Russian: A Linguistic Introduction

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1 History of the language

The transcription used in this chapter is transliteration, based on the Slavic linguistic variant of ISO R9 (see chapter 2, table 9).

1 Historical background (important dates for the language)

From the time of the Slav expansion into the Balkans (sixth century) until the mid-ninth century there were only rare instances of the Slavs setting up any sort of formal state: in the early seventh century (after the defeat of the Avars in 623) the western Slavs in the Bohemian and Moravian area set up one under Samo, which lasted thirty-five years, ending with Samo’s death in 658 (Schenker 1995); in 680 was formed the Bulgarian Khanate of Asparuch, initially not Slav, but which later (early ninth century) became a Slav kingdom lasting until the early eleventh century (1014). As for the eastern Slavs, they were living generally in tribal groupings until the mid-ninth century, at which time, according to the legend of the early chronicles, those living in the area of Novgorod invited the ‘Norsemen’, or Vikings, also known as Varangians, to come and help them establish a state; the date given for this invitation is 860, and the first incoming Norsemen arrived in Novgorod between then and 862. The first ruler in Novgorod was allegedly Rurik (Scandinavian ‘Hrórekr’), who was succeeded by his son (or possibly other kinsman) Oleg in 879. In 882 Oleg transferred his seat to Kiev (taking over by force from Varangians Askold (Hoskuldr) and Dir), and this date is taken as the start of the state known as Kievskaja Rus’ (Kievan Rus’). An alternative view – held strongly by Soviet historians – was that the Kievan state had been formed before the arrival of the Varangians, whose initial role was that of mercenaries in the pay of particular tribes; of these Askold and Dir were the first to take political power – by force – in Kiev, followed by Oleg in Novgorod, then Kiev, as noted above; and that the whole Novgorod ‘invitation’ – including the person of Rurik – is no more than a legend added later to the revised chronicle. These opposing views are referred to as the ‘Normanist debate’ (see Stokes 1976, Rybakov 1965).

Even the origin of the name ‘Rus’ is disputed: for some it was in fact the name applied to the Scandinavians, and probably indeed a Scandinavian ethnonym
in origin, which then found itself attached to the inhabitants of the state, and in turn to the state itself; for others—again mainly Soviet—it reflects an old Slavic tribal name, with the variant ‘Ros’, from which was formed later the toponym ‘Rossija’ (fifteenth century), based on the European Latin-style nomenclature of states. All the early rulers (and their consorts) following Rurik have slavicised Scandinavian names, e.g. Oleg, Ol’ga, Igor’, Gleb, gradually replaced by native formations, usually compounds of a high-flown sort, e.g. Vladimir ‘great in power’, Jaroslav ‘renowned for ferocity’, Jaropolk ‘(leader of) a fierce army’, Svjatopolk ‘(leader of) a pious army’, Mstislav ‘avenger of honour’. Sometimes southern Slav names were used, e.g. Boris, and then Christian(-style) names, e.g. Jurij (George), Andrej (Andrew), Ivan (John).

Kievan Rus’ was a federative state, initially very loose, made up of many principalities, all accepting the predominance of the prince of Kiev, known as the Grand Prince (Velikij knjaz’). Over the next 250 years the state survived with various high and low points—the principle high points being the reigns of the strong grand princes Vladimir I (the Great) (980–1015)—which saw the ‘Baptism’ of the state (that is, its official acceptance of Christianity), Jaroslav I (the Wise) (1036–54)–during which there was a flowering of religious culture and the first code of laws (known as Russkaja Pravda), and Vladimir II and his two sons Mstislav and Jaropolk (1113–39). After Jaropolk’s death the squabbling over the Kievan principality—there were seventeen princes of Kiev over the next thirty years—brought the state to a very weak condition, during which many other principalities began to vie for superiority in their own right, as opposed to trying to acquire the Kievian one. This brought several northern principalities to the forefront: that of Novgorod became independent in 1136, and from the 1150s those of Vladimir and Suzdal’ (north-east of Moscow) became dominant, leading via the sack of Kiev in 1169 and the dominance of Vladimir-Suzdal’ from the 1170s to the acceptance of Jurij of Vladimir-Suzdal’ as Grand Prince in 1218. In theory the Kievian state was still functioning, but in reality it had completely lost any unified strength.

Moscow first appears in the story in 1147, when a chronicle entry describes it as a small town with a castle on the Suzdal’ border; it was then set up as a defence fortress in 1156 by Jurij Dolgorukij (or his son Andrej Bogoljubskij, the one who sacked Kiev).

In 1237 the effective death-blow was dealt to the state by the arrival of the Tatar-Mongols (commonly known in English as Tartars), who took every major town in Kievian Rus’ over the next three years and were to keep the whole area under their subjugation for the next 250 years, the period known in Russian history as the ‘Tatar yoke’. However, in fact the Rus’ princes mostly simply paid tribute to the Tatars and were allowed to go about their business, which continued to include struggling amongst themselves for supremacy. It also included fighting other foes, like the Swedes or the Livonian knights whom
Aleksandr Nevskij (of Novgorod) defeated in 1240 and 1242. Aleksandr became Grand Prince in 1252, beginning a period of Novgorod supremacy over all the north. In 1271 his son Daniil (or Danilo) moved his court to Moscow. Meanwhile the symbolic end for Kiev came when the Metropolitan of the Church moved his seat from Kiev to Vladimir in 1299. In 1326 the seat of the Metropolitan was moved to Moscow, and in 1328 the prince in Moscow (Ivan II) declared himself ‘Prince of Vladimir and all Russia’ at the same time as another invader was occupying Russian territory: the Lithuanians moved into the south-west of Russia, ultimately taking Kiev in 1380. This date is also significant for the ‘north’, for in that year the Russians defeated the Tatars in battle for the first time, in the famous Battle of the Don, near Tula, that is, actually in the south(-east) of the still unoccupied part. However, this was a purely symbolic victory, as the Tatar yoke was to remain in place for a further century. Further, an alliance between the Lithuanians and Poles allowed the Poles to take over control of much of the south – mostly the future Ukraine, while the Lithuanians retained the west, mostly the future Belorussia (Belarus).

During that period the one development of importance was not a political one, but one which concerned the cultural life, and thus the language, of the Russians: late in the fourteenth century there began to arrive in Moscow southern Slavic churchmen from the Balkans, fleeing the invading Ottoman Turks. While we know only a few by name, they exerted an influence which was to prove most important, in that they were able to introduce into the Russian Church elements of the ascetic tradition of the Hesychastic movement of Greece (centred mainly on Mt Athos); these included an attempt to restore the purity of church books by reinstating what were perceived to be the pristine forms of their language. (See section 3.2 below for details.)

Only in the 1460s did the next important politically based development occur – the reign of Ivan III, from 1462 to 1505. This reign saw the final defeat and official renunciation of subservience to the Tatars (1480) and the taking of Novgorod (1478) and of other major northern towns, making Moscow supreme for the first time. Ivan began to refer to himself as ‘Tsar’ of all Russia’, and to Moscow as ‘the new Constantinople’ or ‘the third Rome’, that is, as the successor to Constantinople/Byzantium as the world’s centre of (Orthodox) Christianity. Ivan’s son and successor, Vasilij III, completed the task of making Moscow the master of all the remaining ‘free’ area of ‘Russia’, that is, of the part not occupied by the Lithuanians and Poles. The next tsar, Ivan IV (the Terrible) was the first to retake some of the occupied territory, including the Khanate of Kazan’ from the Tatars in 1552 and some of the south-east from the Poles in the 1570s (immediately following the formal union of Lithuania and Poland in 1569); the colonisation of Siberia began in 1584. In 1654 Ukraine (whose name originally meant simply ‘borderland, frontier’, and was applied especially to this south-western border) managed to gain independence from Poland, and
the eastern part of it (known as the ‘Cossack Host’) became an autonomous province within Russia, to which Kiev was added via treaty in 1667.

By this time, both Ukraine and Belorussia had gone their own way linguistically, not so much at the spoken as at the literary level, as they had missed out on the neo-southern Slavonic influence that the north had received (see section 3.2 below). On the other hand, they, but especially Ukraine under Polish control, had had access to the western European culture and religion of Poland. This in turn was to contribute to the next injection into the language and culture of Moscow under Pëtr I (Peter the Great), who effectively (though not formally) incorporated the independent Ukraine in 1709, and it subsequently became an important element in his ‘Europeanisation’ or ‘westernisation’ of Russia as a linguistic conduit for much of that culture. Peter’s reign also saw the start of the occupation of the Baltic coast, where he set up his new capital of St Petersburg in 1703; but, more importantly in our context, it marks the start of the separation of church and state in ‘cultural’ matters, including language and its writing. Peter introduced a ‘civil script’ (graždanskij šrift) to be used for non-religious publications, set up the first newspaper and laid the ground for the establishment of the Academy of Sciences, founded in the year of his death, 1725.

The story of Russia from then is one of continual expansion and political consolidation, and that of the Russian language one of the business of normativisation and standardisation, which does in theory place it ahead of the same processes in most other Slav countries, which had to wait until the national movements of the nineteenth century to work out their standards. However, it was really only in the nineteenth century that Russian itself finally established its standard forms, and the whole eighteenth century was a battleground in this respect (see below).

In summary, therefore, the following are the crucial periods in Russian history which have a bearing on the development of the standard language:

1. sixth–ninth centuries: the eastern Slavs live separated from the western Slavs by the geographical boundaries of the Pripet marshes in the north and the Carpathian mountains in the south, and so develop certain dialectal features of their own; internally there would have been some special local features at the extremes, especially via contact with non-Slavs in the north and east.

2. ninth–fourteenth centuries: the state of Kievan Rus’ maintains the overall linguistic direction of all its constituent areas. The language of the state is known (now) as Old Russian. Nevertheless there is clearly already a south versus north dialectal division.

3. fourteenth–sixteenth centuries: the occupation of the western and southern parts by the Lithuanians and Poles creates a political separation which puts the north-east and the south-west on different linguistic paths, at the spoken level possibly simply emphasising already existing differences, at
the written level introducing quite different ones. The rise of Moscow as a centre with a northern dialectal base, but attracting southern dialectal speakers, gives rise to a transitional dialect group, referred to as ‘central’.

(4) seventeenth–eighteenth centuries: the formation of a strong Russia, open to the west and with a growing empire; the start of the standardisation process, with the freeing of the literary language from religious-based ties; the opening-up to western borrowings.

(5) nineteenth–twentieth centuries: the establishment of the modern norms.

2 Linguistic features

Note the following terms and their abbreviations.

Proto-Slavonic/Common Slavonic: usage is divided between those who distinguish between the terms ‘Proto-Slavonic’ and ‘Common Slavonic’ and those who use one or the other exclusively. For the former group the difference is one of age: Proto-Slavonic refers to the oldest situation, Common Slavonic to the latest stage before the break-up. This is most typical of Slavonic, especially Russian, usage, where the relevant terms are ‘praslavjanskij’ and ‘obˇ česlavjanskij’. For our purposes a single term will suffice, as we will be setting out in this chapter the developments over the whole period, without dwelling on questions of chronology, leading us to the East Slavonic stage, which will be the basis for observations within each language level of modern Russian; we will use Proto-Slavonic (as done also by Comrie and Corbett 1993). As necessary we will refer to (relatively) early and late Proto-Slavonic.

Balto-Slavonic: without entering the debate about whether there was ever a single Balto-Slavonic language stage or simply a period of close association and shared development of Proto-Slavonic and Proto-Baltic, we will use Balto-Slavonic to refer to the common forms which would have occurred during such an intermediate stage of common developments.

Old Russian: refers to the East Slavonic language spoken and written in Kievan Rus’ in the period between the tenth and fourteenth centuries.

Old Church Slavonic: refers to the written language based on the Bulgaro-Macedonian Slavonic spoken in the late ninth and tenth centuries; it took on local features as it became used in other areas, giving Russian Church Slavonic, amongst others.

Russian Church Slavonic – the language of religious writing, then also of secular writing, in Russia.

For the sake of simplicity, the tradition of attaching asterisks to reconstructed, hypothetical linguistic forms is abandoned; it is to be assumed that all Indo-European and Proto-Slavonic forms are such.
2 Linguistic features

2.1 Slavonic as an Indo-European dialect

For this earliest period we look at the phonology only.

The first major division of Indo-European languages is into what are called the *centum* and *satem* groups, that is roughly into west and east respectively, the names being based on the word for ‘100’ in Latin and Avestic. These names represent the first major phonological split in the family, namely the different treatment of the palatalised velars, the base Indo-European form for the given word being *kʰntom*. The western group converted these into simple velars like [k], the eastern into sibilants like [s]. Slavonic belongs to the *satem* group, the Proto-Slavonic form being *ŝuto*.

A second early dialectal feature concerned the treatment of the aspirated voiced stops, like [bʱ], which became fricative in some, plosive in others, including Slavonic, e.g. (stems only) IE *bʰrātr-* ‘brother’ > Lat *fratre-*; PS *bratr-*; The relative chronology of these first two features is indicated by the development of the aspirated and palatalised [gʱ] into [z] in Slavonic, namely, first, the loss of aspiration, then the assimilation – e.g. *gʰeim-* ‘winter’ > PS *ẑeim-*.

A third feature concerns the treatment of the syllabic sonorants, like [r̥], which in Proto-Slavonic became VC (vowel + consonant) sequences, which may be regarded as falling diphthongs whose non-nuclear (semi-vowel) element is a sonorant; the vowel part was a short [i] or [u], possibly (but not clearly, see Shevelov 1964: 86) depending on a front/back quality of the original syllabic sonorant, e.g. *mrt-* ‘dead/death’, Lat *mort-*, PS *mirt-*.

A final important consonant feature concerned the behaviour of Indo-European [s]: in the eastern group this sound underwent change in certain contexts, namely following the high vowels [i] or [u] and the consonants [r] or [k]. Possibly the context /k— (that is, after [k]) was the first to be affected, the others following through analogical forms. The simplest statement of its Slavonic result is that it became [x] in these contexts; others believe its initial result was [s], as in Balto-Slavonic (Lithuanian). (For detailed argument see Schenker 1995: 80.) For our purposes the traditional statement: s > x /i, u, r, k— will serve well, e.g. IE *yers-* ‘summit’ > BS *virš-*, PS *virx-*, IE *rek-s-* ‘say’ Aorist > BS/PS *rekx- > rēx-.*

Within PS it is possible that in some areas plosive [ɡ] early became fricative [ɣ], thus partnering the new [x] rather than the old [k] within the new three-member velar set; if it is not an early feature, it certainly occurs later in those areas, which include part of the East Slavonic region, however the early view facilitates the explanation of certain later developments (see below).

The semivowels [u̯] and [j] became consonantal in prevocalic position, namely [w] (immediately or later in some areas > [v]) and [j] respectively, e.g. *ulk*- ‘wolf’ > PS *vik-, trej-* ‘three’ > PS *trej–e.*
In respect of vowels confusion between [o] and [a] was common across many areas; the Slavonic result is, again most simply put, complete fusion into a low back rounded vowel which may be designated /o a/, e.g. noki– ‘night’ $>$ PS nokti–, brazr– ‘brother’ $>$ PS bratr–.

It then makes sense further to describe the low (or mid-low) front vowel /e/ as /e a/ (short and long); this too facilitates the explanation of later developments (as well as making for a ‘tidier’ phonological picture!).

At the suprasegmental level:
(a) while vocalic quantity remained distinctive in pure vowels, it probably ceased to be so in the vocalic part of diphthongs, as the latter came to be seen as the maximum length – of two morae – of a syllable nucleus;
(b) stress was free, and probably already associated with particular morphemes in a hierarchical way (see Garde 1976);
(c) pitch had first ceased to be distinctive (from having been so in late IE), but had survived at the phonetic level as a concomitant of quantity (long = rising, called ‘acute’, short = non-rising, called ‘circumflex’). With the shortening of the diphthongs, the tonal difference was apparently retained, such that pitch again became distinctive, though only on diphthongs (until the latter became vowels; see below).

Most of the above features were in principle shared with Baltic, though the details are not always identical (e.g. s $>$ š /i, u, r, k— works better for it, and the confusion of [o] and [a] had different results).

Thus, the probable shape of the earliest Proto-Slavonic phonological system was as shown in table 1 (bracketed forms joined by a vertical line are likely dialectal variants).

### 2.2 Developments within Proto-Slavonic

The following discussion is topic-based rather than chronological, though as far as possible chronological order is followed.

#### 2.2.1 Phonology

A generalisation which may be made in respect of almost all developments – and certainly all the major ones – within Proto-Slavonic is that the syllable boundaries and relations within the syllable altered: the unit of the syllable became more discrete, the boundary was clearly marked by a drop in sonority – that is, syllables became ‘open’, always ending in a vowel, and the elements within the unit influenced each other directly. No doubt this came about in stages, and at any rate it is useful to describe it as though it developed in such a way.
Table 1  *Early Proto-Slavonic phonological system*

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<td>Fricative</td>
<td>s</td>
<td>(x)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(v)</td>
<td>z</td>
<td>j</td>
<td>(γ)</td>
</tr>
<tr>
<td></td>
<td>(w)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affricate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquid</td>
<td>r</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>l</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vowels</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Front</td>
<td>Central</td>
<td>Back</td>
</tr>
<tr>
<td>High</td>
<td>ĭ ĭ</td>
<td></td>
<td></td>
<td>ā ā</td>
</tr>
<tr>
<td>Mid-high</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-low</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>ē ē</td>
<td>ě ě</td>
<td></td>
<td>ē ē</td>
</tr>
<tr>
<td>Diphthongs</td>
<td>ď ď</td>
<td>ē ē</td>
<td>ě ě</td>
<td>ē ē</td>
</tr>
<tr>
<td></td>
<td>o̯u̯</td>
<td>o̯u̯</td>
<td>o̯u̯</td>
<td>o̯u̯</td>
</tr>
<tr>
<td></td>
<td>All short vowels plus r, l, m, n; e.g. ĭr ĭar</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Suprasegmental**
- Stress: Free
- Quantity: All pure vowels, not diphthongs
- Tone/Pitch: Automatic acute on long vowels; diphthongs may have acute or circumflex

2.2.1.1 Velars. A change which seems logically to predate the syllable restructure is the fronting of the velars in the vicinity (on either side) of a front vowel, e.g. BS kětiʾr- ‘four’ > PS kʾetőr-; –iša ‘agent suffix’ > –iša. Within the revised (open) structure mutual effects across a sonority boundary should be minimal (and those within the unit maximal), so that the influence of a vowel on the following consonant is not expected, hence the second example above should have been in place before the restructuring. We shall see below (section 2.2.1.8) that this particular development of the velars has caused problems in respect of chronology, and the positing of an early stage of fronting across the syllable boundary while it was still weak is useful.

2.2.1.2 Effects of [j]; palatalisation. The consonant change which was to be a major feature of Slavonic may usefully also be said to begin early, namely the production of palatal consonants (chuintantes/hushers) by fusion with a
following [j]; while sequences of C+j would always have been within the
new syllable unit, so that this change is not tied to the restructure, it does seem
probable that it is a manifestation of an early assimilative tendency which could
be the precursor of the syllable restructure.

Again, there are clearly stages in this development: while most subsequent
results are common to the whole group, some are not, so we need to indicate
the principle in some way, and it is useful to start from fused consonants which
are simply palatalised versions of the base consonant, e.g. stops like p’, t’, k’,
fricatives like s’, x’ and sonorants like r’, l’, n’.

In a few cases consonant clusters were affected together: for example, it is
useful to see the clusters kt and gt as jointly becoming t’ at this first stage.

The final stage, producing genuine palatal consonants like the chuintantes, is
late, and belongs after the syllable restructure. Some of the results are phoneti-
cally ‘natural’, and occur in many languages, if only at the level of rapid style,
e.g. s’ > ˇs’, z’ > ˇz’, common to all the group; others are less so, for example the
labials become clusters of labial plus l’ – that is, the palatal element is realised
as a palatal lateral. There is no agreement about whether this l’ element was
initially common or not: the western group (e.g. Polish, Czech) does not show it
except in a few odd cases, so it is possible either that they never developed it and
borrowed those few cases, or that they subsequently lost it and these cases are
remnants. For the sonorants r, l, n there is no special further development until
after the break-up into East, West and South. The velars show mostly common
results: all the group has k’ > ˇc’ and x’ > ˇs’; the results of g’ depend on the
stop or fricative nature of this phoneme: the stop [g’] gives dˇz’ (locally later
simplified to ˇz’); the fricative [γ’] gives ˇz’. (Note that if the fricativisation of /g/
is allocated only later, it would be then accompanied by the deaffrication of dˇz’
to ˇz’; thus, the positing of early local preference for fricative /γ/ seems useful.)

2.2.1.3 Palatalisation of velars. The above results of the effect of [j] on conso-
nants may now be expanded to the specific context of the new syllabic structure,
within which vowel articulation may (begin to) influence that of preceding con-
sonants: at the most basic level this means simply the palatalising effect of a
front vowel of the sort normally producing allophones (cf. the nature of /k/
in Eng key, cut, caught). This is effectively the result for dentals and labials.
However, for velars the result was much more drastic, matching the effect of /j/
noted above (and similar to that which occurred in the Romance group, e.g. Lat
camp– > Fr champ–, Lat cent– ([kɛ–]) > Fr [ʃ–], Ital [ʃf–]): again, in Proto-
Slavonic all areas have k’ > ˇc’, x’ > ˇs’ and either g’ > dˇz’ or γ’ > ˇz’. These
changes are traditionally called the ‘First Palatalisation of the Velars’, and the
context is any of the front vowels existing at that point in time, namely high ū/
and low ī/a u, both either long or short. Further changes to the velars came later,
following interim vowel developments (see section 2.2.1.8).
### Table 2 Quantity > Quality

<table>
<thead>
<tr>
<th>Old</th>
<th>New</th>
<th>Examples</th>
<th>(Early PS &gt; Late PS)</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>òa</td>
<td>o</td>
<td>n̥a̞̞i̞̞i̞</td>
<td>not’ì̞</td>
<td>‘night’</td>
</tr>
<tr>
<td>òu (via o̞a?)</td>
<td>a</td>
<td>d̥a̞̞i̞</td>
<td>d̥a̞̞i̞</td>
<td>‘give’ (Inf)</td>
</tr>
<tr>
<td>e̞u (via e̞a?)</td>
<td>e</td>
<td>m̥e̞̞i̞</td>
<td>me̞̞i̞</td>
<td>‘honey’</td>
</tr>
<tr>
<td>ī</td>
<td>ĕ (ī̞)</td>
<td>s̥ ī̞–</td>
<td>s̥ ī̞–</td>
<td>‘sit’</td>
</tr>
<tr>
<td>ī</td>
<td>ḳ (ī̞)</td>
<td>v̥i̞̞̞u̞</td>
<td>v̥i̞̞̞u̞</td>
<td>‘village’</td>
</tr>
<tr>
<td>ī</td>
<td>i̞</td>
<td>g̥i̞̞v̥u̞</td>
<td>z̥i̞̞v̥u̞</td>
<td>‘alive’</td>
</tr>
<tr>
<td>ū (via u̞i̞?)</td>
<td>ū (ū̞ or ū)</td>
<td>d̥i̞̞k̥t̥(er) ḳ̞i̞</td>
<td>d̥a̞̞t̥i̞</td>
<td>‘daughter’</td>
</tr>
</tbody>
</table>

#### 2.2.1.4 Opening of syllables

The syllable restructure, or the ‘opening of syllables’, had, not surprisingly, major consequences for all aspects of the phonological system. We have seen some of the effects on the consonants; others include the dropping of word-final consonants (probably one of the earliest) (e.g. IE (w)us ‘you’ > PS vū; IE NS endings –us/um etc. > PS –ū/–ō) and simplification or reorganisation of unacceptable clusters (usually of falling sonority), e.g. IE wapsa ‘wasp’ > PS osa; IE/early PS ved–ti ‘lead’ Inf > PS vesti.

Changes to the vowels were not actually results of the syllable restructure, but they do occur at the same time, and we shall treat them first, especially since the new vowels are easier to describe and their further developments easier to follow. Furthermore, one view actually sees the vowel changes as having predated the changes to diphthongs, which explicitly supports the following order.

#### 2.2.1.5 Vowel quantity > quality

The system of four pure (i.e. non-diphthongal) vowels with long and short versions was replaced by a system in which quantity ceased to be distinctive and was replaced by qualitative distinctions, though the former length was preserved phonetically, that is, was automatic, or inherent, in the new vowels. It is possible that the long vowels were first converted to falling diphthongs – and this is a very common conversion for languages in general (e.g. OEng ī > Eng ai as in ‘bride’, ā > e ā as in ‘name’); however, such an unprovable hypothesis does not advance us much. We need simply state the starting and finishing points (‘Old’ and ‘New’ in table 2). In the table the ‘New’ column uses the transcription to be used hereafter for PS phonemes. On the quality of these new vowels, we can see that:

(a) rounding has become distinctive at the low level (assuming that we treat /o/ and /a/ as being of the same level), but for the high vowels, on the contrary, rounding was removed at least from the long /u/, and logically also from the short; however, it could be that the former long/short opposition was replaced by ±Round (short > round for the low, short remains round for the high); the subsequent development of /u/ leaves its rounding status at this stage unclear;
(b) the short high vowels are generally assumed to have become lowered to mid-high and are less extreme, in other words their quality has been reduced – hence they are frequently referred to as ‘reduced vowels’ (Rus reducirovanne) (their symbols are the Cyrillic letters used for these vowels in Old Church Slavonic); see also point (d) below on their length;

(c) the quality of /œ/ is also a matter of disputation, again because of the variety of later reflexes: most popular is the view that at this stage it was a low front unrounded vowel ([˜a]); for others it was a rising diphthong of the [ia]/[iä] type; and for still others, it had already shifted to a higher position in some areas, namely East Slavonic (this is to account for local reflexes; see chapter 2). Its symbol is the modern Czech letter representing its common reflex in Czech;

(d) The quantity of the old vowels continued to reside in the new, thus /a/, /œ/, /i/ and /y/ were inherently long, and the other four short. The subsequent developments of /œ/ and /ø/ suggest that they were even shorter than /o/ and /œ/. However this remains a hypothesis, related presumably to their higher position; the further shortening may have occurred later.

2.2.1.6 Monophthongisation. Diphthongs were prime casualties of the new syllabic structure, since in principle the semivowel second part of a falling diphthong represents a drop in sonority and hence means a closed syllable – at least when followed by a consonant or word boundary – and indeed virtually all such tautosyllabic diphthongs were ‘monophthongised’ in Proto-Slavonic. We say ‘virtually’, because it appears that the final stages of this process were overtaken by other changes which reversed the syllabic restructuring process and reinstated closed syllables within the system. The diphthongs which failed to complete the process were those in which the closing element was one of the sonorants r, l, while the rest changed consistently; the results are as described below (the vowel nucleus of the diphthong is by this stage always short, but the new, derived, pure vowel is phonetically long; other Indo-European languages are shown as evidence of the original diphthong).

(a) Closed by semivowel (i, y).

<table>
<thead>
<tr>
<th>Early PS</th>
<th>Late PS</th>
<th>Examples</th>
<th>Early PS</th>
<th>Late PS</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)æi &gt; əæ, i</td>
<td>oj &gt; ě, i</td>
<td>berête, beri ‘take’ Imper 2p, 2s (cf. Gk feroi-te)</td>
<td>(a)æi</td>
<td>e &gt; i</td>
<td>iti, id– ‘go’ Inf, Pres. (cf. Lith eiti)</td>
</tr>
<tr>
<td>(a)æu</td>
<td>ou &gt; u</td>
<td>tury, ‘aurochs’ (cf. Lat taurus)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(æ)u</td>
<td>eu &gt; (j)u</td>
<td>l’udь, ‘people’ (cf. Lith liaudis)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For the above at least, one might postulate an intermediate step of conversion to a rising diphthong, that is, the nucleus shifts to the second element; the
appearance of ˇe from oj is sometimes explained by metathesis (inversion of elements), but this cannot explain the rest. For the vowel system, the new /ˇe/ and /i/ merge with the existing ones from long front vowels (though often they are marked for etymological purposes as /ˇe2/ and /i2/); the new /u/ replaces the /u/ lost by unrounding to /y/; the front /e/ of eu is reduced to [j], which then, as usual, fuses with the preceding consonant to make a palatal consonant.

(b) Closed by nasal sonorant (m, n). As expected (cf. for example French or Polish), the reflex of these is a nasal vowel (NV), with the front or back quality of the nuclear vowel retained (FNV, BNV). The traditional marker of nasality in Slavonic linguistic usage is the subscript hook, taken from the modern Polish alphabet. The underlying symbols are those of the basic (new) mid-vowels e and o (while modern Polish uses underlying a for the back nasal). Thus (with the new vowels inserted as base, and other Indo-European as evidence of the original nasal):

| FV (e, ˇe) + m/n > FNV | ė́ | pete ‘five’   | (Gk pente) |
| BV (o, ˇo) + m/n > BNV | ṓ | potó ‘way’   | (Lat pont-) |
|                      |    | gós ‘goose’   | (Lat anser) |
|                      |    | dót ‘blow’ Inf | (Lith dumti) |

The quality of the underlying vowel may be taken initially to be mid-low e, o. The former height of the nuclear vowel is irrelevant, that is, height is irrelevant for the new nasals (newly acquired nasality being complication enough). The front/back opposition is reinforced within the system, as also is ±Round.

(c) Closed by liquid sonorant (r, l). This set of diphthongs is reflected in various distinct ways over the whole group, indicating that it had its final realisation after the beginning of the break-up of the group, though the motive force of syllable opening belongs to the unified period (before the sixth century, since the period of break-up is roughly sixth to ninth centuries). The relative lateness in the opening of this type of diphthong may be related to the phonetic nature of the liquid sonorants, which are particularly able to function as nuclei themselves – witness the many languages, especially Slavonic ones, in which both /r/ and /l/, or at least /l/, may be nuclei, e.g. Czech, Slovak, Serbian/Croatian, Macedonian. The proposed interim stage of a shift to rising diphthong, as suggested above (section 2.2.1.6), is most easily accepted for these. However, the fact is that these diphthongs did in principle shift in different ways to open the syllable.
In this set, the height of the nuclear vowel is relevant. Perhaps the lateness of the results means that the new vowel system is well in place by then, so that the different height of the former high vowels – that is, the height difference between the new /u/, /i/, on the one hand, and /ɛ/, /ɜ/ on the other – is well established, and means that these latter vowels will not be fused with the low /ɛr/, /ɜr/, as happened with the nasals. Or perhaps it is simply that the combination of high(er) and/or short(er) /u/, /i/ with /r/, /l/ led more easily to a syllabic sonorant (traditionally marked r, l).

Thus we see in principle different results for /u/ + /r/ and /e/ + /l/; but in addition we see different results for each set across the dialectal spectrum. The most common way of formulating this structure is to use ‘C’ (or ‘t’ for any consonant and ‘R’ for /r/; thus we are tracking the late Proto-Slavonic structures C+tRC, C+rRC, CoRC, and CeRC, and also #oRC (that is, where /o/ is word-initial). In some cases /r/ and /l/ behave differently.

(i) C+tRC, C+rRC. The tendency for the two jers (the name given to the vowels /e/ and /i/ from the old name for these Cyrillic letters) to be reduced, and in many areas to end up as schwa ([ə]), would have allowed these sequences easily to become syllabic sonorants in those areas where these were developed, namely the South Slavonic and southern West Slavonic (Czech/Slovak) areas; in principle the quality of the vowel was at least initially preserved in the hard/soft varieties of the new syllabic sonorant. In some cases the syllabic sonorant later developed further (e.g. /r/ reverted to vowel + consonant in Bulgarian, /l/ became a full vowel in Serbian/Croatian). In the rest of the area (that is, ‘northern’ Slavonic) languages remained more consonantal, and these sonorants did not become syllabic, or, if they did, it was a short-lived phenomenon. If they did not, then we have apparently evidence of the failure of these closed syllables to open. The ‘syllabic’ solution is thus structurally more likely.

Thus, in all the south and Czech/Slovak (that is, ‘southern’ Slavonic), we have initially (with further local developments as in examples):

<table>
<thead>
<tr>
<th></th>
<th>South PS</th>
<th>Slavonic</th>
<th>SC</th>
<th>Cz</th>
<th>Slk</th>
<th>Bg</th>
<th>Mac</th>
</tr>
</thead>
</table>

In the northern half (the East and Polish/Sorbian), we have no change at this stage; the reflexes are the same as those of the jers in other contexts. Thus, for
common East Slavonic, which we will later be calling Old Russian, the base
formula shapes (CsrC etc.) remain the valid ones. Further changes within this
group will be treated later (section 2.3.1.3).

(ii) CoRC, CeRC. For this structure we have three distinct groups, though
initially there may only have been two types. There are really only two possi-
bilities for resolution of the given problem where the nuclear vowel is not of
the reduced sort: (1) insertion of a new vowel (epenthesis), thereby creating
an extra syllable (as is typical of borrowings into open-syllable-type languages,
like Japanese or Italian); or (2) metathesis (inversion) of the vowel/sonorant
sequence. Solution (1) is realised in the East and solution (2) in the north-west
area (Polish/Sorbian, known jointly as Lekhitic). A third type in Slavonic is
a variant of metathesis, in which the vowel has additionally been lengthened
(o > a, e > ę), and is found in the ‘southern’ area. The three types, based on
the modern situation (with possible intermediate steps in brackets, where ∗ and
represent roughly phonetic [ʌ] and [i]), are:

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CeRC (via CeRυC?) &gt; CeReC</td>
<td>OR: koro’va</td>
</tr>
<tr>
<td>b. Polish/Sorbian (Lekhitic):</td>
<td>CorC (via CoRςC &gt; CoRoC?) &gt; CroC</td>
<td>PS: korva ‘cow’</td>
</tr>
<tr>
<td></td>
<td>CeRC (via CeRυC &gt; CeReC?) &gt; CreC</td>
<td>PS: koro’va</td>
</tr>
<tr>
<td>c. South + Czech/Slovak (‘southern’):</td>
<td>CoRC (via CoRςC &gt; CoRoC?) &gt; CRoC &gt; CraC</td>
<td>PS: korva ‘cow’</td>
</tr>
<tr>
<td></td>
<td>CeRC (via CeRυC &gt; CeReC?) &gt; CRêC &gt; CRêC</td>
<td>PS: koro’va</td>
</tr>
</tbody>
</table>

The East Slavonic result is referred to in Russian as ‘polnoglasie’, in English
as ‘pleophony’ or ‘full vocalisation’. As suggested in the bracketed forms,
it seems likely that the Lekhitic group went through this step also, but then
removed the first vowel; the point-to-point statement could equally well be
simply metathesis, as is accepted to be the case for the South, which then
lengthened the one vowel, possibly in compensation.

At the suprasegmental level the above picture is somewhat more complicated,
since the place of stress in the East may be on either the old or the new (inserted)
vowel (see chapter 2, section 3.1), and in the other languages the new vowel may
be accompanied by different quantity or pitch. The cause of these variations is the nature of the pitch (rising or not) on the original diphthong.

(iii) #oRC. In theory there should be also the structure #erC, but there are no reliable examples for it, so it is normal to exclude consideration of it, though of course one can say what it might have done. We have here two results, both described as metathesis, one with lengthening of the vowel in some forms; while the inserted-vowel approach is in theory a possible intermediate step, as suggested for the Lekhitic group above, there is in this case no secondary evidence which might support it. Here, moreover, the isoglosses are different, in that all of the East and West have the same result – simple metathesis in some forms, metathesis plus lengthening in others, while the South has always metathesis plus lengthening. In other words, while the South is consistent in its reflexes of the initial and medial contexts, neither the East nor the West is. It is presumed that the initial position presented other factors, which caused either an earlier or later shift; the most important of these was the vulnerability of the absolute initial vowel position in a language shifting towards open syllables, since the preceding sound, that is, the end of the preceding word, would now be ending in a vowel, thus producing undesirable hiatus. In other contexts the typical solution taken by Proto-Slavonic was to insert a prothetic glide (u or i) which later became a consonant (v or j); in this particular context metathesis may have been seen as a useful alternative solution (of course, the inserted vowel remains a possibility, as indicated in brackets).

Thus, we have:

<table>
<thead>
<tr>
<th></th>
<th>PS</th>
<th>OR</th>
<th>Rus</th>
<th>Pol</th>
<th>SC</th>
<th>Cz</th>
<th>Bg</th>
</tr>
</thead>
<tbody>
<tr>
<td>East/West:</td>
<td>oRC (via oRnC?) &gt; RoC/RnC &gt; RoC/RnC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South:</td>
<td>oRc (via oRnC?) &gt; RnC &gt; RnC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The two results in East/West are again caused by pitch differences in the underlying diphthong: a rising pitch was responsible for the lengthened form (reflected in /-a/) of the new vowel.

In all the above cases of diphthongs, where the diphthong was followed by a vowel, the solution to the open syllable impetus was simply to shift the new boundary to after the nuclear vowel, such that the former semivowel or sonorant became a syllable-initial consonant, as follows: i > j, u > w (> v), m, n, r, l. This is an important source of often quite complex morphophonological alternations, based on whether inflections began with a vowel or consonant (see chapter 2, section 3.5).
2.2.1.7 **Syllabic harmony.** Within the new syllabic structure (CV), therefore, the relationship between the consonant and the following vowel became very close, such that each influenced the other. This general feature is called ‘syllabic harmony’ (or ‘synharmony’). The features affected are centred around front/back tongue position, which for vowels means indeed front/back, for consonants the raising of the tongue at the front or back. Thus we have effects like the following.

1. **Consonant fronting.** A front vowel caused raising of the tongue at the front during the consonant articulation, producing what is called a ‘palatalising’ effect, and so-called ‘palatalised’ or ‘soft(ened)’ (or ‘sharp’) consonants.

2. **Palatalisation.** In the case of the furthest back consonants, the velars, the result was indeed, as we have mentioned above, their conversion to full palatal consonants, that is, articulated in the high front tongue position (a shift from soft to hard palate location).

3. **Vowel fronting.** Where palatal consonants had arisen as a result of the effect of [], and where the following vowel had been a back one (say, /o/ or /u/), this back vowel was fronted by the influence of the consonant. In the case of short /o/ and /u/ the fronted versions were in fact the front partners /e/ and /ɛ/, supporting the notion that any rounding was not strong in these short vowels, while for the long /o/ and /u/ the result was at most a fronted [ʊ] or nasal [ɨ] – they did not lose their rounding and merge with their front partners (/i/, /ɛ/). Most interesting is the long /a/, whose formal front partner was /ɛ/: it seems that a fronted [ʊ] was the result in most areas, and since this is what we believe /ɛ/ itself was in most areas, this result means normal fronting (to the partner); however, the ultimate result in all areas was a reflex of /a/, and not of /ɛ/, and moreover, the result of /ɛ/ itself preceded by a palatal was also /a/ (?!). But it is also clear that in those areas where /ɛ/ in other contexts shifted to another position (higher), it is not joined by the vowels following palatal consonants, so that the [ʊ] of these areas was not identical to /ɛ/. Incidentally, no area has retained these three fronted articulations, which were clearly only allophones, and which ceased to function after the syllable was again restructured. At this later stage the sequence Palatal C + Back V again became acceptable (see below, section 2.4.1.1).

The extent to which these shifts are reflected in the modern languages varies: for some (including Russian), the ‘soft’ articulation of consonants – and not just before front vowels – has become an inherent feature; the fronting of vowels is reflected everywhere in morphophonological alternations, in particular in the
opposition between hard and soft declension types (e.g. Rus neuter nouns, hard 
 mest–o ‘place’ versus soft pol–e ‘field’; see chapter 3, section 2.1.3).

2.2.1.8 Further palatalisation of the velars. Later than the ‘First Palatalisa-
tion of the Velars’ described above (section 2.2.1.3), producing alveolo-palatal 
 consonants of the chiuintante/husher type (/ˇc/, /ˇ s/, /ˇ z/), there occurred a second 
 fronting process affecting the velars, producing probably first (dorsal) palatal 
 sounds (like those in modern Polish and Serbian/Croatian), which by the time 
 of the break-up had become soft dentals (or alveolars) (which is the reverse of 
 the Polish and Serbian/Croatian cases, where these palatalas were derived from 
 soft dentals), as follows:

/kl > /c′/; /gl > /dz′/ or /z′/; /xl > /l′/ or /sl′/

The variants for /g/ are parallel to those for the first set, that is, they probably 
 initially related to the stop versus fricative nature of /g/; however, subsequently 
 even areas with stop /g/ converted /dz′/ to /z′/ (including Russian). The variants 
 for /x/, on the other hand, are geographically based, the alveolo-palatal /ˇ s/
 occurring in the west only.

These velar frontings occur in two contexts. One is the expected following 
 front vowel, specifically one of the two new front vowels, or rather new 
 sources of existing front vowels, which had not been present at the time of 
 the first change, namely the new /e 2 / and /i 2 / which had arisen from the (mono-
 phthongised) diphthong /o ı/ (see above, section 2.2.1.6). This set is referred to 
 as the ‘Second Palatalisation of the Velars’. Examples are:

<table>
<thead>
<tr>
<th>PS</th>
<th>Rus</th>
<th>Bg/SC</th>
<th>Cz</th>
<th>Pol</th>
</tr>
</thead>
<tbody>
<tr>
<td>kojna &gt; kēna ‘price’</td>
<td>cena</td>
<td>cena</td>
<td>cena</td>
<td>cena</td>
</tr>
<tr>
<td>gojlo &gt; gēlo ‘very’</td>
<td>OR zēlo</td>
<td>OCz zielo</td>
<td>cena</td>
<td></td>
</tr>
<tr>
<td>xojd– &gt; xēd– ‘grey (haired)’</td>
<td>sed-oj</td>
<td>SC sed</td>
<td>śed–y</td>
<td>szad–y</td>
</tr>
</tbody>
</table>

This change occurred in important inflections, like the Locative Singular and 
 Nominative Plural of nouns, and Imperative of verbs, hence frequent alterna-
tions resulted, e.g.:

<table>
<thead>
<tr>
<th>PS</th>
<th>(North Slavonic)</th>
<th>OR</th>
<th>Cz</th>
</tr>
</thead>
<tbody>
<tr>
<td>rank–oj &gt; rôkē &gt; rœcē ‘hand’ LS</td>
<td>(ruka)</td>
<td>rucē</td>
<td>ruce</td>
</tr>
<tr>
<td>nog–oj &gt; nogē &gt; nodzē ‘foot’ LS</td>
<td>(noga)</td>
<td>nozē</td>
<td>noze</td>
</tr>
<tr>
<td>doux–oj &gt; duxē &gt; dusē/dusē ‘spirit’ LS</td>
<td>(dux)</td>
<td>dusē</td>
<td>dušē</td>
</tr>
</tbody>
</table>
The second context in which this same set of changes occurred is more puzzling: it appears to be caused by a *preceding* high front simple or nuclear vowel (that is, mainly long and short /i/). This makes it a progressive assimilation, which in itself suggests rather the period before the opening of the syllables, since after that there was a clear boundary between a vowel and a following consonant; on the other hand, the fact that only one diphthong-type with nuclear [i] – /iN/ (but not /iR/) provokes the change means that it almost certainly occurred *after* the quantity changes and monophthongisation (that diphthong would first have become a nasalised /i/, then merged with the lower nasalised /ɛ/ ([ɛ]/)); the identical results to the Second Palatalisation also suggest a similar late period. These conflicting facts have led to a range of interpretations about this set of velar changes: traditionally this set has been called the ‘Third Palatalisation of the Velars’, suggesting a late chronology, but it is now more commonly called the ‘Progressive Palatalisation of the Velars’, and many place it as the *earliest* of the three. The compromise position, which attempts to accommodate the contradictions, sees it as having occurred in two stages, the first early and producing simply fronted velars, the second simultaneous with the Second Palatalisation and taking these sounds along with those in the new front vowel context forward to the palatal area. This is why we suggested above (section 2.2.1.1) the early appearance of fronted velars when adjacent to front vowels.

There are also other complications with this set: one is that certain following vowels (high and/or rounded) seem to have prevented it, which fits with the later syllable situation; another is that there must have been some analogical levelling, for example where the following vowel (in a paradigm) was sometimes a preventer, sometimes a supporter (the latter mainly /a/), and analogy would be particularly strong where the motive force was never an inflection, but always a stem (or root) vowel. These last facts account for the absence of alternations arising from this set. Examples are:

<table>
<thead>
<tr>
<th>PS</th>
<th>Rus</th>
<th>Bg/Sn</th>
<th>Cz</th>
<th>Pol</th>
</tr>
</thead>
<tbody>
<tr>
<td>ot-ıkũ &gt; ot–bc’b 'father'</td>
<td>ot–(e)c</td>
<td>ot(e)c</td>
<td>ojc(ic)c</td>
<td></td>
</tr>
<tr>
<td>kũningũ &gt; kně̞dž’b 'prince'</td>
<td>knjaz’</td>
<td>Bg knez</td>
<td>OCz kněž</td>
<td>ksiądz</td>
</tr>
<tr>
<td>vixũ &gt; vb’š’b 'all'</td>
<td>v(e)s’</td>
<td>Sn v(e)s</td>
<td>OCz v(e)s</td>
<td>OP wszy</td>
</tr>
<tr>
<td>suffix –ika &gt; –ic’a Female/</td>
<td></td>
<td></td>
<td>–ica</td>
<td>–ica</td>
</tr>
<tr>
<td>Abstract (but not –ıkũ,</td>
<td></td>
<td></td>
<td></td>
<td>–ica</td>
</tr>
<tr>
<td>–ıkα Diminutive, which &gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>–ıkš, –ıkα)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Those following back vowels which did not prevent the change were then fronted by the rules of syllabic harmony (section 2.2.1.7).
2.2.1.9 Suprasegmental. Two late changes affected all areas: (1) tone became restricted to stressed position (meaning that the old pure vowels – \(a\), \(i\), \(\hat{e}\), \(y\) – could now be non-rising in unstressed position); (2) all vowels which had rising pitch (automatic on the above four, possible – thus phonemic – on the vowels derived from diphthongs: \(i_2\), \(u\), \(\hat{e}_2\), \(\hat{e}\), \(\circ\)) were shortened (meaning that these vowels – that is, \(i\), \(u\), \(\hat{e}\), \(\circ\), since the different origins of /i/ and /\#/ were irrelevant – now had phonemic quantity under stress, since it was no longer predictable). Furthermore, inasmuch as the new short vowels retained their rising pitch, tone was no longer limited to long vowels (and diphthongs); however, there was no longer a simple tonal opposition on any vowel; pitch remained tied to quantity, the opposition on the above vowels being between ‘short + rising’ and ‘long + non-rising’, while the remaining short vowels \((o, e, a, \#)\) were automatically non-rising.

2.2.1.10 Late PS phonological system. We may now consider the system which had arisen by the end of the common period of development, just before the break-up (of the sixth century), which saw different results for jointly motivated changes and the start of locally motivated changes. The following table (table 3) may be compared with that in section 2.1.1 (table 1). Brackets indicate regional or temporary variants, as follows: the combination of labial + l’ (as the ‘jotated’ version) probably did not arise in the West; of the soft dentals (from palatals) only /c’/ (from /k/) was general; the palatal stops are conveniently described as still general in this form; /g/ and /\#/ have alternative articulations by region, as stop versus fricative for the first, as labio-dental versus bilabial for the second. The apostrophe is used to distinguish palatal sounds from simply palatalised ones (marked with acute).

2.2.2 Morphology
2.2.2.1 Nominal. The following are the features and categories of the late Indo-European nominal system of relevance for us and how they were treated in Proto-Slavonic (discussion of the actual forms is taken up in other chapters and sections as appropriate, especially chapter 3, section 2.1):

- **case**: the seven cases of Indo-European – Nominative, Accusative, Genitive, Dative, Instrumental, Locative, Ablative, plus Vocative – were reduced to six plus Vocative in Proto-Slavonic (and Baltic) by the conflation of Ablative into Genitive;

- **number**: of the three numbers – Singular, Dual, Plural – the dual was already losing ground in Proto-Slavonic, having its range of cases reduced to three by the conflation (syncretisation) of the Nom+Acc, Gen+Loc and Dat+Instr. Subsequently it was completely lost except in a couple of areas (Slovenian and Sorbian), but it was still
Table 3 Late Proto-Slavonic phonological system

<table>
<thead>
<tr>
<th></th>
<th>Labial</th>
<th>Dental</th>
<th>Palatal</th>
<th>Velar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stop</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p (pl')</td>
<td>t</td>
<td>t'</td>
<td>k</td>
<td></td>
</tr>
<tr>
<td>b (bl')</td>
<td>d</td>
<td>d'</td>
<td>(g)</td>
<td></td>
</tr>
<tr>
<td>m (ml')</td>
<td>n</td>
<td>n'</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fricative</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>s (s')</td>
<td>s'</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(v) (vl')</td>
<td>z (z')</td>
<td>z'</td>
<td>(γ)</td>
<td></td>
</tr>
<tr>
<td>(w)</td>
<td>j</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Affricate</strong></td>
<td>c'</td>
<td>ε'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(dz')</td>
<td>(dz')</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Liquid</strong></td>
<td>r</td>
<td>r'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>l</td>
<td>l'</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Vowels**

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>i</td>
<td>y</td>
<td>u</td>
</tr>
<tr>
<td>Mid-high</td>
<td>ë</td>
<td>ū</td>
<td></td>
</tr>
<tr>
<td>Mid-low</td>
<td>e</td>
<td>é</td>
<td>o</td>
</tr>
<tr>
<td>Low</td>
<td>ê</td>
<td>a</td>
<td></td>
</tr>
</tbody>
</table>

Also fronted allophones in the context /PalC—: ü, ë, á

**Syllabic sonorants**

|--| in west and south only

**Suprasegmental**

<table>
<thead>
<tr>
<th></th>
<th>Free</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress</td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>After shortening of acute: automatic short on /a/, /y/ and former short (o, e, ë, ū); free on rest.</td>
</tr>
<tr>
<td>Tone</td>
<td>After shortening of acute: double opposition between new short acute and former long circumflex.</td>
</tr>
</tbody>
</table>

functioning in at least Old Church Slavonic and Russian Church Slavonic in the Old Russian period;

gender: the three genders (Masculine, Feminine, Neuter) were retained, inherent (syntactic) in substantives and agreeing (morphological) in adjectives, pronouns and some numerals (1–4); Proto-Slavonic refined the Masculine group with subcategories of ±Personal and ±Animate;

adjectives: no change in gradation – positive, comparative and superlative; an added feature of ±definite in most (non-possessive);

pronouns: no change to the general range and type.