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THE MORPHOLOGY OF SLAVIC NUMERALS.

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Language and Literature, linguistics

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<th>Abbreviation</th>
<th>Term</th>
<th>Language</th>
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<tr>
<td>Acc.</td>
<td>accusative</td>
<td>ModCz Modern Czech</td>
</tr>
<tr>
<td>Anim.</td>
<td>animate</td>
<td>ModGk Modern Greek</td>
</tr>
<tr>
<td>cent.</td>
<td>century</td>
<td>ModPol Modern Polish</td>
</tr>
<tr>
<td>ComS</td>
<td>Common Slavic</td>
<td>ModR Modern Russian</td>
</tr>
<tr>
<td>Cz</td>
<td>Czech</td>
<td>ModScr Modern Serbocroatian</td>
</tr>
<tr>
<td>Dat.</td>
<td>dative</td>
<td>N. neuter</td>
</tr>
<tr>
<td>decl.</td>
<td>declension</td>
<td>Nom. nominative</td>
</tr>
<tr>
<td>e.</td>
<td>early</td>
<td>OČak Old Čakavian</td>
</tr>
<tr>
<td>F.</td>
<td>feminine</td>
<td>OCS Old Church Slavic</td>
</tr>
<tr>
<td>Gen.</td>
<td>genitive</td>
<td>OCz Old Czech</td>
</tr>
<tr>
<td>IE</td>
<td>Indo-European</td>
<td>OPol Old Polish</td>
</tr>
<tr>
<td>Inan.</td>
<td>inanimate</td>
<td>OR Old Russian</td>
</tr>
<tr>
<td>Instr.</td>
<td>instrumental</td>
<td>OScr Old Serbocroatian</td>
</tr>
<tr>
<td>Lith</td>
<td>Lithuanian</td>
<td>pl. plural</td>
</tr>
<tr>
<td>Loc.</td>
<td>locative</td>
<td>R Russian</td>
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<tr>
<td>lt.</td>
<td>late</td>
<td>Scr Serbocroatian</td>
</tr>
<tr>
<td>M.</td>
<td>masculine</td>
<td>sg. singular</td>
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<tr>
<td>ModČak</td>
<td>Modern Čakavian</td>
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LIST OF ABBREVIATIONS II: SOURCES

AI.
Akty istoričeskie. (Collected and published by Arxeografičeskaja komissija.)
St. Petersburg, 1841-1842.

AJu.
Akty juridičeskie ili sobranie form starinogo deloproizvodstva. (Published by Arxeografičeskaja komissija.)
St. Petersburg, 1838.

AJuZ.
Akty, otnosjasčiesja k istorii Južnoj i Zapadnoj Rossii. (Collected and published by Arxeografičeskaja komissija.)

AK.
Arxiv kn. F. A. Kurakina. Vol. II.
St. Petersburg, 1891. Vol. III.
St. Petersburg, 1892. Vol. IV.
St. Petersburg, 1893.

AKA.

Alb.

Alx H.
Alexandreida. Jindřichův Hradec fragment. Late 13th cent. [MS, quoted in Geb.]

AM.
Moscow-Leningrad, 1940. Part II.
Moscow-Leningrad, 1945.


Chir B. Sbírka lékařských rozprav neznámého apatykare frantiskánského. 1440. [MS, quoted in Vaz.]


Comest. Comestor. Hist. schol. Third quarter of 14th cent. [MS, quoted in Geb.]

Čud Nov Zav. Čudovský Nový zavet. 14th cent. [MS, reproduced photographically. Moscow, 1892.]


Háj.  Václav Hájek. Kronika česká. 1541. [MS, quoted in Geb.]

Hrad.  Tak zvaný Hradecký Rukopis. First half of 14th cent. [MS, quoted in Geb.]


Kol.  Excerpta z knih archivů Kolínských. 15th-19th cent. [MS, quoted in Geb.]

Krist.  Život Kristův. 14th cent. [MS, quoted in Geb.]

Kruml.  Sborník zvaný Krumlovský. First quarter of 15th cent. [MS at the Prague National Museum; quoted in Geb.]


Lavr let.  Lëtopis' po Lavrentievskomu spisku. (Published by Arxeografijskaja komissija.) St. Petersburg, 1872.


Mat Raz. Materialy dlja istorii vozmuščenija
St. Razina. Collected by A. Popov.
Moscow, 1857.

Maž. Vladimir Mažuranić. Prinosi za hrvatski
pravno-povjestni rječnik. Zagreb,
1908-1922.

Mikl Gram. Franz Miklosich. Vergleichende Grammatik
der slavischen Sprachen. 4 vols.
Vienna, 1868-1879.

MS 248.,
397.,
504.

Monumenta Serbica spectantia historiam
Serbiæ Bosnae Ragusii. Edited by
F. Miklosich. Vienna, 1858.

Nar prip. Narodne pripovijetke. [Collection,
quoted in Mar.]

Nest Bor Gl. Černorizec Nestor. Čtenje o žitii i o
pogubljenii blžennu strastoterpca
Borisa i Gleba. (Published in I. I.
Sreznevskij. Skazanie o svjatyx
Borisse i Glebe. Sil'vestrovskij spisok
XIV v.) St. Petersburg, 1860.

Novg Chron Sin. Pervaja Novgorodskaja letopis' po
Sinodal'momu spisku. [MS, quoted in Čer.]

Novg I let. Novgorodskaja letopis' po Sinodal'nomu
spisku. (Published by Arxeograficaskaia
komissija.) St. Petersburg, 1875.

NPK. Novgorodskija pisovaja knigi, izdannyja
Arxeograficeskaja komissieiu. Vol. IV:
Perepisnyja obročnyja knigi Selonskoi
Part III: 1552-1553. St. Petersburg,
1886.

Ol. Bible Olomoucká. 1417. [MS, quoted
in Vaz.]

Ostr ev. Ostromirovo evangeli 1056-1057 g.
[MS, quoted in Srez.; excerpts collated
by author with A. X. Vostokov's edition,
St. Petersburg, 1843.]
Otc. Životy Otcův. 15th cent. [MS, quoted in Geb.]

Otr nak. Otryv. nakaza upravitelju zaonežskix pogostov meždu 1598-1605 g. [MS, quoted in Bul.]


Prip. Pripovijetke. [Collection, quoted in Mar.]

Prix rasx kn. Prix.-rasx. knigi Boldina-Dorogobuzsk. mon. za 1585 g. [MS, quoted in Bul.]


Rad. Radnić. [Quoted in Bć.]

RIB. "Russkaja istoričeskaja biblioteka, izdavaemaja Arxeograficесkoi Komissieju." St. Petersburg. [A documentary series which began to appear in late nineteenth century.]

Sobranie gosudarstvennyx gramot i dogovorov, xranjaschixsja v Gosudarstvennoj kollegii inostrannyx del. Part I. Moscow, 1813.


Sbornik Štítnenský. 1450. [MS at the Prague National Museum; quoted in Geb.]

Sergej Stroev. Opisanie pamjatnikov slavjano-russkoj literatury, xranjaschixsja v publicnyx bibliotekax Germanii i Francii. Moscow, 1841.


Svjatoslavov Izbornik 1073 g. [MS, lithographically reproduced by Obščestvo ljubitelej drevnej pis'mennosti. St. Petersburg, 1880.]


Ukaz Manufaktur-kollegii 1752 g. [MS, quoted in Bul.]
Veršované skládání o božíem umučení. First half of 14th cent. [MS at the Rajhrad Library; quoted in Geb.]


Xoždenie igumena Daniila. [MS, quoted in Kuz.]


Život gospodina Jezusa Hrista. Venice, 1764.

Žaltář Wittenberský. Ca. last third of 14th cent. [MS, quoted in Geb.]

DIVISIONS AND SUBDIVISIONS OF THE DISSERTATION

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b. The scope of the dissertation and the approach adopted.

c. The term 'morphology' as used in the dissertation.

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PART IV : CONCLUSION

a. Comparison of the inventories of numerals in Old Russian and Modern Russian.

b. Comparison of the morphology of numerals in Old Russian and Modern Russian.

c. Comparison of the inventories of numerals in Old Czech and Modern Czech.

d. Comparison of the morphology of numerals in Old Czech and Modern Czech.

e. Comparison of the inventories of numerals in Old Serbocroatian and Modern Serbocroatian.

f. Comparison of the morphology of numerals in Old Serbocroatian and Modern Serbocroatian.

g. Conclusions.
INTRODUCTION

a. In this study an attempt is made to examine the morphological structure of a class of words, traditionally referred to as numerals, in three Slavic languages, representatives of the Eastern, the Western, and the Southern groups of the Slavic linguistic family, and to establish the general characteristics of their morphological development. The choice of Russian, Czech, and Serbocroatian was motivated not only by a practical concern for obtaining an optimally balanced representation of this linguistic family, but also by the presence of a number of interesting morphological features by which the individual languages selected now contrast with one another.

b. The primary concern of the investigation is a comparison of the morphology of numerals in the contemporary languages, Modern Russian, Modern Czech, and Modern Serbocroatian, but the synchronic approach applied in this type of comparison will be accompanied by a parallel diachronic treatment of the subject. In other words, the three contemporary languages will be
compared not only with one another but also each with its ancestor language, i.e., Modern Russian with Old Russian, Modern Czech with Old Czech, and Modern Serbocroatian with Old Serbocroatian.

c. The term morphology as used in this work refers first and foremost to inflection. The application of numeral bases in derivation is also treated, but merely marginally, and only as a part of the description of the contemporary Slavic languages (i.e., not of Old Russian, Old Czech or Old Serbocroatian). It will be noted that both the sections concerning the modern languages and those dealing with the ancestor languages contain also comments on the syntax of numerals. In the class of numerals, there exists an extremely close interconnection between morphology and syntax, and thus the inclusion of essential syntactic data in the discussion of the numeral morphology was deemed appropriate.

d. The Slavic numerals are characterized by a great variety of morphological and syntactic patterns, and, as has already been pointed out in c. above, by close ties between morphology and syntax. Unlike nouns or verbs, whose isolation as grammatical classes (parts of speech) presents relatively few problems, numerals cannot be easily isolated either morphologically or syntactically, or even by a combination of these two approaches.
Sometimes this is given as a reason why numerals should be denied the status of a separate class. It will be seen that it is the semantic criteria that are of preeminent significance in the isolation of numerals; without their consideration it is not possible to speak of numerals as a distinct part of speech. Numerals are usually defined as a type of quantifier normally combining with nouns or pronouns (e.g. ModR dva karandaša 'two pencils', ix pjatero 'the five of them') which sometimes may remain unexpressed, e.g. in elliptical or referential use (e.g. ja videl oboix 'I saw both [i.e., of them]'). They refer to an exact quantity (e.g. ModR pjat' čelovek 'five people'), an approximate quantity (e.g. ModR čelovek pjat' 'about five people'), an indefinite quantity (e.g. ModR neskol'ko čelovek 'several people'), the order of a member or members in a series or group (e.g. ModR on pervyj v klasse 'he is the first in the class'), a part or parts of a whole (e.g. ModR dve pjatyx vsex členov 'two fifths of all the members'), etc. The use of numbers in the function of verbalized algebraic symbols (i.e., in their abstract values, when they appear systematically without head nouns, e.g. '6 + 3 = 9') is generally considered as lying outside the scope of a grammatical treatment of numerals. Consequently, such entities as 'zero' (0) or 'infinity' (∞)
are also disregarded in a grammatical discussion. The division of numerals into various types usually yields the following categories:

1) **the cardinal numerals** (e.g. ModR три 'three');
2) **the ordinal numerals** (e.g. ModR первый 'first');
3) **the collective numerals** (e.g. ModR двое 'two, couple');
4) **the fraction numerals** (e.g. ModR четверть 'quarter');

occasionally a few more types may be established (see e., h., below).

e. In grammars of Modern Russian, there are found basically two approaches toward the treatment of numerals as a part of speech. The one which takes into consideration primarily the semantic criteria is represented by the contributing authors (but not the editor) of the Academy Grammar (V. V. Vinogradov et al., Grammatika russkogo jazyka, Vol. I: Fonetika i morfologija [2d ed. revised; Moscow, 1960], pp. 368-386.), by A. V. Isačenko (Gramatičeskij stroj russkogo jazyka v sopostavlenii s slovackim, Vol. I: Morfologija [2d ed.; Bratislava, 1965], pp. 20-25; Russische Sprache der Gegenwart [Halle/Saale, 1960], pp. 521-545.), by A. N. Gvozdev (Sovremennyj russkij literaturnyj jazyk: Fonetika i morfologija [3d ed.; Moscow, 1967], pp. 265-277.), and partly by L. A. Bulaxovskij (Kurs russkogo literaturnogo jazyka, Vol. I [Kiev, 1952], pp. 126 and 223-224.), who
perhaps more than the others stresses the importance of combining the semantic criteria with the morphological and syntactic criteria. The other approach, pioneered by V. V. Vinogradov in his significant monograph (Russkiij jazyk: Grammatičeskoe učenie o slove [Moscow-Leningrad, 1947], pp. 38-44, and 288-316.), is characterized by a strong orientation toward the morphological approach. Thus the ordinal numerals are not considered members of the class of numerals, since they are morphologically identical with the adjectives; similarly million 'million' and milliard 'billion' are excluded from this class, as they show the same morphological characteristics as the nouns, etc. V. V. Vinogradov has many followers, especially among the younger scholars (N. M. Šanskij, A. E. Suprun, etc.) who share his views in full or strongly incline toward his method. Among the more significant contributions of this group one could name: E. M. Galkina-Fedoruk, K. V. Gorškova, and N. M. Šanskij, Sovremennyj russkij jazyk: Leksikologija, fonetika, morfologija (2d ed. revised; Moscow, 1958), pp. 297-317, E. M. Galkina-Fedoruk (ed.), Sovremennyj russkij jazyk, Part II: Morfologija, sintaksis (Moscow, 1964), pp. 97-118, A. E. Suprun, O russkix čislitel'nyx (Frunze, 1959); A. E. Suprun, Imja čislitel'noe i ego izučenie v škole (Moscow, 1964).
The treatment of the class of numerals in the grammars of Modern Czech is at once more uniform and more traditional than that found in Modern Russian (see e. above). It is based essentially on a semantic approach, and the large variety of morphological paradigms is merely acknowledged, and no attempts are made to include, e.g. the ordinal numerals among the adjectives, or such cardinal numerals as sto 'hundred' or tisíc 'thousand' among the nouns, even though their morphology alone would make such a distribution possible. In contrast to the Modern Russian grammars which include among the indefinite numerals the quantifiers mnogo 'many', malo 'few', stol'ko 'so many', skol'ko 'so many', neskol'ko 'several, a few' (the Modern Czech equivalents being, respectively: mnoho, málo, tolik, kolik, několik), the Czech grammars often include here also the expressions všechen/všechna/vše(chno) 'all, entire', and sometimes also (the archaic) všaký/všaká/všaké 'every' (see Václav Vážný, Historická mluvnice česká, Vol. II: Tvaroslovi, Part 1: Skloňování [Prague, 1964], pp. 145-159; B. Havránek and A. Jedlička, Česká mluvnice [Prague, 1960], pp. 181-189.). The last mentioned grammar also established an (optional) class of distributive numerals (p. 183), in which the authors include such syntactic constructions as po dvou 'two apiece', po několika 'several apiece', etc.
g. The same traditionalism that prevails in the grammars of Modern Czech with regard to the treatment of numerals may be observed in the grammars of Modern Serbocroatian. Here, however, in contrast to Modern Russian and Modern Czech, the indefinite numerals (e.g. ModR mnogo 'many', ModCz několik 'several', etc.) are systematically excluded from the class of numerals, and only quantifiers based on definite numbers are considered. Words such as toliko 'so many', mnogo 'many', etc., are usually included among the adverbs, while the related modifiers kolik(i) 'how numerous', mnog(i) 'numerous' are assigned to the adjectives. The repertory of the class of numerals is in certain grammars slightly larger, as some authors (e.g. Antoine Meillet and André Vaillant; Vilim Frančić; Ivan Brabec, Mate Hraste, and Sreten Živković) include among numerals also such syntactic constructions or derivations as po dva 'two apiece', sedam puta 'seven times', and peterostruk 'quintuple', labeling them 'distributive' (di.jelni), 'accretive' (priložni), and 'multiplicative' (umnožni) numerals, respectively (see I. Brabec, M. Hraste, and S. Živković, Gramatika hrvatskosrpskoga jezika [7th ed.; Zagreb, 1966], p. 108.).

h. For the purposes of the present study, which concentrates on the inflectional morphology, the class
of numerals has been delimited to contain:

(1) Quantifiers that express a quantity that is exact (e.g. ModR desjat' studentov 'ten students'), approximate (e.g. ModR studentov desjat' 'about ten students'), or indefinite (e.g. ModR mnogo studentov 'many students'). Such quantifiers must normally be followed by count nouns, or pronouns (never by mass nouns or abstracts in their basic function). Nonetheless, these head nouns may be omitted in cases of ellipsis, or substantivization of the quantifiers (e.g. ModR počemu ty vzjäl tol'ko pjat'? 'why did you take only five? [i.e., objects already mentioned]', semero odnogo ne ždut 'seven (people) do not wait for one (person); the majority rules'). These nouns (pronouns) function as the head nouns of the (cardinal, collective, and indefinite) numerals, and enter with them into various syntactic relations.

(2) Quantifiers that describe an exact (rarely approximate or indefinite) order in a series or a group (e.g. ModCz první 'first'), a part or parts arrived at through a division of a whole (e.g. ModCz třetina 'a third'), the number of types of an object (e.g. ModCz dvoují 'of two kinds'), or the composition of an object in terms of the number of its components (e.g. ModCz čtverý 'fourfold'). The quantifiers of this
group (which includes the ordinal, the fraction, the
generic, and the multiplicative numerals) show a greater
freedom in combining with nouns than the quantifiers in
Group 1: they may be followed by both count and non-count
nouns (excepting abstracts in their basic function).
Their head nouns may also be omitted, namely when the
quantifiers function predicatively (e.g. ModCz Karel je
vždy první 'Charles is always first'), in instances of
ellipsis (e.g. ModCz přišel po čtvrté [i.e., hodině]
'he came after four [i.e., o'clock]'), in referential
use (e.g. ModCz zapomněli jsme na to třetí 'we forgot
about the third [i.e., thing]'), or when the quantifier
is substantivized (e.g. ModCz snědl celou třetinu
'he ate a whole third').

Certain words that function as numerals have also
additional, syntactically, and frequently also semantic­
ally, sharply differentiated functions, e.g. as adjectives
or adverbs (e.g. ModR ona zde žije vodě 'she lives here
alone'; brat nemnoho ustal 'brother is slightly tired').
Such secondary functions of lexical items that primarily
occur as numerals will not be treated in this study.
PART I

CHAPTER 1: CARDINAL NUMERALS IN RUSSIAN

1.1.1. The cardinal numeral *odin* 'one' had in OR many characteristics of an adjective: it was declined pronominally (like the demonstrative *ta/te/to* 'this'; it, too, lacked the definite forms of the type *dobr*-j 'good'), was capable of expressing the gender distinction (*odim*, M., *odbn*, F., *odbo*, N.), and was agreed with its head noun in gender, case, and number (as a cardinal numeral it appeared in the singular only, but the plural form was also used, cf. 7.1.1.). Except for Nom. sg. M., which was formed on the full-vowel stem exclusively (*odín*), all the forms of this numeral could be produced either on the reduced-vowel stem (*odbn*) or the full-vowel stem (*odin*):

i tobe, brate, poslati ko mně na pomoc svoi dva syna da dva brataniča, a syna ti odnogo u sebja ostaviti
'and you, brother, should send me your two sons and two nephews in succor, and keep one son with you'
(Dog gr Vas Dm.; 1399) Srez. III, 872;

*odinomu bě imja Askolđa*
'one was called Askold'
(Novg Chron Sin.; 13th cent.) Čer. 233.
1.1.2.a. The declension of *odin* 'one' in ModR shows very insignificant changes in comparison with the state in OR. There is no longer the free variation of stems, as known in OR, and instead of two stems, three appear: \{*odin*-\}, \{*odn*-\}, and \{*odn1*-\}. The last one is restricted to Instr. sg. non-F. (and pl., cf. 7.1.2.), \{*odn*-\} used in all other cases of the singular which do not end in a morphological \(-\emptyset\), and \{*odin*-\} used before a \(-\emptyset\). Thus this situation is very similar to the alternation of the inserted-vowel stems (containing the vowels \(e\) or \(o\)) with the basic stems (those without the inserted vowels) common, e.g., in the nominal declension e.g. *otec* 'father', Nom. sg., *kusok* 'piece', Nom. sg., vs. *otca*, Gen. sg., *kuska*, Gen. sg.), except that additional complication comes in Instr. sg. non-F., due to the earlier incursion of the soft endings into the hard-stem paradigms. It is interesting to note that exactly the same distribution of the hard and the soft stems occurs in ModR in the declension of the demonstrative *etot/éta/eto* 'this'.

b. In word derivation, the cardinal numeral *odin* 'one' may assume three forms: *odin*-, *odno*-, and *edin*-. The last represents the OCS form of the numeral 'one' which in OR was frequently used in texts with marked Church Slavonic influence; later, in ModR, it was
utilized especially in derivation of abstract terms. The form odno- is the most productive, e.g. odnoobraznyj 'monotonous', odnodnevnyj 'one-day', odnostoronniy 'unilateral', odnorodnyj 'uniform'; odin- and edin- occur in a limited number of derivations, e.g. odinočka 'one-man cell', odinarnyj 'single'; edinstvo 'unity', edinica 'unit'.

1.2.1.a. The history of the numeral dva/dvě 'two' is closely connected with the existence of the dual number in OR. The adjectival character of this numeral is best seen in the oldest monuments: it was declined like the demonstrative to 'this' in the dual, agreed with its own head noun, and showed gender distinction, although not as clearly as odin 'one'. There was syncretism of the F. and N. genders in the direct cases (dva, Nom./Acc., M., dvě, Nom./Acc. F./N.) and full syncretism of all three genders in the oblique cases, compounded by extensive syncretism of the dual number cases (e.g. dvoju, Gen./Loc., dvěma, Dat./Instr.). With the gradual weakening of the dual, there occurred a reinterpretation of, e.g., dva brata 'two brothers', Nom. dual, as dva, Nom. sg., and brata, Gen. sg. Since Gen. sg. of masculines and Gen. sg. of neuters were identical, there soon developed a tendency to replace the original neuter form of the numeral (dvě) by that form
which was associated with those nouns whose Gen. sg. (originally: Nom. dual) ended in -a, namely diva. This process apparently developed in the following stages: the original дзвě selē 'two villages' remained common as long as дзвě ženě 'two women' was the only possibility. But when дзвě žенě → дзвě ženy, as a result of the reinterpretation of брата in дзва брата as Gen. sg. (i.e., when the dual number began to disintegrate), дзвě sela → дзва sela, so that the masculines (дзва брата) and the neuters (дзва sela) became identical in both components, and a new syncretism (M.=N.) arose.

b. The Gen./Loc. form дзвоју underwent an early interference from the nominal declension, and the form дзву soon became a common variant (of the original дзвоју as well as of the later innovation dvux) until as late as the middle of the eighteenth century:

\[
\text{poslat' is Kolegii kanceljarista (imja) i s nim dvu čelovek saldat s ynstrukcieju 'to send from the College the clerk (name) and with him two soldiers with instructions' (Uk Man Kol.; 1752) Bul. 196.}
\]

The form dvux, combining in itself the influence of the dual of the nominal declension as well as that of the plural of the pronominal declension, is recorded in Domostroj:

\[
v \text{dvux six glaviznax 'in these two chapters' (Dom Or.; 16th cent.) Bul. 196.}
\]

It started to gain in popularity, especially in the
seventeenth and the eighteenth centuries, and became the predominant variant thereafter.

c. The original form of Dat./Instr. дъвема was likewise exposed to contamination from various sources.

In the function of Dat. there existed also the form д(а)вемъ (on the analogy of третъ < третъ 'three'):

\begin{quote}
i изошло дорогою до монастыръя
deneg sebe da slugamъ dvemъ
'and on the way to the monastery
he himself and the two servants spent (their) money'
\end{quote}

(Prix rasx kn.; 1585) Bul. 197*

This form was subsequently displaced by dvum, which eventually prevailed. In Instr. there occurred a development from дъвема through дъвемъя to dvumъя, with дъвемъя competing with dvumъя over a considerable period of time:

\begin{quote}
i без менъя снaxъ моju iz dvoriška
vzjal z д(в)emъja syny
'and he took away my daughter-in-law
with two sons from the miserable little farm in my absence'
\end{quote}

(Xoz Moroz., I, No. 27; 17th cent.) Bul. 197.

1.2.2.a. In the contemporary language, we see a generalization of the desinential vowel -у- in the oblique cases, just as in the adjectival paradigm the vowel -ъ- appears in the plural of the hard declension (cf. двуx, двум, dvumъя with добryx, добрым, dobrymъ 'kind', Gen./Loc., Dat., and Instr., respectively). The original syncretism of the dual, Gen.=Loc., has been preserved by
the numeral *dva/dve* 'two', possibly because it is supported by the same syncretism in adjectives, e.g. *dobryx* 'kind', Gen./Loc., while Dat. and Instr. split, likewise on the model of adjectives and pronouns in the plural: Dat. appearing with a final consonant (*-um*), Instr. with a final vowel of a dual origin (*-umja*) in their desinences. The palatalized *-m- of the Instr. *dvumja* /dvum'a/ was plausibly explained by August Leskien (cited in Bui., p. 197) as a result of the influences of the dual nominal ending (*-ma*) and the plural nominal ending (*-mi*) which crossed in this case. In the two direct cases, Nom. and Acc. Inan., the innovated syncretism (M./N. vs. F.), discussed above (1.2.1.a.), is preserved.

b. In word derivation, the numeral 'two' is found in three variants: the unique *dvoju-*, appearing in *dvojurodnyj brat* 'cousin', and the common *dvu- and dvux-*, e.g. *dvulikij* 'double-faced', *dvurušnik* 'double-dealer', *dvustoronnjij* 'bilateral'; *dvuxmestnyij* 'having two seats', *dvuxmotornij* 'twin-engine', *dvuxnedel'nyj* 'two-week'.

1.3.1.a. The cardinal numeral *tri* 'three' was in OR morphologically a substantive (*i-stem, plural only*) and syntactically, an adjective. There apparently existed, just as did in OCS, two forms in Nom./Acc., *trzje* for M.
and tri for F. and N., but this is an assumption only, since not even the oldest monuments devoid of Church Slavonic influence show such a gender distinction, and tri predominates. Nor is there, in these monuments, any trace of the expected Gen. form *trej (*trej). The earliest-recorded form is the one extended from Loc. (trex). Another form of Gen., modeled on Gen. of dva/davě 'two', is treju:

\[
\text{treju angel}\ \\
\text{'of the three angels'}
\]

(Cud Nov Zav.; 14th cent.) Bul. 199.

b. The influence of the dual asserted itself also in Instr. The original form trami soon gave way to the innovation tremja (trema also existed, but is extremely rare). An interesting variant treimi, modeled on oběimi 'both', Instr., is of similarly rare occurrence. In some dialects, the influence of the dual went even farther, and brought about syncretism of Instr. and Dat. Examples of this phenomenon are not numerous but even so they are instructive for the understanding of the close relationship of the numerals dva/davě 'two' and tri 'three' (as well as četyre 'four') in the early period of OR, when the system of three grammatical numbers was being simplified, and a new system of two numbers, singular and plural, was emerging:
ego dětemъ, trema synovljamъ, polovina života
'to his children, the three sons, one
half of the property should go'
(AJu. 419–420; 1612) Bog. 86;

a vklady i sorokousty . . rozdati prikazyvaju . .
Antoneju, da Ovdokimu . . da . . . Fedoru . .

vsemъ tremja vmesno
'I order to distribute . . . the contributions
and the fees for forty-day requiems . . . among
Antonej and Ovdokim, . . . and . . . Fedor, . .
among all the three together'
(TA. 141; 1624) Bog. 86.

c. Eventually, the same development as noted in
Instr./Dat. of dva/dve took place. The syncretism of
these two cases appeared to be too burdensome, and
therefore only one of the cases adopted the ending -mja,
namely Instr. In Dat., the original form (trem < třemъ)
was generalized. As pointed out in the previous section
(1.2.2.a.), the declension of adjectives served as a model
on which the declension of dva/dve developed; the
decension of tri followed this pattern.

1.3.2.a. The declensional paradigm of tri 'three' in
ModR is very similar to that of dva/dve 'two'. The only
remainder of the influence of this number is found in
Instr. tremja. The other cases (Nom./Acc. tri, Gen./Loc.
trěx, and Dat. třem) have been discussed above (1.3.1.;
see also 1.2.2.a.). Syntactically, the numeral tri shows
the same peculiarity as dva/dve, namely that its head
noun appears in Gen. sg. if the numeral itself is in Nom.
or Acc. Inan. In the oblique cases (Gen., Dat., Instr. and
Loc.) and also in Acc. Anim. (since it syncretizes with Gen.) there is complete grammatical agreement: the head noun appears in the plural form of these respective cases.

b. In word derivation the numeral 'three' appears in the form *tréx-, and only rarely in the forms *tre- and *tri-, e.g. *tréxaktynj 'three-act', *tréxclennyj 'trinomial', *tréxmneryj 'three-dimensional'; *treugol'nik 'triangle'; *triždy 'three times'.

1.4.1. The cardinal numeral četyre 'four' shows in OR many similarities of development with the numerals tri 'three' and dva/dvé 'two'. It was likewise a noun (consonant stem; plural only) in its morphology, and an adjective in its syntax. The nominative četyri, originally apparently limited to the F. and N. genders also existed, but in this numeral (unlike in tri) the M. form became predominant. Apart from texts with a strong Church Slavonic influence, the gender distinction is non-existent, and the expected Gen. *čeetra (*četyra) is not found. The morphology of this numeral was gradually reformed, and the substantival characteristics were combined with certain adjectival features, just as in dva/dvé and tri, particularly the syncretism Gen.-Loc. The syncretism Dat.-Instr. (čeetra) is even rarer than the same syncretism in the declension of the numeral tri:
The Instr. of četyre was exposed also to the influence of the higher numerals (i.e., пять 'five' and шесть 'six'), under which the form četyryju developed. It was regarded as a literary form as late as the last third of the nineteenth century (F. I. Buslaev's view as quoted by Bulaxovskij: Bul., p. 199).

1.4.2.a. In the ModR norm, the declension of četyre 'four' stabilized on forms which show parallels with the ModR declension of два/dve and три. Thus Gen. and Loc. četyřex, Dat. četyřem, Instr. četyř'mja. This last form is interesting in that it preserves the palatalized stem: it is possible that it is the product of the syncopated (allegro) version of the parallel form četyremجا (frequent, e.g., in Deržavin) rather than the direct descendant of četyry(m)ja, although it is not necessary to accept this hypothesis. The hardening of r' before a labial in OR is a rather late phenomenon, and the paradigmatic support of the soft stem certainly contributed to the preservation of the palatalization throughout the declension.

b. In word derivation, the numeral 'four' appears in the form četyřex-, e.g. četyřexugol'nik 'quadrangle',

nam: četyrmja bratom, s dvumja sestriškami
'to the four of us brothers with two little sisters'
(PPM. 22, 23; 1643) Bog. 88.
The declension of the numeral *pjatъ* 'five' in OR was identical with the declension of i-stem feminines, and the numeral itself had certain syntactic characteristics of a substantive, e.g. its modifier was in the singular if the numeral was in a direct case (Nom. or Acc.):

\[ i \text{ na druguju pjatъ ĉelovek veleti dati na senokos lug} \]
\[ 'and the other five people are to be ordered to have the meadow mowed' \]
\[ (Carsk gram.; 1601) Bul. 199. \]

Under the influence of *divēma*, *tremǐa* there appeared variants of the Instr. *pjatъju*, namely *pjatъma*, *pjatъmjа* which, at one time, were extended to Dat. as well:

\[ a \text{ v sude veleti s soboju byti tex pogostov, starostam i celoval′nikom, i volostnym lutčim ljudem, ĉelovekom pjatъmjа ili šestъmjа} \]
\[ 'and the village elders and the tax collectors of those parishes, and the noblemen of the district, five or six persons, should be ordered to be also present in the court of law' \]
\[ (Otr nak.; 1598-1605) Bul. 200. \]

With the development of the new syncretism in the plural of animate nouns Acc.-Gen., the form *pjatъ* frequently appeared in the function of Acc.:

\[ i \text{ živyx vorovskix ljudej na tom boju vzjali pjatъ ĉelovek} \]
\[ 'and in this battle, five live Vorov people were captured' \]
\[ (Mat Raz. II, No. 28; 16th cent.) Bul. 200. \]
1.5.1.2. The numeral šestъ 'six' was similar in its morphology (as well as syntax) to the numeral pjatъ 'five' (see 1.5.1.1.). The indirect cases (except Instr.) are frequently found (as late as the seventeenth century) in the form šti. It is to be assumed that the loss of the stem vowel e in forms with the ending -i was the result of the influence of words in which this e was the reflex of è (e.g. ves' 'all, entire', Nom. sg. M., vs. vsja, Nom. sg. F.), i.e., šestъ > šti > šti:

vo šti mëškaxъ
'in six bags'
(AI. III, 404; 1645) Bog. 91.

The use of šesti (šti) as Acc. when an animate noun followed was at one time as common as the use of pjati in this environment (cf. 1.5.1.1.). The numerals semъ 'seven', (v)osmъ 'eight', devjatъ 'nine', and desjatъ 'ten' had an equally common distribution of -i in this function.

1.5.1.3. The morphology and syntax of the numeral semъ 'seven' also follow the pattern discussed in connection with the numeral 'five' (1.5.1.1.). In spite of the paradigmatic support rendered by the oblique cases, the palatalized stem of this numeral was frequently depalatalized in final position (i.e., before the -ъ morpheme), mainly because labials were especially prone to depalatalization:
i vsego 7 sobolej
'and seven sables, altogether'
(AI. 281; 1629) Bog. 91.

The forms sedmъ, sedmi also occur, but they are to be regarded as obvious Church Slavonicisms, as they are restricted to monuments with a marked Church Slavonic influence.

1.5.1.4. The forms of the numeral (v)osmъ 'eight' were analogous to those of pjetъ 'five', šestъ 'six', and semъ 'seven'. There was a similar depalatalization of the final stem-consonant as in semъ (1.5.1.3.):

sbežali . . . vosmъ čelovekъ
'eight people . . . escaped'
(AI. II, 297; 1609) Bog. 92.

The initial (prothetic) consonant was absent, as a rule, in the oblique cases, but rarely in the Nom./Acc. form, as in this case the o was under stress:

medu po osmъ pudъ Rezanskixъ
'eight Ryazan' poods of honey apiece'
(AI. II, 108; 1607) Bog. 92.

1.5.1.5. The numeral devjatъ 'nine' had forms which closely followed those discussed in 1.5.1.1. Under the influence of dvumja there appeared also the form devjatъmja:

za dvadcatъ za devjatъmja čelovekъ puškari
'aftet twenty-nine artillery men'
(PKR. 3; 1616) Bog. 92.

As pointed out in Unbegaun (Unb., pp. 417-418), the
numeral *devjatá* was frequently used as a unit (just as the words 'decade' or 'dozen' are used in English) but exclusively in Russian diplomatic correspondence with the Crimean Tatars. It seems to be an example of adoption of a foreign system based on the number 'nine', and its occasional use as an auspicious, even magic, unit. It is interesting to note that no written examples exist of the use of this numeral as a unit for higher numerals; the third 'ninth' is the upper limit:

`a së nimë by esë prislët ko mënë devjatë krečatovë, da devjatë portišcë sobolej, da tretišu devjatë prislë gornostaevë.`  

'and with him you should send me nine gerfalcons, and nine bags of sable furs, and send another nine bags of ermine furs'  

(DSK. II, 445; 1517) Unb. 418.

The expression *tridevjaté* (*tridevjabt*) is often found in Russian and Belorussian fairy tales, e.g. za *tridevjabt* zemel', v *tridesjamat carstve*. P. S. Kuzneцов (Kuz., p. 176) argues that the numerical value of *tridevjabt* is 'twenty-nine', and not 'twenty-seven', that it is an example of the so-called deductive counting: 'beyond twenty-nine lands, in the thirtieth kingdom' (cf. *na sed'moj desjatok pjatý* used in the meaning *šest'desjat pjatý* 'sixty-fifth').

1.5.1.6. Although the numeral *desjatá* 'ten' historically belonged to a different declensional paradigm than the preceding five numerals (i.e., *pjatý, šestý, semý,*
osmb, devjatb), namely to masculine consonantal stems, not even the earliest records show the expected Instr. *desjatm, and the Loc. desjate is rare. It is only in the compounded numerals (especially the second decade, cf. 1.6.1., or the even decades, cf. 1.7.1.1.-1.7.1.8.), formed on the numeral desjatb that some of the peculiarities of the original, consonantal-stem, morphology of this numeral are preserved.

1.5.2.1. The morphology of the numeral pjetb 'five' in ModR shows no changes in comparison with the state in OR, and the declension of pjetb is thus identical with the III declension. The stress pattern of the numeral pjetb 'five' (as well as of the following five numerals to be discussed in 1.5.2.2.-1.5.2.6.) is simple: before -b the stress falls on the first syllable of the stem; elsewhere it falls on the desinential vowel. On the syntactic level, however, there is a significant contrast between ModR and OR. In OR the modifier of pjetb behaved like a modifier of a feminine noun (e.g. ta pjetb 'these five', Nom., toj pjeti, Gen., tu pjetb, Acc.) whereas in ModR it appears in the plural forms of the appropriate cases (e.g. te pjetb', Nom., tex pjeti, Gen., te/tex pjetb', Acc.). The substantival character of the numeral is thus preserved now only in the sphere of morphology, while the syntax of pjetb' (as well as of
other higher numerals) helps to establish this type of words as a separate form class.

1.5.2.2. The morphology of the numeral șest' 'six' is identical with that of the preceding numeral (1.5.2.1.).

1.5.2.3. Likewise, the numeral sem' 'seven' shows identical morphological (as well as syntactic) features as those discussed in 1.5.2.1.

1.5.2.4. In ModR, the entire declension of the numeral vosem' 'eight' generalized the form beginning with the prothetic consonant v- (which in OR was characteristic only for Nom./Acc.). In the two cases ending in -ĝ (Nom. and Acc.), and optionally in Instr., there developed a secondary vowel e in the stem. On the model of a common morphophonemic alternation e_0 (which is historically based on the loss or the full vocalization of the so-called reduced vowel e, depending on the position of the e within the word) the ModR numeral vosem' 'eight' alternates its two stems, vosem'- and vos'm'-; the former appears before -ĝ, and optionally before -ĵ-, as in the variant of Instr. vosem'ju, while the latter appears elsewhere, including the more common variant of Instr. vos'm'ju (cf. Gram rus jaz., p. 374). A similar alternation of stems is found in the declension of the noun ljubov' 'love'; there, however, Instr. permits only
the stem with the inserted vowel (o in this case): 
\textit{l}jubov'ju, while the distribution in the other cases of the singular is analogous to that of \textit{vosem'}: \textit{l}jubov' in Nom./Acc. and \textit{l}jubv- in Gen., Dat., and Loc. Used as a personal name (\textit{L}jubov' 'Amy'), this noun employs exclusively the stem with the vowel o (e.g. \textit{L}jubovi, Gen., Dat., Loc.; \textit{L}jubov'ju, Instr.). The desinences of \textit{vosem'} are the same as those discussed in 1.5.2.1.

1.5.2.5. The morphology of the numeral \textit{dev}jat' 'nine' is identical with that of \textit{pjat'} 'five' (1.5.2.1.).

1.5.2.6.a. The morphological peculiarities of the numeral \textit{desjat'} 'ten' were lost quite early, as pointed out in 1.5.1.6., and thus in ModR this numeral is declined like, e.g., \textit{devjat'} 'nine' (1.5.2.5.).

b. In word derivation, the numerals 'five', 'six', 'seven', 'eight', 'nine', and 'ten' appear in the oblique-case forms, i.e., \textit{pjati-}, \textit{\c{s}esti-}, \textit{semi-}, \textit{vos'mi-}, \textit{devjati-}, and \textit{desjati-}, e.g.\textit{pjatiletka} 'five-year plan', \textit{pjati-kratnyj} 'fivefold', \textit{\c{s}estigrannik} 'hexahedron', \textit{\c{s}estidnevka} 'six-day week', \textit{semimil'nyj} 'seven-league', \textit{vos'mivesel'nyj} 'eight-oared', \textit{devjatiletni}j 'nine-year old', \textit{desjatiletor'e} 'decathlon'.

1.6.1. The first nine numerals of the second decade in OR developed as compounds which consisted of the
cardinals Odin 'one' through Devjat 'nine' and the prepositional phrase Na desjate 'upon ten', e.g. Tri na desjate 'thirteen', Devjat na desjate 'nineteen', etc. Originally, only the first part of this compound was declined, while the prepositional phrase remained unchanged. Only later, when the prepositional phrase was reduced to the shape -nadcat', there came a transitional period in which both components were declined. The next step was the loss of the declension in the first component (i.e., tri-, devjat-, etc.), and the tightening of the structure of the compound. Then the declension shifted to the second part -nadcat' (realized as [nacet'] or [necat']; the quasi-historical spelling persisted and eventually prevailed) whose structure was very similar to that of pjat', šest' or desjate, and the endings of these numerals were subsequently generalized for the entire compound. With the regard to the reduction of the number of syllables in the compound (e.g. de/vjat'/na/de/sjat'/te 'nineteen' to de/vjat'/nad/cat'), the period after the loss or the vocalization of ă and ă is considered), it is not difficult to understand why this process took place. Words consisting of more than four syllables were too unwieldy (and this was especially true of words of such a high frequency as found in the second decade), and certain simplifications had to be expected.
1.6.2.a. In ModR, the numerals of the second decade (through 'nineteen') are preserved in the syncopated forms (e.g. devjatnadcat' [d'iv'itnácet'] 'nineteen') and, consequently, their original composition is somewhat obscured. It deserves mentioning that while in odinnadcat' 'eleven' the masculine form of the basic numeral was adopted, in dvenadcat' 'twelve' and trinadcat' 'thirteen', it was the feminine/neuter form which prevailed. Furthermore, in the case of četynadcat' 'fourteen', and possibly also of trinadcat' 'thirteen', if we accept tri as coming from trije, not only the prepositional phrase (-nadesjate > -nadesjatě > -nadcat') but also the basic numeral (e.g. četysre- > četys-) were abbreviated. In vosemnadcat' 'eighteen', the form with the prothetic consonant was generalized. Originally, this consonant appeared only in certain cases of the basic numeral (v)osmě 'eight', as mentioned in 1.5.2.4. The morphology of the numerals under discussion in this paragraph is identical with the morphology of the numerals discussed in 1.5.2.1. The only difference observed concerns the stress. Two numerals, namely odinnadcat' 'eleven' and četynadcat' 'fourteen', are stressed on the antepenultimate, while the remaining numerals of this group stress their penultimate syllable.

b. In word derivation, the numerals of the second
decade, 'eleven' through 'nineteen', appear in the oblique-case forms, e.g. odinnadcatičasovoj 'eleven-hour', pjanadcatimestnyj 'with fifteen seats', vosemnadcatiletnej 'eighteen-year old'.

1.7.1.1. The structure of the ModR numeral for 'twenty' bears witness to the original gender of the OR numeral desjata 'ten'. The underlying form is diva desjati (i.e., 'two tens'): the masculine form of the numeral for 'two' was followed by the dual of the numeral for 'ten'. The further development of the latter part of the compound was similar to that found in the numerals for 'eleven' through 'nineteen', -(na)desjate. The trisyllabic -desjati in this form was eventually reduced to the monosyllabic -cat' (where [c]<[ts]<[t's']<[d's']<[d'es']], and the former declension of both parts (e.g. divēma desjatam, Dat.) was replaced by the declension of the numeral as one word (e.g. dva(d)cati, Dat., Gen., Loc.).

1.7.1.2. Similarly, the ModR numeral tridcat' 'thirty' developed from the forms trije desjate and tri desjati, i.e., it has a structure analogous to the form dvadcat' 'twenty'. The older of the two versions (trije desjate) has the masculine form of the numeral for 'three' followed by Nom. pl. of the numeral desjata 'ten', while
the younger version has the feminine form of the numeral for 'three' plus the Nom. dual of the numeral desjatъ 'ten'. It is also possible to interpret 'ten' in this last form (-desjati) as Gen. sg., for it occurs at a time when desjatъ was no longer treated as a masculine but as a feminine, and the dual number began to be confused with the dual. Just as dava desjati 'twenty', tri desjati 'thirty', too, declined its both components, but later adopted the simplified declension of the type dva(d)cati, Gen., Dat., Loc.; dva(d)catъju, Instr.

1.7.1.3. The earliest records show that the OR numeral for 'forty' was similarly structured as the two lower decades (dava desjati and tri desjati): some of the eleventh- and twelfth-century monuments have četyre desjate and četyre desjati in this meaning. But as early as the end of the thirteenth century, the form sorokъ appeared, and this form eventually ousted the compound četyre desjati (see also 1.7.1.7.b.). It is very likely that the origin of the innovation lies in the fur-trading industry. The term sorokъ was used for a bag in which forty pieces of furs of small animals, such as squirrels or martens, were stored, and fur transactions were calculated in terms of such bags. Another, slightly less convincing etymology of sorokъ is the speculation that it is a loan word from the Greek
The OR numeral for 'fifty' was a compound, but its structure was markedly different from that of the lower decades. The numeral desjatə was treated as any other head noun of the numeral pjatə 'five', i.e., it appeared in Gen. pl. It is interesting to note that the original consonantal-stem ending in Gen. pl of desjatə was preserved here: the numeral for 'fifty' appeared as pjatə desjatə in OR. In this compound numeral, originally only the first part (pjatə) was declined. But beginning with the seventeenth century, also the second part (desjatə) is found declined. The endings of both parts were identical (e.g. pjati desjatiti, Gen., Dat., Loc.; pjati desjatiju, Instr.). In Instr., however, there also existed the form pjati desjatiju. Furthermore, the second part of the compound (desjatə) could also occasionally adopt plural endings, e.g. -ix for Loc., -mi for Instr.:

\[s\; pjati\; desjatymi\; tysjačmi\]
'with fifty thousand'

(VP. I, 193; 1704) Bog. 191.

The decades 'sixty' through 'eighty' were declined on the same principle, and with similar peculiarities as those discussed above:
'in eighty companies' 

The same structure as that of п'ят' дес'ят' 'fifty' is found in the following three decades: сьеть дес'ят' 'sixty', семь дес'ят' 'seventy', and (в)осьмь дес'ят' 'eighty'.

1.7.1.6. The OR form of the numeral for 'seventy' was семь дес'ят' (see also 1.7.1.4. and 1.7.1.5.).

1.7.1.7. The OR form of the numeral for 'eighty' was (в)осьмь дес'ят' (for the initial consonant in certain forms see 1.5.1.4.; for morphology see 1.7.1.5. and 1.7.1.4.).

1.7.1.8.a. The more frequent, and apparently older variant of the OR numeral for 'ninety' was дев'ят' дес'ят'. Of a somewhat later date, at least judging by its occurrence in OR monuments, was the form дев'яносто, which eventually ousted дев'ят' дес'ят'. It is not very clear since when and for how long these two forms coexisted in OR. Although дев'яносто is not recorded before the fourteenth century (Bul. 204), the fact that both in Belorussian and Ukrainian the equivalents of 'ninety' develop from дев'яносто rather than from дев'ят' дес'ят' could indicate that дев'яносто is older than the written records suggest.
b. The morphology of *devjatb desjatb* was identical with that of *pjalb desjalb* 'fifty' (1.7.1.4.), while *devjanosto* was declined like *sito* 'hundred' (see 1.9.1.). The origin of *devjanosto* is beyond any doubt connected with the numerals *devjatb* 'nine' and *sito* 'hundred', and the underlying form could have been the construction *devjatb do sito* 'nine (digits) to one hundred', i.e., it described the point from which there are nine digits ('91'-'99') remaining to another significant point, namely 'one hundred'. The change of *-do-* into *-no-* may be seen here as an instance of dissimilation. One circumstance that may be regarded as advantageous for the spread of *devjanosto* was the relative brevity of this variant of the numeral 'ninety', especially in the oblique cases (e.g. *devja/no/sta*, Gen., later also Dat., Instr., Loc., mere four syllables, as compared to the six syllables of *devja/ti/ de/sja/ti*, Gen., Dat., Loc., or *devjatb/ju/ de/sjatb/ju*, Instr.)

Moreover, the replacement of *devjatb desjatb* by *devjanosto* might have been facilitated by two other factors: the first being the great phonetic similarity of the two components (especially in the oblique cases where both parts had final palatalized consonants before the desinences, e.g. *devjatb desjatb*, Gen., Dat., Loc.), and the second being the adjacent position of these
two phonetically similar components, which could have created ambiguities of meaning, e.g. st devjatju desjatju lošadimi might have been taken to mean either 'with ninety horses' or 'with nine or ten horses', i.e., these two numerals could have been construed as a compound numeral or as an expression of an approximate quantity (see also 1.9.2.).

1.7.2.1. The ModR form of the numeral for 'twenty' is dvadcat'. It is, together with tridcat' 'thirty', a much more compact compound than the decades p'jat' desjat through yosem'desjat (see 1.7.2.4.-1.7.2.7.): it is declined as a single word, and the endings are those of the III declension. The stress is on the first syllable if the desinence cannot carry stress (i.e., when the desinence is realized as -Ø), and on the desinence if it can carry stress (e.g. dvádcat', Nom., Acc., but dvadcati, Gen., Dat., Loc., and dvadcat'jú, Instr.).

1.7.2.2. Tridcat' 'thirty' has the same morphological characteristics as those of 'twenty' (see 1.7.2.1.). Its stress pattern likewise coincides with that of dvadcat'.

1.7.2.3. Sorok 'forty', declined like a masculine noun for a considerable time, did not stabilize its simplified declension (direct cases -Ø, oblique cases -a) until the middle of the eighteenth century. In the
distributive function (with the preposition po 'apiece')
the Dat. -u was common up to the middle of the nineteenth
century. The stress pattern of sorok 'forty' is identical
with that described in 1.7.2.1. (e.g. sórok, Nom., Acc.,
but soroká, Gen., Dat., Instr., Loc.; see also 1.9.2.).

1.7.2.4. The declension of ModR pjat'desjat 'fifty'
presents an interesting occurrence of alternation of two
stems, one with a hard terminal consonant (before -ø),
another with a palatalized terminal consonant (before
desinences other than -ø). The palatalized stem differs
from the hard stem by the presence of an infix -i- (or
its variant -ju- which occurs in Instr.; both variants
are always stressed) added to the first component of
the compound (i.e., pjat'). In the absence of this
infix, the stress is on the last syllable of the compound
(e.g. pjat'desjat, Nom., Acc.). The occurrence of the
variant -i- in Instr. (where normally -ju- is found) is
on the increase in ModR (cf. Vin., p. 299 and Bog., pp.
191-192). The complex morphological and stress pattern
found here is historically founded on the original
treatment of pjat' desjat as a type of numeral in which
both components were declined, and each carried its own
stress. Although desjat itself (historically the Gen.
pl. of a masculine consonantal-stem noun desjat 'ten')
did not fit the mold of nouns declined according to the
feminine i-stems, its acceptance by this paradigm (i.e., the ModR III declension) was facilitated by the changes in the declension of desjat, namely by the shift from the masculine consonantal-stem declension to that of the feminine i-stems. The result was that both components received identical endings, such as are found in the ModR period.

1.7.2.5. The morphology of ModR šest' desjat 'sixty' is identical with that of pjat' desjat 'fifty' (see 1.7.2.4.).

1.7.2.6. The numeral sem' desjat 'seventy', too, has in ModR the same morphology as pjat' desjat 'fifty' (see 1.7.2.4.). The stress movement, however, is more limited: the compound is stressed exactly the same way as the basic numeral sem' 'seven' is stressed (see 1.5.2.1.).

1.7.2.7. The ModR numeral vosem' desjat 'eighty' has a somewhat more complex morphological structure than the preceding three decades. Its first component (vosem'-) undergoes certain stem changes (described in full in 1.5.2.4.), while the second component (-desjat) receives the same endings as it does in other compounds of this type (e.g. pjat' desjat 'fifty', see 1.7.2.4.), and just as in sem' desjat, it never carries stress. Similarly, the placing of stress in vosem' desjat coincides with the
placing of stress in *vosem* 'eight' (see 1.5.2.1.).

1.7.2.8.a. The numeral *devjanosto* 'ninety' has a unique place in the morphology of ModR numerals. It presents the only example of a total case syncretism in numerals. Although in the orthography the contrast between the direct and the oblique cases is preserved (*devjanosto*, Nom./Acc. vs. *devjanosta*, Gen., Dat., Instr., Loc.), both forms are phonetically realized as *[div'i-nôsto]* (see 1.7.1.8.b. and 1.9.2.).

b. In word derivation the decades in -*at*, -*at* assume the Gen./Dat./Loc. form, e.g. *dvadcatidnevnyj* 'twenty-day', *vos'midesjatimestnyj* 'with eighty seats', while *sorok* 'forty' is found in the oblique-case form *soroka*-, e.g. *sorokatej* 'forty-year anniversary', and *devjanosto* 'ninety' is found in the direct-case form *devjanosto*-, e.g. *devjanostodnevnyj* 'ninety-day'.

1.8.1. The cardinal numerals *odins* 'one' through *devjatz* 'nine', and the decades *dvadcatz* 'twenty' through *devjanosto* 'ninety' retained in OR their basic morphological characteristics also when they were used in combinations to produce compounded numerals 'twenty-one' through 'ninety-nine'. In such compounded numerals, the decade preceded the unit, and sometimes the two numerals were joined together by the conjunctions *da* or *i*
(both meaning 'and'). When a preposition governed such a compounded numeral, it was frequently repeated, to appear both before the decade and again before the unit:

\[
\begin{align*}
vinitiya & \ v\ pjetidesjatij \\
v\ semi & \ tatbax\ i\ grabe\v phantomz\\
\text{he confessed to fifty-seven thefts and robberies} \\
(XRP. III, 178; 1647) & \text{Bog. 117.}
\end{align*}
\]

Occurrences of the repeated use of prepositions combined with the coordination of the two numerals by means of the conjunctions da or i are rare in OR.

1.8.2.a. ModR preserves the current morphological characteristics of the decades and the units when these are used to produce compounded numerals from 'twenty-one' through 'ninety-nine'. In contrast to OR, the placing of conjunctions between the decade and the unit, and the repetition of the preposition before the unit do not occur.

b. In word derivation bases of compounded numerals for 'twenty-one' through 'ninety-nine' are formed by joining the decade (in the appropriate derivational form, see 1.7.2.8.a.) to the unit (also in the appropriate derivational form; where variants are possible, the most productive one should be used, i.e., ono- for 'one', dyux- for 'two', and trëx- for 'three'), e.g. soroka-
dvuxdnevnyj 'forty-two-day', dvadcatiodnoletnjij 'twenty-one-year old', devjanostovos'mimestnyj 'with ninety-eight seats'.
1.9.1. The OR numeral 1sto 'hundred' was declined like a neuter noun, and this treatment prevailed until as late as the eighteenth century. The Loc. ending -e, since the eighteenth century limited in its occurrence to only one position (after the preposition v 'in'), survived somewhat longer; one example was noted by Boguslawski in Lermontov:

sazennyx vo ste ot nas
'some hundred fathoms from us'
(Lerm B.) Bog. 190.

The ending -u in Dat. was common in the distributive meaning (when the preposition po 'apiece' preceded) until as late as the second half of the nineteenth century:

postupivšimi samoproizvolno
po stu pjatidesjati rublej
'those who join voluntarily should be paid 150 rubles each'
(ASPB. 442; 1812) Bog. 190.

1.9.2.a. In ModR sto 'hundred', devjanost10 'ninety', and sorok 'forty' form a group of numerals with a highly simplified morphology. They have one form for the four oblique cases (e.g. sta, soroka, Gen., Dat., Instr., Loc.) and one form for Nom./Acc. (sto, sorok). The case of devjanost10 (see 1.7.2.8.) deserves particular attention.

b. In word derivation, the numeral 'hundred' assumes the form sto-, e.g. stoletnik 'agave'.

1.10.1.1. The OR numeral džvesti '200' (džve s1ti
The numeral 200 was treated as a combination of the basic numeral *dvě* 'two' and the numeral *sto* 'hundred', in the dual number. The numeral *sto* was regarded as the head of the construction (i.e., there was a syntactic analogy between *dvě sto* '200' and, e.g., *dvě selē* 'two villages'), and the subsequent development of these two parts of the numeral reflects the changes that the numeral *dvě* and its head noun underwent after the simplification of the system of grammatical numbers in OR. There also existed forms in which the numeral *dvě* was declined while the second component appeared in the form -sti in Nom./Acc. Inan., and -sot in the oblique cases (including Acc. Anim.), e.g. *dvěm sot*, Dat. Finally, the form *dve sot* could be used in the function of any of the oblique cases, e.g.:

velělъ vъ Smolensku byti ...
dvusotъ Čelověkomь
'he ordered two hundred people to be in Smolensk'
(AI. II, 389; 1611) Bog. 107.

1.10.1.2. The history of the numerals *trista* '300' and *četyresta* '400' is very similar to the history of OR *dvěsti* '200' (see 1.10.1.1.), except that there is recorded no example of one form serving a whole group of cases (such as *dve sot* above, see 1.10.1.1.). The development of the first component of *trista, četyresta* was identical with the development of *tri* 'three' (1.3.1.)
and četvrt 'four' (1.4.1.), while the second component -sta showed in the oblique cases forms with endings common in the plural of neuter nouns (e.g. stax, stěx, stex, in Loc.; sty, stami, in Instr., etc.).

1.10.1.3. In the numerals piatı sotı '500', šestı sotı '600', semı sotı '700', (v)osmı sotı '800', and devjatı sotı '900', the two components were either declined separately (i.e., there was the declension of piatı, šestı, semı, (v)osmı, devjatı, and the declension of sıto in the oblique cases only; the Nom./Acc. showed the Gen. pl. form of sıto: sotı), or only the first component was declined, while the second component appeared in the form -sotı throughout the declension. Bogusławski (Bog., pp. 109-110 and 193) points out that this simplified declension of numerals '500' through '900' was much more common than the pattern in which both components were declined. He observes that it was not until the second half of the seventeenth century that the second component accepted the plural endings of nouns (-stam in Dat., -stami in Instr., -stax in Loc.) as the prevailing inflectional model.

1.10.2.1. The ModR inflection of dvěstı '200' preserves the basic pattern of separate declension of dvě and sto (the Nom./Acc. Inan. form of this compound deviates in the
second component, cf. 1.10.1.1.), and thus resembles, in its morphological structure, the decade dvadcat' 'twenty'. This resemblance includes the identical stress pattern: in the direct cases, the first component is stressed, and in the oblique cases, the second component is stressed, e.g. dvésti, Nom./Acc. Inan., vs. dvuxsót, Gen., dvumjastámi, Instr., etc.

1.10.2.2. ModR trista '300' and četyresta '400', similarly preserve the separate declension of the two components: tri- and četyre- are declined like the basic numerals tri 'three' and četyre 'four', while -sta is in the oblique cases declined like a plural noun, and in Nom./Acc. Inan. it appears in the Gen. sg. form, normal for head nouns of tri and četyre. The stress pattern of this compound is the same as that of dvésti (cf. 1.10.2.1.), e.g. trista, četyresta, Nom./Acc. Inan., tréxsót, četyrëxsót, Gen./Acc. Anim., tremjastámi, četyr'mjastámi, Instr., etc. (see also the following section and 1.12.2.b.).

1.10.2.3.a. The upper five hundreds, '500' through '900', also in ModR preserve the separate declension of the two components which make up the compound, e.g. p.jatisot, Gen./Acc. Anim., pjet'justami, Instr. The stress pattern, however, is different from that of
dvesti '200' or trista '300'. In pjet'sot '500', šest'sot '600', sem'sot '700', vosem'sot '800', and dev'jat'sot '900', it is the second component (-sot) that consistently carries the stress. A possible secondary stress may occur on the first component, e.g. vosem'sot [vòs'im'sòt], just as it may occur in any of the compounds which decline both components, especially when the primary stress is on the second component. This secondary stress is reflected in the orthography (but only in texts which distinguish ō from o) of Gen. of trista and četyre-sta: trëxsot, četyrëxsot (see also 1.12.2.b.).

b. In word derivation the hundreds assume the form of the Gen., e.g. dvuxsotletie 'bicentenary', trëxsotletie 'tercentenary', pjetisotletni '500-year old'.

1.11.1. The OR numeral tysjača 'thousand' was declined like a soft a-stem feminine noun (type tuča 'cloud'), and preserved its nominal character both in its morphology and in its syntax, so that it resembled very much the so-called nominal quantifiers, such as djužina 'dozen', kupa 'three-score', etc. In addition to the expected endings (-i in Gen., -e in Dat., Loc., -u in Acc. and -aj in Instr.), the declension of tysjača was exposed to interferences from the group of numerals declined according to the (original) i-stem feminines (the present III declension), represented, e.g.
by пять 'five'. This interference was reflected in Instr. (tysjačaju) and Dat./Loc. (tysjači).

1.11.2.a. Comparing the ModR declension of tysjača 'thousand' with that found in OR, one will note only insignificant differences. It may be said that with the exception of Instr. (where the variant tysjač'ju exists), the declension of tysjača is identical with the II declension. The stress stays on the initial syllable throughout the paradigm.

b. In word derivation, the numeral 'thousand' appears in the form tysjače-, e.g. tysjačelistnik 'milfoil, yarrow'. Multiples of 'thousand', e.g. '2000', '3000', etc. are not found as derivational bases in ModR.

1.12.1. In forming multiples of thousands in OR, the word tysjača 'thousand' was preceded by another numeral (between 'two' and '999'), and appeared in the case required by the numeral that preceded (i.e., either Gen. sg. or Gen. pl., or, in compounded numerals that ended in 'one', Nom. sg.), provided that the determining numeral was in Nom. or Acc. If the determining numeral was in any of the oblique cases, the word tysjača 'thousand', as well as the head of the construction appeared in the plural form of the respective case:
and those soldiers should be given . . . pay . . . two thousand equipped cavalrymen and three thousand good infantrymen'

The basic plural endings of tysjača 'thousand' were in no way different from the endings of the a-stem feminines, but as it was pointed out above (l.11.1.), the interference of the feminine i-stems was quite strong in the inflection of tysjača. In the plural, it included Gen. (tysjačej), Dat. (tysjačem), and Instr. (tysjačmi). The numerals '1500', '150(000)', and '250(000)' can be frequently found in the forms poltory tysjači, poltorasta (tysjač), poltretjasta (tysjač), respectively, (for details see 4.10.1.):

'tatars de s_t nimi . . . tysjač
s_t poltretjasta sta
'and it is rumored . . . that some 250,000 Tatars are with him'

In complex numerals consisting of thousands, hundreds, decades, and units, the conjunctions da and i sometimes appeared between the members of such strings, but the juxtaposition of individual members of such numerals without these conjunctions was fairly common as well:
When such strings were declined, all the components (i.e., thousands, hundreds, decades, and units) were inflected.

1.12.2.a. In ModR, the morphological as well as the syntactic characteristics of the numerals between '1001' and '999,999' have remained practically unchanged. The juxtaposition of the individual components without the coordinating conjunctions da and i is now the only version that is acceptable, and in declining these numerals, all the components are inflected. In the spoken language, however, there is a tendency toward a certain simplification, as may be seen in the following example:

s pjat'ju tysjačami pjat'sot
sem'desjat četyr'mja bojcami
'with 5574 fighters'
Gram rus jaz. 369.

It should be pointed out that in higher numerals composed of two-, three-, or multi-digital strings, it is the last component which determines the syntactic characteristics of the numeral in question. All the cardinal numerals can thus be divided into three groups: the first includes the numeral odin/odna/odno 'one', and all higher numerals
ending in odin/odna/odno; the second group includes the numerals dva/dve 'two', tri 'three', četyre 'four', and all higher numerals ending in dva/dve, tri, and četyre; the third group includes all the remaining numerals which by definition do not belong into Group 1 or Group 2. The head noun of numerals in Group 1 always agrees in case and gender with its numeral, and it is declined in the singular; the head noun of numerals in Groups 2 and 3 is agreed in case and gender with its numeral only in the four oblique cases, and declined in the plural. If the numeral appears in Nom. or Acc., the head noun appears in Gen. sg. if a Group 2 numeral precedes, or in Gen. pl. if a Group 3 numeral precedes. Furthermore, numerals in Group 2 show a twofold syncretism, depending on the Anim. vs. Inan. category of their head nouns: Acc.=Nom. if the head noun is Inan., Acc.=Gen. if the head noun is Anim. This syncretism is partially present also in Group 1: it is realized only if the head noun is a masculine.

b. In classifying the compound numerals in ModR, the following types may be established:

(1) compact compounds (represented by dvenádcat' 'twelve' or dvádcat' 'twenty') which inflect only the second component, and have only one primary and no secondary stress;
(2) *loose compounds* (represented by *pjiat'desjat* 'fifty' or *pjiat'sot* '500') which inflect both components and have one primary and often one secondary stress (regularly in forms where the primary stress falls on the last syllable, and there are at least two syllables before the primary stress, thus, e.g. *pjiat'desjat* 'fifty' but not *pjiat'sot* '500'; in cases where the primary stress does not fall on the last syllable, this last syllable may sometimes carry a secondary stress, provided that the syllable immediately before it does not carry the primary stress, thus, e.g. *pjiat'judesjat'ju* 'fifty', Instr., but not *dvjesti* '200', etc.);

(3) *free numeral combinations* (represented by *tri tysjaci* '3000' or *pjiat' millionov* 'five million') whose individual components retain the morphological and prosodic characteristics of separate words. (Multi­
digital numerals may consist of any combinations of the above three types.)

1.13.1. The occurrence of numerals higher than *tysjaca* 'thousand' (other than multiples of this numeral) was exceptional in OR. The fifteenth-century monument *Xozenie za tri morja Afanasija Nikitina*, quoted by B. Unbegaun (Unb., p. 423), contains the word *tma* in the value '10,000', and its multiples, such as *sedm tma* '70,000', *na 20 tma* 'on 200,000'. The numeral '100,000'
was sometimes rendered as *legionii*. P. S. Kuznecov (Kuz., p. 171) adds three more numerals that were occasionally used in OR: *leodrō* 'million', *vorōna* 'ten million', and *kolođa* 'hundred million' or 'an infinitely large quantity'. These numerals could also be used according to a different system in which *tēma* could mean 'million', *legionii* 'million millions', *leodrō* '10^{12}', and *kolođa* '10^{50}'.

1.13.2. In ModR, the only numeral terms higher than *tysjača* 'thousand' are the foreign borrowings *million* 'million', *milliard* 'billion', and *billion* 'thousand billion; billion'. They are believed to have entered the language relatively late, approximately at the beginning of the eighteenth century. All of them are noun-like numerals (similar to *tysjača* 'thousand'). They are declined like masculine nouns.

**Summary (Chapter 1):**

A prominent feature of ModR cardinal numerals is the essentially substantival character of their morphology. Except for the first four numerals (see 1.1.2.a., 1.2.2.a., 1.3.2.a., and 1.4.2.a.), which have pronominal-adjectival desinences in the oblique cases, the paradigms of ModR cardinal numerals find direct correspondences in the substantival paradigms. The numerals *sorok* 'forty',
devjanost'o 'ninety', and sto 'hundred' (see 1.9.2.a.) constitute a significant exception: their paradigm lacks a parallel in the inflectional paradigms of ModR substantives. Another, albeit far less conspicuous deviation, is found in the largest group of ModR cardinal numerals, which includes members that end in -Ø (after a palatalized stem) in the Nom./Acc. and have the desinences of the III declension in the oblique cases. This group contains a large number of members whose stress pattern is quite foreign to the III declension: the cardinal numerals of this type (represented, e.g., by p'jat' 'five' or dvadcat' 'twenty' [see 1.5.2.1.]) have a moving stress, while the III-declension substantives, with extremely rare exceptions, have a fixed non-desinential stress throughout the singular. Finally, the inflectional pattern of the compound numerals p'jat' desjat' 'fifty', šest' desjat' 'sixty', sem' desjat' 'seventy', and vosem' desjat' 'eighty' (see 1.7.2.4.- 1.7.2.7.), which is likewise identical with that of the III declension, presents an instance of a stem alternation that does not occur in the declension of the substantives.
2.1.1. The declension of the cardinal numeral *jeden/jedna/jedno* 'one' in OCz was pronominal, but most of the oblique cases had parallel endings of the definite adjectival declension (e.g. Gen. sg. M./N.: jedného, Dat. sg. M./N.: jednému, etc.). In the pronominal declension, which was the more common of the two, the endings found are those of the non-palatal variety of the paradigm (e.g. -omu, Dat. sg. M./N., as in jednomu), or of the palatal variety of the paradigm (e.g. -emu, Dat. sg. M./N., as in jednemu). The non-palatal type of endings seem to predominate. Furthermore, Gen. and Dat. sg. M./N. are also found with the shortened endings -oh, -om (as in jednoh, Gen. sg. M./N.; jednom, Dat. sg. M./N.). *Jeden/jedna/jedno* 'one' was the only numeral in OCz which distinguished all three genders in the singular (in the direct cases only). Syntactically, this numeral functioned as an adjective, i.e., there was grammatical agreement between it and its head noun in case, gender, and number. The number could be singular (this was the case when
jeden/jedna/jedno functioned as a cardinal numeral proper), or plural (in this case jedni/jedny/jedne functioned as a collective numeral, cf. 8.1.1.). Two cases, Nom. and Acc., are attested in OCz also in the dual:

jedna dva čarodějníky
'one couple of sorcerers
(Otc.; 15th cent.) Váz. 146.

The usage of this numeral in the dual was similar to that common in the plural (cf. 8.1.1.).

2.1.2.a. In ModCz, the declension of the numeral jeden/jedna/jedno 'one' shows exclusively pronominal endings of the non-palatal variety, except in Instr. sg. M./N. which has the palatal-paradigm ending -im. No case variants are permissible in the standard language; a few exist in the dialects. Syntactically, the numeral 'one' retained its original status: it agrees with its head noun in gender, case, and number.

b. In word derivation the numeral 'one' is found in the form jedno-, e.g. jednotvárný 'monotonous', jednoduchý 'simple', jednostranný 'partial, biased', or, less frequently, in the form jedn-, e.g. jednička 'number one', jednota 'unity'.

2.2.1.a. The numeral dva/dvě 'two', M. and F./N., respectively, possessed only the dual number, and the
endings were those of the hard-paradigm pronouns (type ten 'this', Nom. sg. M.; e.g. tú, Gen./Loc. dual). The usual dual-number syncretism is observed: Gen./Loc.: dvú; Dat./Instr.: dvěma; Nom./Acc.: dva/dvě. There existed parallel forms for most of the cases, e.g. dvá, Nom. M.; dvůch (later dvouch by regular phonological development), Gen.; dvům (later dvoum), Dat.; and dvůma (later dvouma), Instr. The innovation dvá, Nom. M., was probably motivated by the contrast of tře/tři (see 2.3.1.); dvá was used especially when its head noun was an animate masculine. The Gen./Loc. case variant dvůch reflects influence from the plural declension, and the split of Dat. and Instr. (dvům vs. dvůma, respectively) seems to have been caused by the same influence: both innovations are relatively late (they date from the sixteenth century).

b. The head noun of dva/dvě was agreed grammatically with the numeral, and appeared in the appropriate case of the dual. There are many examples attested, especially for Gen./Loc., and also for Nom./Acc. (in the latter two cases primarily for the feminine nouns). However, the substitution of the dual forms by the plural forms is very common, even in the oldest monuments. Masculines seem to be especially prone to this substitution. But gradually also feminines and neuters started to replace the dual
forms with the plural forms (including Nom./Acc., e.g. 
dvě ženy → dvě ženy 'two women').

2.2.2.a. The declension of dva/dvě 'two' in ModCz
show marked archaic influences: the syncretisms Nom.=Acc.,
Gen.=Loc., and Dat.=Instr. are those found in the earliest
stage of OCz (as well as in OCS). The form dva is
restricted to the masculines, while dvě serves the
feminines and the neuters. The grammatical agreement
between the head noun and the numeral is total (it
includes not only the oblique cases but, unlike in
Russian, also the two direct cases (e.g. dva muži
'two men', Nom., vs. dvě muže, Acc.). The endings
of the numeral dva/dvě are likewise archaic: Gen./Loc.:
dvou (<dvů<*dvo.ju); Dat./Instr.: dvěma.

b. In word derivation the numeral 'two' assumes the
forms dvoj- or dvou-, e.g. dvojhláška 'diphthong',
dvojitý 'double (adj.)', dvojímyslný 'ambiguous',
dvouplošník 'biplane', dvouroční 'two-year', dvouuchý
'with two handles'.

2.3.1.a. The OCz numeral for 'three' also
distinguished gender, but only in the Nom. The form
tři (*tře), later třé, and finally tři (by regular
phonological processes) served the masculines, while the
form tři was used with the feminines and neuters. Tři
survived until the beginning of the seventeenth century, when it was replaced by the F./N. form tří. The resulting gender syncretism can be explained also otherwise (by the extension of the Acc. M. form tří to Nom., or by the loss of vocalic quantity).

b. The declension of tří/tři was according to the i-stem nouns (plural only). Thus Gen. was tři, Dat. třem, Loc. třech, Instr. třmi. There existed also parallel forms for all the oblique cases. The dual-number syncretism Loc.=Gen. from dva/dvě 'two' apparently brought about the use of the form třech in Gen., whereas the influence of the long vowel in Gen. (tří) is believed to have been the source of the forms třim (Dat.) and třich (Loc.). In Dat., there occurred another influence, namely that of the o-stem nouns (třom and třom). Finally, the two variants of Instr. (třimi and třemi) can be explained by the extension of the desinential vowels of Nom./Acc. F., N. and Dat./Loc., respectively. Syntactically, the head noun was agreed grammatically in all cases (appearing in the plural forms).

2.3.2.a. In ModCz, the declension of tří 'three' shows a return to the original i-stem endings, with the exception of Instr., which has extended the desinential vowel (historically, e from the so-called strong-position e) of Dat. and Loc., and thus obtained the form třemi.
The other forms are: тři, Nom./Acc., тří, Gen., тřem, Dat., тřech, Loc. Like in OCz, there is grammatical agreement between the head noun and the numeral (including Nom. and Acc.), e.g. тři hoši 'three boys', Nom., тři hochy 'three boys', Acc.; тři ženy 'three women', Nom./Acc.; тři okna 'three windows', Nom./Acc.

b. In word derivation the numeral 'three' occurs in the form тро-, e.g. троjdílný 'tripartite', троjnásobný 'triple', троjúbelník 'triangle', and less frequently in the form тří-, e.g. тřiletý 'three-year old', тřínožka 'tripod'.

2.4.1. The morphological characteristics of the OCz numeral for 'four' are in many respects similar to those of the OCz numeral тře/тří 'three'. In Nom. M., the form чtyře (later чtyřé, and finally чtyři, as a result of the so-called loss of jotation, and of the vocalic narrowing, respectively) was modeled on тřie (see 2.3.1.). The OCz and OPol forms of the numeral (i.e., чtyřie and чtyře, respectively) developed from a parallel form чtyр-, rather than from the more common чetyr- whose descendants are found in other Slavic languages. The expected form чtyře, чtyře (cf. OCS чtyre 'four'; i.e., one with an ending clearly pointing to the consonantal-stem declension) does not appear in the earliest period, but only later, possibly as a product of the analogous
form čtyře, as mentioned above). The form čtyří
(originally only F./N.) was generalized for all three
genders at the beginning of the seventeenth century. The
original consonantal-stem declension appears to be best
preserved in the Gen. form čtyř (but see also 2.4.2.);
by analogy of this case, -ř- appeared also in Nom./Acc. F.: čtyřy, Loc.: čtyřech, and Instr.: čtyřmi. However, the
forms with -ř- appear to be more frequent (including
Gen., where -ř was the historically justified consonant):
čtyř, čtř (alongside with čtyří, by analogy with tří), in
Gen., čtyřem (alongside with čtyřom, čtyřom; these by
analogy with třom, třom) in Dat., čtyřech in Loc., and
čtyřmi and čtřmi in Instr. The syntactic characteristics
of this numeral were the same as those of třie/tří (see
2.3.1.).

2.4.2.a. The ModCz declension of čtyří 'four' reflects
the oldest attested state in OCz (including the Gen. form
čtyř). This form may be a younger form than čtyř, although
this latter, the expected consonantal-stem declension
form, is attested later than čtyř. It cannot be ruled
out, however, that čtyř, čtyřech, čtyřmi, Gen., Loc.,
Instr., respectively, are innovations, all based on the
form čtyřy, Acc., which itself may have been formed by
analogy. With the alternation ř - ř being quite common
in the nominal declension, the model bratří(e) 'brothers',
Nom. pl., vs. bratři, Acc. pl., may have brought about a similar pattern to čtyří(e), Nom.; čtyřy, Acc. One detail that supports this hypothesis is the fact that the form čtyřy also appears in Nom. F. (e.g. ženy 'women', Nom./Acc.) but is not found in Nom. M. Anim. The remaining cases are: Nom./Acc.: čtyři, Dat.: čtyřem, Loc.: čtyřech, and Instr.: čtyřmi. Syntactically, the numeral čtyři also belongs to the same category as dva/dvě 'two' and tři 'three': it agrees grammatically with its head noun (which is declined in the plural).

b. In word derivation the numeral 'four' appears in the forms čtyř- and čtyr-, e.g. čtyřramenný 'four-armed', čtyřka 'number four', čtyřlistek 'four-leaf clover', čtyřúhelník 'quadrangle', čtyrmotorový 'four-engine', čtyrvěrší 'quatrain'. The written norm of ModCz prefers the latter variant (čtyr-), while in the spoken language both čtyř- and čtyr- may be found, and the former predominates.

2.5.1.1. In its morphology, the OCz numeral pět 'five' was treated like an i-stem noun, and the nominal character of this numeral was further underlined by its syntax: in the direct cases its head noun appeared in Gen. pl., while its modifier was used in the singular, and agreed with the numeral in case and gender:
tu piet [grošů] provrhu hanc pentadem
'these five [groschen] I will
stake in a game of dice'
(Hrad.; e. 14th cent.) Geb. 350.

The OCz declension of pět 'five' was as follows: Nom./Acc.: pět, Gen./Dat./Loc.: pěti, Instr.: pětí > pětí, later
also: pěti.

2.5.1.2. The OCz numeral šest 'six' had identical morphological and syntactic characteristics as the numeral pět 'five' (see 2.5.1.1.).

2.5.1.3. The OCz numeral sedm 'seven', too, followed the numerals pět 'five' and šest 'six' in its morphology and syntax.

2.5.1.4. The OCz numeral osm 'eight', both in its morphology and its syntax, was treated as the above three numerals (see 2.5.1.1.-2.5.1.3.).

2.5.1.5. The OCz numeral devět 'nine' also belonged to the group of numerals discussed above (2.5.1.1.-2.5.1.4.), both morphologically and syntactically. In three oblique cases, namely Gen., Dat., and Loc., there existed parallel forms with long vocalism: devěti (besides the short-vowel devěti).

2.5.1.6. The OCz numeral deset 'ten', although originally declined as a consonant-stem masculine, is
recorded in forms that are identical with the i-stem
declension (but see also 2.6.1. and 2.7.1.1. for
consonantal-stem endings in Loc. sg. and Gen. pl.).
Just as devět 'nine', this numeral, too, had parallel
forms with long vocalism in Gen., Dat., and Loc.:
deseti (besides the short-vowel desěti).

2.5.2.1. In ModCz the numeral pet 'five' is declined
according to the III declension, with one minor
deivation: the Instr. ending -i (cf. kosti 'bone',
Instr. sg.) does not occur; instead, a short -i is found:
pěti, so there is extensive syncretism in the paradigm.
The form pet occurs in the direct cases, while pěti
serves the oblique cases. Another difference is observed
in the syntax: the modifier of pet appears in the same
case as the head noun of the numeral, e.g. těch pet žen
'those five women', Nom./Acc., těm pěti ženám, Dat.

2.5.2.2. In ModCz šest 'six' the same morphological
characteristics are observed as in pet 'five' (see
2.5.2.1.).

2.5.2.3. In ModCz sedm 'seven' the same morphological
characteristics are observed as in pet 'five' (see
2.5.2.1.).

2.5.2.4. In ModCz osm 'eight' the same morphological
characteristics are observed as in pět 'five' (see 2.5.2.1.).

2.5.2.5. ModCz devět 'nine' also shows identical morphological characteristics as pět 'five', but additional contrast between the direct and the oblique cases is noticed in this numeral: Nom./Acc.: devět, vs. Gen./Dat./Instr./Loc.: devíti (-í- being the reflex of the long e-; cf. OCz devěti).

2.5.2.6.a. ModCz deset 'ten' also closely follows pět 'five' (see 2.5.2.1.) in its morphology. Unlike in devět 'nine', the oblique-case form of this numeral has retained both variants: thus Gen., Dat., Instr., and Loc.: deseti or desíti (note: ě > [je] after labials, but ě > [e] after obstruents other than labials).

b. In word derivation the numerals 'five', 'six', 'seven', 'eight', 'nine', and 'ten' assume the oblique-case form, e.g. pětistopý 'five-foot', šestiletý 'six-year old', desítinásobný 'tenfold', and occasionally the direct-case form (a variant with a lengthened stem-vowel exists for devět 'nine' and deset 'ten': devít-, desít-;), e.g. šestka 'number six', devětsil 'coltsfoot', devítka 'number nine', desetník 'dime', desítka 'number ten'.
2.6.1. The OCz numerals for 'eleven' through 'nineteen' were formed by combining the basic digits ('one' through 'nine') with the construction "na desěte 'upon ten' (attested in OCz only in the already syncopated forms -nádcěte, -nácěte, -náctě, showing also compensatory lengthening of the first vowel). The form of the numeral for 'ten' (dcěte < *desěte < *des'ěte < *desěte) in this phrase is Loc. sg. It shows the peculiar consonantal-stem desinence. In the other cases of the singular the consonantal-stem endings were regularly replaced by the i-stem declension endings, cf. 2.5.1.6. The original morphological status of these numerals was that of compounds in which only the first part (the unit numeral) was declined, while the construction -nádcěte remained unchanged:

dvěma-nádcě apostolom
'to the twelve apostles'
(Krist.; 14th cent.) Váž. 150.

As is seen in the above example, the numerals of the second decade also underwent a certain simplification of the second component. First, the vowel ě was syncopated, and then followed the loss of the terminal vowel ě, so that these numerals eventually resembled such unit numerals as pět 'five', šest 'six', devět 'nine', and desět 'ten', and their declension began to be modeled on them. During a brief period both components of the compound were
declined:

sluh devieši námcti
'of the nineteen servants'
(01.; 1417) Váz. 150.

Eventually, the morphological focus shifted to the second component, and the unit numeral remained in a fixed form throughout the declension.

2.6.2.a. In ModCz the shortened forms of the numerals for 'eleven' through 'nineteen' prevailed, and they represent the standard forms (e.g. šestnáct 'sixteen'). Nevertheless, the forms in -e in the direct cases (e.g. šestnácte 'sixteen') were revived in the modern period. They were used as late as the end of the nineteenth century, but even then they were regarded as archaic. At the present time they are considered obsolete. The ModCz declension of the numerals of the second decade ('eleven' through 'nineteen') coincides with the declension of the numeral pět 'five' (see 2.5.2.1.).

b. The following numerals of the second decade require additional comments. In jedenáct 'eleven' and dvanáct 'twelve', the masculine forms of the basic numerals were generalized. In jedenáct, furthermore, a case of simplification of a double consonant took place (jedenáct < *jeden-na-desete). In třináct 'thirteen', the feminine (or possibly the shortened masculine) form, which now serves all three genders, was
generalized. The numeral čtrnáct 'fourteen' represents a major deviation from the basic numeral čtyři 'four'. Historically, the case is simple enough. The alternation ř → ř was in OCz quite common in the inflection of the basic numeral (see 2.4.2.). The final change of čtyr- > čtr- is not difficult to imagine if it is remembered that it occurred after the loss of inflection in the first part of the compound; thus the paradigmatic support of forms in which -y- belonged to a different syllable than -r- (e.g. Loc.: čtyrech) ceased to exist. In patnáct 'fifteen' and devatenáct 'nineteen', the difference in vocalism between these compounds and the basic numerals pět 'five' and devět 'nine' was caused by the so-called depalatalization (*ã, a palatalizing vowel, lost this palatalizing quality in final position and before a hard consonant, changing into a non-palatalizing vowel a: OCz pěťnácete < *pěť-na-desete, changing into pětnácete > patnácete > patnáct). The remaining three numerals šestnáct 'sixteen', sedmnáct 'seventeen', and osmnáct 'eighteen' present no deviations from the expected forms.

c. In word derivation the numerals 'eleven' through 'nineteen' assume the oblique-case forms, e.g. jedenácti- místný 'eleven-digit', šestnáctiletý 'sixteen-year old', devatenáctiměsíční 'nineteen-month old', and less
frequently the direct-case forms, e.g. dvanáctka 'number twelve', sedmnáctka 'number seventeen'.

2.7.1.1. The OCz numeral for 'twenty' is attested in the full (i.e., non-syncopated) form only once, in the ambiguous spelling devadezeti, Acc., dating from the thirteenth century. Among the more copiously attested forms dva-dceti, dva-ceti, later also dva-cět, dvacet, predominate. In this compound, the masculine form of the numeral for 'two' was followed by the Nom. dual of desět (< *desěti) 'ten'. The oblique cases had the endings of the dual, thus dvú-dcátu for Gen. and Loc. (by extension also for Dat. and Instr.). In Gen./Loc. there occurred also the form dvúdcát, which gives further evidence of the original consonantal-stem declension of *desěti. The expected primary form for Dat./Instr. *dvěma dcietma is not attested. After the loss of the terminal vowel in the direct cases (dva-cět > dva-cět) there occurred a similar development as in the numerals for 'eleven' through 'nineteen', namely the first component ceased to be declined, and the second component adopted the declension of the numeral pět 'five' (see 2.5.1.1.).

2.7.1.2. The OCz numeral tři-dcěti 'thirty' shows certain similarities of structure and development with
dva-dcětí 'twenty'. Originally, both the first component (tri) and the second, the head noun of the numeral tri, appearing in Nom. pl. dcětí < *desětí < *desqětí, were declined. The expected consonantal-stem ending of *desěțe in Nom./Acc. (tri-desěte) is not attested. Also unattested are Dat. (*třem-desětem) and Instr. (*třmi-desětmi). In Gen., however, the consonantal-stem ending was preserved (tři-dcát < tři-desěța). The form -cát (< dcát < desěța) is found also in the form třmi-cát, Instr. With the loss of the final -i, the declension of the two components of the numeral began to be felt as the declension of one word, and the first component became fixed in the form tři- throughout the declension. The original endings of the second component were then replaced by the endings of the numeral pět 'five' (see 2.5.1.1.).

2.7.1.3. The OČ numeral čtyři-dcětí 'forty' had a structure identical with that of tri-dcětí 'thirty' (see 2.7.1.2.). Likewise, this numeral showed in its development the same trends as the numeral tri-dcětí. For the declension of the first component see 2.4.1.

2.7.1.4. The OČ numeral pat-desát 'fifty' was a compound consisting of the basic numeral 'five' (pět-> pat-, like in patnáct 'fifteen', see 2.6.2.), and the
word for 'ten', used as its head noun in the appropriate case, i.e., Gen. pl. desát < *desét-. In the earliest monuments only the first part of the compound was declined: Nom./Acc. pat-; for the oblique cases see the declension of pet 'five', 2.5.1.1.). The second part had two forms: one for the direct cases: -desát, and another for the oblique cases: -dcat (with its variant: -cät). Later on, the second part began to be felt as the morphological focus, and the first part stabilized in the shape pat- (later pa-), and the declension of this compound coincided then with the declension of the numeral pet 'five' (see 2.5.1.1.). On the model of jedenácte 'eleven' (see 2.6.1.) the numeral pat-desát 'fifty' occasionally received the final vowel -e in the direct cases (the earliest example appears at the beginning of the fifteenth century).

2.7.1.5. The OCz numeral šest-desát 'sixty' had an identical structure as pat-desát 'fifty' (see 2.7.1.4.). The variants šes-desát and šedesát were also common, especially after the loss of declension in the first component. The development of the two components of the numeral, and of the compound itself followed the same lines as described in the preceding section (2.7.1.4.).

2.7.1.6. The OCz numeral sedm-desát 'seventy' showed
identical structural and morphological characteristics as those discussed in connection with \textit{pat-desát} 'fifty', and its development was parallel to that of this numeral (see 2.7.1.4.).

2.7.1.7. The OCz numeral \textit{osm-desát} 'eighty' (frequently in the form \textit{vosm-desát}) follows structurally, morphologically, and phylogenetically the numeral \textit{pat-desát} (2.7.1.4.).

2.7.1.8. Likewise, the OCz numeral \textit{devat-desát} 'ninety' possessed the same characteristics of structure, morphology, and development as \textit{pat-desát} 'fifty'. Phonologically, it resembled this numeral in the characteristic change of ě (\( <^*q > a \)) (\textit{devat-} vs. \textit{devět} 'nine', just as \textit{pat-} vs. \textit{pět} 'five', see 2.6.2.).

2.7.2.1.-2.7.2.8.a. In ModCz the cardinal numerals denoting decades: \textit{dvacet} 'twenty', \textit{tricet} 'thirty', čtyřicet 'forty', padesát 'fifty', šedesát 'sixty', sedmdesát 'seventy', osmdesát 'eighty', and devadesát 'ninety' all have a declension which is identical with that of the basic numeral \textit{pět} 'five', i.e., -\( q \) ending in the direct cases (e.g. \textit{dvacet} 'twenty', \textit{devadesát} 'ninety'), and -i in the oblique cases (e.g. \textit{dvaceti} 'twenty', \textit{devadesáti} 'ninety').
b. In word derivation the decades 'twenty' through 'ninety' assume the oblique-case form, e.g. dvacet-
místný 'twenty-digit', padesátčlenný 'with fifty members', osmdesátiletý 'eighty-year old', and less frequently, the
direct-case form (a variant with a lengthened vowel
exists for dvacet 'twenty', třicet 'thirty', and čtyřicet 'forty': dvacit-, třicit-, čtyřicit-), e.g. dvacetnik 'twenty-heller piece', dvacitka 'number twenty', třicetkrát 'thirty times', třicítka 'thirty years', padesátník 'half-crown piece', osmdesátka 'a speed of eighty kilo-
meters per hour'.

2.8.1.a. The OCz compounded numerals of the type
'21', '32', '43', etc., were formed by combining the
basic numerals 'one' through 'nine' with the decades
'twenty' through 'ninety'. The unit numerals and the
decades each preserved its own declension, and they were
usually connected by the conjunction a 'and'. In such
constructions the lower digit (unit) could precede the
higher digit (decade):

šest a sedm desát
'seventy-six'
Váž. 151;

or, in monuments of a later date, the lower digit could
follow the higher digit:

sedmdesát a šest
'seventy-six'
Váž. 151.
In the latter type, the conjunction a was frequently omitted. It was also possible to use a construction in which the decade was joined to the unit by means of the preposition a 'with', e.g.:

\[ \text{dvadočti s jedniem} \]
\[ \text{'twenty-one'} \]
\[ \text{Váž. 152.} \]

Gradually, these compounded numerals developed a simplified declension in which only one component was declined. It was the earlier type šest a sedm desát 'seventy-six' in which this simplification spread very quickly.

b For numerals '21'- '29' OCz had another type of construction. It contained the unit numeral followed by the phrase 'between [two] tens': jeden-mezi-cietma '21'. In this construction only the first component (the unit numeral) was declined. The prepositional phrase mezi-cietma (later also: mez-dcietma, mez-cietma, mez-citma, mecitma), in which cietma < *desietma, Instr. dual, remained unchanged.

2.8.2.a. In ModCz the standard form of deriving compounded numerals '21'- '99' is the juxtaposition of the decade and the unit numerals (e.g. třicet dva '32'). In this type of construction both components are declined as separate parts (see 2.7.2.1.-2.7.2.8. and 2.2.2., 2.3.2., 2.4.2., and 2.5.2.1.-2.5.2.6.). There also exists a less formal method (typical especially for
the spoken language), in which the order of the two components is reversed, and the conjunction a 'and' is used as a link, e.g. dvaatřicet '32'. Numerals of this type are more compact compounds: they are inflected in the second component only (e.g. dvaatřiceti '32', Gen., Dat., Instr., Loc.).

b. In word derivation the compounds '21'-'99' assume the oblique-case form of the variant in which the unit numeral precedes the decade, e.g. šestapadesátka 'fifty-six years' (see also 2.7.2.1.-2.7.2.8.b.).

2.9.1. In OCz the declension of the numeral sto 'hundred' in the singular (for dual and plural see 2.10.1.1. and 2.10.1.2., respectively) was identical with the declension of neuters of the non-palatal stem variety (type: město 'city'): Nom./Acc.: sto, Gen.: sta, Dat.: stu, Instr.: stem, Loc.: stu. There are also examples where sto remains indeclinable.

2.9.2.a. In ModCz the numeral sto 'hundred' retains the same morphological characteristics as those that predominated in OCz (inflection on the model of the neuter nouns, the I declension, with minor deviations). In Loc. sg. sto has -u, whereas město, its paradigmatic model, has -ě: městě. It should be noted that in ModCz neuters declined according to this paradigm generally
vacillate between these two desinential variants (-ů and -ě, realized as [e] or [je]), and frequently, but not always, admit only one of them as acceptable, e.g. *stě 'hundred', Loc. sg., and *městů 'city', Loc. sg. do not occur in standard ModCz.

b. The direct cases of the numeral sto 'hundred' require Gen. pl. of the head noun, e.g.:

\[
\begin{align*}
&\text{bylo tam sto vojáků} \\
&\quad \text{\shortprime a hundred soldiers were there'};
\end{align*}
\]
\[
\begin{align*}
&\text{viděli jsme sto studentů} \\
&\quad \text{\shortprime we saw a hundred students'.}
\end{align*}
\]

In forming the oblique cases of the numeral sto 'hundred' and its head noun, there are three possible combinations, all admitted as appropriate by ModCz grammars:

(1) sto remains indeclinable, and only the head noun is inflected:

\[
\begin{align*}
&\text{ke sto lidem} \\
&\quad \text{\shortprime to a hundred people'};
\end{align*}
\]

(2) sto is declined, and the head noun appears fixed in Gen. pl.:

\[
\begin{align*}
&\text{ke stu lidí} \\
&\quad \text{\shortprime to a hundred people'};
\end{align*}
\]

(3) both sto and its head noun are declined and grammatically agreed in case:

\[
\begin{align*}
&\text{ke stu lidem} \\
&\quad \text{\shortprime to a hundred people'}.
\end{align*}
\]

c. In word derivation the numeral 'hundred' appears in the direct-case form sto-, e.g. stoletý 'hundred-year
old', stonásobný 'hundredfold'.

2.10.1.1. In OCz dvě stě '200' was a compound numeral consisting of the neuter form of the numeral for 'two' followed by Nom. dual of the numeral for 'hundred'. In the declension both parts were in the dual. (Examples for cases other than Nom./Acc. are not attested in the sources available.)

2.10.1.2.a. The OCz numerals tři sta '300' and čtyři sta '400' were of a structure similar to that of dvě stě '200': the basic numeral tři 'three' or čtyři 'four' when in Nom./Acc. was followed by Nom. pl. of the numeral sto 'hundred'. In the oblique cases, there was grammatical (case) agreement between the first component (tři, čtyři) and the second component (sta), e.g. čtyři set '400', Gen.

b. In the plural the numeral sto 'hundred' was also declined on the model of the neuters in -o (type: město 'city'). One slight deviation is noted in Gen., where sto had set, whereas město had měst.

2.10.1.3. The OCz numerals pět set '500', šest set '600', sedm set '700', osm set '800', and devět set '900' were compounds in which the first component was one of the basic numerals (pět 'five', šest 'six', sedm 'seven', osm 'eight', and devět 'nine') which were syntactically similar to nouns; thus in Nom./Acc. the head noun
(sto 'hundred') appeared in Gen. pl. (set). In the oblique cases there was agreement between the two components (the first component was declined in the singular, the second in the plural). Certain OCz monuments also record pět sto, šest sto, etc., i.e., forms in which the second component appears in Nom. sg. throughout the declension of the first component (e.g. pět sto, Nom., pěti sto, Gen., etc.). This was essentially a peculiarity of the Moravian-Slovak dialects, and has survived there up to the present time (it is also the norm in standard Slovak).

2.10.2.1. In ModCz the numeral dvě stě '200' shows a regularized pattern in its declension: the first component is declined in accordance with the declension of the basic numeral dva/dvé 'two' (see 2.2.2.), while the second component shows regular plural-number desinences, except in Nom./Acc. which has retained the original dual ending. Thus Gen.: set, Dat.: stům, Instr.: sty, Loc.: stech.

2.10.2.2. The ModCz numerals tři sta '300' and čtyři sta '400' are declined on the same pattern as the preceding numeral dvě stě '200', i.e., the first component is declined in accordance with the declension of the basic numeral tři 'three' and čtyři 'four' (see 2.3.2. and 2.4.2.),
while the second component follows the plural declension of *sto*: Nom./Acc.: tří/čtyři sta, Gen.: tří/čtyř set,

2.10.2.3.a. In ModCz the numerals for '500' through '900' stabilized in the type where the first as well as the second component are declined (in contrast to Slovak which generalized the type pět sto, i.e., one with the second component fixed in Nom. sg.). Thus Nom./Acc.: pět set, Gen.: pěti set, Dat.: pěti stům, Instr.: pěti stů, Loc.: pěti stech.

b. In word derivation the numerals '200' through '900' usually appear in the Gen. or Nom. forms, e.g. dvousetletý '200-year old', pětisetletý '500-year old', devítisetnásobný '900-fold'; dvěstěprocentní '200-percent', třistaletý '300-year old', and rarely in other forms, e.g. pětistovka '500-meter race'.

2.11.1. The OCz numeral tis'úc 'thousand' (cf. OPol and ModPol tysiac 'thousand') developed from a ComS parallel form *tysotj* (cf. also the vacillation between tysjačju and tysjačeju in Instr. sg., and tysjač and tysjačej in Gen. pl. in OR, and furthermore the vacillation between tysjačju and tysjačej, persisting in ModR). The gender of this numeral was masculine (cf. also OPol, ModPol
tysiąc 'thousand', M.). The change of ty > ti in the first syllable represents an interesting example of assimilation ([t] > [t'] in anticipation of [s'] in the following syllable), while the later change s'u > si (tis'úc > tisíc) is a regular phonological phenomenon (known in OCz as přebleska 'umlaut'). In the declension of the numeral tis'úc the endings were those of the soft-stem masculine nouns: Nom./Acc.: tis'úc, Gen.: tis'úca, Dat.: tis'úcu, Instr.: tis'úcem, Loc.: tis'úci. In the plural, Gen. had two variants: tis'úc and tis'úcov. The other cases were: Nom.: tis'úci, Dat.: tis'úcom, Acc.: tis'úce, Instr.: tis'úci, Loc.: tis'úcích. There also appear numerous examples in which tis'úc and its variant tis'úce appear as indeclinable:

se třmi tisíc
'with three thousand'
(DalC.; 14th cent.) Váz. 152;

v sto tisíce letech
'in a hundred thousand years'
(Kruml.; e. 15th cent.) Váz. 152.

2.11.2.a. In ModCz the numeral tisíc 'thousand' preserved the basic characteristics of its original declension (see 2.11.1.). The present declension corresponds to the palatal-stem variety of the I declension. Singular: Nom./Acc.: tisíc, Gen.: tisíce, Dat.: tisíci, Instr.: tisícem, Loc.: tisíci; plural: Nom./Acc.: tisíce, Gen.: tisíc, tisíců, Dat.: tisícům, Instr.: tisíci,
Loc.: tisícich. The distribution of the two variants tisíc and tisíců is as follows: the former is used after the cardinal numerals (e.g. pět tisíc '5,000'), while the latter is used when the numeral 'thousand' is not modified (e.g. tisíců 'of thousands'), or has a modifier or an indefinite quantifier preceding it (e.g. jásajících tisíců 'of jubilant thousands'; několika tisíců 'of several thousand'). In declining the numeral and its head noun the same characteristics are observed as those mentioned in connection with sto 'hundred' (see 2.9.2.b.).

b. In word derivation the numeral 'thousand' occurs in the forms tisíc- and tisíc-, e.g. tisíciletý 'thousand-year old', tisícinásobný 'thousandfold', tisícovka 'thousand-crown bill'; tisícíkrát 'thousand times'. The multiples of 'thousand' appear in a form that consists of the Gen. of the determining numeral followed by the form -tisíc- or the form -tisíc-, e.g. dvoutisíciprocentní '2,000-percent', pětíttisícovka '5,000-crown bill'.

2.12.1. In OCz, multidigital compounded numerals were formed regularly without any connecting conjunctions (except in the lowest two digits, in '21'- '99', see 2.8.1.). In such compounded groups the numerals sto 'hundred' and tisíců 'thousand' were frequently used in fixed, indeclinable forms (for sto, see 2.10.1.3.; for
However, the declension of each of the individual members of such compounded numerals was an equally common occurrence in OCz.

2.12.2. In ModCz, multidigital compounded numerals are formed by means of juxtaposition of the individual numeral components. Each component preserves its own inflectional characteristics (for the simplified declension of numerals of the type dvaatřicet '32' see 2.8.2.), and the head noun of a multidigital compounded numeral is entirely dependent on the syntactic requirements of the last numeral in such a series, e.g. s tisícem dvěma sty patnácti studenty 'with 1,215 students', but: s tisíc dvě stě studenty or: s tisícem dvěma sty studentů 'with 1,200 students'.

2.13.1.a. With regard to numerals higher than 'thousand' OCz used the expression tma, found in other Slavic languages (e.g. OCS, OR). The meaning of this word was not fixed: it could represent the numbers '6,660' or '10,000', the usual count of men in a Roman legion, or simply a large, indefinite number. For 'million' OCz borrowed milion; the earliest record is from the fifteenth century. Miliarda 'billion' and bilion 'million millions' were borrowed much later than milion.

b. Milion and bilion were declined like hard-stem

2.13.2.a. ModCz uses the borrowed numerals milion 'million', miliarda 'billion', and bilion 'million millions' in a similar way as they were used in OCz, and preserves their nominal-type declension (milion and bilion are declined according to the I declension, miliarda according to the II declension; cf. 2.13.1.: the late OCz declension paradigm of these three numerals as given in the preceding paragraph applies also to the ModCz period).

b. The declensional pattern of groups in which milion, miliarda, and bilion form the first part, and a noun follows as the second part, are the same as the declensional patterns of sto 'hundred' followed by a head noun (see 2.9.2.b.); however, case (l), when the numeral is not declined, is very rare, and is limited to the spoken language only.
Summary (Chapter 2):

In ModCz, the morphology of the cardinal numerals above 'four' is characterized by similarities with the substantival paradigms that are even more conspicuous than those seen in ModR. Thus, e.g., the numeral sto 'hundred', which in ModR belongs to the highly simplified paradigm in which there is one ending for the direct cases and one for the oblique cases (see 1.9.2.a.), is in ModCz declined strictly according to the I declension, and furthermore, ModCz cardinal numerals above sto 'hundred' (including compounds) follow the basic substantival paradigms without exception (in contrast to this, compare, e.g., the desinences of ModR tysjača 'thousand', with variants in Instr., see 1.11.2.a.).

Furthermore, in ModCz numeral compounds, the bond between the individual components is much looser than in ModR (cf. ModR pjet'sót '500' vs. ModCz pět sét '500', which is similar to pět knih 'five books'. The overwhelming majority of ModCz cardinal numerals below 'hundred', namely all cardinal numerals ending in -ř in Nom., belong to a significantly simplified paradigm, structurally similar to that of ModR sorok 'forty', devjanosto 'ninety', and sto 'hundred', but actually based on the III declension. This paradigm has -ř in the direct cases and -i in the oblique cases. The ModCz cardinal
numeral paradigms show a substantial uniformity of stems: alternation of the type ModR \texttt{p}\texttt{jat'des}\texttt{jat} - \texttt{p}\texttt{jat\_des}\texttt{jat} - 'fifty' is not found in ModCz.
CHAPTER 3 : CARDINAL NUMERALS IN SERBOCROATIAN

3.1.1.a. The forms of the OScr numeral jedan/jedna/jedno 'one' are based on parallel ComS forms with the reduced vowel է (*jed[-]/jed[-]/jed[-]) rather than on those with the full vowel i, which underlie the OCS forms jedina/jedina/jedino. In OScr, the forms with -i- are also attested, but they are much less frequent.

b. In its morphology, jedan/jedna/jedno 'one' followed the pronominal declension of ta(i)/ta/to 'this', and syntactically this numeral functioned as a modifier (i.e., agreed with its head noun in case, gender, and number.

3.1.2. ModScr jedan/jedna/jedno 'one' possesses the same morphological and syntactic characteristics as those observed in OScr (3.1.1.b.). The declension of the numeral is pronominal, and there is gender, case, and number agreement between the numeral and its head noun. (For the use of plural forms see 9.1.2. and 9.1.1.a.)

b. In word derivation the numeral 'one' occurs in the form jedno-, e.g. jednoboštvno 'monotheism', jednodušan 'unanimous', jednook 'one-eyed', jednostruk 'single', and
less frequently in the shortened form jedn-, e.g. jednina 'singular', and the full-vowel form jedin- (see 3.1.1.a.), e.g. jedinica 'only daughter', jedinstven 'unique'.

3.2.1. In OScr đive 'two' was used in the neuter gender up to the beginning of the fifteenth century, while điva, originally limited to the masculine gender, began to appear with neuter nouns in the thirteenth century, and eventually prevailed in the neuter gender: the earlier contrast of điva, M. vs. đive, F./N. changed into a new contrast of điva, M./N. vs. đive, F. In the fifteenth century another interesting phenomenon appeared, namely the spread of the feminine desinential vowel ě into the oblique cases. Subsequently (approximately in the seventeenth century), the M./N. desinence -a was utilized in the new formation of the oblique cases for the masculine gender on the basis of analogy with the feminine form (so that đive, Nom. was to điveju, Gen./Loc., and đivema, Dat./Instr. just as điva, Nom. was to đivaju, Gen./Loc., and đivama, Dat./Instr.). The desinence -aju in Gen. pl. (dvaju) was in competition (especially in the Čakavian i-dialects) with the desinence -ih of the adjectival declension (dvih 'two', Gen. pl. F.).

3.2.2.a. The split in the oblique cases of điva/dive
'two' that occurred in OScr (see 3.2.1.) has been
retained in ModScr (however, Loc. no longer syncretizes
with Gen., but with Dat./Instr.). The present declension
of dva/dvije 'two' is as follows:

<table>
<thead>
<tr>
<th>Case</th>
<th>M./N.</th>
<th>F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom./Acc.</td>
<td>dva</td>
<td>dvije</td>
</tr>
<tr>
<td>Gen.</td>
<td>dvaju</td>
<td>dviju</td>
</tr>
<tr>
<td>Dat./Instr./Loc.</td>
<td>dvama</td>
<td>dvjema</td>
</tr>
</tbody>
</table>

b. In the direct cases, the head noun of the numeral
dva/dvije 'two' appears in Nom. pl. if it is a feminine,
while masculine and neuter head nouns employ a form which
is usually described as Nom. dual. It should be noted
that this form is identical with Gen. sg. in a predominant
number of masculines and neuters. The isolation of the
dual is dictated, above all, by requirements of the
verbal congruence in the perfect tense, as seen in the
following examples:

dva su bora naporeda rasla
'two pine trees grew side by side'
BHŽ. 41;

pripremni radovi trajali su godinu dana
'preliminary work lasted a year'
BHŽ. 230.

c. However, the inflection of this numeral may be
suspended, primarily if the numeral is governed by a
preposition (exceptionally also if no preposition precedes
it; in this latter case the head noun of the numeral must
indicate the syntactic relationship):
In word derivation the numeral 'two' occurs in the form dvo-, e.g. dvokolica 'bicycle', dvoličnost 'duplicity', dvopek 'zweback', dvopjev 'duet', and only exceptionally in the form dva-, e.g. dvaput 'twice'.

3.3.1.a. The oldest monuments of OScr attest the forms trije, trađe for 'three', but this was apparently due to OCS influence. Beginning with the fourteenth century only tri appears in the written monuments. These records indicate that the original i-stem declension prevailed in the morphology of tri 'three' in most OScr dialects (thus: Loc. traće, with its reflex e for ἐ in trex, etc.). Some dialects, however, have -i-(e.g. trimi, Instr.) and -ije- (trijema, Instr.) as alternating reflexes of -ἐ-

b. In its development, this numeral was subjected to an increased morphological and syntactic influence of the declension of diva/divē 'two'. As a result, the forms triju, Gen., and trima, Dat./Instr./Loc. developed (the first records are from the sixteenth century). In certain Čakavian dialects Gen. trih and Dat. trim developed on the analogy of the adjectival declension; trih, moreover, was supported by dvih (Gen. of dvije 'two', see 3.2.1.).
c. In the syntax the original Nom. pl. of the head noun of *trije/tri* (these two forms are also preserved in ModČak) was replaced in the masculine and the neuter genders by Gen. sg. This process began to develop in the fifteenth century.

3.3.2.a. ModScr *tri* 'three' has a declension which has a parallel in the paradigm of *dva/dvije* 'two'. However, in contrast to this numeral, the direct cases of *tri* do not show any gender distinction: *tri* refers to all three genders. In Gen. the form *triju* is used, and Dat., Instr., and Loc. syncretize in *trima*. The suspension of inflection of *tri* occurs under exactly the same circumstances as those affecting the inflection of 'two' (see 3.2.2.c.).

b. In word derivation the numeral 'three' appears in the form *tro-*, e.g. *trogub* 'threelfold', *trodnevan* 'three-day', *tročlan* 'trinomial', *trokut* 'triangle', *tronožac* 'tripod'.

3.4.1.a. The development of OScr *četire/četiri* 'four' was very similar to that of *trije/tri* 'three' (see 3.3.1.), i.e., *četiri* appears as the sole form as early as the beginning of the historical OScr period. Some Čakavian dialects, however, continued to use *četire* fairly commonly, and in Štokavian dialects, beginning with
the fifteenth century, -e (alternating with -a) was restored to the shortened form četir, which had become very common, so that the Nom./Acc. forms were as follows: četiri, četire, četira, četir. Somewhat later, the reduction of the stem-vowel -i- occurred, so that the forms četri, četre, četr appeared (in certain dialects the r was vocalic, in others it preserved its consonantal character). The vocalic r ([r]) produced additional variants četer, četeri, found in the Dalmatian dialects beginning with the seventeenth century. In other dialects, the first stem-vowel could disappear, producing forms such as čtiri, etc.

b. In its morphology, too, četiri followed tri very closely: the attraction of the feminine i-stems prevailed (e.g. Dat.: četirem). In Čakavian this -z- was reflected as -i-, and the same reflex appeared also in the Štokavian dialects. But sometimes influences of other paradigms can be seen, as, e.g., in the reflex -ije- (< ě):

ovičex četirijex riječijex
'of these four words'
(Mikl Gram.) Bč. 183.

c. The influence of the morphology of the numeral diva/divë 'two' was even more significant here than the influence of that of tri 'three'. Beginning with the sixteenth century there appeared the forms četiriju in Gen. (by extension also in Loc.) and četirima in Dat.
and Instr.

3.4.2.a. ModScr četiri 'four' is declined according to a paradigm that shows a marked similarity with the inflection pattern of dva 'two' (četiri resembling in this respect also the cardinal numeral tri 'three', see 3.3.2.). The Nom./Acc. form is četiri, Gen.: četiriju, Instr./Dat./Loc.: četirma. The suspension of inflection is possible under the same circumstances as in dva and tri (see 3.2.2.c.). Syntactically, četiri is in the same group as the preceding two cardinals (see 3.2.2.b.).

b. The cardinal-numeral base četir- 'four' does not participate in word derivation. Derivations employing the numeral 'four' are based on the collective-numeral form četver-/četvor- (see 9.4.2.c.).

3.5.1.1.-3.5.1.5. In OScr the numerals for 'five' through 'nine' showed the same morphological characteristics as found in OCS: they were declined like i-stems (feminine). Syntactically, they developed an innovation, however: in the oblique cases it was possible to decline them (in the plural; with endings borrowed from the declension of the numerals 'two', 'three', and 'four'), so that there was grammatical agreement between the numeral and the head noun. At the same time, the old practice (i.e., the head noun in Gen. pl. throughout the declension of the numeral) is still copiously attested
in OScr monuments, and seen as competing with the innovation. Relatively early in the OScr period it was also possible to suspend inflection of the numeral, as the following two examples manifest:

u ostaljeh pet pitanja
'in the remaining five questions'
(Led. 26:1; 1582);

nu reci sada ot sedam grjeha
'but speak now about the seven sins'
(Led. 50:4-5; 1583).

3.5.1.6. The OScr numeral deset 'ten' preserved certain morphological peculiarities inherited from the consonant-al-stem declension. Its declension in the singular (with the exception of the prepositional phrase in Loc. na desete 'upon ten', see 3.6.1.) was largely the same as the declension of the preceding five numerals ('five'- 'nine'). An early example of suspension of inflection in this numeral is found in the following quotation:

ona [i.e., djela] koja nam su postavljena u deset zapovjedi božjeh
'those actions which are laid down for us in the Ten Commandments'
(Led. 36:19-17:1; 1583).

Syntactically, the numeral deset 'ten' also belonged to the same group as the numerals 'five' through 'nine' (see 3.5.1.1.-3.5.1.5.).

3.5.2.1.-3.5.2.6.a. In ModScr the numerals pet 'five',
šest 'six', sedam 'seven', osam 'eight', devet 'nine', and deset 'ten' function as indeclinable words. The head noun appears in Gen. pl. if the numeral has the Nom./Acc. function, while in the remaining cases it appears in accordance with the rection of the verb or the preposition.

b. In word derivation the numerals 'five', 'six', 'seven', 'eight', 'nine', and 'ten' are increased by a linking vowel -o- (sedam 'seven' and osam 'eight' drop -a- before this linking vowel), so that they appear in the forms peto-, šesto-, sedmo-, osmo-, deveto-, and deseto-, e.g. petostran 'pentagonal', petoljeće 'quinquennium', šestoper 'mace with six spikes', sedmo-godišnji 'seven-year old'. The linking vowel -o- is omitted if the element following the numeral base begins in a vowel, e.g. devetnica 'novena', desetak 'about ten'.

3.6.1.a. In OScr the structure and the forms of the numerals for 'eleven' through 'nineteen' reflected accurately the ComS state of things, as found, e.g. in OCS. Beginning with the fourteenth century, forms without the final -e (dva na deset 'twelve'; Bć., p. 177) are attested. Another change that occurred at approximately the same time was the loss of the preceding vowel (in this case the desinential vowel -e, as a rule, was preserved: osam na deste 'eighteen'; Bć., p. 178). In the sixteenth century, there appeared the loss of the
initial dental in the word 'ten', as a result of articulatory weakening in the first post-accentual syllable. This change was apparently connected with the ultimate loss of the final vowel -e in the last component of the numeral: -desete > -deste > -dest(e) > -est(e). Yet there was an appreciable amount of variation between -este and -est, even in the last stage of the above series of changes.

b. In OScr the numerals for 'eleven' through 'nineteen' were gradually reinterpreted as new word units, rather than loosely connected compounds. This accounts for the early loss of inflection in this type of numeral (here even the full, uncontracted, forms were affected), e.g.:

pod pet na desete pečatimi
'under fifteen seals'
(MS 248.) Be. 185.

c. Fairly common, too, was the attachment of endings (borrowed from the declension of the numerals 'two', 'three', and 'four') to the last part of the numeral:

s ovim dvanajestima apostoli
'with these twelve apostles'
(Rad.) Be. 185.

d. Syntactically, these numerals were not associated with the individual numerals of the first decade, but behaved uniformly, all like the numerals for 'five'-'ten', i.e., in the direct cases they required Gen. pl. of their head nouns, while in the oblique cases they were followed
by their head nouns fixed in Gen. pl. In the even that
the numeral itself was not declined, the head noun
appeared in the appropriate case (see example in
3.6.1.b.).

3.6.2.a. The ModScr numerals 
  jedanaest 'eleven',
  dvanaest 'twelve', trinaest 'thirteen', 
  četrnaest 'fourteen', petnaest 'fifteen', šesnaest 'sixteen',
  sedamnaest 'seventeen', osamnaest 'eighteen', and
  devetnaest 'nineteen' are indeclinable. Their syntactic
  properties are identical with those of the numerals for
  'five' through 'ten' (see 3.5.2.1.-3.5.2.6.).

b In word derivation the numerals of the second
decade occur only sporadically. The basic form of the
numerals is used, unless a difficult consonant cluster
would result (thus, e.g., dvanaest- + nik produces
dvanesnik 'duodenum'), i.e., the final consonant of
the numeral base is deleted in such a case.

3.7.1.1.a. In OScr the numeral for 'twenty' is
attested in the expected form 
  děva deseti up to the
fifteenth century, but the final vowel in the second
component is frequently missing (possibly dropped to
avoid homophony with the corresponding ordinal numeral).
The shortened form prevails after the fifteenth century.
In some dialects the final vowel in deseti was preserved
at the expense of the vowel in the preceding syllable, which was syncopated, so that the form desti (*dva desti*) was obtained. In the dialects where the form *dva deset* developed, another simplification occurred, namely the loss of the initial dental in the second component: this change accounts for the forms *dvæset* and *dvæjset*.

b. In the morphology, there was a tendency (noticed even in the oldest monuments) to avoid declining such compounds. Somewhat less common was the use of plural endings (attached to the second component; see example in 3.6.1.c.).

c. Syntactically, a peculiar trend is noticed, namely an attempt to replace the inflection of the numeral and of the head noun (a pattern in which both the numeral and the head noun were declined in a way that grammatical agreement was realized in the oblique cases) by a simplified construction in which both the numeral and the head noun appeared indeclinable: the numeral was in the basic (Nom./Acc.) form, and the head noun followed in Gen. pl. This process of simplification apparently developed through an intermediate stage in which the numeral was declined while the head noun appeared in Gen. pl. (see example in 3.6.1.c.).

3.7.1.2. - 3.7.1.3. The OScr numerals for 'thirty' and 'forty' are attested in the forms *tri deseti* and
četiri deseti, respectively; these appear as the oldest forms (i.e., *trije desete and *četire desete are not attested). As a result of processes similar to those described in 3.7.1.1.a. in connection with dva deset 'twenty', there appeared later forms tridesti and četirdesti, triset and četrdeset, and trijes and četrest (some of these have been preserved in various ModScr dialects). Morphologically and syntactically these two numerals belonged to the same group as dva deset 'twenty':

uzide nakon četardesti dana
'he ascended after forty days'
(Led. 16:7; 1583).

3.7.1.4.-3.7.1.8. In the decades above 'forty' OScr attests forms which were regular reflexes of the underlying South Slavic forms (as found, e.g., in OCS). Those decades in which the first component ended (after the loss of jers) in a dental show a simplification of the resulting cluster of two dentals (e.g. *pet deset 'fifty') into a single dental (pedeset). Moreover, in the case of *šest deset > šezdeset 'sixty' there is seen assimilation of voicing caused by the result of such a cluster-simplification. There appeared also a form in which the new cluster -zd- was lost: šeset 'sixty' (Bč., p. 179). Morphologically and syntactically pedeset 'fifty', šezdeset 'sixty', sedamdeset 'seventy', osamdeset 'eighty', and devedeset 'ninety' belong to the same category as dvadeset 'twenty'
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(see 3.7.1.1.).

3.7.2.1.-3.7.2.8.a. The ModScr numerals dvadeset 'twenty', trideset 'thirty', četrdeset 'forty', pedeset 'fifty', šezdeset 'sixty', sedamdeset 'seventy', osamdeset 'eighty', and devedeset 'ninety' are indeclinable. The head noun of these numerals appears (fixed) in Gen. pl.

b. In word derivation the decades 'twenty' through 'ninety' occur in the basic forms, e.g. devedesetgodišnji 'nonagerian'.

3.8.1. The OScr numerals for '21'-'99' were compounds consisting of decades and units. Both components retained their morphological characteristics (see 3.7.1.1.-3.7.1.8. and 3.1.1., 3.2.1., 3.3.1., 3.4.1., and 3.5.1.1.-3.5.1.5.), while the syntax of such compounds was determined by the second component (the unit numeral). As a rule, the two components were connected by the conjunction i 'and'.

3.8.2. The ModScr compounded numerals for '21'-'99' follow very closely the pattern described for OScr in 3.8.1. above. It should be remembered, however, that the decades, and the unit numerals for 'five'-'nine' are not inflected in ModScr; the unit numerals 'two', 'three', and 'four' may or may not be inflected, and thus only 'one' is always inflected. Since the syntax of such compounded numerals is determined by the unit numeral (i.e., the last
component), the appropriate sections of the ModScr part of this chapter (e.g. 2.1.2., 2.2.2., etc.) apply. The decades and the units are connected by the conjunction i 'and'.

3.9.1.a. In the treatment of the numeral *sto, sto* 'hundred' OScr continued the pattern of South Slavic (as attested, e.g., in OCS) but soon this numeral, too, became indeclinable. Parallel to *sto*, there appeared a declinable variant *stotina* '(a group of) a hundred' (declined according to the *a*-stem feminine paradigm, and having singular and plural). In practical use, the Acc. sg. form was generalized in cases other than Nom. sg. (cf. example in ModScr, 3.9.2. below).

b. Syntactically, the numeral *sto* (*stotina*) required its head noun to appear in Gen. pl. There was also a less common variant, applicable only in the oblique cases: the declension of the head noun in the plural.

3.9.2.a. The ModScr numeral *sto* 'hundred' is indeclinable. Its head noun appears (fixed) in Gen. pl. There is also a declinable variant *stotina* (II declension), but in practical use the Acc. sg. form has replaced in it all cases but Nom. sg.:

sa stotinu i trideset vojnika
'with 130 soldiers'

BHŽ. 109.
This variant has identical syntactic properties as sto.

b. In word derivation the numeral 'hundred' appears in the basic form sto-, e.g. stogodišnji 'centenary' (also in the multiples of 'hundred', e.g. '200', '300'-'900', e.g. devetstogodišnji '900-year old').

3.10.1.1. OScr attests forms for '200' which are analogous to the form dvě satě of OCS: dve sti, dvje sti, dvie ste (cf. ModScr dialectal dvjesti, dvijesti in Bč., p. 176). Beginning with the thirteenth century, the numeral for '200' appears in the form dvesta (< *d(z)ve s(z)ta, which was formed on the analogy of tri sta '300'). This form consists of the original neuter form of the numeral for 'two' and the nominative plural of the numeral for 'hundred'; hence this variant of the numeral developed before dva replaced dvě (dvje, dvije) in the neuter gender. The most common morphological treatment of this numeral was the suspension of declension (especially in the second component). Syntactically dvesta '200' belonged to the same category as the numeral sto 'hundred'.

3.10.1.2. In OScr the attested forms tri sta for '300' and četiri sta for '400' represent regular development of the South Slavic forms found in (or reconstructed for) OCS. In the sixteenth century an innovation appeared:
the numeral sto (indeclinable in the above compound) was replaced by Nom. pl. of the declinable substantive stotina '(a group of) a hundred': četiri stotine '400'. Both variants continued to coexist in the language. Syntactically, they behaved identically, i.e., the head noun was either fixed in Gen. pl. or was declined in the plural.

3.10.1.3. The OScr forms of the numerals for '500'- '900' are closely connected with the OCS forms attested for some of the hundreds:

devet sat dukat
'nine hundred ducats'
(MS 504.; 1468) Bč. 180.

Beginning with the sixteenth century the Gen. pl. form sat 'hundred' appears to have been replaced by Nom. sg. sto. At the same time the Gen. pl. of the substantive stotina '(a group of) a hundred', e.g. pet stotina '500', came into use. The component sto (and its variant sat) usually remained indeclinable, whereas the first component (e.g. pet, šest, etc.) was declined as long as the basic cardinal numerals were declined in OScr; with the loss of declension in these basic cardinal numerals such compounds as pet sto '500' were also affected, and became indeclinable as well. Stotina '(a group of) a hundred' was originally a declinable noun but soon the Gen. pl. form was generalized, and with the loss of
declension in the first component of the numeral the indeclinable status of the whole compound became stabilized. The head noun of a compound such as pet sto(tina)'500' appeared in Gen. pl. (but grammatical agreement with the first component, as long as it was declined, was possible; this is the stage attested in earlier OScr monuments).

3.10.2.1. ModScr has two variants for the numeral '200': the indeclinable dvjesta, and the optionally declinable dvije stotine. Stotine in the latter variant is Nom. pl. of the noun-like numeral stotina '(a group of) a hundred', see 3.9.2. The head noun (of both variants) appears fixed in Gen. pl.

3.10.2.2. The ModScr numerals for '300' and '400', too, have two (or three) variants each: the indeclinable tristo, trista '300' and četiristo '400', and the optionally declinable tri stotine '300' and četiri stotine '400' (četiri stotine being somewhat more common than četiristo). The head noun (of both variants) appears fixed in Gen. pl.

3.10.2.3. The ModScr numerals for '500'- '900' have two variants each: petsto and pet stotina '500', šesto and šest stotina '600', sedamsto and sedam stotina '700', osamsto and osam stotina '800', and devetsto and devet stotina '900'. Both variants are indeclinable, and their head nouns are fixed in Gen. pl.
3.11.1. In OScr there are attested two words for the numeral 'thousand': the earlier tisuća and the later hiljada (borrowed from ModGk, probably via Turkish, xiliada 'thousand'). Hiljada appeared beginning with the fifteenth century. The head noun of tisuća and hiljada usually appeared in Gen. pl., but other cases are attested in a few examples: in these, grammatical agreement between the numeral and the head noun is observed.

3.11.2.a. ModScr has retained both tisuća and hiljada (the latter is somewhat more wide-spread) as the two variants of the numeral for 'thousand'. Both numerals are declined like feminine nouns (II declension), but in practical use Acc. sg. has been generalized for all cases except Nom. sg. (cf. the analogous situation in stotina: stotinu '(a group of) a hundred', 3.9.2.). The head nouns of tisuća and hiljada are fixed in Gen. pl.

b. In word derivation 'thousand' is represented by the form tisuć-, e.g. tisućgodišnjica 'millenium' and the form hiljadu- (or its variant hiljad-, used before elements beginning in a vowel), e.g. hiljadugodišnjica 'millenium', hiljadarka 'thousand-dinar bill'. The multiples of 'thousand' ('2,000', '3,000', etc.) are utilized in derivation only exceptionally.
Summary (Chapter 3):

The status of ModScr cardinal numerals is markedly different from the status of the cardinal numerals in the East and the West Slavic languages examined. Apart from the first four numerals ('one'-'four'), whose declension follows basically adjectival patterns (just as it does in ModR and ModCz), and the numerals stotina 'hundred', hiljada 'thousand', tisuća 'thousand', milijon 'million', and milijarda 'billion', which have substantival characteristics and are declined according to the II declension, ModScr cardinal numerals are distinguished by a feature completely unknown in this class in both ModR and ModCz, namely, they are indeclinable.

Summary (Part I):

A survey of the class of cardinal numerals in ModR, ModCz, and ModScr shows that the most striking similarities in the area of morphology occur in the first four numerals, which have retained a predominantly pronominal-adjectival character of their desinences: 'one' following the singular, the other three numerals following the plural but demonstrating at the same time a marked influence of the old dual forms. The situation in the higher numerals is more diversified. It may be said that in general, the
cardinal numerals above 'four' have a substantival character, and their morphology is modeled on the common substantival paradigms. ModScr, however, constitutes a very important exception: its cardinals in this category are, with a few exceptions, indeclinable. The deviations from the substantival paradigms in ModR and ModCz are less conspicuous, but since they occur in very common numerals (e.g. ModR sorok 'forty', devjanosto 'ninety', sto 'hundred' [see 1.9.2.a.] or in large segments of cardinals (e.g. ModR cardinals that end in -Ø after a palatalized consonant and show a shift of stress [see Summary, Chapter 1] or ModCz cardinals that end in -Ø [see Summary, Chapter 2]), their significance is not to be underestimated: these new patterns may indeed represent the initial stage of a likely trend in the development of the morphology of the cardinal numerals in ModR and ModCz, that of an increasing paradigmatic differentiation from the form class of substantives.
PART II

CHAPTER 4 : ORDINAL NUMERALS IN RUSSIAN

4.1.1.a. The OR ordinal numeral първ/първоj 'first' is etymologically unrelated to the corresponding cardinal numeral один 'one'. Adjectival in its character, it possessed both the short (indefinite, nominal) and the long (definite, pronominal) forms, първа and първоj, respectively. The use of these two forms was similar to the use of the two types of adjectival forms (e.g. нова and новоj 'new').

b. In its morphology and syntax първ/първоj followed the adjectival pattern very closely. There were three numbers: singular, dual, and plural; three genders: masculine, feminine, and neuter; and six cases: Nom., Gen., Dat., Acc., Instr., and Loc. The gender distinction was fully realized only in the direct cases of the singular; the oblique cases of the singular as well as the other two numbers showed a substantial amount of case syncretism. There was complete grammatical agreement (in case, gender, and number) between the ordinal numeral

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and its head noun. The complete paradigms of the indefinite and the definite declension of OR ordinal numerals (exception treni 'third') was as follows (see Kuz., pp. 185, 36-38, 144-145):

### Indefinite

#### Singular

<table>
<thead>
<tr>
<th></th>
<th>M.</th>
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<th>F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom.</td>
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<td>първоа</td>
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<td>първоу</td>
<td>първоу</td>
</tr>
<tr>
<td>Acc.</td>
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<td>първоо</td>
<td>първоо</td>
</tr>
<tr>
<td>Instr.</td>
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<td>първооаа</td>
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</tr>
</tbody>
</table>

#### Dual

<table>
<thead>
<tr>
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<th>Gen./Loc.</th>
<th>Dat./Instr.</th>
</tr>
</thead>
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<td>пъръвае</td>
</tr>
<tr>
<td>Gen./Loc.</td>
<td>пъръвааа</td>
<td>пъръвомуа</td>
<td>пъръвомуа</td>
</tr>
<tr>
<td>Dat./Instr.</td>
<td>пъръвомааа</td>
<td>пъръвамиаа</td>
<td>пъръвамиаа</td>
</tr>
</tbody>
</table>

#### Plural

<table>
<thead>
<tr>
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<th>F.</th>
</tr>
</thead>
<tbody>
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<td>първомуаа</td>
<td>първомуаа</td>
</tr>
<tr>
<td>Acc.</td>
<td>пъръваао</td>
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<td>първомуао</td>
</tr>
<tr>
<td>Instr.</td>
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<td>първомуаоау</td>
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</tbody>
</table>

### Definite

#### Singular

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<th>Nom.</th>
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<th>F.</th>
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</thead>
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<tr>
<td>Nom.</td>
<td>първоа</td>
<td>първоа</td>
<td>първажа</td>
</tr>
<tr>
<td>Gen.</td>
<td>първоааа</td>
<td>първомуаа</td>
<td>първомуаа</td>
</tr>
<tr>
<td>Dat.</td>
<td>първомуааа</td>
<td>първомуааа</td>
<td>първомуааа</td>
</tr>
<tr>
<td>Acc.</td>
<td>първоао</td>
<td>първомуао</td>
<td>първомуао</td>
</tr>
<tr>
<td>Instr.</td>
<td>първомуаоаа</td>
<td>първомуаоаа</td>
<td>първомуаоаа</td>
</tr>
<tr>
<td>Loc.</td>
<td>първомуаоау</td>
<td>първомуаоау</td>
<td>първомуаоау</td>
</tr>
</tbody>
</table>
4.1.2.a. In ModR, the ordinals retained their status of adjective-like modifiers. Their short forms were lost and in their morphology there are reflected the various changes which adjectives also underwent (e.g. the loss of the dual, the simplification of the plural declension, etc.). Syntactically, the ordinals preserved their essential characteristics, too. The declension of the stem-stressed ordinals coincides with the declension of hard-stem adjectives of the type нóвýй 'new'. The complete paradigm of the ordinal numeral pervýj 'first' is as follows:

**Singular**

<table>
<thead>
<tr>
<th>M.</th>
<th>N.</th>
<th>F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom. pýrvýj</td>
<td>pýrvoe</td>
<td>pýrvaýa</td>
</tr>
<tr>
<td>Gen. pýrvogo</td>
<td>пýrvoe</td>
<td>pýrvoj</td>
</tr>
<tr>
<td>Dat. pýrvo mu</td>
<td>=Nom. or Gen. pýrvoe</td>
<td>pýrvoj</td>
</tr>
<tr>
<td>Acc. pýrvm</td>
<td>=Nom. or Gen. pýrvoe</td>
<td>pýrvuýj(u)</td>
</tr>
<tr>
<td>Instr. pýrvým</td>
<td>pýrvoe</td>
<td>pýrvoj(u)</td>
</tr>
<tr>
<td>Loc. pýrvom</td>
<td>pýrvoj</td>
<td>pýrvoj</td>
</tr>
</tbody>
</table>

**Dual**

<table>
<thead>
<tr>
<th>M.</th>
<th>N.</th>
<th>F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom./Acc. pýrvýa</td>
<td>pýrvýi</td>
<td>-------------</td>
</tr>
<tr>
<td>Gen./Loc.</td>
<td>=pýrвуj</td>
<td>-------------</td>
</tr>
<tr>
<td>Dat./Instr.</td>
<td>=pýrвýima</td>
<td>-------------</td>
</tr>
</tbody>
</table>

**Plural**

<table>
<thead>
<tr>
<th>M.</th>
<th>N.</th>
<th>F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom. pýrvýi</td>
<td>pýrvýa</td>
<td>pýrvýe</td>
</tr>
<tr>
<td>Gen.</td>
<td>=pýrвýix</td>
<td>-------------</td>
</tr>
<tr>
<td>Dat.</td>
<td>=pýrвýima</td>
<td>-------------</td>
</tr>
<tr>
<td>Acc. pýrvýe</td>
<td>pýrvýa</td>
<td>pýrvýe</td>
</tr>
<tr>
<td>Instr.</td>
<td>=pýrвýima</td>
<td>-------------</td>
</tr>
<tr>
<td>Loc.</td>
<td>=pýrвýix</td>
<td>-------------</td>
</tr>
</tbody>
</table>
The above paradigm reflects the spelling now in use. Before the orthography reform of 1917 certain peculiarities of spelling could be noted in the following forms:

(1) Gen. sg. M./N. -oɡo (–eɡo for the soft variety) was spelled -aɡo (–jago), if the stem of the adjective (ordinal numeral) was stressed (e.g. përvago 'first', tret'jago 'third'). Furthermore, the spelling -aɡo was common also in ending-stressed adjectives (ordinal numerals) but only until approximately the last quarter of the nineteenth century; afterwards, this type began to use the spelling -oɡo (e.g.: vtoráɡo 'second', but after the third quarter of the nineteenth century: vtoróɡo).

(2) In the plural, the Nom./Acc. Inan. form preserved an artificial gender distinction: the ending -ye (-ie) was used only for the masculine gender, whereas -yja (-ija) was used for the feminine and the neuter genders (e.g. pervye, M., pervyja, F./N.).

(3) The same ending -yja (-ija), common throughout the OR period, is occasionally found in works that appeared as late as the beginning of the ModR period.
(early nineteenth century) in the function of Gen. sg. F. However, this form began to be regarded as archaic soon thereafter.

All the above spelling peculiarities had the origin in the respective OCS forms.

b. In word derivation the ordinal numeral 'first' occurs in the form pervo- or its variant perv-, e.g. pervoistočnik 'primary source', pervocvet 'primrose', pervočerednoj 'first and foremost', pervenec 'first-born (child)', pervičnost' 'priority'.

4.2.1. The two variants of the OR ordinal numeral for 'second', the more common drugž/drugoj and the less frequent vtorž/vtoroj, are also etymologically unrelated to the cardinal numeral diva 'two'. They coexisted in the Russian language in this function for a surprisingly long period: up to the middle of the eighteenth century (Bog., p. 221). Beginning with the second half of the eighteenth century, vtor- prevailed, and relegated drug- to some of the other semantic areas which it had occupied since the Common Slavic period, in addition to its primary meaning 'second', e.g. the areas of '(an)other' and 'different'. Morphologically and syntactically, these two numerals belonged to the class of adjectives (see 4.1.1.).
4.2.2.a. Of the two variants of the ordinal numeral 'second' known in OR (see 4.2.1.) only vtor- is found in ModR (in the form vtoroj; the indefinite forms of the ordinal numerals do not exist in ModR; see 4.1.2.). This ordinal is declined according to the ending-stressed adjectival paradigm (type bol'nój 'sick'); its syntactic characteristics are likewise adjectival.

b. The complete paradigm of the ordinal numeral vtoroj 'second' in ModR is as follows:

<table>
<thead>
<tr>
<th></th>
<th>M.</th>
<th>N.</th>
<th>F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom.</td>
<td>vtorój</td>
<td>vtoróe</td>
<td>vtorója</td>
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<tr>
<td>Gen.</td>
<td>vtorógo-------</td>
<td></td>
<td>vtoroj</td>
</tr>
<tr>
<td>Dat.</td>
<td>vtorómu-------</td>
<td></td>
<td>vtoroj</td>
</tr>
<tr>
<td>Acc.</td>
<td>=Nom. or Gen.</td>
<td>vtoróe</td>
<td>vtorój(u)</td>
</tr>
<tr>
<td>Instr.</td>
<td>vtoróym-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loc.</td>
<td>vtoróm--------</td>
<td></td>
<td>vtoroj</td>
</tr>
</tbody>
</table>

Plural

(M., N., F. genders)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom.</td>
<td>vtorýe</td>
<td></td>
</tr>
<tr>
<td>Gen.</td>
<td>vtorýx</td>
<td></td>
</tr>
<tr>
<td>Dat.</td>
<td>vtorým</td>
<td></td>
</tr>
<tr>
<td>Acc.</td>
<td>=Nom. or Gen.</td>
<td></td>
</tr>
<tr>
<td>Instr.</td>
<td>vtorými</td>
<td></td>
</tr>
<tr>
<td>Loc.</td>
<td>vtorýx</td>
<td></td>
</tr>
</tbody>
</table>

c. In word derivation the ordinal numeral 'second' occurs in the form vtoro- or its variant vtor-, e.g. vtorokursnik 'second-year student', vtoročerdenoj 'of less importance; secondary', vtorostepennyj 'secondary', vtorónik 'Tuesday', vtoróčnyj 'secondary'.
4.3.1.a. The form of the OR ordinal numeral 'third' tretej/tretij suggests that it was derived from the cardinal numeral trije/tri 'three'. However, the relationship between these two types of numeral is still somewhat more complex than the relationship between the cardinals and the ordinals above 'four' in OR. It was the only ordinal which lacked in some cases the nominal (indefinite) forms. On the other hand, in the direct cases of the feminine and the neuter genders in the singular a tendency is seen to employ the indefinite-form endings; the definite-form endings, however, are also found. The declension of tretej/tretij in OR represents a mixture of pronominal and nominal endings, with the former predominating.

b. Morphologically, tretej/tretij belonged to a special class of soft-declined adjectives (type volčij/volčja/volčče 'lupine; wolf's') which were very close to, and thus easily confused with, the much more common soft adjectives (type letnej/letnjaja/letnee 'summer (adj.)'). Syntactically this ordinal did not differ from other OR ordinals (see 4.1.1.).

4.3.2.a.,b. The ModR numeral for 'third' has preserved some of the morphological peculiarities of its OR equivalent. However, the nominal forms common in OR for at least some cases have been lost in ModR. It should
be pointed out that not only all ordinal numerals but also all soft-declined adjectives in ModR lack these short (nominal) forms.

c. The complete declensional paradigm of the ordinal numeral *tretij* 'third' in ModR is as follows:

<table>
<thead>
<tr>
<th></th>
<th>M.</th>
<th>N.</th>
<th>F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom.</td>
<td>tretij</td>
<td>tret'e</td>
<td>tret'ja</td>
</tr>
<tr>
<td>Gen.</td>
<td>tret'ego-----</td>
<td>--------------</td>
<td>tret'ej</td>
</tr>
<tr>
<td>Dat.</td>
<td>tret'emu-----</td>
<td>tret'ej</td>
<td></td>
</tr>
<tr>
<td>Acc.</td>
<td>=Nom. or Gen.</td>
<td>tret'e</td>
<td>tret'ju</td>
</tr>
<tr>
<td>Instr.</td>
<td>tret'im------</td>
<td>tret'ej(u)</td>
<td></td>
</tr>
<tr>
<td>Loc.</td>
<td>tret'em------</td>
<td>tret'ej</td>
<td></td>
</tr>
</tbody>
</table>

Plural

( M., N., F. genders )

<table>
<thead>
<tr>
<th></th>
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<th>N.</th>
<th>F.</th>
</tr>
</thead>
<tbody>
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<tr>
<td>Gen.</td>
<td>tret'ix</td>
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</tr>
<tr>
<td>Acc.</td>
<td>=Nom. or Gen.</td>
<td>tret'imi</td>
<td></td>
</tr>
<tr>
<td>Instr.</td>
<td></td>
<td>tret'imi</td>
<td></td>
</tr>
<tr>
<td>Loc.</td>
<td></td>
<td>tret'ix</td>
<td></td>
</tr>
</tbody>
</table>

d. In word derivation the ordinal numeral 'third' occurs in the form tret'e- or its rare variant tret-, e.g. tret'esortnyij 'third-rate', tret'eklassnik 'third-year student', tret'ebračnyij 'third-marriage', tretičnyij 'tertiary'.

4.4.1. The OR ordinal numeral četvertiz/četvertoj 'fourth' is etymologically related to the cardinal numeral četyre/četyri 'four'; yet the derivation pattern is less regular than the one found between the subsequent sets of
cardinals and ordinals (e.g. devjat 'nine' and devjat 'ninth'; see also 4.5.1.1.-4.5.1.6.). Both the nominal and the pronominal forms of this numeral were in use (for paradigms see 4.1.1.b.). Syntactically, this numeral had the same characteristics as other numerals of this type.

4.4.2.a. ModR četvěřtyř 'fourth' conforms both morphologically and syntactically to the basic type of ordinals (stem-stressed), discussed in 4.1.2.

b. In word derivation the ordinal numeral 'fourth' occurs in the forms četvert- and četvěrt-, or their variants četver- and četvěr-, e.g. četvertak '25 kopecks; quarter', četvertičnyj 'quaternary', četvěrtka 'a quarter', četverg 'Thursday', četvěrka 'number four'.

4.5.1.1. The OR ordinal pjat/pjatoj 'fifth', like a majority of ordinals, was closely connected with the corresponding cardinal numeral; in this case, pjat 'five'. It had both the short (nominal) and the long (pronominal) endings, and in its morphology and syntax, it followed the basic pattern described in 4.1.1.

4.5.1.2. The OR ordinal šestš/šestoj 'sixth' had an identical etymological relationship and the same morphological and syntactic characteristics as the preceding numeral (see 4.5.1.1.).
4.5.1.3. In OR, there were known two variants of the ordinal 'seventh': the native *sems*/semoj and the Church Slavonic loan word *sedm*/sedmoj (this latter variant had a somewhat bookish flavor). Both are etymologically related to ComS *sedm* 'seven'. In their morphology and syntax, these two numerals follow the basic pattern of the ordinals described in 4.1.1.

4.5.1.4. The OR ordinal for 'eighth' was also known in two variants: *vosms*/vosmoj and *osms*/osmoj, both etymologically related to the cardinal numeral (v)osm* 'eight'. Of the two *osms*/osmoj had a similar status as *sedms*/sedmoj (see 4.5.1.3.), i.e., it was considered somewhat bookish. For morphology and syntax see 4.1.1.

4.5.1.5. The OR ordinal *devjats*/devjatoj 'ninth' had an identical etymological relationship and the same morphological and syntactic characteristics as the ordinal *pjats*/pjatoj 'fifth' (see 4.5.1.1).

4.5.1.6. The OR ordinal *desjats*/desjatoj 'tenth', too, followed the basic pattern of the ordinal numerals, as described in 4.5.1.1.

4.5.2.1.a. ModR *pjatyj* 'fifth' is declined like *pervyj* 'first'. For its inflectional paradigm and for a note concerning its syntax see 4.1.2.
b. In word derivation the ordinal-numeral bases from 'five' on are not distinguishable from the cardinal-numeral bases. (See appropriate sections of Chapter 1 for these numerals.)

4.5.2.2.-4.5.2.4. ModR šestoj 'sixth', sed'moj 'seventh', and vos'moj 'eighth' represent the ending-stressed type of ordinals, discussed in 4.2.2. For a note on their syntax see also 4.1.2.

4.5.2.6. ModR devjatyj 'ninth' and desjatyj 'tenth' represent the stem-stressed type of ordinals, as described in 4.1.2.

4.6.1.a. The OR ordinal numerals for 'eleventh' through 'nineteenth' were formed by compounding. The first component of the compound expressed one of the numerals between 'one' and 'nine', while the second component contained a form of the word for 'ten'. There existed several types of such compounds, and practically all of them had pronominal endings only.

b. The type attested by the largest number of examples consisted of the stem of the ordinal numeral 'first' through 'ninth', linked by the vowel -o- (or, in the case of tretė- 'third', by the vowel -g-), with the form -natcatoj 'upon the tenth', which was declined on the model of përvoj 'first' (see 4.1.1.):
kak uže na koně ěžů, tomu drugonatcatoj god
'it is already the twelfth year
since I have been horseback riding'
(DSK. II, 475; 1517) Unb. 446.

(c) Similar to it was the type in which also only
the second component was declined; however, the first
component in this case was a cardinal rather than an
ordinal numeral. This type of second-decade ordinal
gradually began to predominate, and toward the end of
the OR period, it eventually prevailed over the other
types:

svou dvenatcatuju vytě
'his twelfth share of land'
(AS. 306; 1550) Unb. 446.

d. In another, somewhat less common type, both
components were declined, and as a rule received the
pronominal endings. The second component was invariably
in the uncontracted form -nadesjat- rather than -natcat-:

vo vtoromu na desjatomu věkě
'in the twelfth century'
(BE. V, 239; 1793) Bog. 222.

e. However, the most frequent type of ordinal, used
especially to express exact dates, declined only the
first component, leaving the second fixed in the
uncontracted form -nadesjat or -nadesjat 'upon the
tenth':

nojabrja oti sedımgonadesjat
'from the seventeenth of November'
(AK. IV, 159; 1709) Bog. 222.

f. But already in the eighteenth century this type
was in practice limited to dates. Lomonosov in his Rossijskaja grammatika (M. V. Lomonosov, Polnoe sobranie sočinenij, Vol. 7: Trudy po filologii: 1739-1758 [Moscow-Leningrad, 1952], p. 476; quoted in Bog., p. 222) states that such compounds should be used в важных материалах и числах месяцев 'in weighty matters and in dates of the month'; by 'serious matters' was meant, e.g., the designation of monarchs:

Karli vtoryjnadesjatъ 'Charles XII'
(Lom Ros gram.; 1739-1758) Unb. 447.

4.6.2.a. The ModR ordinals for the second decade:

odinnadcatyj 'eleventh', dvenadcatyj 'twelfth', trinadcatyj 'thirteenth', četvrtnadcatyj 'fourteenth', pjetnadcatyj 'fifteenth', šestnadcatyj 'sixteenth', semnadcatyj 'seventeenth', vosemnadcatyj 'eighteenth', and devjatnadcatyj 'nineteenth' are in the same relationship to their respective cardinals as are the first-decade ordinals 'five' through 'ten' to their cardinals (see also 1.6.2. for a discussion of the forms of the individual cardinal numerals of the second decade).

b. In ModR all compounded ordinals are compact compounds (see 1.12.2.b.), and thus no internal inflection (of the type found, e.g., in pjet'desjat 'fifty', Nom./Acc., pjet'judesjat'ju, Instr.) is seen; the desinences are attached to the stem of the last component. The stress
in the compact-compound ordinals is always on the stem, and thus the ordinals of the second decade are declined on the model of pervyj 'first' (see 4.1.2.).

4.7.1.a. The formation of the ordinal numerals for the decades in OR was very similar to the formation of the ordinals for 'eleven' through 'nineteen': thus pjatdesjatoj 'fiftieth', ľestdesjatoj 'sixtieth', etc. The first component of such compounds could also appear in the oblique-case form of the cardinal numeral, and thus we find: semidesjatoj 'seventieth', osmidesjatoj 'eightieth', etc.

b. With the replacement of četyredesjate 'forty' by sorokë 'forty', and devjatdesjatz 'ninety' by devjanosto 'ninety', two new ordinals, sorokovoj 'fortieth' and devjanostoj 'ninetieth', appeared. It is interesting to see the two older ordinals (četyredesjatoj 'fortieth' and devjanostoj 'ninetieth') used much longer than their respective cardinals (cf. Bog., p. 223; for devjatidesjatyj 'ninetieth' as used in ModR, see Gram rus jaz., p. 383). One large area of usage was exact dates (just as was the case of the ordinal numerals for the second decade ending in nadesjatz, see 4.6.1.e., f.).

c. The OR ordinals for higher numerals ('100th', '200th', '500th', '1,000th', etc.) are attested only sporadically. The evidence of ModR indicates that their
formation was analogous to that of other ordinal numerals: in the case of compounds (e.g. '200th', '3,000th', etc.), the first component appeared in Gen. (cf. ModR dvux-
tysjačnyj '2,000th'). The ordinal-numeral forms of the cardinal numeral sata 'hundred' regularly appeared in the form sot-; those of the numeral tysjača 'thousand' in the form tysjačn-.

4.7.2. The ModR ordinals for the decades, the hundreds, and the thousands are formed in a highly regularized fashion. With the exception of dvadcatyj 'twentieth', triccatyj 'thirtieth', sorokovoj 'fortieth', devjanostyj 'ninetieth', sotyj 'hundredth', and tysjačnyj 'thousandth', they are compounded numerals in which the first component takes the form -desjatyj for the decades, -sotyj for the hundreds, and -tysjačnyj for the thousands (the list could be enlarged to accommodate -milionnyj, pertaining to the millions, and -milliardnyj, pertaining to the billions, but ordinals of such high numbers are extremely rare), e.g. pjadadesjatyj 'fiftieth', vos'midesjatyj 'eightieth', terxsotyj '300th', pjaditysjačnyj '5,000th', štyrëxmillionnyj 'four-millionth', semimilliardnyj 'seven-billionth', etc.

4.8.1. The OR ordinal numerals for higher numbers (other than those which ended in round tens, hundreds,
thousands, etc.; for these see 4.7.1.c. above) are not sufficiently attested in the written-out form (letters of the alphabet in the numerical function were used instead). In the examples found only the last component, as a rule, had the form of an ordinal numeral which agreed grammatically with its head noun; the preceding components were cardinal numerals in the nominative:

\[
\text{a dana gramota leta sedmь}
\]
\[
\text{tysjaść tretьjagonadesjatь}
\]
\[
\text{'and the writ was given}
\]
\[
\text{in the 7,013th year [i.e.,}
\]
\[
\text{in the year 7,013]'}
\]
\[
(\text{AI. 171; 1505} \text{ Unb. 446.})
\]

4.8.2. In ModR we see the same treatment of multi­
digital compounded ordinals as in OR: only the last component in the string functions as an ordinal; the preceding components are always in the nominative. There is the usual grammatical agreement between the ordinal numeral and its head noun:

\[
v \text{tysjača devjat'sot sorokovom godu}
\]
\[
'\text{in the year 1940'};
\]
\[
s \text{tysjača vosem'сот dvedcat' pervogo goda}
\]
\[
'\text{since the year 1821}'
\]

4.9.1.a. In OR, the ordinal numerals were used also in a special construction with the adjective \text{samt/sama/samo 'himself/herself/itself'}:

\[
\text{ěдуть mitropolitь samt drugь}
\]
\[
'there travel the metropolitan and one other person'
\]
\[
(\text{DSK. II, 495; 1518} \text{ Unb. 447.})
\]
b. Sam dru meant that the person mentioned was the second member of the group, i.e., there was he and another person; sam devjat similarly expressed that the person mentioned was the ninth member of the group, i.e., there was he and eight other persons, etc.

c. This construction was fairly common only with ordinal numerals of the first decade and with dvadcatz 'twentieth'; it was extremely rare with compounded numerals (e.g. the second-decade numerals), and non-existent with numerical compounds (i.e., higher numerals of the type '154th', etc.). It was used in practice only in reference to human beings.

d. The ordinal-numeral construction with sam had the ordinal usually in the short (nominal) form; however, in Gen. sg. and Acc. sg. Anim. of masculine nouns the pronominal endings can also be found. If the numeral for 'third' appeared in this construction, its Nom. sg. was regularly in the form sam trete; in other cases of the masculine gender the pronominal forms of the numeral appear.

4.9.2. ModR lost the construction of the type sam dru as a productive type during the nineteenth century. It should be noted that as early as the beginning of the nineteenth century, this construction was used only in the nominative, and even then it was felt as an archaism or
regionalism (see Bog., p. 220). In dialectal usage the construction of this type appears in the function of a multiplicative adjective '-fold' (e.g. 'fourfold', 'tenfold', etc.):

\[ \text{pšenica urodilas' tolik samdrug} \]
\[ \text{'the wheat crop was only twofold'} \]
(Uš.) Zwol. 70.

4.10.1.a. In OR, there was common use of the word \text{pola} 'a half' with ordinal numerals to express a quantity in which a whole number was combined with the fraction 'a half', e.g.:

\[ \text{polosma rublja} \]
\[ \text{'seven and a half rubles'} \]
(DSK. I, 406; 1501) Unb. 426.

b. When the construction was declined, the first part appeared in the form \text{poli-} in the direct cases (Nom. and Acc.), and in the form \text{polu-} in the oblique cases, while the second component (i.e., the ordinal numeral) was declined strictly according to the nominal declension (singular only). The head noun agreed with the ordinal numeral in gender and case; however, in the two direct cases the construction did not show grammatical agreement, since \text{pola} as a quantifier required Gen. sg. of its head noun (cf. example in 4.10.1.a.).

c. As the head noun of a construction with \text{poli-}/\text{polu-} could serve any noun, including a numeral such as \text{tysjača} 'thousand' or a numerical expression such as \text{desjatok}.
'a group of ten'. Furthermore, this construction could be attached to compounded numerals:

sto grivenoki i polšestynatcaty grivenki '115 1/2 little grivnas'
(SGD. 410; 1509) Unb. 427.

d. The construction with pol- plus ordinal was very common in early OR but did not remain so throughout the entire OR period. By the seventeenth century it became extremely rare, and later examples are quite isolated.

4.10.2.a. In ModR the construction with pol- plus ordinal (see 4.10.1.) has not been preserved. The only remnant of it is the quantifier poltora/poltory 'one and a half' which has a highly simplified declension: the direct cases have the form poltora, poltory for the masculine-neuter and the feminine genders, respectively. The oblique cases are polutora, M./N., and polutory, F. If the direct cases poltora/poltory are used, the head noun is in the genitive singular (but: poltora sutok '36 hours; a day and a half'; this example is notable for both its divergent stress and the Gen. pl. form: sutki '24-hour day' is the only plurale that can function as the head noun of poltora); after polutora/polutory, the head noun is in the appropriate case of the plural (e.g. a polutora vëdrami 'with one and a half buckets').

b. In the nineteenth century poltora/poltory 'one and a half' could be declined on the model of the OR
(nominal) declension (see 4.10.1.b.), or could even take plural endings, preserving in both instances grammatical case agreement:

\[v \text{ polutore verste ot derevni} \]
\[\text{'at a distance of one and a half versts from the village'}\]
\[(S \text{ Aks Det g.}) \text{ Gram rus jaz. 381; }\]

\[sobytiya poslednix polotoryx vekov \]
\[\text{'the events of the last century and a half'}\]
\[(H \text{ P iz Fr.}) \text{ Gram rus jaz. 381. }\]

c. ModR substitutes for other combinations of whole numbers and the fraction 'a half', expressed in OR by pol- plus an ordinal numeral of the next higher unit, the phrase s polovinoj 'with a half' which accompanies the cardinal numeral of the preceding lower unit, e.g.:

\[pjat' \text{ s polovinoj mesjaca} \]
\[\text{'five and a half months'}\]

4.11.1.a. The structure of fractions in OR suggests their close relationship to ordinal numerals: most fractions were derived from the ordinal-numeral stems with the aid of the suffix -ina, e.g. tret-ina 'a third', osm-ina 'an eighth', etc. The suffix -ina is also found in the expression polovina 'a half'. The fractions in -ina were declined like feminine a-stems.

b. For the most often used fractions, there were basic terms such as pola, polovce 'a half', tret'a third', and četa, četvrt'à 'a quarter'. Pola was declined
according to the u-stems, polovn according to the soft neuter o-stems, and tret, čet, and četvrť according to the feminine i-stems.

c. Fractions with denominators higher than 'ten' were relatively rare in OR; small fractions could be obtained by dividing the basic fractions, e.g.:

\[
\text{polpolčeti soxi} \\
\frac{1}{32} \text{soxa [surface measure]}
\]

(ŠO. II, 153; 1580) Unb. 449.

4.11.2.a. In ModR, the connection between the fraction and the ordinal numerals is even closer than was seen in OR. Instead of the old derivation by means of the suffix -ina (see 4.11.1.a.), ModR uses ordinal numerals in a substantivized function: odna pjataja 'a fifth' for odna pjataja čast' (or: dolja) 'a fifth part'. The form of the ordinal numeral depends on the syntactic requirements of the cardinal numeral (the numerator in the fraction). If the numerator is 'one' (or a numerical compound ending in 'one'), there is grammatical agreement between it and the ordinal (i.e., the denominator), e.g. odnu desjatuju 'a tenth', Acc. sg. If the numerator is a numeral other than 'one' (or a numerical compound ending in 'one'), there is grammatical agreement between the numerator and the denominator in the oblique cases only (the denominator taking the plural endings), e.g. pjat'ju šestymi '5/6',
Instr.; in the direct cases the denominator appears fixed in Gen. pl.: *vosem' desjatyx* '8/10', Nom./Acc.

b. There are three basic fractions of a different type: *polovina* (and its variant *pol*- which may not appear without a head noun immediately following it; it is usually fused with its head noun into one lexical unit, e.g. *polčasa* 'a half-hour') 'a half', *tret* 'a third', and *četvert* 'a quarter'. By their nature they are substantival quantifiers and are declined like feminine nouns: *polovina* according to the II declension, *tret* and *četvert* according to the III declension. Pol- usually avoids the indirect cases (the appropriate cases of *polovina* are substituted) but occasionally the form *polu-* is seen in the oblique cases (e.g. *polučasa* 'a half-hour', Gen., Dat., Instr., Loc.).

c. The head noun of a fraction always appears in the genitive (singular or plural, as the meaning requires), e.g.:

\[ \begin{align*} 
\text{pjat' šestyx lošadi} & \quad \text{'5/6 of the horse'}; \\
\text{pjat' šestyx lošadej} & \quad \text{'5/6 of (all) the horses'}.
\end{align*} \]

d. In the case of mass nouns (e.g. *moloko* 'milk') only Gen. sg. is possible, whereas pluralia tantum, such as *sani* 'sled', must always appear in Gen. pl., regardless of the quantity of the object (the head noun).
Consequently, the contrast possible in simple count nouns (see the two examples in 4.11.2.c.) cannot be expressed in pluralia when they appear as the head nouns of the fractions.

Summary (Chapter 4):

The ordinal numerals in ModR constitute a large, extremely homogeneous class which shares many features with the form class of adjectives, especially in the morphology. The great majority of ModR ordinal numerals belong to the hard-declension paradigm (the stem-stressed type нёвй 'new' or the ending-stressed type бол'ноj 'sick'); only the ordinal третий 'third' follows the special soft-declension paradigm волчий 'wolf's'. In some respects, the ordinal numerals behave like the relational (относительное) adjectives: they do not form the predicate (short) form, nor are they capable of producing the comparative and the superlative degrees. Of the other types of numerals directly related to the ordinals, only the fractions are well represented in ModR. Outside the group of primary fractions such as половина 'a half' or четверть 'a quarter' which follow one of the two feminine declensions, the II or the III, ModR fractions may be described as substantivized adjectives fixed in the feminine-gender form. As such, they follow the
adjectival inflection. The type of numeral consisting of the word pol 'a half' plus an ordinal is represented in ModR by the isolated remnant poltora/poltory 'one and a half', which has developed a simplified morphological pattern in which only the first component of the compound is inflected (the endings are: -∅ in the direct cases, -u in the oblique cases, see 4.10.2.a.). The other related type of numeral, the one in which the word sam 'himself' is combined with an ordinal in the short form, has been similarly relegated to the periphery of the language system. At present, numerals such as sam-drug 'the two of us', sam-šest, etc. occur very rarely in ModR, and they are no longer declinable.
CHAPTER 5 : ORDINAL NUMERALS IN CZECH

5.1.1.a. OCz had two variants for the ordinal numeral 'first', the older průvý and the newer první, both based on an old ComS root, *přrv- 'former; original; early', which underlies the forms of this numeral in the other Slavic languages as well (for OR and OScr see 4.1.1. and 6.1.1., respectively). The ordinal numeral for 'first' is not related etymologically to the corresponding cardinal numeral. This lack of relationship is typical for the first two numerals in the Slavic languages.

b. In its function as the ordinal numeral, prů- did not have the short (nominal) forms. It was declined like a regular adjective of the soft variety (type letní 'summer'). Like other ordinals, průvý and první showed adjectival properties, and were inflected for six cases (Nom., Gen., Dat., Acc., Instr., Loc.), had three genders (masculine, neuter, feminine), and three numbers (singular, dual, plural). In the oblique cases of all three numbers there was a substantial amount of case syncretism. The adjectival nature of the ordinal
numerals was reflected also in their syntax: they agreed grammatically with their head nouns in case, gender, and number.

c. The complete declensional paradigms of prvý and prvni 'first' in OCz were as follows (see Váž., pp. 112-113):

**Prvý 'first'

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**Dual**

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**Plural**

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**Prvni 'first'

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<td>prvníiem, prvníim---</td>
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</table>
5.1.2.a. ModCz has preserved both variants of the ordinal numeral for 'first' that it inherited from OCz (see 5.1.1.a.): **první** and **prvý** (the latter is now of a somewhat formal shade).

b. In the morphology of ModCz **první** and **prvý**, there are reflected the various changes that other ordinals and adjectives underwent (loss of the dual, emergence of a new opposition: Anim. vs. Inan. in Nom. pl., simplification of the declension, etc.). Syntactically, the ordinal numerals have the same characteristics in ModCz as they had in OCz.

c. The complete declensional paradigms of **první** and **prvý** 'first' are as follows (see Čes mluv., pp. 166-167):

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**Dual**

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<tr>
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<td>prvniu, prvniu</td>
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<td>Dat./Instr.</td>
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**Plural**

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**Prvni** 'first'

### Singular

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<td>Loc.</td>
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### Plural

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**Prvý** 'first'

### Singular

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### Plural

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<td>prvé (Inan.)</td>
<td>prvé</td>
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<tr>
<td>Gen.</td>
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<td>Dat.</td>
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</tr>
<tr>
<td>Acc.</td>
<td>prvé</td>
<td>prvá</td>
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<tr>
<td>Instr.</td>
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<tr>
<td>Loc.</td>
<td>prvních---------</td>
<td>prvých-----------</td>
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d. In word derivation the ordinal numeral 'first' appears in the form *prv*— or its variant *prv*—, e.g. *prvotřídní* 'first-class', *prvorozéný* 'first-born', *prvotisk* 'incunabula', *prvěk* 'element', *prvenství*
'championship', and less frequently in the form první- or its variant prvn-, e.g. prvníkrát 'for the first time', prvně 'firstly'.

5.2.1. The OCz numeral druhy 'second' is, just as první, prvý 'first' (vis-à-vis jeden 'one') etymologically unrelated to its corresponding cardinal numeral dva/dvě 'two'. Unlike OR (see 4.2.1.) OCz did not have any other word for this numeral; the stem *vitor- 'second' is known only in the derivation úterý 'Tuesday'. The declension of druhy was according to the hard-type adjectival paradigm, to which also the ordinal numeral prvý 'first' belonged (see 5.1.1.c.); in addition, it could take the short (nominal) endings, but only in certain constructions, e.g. following sám- and pól-; see 5.9.1. and 5.10.1., respectively.

5.2.2.a. ModCz druhy 'second' is a direct continuation of OCz druhy 'second'. It is declined according to the hard-type adjectival paradigm (see prvý 'first' in 5.1.2.c. for complete declension). Nom. pl. M. Anim. druží 'second' deserves special attention, when contrasted with other forms of the paradigm, as an example of the productive morphophonemic alternation h — z in ModCz.

b. In word derivation the ordinal numeral 'second' appears in the form druho- or its variant druh-, e.g.
druhopis 'second copy', druhotvar 'doublet', druhořadý 'inferior', druhy 'once in a while', druhotný 'secondary'.

5.3.1. The OCz ordinal numeral třetí 'third' is etymologically related to the cardinal numeral třie ( < *treje */trie ( < *tri) 'three'; however, the vocalism of the ordinal (-e-) is problematic (no IE cognates exist, except Lith trecias 'third'). Even in the earliest monuments, it shows morphological characteristics identical with those of the soft-type adjectives (paradigm pěší 'pedestrian'; pěší < *pĕš-ø), although historically, it belonged to another type of soft adjectives, that of boží 'God's; divine' (the contracted *-jo, *-ja- stems; cf. also OR, 4.3.1.b.): in the historical period, however, there is seen no difference between these two types in OCz. Only the long (pronominal) declension endings are found in all the environments (the only exception being the construction with pól-, see 5.10.1.). The declensional paradigm of první 'first' (5.1.1.c.) shows the set of pronominal endings that applied also to the OCz ordinal třetí 'third'.

5.3.2.a. ModCz třetí 'third' is a soft-declined ordinal numeral whose declension follows the paradigm první 'first' (see 5.1.2.c.).

b. In word derivation the ordinal numeral 'third' appears very rarely (in the form třetí- or its variant...
třetihorní 'tertiary (geol.)', třetice 'third time'.

5.4.1. The OCz ordinal čtvrtý 'fourth' is etymologically related to the cardinal numeral čtyřie/čtyři 'four', but the relationship is not as obvious as between the ordinals above four and their respective cardinals (cf. 5.5.1.1.-5.5.1.6.). It is attested only with long (pronominal) endings of the hard-type paradigm (see prvý 'first', 5.1.1.c.), except in the constructions with sém- and pól-, where short (nominal) endings are found (see 5.9.1. and 5.10.1., respectively).

5.4.2.a. ModCz čtvrtý 'fourth' is a hard-declined ordinal numeral; its declension is identical with that of prvý 'first' (see 5.1.2.c.).

b. In word derivation the ordinal numeral 'fourth' appears in the form čtvrť- or its rare variants čtvrtco- and čtvrt', e.g. čtvrttek 'Thursday', čtvrtéroční 'quarterly', čtvrtití 'to quarter'; čtvrtohorní 'quaternary', čtvrták '1/4 litre'.

5.5.1.1.-5.5.1.6. The OCz ordinal numerals pátý 'fifth', šestý 'sixth', sedmý 'seventh', osmý 'eighth', devátý 'ninth', and desátý 'tenth' were all pronominally-declined adjectives of the hard type (see prvý 'first', 5.1.1.c.); the short (nominal) endings are found in the constructions with sém- and pól- (see 5.9.1. and 5.10.1.,
respectively). They show a very close relationship with their respective cardinal numerals (pět 'five', šest 'six', sedm 'seven', osm 'eight', devět 'nine', and deset 'ten'). However, this relationship is somewhat obscured in the case of pátý 'fifth', devátý 'ninth', and desátý 'tenth'. The OCz reflex of ComS *q fused with the phoneme /ě/, which later developed into je, e only when a palatal or palatalized consonant followed, e.g. pět [p'ět'ě] 'five', Gen., Dat., Loc., whereas in other positions it fused with the phoneme /a/, e.g. pátý 'fifth' (pátý < *pět-je).

5.5.2.1.-5.5.2.6.a. The ModCz ordinal numerals for 'fifth', 'sixth', 'seventh', 'eighth', 'ninth', and 'tenth' are identical with the OCz forms of these numerals (see 5.5.1.1.-5.5.1.6.). They are declined according to the hard adjectival paradigm (see prvý 'first', 5.1.2.c.).

b. In word derivation the bases of the ordinal numerals above 'four' (except for the ordinals pátý 'fifth', devátý 'ninth', and desátý 'tenth') are identical with the cardinal-numeral bases (see appropriate sections of Chapter 2 for these numerals). The ordinals pátý 'fifth' and desátý 'tenth' occur in a small number of derivations, and appear in the forms pát- and desát-, e.g. pátek 'Friday', desátník 'corporal', desátek 'tithe'; the ordinal numeral devátý 'ninth' lacks derivations.
5.6.1.a. The OCz ordinal numeral for 'eleventh' through 'nineteenth' were formed by adding the phrase -nádcete (< *na desěte) 'upon ten' (also: -nádst, -náct) to the ordinals for 'first' through 'ninth', e.g.:

```
czwrtehonadczete dne
'on the fourteenth day'
(01. 3; 1417) Geb. 351.
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In this compound only the first component was declined; the phrase -nádcete (-nádcete) remained unchanged.

b. A later type of ordinal developed when the two components of the numeral were no longer felt as separate entities, i.e., when the morphological focus of the cardinal numerals 'eleven' through 'nineteen' shifted to the second component (e.g. dvanáct 'twelve', Nom./Acc., dvanácti, Gen., Dat., Loc.). Thus druhy nádcete 'twelfth' gave way to dvanáctý 'twelfth', etc. The resulting compact compound was declined like prý 'first' (see 5.1.1.c.).

5.6.2. The ModCz ordinals jedenáctý 'eleventh', dvanáctý 'twelfth', třináctý 'thirteenth', čtrnáctý 'fourteenth', patnáctý 'fifteenth', šestnáctý 'sixteenth', sedmnáctý 'seventeenth', osmnáctý 'eighteenth', and devatenáctý 'nineteenth' are continuations of the newer type of the OCz ordinal numerals for the second decade (see 5.6.1.b.). They
are declined according to the hard-type adjectival paradigm (see prvý 'first', 5.1.2.c.).

5.7.1.a. The OCz ordinal numerals for the decades, the hundreds, and the thousands were based on the corresponding cardinal numerals (see 2.7.1.1.-2.7.1.8., 2.9.1., and 2.11.1.).

b. In the case of dvacátý 'twentieth', třicátý 'thirtieth', čtyřicátý 'fortieth' (vis-à-vis, respectively, dvacét(i) 'twenty', třicét(i) 'thirty', čtyřicét(i) 'forty'), the same phonological change as described in 5.5.1.1.-5.5.1.6., in connection with pět 'five' vs. pátý 'fifth', took place: the [t] in *dvacětý 'twentieth' caused the ě to change into a, whereas the [t'] in dvacěti 'twenty' did not (the change ě > e, the so-called loss of jotation, followed later).

c. In the higher decades (e.g. padesát 'fifty' vs. padesátý 'fiftieth') the vocalism of both types (i.e., the ordinal and the cardinal numerals) was identical, since in both cases the vowel in question preceded a non-palatalizing consonant (*pětadesěťa > padesát 'fifty' and *pětadesěťje > padesátý 'fiftieth').

d. The ordinal numeral 'hundredth' was, as expected, stý; the ordinal numeral 'thousandth' was also regular, tis'úcí > tisící. The declensional paradigm for all the ordinals in this group (5.7.1.), except the last-named
member, was první 'first' (see 5.1.1.c.); tisíci was declined according to první 'first' (see 5.1.1.c.).

e. The OCz ordinal numerals for round hundreds, thousands, etc., are attested very sporadically. The first component, a cardinal numeral, appeared in Gen., and only the second component was declined (dvůstý '200th', Nom./Acc. Inan., dvůstého, Gen., etc.).

5.7.2.a. The ModCz ordinals for the decades and the round hundreds and thousands are identical with those of late OCz. They are declined according to the hard paradigm (see první 'first', 5.1.2.c.); the only exception being tisíci 'thousandth' and its multiples (e.g. čtyřtisíci '4,000th') which follow the soft paradigm (see první 'first', 5.1.2.c.).

b. The multiples of -stý 'hundreth' and -milionty '-millionth' (possibly also those of -miliardý '-billionth', if such compounds are ever used) decline this part only; the preceding determining cardinal numeral (i.e., the first component of the compound) appears in Gen., e.g. dvoumilioný 'two-millionth'.

5.8.1.a. The OCz ordinal numerals for higher numbers (other than those which ended in round tens, hundreds, and thousands; for these see 5.7.1.) are attested very sporadically.
b. In the older monuments, only the last numeral in a numerical string functions as an ordinal, while the preceding numerals are treated as cardinals. Usually, the preposition po 'after' connects the cardinals with the ordinal:

léta po trzech desetech čtyřtého
'in the thirty-fourth year'
(Dal C. 64; 14th cent.) Geb. 356, i.e., 'in the fourth year after three decades'.

c. The older usus, in which each of the members of the string was in the appropriate form of the ordinal numeral, is of a later date. It survives in ModCz (see 5.8.2.a. for an example).

5.8.2.a. The standard treatment of a multidigital string of ordinals in ModCz is to regard each of its members as an ordinal numeral, e.g.:

roku tisícého osmistého čtyřicátého devátého
'in the year 1849'.

c. The date of the month, however, must always be expressed by an ordinal numeral (or an ordinal-numeral compound):

sedmého května
'on May 7';
dvacátého devátého listopadu
'on November 29'.

d. Outside of dates, multidigital strings of ordinals may sometimes be simplified in a way described in 5.8.2.b.,
or by combining cardinal numerals with ordinals. Unlike in Russian, however, not only the last component (a unit numeral 'one'-'nine', a numeral of the second decade 'eleven'-'nineteen', or a numeral ending in a zero or zeroes) but also the preceding one (but only if it is a numeral denoting a decade) appear as ordinals, while the higher digits assume the form of indeclinable cardinals, e.g.:

na dvanáct tisíc sedm set devadesátém osmém kilometru
'at the 12,798th kilometer'.

e. If the string consists of decades and units only, the most frequent simplification is the reversing of the order of the two numerals: the unit numeral becomes a cardinal, and is attached to the following ordinal by the conjunction a 'and', e.g.:

třiasedmdesátý
'the seventy-third'.

For cardinal numerals of this type see 2.8.2.a.

5.9.1. OCz, just as OR (see 4.9.1.) had a special construction in which an ordinal numeral was preceded by the pronoun sám (samo)/sama/samo 'himself/herself/itself' which expressed that the person named was the respective member in the group, e.g.:

pan Albrecht jel na voze sám čtvrt
'Sir Albrecht rode in the carriage as the fourth [i.e., with three others]' (Jar. 87; ca. 1464) Geb. 272.
b. As a rule, the ordinal numeral in this construction had the short (nominal) declension ending, but there are several examples attested with the pronominal-declension endings, too. The expected *sám druh 'the two of them' is not attested; the usual form is samodruhý. The feminine form of this particular construction is samodruhá (not: *samadruhá). It acquired a specialized meaning when modifying a noun such as žena 'woman', namely: 'pregnant'.

c. The construction with sám(samo)/sama/samo was common only with ordinal numerals of the first decade, and above these, only with numerals denoting the decades, e.g.:

aby samtrojdecat přišel
'so that the thirty of them would come'
(Háj. 293a; 1541) Geb. 272.

5.9.2. ModCz does not preserve any trace of the construction sám (samo)/sama/samo plus ordinal numeral.

5.10.1.a. Just as in OR (see 4.10.1.), in OCz, too, it was common to use the fraction pół 'a half' with ordinal numerals to express a quantity (not the order of an object within a series), i.e., an ordinal numeral preceded by pół was functioning as a cardinal, e.g.:
b. In this construction the nominal endings of the ordinal numerals appear most frequently (among the numerals of the first decade only třetí 'third' lacks them; the form půl třetí 'two and a half' is a late OCz neologism, derived by analogy with půl druha 'one and a half'; see Geb., p. 319). Nevertheless, the later stages of OCz show growing use of the pronominal endings:

za půl čtvrtého dne
'in three and a half days'
(Beck. 1, 553; 1707) Geb. 272.

5.10.2.a. ModCz has preserved the construction with půl plus ordinal numeral (see 5.10.1.), but it must be regarded as somewhat obsolescent, except when used in reference to the hours of the day:

Jan přišel o půl sedmé
'John arrived at half past six'.

b. The long (pronominal) endings are mandatory in all cases except when the ordinal appears in Gen. M./N.: in this case, the short (nominal) ending -á may be used as well:

půl druha ( - druhého ) týdne
'two and a half weeks'.
5.11.1.a. The OCz fractions consisted of the ordinal-numeral stem to which the suffix -ina was added, e.g. třetina 'a third', osmina 'an eighth', etc. This suffix had a palatalizing effect on the stem consonant, so that the phonological change described in 5.5.1.1.-5.5.1.6., namely /ä/ < *g into /a/, seen, e.g., in pátý < *patz-je 'fifth', did not occur. Consequently, OCz had pátý 'fifth' but pětina 'a fifth', devátý 'ninth' but devítina 'a ninth' (long ě < *ě as well as < *g developed into ie, which later monophthongized into ě), and desátý 'tenth' but desetina 'a tenth'. These fractions were treated as nouns, and were declined according to the a-stem feminine nouns.

b. OCz had several expressions for the commonly used fractions such as 'a half' and 'a quarter'. The former was rendered by půl > půl, půla > půle, polovina, polovice, polovic, půlka; the latter by čtvrt, čtvrtka. They were declined according to the i-stems (čtvrt), according to the soft a-stems (půla, půle, polovice, polovic, and originally also půl > půl; later, this fraction was indeclinable), and according to the hard a-stems (polovina, půlka, and čtvrtka).

5.11.2.a. With regard to the fractions, ModCz preserves the state of late OCz: -ina is the suffix by means of which any fraction can be formed on the
ordinal-numeral stem (pětina 'a fifth', devítina 'a ninth', and desetina 'a tenth' stand out as exceptional; the historical explanation is given in 5.11.1.; furthermore, the ordinals prvý/první 'first' and druhý 'second' do not produce fractions). If the denominator is higher than 'twenty' and consists of mixed numbers (e.g., a decade and a unit numeral), the unit numeral, in the cardinal-numeral form, must precede the decade, e.g.: pětadvacetina, not *dvacetipětina '1/25', jedenapadesátina, not *padesáti.jednina '1/51', etc. If the numerator is a numeral other than 'one', the denominator is governed by the syntax requirements of the cardinal numeral that functions as the numerator (i.e., after 'two', 'three', 'four', the denominator is in Gen. sg.; after 'five' and the following numerals, except compounded numerals ending in 'two', 'three', and 'four', as well as 'one', it appears in Gen. pl.). The fraction '1/100' has the form setina. All fractions that end in -ina are considered as nouns, and their declension follows the II declension (hard type).

b. There are several basic fractions in ModCz which do not end in -ina. They are all feminine nouns: půl (indeclinable), půlka, polovička (II declension, hard type), polovice, půle (II declension, soft type) 'a half'; čtvrt (III declension) and čtvrtka (II declension, hard
type) 'a quarter'. There is one fraction, which although derived by means of -ina, is not formed on the ordinal-numeral stem, namely polovina 'a half'. It follows the declension of the other fractions in -ina (see 5.11.2.a.).

Summary (Chapter 5):
The class of ordinal numerals in ModCz manifests in the sphere of morphology a high degree of paradigmatic uniformity and similarity with the form class of adjectives (particularly with the relational type of adjectives which does not produce the predicate [short] forms and the two degrees of comparison). The ordinals prvni 'first' and treti 'third' are declined according to the palatal-stem declension; all other ordinals according to the nonpalatal-stem declension. The related fraction numerals are inflected like the feminine substantives (čtvrt 'a quarter' according to the III declension, and the other fractions according to the II declension, with the exception of pul 'a half', which is indeclinable). The type of numeral consisting of the word pul 'a half' plus an ordinal is now obsolescent in ModCz, except when used in reference to the hours of the day (see 5.10.2.a.). It is interesting as a type of numeral which, at least in some cases, has preserved the nominal (short) endings that normally do not occur
with the ordinal numerals in ModCz. The other type of numeral formed on the ordinals (type OCz samodruhý 'the two of us', see 5.9.1.) does not occur in ModCz.
6.1.1.a. The OScr ordinal numeral *prv/prvi* 'first' was based on the same ComS stem *pfcrv-* as the CR and the OCz equivalents of this numeral (see 4.1.1. and 5.1.1., respectively), and was declined like an adjective, taking either the nominal or the pronominal endings (the nominal endings were subsequently lost in OScr).

b. *Prv/prvi* 'first', just as the other ordinals in OScr, and adjectives in general, was inflected for six cases: Nom., Gen., Dat., Acc., Instr., and Loc.; had three genders: masculine, feminine, and neuter; and, at least in the oldest period of OScr, had three numbers: singular, dual, and plural. There was grammatical agreement between the ordinal numeral and its head noun in these three grammatical categories.

c. The complete (partly reconstructed) paradigm of the short and the long declensions of the OScr ordinals was as follows (see Be., pp. 143-152):
**Prv** 'first'

**Singuler**

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<td>prvom------</td>
<td>prvov, prvom</td>
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<td>Loc.</td>
<td>prvé, prvù---</td>
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**Dual**

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**Prvi** 'first'

**Singuler**

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**Dual**

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6.1.2.a. The ModScr ordinal numeral **prvi** 'first' retains all the morphological and syntactic characteristics of the adjectives except one, namely the ability to produce the short (nominal) forms.

b. The declensional paradigm of **prvi** 'first' (as well as of all ModScr ordinals) is as follows (see BHŽ, pp. 109 and 87):

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<tr>
<td>Dat.</td>
<td>prvi, prve</td>
<td>prva, prve</td>
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<tr>
<td>Instr.</td>
<td>prvim, prvim, prvima, prvime</td>
<td>prve</td>
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<td>Loc.</td>
<td>--prvix, prvimi, prvima, prvime</td>
<td>--prvix, prvima, prvime, prvime</td>
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c. In word derivation the ordinal numeral 'first' appears in the form **prvo-** or its variant **prv-**, e.g. **prvodjenčan** 'first-crowned', **prvostolni** 'metropolitan', **prvorazredan** 'first-class', **prvobitan** '(ab)original',
prvenstvo 'priority', prvakinja 'prominent woman',
prvijenac 'first-born (son)'.

6.2.1. The OScr equivalent of the ordinal numeral 'second' was drug/drugi. The other ComS stem, *vitor- (represented in the function of this ordinal, e.g., in Russian) is attested only in one example of derivation: utorak 'Tuesday'. Drug/drugi was declined like prv/prvi 'first' (see 6.1.1.c.).

6.2.2.a. ModScr drugi 'second' follows the declension of the ordinal numeral prvij 'first' (see 6.1.2.b.).

b. In word derivation the ordinal numeral 'second' appears very rarely, usually in the form drugo- or its variants drug- and druž-, e.g. drugojačnjenica 'ewe lambing for the second time', drugom '(for) the second time', druže 'elsewhere'. [All examples are from Vuk Rječ.; no derivations found, e.g., in Drv.]

6.3.1. The OScr ordinal numeral tretji > treći (< *tretz-ji; see also 4.3.1. and 5.3.1.) 'third' was the only ordinal with an original declension which in OScr prehistory apparently differed from the hard-stem paradigm prv/prvi 'first', given in 6.1.1.c. However, during the historical time of OScr, a majority of the attested forms follow the basic hard-stem paradigm, and
only a few forms stand out as peculiar, e.g. instead of -ě- in the desinences -i- or -e- appear (e.g. Dat. pl., Loc. pl. short declension), and occasionally -em is found instead of -om (Loc. sg. M./N. long declension), and -ej instead of -oj (Dat./Loc. sg. F. long declension).

6.3.2.a. ModScr třeči 'third' is declined according to the paradigm prví 'first' (see 6.1.2.b.), except that masculine and neuter desinences beginning in -o- (-o#) change this vowel automatically to -e- (-e#), e.g. třeč-e, Nom./Acc. sg. N., třeč-ega, Gen. sg. M./N., etc., as required by the rules of morphophonemic alternation in ModScr. The feminine-gender forms are not subject to this alternation (e.g. třeč-om 'third', Instr. sg. F.).

b. In word derivation the ordinal numeral 'third' occurs very rarely, and assumes the form třeč- (only one example noted in Drv.: třečak 'fourth lunar period').

6.4.1. The OScr ordinal numeral četvrt/četvrti 'fourth' was based on the same stem as the OR and the OCz equivalents (see 4.4.1. and 5.4.1.), and was declined according to the basic paradigm prví/prvi 'first' (see 6.1.1.c.).
6.4.2.a. The ModScr četvrti 'fourth' follows the basic morphological pattern of the ModScr ordinal prv 'first' (see 6.1.2.b.).

b. In word derivation the ordinal numeral 'fourth' occurs in the form četvrt-, e.g. četvrtak 'Thursday', četvrtgodišnjak 'quarterly (magazine)'.

6.5.1.1.-6.5.1.6. The OScr ordinals pet/peti 'fifth', šest/šesti 'sixth', sedam/sedmi 'seventh', osam/osmi 'eighth', devet/deveti 'ninth', and deset/deseti 'tenth' were formed on the cardinal-numeral stems, and in their short forms (after the depalatalization of consonants) they coincided with the cardinal numerals (e.g. šest- and šest- 'six' both became šest). The resulting homophony could have played a fairly significant role in the eventual loss of the short forms of the ordinal numerals in OScr (it will be remembered that the short forms of most adjectives were retained, and are commonly used in ModScr). Morphologically, all the above ordinals followed the paradigm prv/prv 'first' (6.1.1.c.).

6.5.2.1.-6.5.2.6.a. The ModScr ordinals peti 'fifth', šesti 'sixth', sedmi 'seventh', osmi 'eighth', deveti 'ninth', and deseti 'tenth' all follow the declension of prv (see 6.1.2.b.).

b. In word derivation the bases of the ordinal numerals above 'four' are indistinguishable from those
of the cardinal numerals (see appropriate sections of Chapter 3 for these numerals).

6.6.1.a. The late forms of the OScr ordinals jedanaest/jedanaesti 'eleventh', dvanaest/dvanaesti 'twelfth', trinaest/trinaesti 'thirteenth', četrnaest/četrnaesti 'fourteenth', petnaest/petnaesti 'fifteenth', šesnaest/šesnaesti 'sixteenth', sedamnaest/šedamnaesti 'seventeenth', osamnaest/osamnaesti 'eighteenth', and devetnaest/devetnaesti 'nineteenth' represent a regular pattern of derivation of the ordinals from the cardinal-numeral stems. The declension of these ordinals was identical with that of prv/prvi (see 6.1.1.c.).

b. It may be assumed that in the earlier period, when the cardinal numerals for 'eleven' through 'nineteen' were still interpreted as loose combinations of the cardinal numerals of the first decade, 'one' through 'nine' and the prepositional phrase na des(e)te 'upon ten', e.g. dva na deste (Bč., p. 178), there existed also ordinals of the type prv/prvi na des(e)te 'eleventh', consisting of the declined ordinal numeral for 'first' through 'ninth' and the phrase na des(e)te. The only example found in the sources available involves the use of such an ordinal in the construction with sam- (see 6.9.1. for details):
6.6.2. The ModScr ordinals *jedanaesti* 'eleventh', *dvanaesti* 'twelfth', *trinaesti* 'thirteenth', *četrnaesti* 'fourteenth', *petnaesti* 'fifteenth', *šesnaesti* 'sixteenth', *sedamnaesti* 'seventeenth', *osamnaesti* 'eighteenth', and *devetnaesti* 'nineteenth' coincide with the late OScr long forms of the respective ordinals. They are all declined like *prvi* 'first' (see 6.1.2.b.).

6.7.1.a. Just as was the case of the OScr ordinals for 'eleventh' through 'nineteenth' (see 6.5.1.1.-6.5.1.6.), the attested forms of the OScr ordinals for 'twenty', 'thirty', 'forty', and the following decades (through 'ninety'), and those of the hundreds and the thousands, belong to the late period of OScr.

b. These forms, as a rule, were based on the cardinal-numeral stems, and the formants -i (osam-deseti 'eightieth', devedeseti 'ninetieth', tisući 'thousandth'), -oti (stoti 'hundredth', tristoti '300th', petstoti '500th'), -iti (hiljaditi 'thousandth'), and -otiniti (dvestotiniti '200th', tristotiniti '300th') were employed in their formation.

c. Some of the above ordinals (especially those derived by means of the formant -i, e.g. *pedeseti* 'fiftieth') may be supposed to have existed also in the
short form (*pedeset < *pedeset-ə 'fiftieth'), possibly only for a short period (cf. 6.5.1.1.-6.5.1.6., where the problem of the competition between šest < *šest-ə 'sixth' and šest < šest-ə 'six' is discussed). When the sound -i began to be interpreted as a sign of the ordinal numerals, the three cardinal numerals that ended in -i (dvades(e)ti 'twenty', trides(e)ti 'thirty', and četirdes(e)ti 'forty' prevailed. With this redistribution, the problem of competition was solved, but unfortunately at the expense of the indefinite (short-form) ordinals. The only short-form ordinals that were temporarily reprieved were the first four: prv 'first', drug 'second', treti 'third', and četvrto 'fourth', since their stems did not coincide with the Nom./Acc. forms of the corresponding cardinals. Eventually, they too followed the fate of the other short-form ordinals, and only the long-form ordinals prvi 'first', drugi 'second', tretji > treci 'third', and četvrto 'fourth' remained.

6.7.2.a. The ModScr ordinals for the decades, the hundreds, and the thousands (as well as for the millions and the billions, if such ordinals need to be formed) are all based on the cardinal numerals (e.g. dvadeset 'twenty': dvadeseti 'twentieth'; devedeset 'ninety': devedeset 'ninetieth', etc.). The ordinal 'hundredth' has two variants: stoti and stotiniti, based on the two variants
of the cardinal 'hundred': sto and stotina; the following hundreds, too, employ the one or the other variant (e.g. tristoti and tristotiniti '300th'). The ordinal 'thousandth' has four variants: two based on the stem hiljad-: hiljadi and hiljaditi, two based on the stem tisuć-: tisući and tisućni.

b. In formation of the higher thousands -tisućni and -hiljaditi are preferred. The first component of the compound is an ordinal numeral; it appears in its stem form, expanded by the linking vowel -o- (e.g. trotisućni '3,000th', petohiljaditi '5,000th', etc.).

[Note: Leskien in Serbokroatische Grammatik (Heidelberg, 1914), referring to the 1899 edition of Maretić' Gramatika hrvatskoga ili srpskoga književnog jezika, par. 235 b, quotes also forms without the linking vowel -o-, e.g. dvije tisući '2,000th', tri tisući '3,000th'. However, this type of ordinal is not mentioned in the 1963 edition of Maretić' grammar, par. 235 b.] The numeral 'four' usually appears in such compounds in the form četvero- (e.g. četvero-hiljaditi '4,000th'). The ordinal 'millionth' is milionti or milijunti; the ordinal 'billionth' is milijardi. Their compounds are produced in the same way as the compounds of the thousands, e.g. dvomilionti 'two-millionth', etc. All such ordinals are declined according to the paradigm prvi 'first' (see 6.1.2.b.).
6.8.1. The ordinal numerals for higher numbers (other than those which end in round tens, hundreds, thousands, etc.; for these see 6.7.1.b.) are insufficiently attested in OScr. The late OScr usus, which is preserved in ModScr, was to place only the last number in the ordinal-numeral form, whereas the preceding members of the string appeared in the nominative case of the cardinal numeral (see examples in 6.8.2.). The conjunction i 'and', common in cardinal-numeral strings, was usually omitted.

6.8.3. The multidigital compounded ordinal numerals in ModScr are constructed as strings in which only the last member appears in the form of an ordinal numeral, while all the preceding members assume the form of the cardinal numerals in the nominative:

- pet stotina devedeset osmi 'the 598th' (Vuk Rječ. XLIX) Mar. 222;
- sedam stotina i dvadeset šeste godine 'in the year 726' (Dan Prip. 13) Mar. 222.

6.9.1.a. OScr, as did OR (see 4.9.1.), OCz (see 5.9.1.), and other Slavic languages, knew the construction *sama drug 'the two of them; he and one other person' (consisting of the pronoun sam/sama/samo 'himself, herself/itself', followed by an ordinal numeral).

b. In this type of construction the ordinal numeral
appeared in the short form or the long form (the short form predominates). In contrast to the OR and Ocz occurrences, the OScr examples show a larger variety of ordinals which could be found with sam/sama/samo: not only the ordinals of the first decade and those denoting the decades (e.g. 'twentieth', 'thirtieth', 'fortieth', etc.) but also combinations of unit numerals with the decades, and even combinations of higher numerals are attested:

samodvadeset i osmi
'the twenty-eight of them'
(Maž. 1016) Zwol. 66;

samostoti šezdeseti trideseti
'the 190 of them'
(Ziv. 63; 1764) Zwol. 66.

c. The neuter form of this construction could also have another meaning (cf. OR, 4.9.1.), namely that of a multiplicative adjective or adverb:

da plakja kraščnik, samosedmo
'let the frontiersman pay sevenfold'
(Zak Duš. 143; 1349-1354) Zwol. 66.

6.9.2. In ModScr no traces have remained of the OScr construction, type sam(o)drug 'the two of them; he and one other person' (see 6.9.1.).

6.10.1. The Slavic construction of the type OR poli-vžtoro 'one and a half' (see 4.10.1.), consisting of the fraction pola 'a half' and an ordinal numeral, is in OScr
represented only by podrug < *polodruga 'one and a half', i.e., 'a half of the second unit'.

6.1C.2. ModScr preserves podrug 'one and a half' as a special (cardinal) numeral, which is indeclinable and whose head noun appears in Gen. sg.:

ostanu ondje oko podrug godine dana
'I will stay there about a year and a half'
(Prip. 102) Mar. 188.

6.11.1.a. The OScr fractions were formed on the ordinal-numeral stem with the suffix -ina, e.g. tretjina > trećina 'a third', šestina 'a sixth', etc. There were two fractions in -ina that were not formed on the ordinal-numeral stem: polovina and polutina, both meaning 'a half'. All these fractions were declined like masculine nouns, pola declined like feminine a-stem nouns, later becoming indeclinable, and četvrt declined like feminine i-stem nouns.

c. The head noun of any of the OScr fractions appeared in Gen. (sg. or pl., depending on whether the noun was a mass noun or a count noun).

6.11.2.a. ModScr produces fractions above polovina 'a half' on the ordinal-numeral stem, with the aid of the formant -ina, e.g. četvrtina 'a quarter', petina 'a fifth', jedanaestina 'an eleventh', etc.

b. Somewhat irregular (with respect to the stem) are
the fractions stotnina '1/100' as well as those fractions whose denominator contains numerals above 'twenty' ending in 'one' and 'two'. Such denominators employ the expressions -jednina and -dvojina for compounds ending in 'one' and 'two', respectively, e.g. trideset-jednina '1/31', pedeset-dvojina '1/52'.

c. The fractions in -ina are declined according to the II declension, and their syntactic characteristics are as follows: the form of the denominator is determined by the type of cardinal numeral in the numerator (i.e., 'one' or its compounds: Nom. sg.; 'two', 'three', 'four': Nom. pl.; other numerals: Gen. pl.). The head noun of the fraction itself always appears in Gen. (sg., if it is a mass noun; pl., if it is a count noun), e.g.:

dve dvadeset petine pijeska
'2/25 of the sand';

dve dvadeset petine učiteljica
'2/25 of the female teachers';

pet osmina vode
'5/8 of the water';

pet osmina studenata
'5/8 of the students'.

d. There are several ModScr fractions that are not formed with the aid of -ina: pola, polovica, pol, pô (all meaning 'a half') and četvrt 'a quarter'. Pô and pol (and usually pola) are not declined; polovica and occasionally pola are declined according to the II declension, and četvrt according to the III declension.
Summary (Chapter 6):

The ordinal numerals in ModScr have characteristics that are analogous to those of their ModR and ModCz counterparts. They are declined according to the adjectival paradigm (the definite [long] declension only), and like the relational adjectives, they cannot form the comparative and the superlative degrees. The related fraction numerals possess substantival morphological features; only po 'half' and pola 'a half' resemble the cardinal numerals above 'four' in that they are indeclinable. Of the declinable fractions, treč 'a third' follows the III declension, whereas all the remaining fractions are declined according to the II declension. With regard to the other related types of numerals discussed in this chapter (the OScr types pol treća 'two and a half' and semostotį 'the hundred of us', see 6.10.1. and 6.9.1., respectively), only the former survives in ModScr in the isolated remnant podrug 'one and a half'; it is indeclinable.

Summary (Part II):

Among the numerals discussed in Part II, the ordinal numerals stand out as morphologically the most uniform type: they show invariably adjectival characteristics, and may be described as being particularly close to the relational (otnositel'nye) adjectives, as they lack
the indefinite declension and are unable to form the comparative and the superlative. The other type of numeral copiously represented in all three languages are the fractions. In ModCz and ModScr, the fractions have purely substantival inflection, while in ModR the majority of the members follow the morphology of the adjectives and only a few that of the substantives. The remaining two types of numeral included in Part II, the sam plus ordinal and the pol plus ordinal numerals, well-documented for the old period of all three languages, no longer have the status that they enjoyed then: they have lost their productivity and have been relegated to the periphery of the system. One possible exception are the pol plus ordinal numerals, which have been preserved as a partially productive type in ModCz (see 5.10.2.a.). Both the adjective-like and the substantive-like numerals discussed in Part II follow the respective adjectival and substantival paradigms without exceptions, i.e., the deviations from the basic substantival paradigms observed in the inflection of the cardinal numerals (Part I) are not found in the inflection of these numerals.
PART III

CHAPTER 7: OTHER NUMERALS IN RUSSIAN

7.1.1.a. Although morphologically OR odıni/odini 'one group, set' belongs to the paradigm of the OR cardinal numeral odın, odına/odıno 'one' (see 1.1.1.) there are at least two reasons why odıni/odini should not be regarded as a cardinal numeral:

(1) the opposition of the grammatical number (common in OR, e.g., in nouns: golova 'head', Nom. sg., golově, Nom. dual, golovy, Nom. pl.) was quite unknown to the class of cardinal numerals in OR;

(2) even if one member of this class should be isolated as an exception, there are serious semantic difficulties precisely with this member: the notion 'one' is singular, unique, and thus it is hardly possible to speak of a cardinal numeral such as 'one' as having a plural.

b. If we consider examples of the usage of odıni/odini in OR, it appears that there is a semantic parallel between odıni/odini, dvoj-, troj- (for the latter two see 7.3.1.) on the one hand, and odın-, odin-, đav-, tr- (for these,
respectively, see 1.1.1., 1.2.1., 1.3.1.) on the other. In other words, *odūni*/*odini* was a type of numeral analogous to the so-called collectives (see 7.3.1. and 7.4.1.). As such, *odūni*/*odini* was used to set off one group of objects taken as a whole that was to be contrasted with another group of the same objects. In this function, the group contrasted with was regularly preceded by *druz(i)* 'others':

```
pride množstvo Poloven: razdělivšesja
na čvoe, odini pridosa k Perejaslavljju i
stasa v Pesčeno, a družii pridosa po onoi
storone Dnepra g Kyevu i stasa u Korsunja
'there came a great number of Polovtsians:
having split in two, some came up to
Perejaslav' and stood near Pesčeno, and
others came along the opposite side of the
Dnieper to Kiev, and stood near Korsun'
(Lavr let.; 1169) Srez. II, 616-617.
```

Furthermore, *odūni*/*odini* was used to designate one set of (usually) paired objects which were commonly used in such a set (e.g. *serēgi* 'earrings'), or to quantify the so-called count pluralia tantum, nouns which lacked the singular altogether:

```
da vxođajt' v gorod' odiněmi voroty
'let them enter the city through
one gate'
(Dag Ig.; 245) Srez. I, 303.
```

c. In OR dialects, the Nom. form of this numeral had two forms: *odni*, *odně* (*odini*, *odine*), and these two forms (i.e., *odni* and *odně*) were later reinterpreted in terms of a gender opposition: *od(a)ni* was assigned in prescriptive grammars of the seventeenth and
the eighteenth centuries to the masculine gender, while od(s)ně was to serve the feminine and the neuter genders. This artificial distribution was preserved until the 1917 orthography reform (just as was preserved, e.g., the Church Slavonic inspired distinction in Nom./Acc. Inan. pl. of adjectives, as well as of the ordinal numerals, -ve vs. -vja: pervye 'first', Nom./Acc. pl. M. Inan.; pervyja, Nom./Acc. pl. F./N., see 4.1.2.a.). Like in Instr. sg. M. of the cardinal numeral odin 'one' (see 1.1.1.), the entire paradigm of the collective numeral odně was influenced by the palatalized variety of the pronominal declension (in those dialects which had odně in Nom., the non-palatalized variety of the pronominal declension prevailed, e.g. odněm, Dat., odněx, Gen./Loc., etc.; see Bul., p. 182).

7.1.2.a. ModR odni 'one group, set' (for the prereform spelling variant odně see 7.1.1.c.) has preserved its morphological characteristics from OR: it is declined like the plural of the soft-stem possessive adjective moj 'my': moj, Nom. pl.

b. Its use in ModR coincides with that found in OR: describing a set or group of objects, either in a parallel construction with drugie 'others', or without it:

odni (studenty) čitali, a drugie razgovarivali 'some (students) were reading, and others were talking';
or referring to nouns that denote objects frequently or usually found in pairs:

na polu ležali odni tufli
'there was a pair of shoes (lying) on the floor';

or, finally, referring to nouns that are unable to produce singular (the so-called count _pluralia tantum_):

za èti den'gi možno kupit' tol'ko odni časy
'for this (much) money only one watch can be bought'.

7.2.1.a. The OR inclusive numeral _oba/obě_ 'both' had close links with the cardinal numeral _dava/dvě_ 'two'; thus _oba_- occasionally replaced _dava_- in the compound _dvanaadesjate_ 'twelve':

jedini oti obojunadesjate
'one of the twelve'

(Ostr ev. Matt. XXVI; 1056-1057) Srez. II, 498

b. In its basic meaning, however, _oba/obě_ 'both' was not a numerical concept; it merely signalized the inclusion of a specific number of objects, namely two, into consideration. Furthermore, it could emphasize that these objects should not be viewed separately (one plus one) but jointly, as a whole. This is particularly evident in constructions where _oba/obě_ is followed by _dava/dvě_: 
and also, if a Jew should be summoned to the court by his judge, and does not come the first and the second times, he must pay the assessed fine for both times' (Zal gr.; 1388) Srez. II, 495.

c. Morphologically, the paradigm of oba/obě 'both' was identical with that of the cardinal numeral đva/džve 'two' (see 1.2.1.). There was only the dual: the indirect cases showed complete gender syncretism, oboju, Gen./Loc., obema, Dat./Instr., while Nom./Acc. contrasted obě, F./N. with oba, M. Like đva 'two' replaced džve, oba later replaced obě in the neuter gender.

7.2.2. The ModR inclusive numeral oba/obe 'both' is used in a similar fashion as oba/obě was used in OR (see 7.1.1.b.). In its morphology, however, only a trace of the original declension remains, namely the Nom./Acc. Inan. oba/obe. The rest of the declension was borrowed from the paradigm of the OR collective numeral oboj 'both' (see 7.3.1.). The existing contrast between the M./N and F. forms in the oblique cases (oboix vs. obeix, Gen./Loc.; oboim vs. obeim, Dat.; oboimi vs. obeimi, Instr.) does not reflect any divergence in the development of the feminine forms, but rather represents an attempt to preserve the vocalic contrast of the direct-case desinences (i.e., -a for M./N., -e for F.) throughout
the entire paradigm.

7.3.1.a. A fairly large group of numerals in OR was the class of the so-called collectives. The collective numerals were derived from the cardinal numerals (and from the inclusive numeral oba/obē 'both') by means of two sets of suffixes: -o serve dava/davē 'two', trije/tri 'three', and oba/obē 'both'; -er-/or- served all other numerals (see 7.4.1.).

b. In actuality, there emerge three types of numerals when the class labeled as the collectives is closely examined. These numerals could function as:

1. **generic numerals** ('of two, three, both, etc. kinds'):

   svjataja bogorodica viděla dvoi ljudi ediny smejuščesja i drugyi plačuščasja
   'the Holy Virgin saw people of two kinds, one laughing and one crying'
   (Xozd Ig Dan.; c. 12th cent.) Kuz. 187;

2. **multiplicative numerals** ('double', 'triple', etc.):

   a ne všporu kupiti, dvoi dengi dati
   'and if not bought in time, a double amount is to be paid'
   (Dom. 109-110; 16th cent.) Unb. 442;

3. **collective numerals proper** ('a group of two, three, etc. '):

   a po svo(ei) d(u)še dal esmę selo
   Ignat'evskoe da troi pčely sv(ja)toi
   Troiče v monastyrь
   'and of my own will I gave the
   Ignat'evskoe village and three swarms
   of bees to the Holy Trinity monastery'
   (Dux Patr.; 1391-1428) Srez. III, 1001
c. Morphologically and syntactically, the generic, the multiplicative, and the collective numerals were very similar to the ordinal numerals: they had a mixed (partly pronominal, partly nominal) declension and agreed in case, gender, and number with their head nouns. It was only later that the collectives changed in a way that the Nom./Acc. sg. N. (dvoe, troe, oboe) was reinterpreted as a nominal-type quantifier (similar to, e.g., tysjača 'thousand'), and its head noun no longer occurred agreed with it but appeared instead in Gen. pl.:

a vzjali esmja, gospodine, na toj požogi
odin topor da dvoe xlebovi
'and we took, master, at that
fire one ax and two loaves of bread'
(L. 141; 1528) Unb. 437.

The adjectival character of these numerals, both in their morphology and their syntax, was retained by the oblique cases (e.g. dvoix, troix, oboix, Gen./Loc.) where plural adjectival (i.e., definite pronominal) desinences were adopted, and complete grammatical agreement occurred:

z dvoimi dětmi
'with two children'
(AJuz. III D, 93; 1649) Bog. 128.

d. When the collectives were used in combination with a class of nouns that usually or exclusively appeared in plural, the agreement between the two was retained even in the direct cases, and the collectives appeared in the Nom./Acc. pl. form:
da dvoi rukavicy, da dvoi čjulki
'and two pairs of mittens,
and two pairs of stockings'
(AM. I, 164; 1651) Bog. 126.

e. The use of the collectives was not limited to an
environment where a head noun followed the numeral. The
collective numerals could also appear in a substantivized
function (cf. ModR sotnja 'a group of one hundred').
Dvoe, troe, oboe were particularly common in such a
function:

čto budetz me Alpy otz sebja dati---
ono ili dvoe, so čto smogu
'what shall I give to Alp of my own---
one or two (things), as I will be able'
(DSK. II, 279; 1516) Unb. 435;

a vž starinu, gosudarž, daščiki vaši,
ezdili po troju i sž tolmaczemž, a nono,
gosudarž, ezdža vaša daščik vž semere
'in the old times, my lord, the tax
collectors traveled in a group of three,
with an interpreter, and now, my lord,
your tax collector travels in
a group of seven'
(AKA. 289; 1595) Unb. 436;

i poslušaetž knjazž velikij carž, učinitž
to oboe, i carž budetz velikomi knjazju i
drugž i bratž, a ne učinitž togo oboego
knjazž velikij, a carž velikomi knjazju
nedrugž budetz
'and if the grand duke obeys the tsar,
and does both of these things, the
tsar will become friend and brother
to the grand duke, but if the grand
duke does not do both of these things,
the tsar will become enemy to the
grand duke''
(DSK. II, 291; 1516) Unb. 435.

f. With the exception of the oblique cases of the
plural the various forms of oboj 'both' began to fall into disuse as early as the seventeenth century (see Bog., p. 216).

7.3.2.a. In ModR, only the collective function of the numerals in -oe and -ero (see 7.4.2.) survives. The generic function is expressed now analytically (e.g. bumaga dvux vidov/sortov 'paper of two kinds'); the multiplicative function is expressed by special suffixes (e.g. -noj, as in dvojnoj 'double', trojnoj 'triple', etc.).

b. The collectives in -oi and -ery (see 7.4.1.c.), e.g. dvoi perčatki 'two pairs of gloves', pjatery sani 'five sleds', common up to the second half of the nineteenth century (see Bog., p. 203), were replaced by the substantivized Nom./Acc. sg. N. form -oe, -ero (see 7.4.1.c.). In the oblique cases the plural endings of the collective numeral survive in ModR (e.g. dvoe detej 'two children', Nom. pl., but: dvoim detjam, Dat. pl.).

c. The function of the collective numeral oboe 'both' is now performed by the inclusive numeral oba/obe 'both' (see 7.2.2. and 7.3.1.f.). The oblique cases of the M./N. genders of this numeral were taken from the paradigm of OR oboj 'both', Nom. pl. (see 7.2.2.). The singular declension of the collective oboj 'both' survives in the
phrase oboego pola 'of both sexes'.

d. The complete paradigm of the -oe collectives (dvoe 'two', troe 'three') in ModR is as follows:

Nom. dvoe
Gen. dvoix
Dat. dvoim
Acc. =Nom. or Gen.
Instr. dvoimi
Loc. dvoix

The head noun is grammatically agreed with the collectives dvoe, troe in all cases except Nom./Acc. Inan., when it appears in Gen. pl.

e. In word derivation dvoe, troe, and oboe are represented by a number of formations, e.g. dvoedušie 'double-dealing', dvoezhenec 'bigamist', dvoetočie 'colon', troekratnyj 'thrice-repeated', oboepolyj 'bisexual', oboestoronnij 'reversible', oboerukij 'ambidexter'.

7.4.1.a. The formant -er-/or- was employed in OR in the same way as the formant -oj- (see 7.3.1.a., b.). It was used to produce the collective, and possibly also the generic and the multiplicative numerals (no examples are available for the latter two in the OR texts) from numeral bases.

b. Unlike the numerals derived by means of the formant -oj-, the numerals in -er-/or- lacked the singular declension; the only survival of an earlier state was the Nom./Acc. sg. N. form -ero/-oro-, which
was used invariably in its quantifier-like function (i.e., the head noun followed in Gen. pl.; it was not agreed with a neuter noun in the singular):

*bystь že morь vo Pskovь, jako že ne byval takovь: gdë odnomu vykopali groбь, tu pjatero i desjatero golovь vз odinь groбь vloжили*  
'there was a pestilence in Pskov as had never been before: where a grave for one person was dug, five and even ten persons were put in (that) one grave'  
(Pskov I let.; 1398) Srez. II, 1794

The oblique cases were supplied by the plural declension of the collective numerals (pronominal, or rarely, nominal); there the agreement was also observed:

*sutь сьложенy в pjатернисахь*  
*кнiзьнyхь cетворeхь*  
'and they are collected in four five-book volumes'  
(Sv Izb.; 1073) Kuz. 187.

It was in the oblique cases, however, that the strong competition of the cardinal numerals was felt. Gradually, the oblique cases of the cardinal numerals replaced the oblique cases of the collectives. Eventually, the process of replacement reached the direct cases as well. Nevertheless, the collectives were not eliminated entirely (see 7.4.2.).

c. In the same way the plural forms of the collective numerals дvoi, troi, oboi were replaced by the Nom./Acc. sg. N. form дvoe, troe, oboe (see 7.3.1.c., d.), the collectives in -er-/-or- replaced the Nom./Acc. pl. form (e.g. četvery, M./F., četverа, N.) with the Nom./Acc. sg.
N. form -ero/-oro- (e.g. četvero), except when followed by nouns of the type serži 'earrings', denoting paired objects, or by the so-called count pluralia tantum (e.g. vorota 'gate'). An isolated example of the older state of things is found in the following late sixteenth-century passage:

kupilč pjetery pčely v uljach,
'(he) bought five swarms of bees in beehives'
(RIB. XXXVIII, 51; 1585) Unb. 441.

d. The collective numerals were derived from the cardinal numerals, primarily from those of the first decade. (Examples of šestero/šestoro 'six', however, are rare: Sreznevskij [Srez. I, II, III] lists only one entry.) Above the first decade, the occurrence of the collectives was limited to the numbers of the second decade:

da lošadej dvencatero
'and twelve horses'
(AS. 336; 1551) Unb. 437;
četverenatcatero lošadej
'fourteen horses'
(DSK. I, 406; 1501) Unb. 437;

where both components of the compounded numeral are in the collective-numeral form, and to the decades:

dvadcatero kurow
'twenty roosters'
(NPK. IV, 199; 1498) Unb. 437.

Only exceptionally numerical compounds could produce the collective form:
7.4.2.a. In ModR the derivation and use of the collectives (both of the -oe type, e.g. dvoe 'two', and the -ero type, e.g. četvero 'four') are quite limited. According to the Academy Grammar (Gram rus jaz., p. 379), only the numerals of the first decade may produce the collective forms. At the same time, recent studies reported in Bogusławski (Bog., p. 205) show that vos'mero, 'eight', devjatero 'nine', and desjatero 'ten' are of merely marginal frequency. The collectives of the higher numerals are relegated by the authors of the Academy Grammar (Gram rus jaz., p. 379) to prostorečie (popular, non-standard, speech). Whenever a collective may not be produced, a cardinal numeral is used instead.

b. The collectives of the numerals above 'three' are formed with the formant -ero (cf. OR, 7.4.1.; the variant -oro does not occur in ModR). The endings of the oblique cases are the adjectival (plural) endings. Unlike the cardinal numerals above 'four', the collectives syncretize Acc. Anim. with Gen. (e.g. pjat' studentov 'five students', Acc. pl., vs. pjateryx studentov, Acc. pl.). The complete paradigm of the -ero collectives is as follows:
In the oblique cases there is complete grammatical agreement between the collective and its head noun; when the form \textit{-ero} occurs, the head noun appears in Gen. pl.

c. Among the collectives, \textit{dvoe 'two', troe 'three',} and \textit{četvero 'four'} have a special place. They are always used (i.e., never replaced by the cardinal numerals) in their direct-case forms: \textit{dvoe, troe, četvero}, when followed by paired-object nouns (e.g. \textit{percätki 'gloves'}) or by \textit{pluralia tantum} (e.g. \textit{sani 'sled'}). In both cases, the production of Gen. sg., required after the cardinal numerals \textit{dva/dve 'two', tri 'three',} and \textit{četyre 'four'}, is impossible (\textit{sani} cannot form it at all; \textit{dve percätki 'two gloves'} clearly contrasts with \textit{dvoe percätok 'two pairs of gloves'}). Above 'four', \textit{pluralia tantum} as well as paired-object nouns usually combine with the collectives (but see 7.4.2.a.), although the cardinal numerals are not uncommon in this position. However, in the oblique cases of any collective forms of the cardinal numerals normally appear: \textit{pjatero sutok 'five days'}, Nom./Acc. but: \textit{bez pjati sutok 'without five days'}, Gen.

d. The collectives (-\textit{oe}, -\textit{ero}) are further used
optionally before non-feminine nouns denoting persons
and human and animal offspring, and before substantivized
adjectives denoting male persons, and before personal
pronouns, e.g. dvoe prijatelej 'two friends', troe
ljudej 'three people', četvero detej 'four children',
semero ščenjat 'seven puppies', pjatero rabočix 'five
workers', nas četvero 'the four of us'.

e. In word derivation the -ero collectives appear
in the basic form (-ero-) or its variants -er- or -ër-,
e.g. četveronogij 'quadruped', četverorukij 'quadrumane',
četverostišie 'quatrain', pjaternja 'five fingers',
pjatërka 'number five'.

7.5.1.a. In addition to the various types of numerals,
such as the cardinals, the collectives, the ordinals, etc.,
all associated with a definite, specific number, there
existed in OR various expressions that were employed
whenever a need arose to indicate quantity indefinitely.

b. Many of the basic OR non-numerical quantifiers
were derived from adjectives with the suffix -o (e.g.
mnoogo 'many' from mnoogyj 'many, numerous', molo 'few'
from malyj 'small', toliko 'so many' from tolikyj 'such,
so numerous', etc.). The quantifiers in -o had the
nominal declension, and the head noun appeared in
Gen. (sg. or pl.):
ide sə Lukъ s malomъ družiny
'he went from Luki with
(a) few of his retinue'
(Novg I let.; 1200) Srez. II, 107;

unę jestъ mně odinomu umreti,
neželi toliku dušь
'it is better for me alone
to die than for so many persons'
(Nest Bor Gl. 19; 14th cent.) Srez. III, 974.

c. Certain quantifiers remained semantically very
close to the adjectives from which they were derived, and
thus we often see a vacillation between the quantifiers
in -o and the adjectives (which appear in the plural
forms, in agreement with the head noun):

potomъ po několiceхъ dneхъ . . . vzjaša
sъ ukraïny několiko Pskovskихъ selъ
'afterward, several days later . . .
they took several Pskovian
villages from the borderland'
(Pskov I let.; 1265) Srez. II, 484.

The equivalent of the ModR quantifier mnogo 'many' appears
in the older OR texts predominantly in the adjectival form:

mnogy kyjany isece
'(he) cut down many Kievnats'
(Novg I let.; 1135) Srez. II, 211.

d. The quantifier toliko, tołko 'so many' and the
interrogative quantifier koliko, kolło 'how many' (the
latter used in older OR texts also in the meaning 'several')
were later replaced by the quantifiers stolisko 'so many'
and skolisko 'how many', respectively. Another quantifier
known but rarely employed in early OR, namely něskolsko
'several' spread very quickly after skolisko began to
function as an interrogative quantifier ('how many') only.
e. The vacillation between the two possible morphological treatments of these quantifiers (as noun-like quantifiers, with nominal declension in the singular, e.g. **malo**, Nom./Acc., **mala**, Gen., **malu**, Dat., etc.), and as adjectival quantifiers with nominal or pronominal declension in the plural (e.g. **mнпогье**, Nom./Acc., **мнпогумъ**, Dat., **мнпогухъ/мнпогъ**, Loc., etc.) persisted throughout the entire OR period. With some quantifiers, notably **нёсколько** 'several', the late OR period presents another alternative, namely the suspension of declension:

```
o pribytii . . . нёсколько
francuzskix korablej
'about the arrival . . .
of several French ships'
(BA. III, 147; 1734) Bog. 224;

predz нёсколько днами
'several days before'
(VP. II, 241; 1716) Bog. 224.
```

7.5.2.a. In ModR the group of non-numerical quantifiers is quite small. The following expressions may be included: **нёскол’ко** 'several', **столько** 'so many', **много** 'many', **немногого** 'not many, few', **мало** 'few', **немало** 'not few, many', and possibly also **сколько** 'how many', and **достаточно** 'enough, plenty'.

b. From a morphological point of view, the non-numerical quantifiers may be divided into two groups: one, comprising **мало** 'few', **немало** 'not few', and
dostatočno 'enough, plenty', and another, including all
the other quantifiers. The first group is characterized
by a defective paradigm (only the two direct cases, Nom.,
Acc., exist; the oblique cases must be borrowed from the
semantically close quantifiers which possess complete
paradigms: malo from nemnog-, nemalo from mnog-, while
dostatočno is unique in that it lacks even such suppletive
forms. The second group has the following morphological
characteristics: the direct cases have the nominal (N., sg.)
ending -o (neskol'ko 'several', mnogo 'many', malo 'few',
etc.), while the oblique cases show the plural adjectival
endings, -ix in Gen./Loc., -im in Dat., -imi in Instr.
In the treatment of Acc. Anim., the literary norm permits
both the type of syncretism found in dva/dve 'two', e.g.
neskol'kix pisatelej 'several writers' just as dvux
pisatelej 'two writers', and the type found in pjat'
'five', e.g. neskol'ko pisatelej 'several writers' just
as pjat' pisatelej 'five writers', i.e., Nom. for Acc.
Anim. in the latter type. This type is allegedly
becoming predominant in ModR (see Gram rus jaz., p. 378).
Syntactically, all the non-numerical quantifiers closely
follow the pattern of pjat' 'five': the head noun agrees
grammatically with the quantifier only in the oblique
cases. When the quantifier appears in its basic -o
form, the head noun takes the Gen. pl. ending (e.g.
neskol'ko stolov 'several tables', Nom./Acc. but:
neskol'kimi stolami, Instr.).

c. In word derivation the non-numerical quantifiers appear in the basic form (-o), e.g. mnogovekovoj 'century-old', mnogokrasočnyj 'polychromatic', mnogobožie 'polytheism', malokrovie 'anemia', malonaselënnýj 'sparsely populated'.

Summary (Chapter 7):

The group of ModR numerals discussed in this chapter includes the lesser types: the collective numerals (7.1.2., 7.3.2., and 7.4.2.), the inclusive numeral oba/obe 'both' (7.2.2.), and the indefinite numerals (7.5.2.). These numerals are characterized in ModR by a high degree of morphological uniformity: in the direct cases, they show substantival desinences, while in the oblique cases adjectival desinences are found. In comparison with the cardinals and the ordinals, these numerals have a very small number of members. Except for the collectives, which tend to be replaced in most environments by the cardinals, the above types of numerals enjoy a substantial stability in the system of ModR, and are of relatively high occurrence.
8.1.1.a. In OCz, a situation similar to that of OR existed with regard to the utilization of the plural of the cardinal numeral jeden/jedna/jedno 'one' in the function of a collective numeral (see 7.1.1.).

b. Like odný/odný in OR, the OCz jedný, M., jedný, F., jedna, N. were used to set off a group of objects (mostly personal, but also animate impersonal, and even inanimate) that should be viewed as one whole:

   yedný ženy řehu  
   'some [i.e., one group of] women said'  
   (Pass. 413; 14th cent.) Geb. 456;

or, more frequently, to express the quantity of objects usually found in the plural, or only found in the plural (the so-called count pluralia tantum):

   gednými dratvami  
   'with one set of cobbler's thread'  
   (Comest. 185 b; lt. 14th cent.) Geb. 456;

   gedných bran  
   'of one gate'  
   (Kol. 30 b, EE; 1735) Geb. 456.

c. The desinences of the collective jedný/jedný/jedná 'one group, set' attested in OCz are almost equally distributed between the short pronominal (type ten 'this')

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and the definite pronominal (adjectival; type dobrý 'good') declensions, e.g. Gen./Loc. jedněch and jedných, Dat. jedném and jedným, Instr. jedněmi and jednými.


8.1.2. ModCz jední/jedny/jedna 'one group, set' (gender distribution identical as in later OCz, see 8.1.1.c.) has retained the basic characteristics of usage as established for OCz (see 8.1.1.b.). When a group or set is contrasted with another set, jedni/jedny/jedna usually appears in a parallel construction with druzi/druhé/druhá 'another group, set':

jedni (hosi) šli na hřiště,

jedny ponůžky se šli koupat

'one group (of boys) went to the playground, another group (of boys) went for a swim'.

It further expresses the quantity of objects that are normally found in pairs (e.g. jedny lyže 'a pair of skis', jedny ponůžky 'a pair of socks'), or objects whose grammatical nature does not permit the formation of the singular (pluralia tantum), e.g. jedny hodiny 'one clock', jedny housle 'one violin', jedny noviny 'one newspaper'.

b. Morphologically, the ModCz numeral jedni/jedny/jedna is more uniform than its OCz equivalent. It shows
exclusively short pronominal desinences (type ten 'this'):

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<tr>
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<tbody>
<tr>
<td>Nom.</td>
<td>jedni</td>
<td>jedny</td>
<td>jedna</td>
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<tr>
<td>Inan.</td>
<td>jedny</td>
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<tr>
<td>Gen.</td>
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<td>jedněch</td>
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<tr>
<td>Dat.</td>
<td></td>
<td>jednem</td>
<td></td>
</tr>
<tr>
<td>Acc.</td>
<td></td>
<td>jedny</td>
<td>jedna</td>
</tr>
<tr>
<td>Instr.</td>
<td></td>
<td>jedněmi</td>
<td></td>
</tr>
<tr>
<td>Loc.</td>
<td></td>
<td>jedněch</td>
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</table>

8.2.1.a. The OCz inclusive numeral oba/obě 'both' was used like the OR numerical of identical forms (see 7.2.1.b.).

b. Morphologically, it closely followed the pattern of the OCz cardinal numeral dva/dvě 'two': thus it formed only the dual number, and preserved the syncretism F.=N. in Nom./Acc., obě, dvě, in contrast to OR, which changed it to M.=N., oba, dva. The following desinences are attested: obů, obůch, obůju, obůjů, obůjí for Gen./Loc.; oběma for Dat.; and obouma, oboumi for Instr. The only divergence between dva/dvě and oba/obě is found in Gen./Loc.: dva/dvě does not have attested the uncontracted desinence -oju, whereas oba/obě does (-oju, -oju; the latter analogically lengthened). In its syntax oba/obě was identical with dva/dvě (see 2.2.1.).

8.2.2.a. The ModCz inclusive numeral oba/obě 'both' preserves the essential features of its OCz predecessor (see 8.2.1.), both in its usage and its morphology and
syntax.

b. Its inflectional paradigm is quite archaic, and reflects the original, dual-number character of the declension:

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<th>M.</th>
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<tbody>
<tr>
<td>Nom./Acc.</td>
<td>oba</td>
<td>obě---------</td>
<td></td>
</tr>
<tr>
<td>Gen./Loc.</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Dat./Instr.</td>
<td>-------------</td>
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</tr>
</tbody>
</table>

The Gen./Loc. form obou comes from obú. Syntactically, oba/obě 'both' preserves grammatical agreement between itself and its head noun, which appears in the appropriate case of the plural number (the dual having been phased out of the OCz grammatical system).

c. In word derivation the inclusive numeral oba/obě is represented by three variants: the rare oba-, e.g. obapolný 'mutual', and the common obou- and oboj-, e.g. oboustranný 'bilateral', obousečný 'double-edged', oboživelný 'amphibious', obojetný 'ambiguous'.
(1) **generic numerals:**

\[
\text{dwogye podstat}
\]
'substances of two kinds'
(Pass. 295; 14th cent.) Geb. 500;

\[
\text{troyu bolest silnú měla}
\]
'she had severe pain of three kinds'
(UmR. 113; e. 14th cent.) Geb. 500;

(2) **multiplicative numerals:**

\[
\text{stodola se dwogim zadením}
\]
'a barn with double walls'
(Kol. 24 a; 1711) Geb. 501;

\[
\text{trogeho zapřeňe}
\]
'of a triple denial'
(Krist. 97 a; 14th cent.) Geb. 500;

(3) **collective numerals:**

\[
\text{dwoge dvěře}
\]
'two doors'
(Ben. 3; 1506) Geb. 501;

\[
\text{troge peníze}
\]
'three sets of money'
(Kol. 34 b, CC; 1544) Geb. 501;

\[
\text{starosta kázal obogých střeci}
\]
'the village elder ordered the both of them to be watched'
(Pass. 562; 14th cent.) Geb. 502.

b. The original pronominal declension of these (i.e.,
generic, multiplicative, and collective) numerals was
less prone to the customary contraction found, e.g., in
the possessives mój 'my', tvój 'your', svój 'one's (own)'
*mojego > mého 'my', Gen. sg. M./N., *mojemu > mému 'my',
Dat. sg. M./N., etc. The uncontracted versions of the
possessives are attested in a very small number of forms
(i.e., certain cases lack the uncontracted forms), while
the generic, the multiplicative, and the collective numerals are commonly found in both the uncontracted and the contracted forms (the former being the more common). Thus there is Nom./Acc. sg. N. *dvoje* as well as *dvě*, in Gen. sg. N. *dvojeho* as well as *dvěho*, etc. On the other hand, certain cases are attested exclusively in the uncontracted form (e.g. Acc. sg. F.: *dvoju*, vs. *mů* < *moju* 'my'; thus also the entire dual number of the -oji- numerals). Furthermore, the original hard-stem declension endings (definite pronominal; adjectival) in the oblique cases of these numerals (e.g. *dvojeho*, *dvěho*, according to *dobrého* 'good', Gen. sg. M./N.) were later contaminated by the soft-stem (definite-pronominal; adjectival) declension (e.g. *dvojího* > *dvojího*, Gen. sg. M./N. according to *pěšieho* > *pěšího* 'pedestrian', Gen. sg. M./N.), and the innovated forms eventually prevailed (see ModCz, 8.3.2.). The original short (indefinite pronominal) forms (e.g. *dvůj*, *trůj*, *obůj*) soon gave way to the innovated (definite pronominal) forms (e.g. *dvojí*, *trojí*, *obojí*) which have remained in the language as the preferred forms since the end of the fifteenth century (cf. Geb., p. 500). Throughout plural there was in OCz an even distribution of the original (indefinite) pronominal endings (e.g. Nom. pl. M. *dvojí*, Gen./Loc. pl. M., F., N. *dvojich*, Dat. pl. M., F., N. *dvojím*, etc.) and the long-quantity endings adopted from
the soft-stem adjectival declension pěší 'pedestrian'
(e.g. Nom. pl. M. dvojí, Gen./Loc. pl. M., F., N.
dvojíčch, Dat. pl. M., F., N. dvojím, etc.). Here the
adjectival endings prevailed in the oblique cases, while
in the direct cases an important split occurred in the
later stage of OCz: dvójí, trójí, obój used as the generic
and multiplicative numerals showed preference for the
adjectival endings, whereas in the function of the
collectives they tended to take the (indefinite)
pronominal endings (see ModCz, 8.3.2.a., for examples).
With regard to the usage, the OCz numerals dvójí, trójí,
obój are found in the generic and the multiplicative
functions in the singular, while the plural (and the
dual, attested only sporadically) are typical for their
collective function.

8.3.2.a. The ModCz numerals dvójí-, trójí-, obój-
have retained the semantic peculiarities that they
possessed in OCz (see 8.3.1.a.). They may be used as:

(1) **generic numerals:**

\[
\begin{align*}
dvojí lídá & \quad \text{‘people of two kinds’;} \\
obojí případy & \quad \text{‘cases of both kinds’;}
\end{align*}
\]

(2) **multiplicative numerals:**

\[
\begin{align*}
dvojí zámek & \quad \text{‘double lock’;}
\end{align*}
\]
trojí pečet
'triple seal';

(3) collective numerals:

troje kalhoty
'three pairs of pants';
obojje housle
'both violins'.

b. The morphology of the ModCz -oř- numerals is considerably simpler than the morphology of their OCz counterparts: the indefinite pronominal endings (e.g. dvój > dvůj , cf. the ModCz possessive můj < můj 'my') are considered quite obsolete and are not used even in a very formal type of the written norm. An isolated remnant of the contracted form is found in the phrase (rozEat. rozseknout) ve dvi '(to cleft, split) in two'. The singular declension of the -oř- numerals (typical for the multiplicative and the generic functions) follows the definite pronominal (adjectival) declension of the soft variety (type pěší 'pedestrian'), whereas the plural (typical for the collective use) follows the indefinite pronominal declension of the soft variety (můj 'my', i.e., its plural: moji/moje, Nom., mojič, Gen., etc.).

c. Syntactically, the ModCz collectives have in general preserved their adjectival properties better than their ModR counterpart: they are agreed with their head nouns not only in the oblique cases but also in
Nom. and Acc., e.g. 

**dvoje šaty** 'two dresses'. However, noun other than paired-object nouns and pluralia tantum usually combine with the collectives in the same way as they do in ModR, e.g. ModR **dvoe detej** 'two children', i.e., the collective numeral in the **-oje** form is followed by its head noun in Gen. pl.: ModCz **troje chlapčů** 'three boys'. The paired-object nouns and pluralia tantum may appear in this construction optionally: **dvoje šatů** 'two dresses'.

d. The selection of nouns that can function as head nouns of the **-oje** numerals in ModCz is much larger than in ModR (cf. 7.4.2.), but in the function of the collectives, the **-oje** numerals are most often followed by paired-object nouns (e.g. **lyže** 'skis', **rukávy** 'sleeves', etc.) or count pluralia tantum (e.g. **dveře** 'door', **narozeniny** 'birthday', etc.).

e. In word derivation the generic, the multiplicative, and the collective numerals are represented in the **-oje**-form, e.g. **dvojtečka** 'colon', **obojjazyčný** 'bilingual', **trojmo** 'in triplicate'.

8.4.1.a. The OCz cardinal numerals above 'three' produced the generic, the multiplicative, and the collective forms with the suffix **-er-**. Only the following numerals are attested in OCz texts: **čtver-** 'four-', **pater-** 'five-', **šester-** 'six-', **sedmer-** 'seven-', **osmer-** 'eight-',
devater- 'nine-', desater- 'ten-', and dvanačter-
'twelve-', but their repertory was very likely larger
than is reflected in the monuments. The following
examples illustrate their use:

(1) **generic:**

ze cztwereho dřivie
'from wood of four kinds'
(Mand. 3 a; 15th cent.) Geb. 270;

(2) **multiplicative:**

na cztwerym placení
'at a quadruple payment'
(Kol. 356 a, CC; 1564) Geb. 270;

(3) **collective:**

jmám cztwery škorně
'I have four pairs of shoes'
(Hrad. 124 a; e. 14th cent.) Geb. 271.

b. The older OCz monuments attest the generic, the
multiplicative, and the collective numerals with nominal
endings in the singular and in the direct cases of the
plural (the dual is not attested). The nominal declension,
however, gradually gave way to the definite pronominal
(adjectival) declension of the hard variety (type nový
'new'); in the oblique cases of the plural these definite
pronominal-declension endings are found even in the
oldest OCz monuments as the only representatives.

8.4.2.a. The ModCz numerals in -er- have retained
the three functions in which they are attested in OCz
(see 8.4.1.a.), except that the multiplicative function
is now merely marginal: there is strong competition of the suffix -násobný 'fold' (e.g. čtyřnásobný 'fourfold', pětinásobný 'fivefold', desetinásobný 'tenfold', etc.), or, occasionally, added to the generic, the multiplicative, and the collective numerals in the -o- and -ero- forms (for the former suffix see 8.3.2.), e.g. dvojnásobný 'double', trojnásobný 'triple', šesternásobný 'sixfold'. In their function as generic, and marginally, also multiplicative numerals, the numerals in -er- prefer the singular; the plural is more typical for the collective function. The ModCz -er- numerals are not limited to the first two decades (cf. 8.4.1.a.), although certain numerals, especially compounds, e.g. dvacet sedm, sedmadvacet 'twenty-seven' rarely, if ever, form them. An interesting example of a higher numeral in -er- is found in the idiom tisíceré díky 'a thousand thanks [i.e., thanks thousandfold]'.

b. Morphologically, the -er- numerals have a mixed substantival-adjectival declension: the direct cases of both singular and plural (with the exception of Nom./Acc. sg. M. Inan.) have the substantival endings (e.g. čtvera látka 'substance of four kinds', Nom. sg. F., pateru vlnu 'wool of five kinds', Acc. sg. F., čtvery šaty 'four dresses', Nom. pl. M. Inan., sedmera vrata 'seven gates', Nom./Acc. pl. N., etc.), whereas the oblique cases
(plus Nom./Acc. sg. Inan.) have the adjectival (i.e.,
definite-pronominal) endings of the hard variety (e.g.
čtverý zákon 'law of four types', Nom./Acc. sg. M. Inan.,
paterému suknu 'cloth of five kinds', Dat. sg. N., etc.).
The complete declensional paradigm of the -er- numerals
is as follows:

**Singular**

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<th>M.</th>
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<tbody>
<tr>
<td>Nom.</td>
<td>šesterý</td>
<td>šester</td>
<td>šestera</td>
</tr>
<tr>
<td>Gen.</td>
<td>šestereho</td>
<td>šestero</td>
<td>šestera</td>
</tr>
<tr>
<td>Dat.</td>
<td>šesteremu</td>
<td>šesterem</td>
<td>šester</td>
</tr>
<tr>
<td>Acc.</td>
<td>Nom. or Gen. šestro</td>
<td>šesteru</td>
<td>šesteru</td>
</tr>
<tr>
<td>Instr.</td>
<td>šesterym</td>
<td>šesterem</td>
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</tr>
<tr>
<td>Loc.</td>
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**Plural**

<table>
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<tr>
<th></th>
<th>Anim. šesteri</th>
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<th>šestery</th>
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<tr>
<td>Nom.</td>
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<tr>
<td>Gen.</td>
<td>šestery</td>
<td>šesterych</td>
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</tr>
<tr>
<td>Dat.</td>
<td>šesterym</td>
<td>šesterym</td>
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</tr>
<tr>
<td>Acc.</td>
<td>šestery</td>
<td>šestera</td>
<td>šestery</td>
</tr>
<tr>
<td>Instr.</td>
<td>šesterych</td>
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c. In certain set phrases, such as Desatero Božích
přikázání 'Ten Commandments', čtvero ročních období
'four seasons of the year', devatero řemesel 'nine trades'
(used especially in the saying devatero řemesel a desátá-
bída 'jack-of-all-trades and master of none'), etc., the
-ero numerals are used as substantives, and they have
exclusively nominal endings (neuter; type město 'city')
throughout the declension.

d. Syntactically, the -er- numerals follow the pattern
of the -či- numerals (see 8.3.2.c.).

e. In word derivation the generic, the multiplicative, and the collective numerals are found in their stem-form
-ěr- or their full form -ero-, e.g. čtverněř 'quadruped',
čtverhranněř 'quadrangular', paterčátko 'quintuplet',
sedměronásobněř 'sevenfold'.

8.5.1. The repertory of the so-called indefinite numerals (as the non-numerical quantifiers are labeled
in grammars) was approximately the same in OCz as it was
in OR (see 7.5.1.). It included mnoho 'many', málo
'few', toliko(s) 'so many', koliko(s)'how many; several',
and několiko(s)'several'.

b. These quantifiers were in OCz derived from the
same adjectives as their OR counterparts (see 7.5.1.b.;
the OCz meanings were identical), and just as the OR
quantifiers of this type, they adopted the nominal-
declension endings of the neuter gender. The head noun
usually appeared in Gen.: 

s mnohem knižat
'with many princes'
(AIXH. 5, 18; 1t. 13th cent.) Geb. 281;

u malu dni
'in (a) few days'
(Štít Mus. 62 b; 1450) Geb. 281;

toliko tůh pojměvši
'having been possessed
by so many desires'
(Hrad. 59 b; ca. 1350) Geb. 274;
kolyko jest dni
'how many days there are'
(Ż Witt. 118, 84; ca. 1365) Geb. 274;

but sometimes agreement occurred (by attraction) between the quantifier and its head noun:

w kolycze dnech
'in how many days'
(Alb. 8 a; 1382) Geb. 274;

po nyekolicie časiech
'after some time'
(Pass. 289; 14th cent.) Geb. 274.

c. In contrast to OR, the OCz non-numerical quantifiers were kept apart from the adjectives from which they were derived (e.g. mnoho 'many'[a]). The adjectives *toliký 'so numerous', *koliký 'how numerous', and *nekoliký 'several' were replaced by the generic forms in -erv (see 8.4.1.a.) that were attached to the stem of these quantifiers, e.g. tolikery 'of so many kinds', kolikerť 'of how many kinds; how numerous', nekolikerť 'of several kinds; several'. The collective forms tolikero, kolikero, and nekolikero, with approximately the same meanings, respectively, as toliko(s), koliko(s), and nekoliko(s) (see 8.5.1.a. above) also existed in OCz. Furthermore, the indefinite meaning of nekoliko(s) could be even more emphasized by the suffix -nádcět (-nádcť, -nást; all from *na desetě 'upon ten', a part of the cardinal numerals of the second decade; see 2.6.1.):
vezmi několikonádcet račic
'take several female crayfish'
(Chir B.; 1440) Váz. 156.

Occasionally, the first part (několiko-) could be omitted:

pro pohon jeti nádcet mil
'to go several miles to
(attend) a law suit'
(Všeh J.; ca. 1500) Váz. 156.

8.5.2.a. The ModCz non-numerical quantifiers mnoho
'many', málo 'few', tolik (< toliko(s) 'so many', kolik
(< OCz koliko(s)'how many', and několik (< OCz několiko(s)
'several' have a substantially more simplified morphology
when compared with their OCz equivalents (see 8.5.1.b.).
When followed by a head noun, mnoho, tolik, kolik, and
několik take the ending -a in all oblique cases (thus:
mnoha, tolika, kolika, několika, Gen., Dat., Instr., Loc.),
while málo remains indeclinable (in Gen. an optional
form -a exists: mála ). When málo is used independently
(i.e., without a head noun), it is declined according to
the I declension. The remaining quantifiers are not used
independently.

b. Syntactically, the link between the non-numerical
quantifiers and their head nouns is loose: it is only
the head noun that carries the case signs throughout the
oblique cases, e.g.:

s mnoha známými
'with many acquaintances';
nekolika kuchařkám  
'to several (female) cooks';

while the quantifiers show a total syncretism here (see 8.5.2.a.). When the quantifiers are used in Nom./Acc., their head nouns appear in Gen. pl.:

málo stolu  
'few tables';

nekolík hraček  
'several toys'.

c. The OCz -ery/-ero forms of the non-numerical quantifiers are preserved in ModCz, and they function as they did in OCz (see 8.5.1.c.). The -ery/-ero forms are declined like the generic-collective numerals (see 8.4.2.b.).

d. In word derivation the quantifiers tolik, kolik, and několik are represented by the oblique-case forms, e.g. několikadílný 'consisting of several parts, volumes', while mnoho and málo appear in their direct-case forms, e.g. mnohonásobný 'multiple', málok terý 'few and far between'.

Summary (Chapter 8):

The collective numerals, with the closely related generic and multiplicative numerals (see 8.1.2., 8.3.2., and 8.4.2.) represent the major types of ModCz numerals treated in this chapter. These numerals are morphologically quite diversified, showing a mixture of substantival and
adjectival desinences. The indefinite numerals (8.5.2.) show a similar mixture of substantival and adjectival desinences, while the inflection of the inclusive numeral oba/obě 'both' (8.2.2.) is identical with that of the cardinal numeral dva/dvě 'two' (2.2.2.). With the exception of the two subtypes, the generic and the multiplicative numerals, the numerals under discussion are firmly established in the system of ModCz, and are not subject to competition from other types of numerals.
9.1.1.a. OScr, just as OR and OCz (see 7.1.1. and 8.1.1., respectively) used the plural form of the cardinal numeral jedan/jedna/jedno 'one' in the function of a collective numeral: 'one group, set'.

b. The OScr jedni, M., jedni, jedne, F., and jedna, N. referred to a group of objects (usually personal) that should be viewed as one whole:

jedne mleko razlivaju ...  
jedne maslo tope  
   'one group (of women) pour out milk ...  
   another group (of women) melt butter'  
(Nar prp. 101) Mar. 224;

or expressed the quantity of objects usually or exclusively found in the plural:

jedne čarape  
   'one pair of socks'  
Mar. 224;

jedna vrata  
   'one door'  
Mar. 224.

c. The declension of jedni/jedne/jedna followed the short (indefinite) pronominal declension (type sam 'alone'; see pl. of the indefinite form of the ordinal numeral prv 'first', 6.1.1.c., where a survey of the OScr
desinences will be found).

9.1.2.a. The ModScr collective numeral jedni, M., jedne, F., jedna, N. is used in the same functions as its predecessor (see 9.1.1.a., b.).

b. In its morphology jedni/jedne/jedna follow the declension of the indefinite adjectives in the plural:

<table>
<thead>
<tr>
<th></th>
<th>M.</th>
<th>F.</th>
<th>N.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom.</td>
<td>jedni</td>
<td>jedne</td>
<td>jedna</td>
</tr>
<tr>
<td>Gen.</td>
<td>---------------</td>
<td>jedni</td>
<td>jedna</td>
</tr>
<tr>
<td>Dat./Instr./Loc.</td>
<td>---------------</td>
<td>jednim(a)</td>
<td>jedna</td>
</tr>
<tr>
<td>Acc.</td>
<td>---------------</td>
<td>jedne</td>
<td>jedna</td>
</tr>
</tbody>
</table>

9.2.1.a. The OScr inclusive numeral oba/obě 'both' was used in the same way as the OR numeral of identical forms (see 7.2.1.b.).

b. Unlike the form dnev of the cardinal numeral dva/dnev 'two', which was in OScr used in the function of the neuter gender up to the beginning of the fifteenth century, the form obě was replaced by the originally masculine form oba in its function of the neuter gender as early as the thirteenth century (see Bč., p. 181). An example of a later date shows the contrast of oba and dve in juxtaposition:

oba dve godiši koja su svrstila 'both of the two years which they completed' (MS 397.; 15th cent.) Bč. 181.

The penetration of the vowel -e- in the Gen./Loc. form (oběju replacing oboju) was shared by dva/dnev 'two' and
oba/obě 'both'; it began to take place in the early fifteenth century (see Bč., p. 181). As a result of this process, the following pattern emerged:

<table>
<thead>
<tr>
<th>Case</th>
<th>M./N.</th>
<th>F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom./Acc.</td>
<td>oba</td>
<td>obě</td>
</tr>
<tr>
<td>Gen.(Loc.)</td>
<td>------oběju------</td>
<td></td>
</tr>
<tr>
<td>Dat./Instr. (Loc.)</td>
<td>------obema------</td>
<td></td>
</tr>
</tbody>
</table>

Later the M./N. form of the Nom. oba exerted the same kind of pressure on the oblique cases as obě did earlier, and by analogy the forms obaju, Gen., (Loc.) and obama, Dat./Instr., (Loc.) were formed. The Gen. form obaju found its place into Daničić (Mala srpska gramatika [Vienna, 1850], p. 47.) but no examples of its use are quoted.

9.2.2.a. ModScr oba/obje 'both' is used in a similar fashion as was used its OScr equivalent oba/obě 'both' (see 9.2.1.a. and also, for OSCR equivalents, 7.2.1.b.). A parallel set of forms, possibly slightly more emphatic, also exists: obada, M./N., obadvije, F.

b. In the morphology of ModScr oba/obje, the later stage of OSCR is reflected (i.e., Dat., Instr., and Loc. show gender syncret: objema). In Nom./Acc. oba/obje and in Gen. obaju/objaju the gender contrast has been retained: oba, obaju are M./N. forms, obje, objaju are F. The parallel set obada/obadvije, Nom./Acc. has the following forms in the oblique cases: Gen.: obadvaju, M./N., obadviju, F.; Dat./Instr./Loc.: obadvama, M./N.
obadvijem, F.

  c. Syntactically, oba/obje and obadva/obadviJe
have the same characteristics as the cardinal numeral
dva/dvije 'two' (see 3.2.2.b.).

d. In word derivation the inclusive numeral oba/obje
appears in the form obo-, e.g. obospolan 'hermaphroditic',
obostran 'mutual'.

9.3.1.a. In OScr, the -oj- numerals (dvoj- 'two',
trjoj- 'three', and oboj- 'both', functioning as the
generic, the multiplicative, and the collective numerals)
were apparently used in a similar fashion as they were
used in OR and OCz (see 7.3.1.a. and 8.3.1.a.,
respectively) but this remains an assumption, as the
necessary examples are lacking. In ModScr, the -oj-
umerals are utilized merely as collectives (see 9.3.2.).
Yet, several examples from OCS can be cited, to
demonstrate that these three functions of the -oj-
umerals were not unknown in South Slavic:

(1) generic:
  po srědě dvoix2 ljudi
  'among people of two kinds'
  (Cloz. 868) Ds. 220;

(2) multiplicative:
  verigami dvoimi
  'with double chains'
  (Supr. 146, 5) Ds. 220;
(3) **collective:**

\[
\begin{align*}
\text{nynj\text{\text{"a}} ubo troi sqt} & \text{\text{"e} pakosti} \\
\text{dejq\text{\text{"e}} te nam} & \text{\text{\text{"a}}} \\
\text{'now there are three who do} & \text{\text{\text{\text{"e}}} evil to us'} \\
\text{(Supr. 73, 1) Ds. 220;} & \\
\text{sice bo oboix} & \text{\text{\text{"e}}} \text{bezumije} \\
\text{'because such is the foolishness} & \text{\text{\text{\text{"e}}} of both (groups of people)}' \\
\text{(Supr. 339, 13) Ds. 220.} & \\
\end{align*}
\]

b. Morphologically, the -oij- numerals were treated like adjectives, and they had both the uncontracted forms (e.g. dvojega, Gen. sg. M./N.) and the contracted forms (e.g. dvoga, Gen. sg. M./N.). Later, when these numerals were reinterpreted as noun-like collectives, their endings were partially influenced by the plural (dual) endings: e.g. Dat. dvojemu > dvomu > dvom > dvoma, later generalized also as Loc. and Instr. (see Bč., p. 187).

9.3.2.a. In ModScr, the -oij- numerals (dvoj- 'two', troj- 'three', and oboj- 'both') are represented by three distinct groups, which are used exclusively in the collective function (i.e., not in the generic or the multiplicative functions, for which other formants have been adopted: -jak, e.g. dvojak 'of two kinds'; -struk, e.g. trostruk 'triple', etc.).

b. In the first group, typical for ModScr and not directly represented in ModR and ModCz, are the collectives
in -ica: dvojica 'two', trojica 'three', obojica 'both'. [Note: There are, both in ModR and in ModCz, nominal numeral derivations with the corresponding formant, -ica in ModR, -ice in ModCz; these, however, should be classified as nouns rather than numerals as they lack some of the semantic and morphological characteristics of the ModScr class produced with the same formant.] The ModScr -ica collectives are used when the head noun (a noun or a pronoun) denotes a male person:

dvojica učenika
'two male students'.

The -ica collectives are declined according to the II declension; the head noun remains fixed in Gen. pl. If the head is a pronoun, the pronoun is agreed in case with the numeral:

o vama dvojici
'about the two (male persons) of you';

njima trojici
'to the three (male persons) of them'.

c. When referring to groups of persons of both sexes, a different collective must be used. Historically, it is the Nom. sg. N. of the generic-multiplicative-collective numeral form (cf. ModR, ModCz dvoe, troe; dvoje, troje; see 7.3.2. and 8.3.2., respectively). Dvoje, troje, oboje, obadvoje are further used when referring to groups of animals:

troje goveda
'three head of cattle';
or when they function in the substantivized form:

to dvoje valja pamititi
'these two things must
be borne in mind';

slomio je prut na dvoje
'he broke the rod in two'.

The declension of the collectives of this type is as follows:

<table>
<thead>
<tr>
<th>Case</th>
<th>dvoje</th>
<th>troje</th>
<th>oboje</th>
<th>obadvoje</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom./Acc.</td>
<td>dvoje</td>
<td>troje</td>
<td>oboje</td>
<td>obadvoje</td>
</tr>
<tr>
<td>Gen.</td>
<td>dvoga</td>
<td>troga</td>
<td>oboga</td>
<td>obadvoga</td>
</tr>
<tr>
<td>Dat./Instr./Loc.</td>
<td>dvoma</td>
<td>troma</td>
<td>oboma</td>
<td>obadvoma</td>
</tr>
</tbody>
</table>

The head nouns of dvoje, troje, oboje, obadvoje are treated the same way as the head nouns of the -ica collectives (see 9.3.2.b.). If a pronoun is used, there is the usual case agreement between the head and the numeral. However, if these collectives become objects of prepositions, the Nom./Acc. form is normally found:

ostala je udovica s petoro djece
'there remained a widow with five children'

BHŽ. lll.

d. The collectives of the third type are used when the head noun denotes an object customarily found in pairs:

oboje čarape
'both pairs of socks';

troji opanci
'three pairs of sandals';
or a member of the pluralia tantum class (i.e., a noun that lacks the singular-number forms):
troje vile
'three pitchforks';

dvoja vrata
'two doors';

bila je u dvojim svatovima
'she attended two weddings'.

The declension of the collectives of this type is identical with the declension of the possessives (e.g. moj 'my'). Syntactically, these collectives are characterized by grammatical agreement between the collective and its head noun (see the last example in 9.3.2.d.).

e. In word derivation dvoj- and troj- are found in the basic (-oij-) form, e.g. dvojina 'dual', dvojci 'twins', trojka 'number three', trojstvo 'trinity', etc. The numeral oboj- lacks derivations.

9.4.1.a. For numerals above 'three', OScr formed the collective (and, very likely, also the generic and the multiplicative forms, cf. 9.3.1.a.) by means of the -or-/er- suffix, e.g. šestor-/šester- 'six'.

b. Morphologically, these numerals developed like the -oij- numerals (see 9.3.1.b.), e.g. Gen. sg. četvoroga, četveroga 'four' syncopated its vowel on the model of dvojega (> dvojga > dvoga 'two', and acquired the same endings (of the hard variety) in the declension.
9.4.2.a. ModScr collectives above 'three' are formed by means of the suffix -or- (or its variant -er-). There are the same three types as found in the -oj- numerals (see 9.3.2.b., c., d. for their morphology and syntax; also 9.3.2.a. for a general description of ModScr collectives).

b. The collectives of these three types are very common in ModScr, and it is possible to form them on any numeral between 'two' and 'ninety-nine', with the exception of numerals ending in -jedan 'one' (i.e., '21', '31', etc.). For the formation of the numerals 'two' and 'three', and their compounds see 9.3.2.b., c., d.). In such compounds only the last component receives the suffix, e.g.:

sedamdeset i trojica drugova
'seventy-three (male) friends';

s njima dvadeset osmoricom
'with the twenty-eight of them (males)';

trideset petore grablje
'thirty-five rakes'.

c. In word derivation the -er-/or- numerals assume the -er-/or- as well as the -ero-/oro- forms, e.g. četvorka 'quadrille', četvorići 'quadruplets', četverac 'four-seated scull', četveroručan 'four-handed', osmerokutnik 'octagon', deveterostruk 'ninefold'.

9.5.1.a. The repertory of OScr non-numerical
quantifiers included, in most probability, the same expressions as are found in OR and OCz (see 7.5.1. and 8.5.1., respectively), derived from adjectives of quantity: mnogo 'many', malo 'few', toliko 'so many', koliko 'how many', nekoliko 'several, a few'.

b. Originally declined like nouns, these quantifiers relatively early lost their declension and acquired a status similar to that of adverbs. This change was partly due to the existence and increased utilization of the related adjectives of quantity (e.g. mnog-i, tolik-i, kolik-i, nekolik-i). These adjectives continued to be declined, and served as substitutes of the -o quantifiers, especially in the oblique cases.

9.5.2.a. The ModScr non-numerical quantifiers mnogo 'many', puno 'a lot, many', malo 'few', toliko 'so many', koliko 'how many', nekoliko 'several, a few' are all considered as indeclinable words, and in grammars of ModScr they are usually included among adverbs. This is done despite the fact that these quantifiers essentially differ from adverbs, especially in their syntax: they have nouns as their heads, and these head nouns appear in an oblique-case form (Gen.). Moreover, these quantifiers can be substantivized, e.g. on mnogo čita 'he reads a lot'.

b. The non-numerical quantifiers (except for malo
'few') use the forms of the related adjectives of quantity in the oblique cases, e.g.:

s tolikima stvarima
'with so many things';

mnogim učiteljicama
'to many (female) teachers'.

The quantifier nekoliko 'several, a few' has in addition a fully declinable variant nekolicina (II declension), which may be used suppletively.

c. In word derivation the non-numerical quantifiers appear in the full form (-o-), e.g. mnogobštvo 'polytheism', mnogobrojan 'numerous', maloljetan 'under (legal) age'.

Summary (Chapter 9):

In ModScr, the most important among the lesser types of numeral are the collectives (9.1.2., 9.3.2., and 9.4.2.). There are three types of them (9.3.2.b., c., d.). The first type, the -ica collectives, has substantival features and is declined according to the II declension; the remaining two types of collectives show pronominal-adjectival desinences. The paradigm of the inclusive numeral oba/obadva 'both' (9.2.2.) is characterized by substantial similarities with the paradigm of the cardinal numeral dva 'two' (3.2.2.a.), whereas the indefinite numerals resemble ModScr cardinal numerals above 'four'
in that they are indeclinable. All the above numerals are commonly used in ModScr and are not subject to competition from other numerals. All three types of the collectives, moreover, show a high productivity.

Summary (Part III):

The numerals treated in Part III may be divided into two uneven groups: the larger one, comprising those types of numeral that are in their use similar to the cardinal numerals (e.g. the -ica collectives [see 9.3.2.b.] or the collectives proper in ModCz [see 8.1.2.]), and those which have predominantly adjectival (attributive) characteristics (e.g. the pluralia tantum collective numerals in ModScr [see 9.3.2.d.] or the ModCz generic numerals [see 8.3.2.a.]). While the latter type manifests exclusively adjectival characteristics in its morphology, the former type is distinguished by an interesting mixture of substantival and adjectival desinences. Both types are represented in ModCz and ModScr, while ModR is conspicuous by lacking the type with the attributive characteristics. The most stable among the numerals discussed in Part III are the indefinite numerals and the inclusive numeral (type ModR oba/obe 'both'). The collectives play a merely secondary role in ModR. In ModScr, however, their
status is quite prominent: in some contexts they may be regarded as possible substitutes of the indeclinable cardinal numerals in situations where declinable quantifiers are preferred. ModCz stands out as the only one of the three languages compared that has preserved the two subtypes of the collectives, the generic and the multiplicative numerals. However, the status of these subtypes is not substantial in ModCz; it is comparable to that of the collective numerals in ModR.
A comparison of the OR and the ModR repertories of numerals shows a substantial reduction in the number of the individual types of numerals, a restriction in the use of numerals other than the cardinals, the ordinals, and the fractions, and an increased occurrence of higher numerals. Thus certain types of numerals known in OR, e.g. the generic and the multiplicative, have disappeared completely, others (e.g. numerals of the type $\text{sam}_1$ plus ordinal and $\text{pol}_1$ plus ordinal) have ceased to be productive and only isolated remnants of them are now in existence and only on the periphery of the system, while still others (e.g. the collectives) have been considerably restricted in both their use and their formation (cf., e.g., the replacement of the collective numerals by analytical constructions containing an expression such as 'pair', 'piece', or 'man' plus a cardinal numeral: $\text{dvoe}_1 \text{per\text{c}atok}$ 'two pairs of gloves' by $\text{dve}_1 \text{par}_1 \text{per\text{c}atok}$, or $\text{p\text{j}atero}_1 \text{dete}_1$ '(a group of)
five children' by п'ят' чеłовек деçeй, etc.). The modern times with their rapid advances in science and technology made it necessary to look for new terms, especially for the higher numerals (e.g. миллион 'million', милиарда 'billion', etc.), and brought a substantial expansion of the use compounded numerals, especially in the area of the cardinal numerals. The ordinal numerals and the fractions have similarly widened their scope of use, and their formation was greatly simplified and regularized.

b. In their morphology, the ModR numerals present a far less complex picture than the OR numerals. It must be admitted that some of the processes that resulted in substantial paradigmatic simplifications were not limited just to the numerals (e.g. loss of the dual number; gender unification in the plural, reflected in the declension of the ordinals and the fractions, etc.). Nonetheless, there were developments that occurred exclusively in the class of numerals, e.g. the substantial simplification of the declension of such cardinal numerals as сорок 'forty', девяносто 'ninety', and сто 'hundred', the complete loss of inflection by all but the ultimate members in multidigital strings (e.g. ModR в тысячеч девяносто сорок пять 'in the year 1945', or с четьреста п'ят'ядесять пять 'with 452
rubles'; the second example described as belonging to spoken Russian, see Gram rus jaz., p. 369), or the structural changes observed in the inflection of the compounds 'eleven' through 'nineteen' and such decades as 'twenty', 'thirty', 'fifty', etc.

c. The contrast between OCz and ModCz, as far as the repertoires of numerals are concerned, is much less striking than that found between OR and ModR. The only numerals that have completely fallen into disuse are those of the type sám plus ordinal, and the special cardinal numerals for '21' through '29': -mecítma. The field of use of the numerals of the type pól (> půl) plus ordinal is now substantially restricted, but otherwise basically the same types of numerals are in existence in ModCz as there were in OCz, although the occurrence of the individual types may be somewhat lower in ModCz. Likewise, their use shows only minor differences: e.g. kolik(o) is no longer used in the meaning 'several' but only in that of 'how many', the -o₁- numerals are predominantly used as collectives, and less commonly as generic or multiplicative numerals, etc.

d. In the morphology of the ModCz numerals there is noticeable a definite tendency toward simplification,
especially in the spoken language (e.g. long strings of declined ordinal numerals are frequently replaced by series of cardinal numerals fixed in the nominative: instead of v roce tisícim devítistém padesátém třetím one hears v roce tisíc devět set padesát tři 'in the year 1953'; instead of na stě sedmdesáté osmé straně one hears na straně sto sedmdesát osm 'on page 178', etc.). There are also instances of paradigmatic simplification (stronger trends prevailing in the spoken language, but some signs are visible also in the written norm), e.g. a paradigm analogous to the ModR paradigm sorok 'forty', which in ModCz includes all the cardinal numerals whose stem ends in -ť or -m: pět 'five', sedm 'seven', jedenáct 'eleven', etc. These numerals have -i in the oblique cases and -g in the direct cases. For a language whose morphology is extremely complex and traditionally conservative, these examples of high syncretism in numerals between 'five' and 'ten', those between 'eleven' and 'nineteen', and those denoting all the decades between 'twenty' and 'ninety' are quite striking. A radical simplification of the inflectional paradigm is observed in the numerals sto 'hundred' and tisíc 'thousand' in ModCz optional variants, e.g. po sto letech 'after a hundred years', s tisíc zlatými 'with a thousand gold coins', in which these numerals syncretize all cases of the singular.
e. In comparing the ModScr repertory of numerals with that of OScr, a situation similar to that found in Russian (see a. above) is observed. A considerable reduction in the number of the types of numerals took place during the OScr period, and the cardinal, the ordinal, and the fraction numerals have emerged in ModScr as the most important types. They are however, accompanied by another type, namely the collectives, which in ModScr play a similarly important role, in contrast to ModR, where the status of the collectives is much less significant.

f. ModScr compared with OScr presents a case of radical innovation, unusual in the inflectional morphology of the Slavic languages. The largest group of numerals, the cardinals, is characterized in ModScr by a considerable amount of paradigmatic simplification: the cardinal numerals above 'four' are not declined at all; 'two', 'three', and 'four' are declined only optionally. On the other hand, the remaining types of numerals (the ordinals, the fractions, and the collectives) have retained inflection to the same degree as did the substantives or the adjectives (except that the -oje and the -ero/-oro collectives partially resemble the cardinals in that they may also occur as indeclinable, especially when preceded by a preposition). Viewed as a whole,
however, the class of numerals emerges in ModScr as the most radically reshaped class with regard to morphology, by having undergone substantial modifications not in the less important types of numerals but in the most frequently used type, the cardinal numerals.

g. To sum up the results of the comparison of the morphology of numerals in the three Slavic languages, it may be concluded that ModCz finds itself at the one extreme, as morphologically the most conservative, ModR occupies the middle position, and ModScr ia at the opposite extreme, as morphologically the most innovating of the three. At the same time, it must be pointed out that (1) the morphology of numerals in each of the three languages in the modern period is far less complex than the morphology of numerals in the old period, and (2) in ModR and ModCz the morphology of numerals is substantially, and in ModScr radically simpler than the morphology of the other form classes that are inflected (e.g. nouns, pronouns, adjectives, etc.): it shows a comparatively higher degree of syncretism and a smaller variety of desinences. To illustrate this by examples: nowhere in ModR nominal inflection (barring certain aunassimilated foreign borrowings) is there a case of complete paradigmatic syncretism of the type [d'iv'inóste] devjanost, -a 'ninety' or even of a
slightly less syncretizing type of declension represented
by sorok 'forty' or sto 'hundred'. Similarly, the ModScr
nominal inflection (with the exception of certain
unassimilated foreign borrowings and a few isolated nouns
such as podne 'midday, noon', doba 'time', and possibly
ljudi 'love' (see Mar., p. 188) does not know the
completely syncretizing paradigm of the cardinal numerals
above 'four'. The unusually high degree of syncretism
in ModCz cardinal numerals ending in -t or -m (e.g. pět
'five', sedm 'seven', dvacet 'twenty', etc., with oblique-
case desinence -i and direct-case desinence -o) finds
a rare parallel in the nominal inflection (neuters of
the type znamení 'sign' which oppose Instr. sg. -ím
to -i in all other cases of the singular), but in the
spoken language these nouns regularly take instead the
adjectival desinences which have an extremely low degree
of syncretism (e.g. znameního, Gen. sg., znamenímu,
Dat. sg., etc.); in the declension of the cardinal
numerals such a substitution does not occur. [Note:
It must be admitted that there exists in the nominal
inflection in ModCz one example of even higher syncretism
than that of the above type znamení 'sign', namely the
feminine paradigm pani 'lady, wife, Mrs.' which has -i
in all cases of the singular, but this is the only noun
that belongs to this paradigm and the only example of
Although it is difficult to speak of numerals in the three Slavic languages as a class that as of now possesses a complete morphological apparatus that is markedly different from that of the other grammatical classes, there is enough evidence to support the thesis that a process is in progress in the Slavic languages that will ultimately result in the establishment of cardinal numerals as a distinct form class set apart from other form classes not only by its unique semantic content but also by certain specific and easily identifiable morphological characteristics.
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