3 Proto-Slavonic

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1 Introduction

Proto-Slavonic was the parent language of the thirteen living and two extinct Slavonic speech communities. Most of these speech communities are accorded the status of autonomous languages. However, the distinction between dialect and language being blurred, there can be no unanimity on this issue in all instances, notably that of Slovincian as separate from Cassubian and, indeed, of Cassubian as separate from Polish (see further chapter 13, section 1).

Traditionally, Slavonic is classified into three basic branches, East, West

Table 3.1   Classification of the Slavonic languages

Proto-Slavonic			
	South	Eastern	[Old Church Slavonic] Bulgarian Macedonian
		Western	Serbo-Croat Slovene
	West	Czecho-Slovak	Czech Slovak
		Sorbian	Upper Sorbian Lower Sorbian
		Lechitic	Polish Cassubian [Polabian]
	East		Russian Ukrainian Belorussian

and South, and subdivided further according to the similarities and distinctions within these branches. This classification is given in table 3.1 (the extinct languages are placed in square brackets).

In addition, it is convenient to group the East and West branches into North Slavonic and the East and South branches into East/South Slavonic. A survey of Late Proto-Slavonic dialects is provided in section 6.

Unlike Latin, the parent language of the Romance languages, Proto-Slavonic was not recorded, and its forms must be reconstructed. Such a reconstruction is accomplished by comparing the forms of all the Slavonic languages and of the languages which, together with Slavonic, constitute the large **Indo-European family of languages** of south-western Asia and Europe. In addition to Slavonic, this family includes Indic (Vedic and classical Sanskrit and many languages of modern India), Iranian (Avestan, Persian and the northern Iranian languages of the Eurasian steppe), Tocharian, Anatolian (Hittite and the lesser languages of Asia Minor), Armenian, Greek, Albanian, Italic (including classical and popular Latin which gave rise to the Romance languages), Celtic, Germanic (the medieval languages with which the Slavs came into contact were Gothic, Old and Middle High German and Old Norse) and Baltic (Lithuanian, Latvian, Old Prussian). As is the case with Slavonic, the genetic relationship of the Indo-European languages is attributed to their descent from a common ancestor, the Proto-Indo-European language, which must also be reconstructed. It is a common practice in historical linguistics to provide reconstructions with asterisks. In this survey, however, language labels will be relied upon to differentiate between attested and reconstructed forms, and asterisks will not be used except to avoid ambiguity.

It is useful to subdivide the period, perhaps four millennia long, separating the disintegration of the Indo-European linguistic unity and the formation of individual Slavonic languages or language groups (about the ninth century AD). While there is no agreement on the criteria for such a subdivision and, hence, on the number of **Proto-Slavonic subperiods**, the least arbitrary formula appears to be one based on the differences in the extent of linguistic change. Thus, the period encompassing the beginning of dialect differentiation within Slavonic is called Late Proto-Slavonic, the period during which changes affected all of Slavonic and only Slavonic is termed Early Proto-Slavonic, and the period characterized by changes affecting Slavonic and Baltic is called Balto-Slavonic. Analogously, it is convenient to subdivide Proto-Indo-European into dialectally diversified Late Proto-Indo-European and dialectally uniform Early Proto-Indo-European. Some scholars use the term 'Common Slavonic' and apply it either to all of 'Proto-Slavonic' or to the last phase of Slavonic linguistic unity (approximating 'Late Proto-Slavonic' of this survey).

The similarities between **Baltic** and **Slavonic** have long been noted. In phonology one could mention the common treatment of the Proto-Indo-

European vocalic sonants (see 2.1) and the development of phonemic pitch (see 2.16); in morphology – the tendency of consonantal stem nouns to acquire -*i*- stem endings (see 3.1.2, note 5), the rise of the category of definiteness in the adjective (see 3.1.4), the development of a two-stem conjugational system (see 3.2), the extension of the participial suffixes -*nt*- and -*üs*- by the suffix -*i*- (see 3.2.2(f)); in syntax – the use of the instrumental in the predicate and of the genitive as object of negated verbs (see 4). There are also many coincidences in Baltic and Slavonic lexicon (see 5). Some scholars, from August Schleicher and Karl Brugmann in the nineteenth century to Jerzy Kuryłowicz and André Vaillant more recently, attributed these similarities to a period of shared history and postulated the existence of Balto-Slavonic as an autonomous, post-Proto-Indo-European linguistic entity. Others, like Jan Baudouin de Courtenay, Antoine Meillet, Alfred Senn and Christian Stang, claimed that the features common to Baltic and Slavonic are, in so far as they are not inherited from Proto-Indo-European, a product of separate, though parallel, development, enhanced by territorial contiguity of the two speech communities and by their social and linguistic interaction. This disagreement appears to be largely terminological in nature and the two points of view need not be viewed as contradictory. Since Baltic and Slavonic were at the tail end of the process of the disintegration of the Indo-European speech community, what is termed 'Balto-Slavonic' is, in fact, the very latest stage of Late Proto-Indo-European. Once separated from each other, Baltic and Slavonic (or, at least, some of their dialects) continued to exist side by side and underwent a period of parallel developments and of outright linguistic borrowing.

The Slavs were the last Indo-Europeans to appear in the annals of history. Slavonic texts were not recorded till the middle of the ninth century and the first definite reference to the Slavs' arrival on the frontiers of the civilized world dates from the sixth century AD, when the Slavs struck out upon their conquest of central and south-eastern Europe. Before that time the Slavs dwelled in the obscurity of their **ancestral home**, out of the eye-reach of ancient historians. Their early fates are veiled by the silence of their neighbours, by their own unrevealing oral tradition and by the ambiguity of such non-verbal sources of information as archaeology, anthropology or palaeobotany. It is generally agreed that the search for the ancestral home of the Slavs should be limited to the region bordered by the Oder, the Baltic, the Dnieper, and the Danube, that is, to the approximate area of current Slavonic settlement, excepting the lands which are known to have been colonized in historical times. However, a more precise location of the Slavonic homeland within that region is still a matter of scholarly controversy. Of the several theories proposed, the one which has gained the most adherents would place the prehistoric Slavs in the basin of the middle Dnieper, that is, in what is today north-central and western Ukraine and south-eastern Belarus (Belorussia).

2 Phonology

The reconstructed system of Proto-Indo-European phonemes is so remote from our own linguistic experience and so little susceptible to verification that it is still a subject of scholarly debate. Among the most controversial issues are the role of the laryngeals and of the vowel ə (shwa) in the formation of the Proto-Indo-European vowel system and the number and nature of phonemically relevant features in the system of the Late Proto-Indo-European stops. In order to describe the complex interrelated changes within the phonological system, we shall number the salient points within this section (2.1–2.35) to facilitate reference forward and back.

2.1

With the above caveats in mind, we will assume that the **Late Proto-Indo-European phonemic system** consisted of five short and five long vowels, $\bar{\imath}\ \bar{u}\ \bar{e}\ \bar{o}\ \bar{a}$, and that the consonants included the spirant s, three unaspirated tense (unvoiced) stops, p t k, three unaspirated lax (voiced) stops, b d g, and three aspirated stops which were neutral as to tenseness or laxness and which in this presentation will be transcribed in the traditional way as bh dh gh. The three plain velar stops, k g gh, contrasted with the palatalized k' g' g'h and labialized $k^w\ g^w\ g^wh$. In addition, four sonants (or sonorants), m n r l, were consonantal when preceded or followed by a vowel but vocalic or syllabic in a non-vocalic environment. In their vocalic function (indicated by a subscript circle ͜), these sonants were short or long. One should also mention the laryngeal sonants ($H_1\ H_2\ H_3$), partly evidenced by Hittite and credited with the transformation of the univocalic system of Early Proto-Indo-European into the multivocalic system of Late Proto-Indo-European.

The mid and low vowels entered into tautosyllabic combinations with high vowels and sonants. In such combinations or diphthongs, the high vowels became semi-vowels, that is they acquired a non-syllabic or consonantal function. There are several ways of marking isolated semi-vowels (in diphthongs, the environment indicates unambiguously the non-syllabic function of semi-vowels). Contrary to the English practice of transcribing non-syllabic i and u as y and w, Slavonic linguistic writings favour i̯ and u̯ or j and v. In this survey, j and v are used for Late Proto-Slavonic reconstructions, with i̯ and u̯ reserved for the earlier periods (see 2.33).

Thus, late Proto-Indo-European had a potential for thirty-six short and long diphthongs:

ēi̯	ēu̯	ēm	ēn	ēr	ēl
ōi̯	ōu̯	ōm	ōn	ōr	ōl
āi̯	āu̯	ām	ān	ār	āl

In addition, during the Balto-Slavonic period, the four syllabic sonants

developed epenthetic high vowels, providing a potential for another sixteen diphthongs:

PIE   m̥̄   n̥̄   r̥̄   l̥̄   ›   BSl.   ı̄m/ū̥m   ı̄n/ū̥n   ı̄r/ū̥r   ı̄l/ū̥l

2.2

Comparative evidence suggests the existence of a Proto-Indo-European system of grammaticalized vowel alternations, best known by the German term 'ablaut' (the terms 'apophony' and 'vowel gradation' are also used). It represents a system of morphophonemic relationships whereby the unmarked vowel *e* entered into a number of marked qualitative and quantitative alternations, depending on the grammatical function of the form. In the qualitative ablaut, the vowel *e* (*e*-grade) alternated with the vowel *o* (*o*-grade). The *e*-grade characterized non-derived verbal roots; the *o*-grade was typical of derived nominal roots. In the quantitative ablaut, a short vowel (normal grade) alternated with a long vowel (long grade) or the absence of a vowel (zero grade). The zero grade of diphthongs consisted in the loss of the vowel and the transfer of its syllabic function to the semi-vowel, sonant or laryngeal, leading to their vocalization: *i̯ u̯ m n r l H* became *i u m̥ n̥ r̥ l̥* ə. The zero grade of diphthongs extended by a laryngeal yielded long vocalic sonants: *m̥̄ n̥̄ r̥̄ l̥̄.*

The basic *e* ~ *o* ablaut is represented in Slavonic by many roots, for example OCS *vezǫ* 'I transport' ~ *vozъ* 'cart', *grebǫ* 'I dig' ~ *grobъ* 'grave', *vedǫ* 'I lead' ~ *voždь* 'leader', *rekǫ* 'I say' ~ *rokъ* 'fixed time'. The *e* ~ *o* ~ *∅* ablaut may be exemplified by roots containing semi-vowels or sonants. In the Old Church Slavonic examples below, the Proto-Indo-European diphthongs are no longer perceivable as such because of their monophthongization (see 2.13, 2.21, 2.22):

e-*grade*	o-*grade*	*zero grade*
-cvisti (i ‹ ěi) 'to bloom'	cvětъ (ě ‹ ŏi) 'flower'	-cvьtǫ (ь ‹ i) 'I bloom'
bl'usti ('u ‹ ěu̯) 'to watch'	buditi (u ‹ ŏu̯) 'to awaken'	bъděti (ъ ‹ ŭ) 'to be awake'
-čęti (ę ‹ ěn) 'to begin'	konьcь (on ‹ ŏn) 'end'	-čьnǫ (ьn ‹ n̥) 'I begin'
berǫ (er ‹ ěr) 'I take'	sъborъ (or ‹ ŏr) 'synod'	bьrati (ьr ‹ r̥) 'to take'

These alternations suggest that in Early Proto-Indo-European the vowel *e* was basic, *a* was marginal, *o* arose as an ablaut variant of *e*, and *i* and *u* were ablaut variants of diphthongs.

2.3

The dissolution of Proto-Indo-European linguistic unity was attended by several sound changes which affected clusters of language families.

(a) One such change, the **merger of the aspirated stops with the un-aspirated lax stops**, connected Slavonic with Baltic, Iranian, Albanian and Celtic. In other Indo-European languages (like Latin) the aspirated and unaspirated lax stops did not fall together:

LPIE	Balto-Slavonic	OCS		Latin	
bh	b	berǫ	'I take'	ferō	'I carry'
b		bolje	'more'	dē-bilis	'weak'
dh	d	dymъ	'smoke'	fūmus	'smoke'
d		dati	'to give'	dare	'to give'
gh	g	gostь	'stranger'	hostis	'enemy'
g		ǫgъlъ	'corner'	angulus	'corner'

(b) Another change produced an important dialect isogloss by dividing the Proto-Indo-European area into the south-central **satem** languages (Slavonic, Baltic, Indic, Iranian, Armenian and Albanian) and the peripheral **centum** languages (Tocharian, Anatolian, Greek, Italic, Celtic and Germanic). In the centum languages, the palatalized velar stops merged with the plain ones, while the labialized velar stops remained distinct; by contrast, in the satem languages, it was the labialized velars which merged with plain velars, while the palatalized velars retained their identity by undergoing spirantization (*k' g' > š ž*). The satem hushing *š ž* were retained in Lithuanian, but changed in other Baltic languages and in Slavonic into the hissing *s z*:

LPIE	Balto-Slavonic	Lithuanian		OCS		Latin	
kʷ	k	kàs	'who'	kъto	'who'	quod	'what'
k	k	kraũjas	'blood'	krъvь	'blood'	cruor	'blood'
k'	š	dẽšimt	'ten'	desętь	'ten'	decem	'ten'
gʷ	g	gývas	'living'	živъ (‹ *gʷīu̯-) 'alive'		vīvus	'alive'
g	g	jùngas	'yoke'	[j]ьgo	'yoke'	iugum	'yoke'
g'	ž	žinaũ	'I know'	znajǫ	'I know'	co-gnoscō 'I know'	
gʷh	g	gariù	'I burn'	gorěti	'to burn'	formus	'hot'
gh	g	gardas	'enclosure'	gradъ	'town'	hortus	'garden'
g'h	ž	vežù	'I transport'	vezǫ	'I transport'	vehō	'I carry'

(c) In the eastern group of the Indo-European languages, after *i/i̯*, *u/u̯*, *r* or *k*, the LPIE *s*, not followed by a stop, became retroflex. This change proceeded in two stages. The **first stage**, *s* to *š*, connected Slavonic with Indic, Iranian and Baltic (however, in Latvian and Old Prussian *š* reverted to *s*):

PIE	OCS	
nŏk'-či-sĭ	nosiši	'you carry' (PRS)
ōu̯s-ī	uši	'ears'
pĕr-sĭd-l-ā	prěšьla	'passed' (RSLT PART F)
rēk-s-n̥t (> rēk-s-int)	rěšę	'they said' (AOR)

In the solely Slavonic **second stage**, *š* to *x* before a back vowel or sonant (alternatively, *s* › *š* › *x*, unless followed by a stop, and *x* › *š* by the first palatalization of velars, see 2.9):

PIE	OCS	
ŏrbh-ŏ-i̯-sŭ	raběxъ	'servants' (LOC PL)
ōu̯s-ŏ-s	uxo	'ear'
pĕr-sŏd-ī-tēi̯	prěxoditi	'to pass'
rēk-s-ŏ-m	rěxъ	'I said' (AOR)

The retroflexion of *s* did not involve the *s* issued from the spirantization of *k'*, which suggests that the retroflexion occurred before the satem change of *š ž* to *s z* – an example of relative dating of linguistic change.

(d) With these consonantal changes, the period of Balto-Slavonic may be said to have ended. Among the vowels, the dividing line between Balto-Slavonic and Early Proto-Slavonic is provided by the **merger of LPIE ŏ** **and ă̆:** ŏ ă merged as ă still in Balto-Slavonic, while ō ā merged as ā in Slavonic, but remained distinct in Baltic.

PIE	Latin	Lithuanian	OCS
ŏu̯ĭ-	ovis 'sheep'	avìs 'sheep'	ovьca 'sheep'
sălĭ-	sāl, sălis 'salt'	saldùs 'sweet'	solь 'salt'
dō-	dōnō 'I present'	dúoti 'to give'	dati 'to give'
mātĕr-	māter 'mother'	mótė 'wife'	mati 'mother'

Similar changes occurred in other Indo-European languages: in Germanic the vowels ŏ ă merged as *a* and ō ā merged as *o*, in Indo-Iranian ĕ ŏ ă merged as ă̆.

2.4
Thus, in the **inventory of Early Proto-Slavonic phonemes**, one may assume a balanced system of four short and four long vowels, in which the 'mid' feature was no longer distinctive (with a corresponding reduction among the diphthongs):

	Front	*Back*
High	ĭ	ŭ
Low	ĕ	ă̆

Since Balto-Slavonic *ă* eventually yielded Slavonic *ŏ* (see 2.27(a)), questions arise about its quality in Early Proto-Slavonic. The assumption of an *ă* is supported by the Baltic *ă*, by the fact that quantity was a distinctive feature in the Slavonic vocalic system (*ă* to *ā* as *ĕ* to *ē*) and by loans from and into Slavonic (Vaillant 1950: 107). There are also questions about the phonetic value of *ē*, which in some positions yielded an *ā*. It is for these reasons that, instead of the symbols *ĕ* and *ă* used in this survey, some scholars write *æ̆* and *å̆*.

Among the consonants and sonants, the palatal *š* and the velar *x* were in complementary distribution:

	Labial		Dental		Palatal		Velar	
	Voiceless	*Voiced*	*Voiceless*	*Voiced*	*Voiceless*	*Voiced*	*Voiceless*	*Voiced*
Stop	p	b	t	d			k	g
Spirant			s	z	š		x	
Nasal		m		n				
Liquid			r	l				

2.5

The Proto-Slavonic sound system, throughout its long history, was affected by two fundamental tendencies in the structure of the syllable. One was the **tendency for intrasyllabic harmony**, that is for a back to front (plain to soft or flat to sharp) accommodation within the same syllable. This tendency manifested itself in the palatalization of consonants before front vowels (see 2.9, 2.19), the yodization (see 2.10) and the fronting of back vowels after palatal consonants and after *i̯* (see 2.12).

The other was the **tendency for rising sonority** or a tendency for an intrasyllabic arrangement of phonemes proceeding from lower to higher sonority (the phonemes with the lowest sonority are voiceless spirants, those with the highest are low vowels). The most signal consequences of this tendency were the elimination of closed syllables, otherwise known as the **law of open syllables**, and the rise of prothetic semi-vowels (see 2.8). The former led, in turn, to the loss of final consonants (see 2.6), changes in syllable-initial consonant clusters (see 2.7), and the elimination of diph-thongs (see 2.13, 2.21, 2.22).

2.6

The tendency for rising sonority called for the **elimination of all inherited word-final consonants**:

Balto-Slavonic	OCS	Compare Sanskrit
sūnŭs	synъ 'son'	sūnús 'son'
pādĕs	pade 'you fell'	ábharas 'you carried'
pādĕt	pade 'he fell'	ábharat 'he carried'
u̯i̯lkād	vlьka 'wolf' (GEN SG)	vṛkād 'wolf' (ABL SG)

2.7

Similarly, all **syllable-initial clusters** which were not in accord with the tendency for rising sonority had to be **simplified or modified**:

Balto-Slavonic	OCS	Compare OCS
pŏktòs	potъ 'sweat'	pekǫ 'I bake'
dādmĭ	damь 'I will give'	dadętъ 'they will give'
sŭpnòs	sъnъ 'sleep'	sъpati 'to sleep'
grèbtēi̯	greti 'to bury'	grebetъ 'he buries'
māzslò	maslo 'oil'	mazati 'to spread'
ŏbu̯īdētēi̯	obiděti 'to offend'	viděti 'to see'
nŏktĭs	noštь 'night' (see 2.23)	Latin nox, noctis 'night'
ptru̯i̯òs	Church Slavonic stryi 'paternal uncle'	pater 'father'

When the juxtaposition of a morpheme final and a morpheme initial did not create an impermissible consonant cluster, syllables were opened by a mere shifting of syllable boundaries. Thus, the Old Church Slavonic syllabification *kъ-nje-mu* 'to him', *vъ-zda-ti* 'to give back' derived from the morphemic division *kъn-j-emu, *vъz-da-ti.

2.8

The tendency for rising sonority favoured **prothesis** in syllable-initial vowels. Before *ū*, there developed a prothetic *u̯*, while before front vowels and, in most dialects, before *ā*, a prothetic *i̯* arose: *ūdrā > *u̯udrā > ORu. *vydra* 'otter', *ĭdŏm > *i̯idǫ > OCS *idǫ* [i̯ьdǫ] 'I go', *ĕsmĭ > *i̯esmĭ > OCS [j]esmь 'I am'. The short *ă* remained without prothesis: *ătĭkŏs > OCS *otьcь* 'father'.

2.9

The principle of intrasyllabic harmony led to the affrication or palatalization of Balto-Slavonic velars before front vowels: *k* to *č* and *g* to *ǯ* to *ž*. Since this change was followed by two younger palatalizations (see 2.19), it is referred to as the **first palatalization of velars**.

	Balto-Slavonic	OCS		Balto-Slavonic	OCS	
NOM SG	u̯ĭlk-ŏ-s	vlьkъ	VOC	u̯ĭlk-ē	vlьče	'wolf'
	băg-ŏ-s	bogъ		băg-ē	bože	'god'

The new palatal consonants *č* and *ž* were in complementary distribution with *k* and *g* respectively, paralleling the status of *š* and *x* (see 2.3(c)):

	LPIE	OCS		LPIE	OCS	
NOM SG	dŏu̯s-ŏ-s	duxъ	VOC	dŏu̯s-ē	duše	'ghost'

2.10

Sequences of a consonant or sonant followed by the front semi-vowel *i̯*

yielded palatal sounds. This change has come to be known as the **yodization** (from *yod*, the Hebrew name of *į*).

(a) The velar stops developed analogously to the first palatalization of velars, *k* to *č* and *g* to *ǯ* to *ž*:

Balto-Slavonic	OCS		*Compare OCS*	
plāk-i̯-ō-m	plačǫ	'I cry'	plakati	'to cry'
lūg-i̯-ō-m	lъžǫ	'I lie'	lъgati	'to lie'

Forms like OCS *duša* (< PIE *dhŏųs-į-ā*) 'soul', *dušǫ* (< PIE *dhŏus-į-ō-m*) 'I blow' are usually considered instances of the yodization of the velar *x* (compare OCS *duxъ* 'breath', *duxati* 'to blow'), and are listed together with examples of the yodization of *k* and *g*. However, the derivation of *duša, dušǫ* does not require an assumption of the intervening stage *dŏųx-į-ā, *dŏųx-į-ō-m (compare 2.3(c) and 2.10(b)).

(b) The hissing sibilants yielded hushing ones, *s* to *š*, *z* to *ž*:

Balto-Slavonic	OCS	*Compare OCS*
dŏųs-i̯-ō-m (s < s)	dušǫ 'I blow'	duxati 'to blow'
pèįs-i̯-ō-m (s < k')	pišǫ 'I write'	pьsati 'to write'
māz-i̯-ō-m (z < g')	mažǫ 'I smear'	mazati 'to smear'

As a result of the yodization of *k g s z*, the sounds *č ž š*, previously positional variants of *k g x*, became independent phonemes as shown by such Early Proto-Slavonic minimal pairs as:

lŏųkā 'garlic' (GEN SG)		lŏųčā 'ray' (GEN SG)
nŏgā 'leg' (NOM SG)	versus	nŏžā 'knife' (GEN SG)
dŏųxā 'spirit' (GEN SG)		dŏųšā 'soul' (NOM SG)

(c) The labials developed an epenthetic *l* (labial + *į* > labial + *l* + *į*), which was lost in West Slavonic and Bulgarian/Macedonian in non-initial syllables due to paradigmatic levelling:

Balto-Slavonic	OCS	*Compare OCS*
sŭp-i̯-ō-m	sъpljǫ 'I sleep'	sъpati 'to sleep'
gūb-i̯-ō-m	gybljǫ 'I perish'	gybati 'to perish'
zēm-i̯-ā	zemlja 'earth'	zemьnъ 'earthly'

The yodization of *ų* was probably a Late Proto-Slavonic change. It contributed to the consonantization of the back semi-vowel (*ų > v*): OCS *loviti, lovljǫ* 'hunt' (see 2.34).

(d) The dental stops *t d* produced different reflexes in different dialect areas. Their discussion, therefore, belongs properly to the Late Proto-

Slavonic period. To avoid this chronological disjunction and to preserve typological symmetry, some scholars assume that *ti di* became *t' d'* in Early Proto-Slavonic, with further developments in Late Proto-Slavonic. This solution is adopted in the present survey, even though there is nothing in the structure of Slavonic to militate against a continued existence of *ti di* sequences until their ultimate replacement by palatal consonants (see 2.23).

(e) A similar problem is posed by the yodization of the sonants *n r l*, which, in the name of uniformity of treatment, are transcribed as *n' r' l'*.

2.11
Thus, except for the results of the second and third palatalizations of velars, that is, the addition of the palatal *c ʒ* and, dialectally, of *s'* (see 2.19), from the end of Early Proto-Slavonic down to the end of Late Proto-Slavonic the following **consonant system** may be posited:

	Labial		*Dental*		*Palatal*		*Velar*	
----------	*Voiceless*	*Voiced*	*Voiceless*	*Voiced*	*Voiceless*	*Voiced*	*Voiceless*	*Voiced*
Stop	p	b	t	d	t'	d'	k	g
Spirant			s	z	š	ž	x	
Affricate					č			
Nasal	m		n		n'			
Liquid			r	l	r'	l'		

The labial semi-vowel *u̯* and palatal semi-vowel *i̯* were in complementary distribution with the vowels *u* and *i* respectively. The palatal consonants and sonants and the semi-vowel *i̯* are conveniently grouped as 'soft', in opposition to the non-palatal 'hard' sounds.

2.12
In a process which operated throughout the Proto-Slavonic period, **back vowels were fronted** after soft consonants, that is, they were replaced by their front counterparts: *ă* to *ĕ* and *ŭ* to *ĭ*. When not counteracted by analogy, this change created 'hard' versus 'soft' alternations, frequently referred to by the German term 'umlaut'. The fronting of back vowels may be exemplified by the Old Church Slavonic pairs: *nes-omъ* 'carried' versus *zna[j]-emъ* 'known', *lьv-ovъ* 'leonine' versus *zmi[j]evъ* 'serpentine', *myti* 'to wash' versus *šiti* 'to sew' and so on (for the Late Proto-Slavonic changes in vowel quality, see 2.27). It is also responsible for the alternating 'hard' and 'soft' endings in the inflection of such stems as OCS *sel-o* 'village' versus *polj-e* 'field' (see 3.1.2):

GEN SG	sel-a (‹ *-ā)	polj-ě (‹ *-ē, dialectally)
LOC SG	sel-ě (‹ *-ăi̯)	polj-i (‹ *-ēi̯, see 2.13)
INST SG	sel-omь (‹ *-ămĭ)	polj-emь (‹ *-ēmĭ)
GEN PL	sel-ъ (‹ *-ŭ)	polj-ь (‹ *-ĭ)
INST PL	sel-y (‹ *-ū)	polj-i (‹ *-ī)

2.13
Complying with the law of open syllables, the many closed-syllable diphthongs were replaced by long vowels. Chronologically, first was the **monophthongization of the diphthongs in** $i̯$ **and** $u̯$. The resultant vowels are often marked with a subscript $_2$: $ăi̯ > ē_2$, $ĕi̯ > ī_2$, $ău̯ > ū_2$, $ĕu̯ > i̯ū_2$.

Balto-Slavonic	EPSl.	OCS	Compare Greek
bĕrŏi̯tĕ	bĕrē₂tĕ	berěte 'take!'	phéroite 'bring'
stĕi̯g-	stī₂g-nŏm	stignǫ 'I'll reach'	steíkhō 'I walk'
lŏu̯ki̯ŏs	lū₂čĭ	lučь 'light'	loûsson 'white wood'
bĕu̯d-	bi̯ū₂d-ŏm	bljudǫ 'I keep'	peúthomai 'I ask'

The instances of $ī_2$ occurring for the expected $ē_2$ (NOM PL of the masculine -ŏ- stems, 2 SG IMP) are probably analogical to the umlauted forms (see 3.1.2 note 6 and 3.2.2(d)). Some scholars, however, formulate phonological rules to account for this replacement.

2.14
In a departure from the tendency for intrasyllabic harmony, $ē$ **became** $ā$ **after soft consonants**. This change is best presented in three stages:

	'to shout'	'to hear'	'to hold'	'to stand'	Compare 'to see'
Stage 1	*krĭkētēi̯	*slŭšētēi̯	*dĭrgētēi̯	*stăi̯ētēi̯	*u̯ĕi̯dētēi̯
Stage 2	*krĭčētēi̯	*slŭšētēi̯	*dĭržētēi̯	*stăi̯ētēi̯	*u̯ĕi̯dētēi̯
Stage 3	*krĭčātēi̯	*slŭšātēi̯	*dĭržātēi̯	*stăi̯ātēi̯	*u̯ĕi̯dētēi̯

Slavonic languages show the final stage of this change, except for the Old Church Slavonic texts of Macedonian provenience which, faithful to the tendency for intrasyllabic harmony, retained stage 2:

Old Russian	kričati	slyšati	dьržati	stojati	viděti
Dialectal OCS	kričěti	slyšěti	drьžěti	sto[j]ěti	viděti

The sequences of a prothetic $i̯$ and root-initial $ē$ were sometimes retained by analogy to the sequences in which a prefix prevented the development of prothesis. Thus, the expected *i̯-ād- from *ēd- 'eat' was replaced in some Slavonic languages by the analogical *i̯-ēd- under the influence of *sŭn-ēd- 'eat up'; compare Old Church Slavonic jasti and sъněsti with Old Russian [j]ěsti and sъněsti.

2.15

The Early Proto-Slavonic back vowels were redundantly and, hence, weakly labialized. However, the introduction of a fully labialized $\bar{u}$ ‹ $\bar{u}_2$, endowed labialization with a phonemic status and contributed to a complete **delabialization of $\bar{u}_1$ to $\bar{y}$**, for example Old Church Slavonic *tu* 'here' (‹ *$t\breve{o}\underset{\shortmid}{u}$) versus *ty* 'thou' (‹ *$t\bar{u}$).

2.16

The monophthongization of diphthongs led to the development of **phonemic distinctions in pitch** (intonation). Before the monophthongization, long vowels and long diphthongs were rising in pitch, while short vowels and short diphthongs were non-rising (falling). These differences in pitch were automatic, hence phonemically non-distinctive. When, after the monophthongization, Proto-Slavonic obtained non-rising long vowels from originally short diphthongs or two contracting short vowels (see 2.32), the formerly redundant distinctions in pitch became phonemic. Consequently, the long $\bar{\imath}$ $\bar{e}$ $\bar{y}$ $\bar{u}$ $\bar{a}$ could be either rising or non-rising, while the short $\breve{\imath}$ $\breve{u}$ $\breve{e}$ $\breve{a}$ were inherently non-rising, contrasting with the corresponding long non-rising vowels. It is customary to refer to the Proto-Slavonic rising and non-rising intonations as 'acute' and 'circumflex' respectively and to transcribe them with an acute (´) and circumflex (ˆ) accent marks. This practice will be followed in the present survey.

Note: The acute accent mark has multiple values as a vowel diacritic in different Slavonic languages. It denotes the following: (a) the acute in Proto-Slavonic; (b) long rising pitch in Serbo-Croat and Slovene; (c) vowel length in Czech and Slovak; (d) place of stress in East Slavonic, Bulgarian and Macedonian (but recall that in this volume we use '); (e) *u*-like pronunciation of *o* (originally $\bar{o}$) in Polish and Sorbian.

2.17

Thus, by the end of the Early Proto-Slavonic period, the **vocalic system** consisted of five long acute vowels, five long circumflex vowels and four short vowels:

	Acute			Circumflex				
	Front	Back		Front	Back		Front	Back
		Unrounded	Rounded		Unrounded	Rounded		
High	í	ý	ú	ĩ	ỹ	ũ	ĭ	ŭ
Low	é		á	ẽ		ã	ĕ	ă

The vowels $\bar{y}$ and $\bar{a}$, though typically acute, could be circumflex when their length was not inherited from Balto-Slavonic but was due to Late Proto-Slavonic developments, such as the contraction of circumflex vowels (see 2.32).

2.18

The introduction of pitch distinctions marks the end of the uniform Early Proto-Slavonic period. During the **Late Proto-Slavonic** period, linguistic developments were dialect specific, leading up to the eventual disintegration of Proto-Slavonic. While it is virtually impossible to establish an absolute chronology of change within Early Proto-Slavonic, the task of dating particular Late Proto-Slavonic changes is somewhat easier. One may surmise that they began with the breakup of the territorial integrity of Slavonic around the end of the sixth century AD, when the Slavs began their push into the Balkans and central Europe. It is even possible to assign certain changes to the beginning or the end of Late Proto-Slavonic by assuming that greater dialectal variation implies a more recent event.

2.19

Two new palatalizations of velars (compare 2.9) and the treatment of the *tl dl* clusters are responsible for a major isogloss, separating West Slavonic from East and South Slavonic. In the **second and third palatalizations of velars**, the velar stops developed identically throughout the Slavonic territory: *k* to *c* and *g* to *ȝ* (simplified to *z'* in most Slavonic languages). However, the palatalization of the velar spirant *x* yielded *š* in West and *s'* in East and South Slavonic. The second palatalization was caused by the new front vowel $\bar{e}_2$ (< *ǎi̯*) acting on the preceding velar. The third palatalization was caused by a high front vowel, with or without an intervening nasal, acting on the following velar. The few Old Church Slavonic examples of *k* becoming *c* after *ir* appear to be analogical (Shevelov 1965: 341). The third palatalization started as a phonological development before *ā*, but soon became grammaticalized. Its extent in the individual Slavonic languages is due to various morphological factors.

Second palatalization of velars				Third palatalization of velars			
EPSl.	*LPSl.*			*EPSl.*	*LPSl.*		
	East and South	*West*			*East and South*	*West*	
kǎi̯nā	$c\bar{e}_2n\bar{a}$		'price'	ău̯ikā	ău̯icā		'sheep'
gǎi̯l-	$ȝ\bar{e}_2l\grave{a}$		'very'	lei̯kā	licē		'face'
xǎi̯r-	$s'\bar{e}_2r$-	$š\bar{e}_2r$-	'grey'	kŭning-	kŭninȝ-		'ruler'
				u̯ix-	u̯is'-	u̯iš-	'all'

Thus the reflexes of the two palatalizations of *k* and *g* are the same throughout Slavonic: OCS *cěna, ȝělo*; *ovьca, lice, kъnęȝь*; Old Czech *ciena, zielo*; *ovce, lice, kniez*. However, the East and South Slavonic reflexes of palatalized *x* do not agree with the West Slavonic ones: Old Russian *sěrъ*; OCS *vьsь* versus Old Czech *šierý*; *veš*.

Additional dialect differentiation was provided by the simplification of the affricate *ȝ* to *z'*, which occurred throughout the Slavonic territory

except in Lechitic and the oldest Old Church Slavonic texts, and by the fact that the sequences *ku̥* and *gu̥* underwent the second palatalization in South Slavonic and parts of East Slavonic, but not in West Slavonic:

EPSl.	East and South	West	
ku̥ai̥t-	cu̥ẽ₂t-	ku̥ẽ₂t-	'flower'
gu̥ai̥zdā	ȝu̥ẽ₂zdā	gu̥ẽ₂zdā	'star'

These differences may be exemplified by Russian *cvet, zvezdá*; SCr. *cvȉjet, zvijèzda* versus Czech *květ, hvězda*; Polish *kwiat gwiazda*.

2.20
The **clusters tl dl** were permitted only in West Slavonic. Elsewhere, they were simplified to *l* or, as in some Slavonic dialects, replaced by *kl gl*:

EPSl.	East and South	West	
mětlā	mělā	mětlā	'swept' (RSLT PART F)
sādlā	sālā	sādlā	'fat'

Compare Russian *melá, sálo*; SCr. *mèla, sàlo* with Czech *metla, sádlo*; Polish *miotła, sadło*.

2.21
The monophthongization of diphthongs (see 2.13) affected also the **diphthongs in nasal sonants (*N*)**, resulting in the creation of two nasal vowels, a front one derived from *ěN* and a back one derived from *ăN*. As for the diphthongs *ĭN ŭN*, it appears that those derived from the Proto-Indo-European vocalic sonants *n̥ m̥* were denasalized, while those resulting from later borrowings fell together with the vocalic reflexes of *ěN ăN* respectively. Nasal vowels were retained in Lechitic and some Bulgarian and Slovene dialects and denasalized elsewhere. In either case, their reflexes differ so widely as to suggest that their phonetic value in Late Proto-Slavonic was not uniform (see 2.27(c)).

2.22
Early Proto-Slavonic inherited from Balto-Slavonic two types of **diphthongs in liquid sonants (*R*)**, differentiated by the height of their vocalic nuclei: the high-vowel diphthongs, *ĭR ŭR*, derived from Proto-Indo-European vocalic liquids and the low-vowel diphthongs *ěR ăR*, derived from *ěR ŏR ăR*. These diphthongs occurred word-initially (*#VRC*) or word-internally (*CVRC*); we use *C* to denote a consonant, and *V* a vowel. In either position the law of open syllables demanded their elimination. There was little dialectal differentiation in the resolution of the *#VRC* diphthongs, testifying to the antiquity of this change. More variegated and, therefore, more recent was the resolution of the *CVRC* diphthongs. There is, in fact, evidence to suggest that this change was still operative in the

ninth century. Its results subdivide the Slavonic territory into four dialect areas: (1) South Slavonic, Czech, and Slovak; (2) East Slavonic; (3) Polish and Sorbian; (4) Cassubian (including Slovincian) and Polabian.

(a) The **#ăRC** sequences (the only examples of the **# VRC** formula) were resolved by metathesis, that is, reversal of positions of the vowel and sonant. However, in North Slavonic the distinction between long and short vowels was preserved, while in South Slavonic (and central Slovak dialects), the short diphthongs were lengthened and merged with the long ones, transferring the difference in vowel quantity to that of pitch. As expected (see 2.16), Early Proto-Slavonic long diphthongs yielded acute vowels, while short diphthongs yielded circumflex vowels.

EPSl.	Russian	Polish	Czech	OCS	Serbo-Croat
āru̯ĭn- 'even'	róvnyj	równy	rovný	ravьnъ	rávan
ălkŭt- 'elbow'	lókot'	łokieć	loket	lakъtь	làkat
ārdlă 'plough'	rálo	radło	rádlo	ralo	rãlo
ālkăm- 'greedy'	làkomyj	łakomy	lakomý	lakomъ	làkom

(b) The **CĭRC CŭRC** sequences developed in two stages. In the Early Proto-Slavonic stage, common to all the Slavonic languages, the vowel was lost and the vocalic function was transferred to the sonant, which, depending on the quality of the vowel, was either soft, r' l' (‹ CĭRC), or hard, r l (‹ CŭRC). Vocalic length was replaced by rising pitch.

In Late Proto-Slavonic, vocalic sonants remained syllabic in area 1, with r' becoming $r̦$, while l' retained its distinctiveness in Polish, Sorbian and partly Czech, merging elsewhere with $l̦$. In other areas, the sonant was preceded by a homorganic vowel, leading to the sequences of the CVRC type. Such a contravention of the law of open syllables suggests that the development of the syllabic sonants outside area 1 belongs to the histories of the individual languages.

(c) The resolution of the **CěRC CăRC** sequences was one of the last changes of Late Proto-Slavonic. The **CělC** sequences fell together with **CălC** in areas 2 and 4. In area 1 the liquid diphthongs were resolved through metathesis, with the short diphthongs lengthened. The Late Proto-Slavonic pitch distinctions were continued in Serbo-Croat and Slovene, but reinterpreted as place of stress in Bulgarian and Macedonian and as quantity in Czech and Slovak.

In other areas, the short and long diphthongs were resolved by the introduction of an epenthetic vowel creating disyllabic sequences of the CV_1RV_2C type. In area 2, V_1 was the vowel of the original diphthong and V_2 an epenthetic short high vowel, homorganic with V_1. These epenthetic vowels were the later front or back jers, which in this position were always 'strong' (see 2.25). The resultant disyllable is known under its Russian

name as '*polnoglasie*' (or, less frequently, 'pleophony'). The Late Proto-Slavonic pitch distinctions were replaced by distinctions in place of stress. The polnoglasie sequences derived from acute diphthongs stressed V_2, while those going back to circumflex diphthongs did not.

In areas 3 and 4, except in Polabian, V_1 was an epenthetic short high vowel, while V_2 continued the vowel of the diphthong. The epenthetic vowels were treated as 'weak' *jers* (see 2.25) and were lost. Their reconstruction is prompted by circumstantial evidence from Polish and Lower Sorbian. Later Proto-Slavonic pitch distinctions were replaced in area 3 by distinctions in vowel quantity. However, only Upper Sorbian has preserved reflexes of quantity distinctions resulting from the acute versus circumflex opposition.

The Polabian facts are difficult to interpret because of the paucity and unreliability of the written records. The *CĕrC* sequences seem to have developed similarly to those in area 3, *CărC* fell together with *Cr̥C*, and *CălC* yielded *ClŭC*.

EPSl.	*Russian*	*Polish*	*Czech*	*Upper Sorbian*	*Serbo-Croat*	*Bulgarian*
bĕrg- 'bank'	bе́reg	brzeg	břeh	brjoh	brȉjeg	breg-ъt
bĕrzā 'birch'	berе́za	brzoza	bříza	brěza	brèza	brеза
bărnā 'harrow'	boronа́	brona	brana	bróna	brána	branа
u̯ārnā 'crow'	vorо́na	wrona	vrána	wróna	vrȁna	vrаna

In Late Proto-Slavonic reconstructions, the diphthongs in liquid sonants will be cited in their *VR* form, in bold face, for example **berg**- 'bank'.

2.23
The **development of t′ d′** (see 2.10(d)) was also characterized by dialectal fragmentation, testifying to the lateness of this change. The reflexes of *t′ d′* fall into five groups: (1) *št žd* in Old Church Slavonic and Bulgarian; (2) *ć ӡ̌*, spelled *ć* and *dj/đ* in Serbo-Croat; (3) *k′ g′* in standard Macedonian; (4) *č ӡ̌* in Slovene and East Slavonic, with *ӡ̌* becoming *j* in Slovene and *ӡ̌* becoming *ž* in Russian and, partly, in Ukrainian and Belorussian; (5) *c ӡ* in West Slavonic, with *ӡ* becoming *z* in Czech and Sorbian.

The palatal *t′* had two sources: *tj* and *kt* + front vowel. The latter sequence presupposes the lenition of *kt* to *i̯t* and its metathesis to *tj̯* in accordance with the tendency for rising sonority within a syllable.

EPSl.	*OCS*	*Serbo-Croat*	*Russian*	*Polish*
su̯ē₂t′ā (‹ su̯ái̯t-i̯-ā) 'candle'	svĕšta	svijèća	svečа́	świeca
năt′i (‹ năkt-i-s) 'night'	noštь	nȍć	noč′	noc
mĕd′ā (‹ mĕd-i̯-ā) 'boundary'	mežda	mèđa	mežа́	miedza

2.24

Comparative evidence indicates that, except for a small number of enclitics, Late Proto-Slavonic developed distinctive **word stress**. However, the task of reconstructing it and of tracing the evolution of the Slavonic accentual system is rendered difficult by the tensions between phonological principles and morphological patterning. It is for this reason that the formulations given below are to be understood as tendencies, nullified often by morphological factors.

(a) In words whose roots contained an acute vowel, word stress coincided with that vowel and, unless overridden by morphological patterns, was fixed. This can be seen in such Russian word families as *véra véry* 'faith', *vérnyj* 'faithful', *uvérennyj* 'confident', *vérju* 'I believe', *Véročka* 'Verochka' (‹ **u̯ē₁r-* 'believe'); *berëza berëzy berëzu* 'birch', *berëzina* 'birchwood', *berëzka* 'small birch', *beréznik* 'birch grove', *berëzovyj* 'birchen' (‹ **bē₁rz-* 'birch').

(b) In words whose roots contained a circumflex vowel, word stress was movable. If no acute vowel followed, the onset of stress was on the first syllable of the phonological word; when an acute vowel followed the circumflex vowel, the onset of stress was on the acute vowel. This principle, which is known as the law of Saussure/Fortunatov, may be exemplified by such Russian word families as *béreg, bérega* 'shore', *ná bereg* 'to the shore', *náberežnaja* 'embankment' versus *beregá* 'shores', *na beregú* 'on the shore' (‹ **bĕrg-* 'elevation'); *vólok* 'portage', *óblako* 'cloud', *návoločka* 'pillowcase' versus *volokú* 'I drag', *oblaká* 'clouds' (‹ **u̯ĕlk-* 'drag'); *úmer* 'he died' *versus umerlá* 'she died' (‹ **mr̥'-* 'die').

(c) Fixed oxytonic (that is, word-final) stress was typical of suffixal derivatives and borrowings, as in the following Russian examples: *molotók, molotká* 'mallet' versus *mólot* 'hammer' (‹ **mălt-* 'mallet'); *kolesó, kolesá, kolesóm* 'wheel' versus *ókolo* 'around' (‹ **kăl-* 'wheel'); *vorotník, vorotniká* 'collar' versus *vórot* 'large collar', *závorot* 'twisting' (‹ **u̯ărt-* 'turn'); *koról', koroljá, korolëm* 'king' (‹ **kărl-i̯-* 'king' ‹ Old High German *Karl*); *molokó, moloká, molokóm* 'milk' (‹ Germanic **meluk-* 'milk'); *topór, toporá, toporóm* 'axe' (‹ Avestan **tapara-* 'axe').

2.25

The short high vowels, *ĭ* and *ŭ*, are also referred to as the **jers**, in anticipation of the name given to their reflexes, ь and ъ, in Old Church Slavonic. In word-final position, these vowels were further reduced in length, giving rise to shortened or weak variants of the *jers*. In accordance with Havlík's law, the occurrence of these variants was regulated by an alternating pattern of weak and strong positions counting from the end of the phono-

logical word. The *jers* were weak in word-final position, strong before a weak *jer*, and weak before a strong *jer* or any other vowel. Since the distribution of strong and weak *jers* was automatic, there is no need for special symbols to distinguish between them. When the difference has to be emphasized, strong *ĭ ŭ* (ь ъ) will be shown in bold face: NOM SG *dĭnĭ (dьnь)* 'day', *sŭnŭ (sъnь)* 'sleep'; INST SG *dĭnĭmĭ (dьnьmь)*, *sŭnŭmĭ (sъnъmь)*. This shortening process culminated in the elimination of the weak *jers*, thus ending the era of open syllables and, at the same time, of the Proto-Slavonic period.

2.26
The weakening of *jers* led to a shift of word stress from the weak *jers* to the preceding syllable. Since all pre-tonic vowels were automatically rising, this shift of stress created a new rising pitch, called **neoacute** and transcribed with a superscript tilde (˜).

The appearance of the neoacute disturbed the old pitch distinctions. In the initial syllable of disyllabic words, the acute (**párgŭ* 'doorsill') and the neoacute (**kãrl-į-ĭ* 'king') contrasted with the circumflex (**gârdŭ* 'town'). The former binary opposition (acute versus non-acute) was restored when the old acute ceased to function as a phonemically distinct entity throughout Slavonic. The varied modes of its elimination mark off four dialect areas, suggesting a post-Proto-Slavonic development.

(a) In Serbo-Croat, the acute versus circumflex opposition was reinterpreted as a distinction of quantity, with the acute yielding a short fall (ˋ) and the circumflex a long fall (ˆ). The long neoacute remained as a long rise (ˊ). In the Čakavian dialect of Serbo-Croat, the three nouns listed above appear as *präg králj grâd.*

(b) In Czech, Upper Sorbian and Slovene the acute fell together with the neoacute. In Czech and Upper Sorbian it yielded vowel length, which contrasted with vowel shortness generated by the circumflex: Czech *práh král* versus *hrad.* Slovene continues the opposition as one between a long rise and a long fall: *prág králj* versus *grâd.*

(c) In Slovak, Polish and Lower Sorbian, the acute fell together with the circumflex yielding vowel shortness which contrasted with vowel length generated by the neoacute: Slovak *prah hrad* versus *král.*

(d) In Bulgarian, Macedonian and East Slavonic, where the original situation must have resembled that of Czech and Upper Sorbian, quantity distinctions were eventually lost. Instead, vowel length under the acute and neoacute, contrasting with the brevity under the circumflex, was reinterpreted in Bulgarian and Macedonian as an opposition between a stressed

and an unstressed vowel and in the East Slavonic *polnoglasie* sequences (see 2.22(c)), as an opposition between a stressed and unstressed V_2; for example, Bulgarian *prág-ъt králj-at* versus *grad-ъt* (*-ъt/-at* are post-positive definite articles); Russian *poróg koról'* versus *górod* or *prígorod* 'suburb' (compare 2.24(b)).

2.27

As was seen in the preceding section, the introduction of the neoacute resulted in the shortening of some Early Proto-Slavonic long vowels: the acute long vowels in Serbo-Croat and Slovene, the circumflex long vowels in Czech, Upper Sorbian, East Slavonic, Bulgarian and Macedonian, and both the acute and circumflex long vowels in Slovak, Polish and Lower Sorbian. This shortening led in turn to the phonemicization of previously non-distinctive **differences in vowel quality** which characterized Early Proto-Slavonic (Stankiewicz 1986: 26).

(a) Early Proto-Slavonic **short vowels** were more central (mid-high and mid-low) than their long counterparts. These differences in quality became distinctive as the high short vowels *ĭ ŭ* yielded *ь ъ* (the so-called front and back *jers*) and the low short vowels *ĕ ă* yielded *e o*. The *jers* had strong and weak variants (see 2.25).

(b) Of the Early Proto-Slavonic **long vowels**, the back vowels *ȳ* (< *ū_1*) *ū_2 ā* remained as *y u a*. The front vowels *ī_1* and *ī_2* fell together in *i*, while *ē_1* and *ē_2* merged in *ě*. The vowel *ě* (the so-called *jat'* of Old Church Slavonic) was a low-front vowel. The testimony of many modern Slavonic languages and of the oldest Old Church Slavonic texts suggests that its phonetic value was that of a fronted *a* [æ]. However, its position in the system was unstable and, depending on other developments, it was either pushed higher (as in East Slavonic, after the denasalization of nasal vowels) or back (as in Lechitic and Bulgarian, after the phonemicization of consonant palatalizations). The vowel *ě*, because of its dual origin (*ě* < *ē_1* < *ē* and *ě* < *ē_2* < *ăi*), exhibits different morphophonemic properties: *ě* from *ē_2* alternates with *i* (< *ī_2* < *ěi*), while *ě* from *ē_1* does not (see 2.12 and 2.13); *ě* from *ē_2* also affects preceding velars differently than does *ě* from *ē_1* (see 2.9 and 2.19). Since these differences prove important in morphological statements, it is convenient to distinguish between *ě_1* (< *ē_1*) and *ě_2* (< *ē_2*).

(c) The two **nasal vowels** were opposed to each other as front versus back. Since these features were sufficient to secure their distinctiveness, the nasal vowels displayed considerable latitude in the selection of the non-distinctive features of vocalic height and quantity. The South Slavonic standard languages agreed on the reflex of the front nasal as *ę* (< *ę̆*), but disagreed on the back nasal: Serbo-Croat *u*, Bulgarian *ъ*, Old Church

Slavonic and Slovene ρ, Macedonian ą. The North Slavonic languages favoured a diagonal opposition between a low-front nasal ę [æ] (< ę̄) and a high back nasal ų. Thus, the traditional transcription of Late Proto-Slavonic nasals as ę and ǫ is an emblematic rather than a phonetic representation.

EPSl.	LPSl.	Bulgarian	SCr.	Slovene	Slovak	Czech	USo.	Polish	Polabian	Russian
mênsă 'meat'	męso	meso̍	mêso	meso̍	mäso	maso	mjaso	mięso	mǫsü	mjáso
rănkă 'hand'	rǫka	rъ̍kă	rúka	róka	ruka	ruka	ruka	ręka	rǫkă	ruká

2.28
A number of Late Proto-Slavonic changes contributed to the **rise of new quantity oppositions**. Some long vowels (going back to Early Proto-Slavonic long vowels and monophthongized diphthongs) were shortened (see 2.26, 2.29); others were preserved (see 2.26, 2.30). In addition, new lengths arose due to compensatory lengthening (see 2.31) and vowel contraction (see 2.32).

2.29
The fact that Late Proto-Slavonic pitch oppositions were distinctive only on long vowels in word-initial syllables contributed to the **shortening of long vowels in word-final position**. This development, affecting all of Slavonic, is discernible in the languages which have or had ways of indicating phonemic length, such as Serbo-Croat, Slovene, Czech, Slovak and Old Polish. Thus, *sēstrā (NOM SG), *sēstrȳ (GEN SG), *sēstrǭ (ACC SG) 'sister' yielded Czech *sestra, sestry, sestru*, contrasting with *ostrá* (NOM SG F), *ostrý* (NOM SG M), *ostrú* (ACC SG F) 'sharp', whose length (indicated in Czech with the acute accent) is due to vowel contractions (see 2.32).

2.30
In a development which was typologically linked with the rise of the neo-acute (see 2.26), **long vowels** were **preserved in pre-tonic syllables in disyllabic words**:

LPSl.	Čakavian Serbo-Croat	Štokavian Serbo-Croat	Czech	Polish
travá 'grass'	trāvà	tráva	tráva	trowa (dialectal, Old Polish ā)
mǫká 'flour'	mūkà	múka	mouka	mąka (Old Polish ǭ)
barzdá 'furrow'	brāzdà	brázda	brázda	bruzda (Old Polish ō)
svět'á 'candle'	svīćà	svijèća	svíce	świca (dialectal, Old Polish ē)
tręstí 'to shake'	trēstì	trésti	třásti	trząść (Old Polish ǭ)

2.31

The reduction and loss of the weak *jers* led to **compensatory lengthening** of the short vowels in syllables immediately preceding the weak *jers*. Although this was a late change whose extent differed from one dialect area to another, it clearly began in the Late Proto-Slavonic period. However, details of its realization belong properly to the histories of the individual languages. Most examples of compensatory lengthening are found in the central group of the North Slavonic languages.

2.32

Towards the end of Late Proto-Slavonic, there developed a tendency for the elision of intervocalic *j* (< *i̯*, see 2.34) and for the contraction of the two vowels in hiatus, resulting in the creation of new vocalic lengths. The most important consequence of **vowel contraction** was the reintroduction of long vowels in word-final position (compare 2.29).

Vowel contractions were more pervasive in South and West Slavonic than in East Slavonic, with Czech/Slovak and Russian at the two poles of the opposing tendencies. The following examples show the extent and sources of the contracted *ā* in several Slavonic languages:

LPSl.	Czech	Old Polish	Serbo-Croat	Russian	
aja	nová	nowā	nȍvā	nóvaja	'new' (NOM SG F)
aje	zná	znā	znâ	zná[j]et	'he knows'
oja	pás	pās	pâs	pòjas	'belt'
ěja	smáti se	śmiāć się	smèjati se	smejàt′sja	'to laugh'
ija	přítel (í < á)	przyjaciel	prȉjatelj	prijàtel′	'friend'

2.33

The sequences *ьjV* and *ъjV* fell together with the sequences *ijV* and *yjV* in what is known as **tense jers** (transcribed *ь̃ ъ̃*). In Old Church Slavonic tense *jers* were written either as *i* and *y* or as *ь* and *ъ*. In other Slavonic languages tense *jers* behaved like regular *jers*, contracting to *i* and *y* in the strong position (that is, *ь̃jь* > *i*, *ъ̃jь* > *y*) and being lost in the weak position. Since Russian did not have contractions across the *j* (see 2.32), its treatment of strong tense *jers* coincided with that of other *jers*.

LPSl.	OCS	Czech	Serbo-Croat	Russian	
prost-ь̃-j-ь	prostyi/prostъi	prostý	prȍstī	prostój	'plain'
pit-ь̃j-e	pitie/pitьe	pití	píće	pit′ë	'drink'

2.34

The Indo-European and Early Proto-Slavonic semi-vowels *i̯* and *u̯* were pre- or post-vocalic variants of the vowels *i* and *u*. When the monophthongization of diphthongs limited the semi-vowels to the pre-vocalic position, the **status of *i̯* and *u̯*** changed since they now occupied the

position of consonants (C) in the *CV* syllabic formula. Morphological patterning also pointed to the consonantization of *i̯* and *u̯* because structurally there was no difference between such forms as *moi̯-ъ, moi̯-a, moi̯-e* 'my' and *naš-ъ, naš-a, naš-e* 'our' or *nou̯-ъ, nou̯-a, nou̯-o* 'new' and *star-ъ, star-a, star-o* 'old'.

In addition, the tendency for rising syllabic sonority must have enhanced the consonantal status of *u̯* and hastened its change into *v*. Thus, the process of yodization produced the unacceptable syllable initial *u̯li̯* (see 2.10(c)), which, in order to conform to the syllabic laws of Slavonic, had to change to *vli̯* (> *vl'*). Similarly, in South Slavonic, Czech and Slovak, the monophthongization of liquid diphthongs produced the unacceptable syllable initials of the *u̯R* type (see 2.22(c)) which had to become *vR* in agreement with the regular Slavonic *CR* type.

These considerations make it possible to assume that in Late Proto-Slavonic *u̯* became *v*, and that the latter had the status of an independent phoneme. On the other hand, there are no compelling reasons to consider *i̯* phonemically independent of *i*. However, the traditional practice of using the symbol *j* in Late Proto-Slavonic reconstructions is adopted in this presentation.

2.35
The **phonemic inventory of Late Proto-Slavonic** included seven short and seven long non-*jer* oral vowels, two short *jers*, two short and two long nasal vowels, twenty-six consonants and the glide *j* (see 2.34). Among the consonants, the hushing *š ž č* are classified as alveolar, contrasting with the palatal *s' z'* and the dental *c*:

	Front	*Back*		*Front*	*Back*	*Front*	*Back*
		Unrounded	*Rounded*				
High	ī̆	ȳ̆	ū̆	ь	ъ	ę̄̆	ǭ̆
Mid	ē̆		ō̆				
Low	ě̄̆		ā̆				

	Labial	*Dental*	*Alveolar*	*Palatal*	*Velar*
Stop	p b	t d		t' d'	k g
Spirant	v	s z	š ž	s' z'	x
Affricate		c ʒ	č		
Nasal	m	n		n'	
Liquid		r l		r' l'	

The affricates, alveolars, palatals and *j* are considered 'soft'. Of these, *t' d'* developed differently in five dialect areas (see 2.23), *z'* and *ʒ* were dialect variants, and *s'* occurred in East and South Slavonic only (see 2.19).

3 Morphology

Words which are morphemically unanalysable are called simple; those which are analysable into two or more discrete morphemes, the etymological root accompanied by derivational and/or inflectional morphemes, are called complex. Except for some conjunctions and particles which were simple, Proto-Slavonic words were complex. Of these, adverbs showed no inflectional morphemes, that is, they were uninflected, while other complex words were inflected. Inflected words belonged to two large classes which expressed different grammatical meanings or categories: (a) nominals (including nouns, pronouns, adjectives and numerals) and (b) verbs. Accordingly, Proto-Slavonic distinguished between nominal and verbal inflections.

Inflected words consisted of stems and endings. Endings included an obligatory inflectional ending which marked such inflectional categories as case, number, gender, person, infinitive and supine. Verbs and adjectives could also have a pre-final desinential suffix which marked such inflectional categories as aspect, tense or mood (for example, -ěa-, the imperfect formant). Some inflectional categories were expressed with the help of an otherwise independent word (for example, sę in the reflexive or an auxiliary verb in the compound tenses or the conditional).

Stems consisted of roots, either alone or accompanied by one or more affixes, which, depending on whether they preceded or followed the root, are called prefixes or suffixes. Affixes showed varying blends of lexical and grammatical meaning. Some could be exclusively or predominantly lexical; such was the negative prefix (for example, OCS ne-plody 'barren woman', ne-vidimъ 'invisible'), the prefixes in many imperfective verbs (for example, OCS vъ-kušati 'taste', pri-běgati 'take refuge'), diminutive or agentive suffixes (for example, OCS dъšt-ic-a 'small board', uči-telj-ь 'teacher'). Others could be exclusively or predominantly grammatical, such as the suffixes switching one part of speech to another (for example, the suffix -ьn- forming adjectives from nouns).

Suffixes which assigned a stem to a particular inflectional pattern are called thematic. Most thematic suffixes of Proto-Indo-European lost their identity in Proto-Slavonic. Such were the thematic vowels of the Proto-Indo-European noun inflection which in Proto-Slavonic blended in with the inflectional endings. Their original morphemic independence is evident from such forms as OCS INST SG grad-omь 'town', syn-ъmь 'son', pǫt-ьmь 'road', whose endings were derived from the sequences of the Proto-Indo-European thematic vowels -ŏ-, -ŭ-, -ĭ- and the inflectional ending -mĭ (compare 3.1.2).

Proto-Slavonic did not use infixation as a grammatical device. It retained, however, traces of the Indo-European present-tense infix -n- in a handful of forms: for example OCS 3 SG AOR sědě, leža vs. 3 SG PRS sędetъ, ležetъ from the roots *sēd-/sě-n-d- 'sit', *lěg-/lě-n-g- 'lie'.

3.1   Nominal morphology

From the standpoint of their derivational structure, Proto-Indo-European nominal stems may be classified into derived and underived or simple.

Derived stems which ended in a thematic vowel are called **thematic (vocalic)**. They included stems in *-ŏ-* (M and N), *-ā-* (F and M), *-ĭ-* (F and M) and *-ŭ-* (M). Stems in which the thematic vowels *-ŏ-* and *-ā-* were preceded by *i̯* (typically, the derivational suffix *-i̯-*) are referred to as the *-i̯-ŏ-* and *-i̯-ā-* stems. As expected, back vowels after *i̯* were fronted (see 2.12). The *-i̯-ī-* stems (F and M) were a subclass of the *-i̯-ā-* stems, differing from them in the nominative singular only. All the thematic stems were represented among the nouns; however, only the *-ŏ-/-i̯-ŏ-*, *-ā-/-i̯-ā-* and *-ĭ-* (F) stems were productive (for examples, see 3.1.2). Of these, the first two characterized the indefinite adjectives, *-ŏ-/-i̯-ŏ-* (M and N) and *-ā-/-i̯-ā-* (F). The Late Proto-Slavonic numerals *jedin-* '1' (singular and plural only) and *dъv-* '2' (dual only) belonged to the *-ŏ-* and *-ă-* classes, while *tr-ь-* '3' (plural only), *pęt-ь-* '5' (singular only) and higher belonged to the *-ĭ-* class.

Stems without a thematic vowel are called **athematic (consonantal)**. Of the derived athematic stems, Proto-Slavonic retained stems in the suffixes *-ōn-/-ĕn-* (M), *-ŏs-/-ĕs-* (N), *-tēr-/-tĕr-* and *-ū-/-ŭy̨-* (F), which showed nominative singular versus non-nominative singular ablaut variants, and stems in *-mēn-/-mĕn-* and *-ēnt-/-ĕnt-* (N), where the nominative singular length developed probably within Slavonic (Meillet 1934: 426). In the *-tēr-/-tĕr-* stems, the NOM SG *-tēr-* was replaced by *-tī-* by analogy with the *-i̯-ī-* stems. Except for the *-ēnt-/-ĕnt-* stems, the Late Proto-Slavonic athematic stems were unproductive. They included a small number of nouns (see 3.1.2, the numeral *četyr-* '4' and some forms of *desęt-* '10'.

In addition, athematic endings occurred with the plural (that is, second) stems of the masculine personal nouns in *-tĕl-i̯-/-tel-*, *-ār-i̯-/-ār-*, *-(ān)-īn-/-(ān)-* as in OCS NOM PL and GEN PL *žitele žitelъ*, *rybare rybarъ*, *graždane graždanъ*, from *žitelj-/žitel-* 'inhabitant', *rybarj-/rybar-* 'fisherman', *graždanin-/graždan-* 'town dweller', as well as with the nominative singular and the nominative plural masculine of the present active and past active participles (see 3.2.2(f)).

Simple athematic nominal stems were either lost in Proto-Slavonic or transferred to a thematic class, with or without a derivational suffix, for example **dĕnt-s* 'tooth' (compare Latin *dēns, dentis*) was lost and replaced by **g'ŏmbh-ŏ-s* 'stake' (compare OCS *zǫbъ* 'tooth'), **k'r̥d-* 'heart' (Latin *cor, cordis*) was replaced by **k'r̥d-ĭk-ŏ-m* (OCS *srъdьce* 'heart'), **(s)nŏig^wh-s* 'snow' (Latin *nix, nivis*) was replaced by **(s)nŏig^wh-ŏ-s* (OCS *sněgъ* 'snow'), **mūs-s* 'mouse' (Latin *mūs*) was replaced by **mūs-ĭ-s* (OCS *myšь* 'mouse').

The shape of inflectional endings allows us to assign Proto-Indo-European and Proto-Slavonic nominals to two inflectional subtypes, one for nouns and numerals and the other for pronouns. The inflection of Proto-Indo-European adjectives did not differ from that of nouns. In Proto-Slavonic, however, only the indefinite adjectives declined like nouns, while the newly created definite adjectives declined like pronouns.

3.1.1   Nominal categories

Among the Slavonic nominals, the adjectives were obligatorily marked for case, number and gender and, in most instances, for gradation and specificity. The nouns were inflected for case and number, and were inherently specified for gender. The gendered pronouns distinguished case, number and gender, while the non-gendered ones and the cardinal numerals '5' and higher were inflected for case only.

Characteristically nominal was the grammatical category of **case**. Late Proto-Indo-European had a seven-case system: nominative, accusative, genitive, dative, instrumental, locative and ablative. The vocative was a case-like address form used with singular personal nouns. Balto-Slavonic lost the distinction between the genitive and ablative (the Proto-Indo-European ablative was not a distinct case except in the singular of the -ŏ-stems), and the new six-case system, with the genitive representing the syncretized cases, was handed down to Proto-Slavonic. Case syncretism was also important in the dual (which distinguished three case forms only: the nominative/accusative, genitive/locative and dative/instrumental), and in the formation of Proto-Slavonic subgenders (see below). The dative and instrumental endings contained the phoneme m, an Indo-European dialect feature connecting Balto-Slavonic and Germanic and opposing them to the other Indo-European languages where the reflexes of bh are found.

Of the three Proto-Indo-European **numbers**, singular, dual and plural, the dual has proved to be least stable. It was still a regular category in Old Church Slavonic, its vestiges are found in all the Slavonic languages but, as a grammatical category, it survives in Slovene and Upper and Lower Sorbian only.

Like most early Indo-European languages Proto-Slavonic distinguished three **genders**: masculine, feminine and neuter. In addition, Proto-Slavonic developed a distinction between two masculine **subgenders**: personal and non-personal, principally among the -ŏ-/-i̯-ŏ- stems. The former was expressed by the syncretism of the accusative and genitive, the latter by an absence of such a syncretism. This distinction was later extended to oppose the animate and inanimate subgenders.

Proto-Slavonic qualitative adjectives continued the Proto-Indo-European distinctions of **gradation** with positive, comparative and superlative degrees. In addition, Proto-Slavonic non-possessive adjectives developed the distinction of **specificity**, whereby the definite (also known

as pronominal or compound) adjectives were opposed to the indefinite adjectives.

3.1.2   Noun morphology

Proto-Indo-European and Proto-Slavonic nouns may be assigned to declensions according to their stem-class (see 3.1), gender, and phonetic developments at the juncture of the stem and the inflectional ending. One athematic and four thematic declensions were distinguished.

The athematic (consonantal) declension had several subtypes, depending on the form of the stem suffix:

	PIE	*LPSl.*	
-ŏs-/-ĕs- (N)	nĕbh-ŏs-/nĕbh-ĕs-	nebo, nebese	'sky'
-ū-/-ŭu̯- (F)	lĕu̯bh-ū-/lĕu̯bh-ŭu̯-	l'uby, l'ubъve	'love'
-tēr-/-tĕr- (F)	mā-tēr-/mā-tĕr-	mati, matere	'mother'
-ōn-/-ĕn- (M)	kām-ōn-/kām-ĕn-	kamy, kamene	'stone'
-mēn-/-mĕn- (M)	pŏl-mēn-/pŏl-mĕn-	polmę, polmene	'flame'
-mēn-/-mĕn- (N)	sē-mēn-/sē-mĕn-	sěmę, sěmene	'seed'
-ēnt-/-ĕnt- (N)	āgn-ēnt-/āgn-ĕnt-	(j)agnę, (j)agnęte	'lamb'

The thematic declensions distinguished four basic subtypes: -ŭ-, -ĭ-, -ŏ-/ -i̯-ŏ- and -ā-/-i̯-ā-/-i̯-ī-:

		PIE	*LPSl.*	*OCS*	
-ŭ-	(M)	sūn-ŭ-s	synъ	synъ	'son'
-ĭ-	(F)	kŏst-ĭ-s	kostь	kostь	'bone'
	(M)	pŏnt-ĭ-s	pǫtь	pǫtь	'road'
-ŏ-	(M)	ŏrbh-ŏ-s	orbъ	rabъ	'slave'
	(N)	g'r̥n-ŏ-m	zr̥'no	zrъno	'grain'
-i̯-ŏ-(M)		dŭzd-i̯-ŏ-s	dъžd'ь	dъždь	'rain'
	(N)	lŏg-i̯-ŏ-m	lože	lože	'bed'
-ā-	(F)	gʷĕn-ā	žena	žena	'woman'
	(M)	u̯ŏldūk-ā	voldyka	vladyka	'leader'
-i̯-ā-(F)		u̯ŏl-i̯-ā	vol'a	volja	'will'
	(M)	i̯ŏu̯n-ōs-i̯-ā	junoša	junoša	'youth'
-i̯-ī-	(F)	bhäg-ūn-i̯-ī	bogyn'i	bogynji	'goddess'
	(M)	săn-dhī-i̯-ī	sǫdii̯i	sǫdii	'judge'

While the Proto-Indo-European endings of the -i̯-ŏ- and -i̯-ā- stems did not differ from those of the -ŏ- and -ā- stems respectively, in Proto-Slavonic, due to the fronting of back vowels (see 2.12), there arose a distinction between the hard (-ŏ- and -ā-) and soft (-i̯-ŏ- and -i̯-ā-) stem endings, which manifested itself by the alternations -ъ ~ -ь, -o ~ -e, -ě₂ ~ -i₂, -y ~ -i, -y₂ ~ -ě₂/-ę- (see note 2a below). The Late Proto-Slavonic hard stem endings are listed in table 3.2. These Late Proto-Slavonic endings are correlated with the Proto-Indo-European endings listed in table 3.3.

Table 3.2   Noun endings of Late Proto-Slavonic

		Athematic	-ŭ-	-ĭ-	-ŏ-	-ā-
	VOC	= NOM	-u	-i	-e/-u	-o
SG	NOM	(-y, -o, -i, ę)	-ъ	-ь	M -ъ, N -o	-a
	ACC	-ь (-o, -ę)	-ъ	-ь	M -ъ, N -o	-ǫ
	GEN	-e	-u	-i	-a	-y₂
	DAT	-i	-ovi	-i	-u	-ě₂
	INST	M/N -ьmь	-ъmь	M -ьmь	-omь	-ojǫ
		F -ьjǫ		F -ьjǫ	-ъmь	
	LOC	-e	-u	-i	-ě₂	-ě₂
DU	NOM/ACC	M/F -i, N -ě	-y	-i	M -a, F/N -ě₂	-ě₂
	GEN/LOC	-u	-ovu	-ьju	-u	-u
	DAT/INST	-ьma	-ъma	-ьma	-oma	-ama
PL	NOM	M -e, F -i, N -a	-ove	M -ьje, F -i	-i₂	-y₂
	ACC	M/F -i, N -a	-y	-i	-y₂	-y₂
	GEN	-ъ	-ovъ	-ьjь	-ъ	-ъ
	DAT	-ьmъ	-ъmъ	-ьmъ	-omъ	-amъ
	INST	M/F -ьmi, N -y	-ъmi	-ьmi	-y	-ami
	LOC	-ьхъ	-ъхъ	-ьхъ	-ě₂хъ	-ахъ

Table 3.3   Noun endings of Proto-Indo-European

		Athematic	-ŭ-	-ĭ-	-ŏ-	-ā-
	VOC	-∅	-ŏu̯-∅	-ĕi̯-∅	-ĕ-∅	-ā-∅
SG	NOM	-s, -∅	-ŭ-s	-ĭ-s	-ŏ-s	-ā-∅
	ACC	-m̥	-ŭ-m	-ĭ-m	-ŏ-m	-ā-m
	GEN/ABL	-ĕs	-ŏu̯-s	-ĕi̯-s	-ŏ-ăd › -ād	-ās
	DAT	-ĕi̯	-ŏu̯-ĕi̯	-ĕi̯-ĕi̯	-ŏ-ēi̯ › -ōi̯	-ā-ĕi̯ › -āi̯
	INST	-mĭ	-ŭ-mĭ	-ĭ-mĭ	-ŏ-mĭ	-ā-m
	LOC	-ĭ	-ŏu̯-∅	-ĕi̯-∅	-ŏ-i̯	-ā-i̯
DU	NOM/ACC	-ĕ, -ĭ	-ŭ-ĕ › -ū	-ĭ-ĕ › -ī	-ŏ-ĕ › -ō	-ā-i̯
	GEN/LOC	-ŏu̯s	-ŏu̯-ŏu̯s	-ĕi̯-ŏu̯s	-ŏ-ŏu̯s › -ōu̯s	-ā-ŏu̯s › -āu̯s
	DAT/INST	-mō̄	-ŭ-mō̄	-ĭ-mō̄	-ŏ-mō̄	-ā-mō̄
PL	NOM	-ĕs	-ŏu̯-ĕs	-ĕi̯-ĕs	-ŏ-es › -ōs, -ŏi̯	-ā-ĕs › -ās
	ACC	-n̥s	-ŭ-ns	-ĭ-ns	-ŏ-ns	-ā-ns
	GEN	-ŏm/-ōm	-ŏu̯-ŏm	-ĕi̯-ŏm	-ŏ-ŏm › -ōm	-ā-ŏm › -ām
	DAT	-mŭs	-ŭ-mŭs	-ĭ-mŭs	-ŏ-mŭs	-ā-mŭs
	INST	-mīs	-ŭ-mīs	-ĭ-mīs	-ŏ-ŏi̯s › -ōi̯s	-ā-mīs
	LOC	-sŭ	-ŭ-sŭ	-ĭ-sŭ	-ŏi̯-sŭ	-ā-sŭ

Notes to tables 3.2 and 3.3

1   The loss of final consonants (see 2.6) and the monophthongization of diphthongs (see 2.13) caused the Proto-Indo-European thematic

vowels and endings to blend into Proto-Slavonic monomorphemic endings; for example, Proto-Indo-European NOM SG *sŭn-ŭ-s*, GEN SG *sūn-ŏu̯-s*, DAT SG *sūn-ŏu̯-ĕi̯* 'son' › *syn-ъ*, *syn-u*, *syn-ovi*. The differences in the shape of the thematic vowel are due to ablaut variations, for example NOM SG *-ŏ-s*, *-āØ* versus VOC *-ĕ-Ø*, *-ă-Ø*, NOM SG *-ŭ-s*, *-i-s* versus GEN SG *-ŏu̯-s* *-ĕi̯-s*. In the nominative/accusative singular of the athematic stems, the Proto-Indo-European stem suffixes were reinterpreted as Late Proto-Slavonic inflectional endings (listed in parentheses).

2   Some Proto-Slavonic endings which cannot be derived from the postulated Proto-Indo-European forms by the application of general phonetic laws, may be explained by developments restricted to particular grammatical endings:

(a) In *-Vn(t)s*, *n* was lost and the preceding vowels, if short, underwent compensatory lengthening, and the low back vowels were, as a rule, raised to *ū*; for example NOM SG **kām-ōn-s* 'stone' › **kām-ū* › *kamy*; ACC PL **sūn-ŭ-ns* 'son' › **sūn-ū* › *syn-y*, **kŏst-i-ns* 'bone' › **kŏst-ī* › *kost-i*, **ŏrbh-ŏ-ns* 'slave' › **ŏrb-ū* › *orb-y*, **gʷĕn-ā-ns* 'woman' › **gĕn-ū* › *žen-y*. In the sequence ** Cn̥s*, *n̥* was lengthened yielding *i*: ACC PL **kām-en-n̥s* › *kameni*. The sequences *-ĕ-ns*, *-ē-ns* of the *-i̯-ŏ-*, *-i̯-ā-* stems (‹ *-i̯-ŏ-ns*, *-i̯-ā-ns*, by 2.12) yielded the expected *-ē* in North Slavonic (referred to as *-ĕ₃*), while in South Slavonic *n* was retained, yielding *-ę*; for example ACC PL **măng-i̯-ŏ-ns* 'man', **kŏz-i̯-ā-ns* 'goatskin' › North Slavonic *mǫž-ĕ*, *kož-ĕ* versus South Slavonic *mǫž-ę*, *kož-ę*. The accusative plural ending of the *-a-/-i̯-ā-* stems spread analogically to the genitive singular and the nominative plural on the model of the *-i-* stems. The alternation *-y* ~ *-ĕ/-ę* is symbolized by *-y₂*.

(b) Long vowels combined with word-final *m* to form nasal vowels: ACC SG **gʷĕn-ā-m* 'woman' › *žen-ǫ*; however, short vowels in that position were denasalized, and *ŏ* was raised to *ŭ*; ACC SG **sūn-ŭ-m* 'son' › *syn-ъ*, **kŏst-i-m* 'bone' › **kost-ь*, **ŏrbh-ŏ-m* 'slave' › *orb-ъ*. Slavonic is alone among the Indo-European languages to derive the genitive plural of the athematic stems from **-ŏm* rather than **-ōm*: **sēmĕn-ŏm* 'seed' › *sĕmen-ъ*. The athematic genitive plural ending *-ъ* was analogically extended to the *-ŏ-* and *-ā-* stems.

3   All neuter stems syncretized the nominative and accusative. In the athematic stems the nominative/accusative singular was generalized from the nominative singular (**nĕbh-ŏs-Ø* 'sky' › *neb-o*, **sēmēn-Ø* 'seed' › *sĕmę*), while in the *-ŏ-* stems, the nominative/accusative singular ending *-o* was extended analogically from the pronoun *to* 'that' (‹ **tŏd*), replacing the expected *-ъ* (‹ PIE *-ŏ-m*); for example

zŗ'n-o 'grain' (‹ **g'ŗn-ŏ-m*). In the nominative/accusative plural all neuter stems had *-a* (‹ PIE *-ā*), for example *nebes-a, sĕmen-a, zŗ'n-a.*

4   The NOM SG *-ъ* of the *-ŏ-* stems and the VOC *-u* of the *-i̯-ŏ-* stems were taken over from the *-ŭ-* stem declension. In the post-Proto-Slavonic period the *-ŭ-* stem declension, though unproductive as a whole, provided individual endings of several cases of the *-ŏ-* stems. The most ancient instance of these analogical developments is the North Slavonic replacement of the *-ŏ-* stem INST SG *-omь* by the *-ŭ-* stem *-ъmь.*

5   The masculine and feminine athematic and *-ĭ-* stems influenced each other. The INST SG *-ьmь* and *-bjǫ*, NOM/ACC DU *-i*, DAT/INST DU *-ьma*, LOC PL *-ьхь*, DAT PL *-ьmъ* and INST PL *-ьmi* of the *-ĭ-* stems spread to the athematic stems. By contrast, the DAT SG *-i* of the athematic stems was taken over by the *-ĭ-* stems.

6   The NOM PL *-i₂* of the *-ŏ-* stems was derived from the pronominal ending *-ŏi̯* which replaced the nominal ending *-ŏs*. The expected *-ĕ₂* was probably displaced by *-i* (‹ *-ĕi̯*) of the *-i̯-ŏ-* stems. The nominative plural of all the feminine nouns was analogical to the accusative plural.

7   The INST SG *-ojǫ/-ejǫ* of the *-ā-/-i̯-ā-* stems was taken over from the pronominal type and then spread into the feminine athematic and *-ĭ-* stems as *-ьjǫ.*

8   The LOC PL *-ĕ₂хъ* (‹ *-ŏi̯-sŭ*) of the *-ŏ-* stems is pronominal in origin. The ending *-ахъ* of the *-ā-* stems for the expected *-asъ* (recorded in Old Czech) was modelled on the phonetically regular locative plural endings of the other thematic declensions.

9   Lacking a satisfactory explanation are LOC SG *-e* of the athematic stems, DAT SG *-u* and INST PL *-y* of the *-ŏ-* stems.

3.1.3   Pronominal morphology

In accordance with their ability to distinguish gender, Proto-Slavonic **pronouns** may be classified into gendered and non-gendered. Gendered pronouns were thematic. They included two *-ĭ-* stems, the demonstrative *sь, si, se* 'this here' (‹ **k'-*) and the anaphoric *jь* 'that which is known'; and various *-ŏ-/-ŏi̯-* and *-ā-/-āi̯-* stems such as the demonstratives *tъ* 'this', *ovъ* 'that', *onъ* 'that yonder'; the interrogatives *kъjь* 'which' (‹ **kʷŭi-*), *kotorъ* 'which of a number'; the possessives *mojь* 'my', *tvojь* 'thy', *svojь* 'one's own', *čьjь* 'whose' (‹ **kʷī-i̯-*), *našь* 'our' (‹ **nās-i̯-*), *vašь* 'your' (‹ **u̯ās-i̯-*); the qualitative *sicь* 'like this here' (‹ **k'ī-k-*), *jakъ* 'like that which is known', *takъ* 'like this', *kakъ* 'like what' (‹ **kʷ-āk-*); the quantitative *mъnogъ* 'many', *vьsь* 'all' (‹ **u̯is-*), *selikъ* 'to this degree', *tolikъ* 'to that degree', *jelikъ* 'to the known degree', *kolikъ* 'to what degree'. The anaphoric *j-* and the demonstrative *t-* or *on-* (depending on the dialect) combined to form the suppletive paradigm of the third-person pronoun, with *t-/on-* in the nominative and *j-* in the oblique cases.

The non-gendered pronouns included the *-ŏ-* stem interrogative *kъ-to*

'who' (‹ *k^w-ŏ-), the -ĭ- stem interrogative čь-to 'what' (‹ *k^w-ĭ-), as well as several athematic pronouns, the reflexive s- 'oneself'; first person (with suppletive stems): SG azъ/m (‹ *ēg'-/m-), DU vě/n-, PL my/n-; second person: SG t-, DU/PL v-.

The inflectional endings of the gendered pronouns and of the interrogative non-gendered pronouns are given in table 3.4.

Table 3.4   Pronoun endings of Late Proto-Slavonic

	SG			DU			PL		
	M	N	F	M	N	F	M	N	F
NOM	-ъ	-o	-a	-a		-ě$_2$	-i$_2$	-a	-y$_2$
ACC		-ǫ					-y$_2$		
GEN	-o-go		-oj-y$_2$		-oj-u			-ě$_2$-хъ	
DAT	-o-mu		-oj-i		-ě$_2$-ma			-ě$_2$-mъ	
INST	-ě$_2$-mь		-oj-ǫ					-ě$_2$-mi	
LOC	-o-mь		-oj-i		-oj-u			-ě$_2$-хъ	

Notes

1   The pronominal formants -ŏi̯- (M/N) and -āi̯- (F) were monoph-thongized to -ě$_2$ before consonants.

2   The fronting of back vowels after soft consonants (see 2.12) caused the expected vowel alternations; -y$_2$ is written as a shorthand term for the y ~ ě/ę alternation (see 3.1.2, note 2(a)).

3   The GEN M/N -ogo represents the Proto-Indo-European ablative -ŏd extended by the particle -go (Arumaa 1985: 175).

4   The non-gendered pronouns kъ-to 'who' and čь-to 'what' were inflected according to the masculine singular paradigm. Their nominative was extended by the particle -to, derived from the demonstrative pronoun. The genitive ending of čь-to was -eso/-ьso reflecting the Proto-Indo-European ending -ĕs(i̯)ŏ.

Table 3.5   Paradigm of the anaphoric pronoun j-

	SG			DU			PL		
	M	N	F	M	N	F	M	N	F
NOM	-jь	je	ja	ja	ji		ji	ja	jě/ję
ACC		jǫ						jě/ję	
GEN	jego		jejě/jeję		jeju			jixъ	
DAT	jemu		jeji		jima			jimъ	
INST	jimь		jejǫ					jimi	
LOC	jemь		jeji		jeju			jixъ	

For the inflection of personal pronouns, see section 3.1.3 of chapter 4, Old Church Slavonic.

3.1.4 Adjectival morphology

In addition to their obligatory categories of case, number and gender, most Proto-Slavonic adjectives were either definite or indefinite. Indefinite adjectives were inflected according to the nominal -ŏ- (M/N) and -ā- (F) types. Definite adjectives were formed by adding the anaphoric pronoun *j-* (see table 3.5) to the forms of the indefinite adjective. The coalescence of these forms yielded the definite or pronominal inflection of the adjective.

In some instances the composition was mechanical:

			LPSl.	OCS
NOM SG	M	starъ + jь	› starъjь	staryi/starъi [starъjь]
	N	staro + je	› staroje	staro[j]e
	F	stara + ja	› staraja	staraja
ACC SG	F	starǫ + jǫ	› starǫjǫ	starǫjǫ
GEN SG	M/N	stara + jego	› starajego	stara[j]ego
				staraago (with assimilation)
				starago (with contraction)

A sequence of two syllables beginning with *j* was reduced by haplology to one syllable:

LOC SG	F	starě + jeji › LPSl. starěji OCS starě[j]i

The definite INST SG F *-ǫjǫ* was derived from the original nominal -ǫ (‹ *-ā-m*) rather than from the analogical pronominal ending *-ojǫ* (see 3.1.2, note 7). Thus:

INST SG	F	starǫ + jejǫ › LPSl. starǫjǫ OCS starǫjǫ

Disyllabic nominal endings were replaced by *-y*, extended analogically from the GEN PL *star-ъ + jixь › staryjixъ* (see 2.32) and INST PL M/N *star-y + jimi › staryjimi*:

		LPSl.	OCS
INST PL F	star-ami + jimi	› staryjimi	stary[j]imi
LOC PL F	star-axъ + jixъ	› staryjixъ	stary[j]ixъ

3.1.5 Numeral morphology

The Proto-Slavonic cardinal numerals ‘1’ to ‘10’ may be subdivided into two groups. The first group included *jedinъ, -a, -o* ‘1’ (‹ *ĕd-īn-ŏ-s*); *dъva* (M), *dъvě* (F/N) ‘2’ (‹ *dŭu̯ō, -ŏį*); *trьje* (M), *tri* (F/N) ‘3’ (‹ *tr-ĕį-ĕs*, *tr-ĭns*); and *četyre* (M), *četyri* (F/N) ‘4’ (‹ *kʷĕtūr-ĕs*, *-ĭns*). The numerals

'1' and '2' were of pronominal origin and followed the pronominal inflection (*tъ*). 'One' could still be used as an indefinite pronoun meaning 'certain, some' and have the singular and plural, while '2' was restricted to the dual; '3' was inflected like the plural *-ĭ-* stem, while '4' was an athematic stem. All four of them were adjectival, that is, they distinguished gender ('2', '3', '4' in the nominative only) and modified the noun counted.

The numerals '5' to '10' were nominal abstract derivatives in *-ĭ-* from the Proto-Indo-European ordinal numerals. They were *pętь* '5' (‹ **pĕnkʷ-t-*), *šestь* '6' (‹ **ksĕks-t-*), *sedmь* '7' (‹ **sĕbdm-*), *osmь* '8' (‹ **ŏk'tm-*), *devętь* '9' (‹ **nĕun-t-*, with the initial *d* by analogy to '10'), and *desętь* '10' (‹ **dĕ-k' m-t-*). They governed the noun counted and did not distinguish gender. The numerals '5' to '9' were *-ĭ-* stems, while '10' transferred from an athematic stem to the *-ĭ-* stem inflection.

The teens were compounds of the base numeral followed by the preposition *na* with the athematic locative singular of '10', for example, *dъva na desęte* '12'. The tens were formed with the base numeral followed by the appropriate case form of '10', for example *dъva desęti* '20', *trьje desęte* '30', *pętь desętъ* '50'. The root **kŏm/k' m* of the numeral '10', extended by the suffix *-t-*, appeared also in the numerals *sъto* '100' and *tysęt'a/tysǫt'a* '1,000'. The former was a neuter *-ŏ-* stem (‹ **k'm-t-ŏ-*); the latter was a feminine *-i-ā-* stem modified by **tū-* 'fat, thick' (‹ **tū-k'm-t-i-ā*). The hundreds were formed analogously to the tens with the appropriate case form of '100', for example *dъvĕ sъtĕ* '200', *tri sъta* '300', *pętь sъtъ* '500'.

3.2   Verbal morphology

Most Proto-Slavonic verbs did not add person and number endings directly to the root, but to the verbal stem, that is, to the root extended by a verb-forming suffix with or without a present-tense suffix. Such verbs are called thematic; those which added person and number endings directly to the root, are called athematic.

There were four **athematic verbs**: 3 SG PRES *jestь* 'he is' (‹ *ĕs-tĭ), *jastь* 'he eats' (‹ *ēd-tĭ), *vĕstь* 'he knows' (‹ *uŏid-tĭ), *dastь* 'he will give' (‹ *dād-tĭ). Except for *jasti* 'to eat' (‹ **ēd-tēi̯*), the athematic verbs had different stems in the infinitive and the present tense: *byti* 'to be', *vĕdĕti* 'to know', *dati* 'to give'. The verb 'to be' had a suppletive infinitive stem *by-* derived from PIE **bhū-* (compare Sanskrit *bhavati* 'he is', Latin *fūi* 'I was'). The verb 'to know' had the infinitive stem *vĕd-ĕ-* derived from first person singular middle perfect-tense form **uŏid-ăi̯*. The verb 'to give' had a reduplicated present-tense stem **dā-d-*, while the infinitive stem was the unreduplicated **dā-* (compare Latin *dare* 'to give').

In most **thematic verbs** the verb-forming suffix occurred in two variants, one in the present-tense and related forms and one in the infinitive and related forms. Because of this variation, it is customary to distinguish between the present-tense and infinitive verbal stems. Since the corres-

pondence between the two variants is generally predictable, it is possible to select one of them as basic and use it in classifying verbal stems. The seven regular verb classes thus obtained are listed below, with the present-tense variant (quoted in third singular present) shown first and separated by an oblique from the infinitive variant. The variant used to label a class is given in bold face. Examples transcribed morphophonemically are enclosed in braces.

(a) -∅--∅- verbs were unproductive and included three subclasses: **consonantic**, for example *neseth* {nes-∅-e-tъ}, *nesti* {nes-∅-ti} 'carry' *rečetь* {rek-∅-e-tъ}, *ret'i* {rek-∅-ti} 'say'; **sonantic**, for example *pьnetь* {pьn-∅-e-tъ}, *pęti* {pen-∅-ti} 'stretch', *jьm-∅-e-tъ}, *jęti* {jem-∅-ti} 'seize', *mretь* {mьr-∅-e-tъ}, *merti* {mer-∅-ti} 'die', where the sequences *ьn ьm ьr* developed from the syllabic sonants *n̥ m̥ r̥* before vowels; **semivocalic**, for example *bijetь* {bij-∅-e-tъ}, *biti* {bij-∅-ti} 'beat', *pojetь* {poj-∅-e-tъ}, *pěti* {poj-∅-ti} 'sing', with the semivowel *j* lost before consonants through the resolution of syllable-initial clusters (see 2.7) and monophthongization (see 2.13).

(b) -n-/-nǫ- verbs were productive and included two subclasses: **vocalic** (*V-nǫ-*), for example *minetь, minǫti* 'pass'; **sonantic**, *slynetь, slynǫti* 'be known' and **consonantic** (*C-nǫ-*), with typical omission of the verb-forming suffix in aorist and past participial formations, for example *dvignetь* {dvig-n-e-tъ}, *dvignǫti* {dvig-nǫ-ti} 'move' but *dvigoxъ* (1 SG AOR), *dvigъ* (NOM SG M PAST ACT PART INDEF), *dviženъ* (NOM SG M PAST PASS PART INDEF).

(c) -j- (< i̯)/-a- verbs, for example *kažetь* (< kāz-i̯-), *kazati* 'show'; *plačetь* (< plāk-i̯-), *plakati* 'weep', were unproductive. This large class was one of two in which the verb-forming suffix -j- alternated with -a- (compare (d) below).

(d) -u-j-/-ov-a- (-ev-a- after soft consonants, see 2.14) verbs, for example *věrujetь, věrovati* 'believe'; *vojujetь, vojevati* 'make war', were productive. They differed from the preceding class by the presence of the suffix -ŏu̯- which monophthongized to u₂ in a closed syllable (see 2.13).

(e) -a-j- (< -ā-i̯-)/-a- and -ě-j- (< ē-i̯-)/-ě- verbs, for example *dělajetь, dělati* 'do'; *umějetь, uměti* 'know how', were productive.

(f) -i- (< -ěi̯-)/-i- (< -ī-) verbs, for example *nositь* {nos-i-∅-tъ}, *nositi* 'carry'; *modlitь* {modl-i-∅-tъ}, *modliti* 'beg' were productive. The shape of the present-tense suffix (-ō-/-∅-) and the difference in origin of the verb-forming suffix in the -i- and -ě- verbs (see below) are discussed in 3.2.2.

(g) -i-/-ě- (< -ē-) verbs, for example *mьnitь, mьněti* 'think'; *viditь, viděti* 'see' were unproductive. In stems in soft consonants *ē* goes to *ā* (see 2.14), for example *kričitь, kričati* {krič-ě-ti} 'shout'; *stojitь, stojati*

{*stoj-ě-ti*} 'stand'. These stems will be listed in their morphophonemic form.

3.2.1   Verbal categories

Among the verbs, Proto-Indo-European distinguished two diatheses, the active (or non-middle) and middle, the latter marked as a category which placed special emphasis on the grammatical subject, leading to the neutralization of the opposition between the agent and the patient (compare the English active *mother washed the baby* or *mother opened the door* with the 'middle' *mother washed* or *the door opened*). The active versus middle opposition was expressed by special sets of inflectional endings. Proto-Slavonic lost these formal distinctions but retained the semantic opposition between the active and the middle, expressing it with a newly developed contrast between two **genera**, the non-reflexive and reflexive, the latter formally distinguished by the particle *sę*. It also added a new **voice** opposition in which the active contrasted with the passive, the latter marked as the category specifying the patient of an action. The active versus passive opposition was formally expressed in the participle only. Genus, by contrast, was an obligatory category of the verb.

Of the four verbal **moods** reconstructed for Proto-Indo-European (indicative, subjunctive, optative and imperative), Proto-Slavonic retained the indicative. The subjunctive (or conjunctive), known from Vedic Sanskrit, Greek, Latin and Celtic, expressed probability or expectation. Therefore, it was frequently reinterpreted as the future tense. In Proto-Slavonic it was replaced by the conditional, in which the resultative (or the *-l-*) participle combined with the auxiliary verb 'to be' to produce an analytical grammatical form. The optative, which occurred in Sanskrit, Greek, Latin and Germanic, expressed desire or potentiality. In Proto-Slavonic it replaced the original Proto-Indo-European imperative.

The oldest system of Proto-Indo-European **tenses**, which included the present, aorist and perfect, appeared to have less to do with temporal relations than with the manner of performance or other characteristics of an action. The present referred to an action which at the moment of speech was not completed. The aorist viewed the action statically, as completed and, therefore, past. The perfect stressed the result of an action, that is, it dwelled on the dynamics of a situation, linking the past and the moment of speech. The future was originally expressed through the modalities of the subjunctive or optative. Specific future-tense formations seem to be Late Proto-Indo-European dialectal innovations. So were the imperfect, which emphasized non-completion of a past action, and the pluperfect, which referred to an action prior to the narrated event.

Aspectual meanings, inherent in the Proto-Indo-European tenses, developed into a new grammatical opposition of two **aspects**, the perfective, specifying a completed action, and the unmarked imperfective;

they became an obligatory category of the Slavonic verb. This development led in turn to the rise of an intricate interplay between the aspects and tenses. The perfective present assumed the function of the future, leaving the imperfective present as the sole indicator of contemporaneity with the moment of speech. Consequently, since the Proto-Slavonic present-tense forms referred either to the present or the future, they may be viewed as non-past and are often so termed. Among the preterite tenses, the opposition between the perfective and imperfective aspects coincided largely with the old opposition between the aorist and the imperfect, leading to a gradual disappearance or reinterpretation of these tenses in the individual Slavonic languages. Proto-Slavonic developed its own perfect and pluperfect, formed analytically with the resultative participle and, respectively, the present or imperfect of the auxiliary verb 'to be'. A Proto-Slavonic innovation was the imperfective future expressed by the infinitive plus the present-tense forms of one of the auxiliary verbs: 'to be', 'to have', 'to want' or 'to begin'.

The three **persons** of the Proto-Indo-European verb remained in Proto-Slavonic. Along with the finite verbal forms, that is, forms inflected for person, Proto-Slavonic had non-finite forms. The **infinitive** and the **supine** were derived from case forms of Proto-Indo-European deverbal nouns, while **participles** and **verbal nouns** combined the functions of verbs with those of adjectives and nouns respectively.

3.2.2   Conjugation

The Proto-Indo-European conjugational system distinguished several sets of personal endings. In the indicative the endings characterizing the active voice were opposed to the endings of the middle voice, and the endings of the present tense, or the so-called primary endings, were opposed to the endings of the preterite tenses, or the secondary endings. Furthermore, some personal endings of the thematic conjugations were different from those of the athematic one. The degree of ending differentiation varied. Thus, in the active voice, the first and second singular admitted three distinct endings, the third singular and plural distinguished two endings, while other persons and numbers displayed one ending only. In Table 3.6 only the most differentiated forms are shown.

Proto-Slavonic, like the ancient varieties of Sanskrit and Greek, exhibited a conjugational system rich in grammatical oppositions. Verbs were inherently specified for government (they were either transitive or intransitive) and, as obligatory categories, they distinguished aspect and genus (they were either perfective or imperfective and reflexive or non-reflexive). Finite verb forms were inflected for person and number, and either tense or mood. Compound finite forms (perfect, pluperfect, conditional) distinguished gender as well. The only form displaying a clearly middle ending was the isolated *vědě* 'I know' found in Old Church Slavonic

Table 3.6   Active personal endings of Proto-Indo-European

	Athematic	Primary	Thematic	Secondary
1 SG	-mĭ		-ō	-m
2 SG	-sĭ		-ĕi̯ (?)	-s
3 SG		-tĭ		-t
3 PL		-ntĭ		-nt

(Codex Suprasliensis), Old Russian, Old Slovene (Freising Fragments) and Old Czech. The ending goes back to the Proto-Indo-European middle *-ă-i̯* (compare Greek *loúomai* 'I wash myself'). Since *vědě* is related to the root *vid-* 'see' (‹ *u̯ĕi̯d-*), its meaning probably developed from 'I have seen for myself' to 'I know'.

Depending on the aspect of the verbal stem, the Proto-Slavonic **present** referred either to an action contemporaneous with the moment of speech (imperfective) or subsequent to it (perfective). Its person and number endings were derived from Proto-Indo-European primary endings. In the thematic verbs, they were added to stems extended by the present-tense suffix. In the verb classes -∅-, -nǫ-, -a-, -ov-a-, and -a-j-, the present-tense suffix was *-ŏH₂-* in first singular, *-ŏ-* in third plural and *-ĕ-* elsewhere. The present forms of these classes are said to belong to conjugation I. The present forms of verb classes -i- and -ě- belong to conjugation II. Their present-tense suffix was *-ŏH₂-* in the first singular and *-∅-* elsewhere. Hence, these presents are sometimes referred to as semi-thematic (Kuryłowicz 1964: 79–80) or semi-athematic (Vaillant 1966: 439).

Table 3.7   Present-tense paradigms of the verbs *ěd-* 'eat', *nes-* 'carry', *kaz-a-* 'explain', *děl-a-j-* 'do' and *modl-i-* 'ask' in Late Proto-Slavonic

		Athematic	Conjugation I			Conjugation II
SG	1	jamь (‹ *ēd-mĭ)	nesǫ	kažǫ	dělajǫ	modl'ǫ
	2	jasi (‹ *ēd-sĕi[?])	neseši	kažeši	dělaješi	modliši
	3	jastь (‹ *ēd-tĭ)	nesetь	kažetь	dělajetь	modlitь
DU	1	javě (‹ *ēd-vē)	nesevě	kaževě	dělajevě	modlivě
	2	jasta (‹ *ēd-tā)	neseta	kažeta	dělajeta	modlita
	3	jaste (‹ *ēd-tē)	nesete	kažete	dělajete	modlite
PL	1	jamъ (‹ *ēd-mȯn)	nesemъ	kažemъ	dělajemъ	modlimъ
	2	jaste (‹ *ēd-tē)	nesete	kažete	dělajete	modlite
	3	jadętь (‹ *ēd-n̥tĭ)	nesǫtь	kažǫtь	dělajǫtь	modlętь

Notes

1   The verb-forming suffix *-i-* in the present tense of the *-i-* and *-ě-* class
    verbs (conjugation II) is different in origin from the verb-forming suffix
    -i- in the infinitive of the *-i-* class verbs. Since the infinitive *-i-* is acute
    and the present-tense *-i-* is not, it is assumed that the former goes back
    to a long vowel (*-ī-*), while the latter is derived from a short diphthong
    (*-ěi̯-*: see 2.16). Hence their dissimilar treatment in those modern
    Slavonic languages which retain reflexes of Proto-Slavonic intonational
    distinctions, for example SCr. *mȍli* 'he asks' but *móliti* 'to ask',
    Russian *mólit* 'he implores' but *molít'* 'to implore'.

2   The first singular athematic *-mь* continues the Proto-Indo-European
    athematic *-mĭ* (OCS *esmь*, Greek *eimi* 'I am'). The ending *-ǫ* goes
    back to the Proto-Indo-European thematic *-ŏH₂* › *ō* (Greek *phérō*,
    Latin *ferō* 'I carry') extended by the secondary first-singular *-m*. In
    conjugation II the sequence *-i-ō-m* › *-i̯-ǫ-*, without the expected front-
    ing of the vowel (*-i̯-ē-m* › *i̯-ę*; see 2.12) because of the analogical influ-
    ence of the ending *-ǫ* of conjugation I.

3   The second-singular endings were the athematic *-si* and thematic *-ši*, as
    in OCS *esi* 'you are' or *neseši* 'you carry'. The consonant *š* arose regu-
    larly in conjugation II as a result of the retroflexion of *s* after *i* (see
    2.3(c)) and spread analogically to conjugation I. The final *i* (for the
    expected *ь*) could have been derived from the Proto-Indo-European
    second-singular thematic *-ěi̯*, which some scholars (Meillet 1934: 253–
    4, Szemerényi 1989: 250–1) see also in the Greek 2 SG *-eis*, for exam-
    ple *phéreis* 'you carry'. In this explanation, in Greek the primary
    thematic ending *-ěi̯* was extended by the secondary ending *-s*, while in
    Proto-Slavonic the ending *-s* was extended by *-ěi̯*.

4   In the third singular and plural, Proto-Indo-European *-tĭ* should yield
    Proto-Slavonic *-tь* and such reflexes do occur in parts of East Slavonic.
    However, in Old Church Slavonic as well as in some north Russian
    dialects (including standard Russian), we find *tъ* instead. It is likely
    that the 3 SG *-tъ* developed under the influence of the demonstrative
    pronoun *tъ* 'this', which functioned also as the third-person pronoun
    'he'. From there *tъ* could have spread analogically to the third plural.
    In West Slavonic and West South Slavonic the ending *-tь/-tъ* has been
    lost altogether. In other Slavonic languages it shows varying degrees of
    staying power (see section 6).

5   The 1 DU *-vě*, instead of the expected *-ve* (‹ *-u̯ěs*), is probably ana-
    logical to the pronoun *vě* 'we two' (‹ *u̯ēs*).

6   The 1 PL *-mъ* seems to be a reflex of *-mŏn* (compare Attic Greek
    -men, as in *phéromen* 'we carry'). The ending *-mo*, which appears in
    some Slavonic languages (see section 6), is probably derived from
    -mŏs, which is the more common variant of this ending in Proto-Indo-
    European (compare Latin *-mus* from *-mŏs* as in *ferimus* 'we carry').

7   The third plural ending of the athematic conjugation was *-ętь* (< *-ntĭ*). The ending *-ętь* (< *-ŏ-ntĭ*) of the *-∅-* and *-nǫ-* classes spread analogically to the *-a-*, *-ov-a-* and *-a-j-* classes replacing the expected *-ętь* (< *-ĭ-ě-ntĭ* < *-ĭ-ŏ-ntĭ*). The conjugation II ending *-ętь* could be attributed to the influence of the athematic conjugation or it could represent a regular phonetic development of *-ěį-ntĭ.*

The **aorist** designated a completed action, without affirming either its duration or resultative value. As such, it served as the narrative preterite tense. Aorist endings were derived from Proto-Indo-European secondary endings and were added to the infinitive stem. Proto-Slavonic had three different aorist formations. Two of them, the root (or simple) and sigmatic aorists, were relics inherited from Proto-Indo-European. The third type appeared alongside and eventually replaced the two older types, thus becoming the only productive aorist formation in Slavonic.

The **root aorist** combined the forms of the Proto-Indo-European thematic aorist and imperfect (compare Vedic Sanskrit *bháram*, Homeric Greek *phéron* 'I carried'). Its endings were preceded by a thematic vowel which was added directly to the verbal root (in other words, the suffix *-nǫ-* in the *-nǫ-* class verbs was omitted). Before *-t* and *-s* the thematic vowel was *-ě-*; elsewhere it was *-ŏ-*.

The root aorist survived in the *-∅-* and *-nǫ-* class verbs. We know, however, from Old Church Slavonic that only in the second and third singular was it used regularly with all the verbs of these classes. In other persons it was used sporadically with about a dozen stems, such as *jьd-* 'go', *lěz-* 'climb', *mog-* 'be able'.

The **sigmatic aorist** was found with verbs of the *-i-* class and with sonantic and about twenty consonantic verbs of the *-∅-* class, for example *greb-* 'bury', *męt-* 'stir', *tek-* 'run'. The endings of the sigmatic aorist were preceded by the formant *-s-* (hence the name 'sigmatic'), followed in the first person of all numbers by the thematic vowel *-ŏ-*. The root vowel of the *-∅-* verbs was lengthened: *i ě ŏ* became *ī ē ō.*

Table 3.8   Root aorist paradigms of *pad-* 'fall' and *dvig-*(*nǫ-*) 'move'

SG	1	padъ	dvigъ	(< -ŏ-m, see 3.1.2, note 1b)
	2	pade	dviže	(< -ě-s)
	3	pade	dviže	(< -ě-t)
DU	1	padově	dvigově	
	2	padeta	dvižeta	
	3	padete	dvižete	
PL	1	padomъ	dvigomъ	
	2	padete	dvižete	
	3	padǫ	dvigǫ	(< -ŏ-nt)

Table 3.9   Sigmatic aorist paradigms of the verbs *bod-* 'pierce' and *nos-i-* 'carry', and partial paradigms of *čьt-* 'read', *pьn-/pę-* 'stretch', *mьr-/mer-* 'die', *rek-* 'say' in Late Proto-Slavonic

SG	1	basъ (‹ *bōd-s-ŏ-m)	nosixъ (‹ *nŏs-ī-s-ŏ-m)
	2	bode (root aorist)	nosi (‹ *nŏs-ī-s-s)
	3	bode (root aorist)	nosi (‹ *nŏs-ī-s-t)
DU	1	basově	nosixově
	2	basta (‹ *bōd-s-tā)	nosista (‹ *nŏs-ī-s-tā)
	3	baste	nosiste
PL	1	basomъ	nosixomъ
	2	baste (‹ *bōd-s-tě)	nosiste
	3	basę (‹ *bōd-s-ņt)	nosišę (‹ *nŏs-ī-s-ņt)
1	SG	čisъ (‹ *kīt-s-ŏ-m)	pęsъ (‹ *pēn-s-ŏ-m)
2	PL	čiste (‹ *kit-s-tě)	pęste (‹ *pēn-s-tě)
3	PL	čisę (‹ *kīt-s-ņt)	pęsę (‹ *pēn-s-ņt)
1	SG	merxъ (‹ *mēr-s-ŏ-m)	rěxъ (‹ *rēk-s-ŏ-m)
2	PL	merste (‹ *mēr-s-tě)	rěste (‹ *rēk-s-tě)
3	PL	meršę (‹ *mēr-s-ņt)	rěšę (‹ *rēk-s-ņt)

Notes

1   Forms corresponding to the Proto-Slavonic sigmatic aorist occur in some but not all Indo-European languages (compare the Greek aorist *édeiksa* 'I showed', Latin perfect *dīxī* 'I said'). Of the immediate neighbours of Proto-Slavonic, this aorist does not occur in either Baltic or Germanic.

2   It is often claimed that the lengthening of the root vowel in the *-∅-* class verbs was the result of compensatory lengthening following the simplification of consonant clusters. However, such a lengthening is not observed in analogous situations elsewhere, for example, *ŏpsā* › *osa* 'wasp'. It is more probable, therefore, that it was morphophonemic in nature.

3   There were no second and third singular sigmatic aorist forms with the consonantic verbs of the *-∅-* class; root-aorist forms were used instead.

4   In Old Church Slavonic the second and third singular of the sonantic verbs were extended by the suffix *-tъ*, for example, *pę(tъ)*, *mrě(tъ)*. This suffix appears to have spread there by analogy from the third singular present.

The **productive aorist** arose within Proto-Slavonic as an analogical extension of the sigmatic aorist of the *-i-* class verbs. In the vocalic verbs (that is, all verbs other than those of the *-∅-* class and the consonantic verbs of the *-nǫ-* class) the impulse for this analogical development must have been

provided by the forms in which -*s*- was pre-consonantal, that is, by the environments in which all the vocalic class verbs (including -*i*-) developed similarly. Compare the following forms of *nos-i-* 'carry' and *děl-a-j-* 'do':

2 SG	nosi (‹ *nòs-ī-s-s)	děla (‹ *děl-ā-s-s)	
3 SG	nosi (‹ *nòs-ī-s-t)	děla (‹ *děl-ā-s-t)	
2 PL	nosiste (‹ *nòs-ī-s-tě)	dělaste (‹ *děl-ā-s-tě)	

These similarities were analogically extended to the forms in which -*s*- was pre-vocalic, that is, to an environment where the phonological development of the -*i*- class verbs was different from that of the other vocalic verbs. Thus, such phonologically regular forms as

1 SG	nosixъ (‹ *nòs-ī-s-ŏ-m)
1 PL	nosixomъ (‹ *nòs-ī-s-ŏ-mŏn)
3 PL	nosišę (‹ *nòs-ī-s-ņt)

led to the creation of analogical forms as in *kaz-a-* 'explain', *věr-ov-a-* 'believe', *děl-a-j-* 'do'; *vid-ě-* 'see':

1 SG	kazaxъ	věrovaxъ	dělaxь	vidĕxь
1 PL	kazaxomъ	věrovaxomъ	dělaxomъ	vidĕxomъ
3 PL	kazašę	věrovašę	dělašę	vidĕšę

In the consonantic verbs, that is, verbs whose infinitive (aorist) stem did not end in a vowel (-∅- and most -*nǫ*- verbs), the starting point of the analogy must have been the non-lengthened root-aorist forms of the second and third singular which, like the corresponding sigmatic aorist forms of the -*i*- class verbs, ended in a vowel; compare from *ved-* 'lead' and *nos-i-* 'carry':

	Root	*Sigmatic*
2 SG	vede (‹ *u̯ĕd-ĕ-s)	nosi (‹ *nòs-ī-s-s)
3 SG	vede (‹ *u̯ĕd-ĕ-t)	nosi (‹ nòs-ī-s-t)

Such forms led to the creation of productive aorist forms in which the abstracted endings of the -*i*- class verbs were added to the non-lengthened roots of the consonantal verbs. The thematic vowel was -*e*- in West Slavonic and -*o*- elsewhere.

	West Slavonic	*South/East Slavonic*
1 SG	vedexъ	vedoxъ
1 PL	vedexomъ	vedoxomъ
3 PL	vedexǫ (-*xǫ*, from the imperfect)	vedošę

The productive aorist occurred with all the consonantal verbs except for

the stems in *r*, which had sigmatic forms only. In some verbs the productive aorist competed with one of the unproductive types (see table 3.10).

Table 3.10   Different aorist formations in Old Church Slavonic

	Root		Sigmatic		Productive	
	1 SG	3 PL	1 SG	3 PL	1 SG	3 PL
mьr-/mrě- 'die'			mrěxъ	mrěšę		
[j]i-/[j]ьd- 'go'	idъ	idǫ			idoxъ	idošę
mog- 'be able'	mogъ	mogǫ			mogoxъ	mogošę
dvig-nǫ- 'move'	dvigъ	dvigǫ			dvigoxъ	dvigošę
čьt- 'read'			čisъ	čisę	čьtoxъ	čьtošę
[j]ьm-/[j]ę- 'take'			ęsъ	ęsę	ęxъ	ęšę
rek- 'say'			rěxъ	rěšę	rekoxъ	rekošę

The **imperfect** arose as a Slavonic innovation following the reinterpretation of the Proto-Indo-European imperfect as the Proto-Slavonic root aorist. It indicated non-completion of a past action and stressed the action's duration or repetition. Because of such a semantic specification, the imperfect was restricted almost exclusively to imperfective verbs. The formant of the imperfect was complex and consisted of the suffix -*ěa*- or -*aa*- followed by the suffix -*x*-. The endings were those of the root aorist.

Table 3.11   Paradigms of the imperfect of *nes*- 'carry', *mog*- 'be able', *děl-a-j*- 'do', *vid-ě*- 'see' and *nos-i*- 'carry' in Late Proto-Slavonic

SG	1	nesěaxъ	možaaxъ	dělaaxъ	viděaxъ	nošaaxъ
	2	nesěaše	možaaše	dělaaše	viděaše	nošaaše
	3	nesěaše	možaaše	dělaaše	viděaše	nošaaše
DU	1	nesěaxově	možaaxově	dělaaxově	viděaxově	nošaaxově
	2	nesěašeta	možaašeta	dělaašeta	viděašeta	nošaašeta
	3	nesěašete	možaašete	dělaašete	viděašete	nošaašete
PL	1	nesěaxomъ	možaaxomъ	dělaaxomъ	viděaxomъ	nošaaxomъ
	2	nesěašete	možaašete	dělaašete	viděašete	nošaašete
	3	nesěaxǫ	možaaxǫ	dělaaxǫ	viděaxǫ	nošaaxǫ

Notes

1   The -*a*-, -*ov-a*- and -*ě*- verbs formed the imperfect on the infinitive stem, while the -*nǫ*- and some irregular verbs based it on the present-tense stem. The imperfect of other verb classes could be interpreted as being based on either stem. It appears, however, that the oldest imperfects were built on the present-tense stem. After the loss of the inter-

vocalic yod in the *-a-j-* class (see note 4, below), the present-tense stem was reinterpreted as the infinitive stem, thus providing a model for the other classes.

2   The endings of the imperfect were taken over from the root aorist which, as shown above, consisted of the Proto-Indo-European secondary endings preceded by a thematic vowel.

3   The suffix *-x-* appears to have been introduced into the imperfect from the productive aorist.

4   There is no agreement on the origin of the suffixes *-ěa-* and *-aa-*. It is likely that the suffix was abstracted from the combination of a stem vowel and a Proto-Indo-European stative suffix *-ē-* (LPSl. *-ě-*). This suffix appeared in the stative verbs of the *-ě-* class, for example, *sěděti* 'to be sitting' (compare Latin *sedēre* 'to be sitting'), in the infinitive *jьměti* 'to have', contrasted with the present *jьmamь* 'I have' (compare Old High German *habēn* 'to have') and in *bě-*, the imperfective aorist stem of the verb *byti* 'to be' (see note 6, below). It was also present in the Latin imperfect, for example *legēbam* 'I was reading', *agēbam* 'I was acting'.

For the verbs of the *-a-*, *-ov-a-*, *-a-j-* and *-ě-* classes, the phonetic development could be viewed in two ways. The stative suffix *-ē-* could have been added to the yod of the present-tense stem of the *-a-j-* class verbs and changed to *ā* after it (see 2.14). After the intervocalic yod was lost, the present-tense stem was reinterpreted as the infinitive stem and this formation spread by analogy to the other verb classes. Alternatively, the stative suffix was added to the final vowel of the infinitive stem and a prothetic yod developed between the two vowels causing the change of *ē* to *ā*. In either case, the loss of the intervocalic yod could lead to the contraction of the two vowels in hiatus. Thus, *āē* > *āįē* > *āįā* > *aa* (with a possible contraction to *a*) and *ēē* > *ēįē* > *ēįā* > *ěa* (with a possible contraction to *ě* or *ä* [æ]).

With the verbs of the *-∅-*, *-nǫ-* and *-i-* classes, the addition of the stative suffix *-ē-* should yield *nesěxъ*, *možaxъ* (< **mŏg-ē-x-ŏ-m*), *dvigněxъ*, *nošaxъ* (< **nŏs-į̄-ē-x-ŏ-m*), and such forms do in fact occur. However, under the influence of the imperfects of the other verb classes, these forms were extended by the vowel *a*, yielding *nesěaxъ*, *možaaxъ*, *dvigněaxъ*, *nošaaxъ*.

5   Therefore, such imperfect forms as *nesěxъ*, *možaxъ*, *nošaxъ*, *bijaxъ*, *živěxъ*, *iděxъ* could represent the older state of the language, before their extension by the vowel *a*. On the other hand, one cannot exclude the possibility that these forms were derived from the younger forms *nesěaxъ*, *možaaxъ*, *nošaaxъ*, *bijaaxъ*, *živěaxъ*, *iděaxъ*, with a contraction of the sequences *ěa* or *aa*, paralleling the development of such clearly contracted forms as *dělaxъ*, *dělaše* from *dělaaxъ*, *dělaaše*.

6   A special case was that of the verb 'to be', whose forms with the stative

suffix -ē- took the endings of the productive aorist and were interpreted as the imperfective aorist, while the younger forms, which occurred in the third person only, were interpreted as the imperfect and were so inflected. Here are the third-person forms of the two paradigms:

	Imperfective Aorist	*Imperfect*
3 SG	bě	běaše
3 DU	běste	běašete
3 PL	běšę	běaxǫ

Proto-Slavonic was alone among the Indo-European languages to derive its **imperative** from the Proto-Indo-European optative mood. In the athematic verbs the Proto-Indo-European optative took secondary personal endings preceded by the optative suffix -i̯ē- (SG)/ -ī- (DU and PL); in the thematic ones, the optative suffix was -ŏ-ī-.

This distinction was retained in the Proto-Slavonic imperative, but with a number of analogical levellings. In the thematic conjugation, the Proto-Indo-European sequence -ŏ-ī- yielded the diphthong -ōi̯-, whose length may be inferred from its subsequent development into an acute monophthong. After i̯ (that is, in the -a-, -ov-a, -a-j- classes) the diphthong ōi̯- was fronted to -ēi̯- and monophthongized to -ī̥, for example, zna-i̯- 'know' formed 2 SG zna-j-i from *znā-i̯-ēi̯-s from *znā-i̯-ōi̯-s and 2 PL zna-j-i-te from *znā-i̯-ēi̯-tě from *znā-i̯-ōi̯-tě. In the athematic conjugation, the suffix -i̯ē- (SG) was replaced by -ū-, which was either derived from -i̯-ŏ-i̯-, with the expected fronting of ŏ, or was analogical to -ī- (DU and PL), for example, dād-/dā- 'give' formed 2 SG dad'i from *dād-i̯-ī-s (OCS daždi, shortened eventually to daždь), 2 PL dadite from *dād-ī-tě.

This development made of -i- the favourite formant of the imperative, leading to its spread to other imperative formations. Thus, in the singular of the -∅- and -nǫ- classes, -ě₂-, issued from the monophthongization of -ōi̯-, was analogically replaced by -i-, for example, OCS 2 SG beri 'take!', rьci 'say!', dvigni 'move!' (versus OCS 2 PL berěte, rьcěte, dvigněte). The Old Church Slavonic forms rьci (of rek- 'say') or mozi (of mog- 'be able') show that the analogical replacement of -ě₂- by -i- took place after the second palatalization of velars. The suffix -i- occurred also with all the imperative forms of conjugation II verbs: for example 2 SG nosi (< *nŏs-ī-s), nosite 'carry!', mьni (< *min-ī-s), mьnite 'think!'.

Morphologically least marked verbal forms were the **infinitive** and **supine**. Like all the non-finite forms, they were not inflected for person, tense or mood. In fact, they distinguished only aspect and genus, the two obligatory categories of the verb. The infinitive and supine endings, -ti and -tъ, were originally case forms of Proto-Indo-European deverbal nouns in the suffix -t- inflected as the -i- and -ŭ- stems respectively. The form of the supine

and its function (specification of goal or purpose with verbs of motion) point to the accusative singular in *-ŭm* as its Proto-Indo-European source. The specific case from which the infinitive was derived is more difficult to establish. Its semantic affinity is with the dative; however, the *i* of the infinitive ending is acute, implying that it was derived from the long diphthong *ēi̯*, which characterizes the ending of the locative singular (see 3.1.2). The infinitive tended to displace the functionally more restricted supine and, unlike the latter, remained in most Slavonic languages. It also influenced the phonetic development of the supine in the velar stems of the *-∅*-class verbs. Thus, the Old Church Slavonic supine of *pek-* 'bake' was *peštъ* from PSl. *pĕk-t-ŭ-m* by analogy to the infinitive *pešti* from PSl. *pĕk-t-ēi̯* (see 2.23). Because of its semantic and formal simplicity, the infinitive is traditionally used as the citation ('dictionary') form of the Slavonic verb.

Some Proto-Slavonic forms combined the functions of verbs with those of adjectives or nouns. The former are known as **participles**, the latter as **verbal nouns**.

Participles were inflected for the adjectival categories of case, number, gender and specificity and for the verbal categories of aspect, genus and tense. However, participial tense distinctions were defined in relative rather than absolute terms: actions contemporaneous with the tense of the main verb were expressed by present participles, while the actions anterior to it, were expressed by past participles. In addition, transitive verbs showed distinctions of voice (active versus passive), and past active participles were either resultative or non-resultative. These distinctions yielded five participles: present active, present passive, past active non-resultative, past active resultative and past passive.

The **present active participle** was marked by the Proto-Indo-European suffix *-nt-* (compare Latin *amāns, amantis* 'loving') added to the present-tense stem and, except in the nominative singular masculine/neuter, extended by the suffix *-i̯-*. The present-tense suffix was *-ŏ-/-i̯-ŏ-* in conjugation I verbs, with *-i̯-ŏ-* fronted to *-i̯-ĕ-* in the nominative singular masculine/neuter, but retained by analogy in the other cases (compare 3.2.2, note 7), and *-ēi̯-* in conjugation II verbs. In the athematic verbs, the original formant of the present active participle must have been *-ęt-* from *-n̥t-*. However, its only trace is the rare OCS *vĕdę* 'knowing'; more recent forms show an analogical thematic *-ǫt-* from *-ŏ-nt-*.

The declension of the present active participle followed the Proto-Indo-European athematic type in the NOM SG M (*-s*), NOM SG N (*-∅*), NOM SG F (*-ī-∅*), NOM PL M (*-es*), and the thematic *-i̯-ŏ-* (M/N) and *-i̯-ā-* (F) types in the other cases. The vowel *ŏ* in the NOM SG M *-ŏ-nt-s* and NOM SG N *-ŏ-nt-∅* is expected to be lengthened and raised to *ū₁ › y* (see 3.1.2, note 2a). This is how it develops in South Slavonic but not in East Slavonic and Czech/

Slovak where instead of -*y* we find -*a*. Since -*a* occurred also sporadically in Old Polish (next to -*ę*), one could posit an Early Proto-Slavonic dialect isogloss separating the South Slavonic -*ū₁* (with vowel raising) from the North Slavonic *ō* (without vowel raising or nasalization). Alternatively, this discrepancy may be explained as a late East Slavonic and Czech/Slovak analogical accommodation to the nominative singular masculine/neuter of other verb classes in which -*ä* derived from -*ę*; compare **nosä* from **nosę* of *nos-i-* 'carry'. In this explanation the Old Polish -*a* forms would be considered a borrowing from Old Czech.

The **present passive participle** was formed from the present-tense stem of transitive, mostly imperfective verbs by the addition of the suffix -*m*-. In the -*i*- presents of conjugation I the thematic suffix -*ŏ*- was fronted to -*ĕ*-; the -*ĕi*- of conjugation II verbs was monophthongized to -*i*-. Athematic verbs showed an analogical -*ŏ*-. The declension was that of the -*ŏ*- (M/N) and -*ā*- (F) stems.

The following are various Late Proto-Slavonic nominative singular masculine present passive participle forms: *nes*- 'carry': *nesomъ*, *děl-a-j*- 'do': *dělajemъ*, *vid-ĕ*- 'see': *vidimъ*, *vĕd*- 'know': *vĕdomъ*.

The **past active participle** was derived from the Proto-Indo-European suffix -*ŭs-/-u̯ĕs-/-u̯ŏs*-. In Slavonic this suffix was simplified to -*ŭs-/-u̯ŭs*- and extended by -*i*- in forms other than the nominative singular masculine/neuter (similarly to the present active participle), yielding EPSl. -*ŭš-/-u̯ŭš*- › *ъš-/-vъš*- (see 2.10(b)). It was added to the infinitive stem. The suffix -*ъš*- occurred with the verbs of the -*∅*- and -*i*- classes and with the consonantic verbs of the -*nǫ*- class; the suffix -*vъš*- occurred elsewhere. In the -*i*- class the stem final *i* › *i̯* before a vowel, causing the expected yodization

Table 3.12   Present active participle forms of *mog*- 'be able', *děl-a-j*- 'do', *nos-i*- 'carry' in Late Proto-Slavonic

NOM SG M/N	mogy/moga	dělaję	nosę
NOM SG F	mogǫt'i	dělajǫt'i	nosęt'i
NOM PL M	mogǫt'e	dělajǫt'e	nosęt'e
GEN SG M/N	mogǫt'a	dělajǫt'a	nosęt'a

Table 3.13   Past active participle forms of *ved*- 'lead', *dvig-(nǫ-)* 'move', *pros-i*- 'ask', *děl-a-j*- 'do', *vid-ĕ*- 'see' in Late Proto-Slavonic

NOM SG M/N	vedъ	dvigъ	prošь	dělavъ	vidĕvъ
NOM SG F	vedъši	dvigъši	prošьši	dělavъši	vidĕvъši
NOM PL M	vedъše	dvigъše	prošьše	dělavъše	vidĕvъše
GEN SG M/N	vedъša	dvigъša	prošьša	dělavъša	vidĕvъša

Table 3.14   Selected nominative singular masculine past passive participle forms in Late Proto-Slavonic

pьn-/pę- 'climb'	pętъ (‹ pn̥-)	pьr-/per- 'push'	pr̥'tъ
jьm-/ję- 'seize'	jętъ (‹ m̥-)	tьr-/ter- 'rub'	tr̥'tъ
u-kaz-a- 'indicate'	ukazanъ	dar-ov-a 'donate'	darovanъ
sъ-děl-a-j- 'make'	sъdělanъ	u-vidě- 'see'	uviděnъ
pri-ved- 'bring'	privedenъ	nos-i- 'carry'	nošenъ
dvig-(no-) 'move'	dviženъ	rod-i- 'give birth'	rod'enъ
	dvignovenъ		

changes (see 2.10). As in the present active participle, the declension was athematic in the nominative singular of all genders and in the nominative plural masculine; in other cases it followed the thematic *-i̯-ŏ-* (M/N) and *-i̯-ā-* (F) types.

The **resultative participle** indicated the result of a completed action. It was formed with the suffix *-l-* added to the infinitive stem. The declension was that of the *-ŏ-* (M/N) and *-ā-* (F) stems. The resultative participle was regularly used in **compound verbal categories** (perfect, conditional), where it was accompanied by a finite form of the verb 'to be': *jesmь neslъ* 'I have carried', *bimь/byxъ neslъ* 'I would carry'.

The following are various Late Proto-Slavonic nominative singular masculine resultative participle forms: *pek-* 'bake': *peklъ*, *věd-(no-)* 'fade': *vędlъ*, *zьr-ě-j-* 'mature': *zьrělъ*, *gor-ě-* 'burn': *gorělъ*.

The **past passive participle** was formed with the suffixes *-t-* or *-n-* added to the infinitive stem. The declension was that of the *-ŏ-* (M/N) and *-ā-* (F) stems. The suffix *-t-* occurred with the sonantic and most semivocalic verbs of the *-∅-* class; the root diphthong in these stems was in the zero ablaut grade. The suffix *-n-* occurred elsewhere. In the consonantic *-∅-* and in the *-no-* and *-i-* classes, *-n-* was linked to the stem by the thematic vowel *-ě-* before which the stem final *-i-* became *-i̯-* with the expected yodization changes in the preceding consonant (see 2.10 and table 3.14).

The **verbal noun** was a *-i̯-ŏ-* stem neuter noun formed from the stem of the past passive participle by the addition of the suffix *-ьi̯-* › *-ьj-*. Unlike the past passive participle, which was typically formed from transitive verbs only, the verbal noun was formed from both transitive and intransitive verbs. Like all nouns, the verbal noun was inflected for case and number in addition to being marked for aspect and genus, the obligatory categories of the verb.

The following are various Late Proto-Slavonic verbal nouns: *pri-nes-* 'bring': *prinesenьje* 'the bringing', *dvig-(no-)* 'move': *dviženьje* 'movement', *děl-a-j-* 'do': *dělanьje* 'the doing', *mьn-ě-* 'consider': *mьněnьbe* 'consideration', *nos-i-* 'carry': *nošenьje* 'the carrying', *jьm-/ję-* 'seize': *jętьje* 'seizure'.

4 Syntax

Syntactic relationships deal with the interdependence of words in sentences or in segments of sentences (syntactic constructions). These relationships may be purely semantic (for example, agent, patient, beneficiary) or they may represent different levels of linguistic structure: syntagmatic (subject, direct or indirect object, predicate, complement) or paradigmatic (case, gender, person). The latter enter into larger classes of morphosyntactic relationships, known as grammatical categories (compare 3.1.1 and 3.2.1). Research on Proto-Slavonic syntax has concentrated on the reconstruction of grammatical categories and of the rules governing their occurrence in sentences, and it is with these topics that the following cursory survey will be concerned.

Some syntactic relationships were expressed by a system of **government**, whereby a verb, a noun or a preposition required a particular form of a noun – its **case**. Features of government distinguished also between **transitive** and **intransitive verbs**, the latter specifying an obligatory absence of the direct object. Distinctions of government were an inherent feature of the verb.

Case distinctions expressed the opposition between the grammatical terms 'subject' and 'direct object', the subject being indicated by the nominative, and the direct object by the accusative or genitive (see below). By contrast, the semantic terms 'agent' and 'patient' were not so specified. This distinction was involved in the contrast between the **reflexive** and **passive constructions**. While the subject-oriented reflexive constructions indicated the centrality of the subject in the action or state expressed by the verb and neutralized the opposition between the agent and the patient (compare 3.2.1), the patient-oriented passive constructions contained an obligatory patient, expressed by the nominative of the subject, and an optional agent expressed by an oblique case or a prepositional phrase. Thus, the subject could designate the agent in active constructions: *mojь synъ sъpase ženǫ* 'my son saved a woman'; the patient in passive constructions: *žena sъpasena bystь* 'the woman was saved'; or either of these terms in reflexive constructions: *žena sę sъpase* 'the woman saved herself' or 'the woman was saved'.

In addition to personal constructions (active, passive and reflexive), Proto-Slavonic had **impersonal** (or subjectless) **constructions** which neutralized the categories of person/number/gender, expressing them by the third person singular (neuter), the least marked finite form of the verbal paradigm. Impersonal verbs were either intransitive or reflexive. They occurred in predications indicating involuntary or natural phenomena: *ne*

xъt'etь sę 'one does not feel like it', *mьnitь sę* 'it seems', *grьmitь* 'there is thunder', *smṛ'ditь* 'there is a bad smell'.

In personal constructions, the category of person contained in the inflectional endings of the first- and second-person forms allowed the **omission of the subject pronoun**: *věmь* 'I know', *věsi* 'thou knowest'. Overt expression of the subject was reserved for emphasis: *azъ věmь* 'I know', *ty věsi* '**thou** knowest'.

The main uses of cases were as follows:

The **nominative** was the case of the subject and of the predicative complement: *ta žena bě neplody* 'this woman was barren';

The **accusative** was a typical case of the direct object: *ova žena rodi dъt'erь* 'that woman gave birth to a daughter'. It also denoted extent with temporal and spatial expressions: *ona sę jestь trudila vьsь dьnь* 'she has worked all day';

The **genitive** expressed subordination in a sequence of two nouns or of a numeral and a noun (possessive and partitive functions): *nožь otьca* 'father's knife', *pętь synovъ* 'five sons'. In certain marked environments, the genitive replaced the accusative as the case of the direct object. One such situation was when the falling together of the nominative and accusative singular endings of the masculine *-ŏ-* and *-ŭ-* stems (see 3.1.2, notes 2b and 4) created a potential confusion between the subject and direct object. To preserve this distinction, the accusative *-ъ* was replaced by the genitive *-a* in nouns denoting male persons: *mojь bratrъ sъrěte pǫtьnika* 'my brother met a traveller'. The resulting accusative/genitive syncretism led to the creation of a masculine personal subgender, also known as virile. This process continued in the histories of individual Slavonic languages, culminating in the creation of the (masculine) animate subgender. In addition, the genitive denoted quantification as a direct object of verbs: *nalija vody* 'he poured some water'. This usage included the direct object of negated verbs: *ne dastь vody* 'he did not give any water', as well as of verbal substantives and supines: *lovl'enьje rybъ* 'the catching of fish', *pride lovitъ rybъ* 'he came to catch fish';

The **dative** was a directional case and, as such, served as the case of the indirect object: *ne dastь jemu vody* 'he did not give him any water'. It also indicated the agent/beneficiary in impersonal constructions and functioned as the subject of the infinitive in the 'dative with infinitive' constructions: *jemu sę ne xъt'etь* 'he does not feel like it', *tomu ne byti* 'this will not happen';

The **locative** denoted localization in time or space: *zimě* 'in wintertime', *gorě* 'above';

The **instrumental** was a case of an accessory to the performance of an action; it denoted an instrument, means or manner of performance: *rězati nožemь* 'to cut with a knife', *pomajati rǫkǫ* 'to wave with one's hand', *jedinojǫ* 'once'.

Except for the nominative, different cases occurred in **prepositional phrases**, with particular prepositions governing particular cases; for example *u* + genitive 'near', *pro* + accusative 'through', *kъ* + dative 'to', *o* + locative 'about', *sъ* + instrumental 'with' (as accompaniment). The meaning of some prepositional phrases depended on the case of the dependent noun or pronoun, for example *vъ* 'in' or *na* 'on' denoted direction with the accusative but location with the locative.

Attributive relationships between modifiers (adjectives, gendered pronouns, numerals from '1' to '4', participles) and their heads (typically, nouns) were expressed by **agreement** in case, number and gender: *Sь dobrъjь učenikъ* 'this good (male) pupil', *si dobraja učenica* 'this good (female) pupil'.

5   Lexis

5.1   General composition of the word-stock
The Proto-Slavonic lexical stock, as reconstructed through a comparison of the vocabularies of all the Slavonic languages, belonged to the sphere of man's physical environment and emotional concerns, personal attributes, family and community ties, occupations, basic needs and desires, feelings and sensations. Many Proto-Slavonic words had cognates in other Indo-European languages and may, therefore, be considered a Proto-Indo-European inheritance. Others were particular to Balto-Slavonic or Proto-Slavonic, representing local innovations or borrowings from the languages with which the Slavs came into contact. The different origins of Proto-Slavonic words may be gleaned through an examination of several primitive semantic categories and through a survey of lexical borrowings. In the lists below, Slavonic reconstructions are given in their Late Proto-Slavonic form.

5.2   Patterns of borrowing
The lexical stock of Proto-Slavonic includes a number of loan-words from the languages of various tribes and nations who were neighbours of the early Slavs. The earliest lexical or semantic borrowings were from the north Iranian languages of the Scythian, Sarmatian and Alanic tribes. Many of these borrowings had religious connotations and included such terms as *bogъ* 'god', *divъ* 'demon', *gatati* 'to divine', *rajь* 'paradise', *svętъ* 'holy', as

well as the name of the supreme Slavonic pagan deity, *Svarogъ*. However, such non-religious terms as *jaščerъ* 'serpent', *patriti* 'to look after', *radi* 'for the purpose of', *sobaka* 'dog', *toporъ* 'axe', *xata* 'house', *xvala* 'glory' are also of Iranian origin.

A few words may have originated in Celtic: for example *bagno* 'bog', *jama* 'cave', *korsta* 'canker', *sěta* 'grief', *sluga* 'servant', *tragъ* 'foot(step)'.

The more numerous loans from Germanic testify to the duration and intensity of contacts between the Slavonic and Germanic tribes. Before the Great Migrations these borrowings were taken from Proto-Germanic and Gothic; later, at the time of the Slavonic colonization of Central Europe, the main source of Germanic borrowings were Old High German dialects. Here are some examples of early Germanic loan-words: *duma* 'thought', *gotoviti* 'to prepare', *kupiti* 'to buy', *kusiti* 'to try', *lěkъ* 'medication', *lixva* 'usury', *lьstь* 'cunning', *měčь* 'sword', *pḷkъ* 'host', *stьklo* 'glass', *šelmъ* 'helmet', *t'ud'ь* 'foreign', *tynъ* 'fence', *xǫdogъ* 'wise', *xlěbъ* 'bread', *xlěvъ* 'stall', *xḷmъ* 'hill', *xyzъ* 'house'. The later loans were often dialect specific: *bl'udo* 'dish', *buky* 'writing', *gobьʒiti* 'to be fruitful', *gonoziti* 'to rescue', *istъba* 'house', *myto* 'tax', *smoky* 'fig', *useręgъ* 'earring', *vṛ togordъ* 'orchard', *opica* 'monkey', *penęʒь* 'coin', *plugъ* 'plough', *stodola* 'barn', and *korl'ь* 'king', perhaps the most celebrated Germanic loan-word in Slavonic, derived from the name of Charlemagne (Old High German *Kar(a)l*). Germanic also served as a transmitting channel for many Latin and, occasionally, Greek words entering Proto-Slavonic: *cěsar'ь* (Latin *Caesar*) 'emperor', *cṛ'ky* (Greek *kyrikón*) 'church', *čeršn'a* (Popular Latin *ceresia*) 'cherry', *dъska* (Latin *discus*) 'board', *kotъ* (Popular Latin *cattus*) 'cat', *kotьlъ* (Popular Latin *catillus*) 'kettle', *осьtъ* (Latin *acetum*) 'vinegar', *osьlъ* (Latin *asinus*) 'ass', *raka* (Latin *arca*) 'casket', *velьbǫdъ* (Greek *eléphas, -antos* 'elephant') 'camel'.

Some Greek and especially Latin words seem to have entered Slavonic without Germanic mediation; for example, *kadь* 'pail', *korab'ь* 'boat', *polata* 'abode' – from Greek; *konop'a* 'flax', *lęt'a* 'lentil', *lot'ika* 'lettuce', (*na*)*gorditi* 'to replace', *poganъ* 'peasant', *port'a* 'lot, work', *skǫdělь* 'tile, crockery', *vino* 'wine' – from Latin. At the end of Slavonic linguistic unity, Greek and Latin provided models for the nascent Slavonic Christian terminology, the choice of the language reflecting the division of Slavdom into Byzantine and Roman ecclesiastic domains; for example, *adъ* 'hell', *dijavolъ* 'devil', *idolъ* 'idol', *popъ* 'priest', *psalъmъ* 'psalm', *sǫbota* 'Sabbath', *xrizma* 'consecrated ointment' – from Greek; *kolęda* 'calendae', *komъkati* 'to communicate', *križь* 'cross', *mьša* 'mass', *olъtar'ь* 'altar', *papežь* 'pope', *židъ* 'Jew' – from Latin.

The relations of the Slavs with various Turkic tribes (chiefly Bulgars, Khazars and Pechenegs) were reflected in such local borrowings as *bagъrъ* 'purple', *bisьrъ* 'pearls', *bogatyr'ь* 'hero', *bol'arinъ* 'nobleman', *karъ* 'black', *kolpakъ/klobukъ* 'hat', *kovъčegъ* 'box', *kъn'iga* 'book', *sanъ*

'dignity', *sapogъ* 'boot', *sokačijь* 'cook, butcher', *suje* 'in vain', *tlmačь* 'interpreter', *tьma* 'myriad', *xъmel'ь* 'hops'.

5.3   Incorporation of borrowings

The mechanism of the incorporation of borrowings into Slavonic allows us to distinguish between productive and unproductive morphological classes, the former admitting loan-words, the latter not. Borrowed nouns are found in the following productive stem types: *-ŏ-/-ĭ-ŏ-* (*plugъ* 'plough' from Old High German *pfluog*, *korl'ь* 'king' from Old High German *Kar(a)l*, that is Charlemagne), *-ā-/-ĭ-ā-* (*stodola* 'barn' from Old High German *stadal* 'sty', *konop'a* 'flax' from Popular Latin *canapis*), *-ĭ-* (*kadь* 'pail' from Byzantine Greek *kádion*), and *-ū-/-ŭŭ-* (*buky* 'letter' from Gothic *bōka*). Borrowed verbs made their way into the following productive classes: *-nǫ-* (*goneznǫti* 'to be rescued' from Gothic *ganisan* 'to recover'), *-ov-a-* (*kupovati* 'to buy' from Gothic *kaupōn* 'to trade'), *-a-j-* (*komъkati* 'to communicate' from Latin *commūnicāre*), and *-i-* (*kusiti* 'to try' from Gothic *kausjan* 'to test').

As for the gender of borrowed nouns, one notes a very low incidence of neuter. Thus, Germanic masculine and feminine nouns retained, as a rule, their gender in Slavonic (for example, *xlmъ* 'hill' from Germanic masculine **hulmaz*, *lьstь* 'cunning' from Gothic feminine *lists*). On the other hand, Germanic neuter nouns switched to the masculine gender in Slavonic (for example, *xlěvъ* 'sty' from Germanic neuter **hlaiwan* 'grave, hole').

5.4   Lexical fields

5.4.1   Colour terms
Most Proto-Slavonic colour terms have Proto-Indo-European etymologies.

The term for 'white' was *běl-*: PIE *bhāi̯-l-*, a variant of PIE *bha-l-* 'shining'; compare OCS *bělъ*, Lithuanian *báltas*, Sanskrit *bhālas* 'shine', Greek *phalós* 'shining'.

There were two terms for 'black': *čr'n-* which was basic and *vornъ*, used to describe an animal's colouring. The former was derived from PIE *krsn-*; compare OCS *črьnъ*, Old Prussian *kirsnan*, Sanskrit *krṣnás*; the latter was BSl. *u̯arn-*: compare OCS *vranъ* 'black', Lithuanian *var̃nas* 'raven'.

Proto-Slavonic used two Proto-Indo-European roots in its terms for 'red'. The basic term was derived from *čr'mь*: PIE *krm-i-* 'worm, vermin' (compare Lithuanian *kirmis*, Sanskrit *kŕmis*), a type of scale insect (*dactylopius coccus*) from which cochineal, a red dye, was produced; it yielded an adjectival derivative, *čr'mьnъ* 'red'. From its variant *čr'vь* 'worm', the verb *čr'viti* 'to dye red' was derived, with its past passive participle *čr'vl'enъ* 'dyed red', hence 'red'. The terms for '(brownish) red' were derived from the roots *rud-/rus-/ryd'-*, ablaut variants of PIE *rĕu̯dh-*; compare Czech *rudý*, Lithuanian *raũdas* 'bay', Sanskrit *róhitas*, Latin *rūfus*, Greek *ereúthō* 'I blush'; OCS *rumĕnъ* (< **rŏudh-mēn-*); ChSl. *rusъ*,

Lithuanian *raũsvas*, Latin *russus* (< **roudh-s-*); ChSl. *ryždь* 'yellow red', Lithuanian *rūdìs* 'rust' (< **rūdh-i-*).

The terms for 'green' and 'yellow' were derived from two Proto-Indo-European root variants, *g'hel-/g'hŏl-/g'hļ-* and *ghel-/ghŏl-/ghļ*. The former yielded PSl. *zel-/zŏl-/zļ-*; compare OCS *zelenъ* 'green', *zlato* 'gold', *zlьčь* 'bile' and Lithuanian *žélti* 'overgrow', *žeĩtas* 'golden', *žãlias* 'green'. The latter gave PSl. *žļ't-* 'yellow'; compare Church Slavonic *žlьtъ* and Lithuanian *geltas* 'yellow', Latin *helvus* 'yellow', Greek *khólos*, *kholḗ* 'bile, gall'.

There were no general Indo-European terms for 'blue' or 'grey'. Proto-Slavonic used three roots in several derivatives to denote a wide range of blue-grey hues. (1) PSl. *si-* from PIE *k'ī-*; compare *sinъ/sinьjь* 'livid, dark blue', *sivъ* 'silver, grey', East Slavonic *sizъ* 'grey', Lithuanian *šẽmas* 'bluish grey', *šývas* 'grey', *šẽžis* 'blackbird', Sanskrit *śyāmás* 'dark grey, black'; (2) EPSl. *xŏị-*; compare ChSl. *sěrъ* 'grey', OCS *sědъ* 'grey-haired'; (3) PSl. *polv-* from PIE *pĕl-/pŏl-*, in Slavonic extended by *-u-*; compare OCS *plavъ*, with meanings ranging from 'pale' (hence, 'fallow, blond') to 'grey' (hence, 'blue'), Greek *peliós* 'pale, dark-grey', Latin *pallidus* 'pale'.

Proto-Slavonic had no term for 'brown' proper. It did, however, have adjectives denoting a swarthy complexion and brown hair colour: *smědъ/snědъ* (for people) and *gnědъ* (for animals). Neither term has a reliable Indo-European etymology.

The term *bagъrъ* 'purple' and its derivatives appear in South and East Slavonic only. It was borrowed from Turkic.

5.4.2 Body parts
Many Proto-Slavonic terms for body parts have reliable Indo-European etymologies:

oko, očese 'eye' from PIE *ŏkʷ-*; compare OCS *oko, očese*, Lithuanian *akìs*, Sanskrit NOM DU *akṣī́*, Greek *óps*, Latin *oculus*.

uxo, ušese 'ear' from PIE *ōus-*; compare OCS *uxo, ušese*, Lithuanian *ausìs*, Greek *oûs*, Latin *auris*.

nosъ 'nose' from PIE *năs-/nās-*; compare Old Russian *nosъ*, Lithuanian *nósis*, Sanskrit *nā́sā*, Latin *nāris*.

usta 'mouth' from PIE *ăus-/ōs-*; compare OCS *usta*, Lithuanian *úostas* 'mouth of a river', Sanskrit *ŏṣṭhas* 'lip', Latin *austium, ōstium* 'mouth of a river'.

bry, brъve 'brow' from PIE *bhrū-*; compare OCS *brъvь, brъve*, Lithuanian *bruvìs*, Sanskrit *bhrūs*, Greek *ophrŷs*, Old High German *brāwa*.

kry, krъve 'blood' from PIE *kreu-/krū-*; compare Old Russian *kry, krъve*, Lithuanian *kraũjas*, Sanskrit *kravís* 'raw meat', Greek *kréas* 'raw meat', Latin *cruor*.

sŗ'dьce 'heart' from PIE *k'ŗd-*; compare OCS *srьdьce*, Lithuanian *širdìs*,

Greek *kêr* and *kardia*, Latin *cor, cordis*, Gothic *hairtō*.

volsъ 'hair' from PIE *u̯ŏls-*; compare OCS *vlasъ*, Lithuanian *valaĩ* 'horse-hair', Avestan *varasa-*, Greek *oũlos* 'curly'.

nogъtь '(finger)nail' from PIE *nŏgh-*; compare OCS *nogъtь*, Lithuanian *nagùtis*, Greek *ónyks, ónykhos*, Latin *unguis*, Old High German *nagal* (compare *noga* below).

(*v*)*ǫtroba* 'entrails' from PIE *ŏ/ĕnt(ĕ)r-*; compare OCS *ǫtroba* 'womb' (in other Slavonic languages also 'liver' or 'heart'), Sanskrit *antrám*, Greek *énteron*, Latin *interior* 'inner'.

Some terms are Balto-Slavonic in origin:

golva 'head' from BSl. *gălu̯ā̆*; compare OCS *glava*, Lithuanian *galvà*.

grdlo 'throat' from BSl. *gŭrdl-*; compare Old Russian *gъrlo*, Lithuanian *gurklỹs*.

rǫka 'hand, arm' from BSl. *rănkā̆*; compare OCS *rǫka*, Lithuanian *rankà*.

noga 'leg, foot' from BSl *năgā̆*; compare OCS *noga*, Lithuanian *nagà* 'hoof' (see *nogъtь* above).

pr'stъ 'finger' from BSl. *pirst-*; compare OCS *prьstъ*, Lithuanian *pirštas* (also Sanskrit *prṣthám* 'peak').

5.4.3   Kinship terms
Kinship terms belong to the oldest layer of Proto-Slavonic vocabulary. Several of them are part of the Proto-Indo-European heritage, while those which are specifically Balto-Slavonic or Proto-Slavonic have identifiable Indo-European roots and suffixes.

PSl. *mati, -ere* 'mother'; *dъt'i, -ere* 'daughter'; *bratrъ* 'brother' came from athematic stems in the suffix *-tēr/-tōr/-tr*: PIE *mā-tēr, dhŭghə-tēr, bhrā-tēr*. In Balto-Slavonic the former two retained some features of the athematic declension; compare OCS *mati, -ere, dъšti, -ere, brat(r)ъ, -a*; Lithuanian *mótė, -ers* 'woman', *duktė̃, -ers, brólis* (< *broter-ĕlis*, a diminutive formation); Sanskrit *mātā̆, duhitā̆, bhrā̆tā*; Greek *mḗtēr, thygátēr, phrátēr*; Old High German *muoter, tohter, bruodor*.

PSl. *sestra* 'sister' (with an epenthetic *t*) was derived from PIE *s(u̯)ĕsŏr*, an athematic *-r-* stem which transferred in Slavonic to the *-ā-* stems; compare OCS *sestra*, Lithuanian *sesuõ, -ers*, Sanskrit *svásā*, Latin *soror*, Gothic *swistar*.

PIE *pa-tēr* and *ăt-* both denoted 'father'. The former, in its zero grade, was the probable source of PSl. *strъjь* 'paternal uncle'. The latter, extended by the suffix *-ik-*, gave PSl. *otьcь* 'father'; compare Greek, Latin and Gothic *atta* 'father', with expressive gemination.

PSl. *svekry* 'husband's mother' from PIE *su̯ĕk'rūs*, an *-ū-* stem which in Slavonic shows a plain velar; compare OCS *svekry*, Sanskrit *śvaśrū́s*,

Greek *hekyrá* 'stepmother', Latin *socrus* 'mother-in-law'.

PSl. *synъ* 'son' from PIE *sūnŭs*; compare OCS *synъ*, Lithuanian *sūnùs*, Sanskrit *sūnus*, Greek *hyiós*.

PSl. *zętь* 'a male kinsman' was probably derived from PIE *g'en-* 'give birth'; compare OCS *zętь* 'bridegroom', Russian *zjat'* 'son-in-law' or 'brother-in-law', Lithuanian *žéntas* 'son-in-law', Sanskrit *jnātis*, Greek *gnōtós* 'relative'.

PSl. *zъly, -ъve* 'sister-in-law' was an *-ū-* stem related to Greek *gáloōs*, Latin *glōs, glōris* 'sister-in-law'.

PSl. *žena* 'woman, wife' from PIE *gʷēnā*; compare OCS *žena*, Sanskrit *jánis*, Greek *gynḗ*, Gothic *qinō* 'woman'.

PSl. *mǫžь* 'man, husband' from PIE *măn-g-į-ŏ-s*; compare OCS *mǫžь*, Sanskrit *mánus*, Gothic *manna* 'man'.

6   Dialects

It is highly probable that the process of dialect differentiation marking the end of the Early Proto-Slavonic period, began soon after the sixth century AD, when the Slavs spread throughout central and south-eastern Europe. It is more difficult to determine when these dialect distinctions became so pronounced as to justify the assumption of the dissolution of Proto-Slavonic linguistic unity and of the rise of separate Slavonic languages. The commonly accepted dating of this process into the ninth-tenth century is based primarily on the political events of the period, such as the attainment of statehood by Bulgaria, Carantania, Croatia, Serbia, Moravia, Pannonia, Bohemia, Poland and Kievan Rus' (see maps 3.2 and 3.4). There is little doubt, however, that by the ninth century there emerged at least three distinct dialects, South Slavonic, East Slavonic and West Slavonic, the latter two grouped as North Slavonic (see map 3.1).

Note: In the following list of isoglosses, only the features not mentioned in the earlier sections of this survey are provided with examples. Features mentioned before are cross-referenced appropriately but no examples are cited.

Some of the features which distinguished South Slavonic (S) from North Slavonic (N) were as follows:

1   PSl. # *ăRC* ‖ S # *RāC* versus N # *RăC* (see 2.22(a)).
2   PSl. *ę* ‖ S *ę* versus N *ě* [ä] (see 2.27(c)).
3   Accusative plural of the *-i-ŏ-* and *-i-ā-* stems ‖ S *-ę* versus N *-ě₃* (see 3.1.2).
4   Instrumental singular of the *-ŏ-* stems ‖ S *-otь* versus N *-ъть*, for example OCS *godotь* 'year' versus Old Russian *godъть* (see 3.1.2).
5   Nominative singular masculine present active participle ‖ S *-y* versus N *-a* (see 3.2.2).

Map 3.1
Schematic
distribution of
Slavonic dialects in
the ninth century

West
Slavonic

East Slavonic

South
Slavonic

6   Verbal prefix 'out' ‖ S *jьz-* versus N *vy-*, for example, OCS *iz-bьrati* 'to elect' versus Old Russian *vy-bьrati*.

The most important features which distinguished West Slavonic (W) from both South Slavonic and East Slavonic (S/E) were as follows:

1   EPSl. *xē₂ skē₂ ku̯ē₂ gu̯ē₂* ‖ W *šě ščě kvě gvě* versus S/E *s'ě scě cvě ʒvě*. These are some of the reflexes of the second and third palatalizations of velars (see 2.19); compare LOC SG EPSl. *u̯ǎsk-ē₂* 'wax': Old Czech *voščě*, OCS *voscě*.
2   PSl. *tl dl* ‖ W *tl dl* versus S/E *l* (see 2.20). Note that many Slovene dialects have *tl dl*, while some Western Russian dialects have *kl gl*.
3   First singular and third plural productive aorist ‖ W *-exъ -exǫ* versus S/E *-oxъ -ošę* (see 3.2.2, p. 100).

Map 3.2
Administrative
division of East-
Central Europe in
the ninth century

The tripartite division of Slavonic soon gave way to a highly differentiated dialect picture (see map 3.3). South Slavonic split into a Western and an Eastern dialect, the former consisting of pre-literary Slovene and Serbo-Croat, the latter of Bulgarian and Macedonian. Practically all extant texts of canonical Old Church Slavonic may be considered examples of literary Eastern South Slavonic. West Slavonic distinguished three dialect groups. The largest was Lechitic, the common ancestor of Polish, Cassubian, Slovincian and Polabian and of the extinct Slavonic Pomeranian dialects attested to by the many surviving place names and a few personal names mentioned in medieval chronicles. The two smaller ones were Sorbian, from which modern Lower and Upper Sorbian are derived, and Czech/Slovak consisting of Czech and Slovak. East Slavonic split first into South-Western and North-Eastern (Russian) variants, the former being the forerunner of Ukrainian and Belorussian.

Map 3.3
Schematic
distribution of
Slavonic dialects in
the tenth century
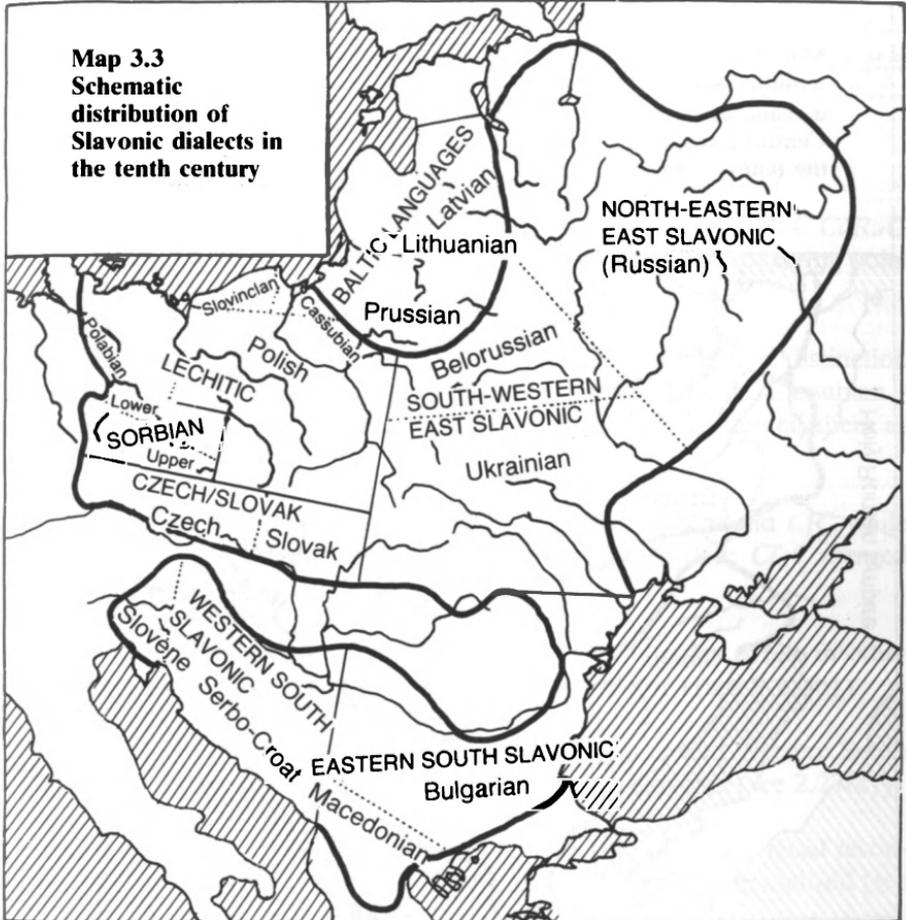
Western South Slavonic (WS) differed from both Eastern South Slavonic and North Slavonic (ES/N) by the following features:

1   Phonemic pitch was retained in WS but lost in ES/N, for example Serbo-Croat NOM SG *rúka* 'hand', ACC SG *rúku* versus Polish *ręka, rękę.*
2   The Proto-Slavonic circumflex (see 2.26) yielded vocalic length in WS but brevity in ES/N.
3   Proto-Slavonic front vowels did not palatalize the preceding consonant in WS but did palatalize them in ES/N, for example, Serbo-Croat *ti* 'for you', *dĕset* '10' versus Polish *ci, dziesięć.*

In Western South Slavonic and West Slavonic the Proto-Slavonic strong *jers* fell together, while in Eastern South Slavonic and East Slavonic they

Map 3.4
Administrative
division of East-
Central Europe in
the tenth century

Based on map 19 in Konrad Jażdżewski (1949) *Atlas do pradziejów Słowian*, Łódź: ŁTN.

did not; for example, PSl. *dьnь* 'day', *sъnь* 'sleep': Serbo-Croat *dân*, *sän*, Czech *den*, *sen* versus OCS *dьnь*, *sъnъ*, Russian *den'*, *son*.

In Eastern South Slavonic and West Slavonic the epenthetic *l* derived from the Proto-Slavonic sequences of a labial (*P*) + *j*, across a morphemic boundary, was lost yielding *P'*, while in Western South Slavonic and East Slavonic it is retained as *Pl'* (see 2.10(c)).

In Czech/Slovak and South Slavonic the syllabic function of Proto-Slavonic syllabic liquids was retained yielding *CRC*, while in East Slavonic, Lechitic and Sorbian it was transferred to a vowel yielding *CVRC* (see 2.22(b)).

Proto-Slavonic soft *ŗ'* hardened in Czech/Slovak and South Slavonic and was retained in East Slavonic; in Lechitic and Sorbian it hardened before hard dentals and was retained in other positions, for example, PSl. *tvŗ'dĭjь* 'hard', *tvŗ'diti* 'to affirm': Czech *tvrdý*, *tvrditi* versus Russian *tvĕrdyj*, *tverdit'* versus Polish *twardy*, *twierdzić*.

The reflexes of PSl. *CĕRC CărC* are threefold (see 2.22(c)); in South Slavonic and Czech/Slovak *CRēC CRāC*, in East Slavonic *CĕRəC CărəC*, in Lechitic and Sorbian *CəRĕC CəRăC* (note, however, the following point on groups involving an *l*).

Sorbian, Polish, Czech/Slovak and South Slavonic retained a distinction between PSl. *CĕlC* and *CălC*, while Western Lechitic (that is, Cassubian – including Slovincian — and Polabian) and East Slavonic merged them as *CălC* (see 2.22(b)).

Sorbian, Polish and Czech distinguished between PSl. *Cļ' C* and *CļC*, while in Slovak, Western Lechitic and South and East Slavonic *Cļ' C* merged with *CļC* (see 2.22(b)).

PSl. *ě* yielded the low vowel [æ] in Lechitic and Bulgarian, while in other Slavonic languages it tended to have high reflexes, *e* or *i* (see 2.27(b)).

PSl. *ǫ* tended to be rounded (*u* or *ọ*) in North Slavonic and Western South Slavonic and unrounded (*ъ* or *ǫ̣*) in Eastern South Slavonic (see 2.27(c)).

Lechitic and some Slovene and Bulgarian dialects retained the nasal resonance of Proto-Slavonic nasal vowels which elsewhere were denasalized (see 2.21).

PSl. *ě* and *ę* merged with *a* and *ǫ* respectively before hard dentals in Lechitic, for example, PSl. *lěsъ* 'forest', *sněgъ* 'snow': Polish *las, śnieg* versus Russian *les, sneg*; PSl. *pętьjь* 'fifth', *pętь* '5': Polabian *p'ǫtě, pǫt* versus Serbo-Croat *pêti, pêt*.

PSl. *g* was spirantized to [γ] or *h* in Southern East Slavonic, Czech/Slovak, Upper Sorbian and West Slovene, for example, Russian *gólos*, Serbo-Croat *glâs* versus Ukrainian *hólos*, Czech *hlas* 'voice'.

The reflexes of PSl. *t', d'* were fivefold (see 2.23), in West Slavonic *c, ʒ*, in East Slavonic and Slovene *č, ǯ* (in standard Slovene *ǯ* became *j*), in Serbo-Croat *ć, ʒ́*, in standard Macedonian *k' g'*, in Old Church Slavonic and Bulgarian *št, žd*.

The Proto-Slavonic third singular and plural present-tense suffix is recon-
structed as -tь (SG)/-tь (PL). However, West Slavonic and Western South
Slavonic have -∅/-∅, Eastern South Slavonic has -∅/-t, South-Western East
Slavonic and some North-Eastern East Slavonic dialects have -∅/-t' in
conjugation I and -t'/-t' in conjugation II, and most of North-Eastern East
Slavonic has -t/-t (see 3.2.2, p. 97, note 4).

The Proto-Slavonic first plural (see 3.2.2 p. 97, note 6) was -mъ in Old
Church Slavonic and North-Eastern East Slavonic, -mo in Western South
Slavonic and South-Western East Slavonic, -me in Eastern South Slavonic
and Czech/Slovak, -my in Lechitic and Sorbian.

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