxъ	*ženě	*ženǣxъ	*golvě	*golvǣxъ (*golvǣxъ)
instr	*kǫrvojъ	*kǫrvami	*ženǫjъ	*ženǣmi	*golvojǫ	*golvǣmi

As we can see here, the immobile accentual paradigm *a* has the constant old acute on the stem/root. In accentual paradigm *b*, the accent is either at the ending (nom^{sg} *ženǎ), or more precisely on the first syllable of the ending if it has two syllables (instr^{sg} *ženòjǫ, instr^{pl} *ženǎmi) or on the last syllable of the stem (gen^{pl} *ženĕ). The vocative is perhaps the exception because it seems to exhibit the same accent (phonological accentlessness) as accentual paradigm *c*, though this may be an innovation (originally the vocatives were maybe *ženó!, *žený!, but this is not attested). In mobile accentual paradigm *c*, the accent is either on the first syllable of the stem/root (acc^{sg} *gòlvǫ) and shifts to a preceding proclitic, which thus ceases to be a proclitic, if available (acc^{sg} *nā ḡolvǫ ‘onto the head’) or it is at the ending – whether on the first syllable of the ending (when acute – as in instr^{pl} *golvámi) or on the second syllable of the ending (instr^{sg} *golvojǫ). In some cases, as in a. p. *b*, we write *' when the tone is not clearly reconstructible in final open syllable. In a. p. *c* above, the accent is reconstructed as still on the (long) final jer in gen^{pl} *golvĕ – this is later *gòlvĕ (at least in some Slavic dialects¹⁰²). Before the retraction of the accent from a final short weak jer, the accent was originally perhaps also variantly desinential in dat^{pl} *golvamĕ, loc^{pl} *golvaxĕ, but this is not clear.¹⁰³

To illustrate the paradigmatic accentuation in verbs, cf. the three accentual paradigms in the present tense of *i*-verbs:

Table 11: *i*-present accentual paradigms

	a. p. <i>a</i> *čistiti ‘to clean’		a. p. <i>b</i> *nosíti ‘to carry’		a. p. <i>c</i> *lovíti ‘to hunt’	
	singular	plural	singular	plural	singular	plural
1	*čistǫ	*čistimo/e/ĕ	*nošǫ	*nòsimo/e/ĕ	*lǫvǫ	*lovimò/ĕ/ĕ
2	*čistišĕ	*čistite	*nòsišĕ	*nòsite	*lovišĕ	*lovitè
3	*čistitĕ	*čistĕtĕ	*nòsitĕ	*nòsetĕ	*lovitĕ	*lovĕtĕ

Accentual paradigm *a* has a consistent immobile old acute on the stem/root. In accentual paradigm *b*, the present tense has the neo-acute on the

¹⁰² Cf. Kapović 2020e.

¹⁰³ Traditionally, only *-ǎmĕ, *-ǎxĕ are reconstructed (cf. e.g. Stang 1957:62–64, Dybo 1981:27, 33, 38) but cf. also e.g. Carlton 1991:189, 191 and Kapović 2017b:326–329 for (possible) *-ǎmĕ, *-ǎxĕ.

only/last syllable of the stem/root except the 1st, which has the old acute at the ending (similar to the infinitive).¹⁰⁴ The present tense of the accentual paradigm *c* has a mobile accent – the absolute initial accent in 1st (*lǫvĭq – *nĕ_lǫvĭq ‘I don’t hunt’) and end-stress in other forms (while the infinitive of *i*-verbs has the stress on the suffix). The accent from the final weak jer later retracted, thus *lovīšĭ > *lovīšĭ etc.

The accent of derived forms depends on the accentual paradigm of the root/stem (i.e. on the prosodic properties of the root/stem, e.g. *čist- ‘clean’ or *lov- ‘hunt’), i.e. on the accentual paradigm of the base word, and the accentual characteristics of affixes and endings. Cf. *gǫdĭ ‘snake, scoundrel’ (a. p. *a*), *grĕxĭ ‘sin’ (a. p. *b*), *gōlsĭ ‘voice’ (a. p. *c*) and the derived adjectives *gǫdĭnĭ – *gǫdĭna (fem.) ‘loathsome’ (a. p. *a*), *grĕšĭnĭ – *grĕšĭna (fem.) ‘sinful’ (a. p. *b*), *gōlsĭnĭ – *gōlsĭnǫ (fem.) ‘loud’ (a. p. *c*). In some cases, as the ones adduced, the derivatives can remain in the same accentual paradigm, while in many cases derivatives change their accentual paradigm due to the influence of the affixes, cf. e.g. *golvǫ – acc^{sg} *gōlvq ‘head’ (a. p. *c*) but *golvīca ‘little head’ (a. p. *a*) because the suffix *-ic- »attracts« the accent and has the same properties as a. p. *a* roots like *čist-. However, not all combinations are possible when it comes to the accent of the base words and their derivatives – from a. p. *a* base words, derivatives stay a. p. *a*, from a. p. *b* base words derivatives can belong to a. p. *a* or *b*, and from a. p. *c* base words derivatives can belong to a. p. *a*, *b* or *c*.

Table 12: possible accentual paradigms of base words and their derivatives

base word	derivative
a. p. <i>a</i>	a. p. <i>a</i>
a. p. <i>b</i>	a. p. <i>a</i> , <i>b</i>
a. p. <i>c</i>	a. p. <i>a</i> , <i>b</i> , <i>c</i>

The three Slavic accentual paradigms were not of equal time depth historically. The first two, a. p. *a* and *b*, actually originate from a single, immobile, accentual paradigm and were opposed to a mobile accentual paradigm (a. p. *c*). The immobile (*a/b*) paradigm originally had a fixed stem-stress (on one of the syllables in the stem/root) – that this was a case in later

¹⁰⁴ For a. p. *b*₁ and a. p. *b*₂ see Dybo–Zamjatina–Nikolaev 1990:112–121 and Kapović 2011:112–113.

a. p. *b* is clear from cognates in Baltic and Indo-European languages. Cf. end-stress in Proto-Slavic nom^{pl} *blъxy ‘fleas’ or nom^{pl} *dvori ‘courts, courtyards’ with stem-stress in Lithuanian nom^{pl} *blūsos* (also Greek nom^{pl} *psýllai*) and Vedic nom^{pl} *dvārā* ‘doors’.¹⁰⁵ The original stem-stress was preserved when the root was »acute«/glottalized (i.e. in a. p. *a*), while in a. p. *b*, where the root was not »acute«/glottalized, the accent tended to shift to the next syllable: gen^{sg}/nom^{pl} *blъxy > *blъxy, nom^{pl} *dvōri > *dvōri (but gen^{sg}/nom^{pl} *ǣmy ‘hole(s)’ without a change). This progressive shift is usually called, as already said, Dybo’s law. However, the shift to a following »acute«/glottalized syllable (e.g. *blъxa’ > *blъxǣ, *nōsi’ti’ > *nosǣti), which seems to have been separate and earlier (and which always produced the old acute at the following syllable), is called de Saussure’s law (see above). The progressively shifted accent is seen in some forms (e.g., nom^{sg} *blъxǣ, nom^{pl} *blъxy, *dvōri, present 1^{sg} *nošǣ ‘I carry’) but not in others (e.g., nom^{sg} *dvōrǣ, gen^{pl} *blъxǣ, present 2^{sg} *nōsišb ‘you carry’).¹⁰⁶ That is how accentual paradigm *b* came into existence.

5. Valence theory

As we have seen, the Common Slavic accentual system comprised the old acute (*ˀ – IPA [ː]) and the neo-acute (*ˁ – IPA [ˑ]; *ˁ – IPA [ˑ]), with the circumflex (*ˆ – IPA [˘]; *ˆ – IPA [˘]) being the surface/phonetic realization of absolute initial accent in phonologically accentless words in positions when they were not unaccented (e. g. in isolation). Morphologically speaking, all words belonged to one of the three accentual paradigms (see section 4 above) – the immobile accentual paradigm *a*, the stem/post-stem accentual paradigm *b* and the mobile accentual paradigm *c*. The Moscow accentological school¹⁰⁷ derives the said Common Slavic system from an

¹⁰⁵ Cf. Illič-Svityč 1963/1979.

¹⁰⁶ Cf. Kapović 2015:103–134, Kapović 2020c.

¹⁰⁷ In Balto-Slavic accentology, the role of the so-called accentological schools is very important. What is meant by »accentological school« is a more or less informal group of scholars, usually from the same institution/city/country, that share the general accentological framework. The Moscow accentological school (often abbreviated as MAS) is the most famous of accentological »schools«. Most Slavic accentologists today accept the Common Slavic accentual system reconstructed in Dybo 1981, based on years of previous research and ultimately on Stang 1957 and Illič-Svityč 1963. The two most prominent scholars of the Moscow accentological school are Vladimir Antonovič Dybo (1931–2023) and Sergei Lvovič Nikolaev (born 1954). Vladislav Markovič Illič-Svityč (1934–1966) died young during the very beginning of the era of modern Stangian accentology. Nikolaev is especially important as the initiator of the new Moscovite approach since 1993, after which the classical stances on Dybo’s and Stang’s law were largely abandoned (Hendriks 2003 provides a very useful survey of

older system of dominant (+) and recessive (–) tones, phonetically probably high and low tones respectively (e.g., Dybo 2000:11–14), not unlike the (Tōkyō) Japanese accentual system.

Before the accent shift of the neo-acutes (traditionally known as Dybo's law) in what is to mainly become the accentual paradigm *b* (e.g. *žèna > *ženā, *nòsiti 'to carry' > *nosíti or *kōrļi > *korļi 'kings'), Slavic had a system of immobile accentual paradigm (with acute roots like *bólto 'mud', later to be a. p. *a*, and non-acute ones like *sèlo 'village', *vīno 'wine', later to be a. p. *b*) and mobile accentual paradigm (e.g., *zvòno 'bell', *zólto 'gold', later to be called a. p. *c*).

Table 13: accentual paradigms in pre- and post-Dybo Slavic

pre-Dybo	immobile		mobile
	*bólto	*sèlo, *vīno	/*zvono, *zolto/ [*zvòno, *zólto]
post-Dybo	a. p. <i>a</i>	a. p. <i>b</i>	a. p. <i>c</i>
	*bólto	*selò, *vinò	/*zvono, *zolto/ [*zvòno, *zólto]

Roots/stems in the immobile accentual paradigm had an inherent accent, which remained fixed throughout the paradigm and in derivation (gen^{sg} *bólta, nom^{pl} *bólta, adjective *bólтънъ 'muddy', *bóliti 'to muddy', etc.) – the accent in what is to become a. p. *b* only shifted to the next syllable later and only in some conditions/forms (e.g. *sèlo > *selò, gen^{sg}

major changes in the Moscow accentological school approach in the 1990's). The methodology of the Moscow accentological school (certain characteristics of it have been criticized rather harshly by Vermeer 2001) is primarily based on careful analysis of data from a wide array of primary sources – including various Slavic dialects (Eastern, Western and Southern) and old texts (Old Russian, Middle Bulgarian, Old Croatian, etc.). Nikolaev and associates have also been involved with fieldwork, primarily in East Slavic territory, as well. The Moscovite studies are characterized by adducing huge amounts of evidence (often repeated in different works) from various Slavic sources. Special attention is given to the reconstruction of accentual paradigm distribution for specific words (i.e. attributing the original accentual paradigm to every word), while detailed phonetic reconstruction of proto-systems, questions of relative chronology or detailed studies of reflection of Common Slavic accentual system in various Slavic languages are rarely (explicitly) tackled. A lot of consideration (e.g. in Dybo 1981 and 2000) is also given to problems of accent in Slavic word-formation, which is very important for the reconstruction of the Balto-Slavic accentual system and for the valence theory. For full disclosure, the views presented in this paper are often close to the ones of the Moscow accentological school.

*sèla > *selá, but gen^{pl} *sèlъ, loc^{pl} *sèlěxъ, adjective *sèlьskъ ‘rural’, etc.). Roots/stems in the mobile accentual paradigm did not have an inherent accent – so the forms were either unaccented (with the automatic initial circumflex, e.g., *zvòno, if the endings did not »attract« the stress) or had end-stress (in case the ending, or suffix, »attracted« the stress, e.g., nom^{pl} *zvonaǎ).

Unaccented words (without an inherent accent on the root/stem and without the suffix or ending that »attracted« the stress, like *zvono) are called *enclinomēna*, as already said, while words with an inherent accent (on the root/stem – like *bǫlto, *sèlo, suffix – like *golvíca,¹⁰⁸ or ending – like *golvá ‘head’) are called *orthotona*. The word-forms in immobile accentual paradigm were all *orthotona* (with stem-stress, i.e. root-stress or suffix-stress), while word-forms in mobile accentual paradigm had an alternation of *enclinomēna* (unaccented forms – like *lovilъ ‘hunted’, i.e. *lǫvilъ, or *zvono, i.e. *zvòno) and *orthotona* (suffix-stress like *lovĩti or end-stress like nom^{pl} *zvonaǎ).

The valence theory¹⁰⁹ tries to interpret the Slavic paradigmatic accentuation (the fact that all words are divided into a few accentual patterns) in a simpler way and provide a phonological and phonetic analysis of it. According to the valence theory, all morphemes (syllables) in Slavic (and Balto-Slavic) were either dominant/high (+) or recessive/low (–)¹¹⁰ – just like in Japanese every syllable is either high or low.¹¹¹ Since most words are made of two or more morphemes (e.g. *zvon-o, *vod-a ‘water’, *bolt-o, *vorn-a ‘crow’), various combinations of dominant and recessive morphemes were possible. All words could thus have: all (+) tones, all (–) tones or mixed (+) and (–) tones.¹¹² The rule was that the ictus (stress) always fell on the first dominant/high tone in a word. If there were no dominant tones in a word, the word is accentless, i.e. it has no inherent accent (= no high tones) (3.7), which means it is either literally phonetically unaccented in some positions or gets an automatic falling tone (circumflex) on the absolute initial syllable in other positions (see the examples in 3.7).

¹⁰⁸ A derivation of *golv-, without an inherent accent, and *-ĩc-, a suffix with an inherent accent.

¹⁰⁹ Dybo 1981:260–262, Dybo 2000:11–14. Cf. also the overview in Kapović 2015:98–102.

¹¹⁰ Cf. e.g. Dybo 1981:260.

¹¹¹ Cf. in Japanese (Tōkyō) *kákū* (HL) ‘to write’, *tàmagō* (LHL) ‘egg’, *kàgámí* (LHH) ‘mirror’.

¹¹² Note that in this article, for reasons of simplicity, we operate only with + and – and not with the concept of secondary dominant morphemes (±) (for which cf. e.g. Kapović 2015:175–177).

If we take the roots *zvон-, *vod-, *bolt- and *vorn- that we mentioned above and the endings *-o (neuter *o*-stem nominative singular) and *-a (feminine *ā*-stem nominative singular & neuter *o*-stem nominative plural), we can divide them (disregarding the glottalization) into dominant ones (roots: *bōlt-, *vōrn-, ending: *-ā) and recessive ones (roots: *zvон-, *vod-, ending: *-o). The dominant morphemes (roots and endings) »attract« the accent, while the recessive do not.

Table 14: examples of pre-Dybo Slavic with the traditional accentual notation and reconstruction, as well as with valences and realistic Proto-Slavic reconstruction

traditional reconstruction	traditional (IPA)	realistic Proto-Slavic (IPA)	valences (traditional reconstruction)	valences (IPA)	realistic Proto-Slavic + valences (IPA)
*bōlto	*bǝʔlto	*bǎʔlta	*bǝlto	*bóʔlto	*bǎʔlta
*sēlo	*sělo	*sěla	*sǝlo	*sélò	*sěla
*vǫrna	*vǝʔrnaʔ	*wǎʔrnǎʔ	*vǫrna	*vóʔrnǎʔ	*wǎʔrnǎʔ
*zvōno	*zvôno	*zwâna	*zvǝno	*zvònò	*zwànà
*vodǎ	*vodǎʔ	*wadǎʔ	*vodǎ	*vòdáʔ	*wadǎʔ

As already noted (see the introduction to this paper), while closer to the actual forms that can be reconstructed, the realistically reconstructed Proto-Slavic looks very different than the actually attested Slavic languages. Traditional reconstruction, close to Old Church Slavic, is not as precise but is much closer to what is actually attested in Slavic. Similar to that, traditional accentual reconstructions represent later Common Slavic forms, close to later reflexes in various Slavic languages/dialects, which have, so it seems, coexisted for some time with the valences (old high and low tones). Thus, *ʔ was probably a high rising glottalized accent, the neo-acutes were low rising tones, while (phonetic) circumflexes were low falling tones. Also, unstressed syllables were also either high or low. At a later stage of Common Slavic, valences (distinctive high and low tones) disappeared, just like the glottalization, and only the three prosodemes (acute, neo-acute + the automatic circumflex) were left.

While the previous table (table 14) had the aim of showing the connection of traditional accentual reconstruction and the valences, in the next table (table 15) we shall show different stages which can tentatively be reconstructed from Proto-Slavic to late Common Slavic, with an emphasis

on changes (with as realistic reconstructions as possible) from a system with valences (high and low tones) through a transitional system to the »classic« late Common Slavic system with the five prosodemes:

Table 15: stages of Slavic accentuation

	Proto-Slavic	early Common Slavic	late Common Slavic
valences	+	+	–
glottalization	+	+/-	–
Dybo's law	–	–	+
‘mud’	*bǫʔltǫ	*bǫʔltǫ	*bǫlto
‘village’	*sěla	*sělo	*selò
‘crow’	*wǫʔrnǫʔ	*vǫʔrnǫ	*vǫrna
‘bell’	*zwǫnǫ	*zvǫnǫ	*zvǫno
‘water’	*wǫdǫʔ	*vǫdǫʔ	*vodǫ

As we have already said, the accentual system of Proto-Slavic with the valences was somewhat akin to Tōkyō Japanese, with every syllable/morpheme being dominant/high or recessive/low (with the additional possibility of prosodic glottalization in all long syllables). In late Common Slavic, the system was very different and consisted of two distinctive prosodemes (the rising/acute and the rising/neo-acute, discounting the automatic falling/circumflex accent) which appeared only in accented syllables (the stress was free, alternating and unpredictable). In the transitional phase, in early Common Slavic, one can suppose the coexistence of both of these systems – the valences were still present (e.g. non-accented syllables were still either high or low), but new prosodemes (the acute and neo-acute) already appeared (prosodic glottalization might have still existed, but perhaps only as part of the »old acute« and not in unstressed positions¹¹³). Typologically, this can be compared to modern Neo-Štokavian system, where the falling and rising prosodemes coexist with high and low tones, e.g. *krǫva* ‘cow’ is HL, while *dǫska* ‘board’ is HH.¹¹⁴ In an even

¹¹³ Note that it is difficult to know when exactly the possible glottal phonation disappeared – the reconstruction in the table should be taken as provisory and illustrative.

¹¹⁴ Stressed syllables (e.g. the first syllable in *krǫva* ‘cow’, *dǫska* ‘board’) are high, while the posttonic syllable is low after the falling accent (e.g. the second syllable in *krǫva* is low), but high after the rising accent (e.g. the second syllable in *dǫska* is high), cf. e.g. Kapović 2023:244–245.

later stage of Common Slavic, the circumflexes became real tonemes (and not just automatic realizations in accentless words when they were not unaccented) and the valences were completely lost. These phases of development of Slavic accentuation can be summarized like this:

- 1) all morphemes H or L + glottalization (potentially in all long syllables)
- 2) all morphemes H or L + glottalization (potentially in all long syllables) + acute/neo-acute distinction¹¹⁵ in stressed syllables (circumflex is automatic in accentless words)
- 3) all morphemes H or L + glottalization (only in long stressed syllables potentially) + acute/neo-acute distinction in stressed syllables (circumflex is automatic in accentless words)
- 4) acute/neo-acute distinction in stressed syllables (circumflex is automatic in accentless words)
- 5) the distinction of acute, neo-acute and circumflex in stressed syllables¹¹⁶
- 6) various developments in separate Slavic dialects/languages

One other way in which one can partly understand this early Common Slavic system is by comparing it with more complex tonal systems, such as the ones in e.g. Cantonese (which had falling and rising tones in various heights) and Vietnamese (which had various falling and rising tones together with various phonations such as glottalization). The old acute and neo-acute were originally always dominant, but could have also been recessive after the progressive shift of the neo-acute (Dybo's law – e.g. *nòsĭlĭ > *nôsĭlĭ 'carried') and the retraction of the accent from the weak jer (Ivšić's rule – e.g. *dāstǫ > *dāstǫ 'gives').

¹¹⁵ The old acute being the dominant glottalized stressed syllables and the neo-acute the dominant non-glottalized stressed syllables.

¹¹⁶ This is the system that is classically reconstructed for Common Slavic (often dubbed Proto-Slavic).

Table 16: Tentative typological comparison for early Common Slavic complex prosodemes

prosodeme ¹¹⁷	description	typological comparison
* $\acute{\text{e}}^{\text{g}}$	high rising glottalized tone	Vietnamese <i>ngã</i> [ʔ] = 3 ⁵ /4 ⁵]
* $\acute{\text{e}}^{\text{g}}$	low rising glottalized tone	Cantonese 5 th tone [23] + glottalization
* $\acute{\text{e}}/\acute{\text{e}}^{\text{g}}$	high rising tone	Cantonese 2 nd tone [35]
* $\acute{\text{e}}/\acute{\text{e}}^{\text{g}}$	low rising tone	Cantonese 5 th tone [23]
* $\acute{\text{e}}/\acute{\text{e}}^{\text{g}}$	low falling tone	Cantonese 4 th tone [21]

It is impossible to know what the exact tone values were, e.g. whether a rising tone was 35 (mid to high) or 24 (low-mid to high-mid), etc., just like we cannot really know what was the exact difference between the »acute« and the »neo-acute« rising tone – these could have been different rising tones (like 45 and 24) or perhaps the crucial differences was in glottalization. It is also possible that the distinction was different in different periods and in different dialects.¹¹⁸ All typological similarities stop with the comparison of specific tonemes. Cantonese and Vietnamese have a typical East Asian complex tone system with every syllable having a certain tone (Vietnamese, unlike Cantonese, also exhibits certain phonations with some tones – not only glottalization), while Common Slavic was in a transition phase from a Tōkyō Japanese type of accent (with all syllables being high or low) to a more European pitch-accent system (with different tones in stressed syllable only). Thus the said tonemes from table 16 occurred in early Common Slavic only in specific conditions (and at specific periods): a) in the syllable with the first high tone in a word (old acute *, like *bŏlto, and the pre-Dybo neo-acute */*~, like *sĕlo and *vĩno, before their progressive shift), b) in the first syllable of words with all low tones (circumflexes *, ^, like *zvŏno and *zŏlto 'gold'), c) in the first glottalized (»acuted«) high syllable after a high syllable in the case of the progressive shift of the neo-acute to a following glottalized (»acuted«) syllable (de Saussure's law – e.g. *žĕnā? > *žĕnǎ 'woman'), d) in any syllable after the first high

¹¹⁷ Jat is used for illustration purposes only.

¹¹⁸ Cf. e.g. the situation in modern Neo-Štokavian, where the distinction between falling and rising tonemes can be quite phonetically different in different Neo-Štokavian dialects.

one after the progressive shift of the old neo-acute (Dybo's law like *sělo > *sělo̯, *nōsi'ľ > *nōs'ľ), e) in a low tone before a weak originally accented jer (like *rěxъ 'I said' > *rěxъ̯). In the table, we present only the glottalized («acute») low (recessive) prosodeme that appeared secondarily – after the progressive shift of the neo-acute (Dybo's law) – however, originally there was also a »recessive acute« (low glottalized tone) which later yielded *~ in first syllable (i.e. in all-low tone words), e.g. acc^{sg} *gā'lwān > *gōlvō.¹¹⁹

As we have seen, the ictus (stress/accent) was on the first dominant (high) syllable/morpheme, e.g. *bōlto, nom^{pl} *bōlta, nom^{pl} *zvōnā, *bōlti'ti 'to muddy up', *zvōn'iti 'to ring a bell', etc. If all syllables were recessive, the form was an *enclimenon* (phonologically accentless and in some positions indeed phonetically unaccented, but phonetically with an initial circumflex if it could not have really been unstressed, e.g. in isolation): *zvōno, *sŷnъ 'son'. The whole idea of the valence system is to explain the peculiar features and alternation of the traditionally reconstructed Common Slavic accentuation through original inherent prosodic properties of each morpheme (dominance = high tone and recessiveness = low tone). Thus, all Slavic morphemes can be divided into dominant and recessive. So which morphemes were dominant and which were recessive from a point of view of the traditionally reconstructed Common Slavic accentuation?

Dominant morphemes were:

- a) roots of immobile a. p. (a/b) (e.g. *kōrvā 'cow', *sěstrā 'sister')
- b) stress-»attracting« endings in mobile a. p. c (e.g. *-ā in *nōgā 'leg')
- c) stress-»attracting« affixes in combination with recessive roots (e.g. *nōžīcā 'little leg')

Recessive morphemes were:

- a) roots of mobile a. p. c (e.g. *nōg- 'leg')
- b) unaccented endings in mobile a. p. c (e.g. *-ō in acc^{sg} *nōgō);
- c) unaccented affixes in combination with recessive roots (e.g. *sŷnōvъ 'son's')

In forms with dominant roots (like *sěl- 'village' or *kōrv-), the valences of other morphemes were irrelevant – the stress was on the dominant root regardless of the nature of following morphemes (suffixes and endings). In forms with recessive roots (like *nōg- or *gōlv- 'head'), the valences of other morphemes determined the accent (the ictus was on the first dominant morpheme). Thus, the paradigmatic mobility/immobility of a word depended on the inherent prosodic characteristics of all its morphemes.

¹¹⁹ Cf. e.g. Dybo-Zamjatina-Nikolaev 1993:16–17, Kapović 2015:142–148.

According to MAS, this system of high and low tones was still a real phonetic phenomenon (together with the separate prosodemes: acute, neo-acute and circumflex) in a stage we have called here early Common Slavic, which is seen in the way these dominant/high and recessive/low tones influenced various phonological and morphological changes in Slavic¹²⁰ – e.g., the development of post-tonic¹²¹ and final syllable length.¹²²

This system in which all morphemes were either dominant or recessive, however, seems to have been starting to get some cracks in it already in Proto-Slavic. Ideally, one would expect all morphemes to have a more or less random distribution of dominant and recessive valences like the roots/stems (of nouns, verbs and adjectives) did – e.g. *b_{og}- ‘god’, *z_{im}- ‘winter’, *p_{ek}- ‘bake’ and *b_{os}- ‘barefoot’ were recessive and *k_{oň}- ‘horse’, *k_{orv}- ‘cow’, *m_{og}- ‘can’ were dominant. But from what we can reconstruct, this was not the case, at least not at later stages, for prefixes/prepositions and postpositive clitics and for compounds. A couple of prefixes were dominant and acute (*v_ý- ‘out-’, *p_ǎ- ‘fake’, *pr_ǎ- ‘Ur-’), but all other verbal prefixes (like *na-, *po-, *v_ъ-, *pri-, *s_ъ- etc.) and prepositions (like *na ‘on’, *po ‘upon, at, for, after’, *v_ъ ‘in’, *pri ‘at’, *s_ъ ‘with’ etc.) were recessive (i.e. they did not »attract« the accent), which does not look as if it were the original situation – one would expect some of them to be dominant¹²³ (note, also, that all dominant prefixes, mentioned above, like *v_ý-, are glottalized). Cf. e.g. *na_r_{ýb}o ‘for fish’, *n_â_z_{emlj}o ‘onto the ground’, *na-poj_ĩti ‘to give water’ but *v_ýdati ‘to give out’ (Russ. *výdat’*). The accent in prepositional *nar_{òdъ} ‘people’ and *pod_{òb}a ‘manner’ type derivatives is usually fixed on the root that comes after the preposition (*-r_{òdъ}, *-d_{òb}a), regardless of the original root stress (*r_{òdъ}, *d_{òbъ} – a. p. c), which one may take as the original generalization of dominant prefixes in such derivatives (e.g. *nar_{òdъ}, *p_{òd}òb_a), but it is more likely that generalization of the short neo-acute on short roots (e.g. in *nar_{òdъ}) and of the old acute on long roots (e.g. in *ob_{òr}na ‘defence’ – cf. *b_{òr}nite ‘y’all defend’, a. p. b) is of later origin and has nothing to do with the valences, especially since we find the same type of generalization in compounds like *bos-o-n_{ògъ} ‘barefoot’ (cf. the recessive root in *nog_ǎ ‘foot’, a. p. c) and *gol-o-b_{òr}dъ ‘barefaced’ (cf. the recessive root in *bord_ǎ ‘beard’, a. p. c). One could hypothet-

¹²⁰ Kapović 2015:102.

¹²¹ Cf. Kapović 2015:503–511.

¹²² Cf. e.g. Kapović 2020e:331–334.

¹²³ There may be a couple of remnants of this, with the (long) reflexes of apparently dominant prefixes in some verbs, like Neo-Štokavian *nástojati* ‘to strive’ (Old Czech *nástáti*), Old Czech *záviděti* ‘to envy’, Ukrainian *nenávydity* ‘to hate’, etc. Cf. Dybo–Zamjatina–Nikolaev 1993:41, Nikolaev 2013:176–177, Kapović 2015:458¹⁶⁶².

ically suppose here that the compositional *-o- was generalized as dominant (and that words like *bosonògъ would be due to Dybo's law¹²⁴) but it is not clear why that would be so, nor would that explain the unetymological generalized acute on long roots (as in *golobǫrdъ). While words like *naròdъ and *golobǫrdъ do go against the valence principle, it seems that this is due to a younger (post-valence) generalization of accent (i.e. of * on short and * on long roots¹²⁵).

Unlike prefixes, which tend to be recessive (with the exception of *vǫ-, *pǎ-, *prǎ-), suffixes have the expected distribution – some are recessive (like possessive *-ov-), some are dominant (like *-íc-). The same goes, as we have seen, for endings – some are recessive (like neuter *-o), while others are dominant (like feminine *-ǎ). However, it seems to be different with enclitics, i.e. postpositive clitics – usually particles, but also some pronominal forms. Though one would expect some of them to be recessive (and thus not attracting the stress after all-recessive words) and some of them to be dominant (thus attracting the stress after all-recessive words), that is not the case. We have already mentioned the so-called Vasil'ev-Dolobko's rule,¹²⁶ where the accent shifts to a what would otherwise be an enclitic after all-recessive words. This seems to be confirmed by examples from some Old Russian and Middle Bulgarian manuscripts (Dybo 1981:48–49),¹²⁷ e.g. Old Russian¹²⁸ *dar žè, gněv bò, korenъ bò, mirъ tì, stranu tû, vrěmę žè*, Middle Bulgarian *běsъ žè, gněvъ žé, mir tî, slovo žè, vrazi žè, zqoby žè*, etc.¹²⁹ This phenomenon can also be seen in the accentuation of definite adjectives in a. p. c, e.g. *mòldъ 'young' but *moldǫjъ < *moldǫjъ (with a retraction from the weak jer) (Russian *molodój*); by forms like *dǫnъ 'day' but *dǫnъsъ < *dǫnъsъ 'today' < 'this day' (again with a retraction from the weak jer) (Štokavian dialectal *danäs* > Neo-Štokavian/standard *dànas*, cf. also Neo-Štokavian *nòčas* 'tonight' < dial. *nočàs, jesènas* < dial. *jesenäs* 'this autumn' and Russian *nočés', osenés'*); Russian forms like dia-

¹²⁴ From the supposed earlier *bosonogъ, which would later yield *bosonògъ by Dybo's law.

¹²⁵ Cf. more details in Kapović 2019:108–112.

¹²⁶ Cf. Dybo 1981:47–54 for discussion, examples and further references.

¹²⁷ These phenomena are primarily found in the Old Russian dialect of Čudovskij novyj zavet, eastern Bulgarian dialects from 13th to 15th century, and in remnants in Serbian texts from the 15th century (Dybo 1981:47).

¹²⁸ Various symbols for stress position are just graphic variance.

¹²⁹ When both proclitics and enclitics appear, the accent again tends to be on the enclitic, e.g. Old Russian *въ vrěmę sè, ot grada žè, i sami tē*, Middle Bulgarian *ni kako žè, kъ zlatu žè, ot světa žè, bez straxa bô*, etc.

lectal/older *ródil* ‘gave birth’ but *rodilsjá*¹³⁰ ‘was born’ (*rödilъ – *rodilъ_sě); by the already mentioned definite forms like Bulgarian *nosàt* (from *nösъ – *nosъ_tь), etc. Originally, such enclitics could surely have been both recessive and dominant. However, in opposition to proclitics and verbal prefixes which mostly became recessive later, enclitics (like *že, *bo, *ti, etc.) originally tended to become generally dominant, thus attracting the accent when coming after the accentless *c*-forms – this phenomenon was then preserved in some Old Russian and Middle Bulgarian dialects in general and in remnants elsewhere in Slavic (paradigmatically most conspicuously in definite forms of a. p. *c* adjectives).

Abbreviations

- acc^{sg} – accusative singular
- dat^{pl} – dative plural
- dial. – dialectal
- fem. – feminine
- gen^{pl} – genitive plural
- gen^{sg} – genitive singular
- instr^{pl} – instrumental plural
- instr^{sg} – instrumental singular
- loc^{pl} – locative plural
- loc^{sg} – locative singular
- nom^{pl} – nominative plural
- pl. – plural
- sg. – singular
- 3^{sg} – third person singular
- Blg – Bulgarian
- Croat. – Croatian
- CSl – Common Slavic
- Cz – Czech
- Čak. – Čakavian
- Kajk. – Kajkavian
- OCS – Old Church Slavic

¹³⁰ Cf. Dybo 1981:48.

Pol. – Polish

PSl – Proto-Slavic

Russ. – Russian

Slk – Slovak

Sln – Slovene

Štok. – Štokavian

† – dead/extinct language

<> – orthographical form

// – phonological form

[] – phonetic form

* – reconstructed form

** – impossible/imaginary form

>, < – yields (regularly/phonetically)

~ – connected/related to

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O rekonstrukciji općeslavenskoga naglasnoga sustava

Sažetak

Cilj je rada rekonstrukcija općeslavenskoga naglasnoga sustava. Nakon uvodne rasprave o praslavenskom i općeslavenskom, naglasak se stavlja na razmatranje razlogâ za rekonstrukciju općeslavenskih prozodema, uključujući njihovu provizornu fonetsku narav. Zatim se raspravlja o naravi rekonstruiranoga sustava, uz neke tipološke usporedbe i različite moguće interpretacije toga sustava u različitim razdobljima.

Ključne riječi: općeslavenski, praslavenski, akcentuacija, prozodija, rekonstrukcija

Keywords: Common Slavic, Proto-Slavic, accentuation, prosody, reconstruction

