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Problems of Proto-Slavic Historical Nominal Morphology

On the Basis of Old Church Slavic

Academic dissertation to be publicly discussed, by due permission of the Faculty of Arts at the University of Helsinki in auditorium XII, on the 27th of May, 2006 at 10 o'clock.

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I graduated from the Department of Slavonic and Baltic Languages and Literatures at Helsinki University in June 2000. Work on this doctoral thesis was technically begun in January 2001, but the approach, the focus, the internal organization and the title of the study changed many times since then. The manuscript I handed over to the Faculty of Arts in May 2005 bore very little resemblance to anything I had in mind in 2001, something I am happy to say today.

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Jussi Halla-aho
Helsinki, March 2006

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INTRODUCTION

1. The topic of the study

In this study, I shall offer a diachronic solution for eight difficult inflectional endings of Old Church Slavic: the */o/-stem masculine nominative-accusative singular in -ъ (or -'ь), the */o/-stem neuter nominative-accusative singular in -o (or -'e), the */i/-stem accusative plural in -i, the */men/-stem masculine nominative singular in -y, the */o/-stem dative singular in -u, the nominative singular of the active present participle in -y, the */ā/-stem genitive singular in -y, and the genitive plural of all nouns in -ъ.

In this context, I address the perhaps most disputed and the most important question of the Slavic nominal inflectional morphology: whether there was in Proto-Slavic an Auslautgesetz, a law of final syllables, that narrowed the Proto-Indo-European vowel */o/ to */u/ in closed word-final syllables. Rather than trying to prove my view positively, as absolutely likely, I attempt to approach the correct solution by excluding those theories that do not seem possible or probable.

2. The contents and structure of the work

The study consists of three chapters. **Chapter I** presents a synchronic description, with a diachronic touch, of the Common Slavic nominal declensional classes and the lexical material contained by them as they are represented in canonical Old Church Slavic.[1] **Chapter II**, which is the central part of this study, addresses the disputed change of */o/ to */u/ in closed word-final syllables and deals with the forms for which the question is relevant. In the final, short **Chapter III** I discuss and propose an explanation for a single element of nominal morphology, the */o/-stem dative singular termination -u. The study touches a wide range of issues. In recognition of the independent nature of the chapters, each of them has its own concluding section and bibliography.

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[1] "Canonical" will be defined in **Chapter I**.

Morphemes, the object of my study, cannot be dealt with in isolation from phonology, for any explanation or hypothesis concerning the evolution of a grammatical form or element contains a statement about a reconstructed phonological system, whether the latter is described explicitly or not. Different phonological models set different limits and different possibilities for analyses of morphology. To make as explicit as possible the phonological framework within which the morphological analysis takes place, two issues related to Proto-Indo-European and Proto-Slavic phonology are addressed at the end (**5**.) of this introduction, namely, the status of the so-called labiovelar stops and the contrastive vowel-length in Proto-Indo-European. Since my views on the reconstruction of the Proto-Indo-European and, to a lesser degree, Proto-Slavic phonology do not always correspond to the current *communis opinio*, I have considered it necessary to not only state *how* I reconstruct, but also *why* I reconstruct as I do.

Chapter I is the most independent of the three. Nevertheless, since morphological interactions between different declensional types are essential for the topics dealt with in **Chapters II** and **III**, and since the plausibility of any suggested interparadigmatic influence is to a certain degree dependent on the qualitative and quantitative relationship between the declensions, the Slavic nominal stem system as a whole is constantly relevant in a discussion of the problems of inflectional morphology.

3. The methods and aims

Chapter I aims at presenting an exhaustive and accurate classification of the nouns and adjectives, on the basis of their diachronic and synchronic declensional characteristics and their derivational structure, that occur in the Old Church Slavic texts. It is my hope that this classification will prove useful for non-specialists in Old Church Slavic wishing to use material from that language in their work.

In **Chapter II** I argue that there was an Auslautgesetz, a phonological change of Proto-Indo-European */o/ to */u/ in Proto-Slavic closed final syllables. The difficulty of the

Auslautgesetz hypothesis is that the evidence is mutually contradictory. Certain forms support it while some others seem to rule it out. It is fruitless to discuss the phonetic plausibility or implausibility of such a change, because such probabilities cannot be calibrated in any meaningful way. Ultimately, the decision on the Auslautgesetz hypothesis remains a matter of taste. I have instead focused on the consequences of the different decisions. If there was no Auslautgesetz, the forms supporting it must be irregular, and this irregularity must be explained. If there *was* an Auslautgesetz, the forms not consistent with the hypothesis must be explained. Some of the forms must be irregular. It is my view that denying the hypothesis leaves much more to be explained and the explanations available are not supported by any known parallels and are subjectively questionable. Indeed, to a large extent this study arose as a reaction to Robert Orr's recent work (Orr 2000). Orr categorically denies the possibility of any phonological developments peculiar to the final syllables and advances a model of massive, morphologically triggered changes in the Proto-Slavic nominal inflection. The adoption of the Auslautgesetz hypothesis is preferrable not because the development implied by it is *an sich* especially likely, but because the cost of rejecting it is unacceptably high. However, my main argument for accepting the hypothesis is that, considering the nature of the Indo-European grammatical gender and the developments that are attested both in Slavic and elsewhere, without a phonological change of */o/ to */u/ Slavic very probably would not have retained a neuter. It seems that the Auslautgesetz is a necessity.

Chapter II takes up two tasks, a) an attempt to show that we need an Auslautgesetz which also explains a number of difficult forms, and b) an explanation of those forms that contradict the hypothesis and which, by denying the hypothesis, would appear completely regular. It must be stressed that these are two *different* tasks. I am committed to the Auslautgesetz hypothesis because I believe it can, with objective facts, be shown to be necessary. These facts would remain even if no explanation at all could be given for the obvious counterevidence, the nominative-accusative singular

form of the */es/-stem neuters, for instance Old Church Slavic *nebo* 'sky' from Proto-Indo-European */neb^{h}os/. The adoption of the Auslautgesetz hypothesis implies that *nebo* must be irregular, i.e. analogical. Analogy, by its very nature, is unpredictable and irregular, and there may be several imaginable (and unimaginable) ways of obtaining *nebo* from */neb^{h}os/. Knowing that a phonological change took place from */o/ to */u/ means that an analogical explanation for *nebo* is out there, although we may never find it, or, in any case, we will not know for sure whether we have found it. I shall offer an explanation which, I believe, is congruent with the evidence and for which structural arguments can be adduced. My theories concerning such irregularities as *nebo* are speculative, but in historical linguistic reconstruction speculation, i.e. reasoning by plausibilities, is often the only methodology available (see Mulder 1996:17-18). As Shields (1977:56) puts it, "[…] very little of contemporary historical and comparative linguistic theory and analysis can be proven in an absolute sense and […] any novel approach to a problem is by definition speculative".

In **Chapters II** and **III** I repeatedly refer to the role of different sorts of analogy, e.g., the spread of dominant features without any special motivation, on the one hand, and remedial analogy, morphological restructurings triggered by phonetic erosion of contrasting elements, on the other. It has been customary in historical treatments of both Slavic and other IE languages to abuse the concept of remedial change without giving much consideration to what contrasts really are essential enough to be protected by the speakers of a community. Orr's anti-Auslautgesetz model, for example, seems to be based on a misunderstanding of the significance of the morphological distinction between the masculine and neuter genders. As we shall see, it may not be possible to quantify the functional load of a particular morphological contrast prior to its loss, but it is possible to observe which grammatical contrasts do not tend to be defended against the action of phonetic change and which do. In my treatment of the active present participles (**Chapter II**) and the dative singular forms (**Chapter III**), I stress that when analogy, remedial or of some other type, takes place, it is not always a concrete

grammatical desinence, a phonological shape, that is borrowed from one paradigm into another or from one paradigmatic form to another. There are also structural features that spread. They are borrowings (either within or between paradigms) as well, but the analogical product that arises does not necessarily have the same phonological shape as the source of the borrowing.

4. Notes on the conventions applied

All reconstructed forms are given in their phonological shape, e.g. Proto-Indo-European nominative singular */eḱwos/ 'horse'. When referring to a lexeme rather than to its grammatical forms, words are given as stems, without grammatical markers and with the stem element separated from the root with a hyphen, e.g. */eḱw-o-/ 'horse', */mā-ter-/ 'mother'. Deviations from this principle are made when a point being made so requires.

Sanskrit and Old Irish verbs are, as usual, given in their present indicative 3rd person singular forms and glossed with an English infinitive, e.g. Sanskrit *pátati* 'to fly' (lit. 'flies'), Old Irish *aigid* 'to drive' (lit. 'drives'). Sanskrit nouns are given in their nominative singular form, rather than as pure stems, e.g. *ghṛṇiḥ* 'heat', with the exception of most consonantal stems in which sandhi renders the stem opaque, e.g. *netár-* 'leader' instead of *netā́*. Sanskrit adjectives however, not having any inherent gender affiliation, are given as bare stems, e.g. *náva-* 'new'.

The term 'Sanskrit' refers to the Vedic as well as to the classical language. Phrygian refers to New Phrygian unless otherwise indicated.

Prefixes, augments and reduplicative syllables are separated from the root with a raised dot ·, e.g. Old Church Slavic *vъz·ęti* 'to take', Greek ἔ·λιπον 'I left', Sanskrit *dá·dāmi* 'I give'. Members of compounds are separated in the same way, e.g. Old Church Slavic *gromъ·glasъ* 'with a thundering voice'. For any other segmentation, the hyphen is used.

Old Church Slavic words are given in the phonologically and morphologically normalized form found in *Staroslavjanskij slovar' (po rukopisjam X-XI vekov)*, 1994, with the following exceptions: 1) The 'tense' jers, i.e. ъ and ь followed by *j*, are written as short, e.g. *znanьje* 'knowledge' pro *znanije*. 2) The front jer, ь, and *i* are written after *j* when there is a morpheme boundary between the two, e.g. nominative singular *krajь* pro *krai*, nominative plural *kraji* pro *krai*, *dojiti* 'to suckle' pro *doiti* (but *igo* 'yoke', not *jьgo*). The back nasal vowel is written as ǫ for technical reasons. Greek *thēta* and *ypsilon*, occurring rarely in borrowings, are transliterated as *θ* and *ÿ*, respectively. The outcome of Proto-Slavic */g/ from the Second and the Third Palatalization (Glagolitic ⰼ, Cyrillic ѕ) is given as *ǧ*. The palatalized nasals and liquids from Proto-Slavic */ly/, */ry/, */ny/ are written as *ĺ, ŕ, ń*.

5. Two notes on historical phonology
5.1. On the length distinctions of Proto-Indo-European vowels

I assume that, in addition to the simple long vowels, Proto-Indo-European immediately prior to its disintegration possessed a set of trimoric, "overlong" or "circumflex" vowels which had arisen from contractions at morpheme boundaries. These will be written as */ã/, */ẽ/, */õ/. The circumflex length merged with the simple one in most IE dialects but it is, in my opinion, the best way to account for the variation in the treatment of Germanic */ō/ in unstressed syllables (Prokosch 1948:136-139, discussion and a different view in Boutkan 1995:97-166), and for the non-acuted long vowels in Balto-Slavic. Thus, in the Proto-Indo-European present 1st singular ending we have a simple long vowel */-ō/, reflected by Gothic *-a* and Balto-Slavic acute, e.g. Gothic *baíra* 'I carry', Lithuanian *nešù* 'id.'. The thematic ablative singular termination has a contracted circumflex vowel */-õ(d)/ (from */-o-ed/)[2], continued by Gothic *-o* and

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[2] A recent discussion of the ending can be found in Shields (2002).

Balto-Slavic non-acute, e.g. Gothic *hvaþro* 'whence', Lithuanian *vil̃ko* 'wolf's', Russian *vólka*. Cp. Latin *ferō* as *lupō*, Sanskrit *bhárā-mi* as *vŕ̥kād*.[3]

Since the opposition between simple and circumflex length is directly reflected in two branches only, it may seem uneconomical to project the distinction to Proto-Indo-European as a whole. However, to do otherwise would imply that the hiatus in, e.g., the abl. sg. */-o-ed/ and the */o/-stem nom. pl. */-o-es/ persisted up until the dialectal period and was eliminated (by contraction) independently in various branches. This assumption, in turn, would be incompatible with the comparative evidence.

Purczinsky (1993:53) makes the typological observation that "languages cannot have distinctive intonations on unstressed syllables if they also have distinctive stress and vowel length". However, the contrast between Proto-Indo-European simple and circumflex vowels can be seen as one of quantity, not quality. Thus, a Proto-Indo-European circumflex */ẽ/, despite the semantic connotations of the term, was distinguished from */ē/ and */e/ not by intonation but simply by length. A distinctive three-length opposition is rare but does occur, disputably in Estonian and certainly in Mixe (Ladefoged & Maddieson 1996:320).

5.2. On the labiovelar stops, and the fate of the syllabic sonorants in Proto-Slavic

I join Hirt (1927:231) and Sturtevant (1930) in considering the usually reconstructed labiovelars to be biphonemic sequences of a stop and the semivowel */w/, i.e. */kw/, */gw/, */gʰw/, */ḱw/, */ǵw/, */ǵʰw/. The argument behind this view is simple. It is not relevant how the reflexes of these clusters are pronounced in, e.g., Gothic (Bennett 1959) or whether they "made position" in Latin (Sturtevant 1939b). What is relevant is

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[3] This model, naturally, implies that the Gothic "dative" singular *wulfa* continues a Proto-Indo-European locative singular */wl̥kwoy/ (Sanskrit *vŕ̥ke*), as claimed by Prokosch (1948:235), rather than a Proto-Indo-European ablative singular */wl̥kwõ(d)/ (Sanskrit *vŕ̥kād*), as claimed by Schmidt (1990:9-10). The former proposal is superior also because all other Germanic "datives" can formally be derived from Proto-Indo-European locatives.

that the so-called labiovelars do not contrast with clusters of a velar and */w/ in any language. Virtually the only piece of proof for such a contrast is Greek ἵππος 'horse' (Proto-Indo-European */eḱw-o-/), as opposed to, e.g., ἕπομαι 'I follow' (Proto-Indo-European */sekw-o-/), but, as is known, the Greek 'horse' word has other phonological peculiarities as well.[4] As shown by Adams (1988:37-38) and Hilmarsson (1993:177), there seems to be no such distinction in Tocharian B either, *pace* Ringe (1990:403-404). Cp. *keu* 'cow' from */gwow-/ (allegedly from */gʷow-/, cp. Greek βοῦς) vs. *kene* 'tune, melody' (*/ǵʰwon-o-/, cp. Old Church Slavic *zvonъ* 'sound'), *walkwe* 'wolf' (allegedly from */wl̥kʷ-o-/, cp. Latin *lupus*) vs. *yakwe* 'horse' (*/eḱw-o-/).

Balto-Slavic has a small handful of forms with /kv/ and /gv/ or their later reflexes. The very rarity of these clusters, as well as the facts that the forms in question often do not have reliable cognates and that the clusters are restricted to the word-initial position, suggests there is something exceptional about them. I have argued elsewhere (Halla-aho 2005) that Proto-Slavic */květъ/ (Old Church Slavic *cvětъ* etc.) 'flower' is a borrowing. In late Proto-Slavic */gvězda/ (Old Church Slavic *gvězda* etc.) 'star' the initial stop is obviously secondary, probably metathesized from *zvěgda* < */ǵʰwoygw-/, cp. Lithuanian *žvaigzdě̃*, Greek φοῖβος 'shining' (according to Holzer 1989:155-157 the Balto-Slavic word for 'star' is a borrowing).

Since there indisputably were plain velars as well as the semivowel */w/ in Proto-Indo-European, it is irrational and uneconomical to treat their combinations as single phonemes. The different treatment of, say, */kw/ and */ḱw/ in the satem group (e.g. Proto-Indo-European */kw-o-/ > Sanskrit *kaḥ* 'who' vs. Proto-Indo-European */eḱw-o-/ > *áśvaḥ* 'horse') has to do not with a different number of phonemic units in these sequences, but with the fact of relative chronology that */ḱw/ yielded */ćw/ before the

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[4] See GEW, DÉLG, s.v. ἵππος. Bonfante (1996) explains Greek ἵππος as an Illyrian borrowing and sees the true Greek reflex of Proto-Indo-European */eḱw-o-/ in the proper name Ἐπειός (the builder of the Trojan horse). For different views on both ἵππος and Ἐπειός, see Woodhouse (1998) and Louden (1996:279-280).

simplification of clusters of velars plus */w/. Direct proof that the "labiovelars" are biphonemic can be seen in archaic ablaut patterns where a prevocalic labiovelar alternates with a preconsonantal sequence */Ku/, e.g. Hittite 3rd singular *kuenzi* 'slays' vs. 3rd plural *kunanzi*, Old Church Slavic 3rd singular *ženetъ* 'chases' vs. infinitive *gъnati*.

Proto-Slavic, like all satem languages and also insular Celtic (with the exception of */gw/) and probably Phrygian (if it was a centum language), simplified the clusters of a velar plus */w/, the so-called labiovelar stops.[5] This does not hold for the clusters with a palatovelar as the first component. These yielded */Ćw/ (*/Ć/ standing for the initial outcome of the satemization). This means that the satemization took place before the simplification of */Kw/ clusters, a relative chronology that is well in line with the idea that the latter process was a reaction to the former. As the original velars were fricativized, or more probably affricated, their old phonetic slot was occupied by the complex */Kw/ (as has happened in French). Examples are:

PIE */kwoyn-/:	OCS *cěna* 'price', cp. Lith. *káina*, Gk. ποινή 'id.'
PIE */ḱweyt-/:	OCS *svitati* 'to dawn', cp. Lith *sviẽsti* 'to shine', OE *hwít* 'white'
PIE */begw-/:	OCS *běgati* 'run', cp. Lith. *bė́gti* 'id.', Gk. φέβομαι 'I flee'
PIE */snoyg^hwo-/:	OCS *sněgъ* 'snow', cp. Lith. *sniẽgas* 'id.', Goth. *snaiws* 'id.'
PIE */ǵ^hwēr-/:	OCS *zvěrь* 'beast', cp. Lith. *žvėrìs* 'id.', Gk. θήρ 'id.'

It is often thought that the Proto-Indo-European distinction between the labiovelars and the plain velars is reflected in the variation between the */i/- and */u/-epenthesis that

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[5] For the sake of simplicity, I shall continue to use this misnomer.

emerged before original syllabic nasals and liquids. See, e.g., Tischler (1990:81), Kortlandt (1994:96), or any handbook on historical Slavic. The actual distribution of the */iN/ and */uN/ reflexes does not support this view, a consideration which is routinely explained away as reshuffling "under the influence of apophonic relationships" (Kortlandt, ibid.). The relevant forms and a discussion of different proposals can be found in Avksentjeva (1975). While the standard theory is phonetically plausible, if completely unverifiable, it has a chronological problem. The loss of the labiovelars encompasses all of the satem group and parts of the centum group, which indicates (but does not prove) that it was an early development. After satemization, the relevant dialects ended up with a peculiar situation where velars occurred almost exclusively in a cluster with */w/, which in that position may have phonetically become a feature of the preceding stop rather than an independent segment, i.e. *[kʷ] rather than [kw]. Since the labialization of the velar was now purely phonetic with no contrasting load, and since a system with marked velars only cannot be stable, it is probable that the change of [kʷ] to *[k] took place very soon after satemization. On the other hand, the ways of treating the old syllabic nasals and liquids vary greatly even in closely related (and/or situated) dialects. This makes it likely that this process took place considerably later than the simplification of the labiovelars. This relative chronology, in turn, rules out any effect on the treatment of the sonorants from the side of the labiovelars.

While the idea that the alleged */u/ reflexes of the syllabic nasals and liquids reflect the quality of a preceding velar is unverifiable and chronologically impossible, I do believe there is evidence in Balto-Slavic that is relevant for the labiovelars: namely, evidence for their biphonemic nature in Proto-Indo-European. The Old Church Slavic infinitive *gъnati* 'to hunt, chase', as opposed to the present 3ʳᵈ singular *ženetъ*, does not reflect Proto-Indo-European */gʷn̥-/ (as Sanskrit *hatá-* 'slain') but */gun-/, the archaic regular zero grade of */gwen-/. The relationship between Old Church Slavic *žen-* and *gъn-* is the same as that between the Hittite present 3ʳᵈ singular *kuenzi* 'to slay' and the present

3rd plural *kunanzi*, or between Proto-Indo-European */swep-/ 'sleep' (Latin *somnus*) and the zero grade */sup-/ (Greek ὕπνος).

Most of the apparent */uN/ instances can be explained as reflexes of original Proto-Indo-European */uN/ sequences, archaic zero grades of */weN/. A few others that have been suggested are based on erroneous morphological interpretations which, in turn, are often the result of erroneous phonological models. An example of this is the derivation of the Old Church Slavic aorist 1st singular ending -ъ (e.g. *bodъ* 'I pierced', *věsъ* 'I led') from the athematic ending */-m̥/ rather than the thematic */-om/.

The question of the status of Proto-Indo-European labiovelars and of the Proto-Slavic reflexes of Proto-Indo-European syllabic nasals and liquids is discussed in more detail in Halla-aho (2005b).

6. Abbreviations
The following abbreviations are used:

1. Grammatical terms
abl.   ablative
acc.   accusative
act.   active
ALG   Auslautgesetz(e)
aor.   aorist
dat.   dative
du.   dual
gen.   genitive
instr.   instrumental
loc.   locative
nom.   nominative

pass. passive

pl. plural

pres. present tense

ptcl. participle

sg. singular

tant. tantum (only)

voc. vocative

2. Languages

Arm. Armenian

Av. Avestan

Blg. Bulgarian

Cz. Czech

Eng. English

Germ. German

Gk. Greek

Gmc. (Proto-)Germanic

Goth. Gothic

Hit. Hittite

IE Indo-European

Lat. Latin

Latv. Latvian

Lith. Lithuanian

OCS Old Church Slavic

OCz. Old Czech

OE Old English

OIr. Old Irish

OLat. Old Latin

OLith. Old Lithuanian

ON   Old Norse

OP   Old Persian

OPhr. Old Phrygian

OPo.   Old Polish

OPr.   Old Prussian

OR   Old Russian

Phr.   (New) Phrygian

PIE   Proto-Indo-European

Po.   Polish

Pre-IE Pre-Indo-European

PSl.   Proto-Slavic

Ru.   Russian

SCr.   Serbo-Croatian

Skt.   Sanskrit

Sl.   Slovene

Sw.   Swedish

Toch. Tocharian

Ukr.   Ukrainian

References:

Adams, Douglas Q.

    1988   *Tocharian historical phonology and morphology*. New Haven.

Avksentjeva, A.G.

    1975   Ob odnoj balto-slavjanskoj izoglosse (iR/uR), *Baltistica* 11, 37-61.

Bennett, William H.

    1959   The phonemic status of Gothic *w hv q*, *Language* 35, 427-432.

Bonfante, Giuliano

    1996   The etymology of ἵππος, *Journal of Indo-European Studies* 24, 111-113.

Boutkan, Dirk

  1995   *The Germanic 'Auslautgesetze'*. Amsterdam.

Halla-aho, Jussi

  2005   Two borrowings in Proto-Slavic, and a minor Balto-Slavic sound change, *Journal of Indo-European Studies* 33, forthc.

  2005b   The collapse of an early PIE. ablaut pattern, *Indogermanische Forschungen* 110, 97-118.

Hilmarsson, Jörundur

  1993   Development of labiovelars (and tectals plus *w*) in initial position in Tocharian (an overview), *Sprache* 35, 176-186.

Hirt, Hermann

  1927   *Indogermanische Grammatik, I*. Heidelberg.

Holzer, Georg

  1989   *Entlehnungen aus einer bisher unbekannten indogermanischen Sprache im Urslavischen und Urbaltischen*. Wien.

Kortlandt, Frederik

  1994   From Proto-Indo-European to Slavic, *Journal of Indo-European Studies* 22, 91-112.

Ladefoged, Peter & Ian Maddieson

  1996   *The sounds of the world's languages*. Oxford & Cambridge.

Louden, Bruce

  1996   *Epeios*, *Odysseus*, and the Indo-European metaphor for poet, *Journal of Indo-European Studies* 24, 277-304.

Mulder, Jan

  1996   Methodology and description, *La linguistique* 32, 17-34.

Orr, Robert

  2000   *Common Slavic nominal morphology, a new synthesis*. Bloomington.

Prokosch, Eduard

  1948   *A comparative Germanic grammar*. Philadelphia.

Purczinsky, Julius

 1993   Proto-Indo-European circumflex intonation or bisyllabicity?, *Word* 44, 53-68.

Ringe, Ronald A. Jr.

 1990   Review of Adams, *Language* 66, 400-407.

Schmidt, Karl Horst

 1990   Zur Deklination der *o*-Stämme in den "westindogermanischen Sprachen", *Lingua Posnaniensis* 31, 3-10.

Shields, Kenneth, Jr.

 1977   Speculations on the development of the Indo-European nominal inflection, *Folia Linguistica* 10, 109-149.

Sturtevant, Edgar H.

 1930   The gutturals in Hittite and Indo-European, *Language* 6, 213-228.

 1939   The pronunciation of Latin *qu* and *gu*, *Language* 15, 221-223.

Tischler, Johann

 1990   Hundert Jahre kentum-satem Theorie, *Indogermanische Forschungen* 95, 63-98.

Woodhouse, Robert

 1998   Bonfante's Illyrian horse, *Journal of Indo-European Studies* 26, 467-468.

DÉLG= Pierre Chantraine, 1980, *Dictionnaire étymologique de la langue grecque*. Paris.

GEW = Hjalmar Frisk, 1960, *Griechisches etymologisches Wörterbuch (I-II)*. Heidelberg.

CHAPTER I

Old Church Slavic nominal classes

1. Introduction

This chapter presents a synchronic survey of the nominal declensional classes that can be distinguished in the language of the canonical Old Church Slavic manuscripts, and of the traces left by those PIE classes that have become extinct during the Proto-Slavic period. The lexical items included are derived from *Staroslavjanskij slovar' (po rukopisjam X-XI vekov)*, 1994, by E. Blagova, R.M. Cejtlin, S. Gerodes, L. Pacnerova, M. Bauerova (henceforth: SL). The description of the lexical material contained by each declensional class aims at exhaustiveness, including virtually every noun and adjective found in SL, with the exception of the productive deverbal nomina actionis of the type *xoždenьje* 'going' ← *xoditi* 'to go' and foreign proper names occurring in the texts.

Each declensional class is put into an historical context in a brief presentation of the corresponding type in other IE languages. Within each class, different derivational types are described. Only selected lexical examples are given in the text, with reference to the **Appendix**, which is essentially a list of words. In this way, I have attempted to make the text a bit more "readable" than earlier works with similar content, e.g. Vaillant (1974), Sławski (1974), Arumaa (1985).

The language of the OCS manuscripts shows in progress the shift, nearly completed in modern Slavic, from a stem-based declension to a gender-based declension. This is especially true of the adjective. The rich system of different declensional types, reconstructable for PIE and still observable from many earlier attested languages, was greatly reduced. Some of these simplifications were most likely triggered as early as in the disintegrating proto-language, while some can be termed "North-West-IE", Balto-

Slavic, or purely Slavic. Special attention is paid to the derivational mechanisms by which lexical items have been transferred from one declension to another.

Etymological questions have been touched on only when they are relevant for cracking open derivational structures that have been rendered opaque by phonological processes or when I have felt I have something essential to say about them.

2. Inflectional categories of Old Church Slavic noun

The grammatically relevant morphological properties of the OCS noun, and their historical aspects, are described below.

2.1. Gender

It appears that PIE in its earliest phase had a two-gender system that distinguished animates from inanimates. The emergence of the feminine was probably not primarily the result of a split in the animate gender but rather of a semantic and morphological reanalysis of certain collective/plural forms as singulars, e.g. sg. */wers-o-/ 'rain' (Skt. *varṣám*, Hit. *waršaš*) → coll./pl. */wers-o-h/ > */wers-ā/ → (reanalyzed) sg. */wers-ā/ (Gk. ἔρση 'dew'). For discussion, see Brosman (1976, 1978, 1981, 1982), Miranda (1975), and, most recently, Matasović (2004). As such forms were treated as singulars, they developed paradigms of their own and gave rise to new long-vowel stem types. The coll./pl. desinences, including */-ū/, */-ī/, and */-ā/, became derivational elements for building specifically feminine counterparts to existing masculines: */eḱw-o-s/ 'horse' → */eḱw-ā/ 'female horse', */wḷkw-o-s/ 'wolf' → */wḷkw-ī/ 'female wolf'. The feminine subgender was grammaticalized by adjectival agreement (*/sen-o-s eḱw-o-s/ 'old horse' vs. */sen-ā eḱw-ā/ 'old mare'), which finally led to a gender split in the formally ambivalent */u/-, */i/- and consonantal stems.

OCS has inherited the PIE three-gender system as such. In addition, OCS, like all Slavic languages, has developed an "animate subgender", manifested in the use of the

"genitive-accusative" with nouns denoting animate masculine objects. There is no consensus on the rise of this category.

2.2. Case

The OCS noun is inflected in six grammatical cases, viz. the nominative, the accusative, the genitive, the locative, the dative, and the instrumental. In addition, there is a vocative form in the singular. The vocative, with its distinctive morphological marking, may be listed as the seventh case in a morphologically oriented study although it lacks a syntactic function proper. Adams (1988:141) aptly calles it something "between a true case form and an interjection".

The Balto-Slavic case system is nearly identical to that of Indo-Aryan, with the exception that it has no genitive-ablative dichotomy in any declensional type. This system most likely goes back at least to the "dialectal period" of PIE, but whether it was inherited by all of IE and later greatly simplified in nearly all dialects is questionable. Fairbanks (1977) argues that a) phonetic change (phonetic reduction of final syllables) is typologically the most important cause for case losses, b) phonetic change cannot account for the apparent reduction of cases in many IE languages (reduction of final syllables implies non-final stress), c) one cannot phonologically join the $*/-b^h-/$ and $*/-m-/$ elements into unified proto-endings, and d) the structure of different case desinences (presence vs. absence of vowel gradation) allows the establishment of a relative chronology of their appearance (see also Lane 1949:338, Lehmann 1958:182).

For these reasons, it may be assumed that PIE proper, before the "dialectal period", had about five formal case distinctions in the singular, viz. the nominative, the accusative, the vocative, the genitive, the dative, and three in the plural, viz. the nominative, the accusative and the genitive (Fairbanks 1977:121). Hittite would most faithfully have preserved this system, understandably enough, considering the early attestation of

Anatolian and its (assumed) early separation from the rest of IE.[1] The "dialectal period" saw the rise of various secondary case forms, possibly through fusion of the stem (or an inflected form) with different postpositions or particles, such as */bʰey/ ~ */bʰi/. Sihler (1995:246) speaks of a "case-system in which certain endings and functions were well established […] whereas much of the remainder was less a case-system than a collection of markers more or less in flux". A parallel development later led to the formation of the Tocharian "secondary" case forms (Fairbanks 1977:117, Adams 1988:142-143).

2.3. Number

The OCS noun is inflected in three numbers, viz. the singular, the dual, and the plural. Reconstructing the proto-morphology of the dual, both in the noun and the verb, is made difficult by the poor survival rate of that number in IE languages (see, e.g., Shields 1987, Sihler 1995:255-256, Malzahn 1999), but the Indo-Aryan, Balto-Slavic, Germanic, Greek, and Celtic evidence makes it clear that the category existed in their common ancestor. It is absent from Anatolian, which probably indicates its rise in post-Proto-Indo-Hittite times.

The OCS dual is a living category for all declined or conjugated parts of speech, "doch liegt es in der Natur der Sache, daß im Dual meist paarige Dinge stehen" (Leskien 1909:105). It is used with great consistency, yet there are indications that it is gradually falling out of use. Cp. the following passage from the Codex Zographensis where Jesus invites Peter and Andrew to follow him. I have normalized the orthography and the morphology, and added the punctuation:

> Xodę že pri moŕi galilějьscějemь viдě *dъva bratra* (acc. du.) Simona naricająštajego sę Petra i Andrěją bratra jego *vъmětająšta* (acc. du.) mrěžę vъ

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[1] On this question, see Wittman (1969:2), Adrados (1982), Brosman (1976, 1978, 1982). For a different view, cp. Puhvel (1994).

moŕe; *běašete* (impf. 3rd du.) bo *rybaŕa* (nom. du.). I glagola *ima* (dat. du.): *gręděta* (impv. 2nd du.) vъ slědъ mene i sъtvoŕą *vy* (acc. pl.) člověkomъ *lovьca* (acc. du.). *Ona* (nom. du.) že abьje *ostavĺьša* (nom. du.) mrěžę po ńemь *idoste* (aor. 3rd du.).

Among the dual forms there is one plural (*vy* 'you') which, perhaps, shows that while the scribe felt quite comfortable with the dual, it may also not have been completely alive in his everyday speech.

3. Consonantal stems

All OCS consonantal stems are suffixal derivatives. As to their inflection, they are heavily influenced by the */i/-stems, especially in the plural.

3.1. Stems in *-ter-*, *-tel-*, *-ar-*

There are two feminine kinship terms: *mati* 'mother' (stem *mater-*) and *dъšti* 'daughter' (stem *dъšter-*). These are well-established PIE words, having such cognates as

> Skt. *mātár-*, Gk. μητερ-, Lat. *māter*, OIr. *máthair*, OE *moþar*, Toch. B *mācer*, OPhr. *matar*, Lith. *móter-*, all from PIE */mā-ter-/. The root */mā-/ is usually interpreted as a nursery word (Mayrhofer 1986:122); see, however, Klein (1987:409).
>
> Skt. *duhitár-*, Gk. θυγατερ-, Goth. *daúhtar*, Lith. *dukter-*, Toch. B *tkācer*, all from PIE */d^{h}uǵə-ter-/, or, according to a more modern view, */d^{h}uǵh$_2$ter-/ (e.g. Mayrhofer 1986:136-137).

Two other reconstructable members of this (declensional if not derivational) class have been transferred to the vocalic declensions: *bratrъ* 'brother', *sestra* 'sister'. In both instances, the thematic vowel has been added to the zero-grade stem, i.e. */b^{h}rā-tr-o-/, */swe-sr-ā-/. Since both Slavic and Baltic have eliminated the paradigmatic ablaut in

*/mā-ter-/ and */dʰuǵǝ-ter-/ as well as in the other consonantal classes in favor of the full grade, it is likely that the thematicization was an early change. Cp.

> Skt. *bhrā́tar-*, Lat. *frāter*, OIr. *bráthair*, Goth. *broþar*, Phr. (nom. pl.) βρατερης, Toch. B *procer*, all from */bʰrā-ter-/.
>
> Skt. *svásar-*, Gk. (Hes.) ἔορ[2], Lat. *soror*, OIr. *siur*, Goth. *swistar*, Lith. *seser-*, Toch. B *ṣer*, all from */sw(-)e(-)sor-/. It is not quite clear how this stem should be segmented; see Normier (1980), Hamp (1988).

Surprisingly there are no clear traces of the PIE word for 'father' either in Slavic or in Baltic:

> Skt. *pitár-*, Gk. πατερ-, Lat. *pater*, OIr. *athair*, Goth. *fadar*, Toch. B *pācer*, all from PIE */pǝ-ter-/. I still consider the tradional interpretation 'protector' from PIE */pā-/ : */pǝ-/ most likely, *pace* Szemerényi (1977:9).[3]

The OCS word for 'father' is *otьcь*, a diminutive of PSl. */ata-/ which is indirectly attested in OR *otьnь* 'paternal'. The word is usually linked to Gk. ἄττα, Goth. *atta*, and Hit. *attaš* 'id.'. It has been suggested that PIE */pǝ-ter-/ denoted 'father' as a tribal leader, whereas */atta-/ was used for 'father by birth' (Wittman 1969:3, Benveniste 1993:170-171). This is possible, but as the Goth. form is phonologically incompatible with PIE */atta-/, and as */atta-/ is in itself anomalous for PIE, and as this is clearly a word of child speech, it may be more likely that */atta-/ was "reinvented" over and over again rather than inherited in the proper sense of the word.

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[2] Hesychius gives meanings θυγάτηρ, ἀνεψιός.

[3] Some scholars see a reflex of PIE */pǝ-tr-/ in Late PSl. */stryjь/ (e.g. Po. *stryj*) 'uncle'. This is problematic and very uncertain, as shown by Arumaa (1985:38-39).

The kinship terms in */-(t)er-/ constituted declensionally a closed and internally somewhat inconsistent category of words, distinct from the agent nouns in */-ter-/. In Skt., the latter class retains quantitative ablaut, e.g. *netár-* 'leader': acc. sg. *netáram*, gen.-abl. sg. *netúḥ*, loc. sg. *netári*, dat. sg. *netré*, instr. sg. *netrā́*, voc. sg. *nétaḥ*, etc. Gk. has generalized the */e/-grade, e.g. γραπτήρ, γραπτέρος 'writer' or, rarely, the */o/-grade, e.g. ἀμύντωρ 'helper'. The synchronically opaque ἀστήρ 'star' may be a relic, if it is an original agent noun as suggested by Bomhard (1986). Lat. has an invariantly long */o/-grade, e.g. *dator*, *datōris* 'giver'. A relic may be seen in *passer* 'sparrow' if it continues */pet-ter-/ 'flier' (cp. Gk. πέτομαι 'I fly').

The agent suffix */-ter-/ is absent in OCS, but it may be hidden in the isolated *větrъ* 'wind' if it is thematicized from */wē-tr-/ (cp. *bratrъ*, *sestra*), a zero grade of */wē-ter-/ 'blower'; cp. pres. 3rd sg. *vě-je-tъ* 'blows (of wind)'. Otherwise, the semantic equivalent of PIE */-ter-/ is OCS *-tel-*. It seems likely that *-tel-* somehow continues PIE */-ter-/ (for a different view, see Arumaa 1985:41-43). Most likely it arose as a result of dissimilation in words like *ratelь* 'plower' from PSl. */ar-tel-/ < */ar-ter-/. The nouns in *-tel-* follow the */yo/-declension in the singular but show consonantal-stem endings in the plural.

These nouns are exclusively derived from the infinitive (or the "aorist") stem of verbs of all classes, although nouns from root-class verbs are somewhat rare, e.g. *datelь* 'giver' ← *dati* 'to give', *vlastelь* 'ruler, lord' ← *vlasti* (*vlad-*) 'to rule' (**App. 1.1.**). Nouns from verbs with the infinitive stem in *-a-* or *-ě-* include *dělatelь* 'worker' ← *dělati* 'to do, work', *lъže·sъ·vědětelь* 'false witness' ← *sъ·věděti* 'to witness, testify' (**App. 1.2.**). By far the most common type involves verbs with the infinitive in *-i-*, e.g. *gonitelь* 'persecutor' ← *goniti* 'to persecute' and *gubitelь* 'destroyer' ← *gubiti* 'to destroy' (**App. 1.3.**).

Occasionally, *-i-* was reanalyzed as belonging to the suffix. This gave rise to a secondary type where *-itel-* was attached to the present stem, e.g. *zižditeĺь* 'builder', beside *zьdateĺь*; cp. pres. 3rd sg. *ziždetъ* 'builds' (**App. 1.4.**).

There is a semantically close and declensionally identical group of denominal masculine nomina agentis in *-ar-*. The suffix most likely spread to native formations from a small number of Germanic borrowings (Leskien 1909:75), e.g. *vinaŕь* 'vinedresser' ← *vino* 'wine'. OCS *mytaŕь* 'tax collector, publican', could be from *myto* 'toll, bribe' but was more likely borrowed as such from Goth. *motareis* 'id.' (according to Holzer 1986:125, from Old Bavarian) (**App. 2.**).

3.2. Stems in */-(m)en-/

This class includes two masculines, *plamy* 'flame' (stem *plamen-*) and *kamy* 'stone' (*kamen-*). A few others have been transferred to the */i/-stems, but they still show some consonantal endings, typically in the gen. sg.: *korenь* 'root', *prьstenь* 'ring' (according to Arumaa 1985:22, an original adjective from *prьstъ* 'finger'), *remenь* 'belt', *stepenь* 'stair', *jelenь* 'deer'.

There are seven attested neuters in *-men-*, both deverbal and denominal, many of which have close cognates:

> *brěmę* (*brěmen-*) 'burden', cp. Gk. φέρμα 'id.', both from PIE */bʰer-men-/.
> *vrěmę* (*vrěmen-*) 'time, season, weather', cp. Skt. *vártman-* 'track', both from
> PIE */wert-men-/.
> *imę* (*imen-*) 'name', cp. OIr. *ainm* 'id.', both from PIE */n̥-men-/.
> *sěmę* (*sěmen-*) 'seed', cp. Lat. *sēmen* 'id.', both from PIE */sēmen-/.
> *pismę* (*pismen-*) 'letter' ← *pьsati*, *pišǫ* 'to write' from PIE */pik̑-/ : */peyk̑-/,
> cp. Skt. *piś-* 'ornament', *peśalá-* 'mottled'.
> *plemę* (*plemen-*) 'tribe' < */pled-men-/, cp. *plodъ* 'fruit, offspring'.

        čismę (*čismen-*) 'number' ← *čisti* (*čьt-*) 'to count'. The *-s-* has apparently

              been taken from the infinitive *čisti* (= {čit-ti}) for *čit-men-* would have

              yielded **čimen-*.

PIE */-men-/, with obscure semantics, builds masculines and neuters in many IE languages, e.g. Skt. *ātmán-* 'breath', OIr. *brithem*, *brithemon* (masculine) 'judge'.[4] Gk. shows variation in the ablaut grades of the suffix: γνώμων, -ονος 'one that knows' vs. θημών, -ῶνος 'heap' vs. λιμήν, -ένος 'harbour'. In Goth., the suffix is in the */e/-grade in the singular but */o/-grade in the plural, e.g. *ahma* 'spirit', gen. sg. *ahmins*, nom. pl. *ahmans* (cp. *aha* 'mind').

The only */men/-stem masculine with a solid PIE etymology seems to be */aḱ-men-/ 'stone, anvil', continued by Skt. *áśman-*, Gk. ἄκμων, Lith. *akmuõ*, and probably OCS *kamy*. The exact relationship between Slavic *ka-* and PIE */aḱ-/ is a matter of dispute. See, e.g., Michels (1894), Fraenkel (1959:24), Hamp (1967), Maher (1973).

The neuters are extremely productive in Gk., e.g. ἅλμα 'spring', with a secondary oblique */t/-stem, cp. gen. sg. ἅλματος. Phr., like Gk., has generalized the zero grade from the nom.-acc. sg., but otherwise retained the original stem; cp. *κνουμαν 'tomb', dat. sg. κνουμανει. Neuters are very numerous also in Skt., e.g. *jániman-* 'birth' (cp. aor. 1st sg. *á·jani* 'generate'). In some instances the change of gender affects the meaning, e.g. masculine *brahmán-* 'priest' vs. neuter *bráhman-* 'prayer', but very often it is difficult to see any categorial semantic differences between the masculines and neuters, e.g. neuter *drāghmán-* 'length' vs. masculine *várṣman-* 'height'.

The suffix */-en-/, reflected in the OCS type *prьstenь* 'ring' (*prьstъ* 'finger'), occurs in a few very archaic IE nouns, e.g.

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[4] A discussion of the possible meanings and functions of the suffix, as well as references to relevant literature, can be found in Arumaa (1985:27-32).

PIE */ḱu-on-/ : */ḱu-n-/ 'dog', cp. OIr. *cú*, gen. sg. *con*, Lith. *šuõ*, acc. sg. *šùnį*, Gk. κύων, acc. sg. κύνα, Toch. B *ku*, acc. sg. *kweṃ*, etc. The root, no doubt, is */pḱu-/, the zero grade of */peḱu-/ 'cattle' (see Hamp 1980, also Bloomfield 1909).

PIE */uks-en-/ : */uks-n-/ 'ox', cp. Skt. *ukṣā́*, gen. sg. *ukṣṇáḥ*, Goth. *aúhsa*, gen. pl. *aúhsne*, etc.

PIE */dʰǵʰem-en-/ 'man', cp. Lat. *homō*, gen. sg. *hominis*, Goth. *guma*, gen. sg. *gumins*, etc.

The suffix has become extremely productive in Lat., Goth. and Toch., and is also common in Skt., Gk. and OIr. These nouns are usually masculine and feminine. Cp. Skt. masculine *mahán-* 'greatness' (from *máh-* adj. 'great'), feminine *yóṣan-* 'woman' (*yóṣā* 'id.'). Gk. has various ablaut relations, e.g. ἀγών, -ῶνος 'assembly' (from ἄγειν 'to drive') vs. ἄξων, -ονος 'axle' vs. λειχήν, -ῆνος 'lichen' vs. αὐχήν, -ένος 'neck'. The feminines include κληδών, -όνος 'omen, rumour', πυγών 'elbow', σταγών 'drop' (στάζειν 'to let drop'). Goth. masculines and a few archaic neuters show */e/ : */o/ -grade variation, e.g. *maþa*, *maþins* 'worm', *wato*, *watins* 'water', but the feminines have a generalized */ō/-grade, e.g. *þāho*, *þāhons* 'clay'. In Lat., most masculines and feminines likewise have an invariable */ō/-grade, e.g. *pulmō*, *-ōnis* 'lung', *datiō*, *-ōnis* 'giving', but certain archaic items, as well as some */en/-stem suffixes, have retained either a permanent zero grade in the oblique forms, as in *carō*, *carnis* 'flesh', or */o/ : */e/ variation, e.g. *virgō*, *-ginis* 'maiden', *pulchritūdō*, *-dinis* 'beauty'. Neuters are few, e.g. *glūten*, *-inis* 'glue', *inguen* 'groin', *unguen* 'fat'. OIr. has a few archaic nouns with an invariable zero-grade oblique stem (Lat. *carō* type), e.g. *brú* (from */brus-ō/), gen. sg. *bronn* (from */brus-n-os/) 'belly'. Otherwise the */o/-grade has been generalized, e.g. feminine *toimtiu*, *toimten* 'opinion', *Ériu*, *Érenn* 'Ireland'.

OCS nouns in *-ěn-*, which have a heteroclitic */o/-stem singular in *-ěn-inъ*, are consonantal stems in the plural (in which they are almost always used). They usually

denote nationality or other modes of belonging and formally correspond to the Gk. λειχήν, -ῆνος type, e.g. *izdrailitĕne* 'Israelis' (**App. 3.**). In most instances, the suffix occurs in the form -*'an-*, which phonologically can continue either */-yēn-/ or */-yōn-/, e.g. *graždane* 'city dwellers, citizens' from *gradъ* 'city', *rimĺane* 'Romans' (**App. 4.**).

This nominal type has a close match in Lith., e.g. *Tilžénas* 'inhabitant of Tilsit' from *Tilžė̃*, *kalnénas* 'mountain dweller' from *kálnas* 'mountain' (Leskien 1909:76).

3.3. Stems in */-nt-/

The suffix */-nt-/ builds diminutive animate neuters in OCS and has retained its productivity in many of the modern Slavic languages. There are seven attested instances, none of which has close morphological cognates elsewhere.

> *agnę, -ęte* 'lamb', from late PSl. */agnъ/, related to Lat. *agnus*.
>
> *kĺusę, -ęte* 'beast of burden', related to Lith. *klùpti* 'to stumble', Goth. *hlaupan* 'to leap'.
>
> *kozъlę, -ęte* 'young goat' ← *kozъlъ* 'goat', itself from *koza* 'she-goat'.
>
> *osъlę, -ęte* 'young ass' ← *osъlъ* 'ass', the latter probably from Goth. *asilus*.
>
> *ot·ročę, -ęte* 'child' ← *ot·rokъ* 'id.'.
>
> *ovьčę, -ęte* 'sheep' ← *ovьca* 'id.', itself from late PSl. */ovь/, related to Lat. *ovis* etc.
>
> *žrĕbę, -ęte* 'foal', from PIE */gwerb^h-/, related to Gk. βρέφος 'new-born child'.

The */-nt-/ diminutives have their closest equivalents in Baltic. For OPr., see Fraenkel (1959:5); for Lith., see Otrębski (1963:115-116). Mezger (1964) rejects the tradition (Streitberg 1900:74) of seeing Goth. *frijonds* 'friend' as a petrified participle of *frijon* 'to love' (OCS *prijati* 'to assist, sympathize', *prijateĺь* 'friend', *prijaznь* 'devotion, friendship'), and sees in it an */-nt-/ extension of the adj. *freis* 'free' (Skt. *prijá-*

'dear').[5] For discussion of further possible relations of the Slavic type, see Georgiev (1969:132-134) and Arumaa (1985:33-36). Slavic seems to be the only IE branch where this suffix, as an instrument for deriving nouns, has a clearly defined meaning (diminutive).

A homophonic suffix */-nt-/ was used for building the active present participle. This formation survives in almost all IE languages. In OCS the consonantal inflection is retained in the masculine nom. sg. and acc. sg., as well as the nom. pl. Otherwise the participle has been transferred to the */yo/-declension. The yodization of the suffix-final */-t-/ is analogical. An example is *dery* 'tearing', acc. sg. *derǫštь* for earlier */derǫtь/ = Gk. δέροντα, nom. pl. *derǫšte* for */derǫte/ = Gk. δέροντες. The nom. sg. form *dery* will be discussed in **Chapter II: 9**. The corresponding feminine form is a devī-stem (see **4.3.**), as it is in Gk., Skt., Lith., e.g. *derǫšti* = Gk. δέρουσα.

3.4. Stems in */-es-/

Twelve nouns, all neuter, that either consistently or sporadically follow this declension are attested in the manuscripts. This declensional type is merging with the */o/-stems, undoubtedly owing to the homophonous nom.-acc. sg. The latter is discussed in **Chapter II: 6**.

Two words can with some certainty be considered as inherited from PIE

> *nebo* (stem *nebes-*) 'sky, heaven', cp. Skt. *nábhaḥ* 'id.', OIr. *nem*, *nime* 'id.',
>> Hit. *nepiš* 'id.', Gk. νέφος 'cloud', all from PIE */neb^h-es-/.
> *slovo* (stem *sloves-*) 'word, rumour', cp. *śrávaḥ* 'fame', Gk. κλέϜος 'rumour',
>> OIr. *clú*, *clue* 'fame', Toch. B *ñom·kalywe* 'id.', all from PIE
>> */ḱlew-es-/.

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[5] On the semantic development of PIE */priy-o-/, see Polomé (1983:282-283).

A few more have more or less close morphological equivalents in at least one other IE branch. However, one cannot rule out that any particular formation arose independently from common inherited building blocks in individual languages and branches. As Schlerath (1987:44) points out, "[…] normally we do not know whether a complete word was indeed realized in IE. We reconstruct the rule."

uxo (stem *ušes-*) 'ear', cp. OIr. *áu*, gen. sg. *aue*, both from PIE */aws-es-/. The */es/-stem has replaced a PSl. */i/-stem */aws-i-/ (cp. Lith. *ausìs*, Lat. *auris*) which survives in the dual form *uši*.

čudo (stem *čudes-*) 'wonder', cp. Gk. κῦδος 'glory, fame', both from PIE */kēwd-es-/ : */kūd-es-).

The remaining instances are:

kolo (stem *koles-*) 'wheel'. Probably related to the Gk. */o/-stem masculine πόλος 'axle' from */kwol-o-/, but one cannot rule out a connection to the Gk. */es/-stem neuter τέλος 'aim, end' from */kwel-es-/ and a semantic development 'wheel' > 'circle' > 'end', i.e. a 'full circle'. This would, however, imply an early assimilation, predating the First Palatalization, from PSl. */kela-/ to */kala-/, something for which there is no supporting evidence (cp. *selo* 'village').

divo (stem *dives-*) 'wonder, miracle'. Probably influenced by the synonymous *čudo* (above) and derivable from PIE */deyw-o-/ (Lat. *dīvus* 'divine').

drěvo (stem *drěves-*) 'tree, wood', most likely an */o/-stem as Goth. *triu*, both thematicizations of a PIE */u/-stem */dor-u-/ (see **4.2.**).

oko (stem *očes-*) 'eye'. Similarly to *uxo* (above), the */es/-stem has replaced a PSl. */i/-stem */ak-i-/ (cp. Lith. *akìs*) which survives in the dual form *oči*.

l̑uto (stem *l̑utes*-) 'rage'. Derives from *l̑utъ* 'angry' and has no obvious
      cognates. (See ESRJa., s.v. *ljútyj*.)

isto (stem *istes*-) 'intestines'. The derivation and etymology are unclear. (See
      ESRJa., s.v.)

dělo (stem *děles*-) 'matter, deed'. Derived from PIE */d^{h}ē-/ 'do, put', OCS
      děti 'to put, place'.

tělo (stem *těles*-) 'body'. The derivation and etymology are unclear. (See
      ESRJa., s.v. *télo*.)

Gk. and Skt. have countless deverbative neuter */es/-stems, many of them probably
going back to the proto-language, e.g.

    Skt. *mánaḥ* 'mind', Gk. μένος 'spirit', from PIE */men-es-/.

    Skt. *rájaḥ* 'space, air', Gk. Ἔρεβος 'a place of nether darkness, above the
        still deeper Hades', from PIE */regw-es-/.

    Skt. *vácaḥ* 'speech', Gk. ἔπος 'word', from PIE */wekw-es-/.

    Skt. *sádaḥ* 'seat', Gk. ἕδος 'id.', from PIE */sed-es-/.

Goth. has a few relic forms which have almost completely moved to the */o/-
declension: *sigis* 'victory' (Skt. *sáhaḥ* 'might') from */seg^{h}w-es-/, *agis* 'fear' (Gk. ἄχος
'pain') from */ag^h-es-/ (see **Chapter III: 4.**). OIr. likewise has a few remnants, e.g.
(apart from those already mentioned) *tech* 'house' (Gk. τέγος 'roof') from */teg-es-/,
leth 'side' (Lat. *latus* 'id.') from */let-es-/. Lat. has two subtypes, those with the old
ablaut variation */-os/ : */-es/ (as in Gk. and OIr., possibly in Skt.), e.g. *ulcus* (*ulcer*-)
'ulcer', and those with a generalized */o/-grade, e.g. *stercus* (*stercor*-) 'dung'.

OCS has no identifiable traces of masculine and feminine */es/-stems, and these seem
to have been rare already in PIE. The only reliably reconstructable item is the word for

'dawn', PIE */aws-es-/ : */us-es-/ > Skt. *uṣás-*, Gk. ἠώς, ἠόος, a derivative of */us-/ > Skt. *uṣ-* 'id.'. Lat. has a handful of additional instances, e.g. *honōs* 'honor' (classical *honor*), *arbōs* 'tree' (classical *arbor*), *lepōs* 'grace', *tepor* 'warmth'.

3.5. Stems in */-wes-/

OCS builds the active past participle with a suffix -ъs- which represents a generalized zero grade of the PIE active perfect participle suffix */-wes-/ : */-us-/. As was the case with the active present participle, these forms have for the most part gone over to the */yo/-stem inflection, yet they retain the consonantal character in the masculine (and neuter) nom. sg., the acc. sg., and the nom. pl. E.g. *vlěkъ* 'having dragged', acc. sg. *vlěkъšь*, nom. pl. *vlěkъše*.[6]

Excursus: Building the active past participle in OCS

The suffix occurs in its pure form with verbs with a consonantal radical aorist stem, e.g. *vlěšti* (*vlěk-*) 'to drag' (**App**. **5.1.**). Here belong also *lešti* (*leg-*) 'to lie down', *sěsti* (*sěd-*) 'to sit down' and *ob·rěsti* (*ob·rět-*) 'to find', which have a nasal infix in the present stem, i.e. *lęg-*, *sęd-*, *ob·ręšt-*. The verb *iti* (*id-*, *šьd-*) 'to go' has a heteroclitic paradigm. It builds the act. past ptcl. from *šьd-* which probably represents a reduction grade of an obsolete **šed-*, the iterative of which survives in *xoditi*. Verbs that have the suffix *-nǫ-* in the infinitive, drop it in the ptcl. and behave like the verbs above: *vyknǫti* (*vyk-*) 'to learn', *vęznǫti* (*vęz-*) 'to bind', *dъxnǫti* (*dъx-*) 'to draw breath', *u·glьnǫti* (*u·glьb-*) 'to sink'. A dozen or so radical verbs have a gradating stem. The participle is built from the zero-grade stem which coincides with the present stem of these verbs, e.g. *po·črěti* (*·črěp-*, *·črъp-*) 'to draw water', pres. 1st sg. *po·črъpǫ*, ptcl. *po·črъpъ* (**App**. **5.2.**).

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[6] Note that the suffix-final *-s-* is lost in the nom. sg. as a final consonant, whereas in the other forms it is retroflected after -ъ- (from */-u-/).

IV conjugation verbs with the infinitive in *-i-* (from */-ī-/) form the ptcl. as if they were radical stems (see above). However, the stem-final */-i-/ becomes */-y-/ before a vowel, as it does in the pres. 1st sg., and yodizes the root-final consonant and umlauts the suffix vowel. For instance, *kuditi* 'to rebuke' → **kud-j-ъs* → *kuždъ*. Similarly, *měsiti* 'to mix' → *měšь*, *mraziti* 'to freeze' → *mražь*, *paliti* 'to burn' → *paĺь*, *pěniti* 'to foam' → *pěńь*, *oriti* 'to mock' → *oŕь*.

All other verbs with the infinitive stem in a vowel, whether radical or thematic and regardless of the conjugational type, have a secondary act. past ptcl. A binding consonant *-v-* is attached to the stem, and the ptcl. suffix *-ъs-* to that *-v-*. For example, *dьrati* 'to tear' → *dьravъ*, *znati* 'to know' → *znavъ*, *sěti* 'to sow' → *sěvъ*, *piti* 'to drink' → *pivъ*, *čuti* 'to hear' → *čuvъ*, *vęzati* 'to bind' → *vęzavъ*, *ględati* 'to watch' → *ględavъ*, *viděti* 'to see' → *viděvъ*, *dati* 'to give' → *davъ*.[7]

The old inflection of the participle is best retained in Skt.; cp. nom. sg. *vidvā́n* 'knowing' (with a secondary nasalization as in a number of other full-grade forms), acc. sg. *vidvā́ṃsam*, gen.-abl. sg. *vidúṣaḥ*, dat. sg. *vidúṣe*, voc. sg. *vídvaḥ*, etc. Gk. has retained the nom. sg., e.g. εἰδώς 'id.' (masculine and feminine), εἰδός (neuter), but otherwise the participle has become a */t/-stem, e.g. gen. sg. εἰδότος, dat. sg. εἰδότι.

The OCS feminine form is a devī-stem (see **4.3.**), as it is in Gk. and Skt., e.g. *vlěkъši* = Gk. ἑλκυῖα from PIE */welkusī/ (or, perhaps, */welkusyə/, in laryngealist notation */welkusih$_2$/); cp. also Skt. *vidúṣī*. I believe it was the feminine stem whence the zero grade */-us-/ spread to the masculine and neuter paradigms.

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[7] The listed verbs all belong to different conjugational types.

3.6. Stems in */-yes-/

OCS builds comparative forms with a suffix *-jьs-* which continues PIE */-yes-/, although the phonological details are disputed (e.g. Birnbaum & Schaeken 1997:70-71). The suffix occurs in its pure form in a handful of underived adjectives:

> *dragъ* 'dear' → *dražьjь*
> *grǫbъ* 'rude' → *grǫbĺьjь*
> *krěpъ* 'strong' → *krěpĺьjь*
> *lixъ* 'bad' → *lišьjь*
> *ĺutъ* 'furious, severe' → *ĺuštьjь*
> *xudъ* 'small' → *xuždьjь*

and in adjectives with a suffix *-ok-*, *-ъk-* in the positive:

> *vysokъ* 'high' → *vyšьjь*
> *glǫbokъ* 'deep' → *glǫbĺьjь*
> *širokъ* 'wide' → *šiŕьjь*
> *sladъkъ* 'sweet' → *slaždьjь*
> *tęžьkъ* 'heavy' → *tęžьjь*

In addition, there is a small number of suppletive comparative forms with no corresponding positive: *boĺjь* 'bigger', *vęštьjь* 'id.', *lučьjь* 'better', *suĺjь* 'id.', *goŕjь* 'worse', and *mьńjь* 'smaller'.

The glide *-j-* which begins the suffix causes the yodization of the root-final consonant. As can be seen from the examples, the masc. nom. sg. form occurs only in its definite, or "long", or "pronominal" form, a phenomenon which may have originated from the superlative function (Leskien 1909:125, Vondrák 1912:446, Diels 1932:199, Xaburgaev 1986:71). The underlying short forms would then be *dražь, grǫbĺь*, etc.

The masculine form is mostly declined as a */yo/-stem, but the consonantal endings survive in the nom. pl., *dražьše*. The original declension is best retained in Skt., again excluding the nasalization; cp. nom. sg. *návyān* 'newer', acc. sg. *návyāṃsam*, gen. sg. *návyasaḥ*, loc. sg. *návyase*, etc. In Gk., the comparative has become an */en/-stem in most forms, e.g. nom. sg. (masculine and feminine) ἐλάσσων 'smaller', gen. sg. ἐλάσσονος, dat. sg. ἐλάσσονι etc., but certain */es/-stem forms survive; cp. acc. sg. ἐλάσσω < *ἐλάσσοσα < PIE */lṇgʰ-yos-m̥/ (Skt. *lághīyāṃsam*); nom. pl. ἐλάσσους < *ἐλάσσοσες < PIE */lṇgʰ-yos-es/ (Skt. *lághīyāṃsaḥ*); nom.-acc. pl. neuter ἐλάσσω < *ἐλάσσοσα < PIE */lṇgʰ-yos-ə/ (Skt. *lághīyāṃsi*). In Lat., rhotacizm caused the comparative to become indistinguishable from */r/-stems, e.g. *senior* 'older', acc. sg. *seniōrem*. OIr. has inherited the nom. sg. form in */-ōs/, e.g. *siniu* 'older', but the comparative can only occur as a predicative and thus has no inflection. Gmc. makes use of the zero grade */-is-/, but the comparative forms were extended with a suffix */-en-/, e.g. Goth. nom. sg. masculine *batiza* 'better', feminine *batizo*, gen. sg. *batizins*, *batizons*.

The OCS feminine form is a devī-stem as in Skt. but unlike in Gk., Lat. and OIr., where one form serves as both masculine and feminine. Cp. *dražьši* and Skt. *návyasī* 'newer'.

OCS has no reliable traces of PIE */-ter-o-/, which is used as the more common comparative suffix in Skt. and Gk. and as an equative in OIr. On the semantic functions of */-yes-/ and */-ter-o-/, see Puhvel (1973), Streitberg (1915).

3.7. Radical consonantal stems

It is common knowledge that, in a specifically Balto-Slavic process, PIE radical consonantal stems were transferred to the */i/-declension through the simple addition of the stem formant */-i-/ to the root. More often than not, old consonantal-stem forms are attested in Lith. (all relevant instances are discussed by Skardžius 1956). In OCS, the following can be mentioned:

zvěrъ 'wild beast', Lith. *žvėrìs* 'id.', cp. Gk. θήρ, θηρός 'id.', all from PIE
*/ǵʰwēr-/.

noštь 'night', Lith. *naktìs*, cp. Lat. *nox, noctis*, Gk. νύξ, νυκτός, Goth. *nahts*
'id.', all from PIE */nokt-/.

myšь 'mouse', cp. Lat. *mūs, mūris*, Gk. μῦς, μυός, OE *mús* 'id.', all from PIE
*/mūs-/.

solь 'salt', cp. Gk. ἅλς, ἁλός 'salt (when masc.), sea (when fem.)', both from
PIE */sal-/.

vьsь 'village', cp. Ved. *viś-* 'id.', both from PIE */wiḱ-/.

srьdь 'heart', Lith. *širdìs* 'id.', cp. Lat. *cor, cordis*, Ved. *hṛd-*, Hit. *kard-* 'id.',
all from PIE */ḱṛd-/. OCS *srьdь*, instead of the synchronically existing
*/o/-stem derivation *srьdьce*, occurs in the adverbially used acc. sg.
expression *vьse srьdь* 'wholeheartedly'.

dvьri 'door' (pl. tant.), Lith. *dùrys* 'id.', cp. Skt. *dvār-*, all from PIE */dʰwor-/
: */dʰwṛ-/ : */dʰur-/. On the Indic *d-* instead of *dh-*, see Hamp
(1977:10).

In a few instances, a secondary */i/-stem was further thematicized and became a */yā/-
stem:

zemĺa 'earth' from **zemь*, which occurs in the Ru. adverb *na·zem'* 'to the
ground', cp. Skt. *kṣam-* 'earth', Gk. χθών 'id.', Toch. B *tkaṃ* 'id.', all
from PIE */dʰǵʰom-/ : */dʰǵʰem-/

luča 'beam (of light)' from **lučь*, which survives in Ru. *luč'*, cp. Skt. *ruc-*
'lustre', Lat. *lūx, lūcis* 'light', all from PIE */lewk-/ : */luk-/

In a few other instances, we have thematic stems for what seem to have been radical
nouns, but as the thematicization is usually accompanied by corresponding changes in
the radical ablaut grade and as these formations often have equivalents in other

European languages, it is possible that the shift took place in the proto-language itself. Examples are:

> *snĕgъ* 'snow', Lith. *sniẽgas*, Goth. *snaiws* 'id.', cp. Lat. *nix*, *nivis*, Gk. (Hes.) acc. sg. νίφα, all from PIE */snig^{h}w-/ : */snoyg^{h}w-/
>
> *brĕgъ* 'river-bank, hill', OE *beorg* 'hill', cp. Goth. *baúrgs* 'town', OIr. *brí*, gen. sg. *bríg* 'hill', all from PIE */b^{h}r̥ǵ^h-/ : */b^{h}erǵ^h-/. According to Boutkan & Kossman (1999:90-91), Goth. *baúrgs* does not belong here but is rather a Berber borrowing together with Gk. πύργος 'tower'. Considering the consonantal inflection this does not seem likely.
>
> *drugъ* 'friend', Lith. *draũgas* 'id.', cp. Skt. *druh-* 'fiend', Av. *druj-* 'id.', all from PIE */drug^h-/ : */drowg^h-/. The original root seems to have referred to 'otherness', which can be perceived either as benign or hostile; cp. OCS adjectival *drugъ(jь)* 'other'. Cp. PIE */g^{h}os-t-i-/ in **4.1.1**.
>
> *noga* 'foot', Lith. *nagà* 'hoof', cp. Gk. ὄνυξ, ὄνυχος 'nail', all from PIE */nog^h-/.
>
> *ob·razъ* 'sight, look, form', derived from *rĕzati* 'cut, chop off', cp. Gk. ῥώξ, ῥωγός 'cleft, narrow passage', ῥήγνυμι 'I break, shatter', both from PIE */rōǵ-/ : */rēǵ-/.

There are in OCS synchronic traces of one radical consonantal stem, the etymology of which is a puzzle, *pol 'a half', which occurs only in the compounds *pla·dьne* 'noon' (i.e. 'a half of the day') and *pol·ъtora* 'one and a half' (i.e. 'a half of the second'). That *pol is not a prefix but a noun is shown by the fact that it takes a genitive attribute. The independently used forms are the */u/-stem *polъ* and the */ā/-stem *pola*, both 'id.'.

3.8. Heteroclitics

Historical Balto-Slavic has no heteroclitics in the sense of the well-known neuter type of PIE. It seems, however, that their loss was a relatively recent development, as shown by the different treatment of PIE */wes-^r_n-/ in Lith. *vãsara* 'sommer' and OCS *vesna* 'spring', cp. Gk. ἔαρ 'id.', Lat. *vēr* 'id.'. For a similar reason, by comparing Goth. *fon*, *funins* 'fire' with OE *fýr* 'id.' or Goth. *wato*, *watins* 'water' with OE *wæter* 'id.', we can infer that their ancestors were still heteroclitic in Proto-Germanic. An earlier discussion of the Balto-Slavic traces of the heteroclitics can be found in Matasović (1998).

OCS *vesna* was transferred to the */ā/-declension by the same mechanism as the */er/-stems *bratrъ* 'brother' and *sestra* 'sister' (see **3.1.**), by adding the thematic element to the zero-grade oblique stem, i.e. */wes-n-ā/. The same is true of Lith. *jẽknos* (pl. tant.) 'liver' from */yekw-n-ā/ < */yekw-^r_n-/, cp. Skt. *yákṛt*, gen. sg. *yáknaḥ*. This noun lacks a cognate in OCS but is possibly related to Ru. *ikrá* 'roe' which, like Lith. *vãsara* (see above), has generalized the oblique stem.

OCS *sъnъ* 'sleep', together with Gk. ὕπνος 'id.', probably continues */sup-n-o-/, a thematicized oblique stem of */sup-ṛ/ > Gk. ὕπαρ 'waking vision', Lat. *sopor* 'deep sleep' (Eckert 1969:8). Sihler (1995:299) is not happy with this explanation since the forms in */-n-o-/ are masculine and not neuter. This, however, is not a very good argument, given that OCS *vesna* and Lith. *vãsara*, which *certainly* continue an old heteroclitic neuter, are both feminine.

Another well-attested IE heteroclitic, */wod-^r_n-/ 'water', is a regular */en/-stem in Lith., *vanduõ*, gen. sg. *vandeñs*, acc. sg. *vándenį* etc. For the nasalized root, cp. Lat. *unda* 'wave', Skt. pres. 3rd pl. *undánti* 'they wet'. OCS *voda* 'water' is a more difficult issue. From the phonological point of view, it probably *might* continue */wodōr/, an original collective nom.-acc. pl. (e.g. Georgiev 1973:44, Birnbaum & Schaeken 1997:19, 25) comparable to Gk. ὕδωρ and Umbrian *utur*, but one would expect to find at least traces

of an oblique stem */wod-(e)n-/. It cannot be ruled out completely that the OCS adjective *vodьnъ* 'pertaining to water' (translating τοῦ ὕδατος, τῶν ὑδάτων) is a reanalyzed and slightly deformed reflex of an old gen. sg. *vodene*, as suggested by Georgiev (1969:132), but nothing indicates it is not derived quite regularly from the */ā/-stem *voda*. Perhaps most likely, *voda* represents a simple thematicization of an original root noun */ud-/, cp. Skt. *ud-* 'wave'.

Other suggested candidates for Proto-Slavic heteroclitics, e.g. OCS *darъ* 'gift', *měra* 'measure', *jezero* 'lake' have been criticized (see, e.g., Arumaa 1985:18-21).

Synchronic $*/^r_n/$-heteroclitics are not numerous anywhere, with the exception of Hittite. In Skt. they include with certainty *áhaḥ*, *áhnaḥ* 'day', *ū́dhaḥ*, *ū́dhnaḥ* 'udder', *yákṛt*, *yáknaḥ* 'liver' and *śákṛt*, *śáknaḥ* 'excrement'. The last two have a secondary extension *-t* in the nom.-acc. sg. In Gk. the old nom.-acc. sg. form is well preserved, but otherwise most of these neuters have become */t/-stems, as have all neuters with an inflection "a little bit peculiar" (Sihler 1995:297), e.g. ἄλειαρ (gen. sg. ἀλείατος) 'wheaten flour' and similarly inflected δέλεαρ 'bait', εἶδαρ 'food', ὕδωρ 'water', εἶλαρ 'protection, shelter', ἦμαρ 'day', ἧπαρ 'liver', ὄνειαρ 'refreshment', οὖθαρ 'udder', σκώρ (gen. sg. σκατός) 'dung', στέαρ 'hard fat', φρέαρ 'well'. Less often, the nom.-acc. sg. form has become an invariable stem, e.g. ἔαρ (gen. sg. ἔαρος) 'spring', θέναρ 'the flat of the band', κέαρ 'heart', πῦρ 'fire'. A few old heteroclitics have become indeclinable, e.g. ὄναρ 'dream', πέλωρ 'monster', πῖαρ 'fat', ὕπαρ 'waking vision'. Lat. has synchronically three heteroclitic neuters. Of them, *femur*, *feminis* 'thigh' shows the expected stem variation. The other two show different kinds of contamination. Although the expected gen. sg. of *iter* 'journey' would be *itinis*, we find instead *itineris* as if from a nom. sg. *itiner*, which indeed is attested in late Lat. A gen. sg. *iteris* also appears. The word *iecur* 'liver' has a gen. sg. *iecinoris* and also *iecoris* as if from *iecus*. A new nom. sg. *iecinus*

was later formed from *iecinoris*. OIr. has a relic form *arbor* 'corn' with a gen. sg. *arbae*, dat. sg. *arbaimm*.

The nature of the heteroclitics is not very well understood. It might be tempting to see in them original agent nouns, i.e. */wod-^r_n-/ 'water' < 'wetter', */wes-^r_n-/ 'a warm season' < 'bringer/doer of good' (cp. Gk. εὖ 'well', Skt. *vásu* 'wealth', OCS *veselъ* 'merry'), */pū-^r_n-/ 'fire' < 'purifier' (cp. Skt. *pūnā́ti* 'to purify'). Shields (1979) has a novel idea concerning the origins of the stem alternation.

3.9. Miscellanea

OCS has three former */t/-stems, *nogъtь* 'nail', *lakъtь* 'elbow', and *trъxъtь* 'a small coin'. Beside */i/-stem forms, the first two build a gen. sg. in *-e* (*nogъte*, *lakъte*) from PIE */-es/. The etymology of all three is somewhat obscure (see ESRJa, s.v. *nógot'* and *lókot'*) but the common derivative element seems to be *-ъt-* from */-ut-/. See Birnbaum & Schaeken (1997:36).

4. Vocalic stems

The concept of OCS "vocalic stems" includes the stems in */-i-/, */-u-/, */-ī-/, */-ū-/, */-o-/ and */-yo-/, */-ā-/ and */-yā-/.

4.1. Stems in */-i-/

The OCS */i/-declension consists of nearly exclusively inanimate feminines and a small number of mostly animate masculines. The feminine type is very productive, mostly owing to one popular derivational */i/-stem suffix. The masculine type is closed, and the masculines are being transferred to the */yo/-stems, probably due to a similar ending in the nom.-acc. sg. and a few other paradigmatic forms. For other possible reasons, see **Chapter III: 5**.

There are no synchronic */i/-stem neuters, but there are two nouns that deserve attention in that connection, viz. the */i/-stem feminine *kostь* 'bone' and the */yo/-stem neuter *moŕe* 'sea'. Comparative evidence strongly suggests that both used to be neuter */i/-stems: Hit. *ḫaštai* 'bone', Skt. *ásthi* 'id.' and Lat. *mare* 'sea', OIr. *muir*ⁿ 'id.'.[8] It is clearly preferrable to see in Gk. ὀστέον a thematicization of an original neuter */i/-stem (Brosman 1978:98, 2000:8), rather than the reflex of a */h₃esth₁-/, as suggested by Sihler (1995:99). OCS *moŕe* is most likely a backformation from the nom.-acc. pl. *moŕa* which may be a direct continuation of a late PIE */i/-stem form */moryā/ = Lat. *maria*, OIr. *muire* (cp. **4.2.**). In addition, *slъnьce* 'sun' could be interpreted as an old */i/-stem (cp. **4.1.2.**), thematicized in a way similar to *srьdьce* 'heart' (see **3.7.**), rather than as an old heteroclitic */su-$^{1}_{r}$-/ that has retained both stem alternants (I do not know of another such instance in any language), cp. Birnbaum & Schaeken (1997:19).

On the Lat. sub-type in *-ēs*, e.g. *fidēs* 'loyalty', and its relations see Brosman (1984, 1986).

4.1.1. Masculines

Most of the few masculines are synchronically simplex and often have close cognates in other IE languages, testifying to their great antiquity:

> *črьvь* 'worm', cp. Lith. *kirmìs* 'id.', Skt. *kŕmiḥ* 'id.', OIr. *cuirm* 'id.', Welsh
>   *pryf* 'id.', Goth. *waúrms* 'id.', all from PIE */kwṛm-i-/
> *ognь* 'fire', cp. Lith. *ugnìs* 'id.', Lat. *ignis* 'id.', Skt. *agníḥ*, all from PIE
>   */Vgn-i-/. The radical vocalism is very obscure, see Stang (1971).
> *ǫglь* 'coal', cp. Lith. *anglìs* 'id.'

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[8] For some ideas concerning the initial consonant in *kostь*, see Swadesh (1970), Hodge (1986), Knobloch (1988:125), Wescott (1993), and Birnbaum & Schaeken (1997:28). A form *ostь* occurs once in the Psalterium Sinaiticum.

There is a small number of deverbal asuffixal nomina agentis. The type occurs in other languages as well, e.g. Gk. τρόχις 'runner' ← τρέχειν 'to run', OIr. *daig* 'fire' ← */dʰegʰ-/ (cp. Skt. *dáhati* 'to burn'). When feminine, these words as a rule refer to the action itself or its result, cp. Gk. δῆρις 'fight' from δέρειν 'to tear', Goth. *krusts* 'gnashing (of the teeth)' from *kriustan*:

> *blędъ* 'talker, windbag' ← *blęsti* (*blęd-*) 'to talk rubbish'; cp. *blędь* (fem.) 'idle talk'.
>
> *bolь* 'sick man' ← *bolěti* 'to be sick'; cp. *bolь* (fem.) 'illness, pain'.
>
> *drъkolъ* 'stick, spear', a peculiar combination from the roots of *dъrati, derǫ* 'to tear' and *klati, kolǫ* 'to pierce'. Another possibility is that the initial element is actually *drъ-*, i.e. */dru-/ 'tree'. Both spellings, *drъkolъ* and *drъkolь*, occur about as often, but the word is usually normalized as *drъkolь*.
>
> *xotь* 'lover' ← *xotěti* 'to want, wish'; cp. *po·xotь* (fem.) 'lust'.
>
> *stražь* 'guard' ← *strěšti* (*strěg-*) 'to watch, guard'.
>
> *u·šidь* 'fugitive, refugee' ← *iti* (*id-, šьd-*) 'to go'.
>
> *ĺudъje* (pl. tant.) 'people'. This word belongs here in a historical sense only; cp. Goth. *liudan* 'to spring, grow' from */lewdʰ-/.

The same applies to the semantics of the few derivatives in */-t-i-/ which, when masculine, always refer to an agent, never to the action itself:

> *gostь* 'guest', cp. Goth. *gasts* 'id.', Lat. *hostis* 'enemy', all from PIE */gʰos-t-i-/. The original semantics of the root */gʰos-/ are perhaps best retained in Gk. ξένος 'foreign' (from */gʰs-en-/). Birnbaum & Schaeken (1997:49), for reasons that remain obscure, reject this etymology and consider the *-t-* in *gostь* as radical.

> *tatь* 'thief' ← *tajati, tają* 'to hide'; cp. OIr. *táith* 'id.' (synchronically
>> inflected as a consonantal stem), both from PIE */tā-t-i-/.
>
> *tьstь* 'father-in-law'. Trubačëv (1959:125) derives this word from */teḱ-ti-/,
>> cp. Gk. τίκτειν 'to beget', τέκνον 'child'.
>
> *malo·moštь* 'crippled' ← *mošti* (*mog-*) 'can'; cp. *moštь* (fem.) 'strength'.

OCS *zętь* 'son-in-law', as Lith. *žéntas* 'id.', is probably a rebuilt kinship term in */-ter-/, related to Skt. *jāmatar-* 'id.'.

The remaining masculines have an opaque structure: *grъtanь* 'throat' (cp. *grъlo* 'id.') with an obsolete suffix, *gvozdь* 'nail' (cognate to Goth. *gazds* 'sting', the declension of which cannot be determined), *golǫbь* 'dove' (according to Holzer 1989:161-162 a borrowing from a previously unknown IE language, referred to as "Tememematic" by him[9]; according to Sławski 1974:62 derived from PIE */$\acute{g}^h$el-/ ~ */$\acute{g}^h$el-/ with a suffix */-om-b^h-/).

The word *gospodь* 'lord' cannot be explained in terms of internal Slavic development. It is most probably a borrowing from Gmc. */gaspadi-/ < PIE */g^host-i-pot-i-/; cp. Goth. *hunda·faþs*, *·fadis* 'centurion'. A discussion can be found in Georgiev (1969:81-83). This also explains why *gospodь*, as a unique case, takes */o/-stem endings in the singular, with the exception of the vocative, but */i/-stem endings in the plural. Goth. masculine */i/-stems have moved to the */o/-declension in the singular inflection, e.g. gen. sg. *·fadis*, dat. sg. *·fada*.

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[9] The term "Tememematic" refers to the sound changes this unknown language is supposed to have undergone with respect to PIE: tenues became mediae while aspiratae became tenues, i.e., the voiceless stops became voiced after which the original aspirated stops yielded plain voiceless stops. I am somewhat troubled by the proposed development, for it is hard to understand why voiceless stops would unconditionally become more marked and, temporarily, leave the language without unmarked voiceless stops.

4.1.2. Feminines

The simple feminines, excluding obvious former consonantal stems (see **3.7.**), are mostly deverbatives, e.g. *vodo·nosь* 'vessel (for water)' ← *nositi* 'to carry', *po·konь* 'beginning' ← *po·čęti* (*·čьn-*) 'to begin' (**App. 6.**). Some, however, are deadjectival, e.g. *zъlь* 'evil(ness)', from *zъlъ* 'evil' (adj.) (**App. 7.**). Probably denominal is *ǫ·dolь* 'valley' from an */u/-stem **dolъ*, petrified case forms of which survive as adverbs (e.g. *dolu* 'down(wards)'). Cp. Goth. *dal* 'valley'.

Well represented is the PIE deverbative type with the suffix */-t-i-/, e.g. *peštь* 'oven', from *pešti* (*pek-*) 'to bake' (**App. 8.**). In one instance, the noun seems to be deadjectival: *slastь* 'pleasure, satisfaction, sweetness' from *slad(ъkъ)* 'sweet'.

Three deverbal nouns contain the suffix */-n-i-/. The type is comparable to Skt. *ghŕṇiḥ* 'heat' (from PIE */gʰwer-/ 'warm'), OIr. *áin* 'driving' (the deverbal noun of *aigid* 'to drive' from PIE */aǵ-/), Goth. *sokns* 'search' from *sokjan* 'to seek', Lat. *pēnis* (*/pes-n-i-/, cp. Gk. πέος 'id.', πόσθη 'id.'):

> *branь* 'battle' ← *brati* (*boŕ-*) 'to fight'; cp. Lith. *barnìs* 'id.' from *bárti*.
> *danь* 'tax, toll' ← *dati* 'to give'.
> *kaznь* 'punishment, order' ← *kazati* 'to punish, order'.

Historically the */yo/-stem masculine *końь* 'horse' may also belong here if it was thematicized from PSl. */kab-n-i-/, cp. *kobyla* 'mare', Lat. *caballus* 'horse'. A probable old neuter belonging here is *slъnьce* 'sun' from */sul-n-i-/ (see **4.1.**). For discussion of the difficult root, see Huld (1986).

Most often one finds contaminated suffixes *-znь* and *-snь* (the latter once), the initial fricative of which was probably abstracted from regular instances like *kaznь*, e.g. *pěsnь* 'song' ← *pěti* (*poj-*) 'to sing', *žiznь* 'life' ← *žiti* (*živ-*) 'to live' (**App. 9.**).

A suffix -*slь* occurs in three deverbal feminines: *lěto·raslь* 'offspring' (and *novo·raslь*, *otъ·raslь* 'id.') from *rasti* (*rast-*) 'to grow', *gǫsli* (pl. tant.) 'stringed instrument' from an unattested **gǫd-* 'to play' (cp. Ru. *gudét'*), and *jasli* (pl. tant.) 'manger' from *jasti* (*jad-*) 'to eat' (for the semantic development, cp. Goth. *uz·eta* 'manger' ← *itan* 'to eat'). More numerous are deverbatives in -*ělь*, e.g. *gybělь* 'disaster, loss' from *gybnǫti* 'to perish' (**App. 10.**).

Two feminines continue a PIE suffix */-r-i-/ (cp. Lat. *imber* 'rain' from */m̥bʰ-r-i-/ < */nebʰ-/): *dъbrь* 'valley' from */dʰub-r-i-/ (Lith. *dubùs* 'deep') and *igrь* 'play, game' from */ig-r-i-/ (cp. Skt. *éjati* 'to stir'). It is possible that the masculine *veprь* 'boar', synchronically a */yo/-stem, also belongs here if it continues */wep-r-i-/; cp. Skt. *vápati* 'to ejaculate'.

The remaining synchronically simplex feminines (**App. 11.**) have an unclear structure.

Some ancient */i/-stem feminines seem to have moved to the */ā/-stems, e.g. *gora* 'mountain', cp. Skt. *giríḥ* 'id.' from PIE */gər-i-/; *sekyra* 'axe', cp. Lat. *secūris* 'id.'; *vlьna* 'wave', cp. Lith. *vilnìs* 'id.' from PIE */wl̥-n-i-/. In later times this was to be the fate of *igrь* 'game' and *sěčь* 'fight' as well which in OCS are still */i/-stems but have become */ā/-stems in Modern Slavic (or parts of it), e.g. Ru. *igrá*, Po. *gra*, Ru. *séča*.

The largest single group of suffixal */i/-stems consists of those derived from adjectives with a suffix -*ostь*, e.g. *dobrostь* 'goodness' ← *dobrъ* 'good' (**App. 12.**). I am tempted to see in -*ostь* a double suffixation -*ot-ь*. Thus, *dobrostь* would be derived from the synonymous *dobrota* with the common suffix -*ь* (PIE */-t-i-/). There is, however, some evidence that */-ost-i-/ existed in the proto-language (see, e.g., Witczak 2002), which, of course, does not make the proposal impossible, perhaps only less likely. For other proposals, see Vaillant (1974:376-377), Arumaa (1985:46), and Birnbaum & Schaeken (1997:50).

The OCS */i/-declension contains numerous Gk. borrowings that include appellatives (*eresь* 'heresy' from Gk. αἵρεσις, attested in the gen. sg. in Cod. Supr.: *obrěte bogoborьnyję eresi potopъ dušьnyjь*) and toponyms (*xrusopolь* from Χρυσόπολις), as well as Hebrew female proper names, which in Gk. were indeclinable (*ijezavelь* from Ἰεζάβελ, attested in the gen. sg. in Cod. Supr.: *běgajь slasti aky ilija ijezaveli*). This suggests that even the asuffixal feminine type remained productive until late. It must, however, be noted that many of these words are hapaxes, attested only in the nom.-acc. sg. Consequently, their declinability cannot always be confirmed (**App. 13.**).

4.2. Stems in */-u-/

The OCS */u/-declension is completely masculine and very small. Not one of the nouns traditionally assigned to this class makes consistent use of the historical */u/-stem desinences. The nouns that historically belong here are, no doubt due to the homophonous nom.-acc. sg., being transferred to the */o/-stems, whereas the latter often use historical */u/-stem endings.

There are no reliable traces of feminine */u/-stem nouns in OCS, yet I would like to suggest two possibilities, *vrьvь* 'rope' and *větvь* 'branch', both synchronically */i/-stems. The root-final -*v*- might be best explained as an old stem vowel */-u-/ that has found itself in a consonantal position before an attached secondary stem vowel */-i-/. The PSl. forms would then be */wir-u-/ < PIE */wṛh-u-/, cp. Gk. Ϝερύειν 'to drag', and */way-t-u-/ < PIE */woy-t-u-/ : */wi-t-u-/, cp. *viti* 'to plait', Gk. οἶσος (*Ϝοῖτϝος) 'willow'.

The feminines seem to have been very rare already in PIE. A more or less certain instance is */ǵen-u-/, continued by Gk. γένυς 'mouth, jaw' and Goth. *kinnus* 'cheek', both feminine. On the geminated -*nn*- of Goth., see Szemerényi (1989:189). The masculine gender of OIr. *giun* 'mouth' is probably secondary, as OIr. has no */u/-stem

feminines. Another possible feminine */u/-stem is PIE */aḱ-u-/, continued by Hit. common gender *akuš* 'sharp stone' and Lat. feminine *acus* 'needle'. Lat. *domus* might suggest that OCS *domъ* used to be feminine (Meid 1957:155, Birnbaum & Schaeken 1997:29), but Gk. δόμος and Skt. *dámaḥ* rather point to an */o/-stem masculine. Besides, the */u/-stem forms of Lat. *domus* are attested late and thus likely to be secondary (see Meier-Brügger 1977:159).

Neuters were more numerous in PIE, and at least the following can be reconstructed:

> PIE */ǵon-u-/ > Skt. *jā́nu*, Gk. γόνυ, Lat. *genū*, Hitt. *gienu*, all 'knee'.
>
> PIE */medʰ-u-/ > Skt. *mádhu* 'honey, mead', Gk. μέθυ 'wine', OIr. *mid* 'mead'. OIr. *mid* is a masculine, but the fluctuation between genders may be old, as this is originally a substantivized adjective.
>
> PIE */dor-u-/ > Skt. *dā́ru* 'wood', Gk. δόρυ 'stem (of a tree)'.
>
> PIE */(d)aḱr-u-/ > Skt. *áśru*, Gk. δάκρυ, Goth. *tagr*, all 'tear'. A discussion of PIE */daḱru-/ and its various reflexes can be found in Sapir's unfinished, posthumously published 1939 article.
>
> PIE */gwer-u-/ > Lat. *verū* 'point of javelin', OIr. *biur* 'spear'.

OCS has traces of at least two */u/-stem neuters, *drěvo* 'tree' and *medъ* 'honey'. The former is still a neuter but it has gone over to the */o/-declension, whereas the latter is still an */u/-stem but has become a masculine. Their different treatment is easily explained by their semantics. PIE */medʰ-u-/, as a noun, was by necessity a singulare tantum. The masculine and neuter */u/-stems were distinguished in the singular only in the nom. sg. (masculine */-s/ vs. neuter */-ø/) and the acc. sg. (masculine */-m/ vs. neuter */-ø/). The PSl. loss of all final consonants thus wiped out everything that made PIE */medʰ-u-/ a non-masculine. PIE */dor-u-/, on the other hand, referring not only to the material 'wood' but also to the countable unit 'tree', occurred frequently both in the singular and in the plural. The gender was retained by the */u/-stem plural forms like

nom.-acc. pl. */der-w-ā/ (OCS *drěva*, with an analogical expansion of the thematic ending, cp. Homeric δοῦρα from */dor-w-ə/[10]), and a new */o/-stem nom.-acc. sg. */der-w-o-/ (OCS *drěvo*) was backformed. Goth. shows exactly the same development in the former */u/-stems *kniu* 'knee' (*/ǵn-ew-o-/) and *triu* 'tree' (*/dr-ew-o-/), backformed from the plural forms *kniwa* (*/ǵn-ew-ā/) and *triwa* (*/dr-ew-ā/), respectively. Gk., Goth. and OCS have generalized different qualitative (*/dor-/ vs. */der-/) and quantitative (*/der-u-/ vs. */dr-ew-/) grades of the original proterodynamic noun.

OCS has three masculines that with some certainty continue an original */u/-stem and which are more or less consistently declined as */u/-stems:

> *synъ* 'son', cp. Skt. *sūnúḥ* 'son', Goth. *sunus* 'id.', Lith. *sūnùs* 'id.', all from
>   PIE */sūn-u-/.
> *medъ* 'honey', see above.
> *vrъxъ* 'top, peak', cp. Lith. *viršùs* 'id.', both from PIE */wr̥s-u-/.

In addition, many nouns, some of them almost certainly original */o/-stems, often follow this declension, e.g. *darъ* 'gift, reward' (cp. Gk. δῶρον), *domъ* 'house' (**App. 14.**).

The mechanisms by which several PIE */u/-stems have been transferred to other declensions are discussed in Orr (1996). Possible traces can also be seen in the deverbative type in *-tva* (**4.6.3.12.**) and the neuters in *-ьstvo* (**4.5.2.3.10.**).

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[10] Probably even the Gk. ending is secondary, replacing the old neuter */u/-stem nom.-acc. pl. termination */-ū/ < */-uh/. The latter, again probably, survives in OIr., see Strachan (1899).

4.3. Stems in */-ī-/

The vocalic stems in */-ī-/ are often divided into the so-called devī- and vrkī-stems, so named after their characteristic representatives in Skt., viz. *devī́* 'goddess' and *vṛkī́ḥ* 'she-wolf' (the two types, distinct in Vedic, merged in the classical language). Synchronically speaking, this division is meaningless for OCS although both historical types are represented (see Meid 1957b:15-16, Kortlandt 1997).

Although the OCS type as such is inherited, the nouns contained by it are not, with one possible exception: *tysęšti* 'thousand' agrees with Goth. *þūsundi* 'id.', both from */tūs-ḱṃt-ī/. Reconstructable PIE */ī/-stems have been transferred to the */ā/-declension, mostly by the addition of */-k-ā-/, cp. *mъšica* 'fly' ≈ Gk. μυῖα 'id.', both from PIE */mus-ī/. For several other examples of original */ī/-stems, see Hirt (1912) and Arumaa (1985:80-90). It is plausible that the nouns in *-ica* are secondary thematicizations of older consonantal stems, i.e. PIE */mus-ī/ > PSl. */mus-ī-k-/ > */mus-ī-k-ā/. This would be comparable to the treatment of */ī/-stems in Lat., cp. *genitrīx* 'mother' vs. Skt. *jánitrī*, Gk. γενέτειρα, all from */ǵenə-tr-ī/.

OCS */ī/-stems, the inflection of which differs from that of the */ā/-stems only in the nom. sg. (where they end in *-i*), fall into several derivational categories. By far the most numerous are feminines in *-yńi*. (Vaillant 1974:387-388 believes the suffix is borrowed from Gmc.) The palatalization of *-ń-* probably spread from oblique forms, where it is regular, e.g. acc. sg. *-ńǫ* < */-nyām/ (Birnbaum & Schaeken 1997:24). They are either deadjectival abstracta, e.g. *pravyńi* 'justice, rightness' ← *pravъ* 'right, straight' (**App. 15.**), in which case they are synonymous to the */i/-stems in *-ostь* (**4.1.2.**), or denominal, e.g. *bogyńi* 'goddess' ← *bogъ* 'god' (**App. 16.**), in which case they mostly denote animates. The productivity of this class is indicated by many borrowings, e.g. *sȳro·finikissanyńi* 'Phoenician woman from Syria' (translating Gk. Συροφοινίκισσα) and even *magъdalyńi* 'Magdalene', from Gk. Μαγδαληνή, adopted here due to phonetic similarity.

There are three feminines and four masculines, the latter denoting animates, built with a suffix */-iy-ī/, e.g. fem. *ladьji* 'boat, ship' (**App. 17.1.**), masc. *balьji* 'physician' (**App. 17.2.**). Six masculines, all denoting a profession, contain a suffix */-kiy-ī/, e.g. *korabьčьji* 'sailor' ← *korabь* ~ *korabĺь* 'ship' (**App. 18.**).

Finally, this declensional class contains a fair number of borrowed personal names and toponyms, e.g. *eremioni* (fem.) ← Gk. Ἑρμιόνη, *iosьji* (masc.) ← Gk. Ἰωσῆ, *vitьfagьji* ← Gk. Βηθφαγή (**App. 19.**), and a few appellatives, e.g. *eresevьji* 'a plant disease (of rye)' ← Gk. ἐρυσίβη (**App. 20.**). I would, despite Vasmer (ESRJa, s.v. *pereginja*), consider *prěgyńi* 'wild mountainous region' as a borrowing from Gmc. */fergunya-/ → Goth. *faírguni* 'mountain' (with the substitution */f/ → */p/ as in *pila* 'saw' ← OHG *fíl*) < PIE */perku-/. Cp. the Celtic form that is indirectly attested in Gk. Ἑρκύνια δρυμά (Aristot.), Schmidt (1992:167).

4.4. Stems in */-ū-/

OCS */ū/-stems are all feminine. The class contains at least eleven nouns, at least six of which are borrowings, mostly from Gmc. The native items are

> *kry* 'blood', now attested in the recently found Psalterium from the Sinai (Birnbaum & Schaeken 1997:30). Otherwise the old acc. sg. *krъvь* is used as the nom. sg. as well. From PIE */krū-/, the zero grade of */krewə-/ which is reflected in Gk. κρέϜας 'flesh, meat' and Skt. *kravíḥ* 'id.'.

> *žrьny* 'millstone', cp. Goth. */u/-stem *asilu·qaírnus* 'mill', which is probably feminine (this is inferrable from OE *cweorn* 'id.'), both from PIE */gwērn-u-/ : */gwṛ:n-u-/.

> *loky* 'pond', cp. Lat. *lacus*, OIr. *loch*, both 'lake' (both */u/-stems), all from PIE */lok-u-/.

ĺuby 'love, lust, attraction', from the adjective *ĺubъ* 'dear', related to Goth.
    liufs 'id.', from PIE */lewb^h-/.

ne·plody 'sterile woman', from *plodъ* 'fruit', probably an original */u/-stem
    as can be inferred from the adjective *plod-ov-ьnъ* 'fruitful'.

cěly 'healing', from the adjective *cělъ* 'whole, healthy', related to Goth. *hails*
    'id.', both from PIE */koyl-/.

It seems obvious that *ne·plody* is a feminine bahuvrīhi adjective from *plodъ*, while at least *ĺuby* and *cěly* are best interpreted as original collectives (historically there is no difference between the two, see **2.1.**). See Meid (1957b:8).

One additional word belongs here historically: **bry* 'eye-brow', attested once in the instr. pl. *brъvьmi* in Cod. Supr. It is impossible to determine whether its nom. sg. was *bry* or *brъvь*. The word continues PIE */b^{h}rū-/ and is identical to Skt. *bhrūḥ*, Gk. ὀφρύς, OE *brú*, all 'id.'.

The masculines seem to have been very few already in PIE, which is understandable given that the class consists almost exclusively of derived feminines and feminine adjectives. Masculines should therefore be sought among the radical stems. There are traces of two such words in OCS:

bykъ 'bull'. Gribble (1973) derives the word from a verbal root */b^{h}ew-/ : */b^{h}ū-/ 'swell, puff up' + an agent suffix */-k-o-/. More likely, in my opinion, PSl. used an onomatopoetic root */bū-/ as an adjective, i.e. 'one that goes *bū*'. This is also suggested by the suffix */-k-o-/, which is the usual instrument for transferring old */u/-stem adjectives, but not nouns, to the */o/-declension, cp. *sladъkъ* 'sweet' vs. Lith. *saldùs* 'id.'.

językъ 'tongue, language', related to Lith. *liežuvìs*, OPr. *insuwis*, Goth. *tuggo* etc., all from PIE */dn̥ǵʰū-/. On the Lith. form, see Hamp (1979:44). I have no idea what Hilmarsson (1982:358) means when he says that "[o]ur present understanding of the resonants and their vocalization, of course, forbids" the derivation of Balto-Slavic */in-/ from PIE */dn̥-/. Hilmarsson's idea that the word is a compound of */dn̥t-/ or */n̥-/ 'in, inside' and */ǵʰdʰū-/ 'fish' (Gk. ἰχθύς) does not make any sense semantically and is phonologically impossible. The word for 'fish' must have been */dʰǵʰū-/, since a */ǵʰdʰū-/ would have yielded Lith. *žduvìs, not the existing *žuvìs. Gk. ἰχθύς thus arose from a metathesis, in exactly the same way as χθών 'earth' vs. Hit. *tekan*. A similar metathesis also took place in Skt., cp. *kṣam-* 'earth'. Therefore PIE */dʰǵʰū-/ would yield Skt. *kṣū-, not the existing *ju·hū́ḥ* 'tongue', which can only continue */ǵʰū-/. It can thus be concluded that the word for 'tongue' can have nothing to do with that for 'fish'. The identity between Lith. *žuvìs* and the last element of *liežuvìs* is secondary; it came about as a consequence of the fact that both PIE */dʰǵʰ/ and */ǵʰ/ yield Lith. *ž* (and Slavic *z*).

Winter's reconstruction */n̥dʰ-/ (Skt. *adháḥ* 'below') + */ǵʰeAw-/ (Winter's notation) (Gk. χάος 'infinite space, atmosphere', Lat. *faucēs* 'throat, narrow entrance'), i.e. 'that which is below the root of the mouth', with a subsequent metathesis of the initial complex cluster, is semantically plausible, but a metathesis does not explain the */d-/ (instead of */dʰ-/) required by Goth. *tuggo* and OLat. *dingua*.

I believe the correct analysis is */dn̥t-/ 'tooth' + the verbal root */ǵʰū-/, the zero grade of */ǵʰewə-/ 'call', cp. Skt. *hávate* 'to call', pass. past ptcl. *hūtá-*, OCS pres. 3rd sg. *zovetъ*, inf. *zъvati* 'id.'. PIE */dn̥ǵʰū-/ is thus a substantivized bahuvrīhi adjective naming the location (behind or between the teeth) and the function of the organ in question. Like *bykъ* and the */u/-

stem adjectives, it has been transferred to the */o/-declension with the suffix */-k-/. There is no need for a laryngeal hardening à la Martinet (1956) to account for the latter.

Surprisingly, considering the marginal position of the */ū/-stems in OCS and their gradual shift to the */i/-stems (*krъvь*, **brъvь*), there are six relatively recent borrowings. Their ending up in this declension was probably phonetically motivated (Halla-aho 2005).

> *brady* 'axe' from Gmc. */bardõ/, cp. Germ. *Barte*.
> *buky* 'document, book' from Gmc. */bōkō/, cp. Goth. *boka*.
> *svekry* 'mother-in-law' from Gmc. */swexrõ/, cp. Goth. *swaíhro* (see Halla-
> aho 2005).
> *smoky* 'fig' from Gmc. */smakkō/, cp. Goth. *smakka*.
> *xorǫgy* 'sceptre' from Mongolian, see ESRJa, s.v. *xorúg(o)v'*.
> *crъky* (and *cirky*) 'temple, church, assembly' from Gmc. */kir(i)kõ/, cp. OE
> *cirice*

For a discussion of further relics of PIE */ū/-stems in Slavic, as well as of their semantic classification, see Arumaa (1985:63-68).

4.5. Stems in */-o-/

Stems in */-o-/ form the largest non-feminine nominal stem class in all (excluding Hittite) IE languages, containing more masculines and neuters than all other declensions together. Due to its productivity, it has also been especially prone to morphological rearrangements and innovations. Stems in */-o-/ are distinguished from most other noun classes by the virtual absence of ablaut. For some views on the stem-vowel alternation */-o-/ : */-e-/, see Gray (1932:184) and Mottausch (2001).

The */o/-stems seem to be the youngest PIE stem class, with the exception of the */ā/-stems, which are derived from the former. It has been proposed that the class emerged from reanalyzed athematic genitive attributes in */-os/ (Brosman 1998). Brugmann (1920) suggests that Lat. *humus* 'earth' continues an old gen. sg., comparable to Gk. χθονός. This idea would also explain why the */o/-stem nom. sg. and gen. sg. are identical in Hit., and why the reconstruction of a common */o/-stem proto-genitive seems so difficult (Gray 1932:185-186, Shields 1991).

Gk. and Lat. have a small number of feminine */o/-stems, whose historical status is not clear, e.g. Gk. νῆσος 'island', νόσος 'disease', νυός 'daughter-in-law', ὁδός 'way', παρθένος 'virgin', Lat. *alvus* 'stomach', *cunnus* 'vagina', *humus* 'earth'.

The OCS masculines and neuters are described below separately.

4.5.1. Masculines
4.5.1.1. Asuffixal nouns
Most of the simple, asuffixal, masculines are deverbatives. Some, however, do not have a transparent verbal connection and seem to be very old. Examples are:

> *bogъ* 'god', cp. Skt. *bhágaḥ* 'wealth, food, god', Gk. φάγος 'glutton', all from */bʰag-o-/. The original root */bʰag-/ seems to have referred to 'eating', 'food', 'wealth', hence to the provider or sharer of food and wealth, i.e. 'god'. Cp. OCS *u·bogъ* 'poor' ('unwealthy'), *bog-atъ* 'rich', Skt. pres. 3rd sg. *bhájati* 'share, divide', *bhágavant-* 'bounteous'. For the semantic development, see Jucquois (1965). It is sometimes claimed on semantic grounds that *bogъ* is an Iranian borrowing, e.g. Schlerath (2001). This is an unnecessary assumption.
> *ǫgъlъ* 'angle, corner', cp. Lat. *angulus* 'id.', both from */angul-o-/.

divъ 'astonishment, wonder', cp. Skt. *deváḥ*, Lith. *diẽvas*, Lat. *deus*, OIr. *día* 'god', all from */deyw-o-/.

zvonъ 'noise', cp. Toch. B *kene* 'music, tune', both from */ǵ⁽ʰ⁾won-o-/. According to Holzer (1986:86-96), a borrowing (see **4.1.1.**, fn.9).

dymъ, cp. Skt. *dhūmáḥ*, Lat. *fūmus* 'smoke', Gk. θυμός 'soul, breath', all from */dʰūm-o-/.

sramъ 'shame', cp. ON *harmr* 'harm', both from */ḱorm-o-/.

gradъ 'city', *prě·gradъ* 'vestibule', cp. Lith. *gar̃das* 'fence', Skt. *gr̥háḥ* 'house', all from */gʰordʰ-o-/. The different ablaut grades may suggest that this is an original root noun.

štitъ 'shield', cp. Lith. *skiẽtas* 'id.', OIr. *scíath* 'id.', all from */skeyt-o-/.

turъ 'bull', cp. Gk. ταῦρος 'id.', Lat. *taurus* 'id.', Lith. *taũras* 'id.', Goth. *stiur* 'steer', all from */(s)tawr-o-/ : */(s)tewr-o-/.

sokъ 'juice', cp. Gk. ὀπός 'id.', Toch. B *sekwe* 'pus', all from */sokw-o-/.

sěverъ 'north, northern wind', cp. Lat. *caurus* 'north-west wind', both from */sḱēw(e)r-o-/; cp. also Lith. *šiáurė* 'north', *šiūras* 'winterly', Goth. *skūra* 'shower'.

dvorъ 'court(yard)', cp. Lith. *dvãras* 'court', Toch. B *twere* 'door'.

vlьkъ 'wolf', cp. Skt. *vŕ̥kaḥ* 'id.', Goth. *wulfs* 'id.', Lith. *vil̃kas* 'id.', Toch. B *walkwe* 'id.', all from */wl̥kw-o-/.

gadъ 'snake, any creeping repulsive animal', cp. OHG *quât* 'evil', both from PIE */gwōdʰ-o-/, possibly a substantivized adjective; cp. also Lith. *gė́da* 'shame'.

měxъ 'leathern bag, wineskin', cp. Lith. *maĩšas* 'sack', Skt. *mešáḥ* 'ram, skin', all from */moys-o-/.

rabъ 'slave, servant', cp. Lat. *orbus* 'bereaved, parentless', both from */orbʰ-o-/, probably a substantivized adjective.

krǫgъ 'circle', cp. ON *hringr* 'ring', both from */krᵉₒngʰ-o-/.

Additional synchronically non-derived simple masculines are given in **App. 21**. As stated above, the most common type of asuffixal masculines are */o/-grade deverbatives. At least the following formations can be traced back to PIE:

> *sъ·borъ* 'gathering, meeting' ← *bьrati* (*ber-*) 'to gather', cp. Gk. φόρος 'that which is brought in, tribute' ← φέρειν 'to carry', both from */bʰor-o-/ ← */bʰer-/.

> *raz·dorъ* 'quarrel' (metaphorically from 'tearing') ← *dьrati* (*der-*) 'to tear', cp. Gk. δορός 'leathern bag' (i.e., a product of 'skinning') ← δέρειν 'to skin', both from */dor-o-/ ← */der-/.

> *gladъ* 'hunger' ← *žlьděti* (cp. SCr. *žúdjeti* 'to wish'), cp. Skt. *gárdhaḥ* 'thirst' ← *gŕ̥dhyati* 'to be greedy', both from */gʰoldʰ-o-/ ← */gʰl̥dʰ-o-/.

> *zǫbъ* 'tooth' ← *zęti* (*zęb-*) 'to gnaw', cp. Gk. γόμφος 'bolt', Toch. B *keme*, Skt. *jámbhaḥ* 'tooth', OE *camb* 'comb', all from */ǵombʰ-o-/ ← */ǵembʰ-/.

> *morъ* 'plague, pestilence' ← *mrěti* (*mer-*) 'to die', cp. Lith. *mãras* 'plague' ← *mìřti* 'to die', Gk. μόρος 'fate, ruin, death', all from */mor-o-/ ← */mer-/.

> *o·strovъ* 'island' ← obsolete **struti* (**strov-*), cp. Gk. ῥόϝος 'stream' ← ῥέϝειν 'to flow', both from */srow-o-/ ← */srew-/.

> *tvorъ* 'creation', *za·tvorъ* 'bolt (for closing a door)', *pri·tvorъ* 'colonnade, cloister' ← obsolete **tver-*, cp. Lith. *ãp·tvaras* 'fence' ← *tvérti* 'to enclose', Gk. σορός 'urn, coffin', all from */twor-o-/ ← */twer-/. Cp. */i/-stem vrddhi *tvarь* 'creation'. According to Holzer (1989:81-84), this group, both in Slavic and Baltic, was borrowed from "Tememematic" (see **4.1.1.**, fn.9).

vozъ 'chariot' ← *vesti* (*vez-*) 'to transport', cp. Gk. ὄχος 'id.' (usually an
　　　*/es/-stem neuter but sometimes an */o/-stem masculine), both from
　　　*/woǵʰ-o-/ ← */weǵʰ-/.

In some cases the deverbative seems to be an old adjective:

ot·lěkъ 'remains' ← obsolete **lik-*, cp. Gk. λοιπός (adj.) 'remaining' ←
　　　λείπειν 'to leave, abandon', both from */loykw-o-/ ← */leykw-/.

vъ·lazъ 'entrance' ← *·lěsti* (*·lěz-*) 'to go, creep, sneak', cp. ON *lágr* 'low',
　　　both from */lōǵʰ-o-/ ← */lēǵʰ-/. Also *za·lazъ* 'danger', *sъ·lazъ*
　　　'descent'.

ob·(v)lakъ 'cloud' ← *vlěšti* (*vlěk-*) 'to drag, pull', cp. Gk. ὁλκός 'that which
　　　draws' ← ἕλκειν 'to draw, drag', both from */wolk-o-/ ← */welk-/.

The remaining masculine */o/-stem deverbatives are given in **App. 22**.

There are three reduplicated asuffixal deverbal masculines:

glagolъ 'word, speech, thing' from PSl. */gal-gal-a-/ (cp. Eng. *call*).
tǫ·tьnъ 'noise' (cp. Lat. *tin·tinnāre* 'to tinkle').
popelъ ~ *pepelъ* 'ash(es)', cp. *paliti* 'to set on fire', *politi* 'to blaze up'. The
　　　variant *popelъ* probably reflects secondary identification of the
　　　reduplicating syllable as the prefix *po-* (Hamp 1972:158).

4.5.1.2. Onomatopoetics

The following */o/-stem masculines can be classified as onomatopoetic in nature:
lopotъ 'any loud noise', *klьčьtъ* 'knocking', *kokotъ* 'rooster', *skrьžьtъ* 'gnashing',
strьkъ 'swan'.

4.5.1.3. Borrowings

Transparent borrowings came from two main sources, Gmc. (**App. 23.1.**) and Gk. (**App. 23.2.**). The former are older than the latter, as is clearly shown by the sound substitution. The OCS */o/-stem masculine declension is the deposit for all Gmc. */o/-stems, whether masculine (OCS *dlъgъ* 'debt' ← Gmc. */dulgaz/) or neuter (OCS *xyzъ* 'hut, cabin' ← Gmc. */xūsa(n)/), and also all */u/-stems (*osьlъ* 'donkey' ← Gmc. */asiluz/). Most Lat. and Asiatic words likewise entered late PSl. through Gmc., e.g. *mъnixъ* 'monk' ← OHG *munih* ← Vulgar Lat. *monicus, velьbądъ* 'camel' ← Goth. *ulbandus* 'id.' ← Hit. *huwalpant-* 'hunchback' (cp. Gk. ἐλέφας, ἐλεφάντος from the same source). There are scattered borrowings from Turkic and Iranian sources (**App. 23.3.**).

4.5.1.4. Suffixal masculine */o/-stems

The elements that are used in building derived */o/-stem masculines can be divided into */s/-, */n/-, */t/-, */r/-, */y/-, */l/- and */k/-suffixes. There are also less numerous traces of other derivational extensions.

4.5.1.4.1. Nouns in */-s-o-/

The nouns with a suffix */-s-o-/, often realized as -*xъ* either phonologically or analogically, constitute a heterogeneous group. Most of those whose derivation can be determined are deverbal. The instances are:

> *běsъ* 'demon' from PIE */bʰoyd-s-o-/, cp. Lith. *baĩsas* 'ghost' and, without
> */-s-/, Lat. *foedus* 'foul, filthy'.
> *grěxъ* 'sin', cp. *sъ·grěti sę* 'to grow hot'.
> *duxъ* 'spirit', *vъz·duxъ* 'air', cp. *na·duti sę* 'to swell, boast'. The */-s-/-
> formation seems to be very old, cp. Lith. *daũsos* (pl. tant.) 'air', Goth.
> *dius* 'animal' (*/o/-stem neuter), all from */dʰew-s-o-/. The ultimate
> root is */dʰew-/ > Goth. *diwan* 'to die'.

ženixъ 'bridegroom' from *ženiti* 'to marry'.

spěxъ 'effort', *po·spěxъ* 'ability, strength', *u·spěxъ* 'profit, success' ← *spěti* 'to succeed'.

sluxъ 'hearing', *po·sluxъ* 'witness' ← *sluti* 'to be known as'.

vlasъ 'hair', cp. Gk. οὖλος 'fine, thick, twined', both from */wol-s-o-/ and derived from PIE */wel-/ whence OCS *vьlati* 'to undulate', Lat. *volare* 'to fly, speed'.

směxъ 'laughter' ← *smijati sę*, *směją sę* 'to laugh'.

glasъ 'voice' from */gol-s-o-/ with the same root as in the reduplicated *glagolъ* 'word, thing, speech'.

lisъ 'fox' if from something like PSl. */wleyp-s-a-/ via Lidén's Law. Shevelov (1964:196) explains the chaotic vocalism in *lisъ*, Lat. *vulpēs*, Gk. ἀλώπηξ, Lith. *lãpė* as "attributable to taboo motives". Latv. *lapsa* < */wlap-s-ā-/, apart from the root vowel, is a close parallel to PSl. */wleyp-s-a-/. For discussion, see Blažek (1998b) and Schrijver (1998).

4.5.1.4.2. Nouns in */-n-o-/

4.5.1.4.2.1. *-nъ*

There are two nouns with */-n-o-/ attached to a verbal root, viz. *stanъ* 'camp' ← *stati* 'stand (up), stop, rise' and *sъnъ* 'sleep' ← *sъpati*, but the latter may continue a generalized oblique stem of a heteroclitic neuter (**3.8.**), while *stanъ* may be an old pass. past ptcl. of *stati*.

4.5.1.4.2.2. *-inъ*

The suffix *-inъ* is a very productive singulative element, used mostly with consonantal-stem pluralia tantum nouns denoting nationalities (see **3.2.**). In addition, the following occur:

žitelinъ 'inhabitant'; a backformation from a *-tel*-stem nom. pl. *žitele* ←
    žiteĺь 'id.'.

člověčinъ 'a little man' (pejorative) ← *člověkъ* 'man'.

žęteĺaninъ 'reaper'; an interesting case of multiple suffixation. The ultimate
    source is the *-tel*-stem *žęteĺь, žętele* 'id.', extended with the plural
    suffix *-jan-, žęteĺane*, and finally the singulative *-in-, žęteĺaninъ*.

gospodinъ 'lord, master' ← *gospodь* 'id.'.

ispolinъ 'giant'.

židovinъ 'Jew'; possibly a backformation from an */u/-stem nom. pl. *židove*
    ← *židъ* 'id.'.

ĺudinъ 'man' ← pl. tant. *ĺudьje* 'people'.

poganinъ 'heathen' ← Lat. *pāgānus* 'rustic, civilian'.

4.5.1.4.3. Nouns in */-t-o-/

Six or so nouns are built by adding */-t-o-/ directly to a root, in most cases verbal:

potъ 'sweat' ← *pešti* (*pek-*) 'to bake', i.e. */pokw-t-o-/ ← */pekw-/.

mastъ 'grease, oil' ← *mazati, mažǫ* 'to grease, anoint', i.e. */mōǵ-t-o-/.

mlatъ 'hammer' ← *mlěti, meĺǫ* 'to grind', i.e. */mol-t-o-/ ← */mel-/.

platъ 'a half' ← *polъ* 'id.', *pola* 'id.', i.e. */pol-t-o-/.

sǫ·po·statъ 'enemy' ← *stati* 'to stand up', i.e. */stā-t-o-/.

listъ 'leaf', cp. Lith. *laĩškas* 'id.', i.e. */leysk-t-o-/.

Three nouns have a connecting vowel between the root and */-t-o-/:

trepetъ 'fear, horror' ← *trepetati* 'to shake', cp. Gk. τρέπειν 'to turn, guide,
    overthrow, upset'.

životъ 'life' ← *žiti* (*živ-*) 'to live', cp. */i/-stem *žitь* 'id.' and *žiznь* 'id.'.

xobotъ 'tail', possibly related to Lith. *kabė́ti* 'to hang' (the initial *x-* is
unexpected in any case).

4.5.1.4.4. Nouns in */-r-o-/

There are four nouns with */-r-o-/ attached directly to a verbal root:

žirъ 'pasture' ← *žiti* 'to live'.
pirъ 'party' ← *piti* 'to drink'.
pro·nyrъ 'wickedness, badness' ← **nyti*, cp. *u·nyti* 'to collapse mentally'.
darъ 'gift' ← *dati* 'to give', this seems to be an ancient formation, cp. Gk.
δῶρον 'id.'.

A few more have a connecting vowel:

sěverъ 'north' from PIE */(s)ḱēw-/, cp. Lith. *šiáurė* 'id.', Lat. *caurus* 'north-
west wind'; the original root can possibly be seen in Goth. *skewjan* 'to
go, walk'.
stežerъ 'foundation, base', cp. Lith. *stegerỹs*, possibly related to Gk. στέγειν
'to cover', Lat. *tegere* 'id.', etc.

The word *govorъ* 'noise' may belong here if it continues PIE */gow-/ (Gk. γόϝος
'weeping, wailing') : */gu-/ (OIr. *guth* 'voice'). It can, however, be a backformation
from *govoriti* 'to make noise', which may formally be a borrowing from Goth.
ga·warjan 'to forbid', cp. *vъ·kusъ* 'temptation' ← *vъ·kusiti* 'to tease' ← Goth. *kausjan*
'id.'.

4.5.1.4.5. Nouns in */-y-o-/

4.5.1.4.5.1. -*jь*

Non-verbal (at least transparently) masculines that were built with a simple suffix */-y-o-/ are very rare: *vojь* 'army', *vračь* 'physician', *košь* 'wicker basket', *mǫžь* 'man, husband', and *strojь* 'household, order'. A few more are probably thematicized */i/-stems: *końь* 'horse' and *veprь́* 'boar' (see **4.1.2.**). The noun *dъždь* 'rain' continues PIE */dus·dyu-/ 'bad day' and is thus a radical stem. The deverbatives, e.g. *voždь* 'leader' from *vesti* (*ved-*) 'to lead' or the iterative *voditi*, are more numerous (**App. 24.**).

Two deverbal instrumental nouns appear to have been built with a complex */-k-y-o-/, viz. *bičь* 'whip' ← *biti* 'to hit' and *kĺučь* 'key' ← obsolete **kĺuti*; cp. Lith. *kliáuti* 'to bend, twist', Lat. *clāvis* 'key', and Gk. κληΐς 'id.'.

4.5.1.4.5.2. -*ajь*

Four abstract deverbatives were built with */-yā-y-o-/:

> *po·lučajь* 'fate, destiny, lot', *pri·lučajь* 'incident, coincidence', *sъ·lučajь* 'id.'
>> ← *po·lučiti* 'to gain, receive'.
> *ob·(v)yčajь* 'custom, manner' ← *vyknǫti* 'to learn, be accustomed'.
> *pri·myšĺajь* 'scribble, whim', *u·myšĺajь* 'id.', *roz·myšĺajь* 'intellect, reason'
>> ← *pri·mysliti* 'to come up with, invent'.
> *pri·kĺučajь* 'incident, coincidence' ← *pri·kĺučiti sę* 'to happen, take place'.

Birnbaum & Schaeken (1997:40) reconstruct */-ē-y-o-/ which agrees with the nouns with a root-final velar but not as well with ·*myšĺajь*.

4.5.1.4.5.3. -*tajь*

Four nomina agentis were built with */-tā-y-o-/. The archetype is *ratajь* 'farmer' ← *rati* (*orǫ*) 'to till' corresponding to Lith. *artójas* ← *árti*, both from PIE */arə-/. The

synchronic irregularity between the inf. *rati* and the pres. stem *oŕ-*, caused by the liquid metathesis, was removed by remodeling the former to *orati*, with a new segmentation of the old root infinitive *ra-ti* as *or-a-ti* (i.e., according to the type *stenati* 'to lament' : *steńǫ*). This gave rise to a secondary *oratajь*, from which -*atajь* was reanalyzed as the suffix. Consequently, we have *vodatajь* 'leader' ← *voditi* 'to lead', *xodatajь* 'defender, assistant', *is·xodatajь* 'id.' ← *xoditi* 'to go', *po·zoratajь* 'spectator' ← *zьrěti* 'to watch'.

4.5.1.4.5.4. -*ьjь*

Half a dozen masculines were built with */-i-y-o-/, e.g. *vrabьjь* 'sparrow' (**App. 25.**). The productivity of this type is shown by the many Gk. borrowings ending in -ιον or -ιος contained by it (**App. 26.**).

4.5.1.4.5.5. -*ištь*

Ten or so diminutives contain a complex */-ey-t-y-o-/, e.g. *grъličištь* 'young turtle-dove' ← *grъlica* 'turtle-dove' (**App. 27.**).

4.5.1.4.6. Nouns in */-l-o-/

Three nouns contain a suffix -*ьlъ* (*/-i-l-o-/), which may or may not have been abstracted from the Gmc. borrowings *osьlъ* 'donkey' and *kotьlъ* 'kettle' (Birnbaum & Schaeken 1997:42):

> *orьlъ* 'eagle' from PIE */or-/ : */er-/, cp. Lith. *erẽlis* 'id.', Gk. ὄρνις 'bird', Goth. *ara* 'vulture'.
> *pьсьlъ* 'pitch'. The root *pьс-* from PIE */pik-/ (through the Third Palatalization) is the same as in Gk. πίσσα 'id.' (from */pikyə/) and Lat. *pix, picis* 'id.'. The suffixation cannot be very old, for otherwise we would expect *pьčьlъ*. The immediate source for *pьсьlъ* is probably an */o/-stem *pьсь* or an */ā/-stem *pьca*.
> *kozьlъ* 'goat' ← *koza* 'she-goat'.

4.5.1.4.7. Nouns in */-k-o-/

4.5.1.4.7.1. -kъ, -cь

In the simplest type the suffix */-k-o-/ was added directly to a verbal root or an older stem. There are four such instances:

> *brakъ* 'marriage', as if from */bʰor-k-o-/, ← *bьrati* (*ber-*) 'to gather'.
>
> *zrakъ* 'sight, look, form', *o·zrakъ* 'id.', as if from */ǵ⁽ʰ⁾or-k-o-/, ← *zьrěti* 'to see, watch'. Cp. *vъ·zorъ* 'sight'.
>
> *měsęcь* 'month, Moon', as if from */mēns-n̥-k-o-/. The suffix was apparently added to the zero grade of an old */en/-stem.
>
> *zlakъ* 'shoot of plants, foliage', as if from */ǵʰol-k-o-/, cp. *zelenъ* 'green', Lith. *žãlias* 'green, raw'.

4.5.1.4.7.2. -ъkъ

A bit more numerous are nouns in -ъkъ, e.g. *šipъkъ* 'rose'. In deverbatives the suffix is preceded by either -*n*-, e.g. *o·stanъkъ* 'remains', or -*t*-, e.g. *o·statъkъ* 'id.', both from *o·stati* 'to remain', suggesting that the source of derivation is the pass. past ptcl. (**App. 28.**).

4.5.1.4.7.3. -ikъ

A very popular */k/-suffix, used almost exclusively to derive personal nouns from adjectives in -*ьn*- and pass. past participles in -*en*-, is -*ikъ*, e.g. *grěšьnikъ* 'sinner' ← *grěšьnъ* 'sinful' ← *grěxъ* 'sin' (**App. 29.**). In the isolated *zlatikъ* 'gold coin' the suffix is attached directly to the root (*zlato* 'gold') and has a diminutive (or singulative) meaning.

4.5.1.4.7.4. -ьcь

The suffix -*ьcь*, from PIE */-i-k-o-/, has several functions. It builds diminutives from other nouns, although very often the resulting form is (synchronically) identical in

meaning with the source noun, e.g. *cvětьсь* 'flower' from *cvětъ* 'id.' (**App. 30.1.**). On the other hand, it builds deadjectival nouns denoting a person (very rarely an animal) with the quality indicated by the source adjective, e.g. *ĺutьсь* 'severe person' from *ĺutъ* 'severe' (**App. 30.2.**). Denominal nomina agentis, e.g. *kaznьсь* 'warlord' from *kaznь* 'punishment, order', are less common (**App. 30.3.**). But most often the suffix is used to derive agent nouns from verbs (**App. 30.4.**). The deverbatives are largely synonymous with act. pres. participles and agent nouns in -*ьn-ikъ* (above) and -*tel-* (**3.1.**). Historically, the suffix is identical to Gk. -ικος, which is adjectival and corresponds semantically to OCS -*ьnъ*, which, in turn, is the adjectival equivalent of -*ьсь*.

4.5.2. Neuters
4.5.2.1. Asuffixal nouns
Simple neuters are very rare in OCS. Those with a more or less solid etymology are:

> *vino* 'wine', cp. Lat. *vīnum* 'id.', Goth. *wein* 'id.', all from */weyn-o-/, probably a cultural borrowing.
>
> *zlato* 'gold', cp. Goth. *gulþ* 'id.'. Probably a petrified neuter form of an adjective, cp. Lith. *žeĺtas* 'golden'. All from */ǵʰolt-o-/ : */ǵʰelt-o-/ : */ǵʰḷto-/. Birnbaum & Schaeken (1997:40) see in *zlato* a zero grade *zl-*, which, of course, is not the case, as shown by West and East Slavic, cp. Po. *złoto*, Ru. *zóloto*.
>
> *vedro* 'good weather', cp. OHG. *wetar* 'weather', both from */wedʰr-o-/.
>
> *zrьno* 'grain', cp. Skt. *jūrṇám* 'id.', Lat. *grānum* 'id.', OIr. *gránⁿ* 'id.', and Goth. *kaúrn* 'corn', all from */ǵr̥:n-o-/.
>
> *igo* 'yoke', cp. Skt. *yugám* 'id.', Goth. *juk* 'id.', Lat. *iugum* 'id.', and Gk. ζυγόν 'id.', all from */yug-o-/.
>
> *selo* 'field, acre, village', cp. Lat. *solum* 'base, foundation, earth, soil' and Lith. *salà* 'village' (synchronically feminine), all from */sel-o-/ : */sol-o-/.

tьlo 'ground, surface', cp. Skt. *talam* 'plain', both from */tel-o-/.

męso 'flesh, meat', cp. Goth. *mimz* 'id.' and Skt. *mā́ṃsám* 'id.', all from
*/mēms-o-/.

ramo 'shoulder', cp. OIr. *arm^n* 'weapon' and Lat. *arma* (pl. tant.) 'id.', all
from */arm-o-/. Goth. *arms* 'arm' is a masculine */i/-stem.

sěno 'hay', cp. Lith. *šiẽnas* 'id.' which is probably an old neuter, as
suggested by the Finnish borrowing *heinä* 'id.'. Hesychius has κοινά ·
χόρτος, which could be interpreted as a neuter plural (or collective)
form. If this is the case, we are entitled to reconstruct a PIE
*/ḱoyn-o-/.

Additional synchronically simple neuters are given in **App. 31**.

4.5.2.2. Borrowings

In late PSl., the neuter gender seems to have been a more closed noun class than the
masculines and the feminines. Borrowings are few, and even these are often disputed.
In my opinion, the following are likely to be of Gmc. origin:

blúdo 'plate' beside the masculine *blúdъ* ← Gmc. */bewd-a-/, cp. Goth.
biuþ(s) 'table'. Due to insufficient attestation, the gender of the Goth.
word cannot be determined with certainty.

myto 'gift, bribe' ← Goth. *mota* 'toll, custom'.

lice 'face, person' ← Goth. *leik* 'body, flesh, corpse'.

gobino 'abundance' ← Goth. *ga·bei*, acc. sg. *ga·beins* 'id.'.

mlěko 'milk' ← Gmc. */melk-/, cp. OE *meolc*, Sw. *mjölk*, Germ. *Milch*. PSl.
*/melk-/ is sometimes (ESRJa s.v. *molokó*, Shevelov 1964:403)
regarded as inherited, but this attitude looks ideological rather than
based on evidence. Some plausible, but rather imaginative, cognates
with PIE */k/ have been suggested, e.g. Gk. μέλκιον 'well, spring',

Lith. *maĩkas* 'gulp', Lat. *mulcēre* 'to stroke, sooth'. But all IE words actually denoting 'milk', 'milking' and 'breast feeding' unambiguously point to PIE */ǵ/, e.g. SCr. *mlâz* 'spurt of milk', Ru. *molózivo* 'beastings', Lith. *málžyti* 'to milk', Lat. *mulgēre* 'id.', Gk. ἀμέλγειν 'id.', and the source of *mlěko* need not have been Goth. *miluks* which is exceptional even within Gmc.

4.5.2.3. Suffixal neuter */o/-stems

We can distinguish */n/-, */t/-, */r/-, */dʰ/- */y/-, */l/-, */w/- and */k/-suffixes. The very numerous nouns with the historically complex suffixes -*ište* and -*ъstvo ~ -ъstvъje* are considered separately below.

4.5.2.3.1. Nouns in */-n-o-/

The nouns with */-n-o-/ are *runo* 'wool' (cp. *rъvati, rъvą* 'to tear'), *stegno* 'leg' (cp. *stežerъ* 'base, foundation') and *ložesna* (pl. tant.) 'womb', as if from */logʰ-es-n-o-/, from an obsolete */es/-stem *ložes-* (cp. Gk. λέχος, λέχεος 'bed'). A (historical) variant of *ložesna* may be seen in *lono* 'bosom' if from */logʰ-s-n-o-/ = */loksno/. For the simplification */ksn/ > */n/, cp. *luna* 'Moon' from */louk-s-n-ā/.

4.5.2.3.2. Nouns in */-t-o-/

There are five neuters that apparently contain a suffix */-t-o-/:

> *blato* 'swamp' ← *bělъ* 'white', cp. Lith. *báltas* 'white', Skt. *bhālam* 'shine', Gk. (Hes.) φαλός 'white', all from */bʰēl-/ : */bʰōl-/ : */bʰəl-/.
>
> *žito* 'crop' ← *žiti (živ-)* 'to live', cp. OPr. *geits* 'bread'.
>
> *pǫta* (pl. tant.) 'shackles' ← *·pęti (·pьn-)*, cp. *o·pona* 'curtain', *ras·ponъ* 'cross' (as a means of execution), also the Finnish borrowing *panta* 'band, ribbon, collar'.

lĕto 'summer', possibly from *liti*, *lĕją* 'to pour', i.e., a reference to 'rain', or
related to OIr. *láithe* 'day'.

jato 'food', if simplified from **jasto* < */ēd-t-o-/. A similar simplification is
probably attested in *utro* 'morning' from **ustro* (*za·ustra* 'in the
morning' is a hapax in the Savvina Kniga) < PIE */aws-r-o-/, cp. Lith.
aušrà 'dawn', Skt. *uṣár-* 'id.', Eng. *Easter*, etc.

4.5.2.3.3. Nouns in */-r-o-/

The only clear instances of */-r-o-/ are *rebro* 'rib' (cp. OE *ribb* 'id.') and *utro*
'morning' (see above), possibly also *vĕdro* 'bucket, pail' if the -*r*- does not continue the
stem element */-r-/ of the PIE heteroclitic */wod-$^{r}_{n}$-/ 'water'.

4.5.2.3.4. Nouns in */-dʰ-o-/

Two nouns seem to contain a suffix */-dʰ-o-/, viz. *stado* 'herd, flock' ← *stati* 'to stand
up' (cp. ON *stóð* 'id.', Germ. *Stute* 'mare') and *čędo* 'child' ← *vъ·čęti* (·*čьn*-) 'to begin'
(cp. Lat. *re·cēns* 'fresh, recent'). OCS *čędo* is sometimes seen as a Germanic borrowing
(e.g. Holzer 1990:65).

4.5.2.3.5. Nouns in */-y-o-/
4.5.2.3.5.1. -*je*

There are very few neuters with a simple suffix */-y-o-/, mostly deverbal nomina
instrumenti or collectives:

lože 'bed' ← *lešti* (*leg-*, *lęg-*) 'to lie down'. Despite the lack of exact
cognates, */logʰ-y-o-/ may well be a PIE formation, as suggested by
the structurally identical OIr. *suideⁿ* 'seat', Lat. *solium* 'throne' from
*/sod-y-o-/ ← */sed-/ 'to sit (down)'. Lith. *ložà* 'camp' is
synchronically an */ā/-stem feminine, but it could be an original
neuter pl. */lōǵʰ-y-ā/ and close to OCS *loža* 'beds'. Cp. also Toch. B

leke 'bed' and Gk. λόχος 'place for lying in wait', both from
*/logʰ-o-/. On the other hand, *lože* could be a former */es/-stem, like
Gk. λέχος 'bed', but it has the wrong grade in the root.

věšte 'council' ← *větъ* 'agreement'.

ǫže 'rope' ← *ǫza* 'shackles' (cp. Gk. ἀγχόνη 'rope, halter', ἄγχειν 'to
strangle').

ovošte (coll.) 'fruits'. This word should probably be analyzed as *o·vošte* and
derived from a former */i/-stem */wag-ti-/, cp. Goth. *us·wahsts*
'growth' (Iljinskij 1922). Ultimately */wag-/ is in Schwebeablaut
relationship to the more usual */awg-/ as in Lat. *augēre* 'to increase',
Skt. *ójaḥ* 'might', etc.

pĺušta (pl. tant.) 'lungs, internal organs', cp. Lith. *plaũčiai* 'id.'.

poĺe 'field', cp. OR *polъ* 'open, hollow', Lat. *palam* adv. 'openly, publicly'.
Juhani Nuorluoto has suggested (pers. comm.) a connection with the
Finnish adjective *paljas* 'bare, plain'. The latter, judging by the final
-*s*, cannot have been borrowed from PSl. but may suggest a Balto-
Slavic adjective */palya-/, which would make *poĺe* a substantivized
neuter form.

4.5.2.3.5.2. -ьje

The suffix */-i-y-o-/ has two functions. In the first place, it builds denominal collective
plurals, e.g. *větvьje* 'branches' ← *větvь* 'branch'. In one case the source is a borrowing,
gobьǧьje 'abundance' ← Goth. *ga·bigs* 'rich', in another an adjective, *ob·(v)ilьje*
'abundance', cp. *ob·(v)ilъ* 'abundant'. There are some twenty attested instances (**App.
32.**).

In the second place, the suffix is used in the countless deverbal nomina actionis, which,
perhaps, should be considered as part of a verbal paradigm, suppletive forms of the
infinitive, which only has the nom. and the acc., and the supine, which only has the acc.

These neuters are derived from the pass. past ptcl., e.g. *pri·nesenьje* 'bringing' ← *pri·nesenъ* 'brought' ← *pri·nesti* (·*nes*-) 'to bring', or a form looking like it. (It is clear that in practice an intransitive verb cannot have a passive participle, e.g. *šьstьje* 'road, journey' ← **šьstъ* ← *iti* (*id*-, *šьd*-) 'to go'). Very rarely, the suffix is attached directly to the root: *bogo·borьje* 'struggle with God' ← *brati*, *borǫ* 'to fight' (cp. *bogo·boŕenьje* 'id.' ← *boŕenъ* 'fought').

4.5.2.3.6. Nouns in */-l-o-/
4.5.2.3.6.1. -*slo*

The suffix */-s-l-o-/ occurs at least in two deverbatives, viz. *veslo* 'oar' ← *vesti* (*vez*-) 'to transport' and *maslo* 'ointment' ← *mazati*, *mažǫ* 'to grease, anoint'. A third one, *čislo* 'number' ← *čisti* (*čьt*-) 'to count', is uncertain since the -*s*- may have spread from the infinitive (cp. *čismę* 'id.') in reaction to the simplification of */-tl-/ clusters and the rise of a form **čilo*.

4.5.2.3.6.2. -*lo*

OCS has a fair number of deverbal nomina instrumentis in -*lo*, reflecting PIE */-dʰ-l-o-/, and these correspond semantically to the well-attested type in */-tr-/. Cp. Skt. *carítram* 'leg' (lit. 'mover') ← *cárati* 'to move', *pátatram* 'wing' ('flier') ← *pátati* 'to fly', *śrótram* 'ear' ('hearer') ← *śṛṇóti* 'to hear', Lat. *feretrum* 'bier' ← *ferre* 'to bear', *mulctrum* 'milking-pail' ← *mulgēre* 'to milk', *claustrum* 'bolt, bar' ← *claudere* 'to close', Goth. *maúrþr* 'murder' < PIE */mṛ-tr-o-/ ← */mer-/ 'die', *gilstr* 'tribute' ← *us·gildan* 'to reward', and Gk. βλῆτρον 'iron nail' ← βάλλειν 'to strike', δαιτρόν 'one's portion' ← δαίειν 'to distribute', λύτρον 'ransom' ← λύειν 'to release'.

It is likely that if we go back far enough in time, these neuters were thematicized */-ter-/-stems (**3.1.**), originally identical with the common agent noun type. The inanimate equivalent of the agent is the instrument. Note that there is no formal distinction between the English inanimate *can opener* (an instrument with which one

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opens cans) and the hypothetically possible animate *can opener* (a person who gets paid for opening cans, for instance). In the Ru. sentences *čelovék byl ubít toporóm* 'the man was killed with an axe' and *čelovék byl ubít bandítom* 'the man was killed by a gangster', the decision between an agentive and instrumental interpretation of the instr. sg. form is based solely on the semantics of *topór* and *bandít*.

The suffix */-d^h-l-o-/ appears to be ancient, cp. Lat. *stabulum* 'place for standing, hiding etc.' from PIE */stə-d^{h}l-o-/. On the origin of the suffix, see e.g. Sihler (1979). There are about 25 instances in OCS, e.g. *kadilo* 'incense' ← *kaditi* 'to burn as incense'. South and East Slavic have simplified the late PSl. cluster */-dl-/, but cp. Cz. *kadidlo* and Po. *kadzidło*. Very rarely the suffix builds denominals denoting place, e.g. *cvětilo* 'meadow' ← *cvětъ* 'flower'. **App. 33**.

4.5.2.3.7. Nouns in */-w-o-/

A suffix */-w-o-/ occurs in two deverbatives, viz. *pivo* 'beverage' ← *piti* 'to drink' and *sěčivo* 'axe' ← *sěšti* (*sěk-*) 'to hack, chop off'.

4.5.2.3.8. Nouns in */-k-o-/

The neuters in *-ьce* are historically similar to the masculines in *-ьсь* (*/-i-k-o-/) (**8.1.2.1.**). They are usually diminutives, although quite often the semantic difference between the base word and the derivation is neutralized, e.g. *čędьce* 'child' ← *čędo* 'id.'. There are eight instances in OCS (**App. 34.**).

4.5.2.3.9. Nouns in *-ište*

There are some thirty neuters in *-ište*, mostly denoting places. When denominal, they often have a pejorative meaning, e.g. *crъkъvište* 'heathen temple' ← *crъky* 'temple'. The deverbatives are neutral, e.g. *sъn·ьmište* 'synagogue, gathering, council' ← *sъn·ęti sę* (*·ьm-*) 'to gather, meet'. Quite often the suffix has been added to an */l/-participle (or

a form looking like it), e.g. *blǫdilište* 'brothel' ← *blǫditi* 'to prostitute', in one case to a pass. past ptcl., *pri·stanište* 'haven, port' ← *pri·stati* 'to arrive'. **App. 35**.

4.5.2.3.10. Nouns in *-ьstvo ~ -ьstvьje*

By far the largest group of neuters consists of desubstantival and deadjectival abstract nouns in *-ьstvo*. The history of the suffix is not clear, but the *-v-* may be a former stem element */-u-/ to which a theme vowel */-o-/ has been attached (as in the case of *drěvo* 'tree', see **4.2.**). The suffix-initial *-ь-* is probably a mere prop-vowel preventing sound changes at the morpheme boundary. This is suggested by *běstvo* 'escape' in which *-stvo* has been added directly to the verbal root *běg-* 'to run, escape'. The *-s-* may have been abstracted from a root, in which case the actual suffix would be */-t-u-/. If this analysis is correct, the class is morphologically to be identified with the deverbative type represented by Goth. *wahstus* 'growth' ← *wahsjan* 'to grow', OIr. *mess* 'judgment' (*/med-t-u-/) ← *midithir* 'to judge', Lat. *gressus* 'step' ← *gradī* 'to walk', and Gk. κλιτύς 'slope' ← κλίνειν 'to incline'.

In the subclass with *-ьje*, the suffix has been extended with */-i-y-o-/.

The deadjectival nouns are synonymous with the feminines in *-ostь* (**4.1.2.**), e.g. *mǫdrьstvo* 'wisdom, wit', *mǫdrostь* 'id.' ← *mǫdrъ* 'wise', and *-ota* (**4.6.3.3.**), e.g. *veličьstvo* 'greatness', *velikota* 'id.' ← *velikъ* 'great', and also to the neuters in *-ьje* (**4.5.2.3.5.2.**), e.g. *blaženьstvo* 'bliss', *blaženьje* 'id.' ← *blaženъ* 'blessed'. **App. 36**.

4.6. Stems in */-ā-/

The rise of the */ā/-stems, now usually called the */eh₂/-stems, was linked to the rise of the gender opposition between masculines and feminines (**2.1.**). The class was a recent arrival in late PIE, which also explains why so few lexical items are reconstructable to the proto-language.

OCS, like Lat. and Gk., has a group of masculine */ā/-stems which declensionally are identical to the feminines. Some derivational types are exclusively masculine.

4.6.1. Simple */ā/-stems

There is a handful of asuffixal */ā/-stems that seem to go back at least to the dialectal period of PIE:

žena, cp. OIr. *ben* and Toch. B *śana* 'woman', all from PIE */gwen-ā/. According to Hamp (1979b) this is a ghost-form. He suggests the root noun */gwenh-/ was thematicized independently in the dialects. See also Meid (1966).

cěna, cp. Gk. ποινή and Lith. *káina* 'price', all from PIE */kwoyn-ā/.

stьga, cp. Goth. *staiga* and Latv. *stiga* 'path', all from PIE */stoyg^h-ā/ ~ */stig^h-ā/.

vьdova, cp. Lat. *vidua* and OIr. *fedb* 'widow', all from PIE */wid^h(e)w-ā/.

vlьna, cp. Lith. *vìlna*, Goth. *wulla*, Skt. *ū́rnā*, and Lat. *lāna* 'wool', all from PIE */vl̥:n-ā/.

po·soxa 'stick', cp. Lith. *šakà* 'branch' and Skt. *śā́khā* 'id.', all from PIE */ḱok^h-ā/. (The traditional reconstruction of voiceless aspirates, now generally rejected, has been recently defended by Elbourne 1998, 2000, 2001.) Another possibility is to reconstruct a laryngeal, i.e. */ḱokh-ā/.

črьta 'line, streak', cp. Skt. *kṛ́tā* 'opening, crack, chink', both from PIE */kr̥t-ā/.

črěda 'flock, herd', cp. Goth. *haírda* 'id.', both from PIE */kerd^h-ā/.

koza 'she-goat', cp. Skt. *ajā́* 'id.', both from PIE */oǵ-ā/. On the initial *k-*, cp. *kostь* 'bone' in **4.1**.

brada, cp. Lith. *barzdà* and Lat. *barba* 'beard', all from PIE */b^{h}ard^h-ā/.

Additional simple */ā/-stems are given in **App. 37**. A few nouns seem to be petrified adjectives:

> *věra* 'faith', cp. Lat. *vērus* 'true, faithful' and OIr. *fír* 'id.', all from PIE */wēr-o-/.
>
> *raba* 'female servant', cp. Lat. *orbus* 'deprived, parentless' and Arm. *orb* 'orphan', all from PIE */orbʰ-o-/.
>
> *ruda* 'ore, metal', cp. Goth. *rauþs* 'red' and OIr. *rúad* 'id.', all from PIE */rowdʰ-o-/.
>
> *druga* 'friend' ← *drugъ* 'other'.
>
> *mežda* 'lane, walk', cp. Lat. *medius*, Skt. *mádhya-*, Goth. *midjis*, and Gk. μέσος 'middle', all from PIE */medʰy-o-/.
>
> *skvrъna* 'filth' ← *skvrъnъ* 'filthy, dirty'.
>
> *peštera* 'cave, dungeon', probably from a PIE comparative-equative */pekw-ter-o-/ 'oven-like'. Cp. *pešti* (*pek-*) 'to bake', *peštь* 'oven'.
>
> *groza* 'horror', cp. Gk. γοργός 'terrible, fearful', both possibly from PIE */groǵ-o-/ : */gorǵ-o-/ unless the Gk. form was assimilated from *γαργός < PIE */gr̥ǵ-o-/. OCS *groza* can be an old neuter nom.-acc. pl. in the sense 'the horrible (things)' = 'horror'.
>
> *vrъsta* 'age, generation', probably from a pass. past ptcl. */wr̥dʰ-t-o-/ and identical to Skt. *vr̥ddhá-* 'grown' ← *várdhati* 'to grow'. Vasmer and many others (ESRJa, s.v. *verstá*) derive *vrъsta* from */wr̥t-t-o-/, e.g. Skt. *vr̥ttá-* 'turned, round' ← *vártate* 'to turn' and Lat. *vorsus* ← *vertere*. This is also plausible but, perhaps, semantically less likely.
>
> *krasta* 'abscess, ulcer', probably a former pass. past ptcl. */kors-t-o-/, cp. Lith. *kar̃šti*, *karšiù* 'to comb'.
>
> *ne·věsta* 'bride', from a pass. past ptcl. */woyd-t-o-/. Cp. *iz·věstъ* 'known' ← *věděti* 'to know', Lat. *vīsus* 'seen' ← *vīdēre* 'to see'. I agree here with Vasmer (ESRJa, s.v. *nevésta*). Some prefer to interpret *nevěsta* as a

superlative of PIE */new-o-/ 'new' (e.g. Seliščev 1951:115, Shevelov 1964:357-358, and Arumaa 1985:98). It would then continue */new-oys-t-o-/. However, a full-grade superlative suffix */-oys-t-o-/, beside the normal */-is-t-o-/, is not attested anywhere. The expected OCS form would thus be *nevьsta, cp. Skt. návisṭhas, Goth. niujists. Părvulescu (1989:68 fn.12) reconstructs */newo-west-/ (in my symbolism), i.e. 'newly wed' from */wed^h-/. He leaves the long vowel in nevěsta unexplained and does not explicitly say whether he means haplology.

otъ·rada 'deliverance, empathy' ← radъ 'glad, merry'.

Simple deverbatives are fairly numerous. Like corresponding */o/-stems, they often show an */o/-grade, e.g. rǫka 'hand' (cp. Lith. riñkti, renkù 'to gather'), but sometimes vrddhi, e.g. slava 'fame, glory, reputation, gratitude' ← sluti (slov-) 'to be known as'.[11] Occasionally, the noun retains the verbal grade, e.g. be(z)·sěda 'discussion, speech, dialect' ← sěděti 'to sit', mlъva 'fuss, stir, hubbub' ← mlъviti 'to make noise, stir up'. **App. 38**.

Seven nouns seem to be derived from adjectives, e.g. mǫka 'flour' ← mękъkъ 'soft' (**App. 39.**).

4.6.2. Borrowings
There are some twenty borrowings in the OCS */ā/-declension (**App. 40.**).

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[11] The */ā/-stem seems to have assumed the semantics of PIE */ḱlew-es-/, which is formally reflected by slovo 'word, thing'.

4.6.3. Suffixal */ā/-stems

The suffixal */ā/-stems can be divided into the nouns in */-s-ā-/, */-n-ā-/, */-t-ā-/, */-r-ā-/, */-y-ā-/, */-l-ā-/, */-w-ā-/, */-m-ā-/, */-k-ā-/. The productive suffixes *-ьda*, *-oba*, *-tva* are considered separately below.

4.6.3.1. Nouns in */-s-ā-/

A simple suffix */-s-ā-/ occurs in one instance, *strěxa* 'roof', cp. Lith. *stríegti* 'to cover with straw'.[12]

4.6.3.2. Nouns in */-n-ā-/
4.6.3.2.1. *-na*

A simple suffix */-n-ā-/ occurs in a handful of words:

> *slana* 'hoar-frost'. Cp. Lith. *šalnàs* 'frost', ON *hēla* 'hoar-frost'.
> *pelena* 'swaddling cloth, napkin'. Cp. Lat. *pellis* (from */pel-n-i-/) 'skin, leather', OHG *fil* 'skin, fur'.
> *strana* 'side, country, nation' ← *pro·strěti* 'to stretch'.
> *stьgna* 'square, street'. Cp. *stьǧa* 'path'.
> *tina* 'slime, mud'. Cp. *timěnьje* 'id.'.

4.6.3.2.2. *-ina*

There are about thirty nouns in *-ina*. When deadjectival, they are similar in meaning to nouns in *-ota* (**4.6.3.3.**), *-ostь* (**4.1.2.**), *-ьba* (**4.6.3.10.**), *-ьda* (**4.6.3.11.**), *-ьstvo*, *-ьstvьje* (**4.5.2.3.10.**), *-yńi* (**4.3.**) and */-i-y-o-/ (**4.5.2.3.5.2.**), e.g. *čistina* 'purity' ← *čistъ* 'pure, clean' (cp. *čistostь*, *čistota* 'id.'). Desubstantival nouns often have a collective meaning, e.g. *družina* 'companions, company' ← *drugъ* 'other, friend'. **App. 41**.

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[12] For different proposals, see ESRJa, s.v. *strexá*.

The suffix *-ina* was probably thematicized from a consonantal-stem element */-īn-/ which occurs in Goth. in a similar function, e.g. *baírhtei*, gen. sg. *baírhteins* 'brightness' (i.e. /berxtī/, /berxtīns/) ← *baírhts* 'bright'; however, accentologically *-ina* would appear to be the merger of two PSl. elements, viz. */-eyn-/ and */-īn-/, cp. Lith. *-ienà* vs. *-ỹnė* (Vaillant 1974:365-366).

4.6.3.3. Nouns in */-t-ā-/

Two nouns have a suffix */-t-ā-/:

> *kleveta* 'slander, defamation'. Cp. Ru. *klevát'*, *kljujú* 'to peck'. OCS *klevetati*, *kleveštǫ* 'to slander, mock' is denominal.
>
> *lanita* 'cheek'. Cp. Gk. ὠλένη 'elbow', Lat. *ulna* 'forearm', Goth. *aleina* 'elbow'.

There are numerous deadjectival abstracta in *-ota*, similar in meaning to the feminines in *-ostь* (**4.1.2.**), *-ьda* (**4.6.3.11.**), *-yńi* (**4.3.**), and the neuters in *-ьstvo*, *-ьstvьje* (**4.5.2.3.10.**) and */-i-y-o-/ (**4.5.2.3.5.2.**). An example is *velikota* 'great number, mass' ← *velikъ* 'great' (cp. *veličьje*, *veličьstvo*, *veličьstvьje* 'id.'). In a few instances the originally abstract noun has developed a concrete animate meaning: *sirota* 'orphan' ← *sirъ* 'deprived', *junota* 'young man' ← *junъ* 'young'. Very rarely the source word is a noun, e.g. *sramota* 'shame' ← *sramъ* 'id.'. **App. 42**.

It seems possible that *-ota* is the regular outcome of a PIE consonantal stem suffix */-o-tāt-/, which due to the loss of final consonants was reanalyzed as the */ā/-stem nom. sg. ending. Cp. *rabota* 'slavery' and Lat. *orbitās*, *-tātis* 'bereavement, orphanage', both from PIE */orbʰ-o-tāt-/. Vaillant (1974:372-373), however, points out that *-ota* has direct, vocalic, correpondences in other languages as well.

4.6.3.4. Nouns in */-r-ā-/

A suffix */-r-ā-/ can be seen in:

> *bedra* 'hip'. Cp. Lat. *femur* 'thigh'. According to Holzer (1989:105-107), this is a borrowing (see **4.1.1.**, fn.9).
>
> *kotora* 'quarrel'. Cp. OIr. *cath* 'fight', Gk. κότος 'ill-will, anger', and Goth. *skaþjan* 'to injure'.
>
> *měra* 'measure'. Cp. Skt. *mā* 'measure' and Goth. *mela* 'id.'.
>
> *iskra* 'sparkle'. Cp. *jasnъ* 'bright' and Lith. *áiškus, iškùs, éiškus* 'bright'.

4.6.3.5. Nouns in */-y-ā-/

There are numerous nouns in */-y-ā-/, mostly deverbal, e.g. *voĺa* 'will' ← *velěti* 'to command, order' and *sъ·rešta* 'attack, meeting, rendezvous' ← *sъ·rěsti, sъ·reštą* 'to meet' (**App. 43.1.**), but sometimes deadjectival, e.g. *rъžda* 'rust', cp. Lith. *rùdas* 'reddish brown' (**App. 43.2.**), or denominal, e.g. *duša* 'soul' ← *duxъ* 'spirit' (**App. 43.3.**).

In a few instances the deverbatives denote animate masculine agents, cp. *drěvo·děĺa* 'carpenter' ← *dělati* 'to work' vs. *ne·děĺa* 'Sunday'.

The noun *tǫča* 'rain' appears to have an extension */-k-y-ā-/ (cp. *bičь, kĺučь*, **4.5.1.4.5.1.**), cp. the reduplicated *tǫ·tьnъ* 'noise'.

4.6.3.6. Nouns in */-l-ā-/

A suffix */-l-ā-/ occurs in the following:

> *bьčela* 'bee'. Cp. Lat. *fūcus* 'bee-glue'.
>
> *motyla* 'dung' ← *mesti* (*met-*) 'to sweep'.
>
> *kobyla* 'mare'. Cp. *konь* 'horse', Lat. *caballus* 'horse'.

osla 'whetstone'. Cp. Lat. *aculeus* 'sting, point', Gk. ἀκόνη 'whetstone'. This is a hapax from the Codex Suprasliensis and may stand for **osъla*, which would be closer to Lat. *aculeus*.

4.6.3.7. Nouns in */-w-ā-/

A few nouns have the suffix *-va*. It may have been abstracted from *plěva* 'chaff', which synchronically appears to be derived from *plěti, plěvą* 'to root out' but in which the *-v-* is actually an old stem formant, i.e. */pel-u-ā-/:

> *drьžava* 'kingdom' ← *drьžati* 'to hold, keep'.
> *kričava* 'shout' ← *kričati* 'to shout, yell'.
> *dǫbrava* 'grove' ← *dǫbъ* 'tree'.
> *pońava* 'towel'.
> *tętiva* 'sinew'.

4.6.3.8. Nouns in */-m-ā-/

A suffix */-m-ā-/ occurs in one word: *krъma* 'food', cp. Lat. *carō, carnis* 'flesh' and Lith. *šérti, šeriù* 'to feed'.

4.6.3.9. Nouns in */-k-ā-/
4.6.3.9.1. *-ka*

A simple suffix */-k-ā-/ occurs in one isolated form: *rěka* 'river', cp. Lat. *rīvus* 'stream', Skt. *ráyaḥ* 'id.', Ru. *roj* 'swarm'. Martinet (1956) derives all these forms from PIE */reyh$_2$-/. The *-k-* in *rěka* would then reflect the "laryngeal-hardening" before an original nom. sg. ending */-s/.

4.6.3.9.2. *-ica, -ika*

The suffix *-ica* (corresponding formally to the masculine *-ikъ*, see **4.5.1.4.7.3.**) occurs in a very large number of nouns. They often denote animates and are usually

deadjectival, e.g. *grěšьnica* 'sinner woman' ← *grěšьnъ* 'sinful' (corresponding to the masculine *grěšьnikъ*), or desubstantival, e.g. *grъlica* 'turtle-dove' ← *grъlo* 'throat', rarely deverbal, e.g. *krъvo·točica* 'haemophiliac woman' ← *točiti* 'to spill, shed' (the causative of *tešti*, *tek-* 'to run'). **App. 44**.

The same suffix, but without the Third Palatalization, occurs in two masculines: *bližika* 'fellow man, relative' (cp. *blizъ* adv. 'near', comp. *bliže*), *ǫžika* 'relative, kin, family' (cp. *ǫza* 'bond, shackle', *ǫzъkъ* 'tight, narrow', *ǫže* 'rope').

4.6.3.9.3. *-ьca*

An interesting group consists of nouns in *-ьca* from */-i-k-ā-/. When they denote humans they are exclusively deverbal masculines and, unlike the semantically close agent nouns in *-ьcь* (*/-i-k-o-/, see **4.5.1.4.7.4.**), they carry a pejorative meaning, e.g. *jadьca* 'glutton, hog' ← *jasti* (*jad-*) 'to eat' (**App. 45.1.**). The feminines are diminutives, e.g. *myšьca* 'hand, shoulder, muscle' ← *myšь* 'mouse' (cp. Lat. *mūsculus* 'muscle' ← *mūs* 'mouse') (**App. 45.2.**). In one peculiar case, the Third Palatalization fails to occur: *klětъka* 'closet, alcove' ← *klětь* 'id.' (for similar instances in other Slavic languages, see Sławski 1974:94).

4.6.3.10. Nouns in *-ьba*

There are some fifteen mostly deverbal nomina actionis built with a suffix *-ьba*, e.g. *svętьba* 'consecration, sanctification' ← *svętiti* 'to sanctify'. They are usually synonymous to deverbal neuters in */-i-y-o-/ (see **4.5.2.3.5.2.**), denominal neuters in *-ьstvo* (**4.5.2.3.10.**), deverbal feminines in */-t-i-/ (**4.1.2.**) and *-yńi* (**4.4.**), and deverbal feminines in *-tva* (**4.6.3.12.**). In two words, we have a variant *-oba*: *zъloba* 'evil, wickedness' ← *zъlъ* 'evil, wicked', *ǫtroba* 'viscera, abdomen, uterus' ← *ǫtrъ* adv. 'inside' (cp. Lat. *inter*). On the meaning and the history of the suffix, see Osten-Sacken (1909, 1911). It may be the case that the suffix proper is *-ba*, whereas both *-ь-* and *-o-*

have been abstracted from */i/- and */o/-stem basewords, respectively (Sławski 1974:62). **App. 46**.

4.6.3.11. Nouns in -ьda

These are similar in meaning to the nouns in -ьba, but there are only three instances: *vražьda* 'hatred, hostility' ← *vragъ* 'enemy', *pravьda* 'justice, principle, truth' ← *pravъ* 'straight, right, just' (cp. *pravostь* 'id.'), *stražьda* 'guard, watch' ← *stražь* 'guard' (cp. *stražьba* 'id.').

4.6.3.12. Nouns in -tva

There are about ten deverbal nomina actionis in -tva, mostly from radical infinitives. The type occurs rarely also in Goth., e.g. *fijaþwa* 'hatred' ← *fijan* 'to hate'. It is difficult not to see in -tva a simple thematicization of the PIE deverbative element */-t-u-/. Cp. *pastva* 'herd' ← *pasti* (*pas-*) 'to shepherd' and Lat. *pāstus*, -*ūs* 'pasture, pasturage, feeding-ground'. **App. 47**.

5. The adjective

PSl. greatly simplified the distribution of adjectives among the nominal declensional classes. On the adjectival types in IE, see Stang (1954). Specifically on Vedic Skt., which presumably best reflects the inherited system, see Sommer (1916). There is a small handful of indeclinable */i/-stem adjectives, none of which continues any recognizable PIE derivational structure:

> *is·plьnь* 'full, fulfilled' (beside *plьnъ*).
> *na·němь* 'having a speech defect' (beside *němъ*).
> *prě·prostь* 'simple' (beside *prostъ*).
> *raz·ličь* 'different' (beside *raz·ličьnъ*); the element ·*ličь* from */-līk-i-/ is
> > probably borrowed from Gmc., cp. Goth. *hvi·leiks* 'what sort of', Eng.
> > *like*.

svobodь 'free(d)' (beside *svobodьnъ*). According to Holzer (1989:129-132),

this is a borrowing (see **4.1.1.**, fn.9).

sugubь (beside *sugubъ* and *sugubьnъ*) 'twofold, double'.

u·dobь (beside *u·dobьnъ*) 'easy'.

A discussion of these adjectives can be found in Stang (1939). On some further relics, like the adverbialized instrumental forms *velьmi* 'very' and *kolьmi* 'how much', see Arumaa (1985:55). Otherwise all adjectives have moved to the thematic flection, the */o/-stems for the masculine and neuter forms and the */ā/-stems for the feminine, either by simply adding a theme vowel to the pre-existing stem or through suffixal derivation. This shift can, no doubt, be interpreted as a tendency to systematize the gender agreement between the controller (noun) and the target (the adjective). The */o/- and */ā/-stems were the only declensional type with a thorough-going formal gender distinction.

Only one radical-stem adjective can be reconstructed for PIE, viz. */meǵə-/ 'great': Skt. *mah-*, *máhi*, Gk. μέγας, possibly with a zero grade */ṇǵə-/ > Homeric ἄγα- (for a very different view, see Anttila 2000). On the variation of the inlaut guttural, see Mayrhofer (1986:136). In addition, many radical nouns were used adjectivally in bahuvrīhi compounds, the prime example being */dwi·pod-/ 'biped' as testified by Skt. *dvi·pád-*, Gk. δί·πους, ·ποδος and Lat. *bi·pēs*, *·pedis*. Adjectives are attested in all other athematic nominal classes.

The PIE */es/-stem */wet-es-/ 'old, withered' occurs in a thematicized form in OCS *vetъxъ*, cp. Lat. *vetus*, *veteris*. A discussion of *vetъxъ* and its relationship with Lith. *vẽtušas* is found in **Chapter II: 10**. I also think, *pace* Orr (1983:113 fn.16), that OCS shows clear evidence for the prior existence of at least two */n/-stem adjectival suffixes, both inherited from PIE. These are */-en-/ (cp. Gk. ἀχήν, -ένος 'poor') and */-in-/ (cp. Skt. *pakṣín-* 'winged' ← *pakṣáḥ* 'wing'), thematicized in, e.g., *drěvěnъ* 'wooden, made

of wood' ← *drěvo* 'tree' and *bolьnъ* 'sick' ← *bolь* 'sickness'. See also *prьstenь* in **3.2**. A surviving remnant of consonantal adjectival inflection is the numeral *četyre* 'four' (see Blažek 1998).

Of all the PIE athematic adjectival types which became extinct during the PSl. period, the clearest trace was left by the */u/-stems which were very systematically transferred to the */o/- and */ā/-stems with a suffix */-k-o-/. The more obvious instances are:

> *lьgъкъ* 'light', cp. Gk. ἐλαχύς 'small, short' and Skt. *lághu-* 'light'.
> *tьnъkъ* 'thin', cp. Lat. *tenuis* 'id.', Gk. τανυ- 'id.', and Skt. *tánu-* 'id.'.
> *tężьkъ* 'hard', cp. Lith. *tingùs* 'id.'.
> *ązъkъ* 'narrow', cp. Skt. *aṃhú-* 'id.'.
> *sladъkъ* 'sweet', cp. Lith. *saldùs* 'id.'.
> *krotъkъ* 'meek, gentle', cp. Gk. κρατύς 'strong, mighty' (note the full-grade
>> comparative κρέσσων from */kret-yos-/) and Goth. *hardus* 'hard'.
>> According to Holzer (1989:76-77), late PSl. */krotъ/ is a borrowing
>> (see **4.1.1.**, fn.9).

This derivational mechanism in itself is inherited from the proto-language, cp. Skt. *tánuka-* 'thin' = *tьnъkъ*. In a few instances, a former */u/-stem appears to have been thematicized by simply replacing the stem vowel */-u-/ with */-o-/, e.g. *drъzъ* 'bold' (cp. Gk. θρασύς 'id.', the -z- is not clear), *mladъ* 'young' (cp. Gk. βλαδύς 'soft', Skt. *mṛdú-* 'id.', Lat. *mollis* 'id.'), *zъlъ* 'evil' (cp. Lith. *žvalùs* 'sly'). In *trězvъ* 'sober' we may see the same mechanism of thematicization as we did in *drěvo* (**4.2.**), i.e. PSl. */terz-u-a-/ (cp. Skt. *tṛṣú-* 'thirsty', Goth. *þaúrsus* 'dry'). For discussions of the PSl. */u/-stem adjectives, see Otkupščikov (1983) and Arumaa (1985:59-63).

A tendency to eliminate the inherited */u/-stem adjectives with one specific mechanism (such as */-k-o-/ in PSl.) is shared by Lat., where most of the reconstructable adjectival

*/u/-stems have been extended with a new stem formant */-i-/, e.g. *svāvis* 'sweet' (Skt. *svādú-* and Gk. ἡδύς), *levis* 'light' (Skt. *lághu-* 'id.' and Gk. ἐλαχύς 'small, short'), *gravis* 'heavy' (Skt. *gurú-*, Gk. βαρύς, and Goth. *kaúrus*), and Toch. where they seem to have been extended with */-r-o-/ (cp. **5.2.4.**), e.g. (Toch. B) *swāre* 'sweet' (cp. above), *pärkare* 'long' (Hit. *parkuš*) (Adams 1988:124).

An old */i/-stem is often seen in *vysokъ* 'high' (comp. *vyšьjь*) which could be comparable to the Gk. adverb ὕψι 'high, aloft', comp. ὑψίων. Some scholars (e.g. Schenker 1995:111) see an original */i/-stem also in *goŕьkъ* 'bitter' but this is probably not the case. Rather, *goŕьkъ* is an old */u/-stem which has taken its irregular palatalization from its original comparative *goŕьjь* 'worse' (like *tęžьkъ* 'heavy' instead of **tęgъkъ*). The latter, in turn, continues PIE */gwor-yos-/ and is identical to Skt. *garī́yas-*, the comparative of *gurú-* 'important, heavy'. A surviving remnant of */i/-stem adjectival inflection is the numeral *trьje* 'three'. A discussion of IE */i/-stem adjectives can be found in Sturtevant (1934).

5.1. Simple adjectives
OCS has a fair number of primary adjectives with at least one cognate elsewhere (outside of Balto-Slavic). These include:

> *bělъ* 'white, shining', cp. Gk. (Hes.) φαλός 'white', both from PIE */bʰēl-o-/ :
> */bʰəl-o-/.
>
> *blědъ* 'pale', cp. OE *blát* 'id.', both from PIE */bʰloyd-o-/.
>
> *dlъgъ* 'long', cp. Skt. *dīrghá-* 'id.' and Lith. *ìlgas* 'id', all from PIE
> */dḷ:gʰ-o-/.
>
> *golъ* 'naked, bare', cp. Germ. *kahl* 'bald', both from PIE */gol-o-/.
>
> *živъ* 'alive, lively', cp. Skt. *jīvá-* 'id.', Lat. *vīvus* 'id.', Lith. *gývas* 'id.', OIr.
> *béo* 'id.', and Goth. *qius* 'id.', all from PIE */gwīw-o-/ ~ */gwiw-o-/.

jarъ 'severe', cp. Gk. (Hes.) ζωρός 'sheer, unmixed', both from PIE
        */yōr-o-/.

cělъ 'whole, healthy', cp. Goth. *hails* 'id.', both from PIE */koyl-o-/.

črьnъ 'black', cp. Skt. *kṛṣṇá-* 'id.', both from PIE */kṛsn-o-/.

lěvъ 'left', cp. Lat. *laevus* 'id.' and Gk. λαιϜός 'id.', all from PIE */layw-o-/.

novъ 'new', cp. Skt. *náva-*, Gk. νέϜος, Toch. B *ñuwe* 'id.', and Lat. *novus*
        'id.', all from PIE */new-o-/.

plьnъ 'full', cp. Skt. *pūrṇá-* 'id.', Lith. *pìlnas* 'id.', Goth. *fulls* 'id.', and OIr.
        lán 'id.', all from PIE */pḷ:n-o-/.

suxъ 'dry', cp. Lith. *saũsas* 'id.' and Gk. αὖος 'dry', all from PIE */saws-o-/.
        A zero-grade derivative can be seen in Skt. *śúṣka-* 'dry', as well as in
        OCS *sъxnǫti* 'to dry'. Due to its wide distribution this root is a piece
        of solid evidence for PIE */a/, the existence of which is questioned by
        some scholars (e.g. Hoenigswald 1952:182 and Lubotsky 1989).
        Lubotsky (1985) reconstructs */h₂sows-/ and, for the Gk. form, a zero
        grade */h₂sus-/. This analysis is refuted by Berg & Lindeman (1992).

syrъ 'moist, juicy', cp. Lith. *sū́ras* 'salty', OE *súr* 'sour', all from PIE
        */sūr-o-/.

ĺubъ 'dear', cp. Goth. *liufs* 'id.', both from PIE */lewbʰ-o-/.

mrьtvъ 'dead', cp. Lat. *mortuus* 'id.', Skt. *mṛtá-* 'id.', and OIr. *marb* 'id.', all
        from PIE */mṛ(t)(w)-o-/. On the inlaut variation, see Trost (1967) and
        Hamp (1977b).

šujь 'left', cp. Skt. *savyá-* 'id.', both from PIE */sewy-o-/.

xromъ 'crippled', cp. Skt. *srāmá-* 'id.', both from PIE */srom-o-/.

malъ 'small, little', cp. Goth. *smals* 'id.' and Lat. *malus* 'bad, unfortunate,
        weak', all from PIE */smōl-o-/ : */sməl-o-/.

ništь 'poor, miserable', cp. Skt. *níṣṭya-* 'foreign', both from PIE */neysty-o-/
        : */nisty-o-/.

Additional asuffixal adjectives are given in **App. 48**.

There are several simple desubstantival bahuvrīhi adjectives in which the theme vowel */-o-/ itself functions as a derivational element. For example, *gromъ·glasъ* 'having a thunderous voice' ← *glasъ* 'voice' (**App. 49.**). This adjectival type is familiar in all IE languages, e.g. Skt. *urū·nasá-* 'broad-nosed' ← *nās-* 'nose', Goth. *arma·haírts* 'merciful' ← *haírto* 'heart'. The corresponding deverbatives are less common, e.g. *slěpъ* 'blind' ← *o·slьpnǫti* 'to go blind' (**App. 50.**).

Two borrowed adjectives can be distinguished:

> *gotovъ* 'ready, prepared'. A back-formation from *gotoviti* 'to prepare', which, in turn, is borrowed from Goth. *ga·taujan* 'to make, perform'.
>
> *mъnogъ* 'many, great', from Goth. *manags* 'id.'. The first vowel is problematic, but this is not the only instance where *ъ* serves as a substitute for a foreign *a*, cp. *sъto* 'hundred', which is probably borrowed from an Iranian source.

5.2. Suffixal adjectives

One can distinguish suffixal adjectives in */-s-o-/, */-n-o-/, */-t-o-/, */-r-o-/, */-y-o-/, */-l-o-/, */-w-o-/ and */-k-o-/.

5.2.1. Adjectives in */-s-o-/

There is one clear example of deverbal adjectives with a simple suffix */-s-o-/: *lixъ* 'excessive, overflowing, superfluous, bad', as if from */leykw-s-o-/. Cp. *otъ·lěkъ* 'remains, relict'.

5.2.2. Adjectives in */-n-o-/

5.2.2.1. *-nъ*

There are about ten adjectives built with a */-n-o-/ attached directly to a nominal or verbal root, e.g. *slanъ* 'salty' ← *solь* 'salt' (**App. 51.**). This type is giving way to the one in *-ьnъ* (PIE */-in-/), probably to avoid sound mutations at the morpheme boundary, e.g. *solьnъ* beside *slanъ*, *slavьnъ* 'famous' beside Lith. *slaũnas* 'id.', and *po·dobьnъ* 'proper, appropriate' beside Lith. *dabnùs* 'nice'.

5.2.2.2. *-inъ*

The suffix *-inъ* builds relative and possessive adjectives from nouns other than the */o/-stems. Semantically it corresponds to */(-i)-y-o-/ and *-ovъ*, e.g. *lędvьjinъ* 'pertaining to kidneys' ← *lędvьję* (pl. tant.) 'kidneys' and *osьlętinъ* 'ass's, asinine' ← *osьlę* (*osьlęt-*) 'ass'. **App. 52.1**. Adjectives built from foreign proper names in **App. 52.2**. At least one formation seems to go back to PIE:

> *svinъ* 'pertaining to swine', cp. Lat. *suīnus* 'id.' and Goth. *swein* 'swine' (a substantivized neuter form), all from PIE */sw-īn-o-/.

5.2.2.3. *-ěnъ*

About twenty deverbal and desubstantival adjectives have a suffix *-ěnъ* and are probably old consonantal stems in *-en-* with a generalized long grade (see **5.**), e.g. *vlasěnъ* 'made of (horse) hair' ← *vlasъ* 'hair'. This is also suggested by the two adjectives built from a */men/-stem noun, viz. *kaměnъ* 'stony, rocky, made of stone' (instead of **kameněnъ*) ← *kamy* 'stone', and *plaměnъ* 'fiery' (instead of **plameněnъ*) ← *plamy* 'flame'. Different suggestions concerning this type are discussed by Arumaa (1985:24-25). In my opinion, *kaměnъ* and *plaměnъ* make use of the stem-vowel alteration as a derivational mechanism and thus correspond to the type of Gk. εὐ·γενής ← γένος. **App. 53**.

5.2.2.4. *-ьnъ*

The adjectives in *-ьnъ* are the most numerous single adjectival group of OCS. The suffix *-ьnъ*, originally probably consonantal (see **5.**), builds relative adjectives from nouns, e.g. *rěčьnъ* 'pertaining to river' ← *rěka* 'river' (**App. 54.1.**), verbs, e.g. *alъčьnъ* 'hungry, starving' ← *alъkati*, *alъčǫ* 'to starve' (**App. 54.2.**), and other adjectives, e.g. *zvěrinьnъ* 'bestial, pertaining to animals' ← *zvěrinъ* 'id.' (**App. 54.3.**).

Very often, however, it is difficult to determine what the source of an adjective is. This is particularly true of those adjectives that end in *-ovьnъ*. They may have been derived from older (not always attested) adjectives in *-ovъ*. *Or* the *-ov-* may be the original full grade thematic element of */u/-stems, much like *ĺubъvьnъ* was transparently built by adding *-ьnъ* to the stem *ĺuby*, *ĺubъv-*. *Or* *-ovьnъ* may be a synchronically unsegmentable unit. *Or* the source may be a verbal stem in *-ov-*, e.g. *věrovati* 'to believe'. These problematic instances are listed in **App. 54.4**.

The adjective *jęčьnъ* 'made of barley' is an interesting detail. The late PSl. noun for 'barley' seems to have been **jęčьmy*, **jęčьmene*, whence an adjective **jęčьměnъ* was derived. The noun survives in Ru. *jačmén'*, Cz. *ječmen*, Po. *jęczmień*, etc. It is not directly attested in OCS, but the adjective *jęčьněnъ* suggests it was assimilated to **jęčьny*, **jęčьnen-*. In the adjective *jęčьněnъ*, the *-ěn-*, which properly belonged to the consonantal stem suffix *-men-*, was reanalyzed as being an adjectival suffix, as in *vlasěnъ* 'hairy' from *vlasъ* 'hair', and replaced with another adjectival suffix, namely *-ьnъ*: *jęčьn-ěnъ* → **jęčьn-ьnъ*. Finally, **jęčьnьnъ* was haplologized into the attested *jęčьnъ*, as if it had come from a **jęčь* or **jękъ*. The assimilated and haplologized *jęčьnъ* is reflected by Cz. *ječný*, while a double-suffixed **jęčьměnьnъ* survives in Ru. *jačménnyj* and Po. *jęczmienny*.

5.2.2.5. *-ьńь*

There is a handful of possessive/relative adjectives in *-ьńь*, i.e. *-ьn-* extended with */-y-o-/, e.g. *bratrьńь* 'fraternal, brotherly, brother's' ← *bratrъ* 'brother' (**App. 55.1.**). The suffix *-ьńь* is an almost exclusive means of deriving adjectives from adverbs and prepositions, e.g. *ǫtrьńь* 'inner, internal' ← *ǫtrь* adv. 'inside' and *prědьńь* 'first, previous' ← *prědъ* (prep. + instr.) 'before, in front of' (**App. 55.2.**). The deprepositional and deadverbial adjectives often have a superlative or intensive meaning, which, together with the frequent and phonologically unmotivated yodization of the root-final consonant, suggests that the source of derivation is a comparative-superlative, e.g. *bližьńь* 'near' ← *blizъ* adv. 'near', comparative *bliže* (**App. 55.3.**).

Adjectives derived from adverbs in *-ě* and *-a*, petrified loc. sg. and abl. sg. forms, respectively, add a *-š-* between the adverb and the adjectival suffix, e.g. *vъněšьńь* 'outer, external' ← *vъně* adv. 'outside' (**App. 55.4.**). The form *dьnьšьńь* 'today's', beside *dьnьsьńь*, is probably analogical to this type. A genuine oddity is *o·krǫgьńь* 'surrounding, near' ← *o·krǫgъ* prep. 'around', instead of **o·krǫžьńь*. Cp. Ru. *o·krúžnyj* < **o·krǫžьnъ*.

5.2.3. Adjectives in */-t-o-/
5.2.3.1. *-tъ*

There are three adjectives with a simple suffix */-t-o-/. They may be participial in origin:

> *ĺutъ* 'severe, strict, strong', possibly from an obsolete **ĺuti*. Cp. *lovъ* 'hunt',
>   *loviti* 'to hunt'.
> *čęstъ* 'frequent, thick', from an obsolete **čęsti*, *čęsǫ*. Cp. Lith. *kim̃šti*, *kemšù*
>   'to cram, pack, jam', pass. past ptcl. *kim̃štas*.
> *istъ* 'true, real, exact', cp. Lat. *iūstus* 'just, lawful, right', both from PIE
>   */yūs-t-o-/. This comparison is controversial. Polomé (1998:195-196)

derives *istъ* from PIE */eyḱ-t-o-/ and compares the root with Skt. *īś-* 'to be master' and the Goth. preterite-present verb *aih* 'I have', *aigum* 'we have'. The semantic link between *istъ* and Lat. *iūstus* appears stronger. A discussion of different proposals can be found in Stang (1949).

5.2.3.2. *-itъ*, *-atъ*

There are some fifteen adjectives built with a suffix */-t-o-/, preceded by a connecting vowel, usually *-i-*, e.g. *imenitъ* 'famous, named' ← *imę* (*imen-*) 'name', and sometimes *-a-*, e.g. *krilatъ* 'winged' ← *krilo* 'wing'. The vowel is no doubt an old stem formant that was reanalyzed as part of the suffix. The situation is similar to the Lat. suffix *-li-*. From the historically "correct" formations, e.g. *nātūrālis* 'natural' ← *nātūra* 'nature', *fidēlis* 'faithful' ← *fidēs* 'faith', *cīvīlis* 'civic' ← *cīvis* 'citizen', *tribūlis* 'belonging to the same tribe'[13] ← *tribus* 'tribe', there arose the pseudo-suffixes *-āli-*, *-īli-*, *-ūli-*, *-ēli-*, cp. *anīlis* 'old-womanish' ← *anus* 'old woman', *capitālis* 'belonging to the head' ← *caput* 'head', *edūlis* 'eatable' ← *edere* 'to eat', etc. **App. 56**.

5.2.4. Adjectives in */-r-o-/

There are around ten, mostly deverbal, adjectives in */-r-o-/, e.g. *bъdrъ* 'brisk, alert, awake', from *bъděti*, *bъždǫ* 'to be awake'. This is an inherited type, as is shown by, e.g., Skt. *dhī́ra-* 'thoughtful' ← *dhīḥ* 'thought', Goth. *laus·qiþrs* 'with an empty stomach' ← *qiþus* 'stomach', and Gk. οἰκτρός 'pitiable' ← οἶκτος 'pity'. There is even one close match, OCS *starъ* 'old', Lith. *stóras* 'thick, deep', and Skt. *sthirá-* 'firm', all from PIE */stā-r-o-/ : */stə-r-o-/ ← */stā-/ : */stə-/ 'to stand'. **App. 57**.

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[13] Used as a noun, i.e. 'fellow tribesman'.

5.2.5. Adjectives in */-y-o-/

5.2.5.1. *-jь*

There is a large number of denominal adjectives in */-y-o-/, almost exclusively possessive in meaning, e.g. *grěšьničь* 'sinner's' ← *grěšьnikъ* and *grěšьnica* 'sinner' (**App. 58.1.**). Very rarely, the source of derivation is a pre-existing adjective, e.g. *bъždŕъ* 'brisk, alert, awake' ← *bъdrъ* 'id.', or a verb, e.g. *ne·gъbĺь* 'undying, unyielding', cp. *sъ·gъbati*, *sъ·gъbĺǫ* 'to bend'. The type is PIE, as testified by Skt. *pítryas*, Lat. *patrius*, Toch. B *patarye*, and Gk. πάτριος 'paternal', all from */pə-tr-y-o-/ ← */pə-ter-/ 'father'.

The productivity of */-y-o-/ is shown by the fact that it often occurs with recent borrowings, e.g. *faraošь* 'Pharaoh's' ← *faraosъ* (**App. 58.2.**), and many foreign proper names, e.g. *venьjamińь* ← *venьjaminъ* ← Gk. Βενιαμίν (**App. 58.3.**).

5.2.5.2. *-ьjь*

A small number of possessive/relative adjectives contains the suffix */-i-y-o-/, e.g. *božьjь* 'God's, divine' ← *bogъ* 'god' (**App. 59.**).

5.2.5.3. *-ajь*

Three adjectives are built with the suffix *-aj-*:

> *bez·umajь* 'unwise' ← *umъ* 'intellect, reason, mind'.
> *bes·po·sagajь* 'unmarried (of women)' ← *po·sagnǫti* 'to marry'.
> *beštinajь* (*bez·činajь*) 'unrestrained' ← *činъ* 'order, rank, rule'.

5.2.6. Adjectives in */-l-o-/

There is one adjective with */-l-o-/ added directly to the root, and three more with a connecting vowel *-e-*:

toplъ 'warm, hot'. This is a secondary variant of **teplъ* as in OCS *teplota* 'warmth, heat', Ru. *tëplyj*, Cz. *teplý*, Po. *ciepły*, and Ukr. *téplyj*, all from PIE */tep-/. Cp. Lat. *tepēre* 'to be warm, glow', *tepescere* 'to become warm', *tepidus* 'mild, warm', OIr. *té* 'hot', fem. nom. pl. *téit*, from act. pres. ptcl. */tepent-/, and Skt. *tápati* 'to heat'.

veselъ 'merry', from PIE */wesu-/ 'wealth(y)'.

debelъ 'fat', cp. *dobrъ* 'good', *po·doba* 'manner'.

dręselъ 'sad, mournful', cp. OIr. *drésacht* 'creaking of wheels' from PIE */drens-/ 'to cry'.

One adjective has a suffix *-ьlъ*, *světьlъ* 'bright', *ne·světьlъ* 'dark', *prě·světьlъ* 'very bright' from *světъ* 'light'. These undoubtedly used to be more numerous, as can be inferred from the complex suffix *-ьl-ivъ*, e.g. *po·bědьlivъ* 'victorious' ← **po·bědьlъ* ← *pobĕda* 'victory'.

5.2.7. Adjectives in */-w-o-/

5.2.7.1. *-avъ, -ivъ*

There are six adjectives in *-avъ*, always denominal (**App. 60.**), and some fifty in *-ivъ*, denominal and deverbal (**App. 61.**). They both contain a primary suffix */-w-o-/, with a connecting vowel abstracted from the stem of the base word, e.g. *lǫkavъ* 'bad, evil, cunning' ← *lǫka* 'plot, intrigue' and *l'ubivъ* 'loving' ← *l'ubiti* 'to love'. It is an interesting, if hardly significant, detail that the adjectives in *-ivъ* from IV conjugation verbs are in the nom. sg. formally identical to the act. past ptcl. (*l'ubivъ*) but semantically they are identical to the act. pres. ptcl. (*l'ubę*). The near-extinct adjectives in *-ьlъ* (**5.2.6.**) were usually transferred here, e.g. *bъdrъlivъ* 'brisk, alert' ← **bъdrъlъ* ← *bъdrъ* 'id.'.

5.2.7.2. -ovъ

The suffix *-ovъ* occurs in a small number of relative adjectives, in which use it is synonymous with */-i-y-o-/ (**5.2.5.2.**), e.g. *lьvovъ* 'lion's' ← *lьvъ* 'lion' (cp. *lьvьjь* 'id.'). With nouns denoting humans, and with proper names, it is an extremely productive formant of possessive adjectives, competing in this function with, and ultimately ousting, */-y-o-/, e.g. *igemonovъ* 'ruler's' ← *igemonъ* 'ruler' (**App. 62.1.**). It also occurs with a large number of foreign proper names (**62.2.**).

5.2.8. Adjectives in */-k-o-/

5.2.8.1. -kъ, -cь

There are two, apparently deprefixal, adjectives built with a simple suffix */-k-o-/:

> *nicь* 'bent down to the ground', as if from PIE */ney-k-o-/ ← */ni-/ : */ney-/ 'down'.
>
> *prokъ* 'remaining, other', as if from PIE */pro-k-o-/ ← */pro-/ 'forward'. According to Holzer (1989:123-126), this is a borrowing (see **4.1.1.**, fn.9).

5.2.8.2. -okъ

Six deadjectival adjectives have a suffix *-ok-* which is secondary and usually lost in derivational processes:

> *vysokъ* 'high', cp. *vysota* 'highness, height'.
> *glǫbokъ* 'deep', cp. *glǫbina* 'depth, abyss'.
> *grǫstokъ* 'sad, mournful'.
> *žestokъ* 'severe, strict', cp. *žestostь* 'severity', *žesto·srьdъ* 'severe, hard-hearted'.
> *širokъ* 'wide, broad', cp. *širota* 'width, breadth'.

> *inokъ* (substantivized) 'hermit', cp. *inъ* 'another', originally 'one' (cp.
> *ino·rogъ* 'unicorn').

5.2.8.3. *-ъkъ*

A handful of adjectives have the suffix *-ъkъ*. As these are mostly ancient */u/-stems (**5.**), the initial *-ъ-* can be interpreted as an old stem vowel. In some cases, however, *-ъkъ* builds deverbatives, e.g. *vratъkъ* 'easily turned' ← *vratiti sę* 'to turn (around)'.

5.2.8.4. *-ьskъ*

The suffix *-ьskъ*, an exact match of the Gmc. */-isk-a-/, is a very productive formant of relative adjectives. They are exclusively desubstantival, e.g. *adьskъ* 'hell's, infernal' ← *adъ* 'hell' (cp. *adovъ* 'id.', *adovьnъ* 'id.') (**App. 63.1.**), or more rarely deadjectival, e.g. *adovьskъ* 'hell's, infernal' ← *adovъ* 'id.' (cp. *adovьnъ* 'id.', *adьskъ* 'id.') (**App. 63.2.**). Nearly all adjectives from toponyms are built with *-ьskъ*, *livanьskъ* ← *livanъ* ← Gk. Λίβανος (**App. 63.3.**).

It has been suggested (e.g. Shevelov 1964:437) that the suffix was actually borrowed from Gmc., but I do not see a necessity for such an assumption.

6. Conclusion

This concludes the survey of the Old Church Slavic nominal stem classes and the derivational types contained by them.

References

Adams, Douglas Q.

  1988   *Tocharian historical phonology and morphology*. New Haven.

Adrados, Francisco R.

    1982   The archaic structure of Hittite: The crux of the problem, *Journal of Indo-European Studies* 10, 1-35.

Anttila, Raimo

    2000   Greek and Indo-European etymology in action: Proto-Indo-European *aǵ-. (Current Issues in Linguistic Theory.) Amsterdam & Philadelphia.

Arumaa, Peeter

    1985   *Urslavische Grammatik, Band III*. Heidelberg.

Benveniste, Emile

    1973   *Indo-European language and society*. Coral Gables.

Berg, Nils & Otto Lindeman

    1992   The etymology of Greek αὖος and Od. 19. 327 αυασταλέος: Homeric metrics and linguistics - a question of priority, *Glotta* 70, 181-196.

Birnbaum, Henrik & Jos Schaeken

    1997   *Das altkirchenslavische Wort: Bildung - Bedeutung - Herleitung*. (Slavistische Beiträge, 348.) München.

Blažek, Václav

    1998   Indo-European 'four', *Indogermanische Forschungen* 103, 112-134.

    1998b   Baltic and Slavic 'fox', *Linguistica Baltica* 7, 25-31.

Bloomfield, Maurice

    1909   On some disguised forms of Sanskrit *paśu* 'cattle', *Indogermanische Forschungen* 25, 185-199.

Bomhard, Allan R.

    1986   An etymological note: PIE *H̥s-tér- 'star', *Journal of Indo-European Studies* 14, 191-192.

Boutkan, P. & M.G. Kossmann

    1999   Some berber parallels of European substratum words, *Journal of Indo-European Studies* 27, 87-100.

Brosman, Paul W., Jr.

    1976   The Hittite gender of cognates of PIE feminines, *Journal of Indo-European Studies* 4, 141-159.

    1978   The Hittite gender of cognates of PIE neuters, *Journal of Indo-European Studies* 6, 93-106.

    1981   The origin of the PIE *ā*-stems, *Journal of Indo-European Studies* 9, 255-273.

    1982   The development of the PIE feminine, *Journal of Indo-European Studies* 10, 253-272.

    1984   The IE cognates of the Hittite *ai*- and *au*-stems, *Journal of Indo-European Studies* 12, 345-365.

    1986   Lat. *fidēs* and the *i*-stems with nom.sg. *-ēs*, *Journal of Indo-European Studies* 14, 334-363.

    1998   On the origin of the PIE *o*-stems, *Folia Linguistica Historica* 19, 65-78.

    2000   On the origin of the PIE neuter plural, *Folia Linguistica Historica* 21, 3-29.

Brugmann, Karl

    1920   Altlat. *humus* Gen. Sing. = gr. χθονός, *Indogermanische Forschungen* 39, 151-154.

Diels, Paul

    1932   *Altkirchenslavische Grammatik*. Heidelberg.

Eckert, R.

    1969   Zu einigen Kontinuanten indoeuropäischer Heteroklita im Baltischen, *Baltistica* 5, 7-15.

Elbourne, Paul

    1998   Proto-Indo-European voiceless aspirates, *Zeitschrift für vergleichende Sprachforschung* 111, 1-30.

    2000   Plain voiceless stop plus laryngeal in Indo-European, *Zeitschrift für vergleichende Sprachforschung* 113, 2-28.

2001   Aspiration by /s/ and devoicing of mediae aspiratae, *Zeitschrift für vergleichende Sprachforschung* 114, 197-219.

Fairbanks, Gordon H.

1977   Case inflections in Indo-European, *Journal of Indo-European Studies* 5, 101-131.

Fraenkel, Ernst

1959   Zur indoeuropäischen Stammbildung und Flexion, *Lingua Posnaniensis* 7, 1-24.

Georgiev, Vladimir

1969   *Osnovni problemi na slavjanskata diaxronna morfologija.* Sofija.

1973   Die Herkunft der indoeuropäischen Endungen für Nominativ-Akkusativ-Vokativ Plural Neutrum und Dual, *Indogermanische Forschungen* 78, 43-50.

Gray, Louis H.

1932   On Indo-European noun-declension, especially of -*o*- and -*ā*-stems, *Language* 8, 183-199.

Gribble, Charles E.

1973   Slavic *bykъ 'bull', *Linguistics* 113, 53-61.

Halla-aho, Jussi

2005   Two borrowings in Proto-Slavic, and a minor Balto-Slavic sound change, *Journal of Indo-European Studies* 33, forthc.

Hamp, Eric P.

1967   On the notions of 'stone' and 'mountain' in Indo-European, *Journal of Linguistics* 3, 83-90.

1972   On Indo-European nouns in *e*-reduplication, *Indogermanische Forschungen* 77, 159-170.

1977   Indo-Celtica, *Lingua Posnaniensis* 20, 9-11.

1977b   Some Italic and Celtic correspondences, *Zeitschrift für vergleichende Sprachforschung* 91, 240-245.

1979   On two Baltic etymologies, *Baltistica* 15, 144-145.

1979b   Indo-European *g^wen-H_a, *Zeitschrift für vergleichende Sprachforschung* 93, 1-7.

1980   IE. *() *ḱuon*- 'dog', *Indogermanische Forschungen* 85, 35-42.

1988   *sor*- 'woman' and 'Indo-Hittite', *Journal of Indo-European Studies* 16, 121-122.

Hilmarsson, Jorundur

1982   Indo-European 'tongue', *Journal of Indo-European Studies* 10, 355-367.

Hirt, Hermann

1912   Zur Bildung auf -$\bar{\iota}$ im Indogermanischen, *Indogermanische Forschungen* 31, 1-23.

Hodge, Carleton T.

1986   Indo-European consonant ablaut, *Diachronica* 3, 143-162.

Hoenigswald, Henry M.

1952   Laryngeals and *s* movable, *Language* 28, 182-185.

Holzer, Georg

1986   Bairisch-österreichisch *Maut*. Eine vergleichende Wortstudie zum Germanischen, Romanischen und Slawischen, *Beiträge zur Erforschung der deutschen Sprache* 6, 108-125.

1989   *Entlehnungen aus einer bisher unbekannten indogermanischen Sprache im Urslavischen und Urbaltischen*. Wien.

1990   Germanische Lehnwörter im Urslavischen: Methodologisches zu ihrer Identifizierung, in *Croatica - Slavica - Indoeuropaea*, 59-67. Wien.

Huld, Martin E.

1986   Proto- and post-Indo-European designation for 'sun', *Zeitschrift für vergleichende Sprachforschung* 99, 194-202.

Iljinskij, G.

1922   Kirchenslavisch *ovoštь* 'Frucht', *Indogermanische Forschungen* 40, 144-145.

Jucquois, Guy

    1965   V.sl. *bogatъ* 'riche', *bogъ* 'dieu', et apparentés, *Sprache* 11, 131-135.

Klein, Jared S.

    1987   Review of Mayrhofer, *Language* 63, 407-410.

Knobloch, J.

    1988   "Female speech" in Greek, Armenian, and Albanian, *Journal of Indo-European Studies* 16, 123-125.

Kortlandt, Frederik

    1997   Baltic *ē*- and *ī/jā* -stems, *Baltistica* 32, 157-163.

Lane, George S.

    1949   On the present state of Indo-European linguistics, *Language* 25, 333-342.

Leskien, August

    1909   *Grammatik der altbulgarischen Sprache*. Heidelberg.

Lubotsky, Alexander

    1985   The PIE word for 'dry', *Zeitschrift für vergleichende Sprachforschung* 98, 1-10.

    1989   PIE phoneme *a*, in Theo Venneman (ed.): *The new sound of Indo-European: Essays in phonological reconstruction*. (Trends in Linguistics, Studies and monographs, 41.) Berlin.

Maher, J. Peter

    1973   *$H_2eḱmon$* '(Stone) Axe' and 'Sky' in I-E/Battle-Axe Culture, *Journal of Indo-European Studies* 1, 440-462.

Malzahn, Melanie

    1999   Die nominalen Flexionsendungen des idg. Duals, *Zeitschrift für vergleichende Sprachforschung* 112, 204-226.

Martinet, André

    1956   Some cases of -*k*-/-*w*- alternation in Indo-European, *Word* 12, 1-6.

Matasović, Ranko

    1998   The Proto-Indo-European heteroclita in Balto-Slavic, *Wiener Slavistisches Jahrbuch* 44, 121-127.

    2004   *Gender in Indo-European*. Heidelberg.

Mayrhofer, Manfred

    1986   *Indogermanische Grammatik, Band I - 1/2*. Heidelberg.

Meid, Wolfgang

    1957   Zur Bedeutung und Bildung von altindisch *dámūnas-*, *Indogermanische Forschungen* 63, 151-162.

    1957b   Zur Dehnung praesuffixaler Vokale in sekundären Nominalableitungen, *Indogermanische Forschungen* 63, 1-28.

    1966   Idg. *g^wen-* 'Frau', *Zeitschrift für vergleichende Sprachforschung* 80, 271-272.

Meier-Brügger, Michael

    1977   Lateinisch *humī* und *domī*, *Zeitschrift für vergleichende Sprachforschung* 91, 159-165.

Mezger, Fritz

    1965   Germ. *frijōnd-* 'Verwandte', *Zeitschrift für vergleichende Sprachforschung* 79, 32-38.

Michels, Victor

    1894   Metathesis im Indogermanischen, *Indogermanische Forschungen* 4, 58-66.

Miranda, Rocky V.

    1975   Indo-European gender: a study in semantic and syntactic change, *Journal of Indo-European Studies* 3, 199-215.

Mottausch, Karl-Heinz

    2001   Die thematischen Nomina im Indogermanischen: Entwicklung und Ablaut, *Zeitschrift für vergleichende Sprachforschung* 114, 2-14.

Normier, Rudolf

    1980   Nochmals zu *sor-, *Indogermanische Forschungen* 85, 43-80.

Orr, Robert

    1982   The twofold adjective declension in Germanic and Slavic (with some reference to Baltic): a contrastive/comparative analysis, *Zeitschrift für vergleichende Sprachforschung* 96, 104-118.

    1996   Again the *ŭ*-stems in Common Slavic, *Journal of Slavic Linguistics* 4, 312-343.

Osten-Sacken, W. Frhr. v. d.

    1909   Zur Entwicklungsgeschichte der Nomina auf slavisch -ьba, litauisch -*ýbas* -*ýba* -*ỹbė*, lettisch -*ība*, *Indogermanische Forschungen* 26, 307-324.

    1911   Die Bedeutungssphäre der Eigenschaftsabstrakta auf slav. -*oba*, *Indogermanische Forschungen* 28, 416-424.

Otkupščikov, Ju. B.

    1983   Baltijskie i slavjanskie prilagatel'nye s -*u*-osnovoj, *Baltistica* 19, 23-39.

Otrębski, Jan

    1963   Baltisch-Slawische Miszellen, *Lingua Posnaniensis* 9, 115-121.

Părvulescu, Adrian

    1989   Blood and IE. kinship terminology, *Indogermanische Forschungen* 94, 67-88.

Polomé, Edgar C.

    1983   Celto-Germanic isoglosses (revisited), *Journal of Indo-European Studies* 11, 281-298.

    1998   Germanic etymological dictionary, *Journal of Indo-European Studies* 26, 191-197.

Puhvel, Jaan

    1973   Nature and means of comparison in Proto-Indo-European grammar, *Journal of Indo-European Studies* 1, 145-154.

1994   Anatolian: autochthon or interloper, *Journal of Indo-European Studies* 22, 251-263.

Sapir, Edward

1939   The Indo-European words for 'tear', *Language* 15, 180-187.

Schenker, Alexander

1995   *The dawn of Slavic*. New Haven.

Schmidt, Karl Horst

1992   Celtic movements in the first millennium, *Journal of Indo-European Studies* 20, 145-178.

Schrijver, Peter

1998   The British word for 'fox' and its Indo-European origin, *Journal of Indo-European Studies* 26, 421-434.

Seliščev, Afanasij

1951   *Staroslavjanskij jazyk*. Moskva.

Shevelov, George A.

1964   *A prehistory of Slavic*. Heidelberg.

Shields, Kenneth, Jr.

1979   More on early Indo-European nominal inflection: the origin of the *-r-/-n-* stems, *Journal of Indo-European Studies* 7, 213-226.

1987   Some remarks about the dual of Indo-European *o*-stems, *Journal of Indo-European Studies* 15, 341-352.

1991   Comments about the *o*-stem genitive of Indo-European, *Zeitschrift für vergleichende Sprachforschung* 104, 52-62.

Sihler, Andrew L.

1979   The Latin 'tool' suffixes and the formation of *rēgula*, *tēgula*, and *trāgula*, *Indogermanische Forschungen* 84, 157-174.

1995   *New comparative grammar of Greek and Latin*. Oxford.

Skardžius, Pranas

1956   Alte Wurzelnomina im Litauischen, *Indogermanische Forschungen* 62, 158-166.

Sławski, Franciszek

1974   "Zarys słowotwórstwa prasłowiańskiego", in *Słownik prasłowiański, Tom I*. Wrocław.

Sommer, Ferdinand

1916   Das Femininum der *u*- und *i*-Adjektiva im R̥gveda und im Awestischen, *Indogermanische Forschungen* 36, 165-232.

Stang, Christian

1939   Slavische indeklinable Adjektiva auf -ь, *Norwegian Journal of Linguistics* 11, 99-103.

1949   L'adjectif slave *istъ*, *Norwegian Journal of Linguistics* 15, 343-351.

1954   Zum indoeuropäischen Adjektivum, *Norwegian Journal of Linguistics* 17, 129-145.

1971   Litauisch *ugnìs, ùpė, Norwegian Journal of Linguistics* 25, 7-13.

Strachan, J.

1899   The nominative plural of neuter *u*-stems in Celtic, *Indogermanische Forschungen* 10, 76-77.

Streitberg, Wilhelm

1900   *Gotisches Elementarbuch*. Heidelberg.

1915   Die Bedeutung des Suffixes *-ter-*, *Indogermanische Forschungen* 35, 196-197.

Sturtevant, Edgar H.

1934   Adjectival *i*-stems in Hittite and Indo-European, *Language* 10, 266-273.

Swadesh, Morris

1970   The problem of consonantal doublets in Indo-European, *Word* 26, 1-16.

Szemerényi, Oswald

1977   *Studies in the kinship terminology of the Indo-European languages (with special reference to Indian, Iranian, Greek and Latin)*. (Acta Iranica.

Encyclopédie Permanente des Études Iraniennes. Troisième Série, 7.) Teheran & Liège.

Trost, Klaus

1967   Slav. *mьrtvъ* 'tot', *Sprache* 13, 52-60.

Trubačёv, O.N.

1959   *Istorija slavjanskix terminov rodstva i nekotoryx drevnejšix terminov obščestvennogo stroja*. Moskva.

Wescott, Roger W.

1993   Toward a more concise inventory of Proto-Indo-European roots, *Word* 44, 459-472.

Winter, Werner

1982   Indo-European words for 'tongue' and 'fish': a reappraisal, *Journal of Indo-European Studies* 10, 167-186.

Witczak, Krzysztof Tomasz

2002   Indo-European abstracta ending with *-osti-*: the Ossetic evidence, *Lingua Posnaniensis* 44, 175-179.

Wittman, Henri

1969   A lexico-statistical inquiry into the diachrony of Hittite, *Indogermanische Forschungen* 74, 1-10.

Vaillant, André

1974   *Grammaire comparée des langues slaves, tome IV*. Paris.

Vondrák, Wenzel

1912   *Altkirchenslavische Grammatik*. Berlin.

Xaburgaev, Georgij

1986   *Staroslavjanskij jazyk*. Moskva.

ESRJa= Max Vasmer, 1964-73, *Ètimologičeskij slovar' russkogo jazyka (I-IV) (transl. from German by O.N. Trubačёv)*. Moscow.

CHAPTER II

Proto-Slavic Verdumpfung or not?

1. Introduction

Among scholars there is an age-old debate on whether or not there were sound laws in
PSl. that operated only in final syllables, so-called "Auslautgesetze" (henceforth ALG).
The most important of these putative ALG is the narrowing, or *Verdumpfung* in
"classical" terminology, of PIE */o/ to */u/ in closed final syllables. Such a regular
change would explain a group of anomalous terminations in the Slavic nominal and
verbal inflection.

An excellent survey of the various ALG hypotheses advanced in the course of the 19th
and the 20th centuries can be found in Orr's state-of-the-art report (Orr 2000) and need
not be repeated here. Let it merely be noted that the supporters of the ALG are roughly
divided into two groups; those who believe that a final-syllable */o/ became */u/ before
any final consonant (the "Fortunatovian version", Orr 2000:97-98), and those who
believe the Verdumpfung took place only before a nasal (the "Leskienian version"). As
Orr (2000:113) concludes, "the scholarly consensus overwhelmingly accepts *-om >
*-u, while nowadays generally rejecting *-os > *-u, although the latter sound change
continues to find a small, but steady stream of support".[1]

Henceforth, the two main variants of the theory will be called the "weak" ALG
hypothesis (*/-oN/ > */-u/) and the "strong" ALG hypothesis (*/-os/, */-oN/ > */-u/).

Most scholars thus assume that the apparent instances of */-oN/ > */-u/ in Slavic are
"real", i.e. products of regular phonological development, while the apparent instances
of */-os/ > */-u/ are "unreal", products of morphological rearrangements. Such
rearrangements are mostly motivated by a PSl. tendency to preserve the distinction

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[1] An example is Galabov (1973).

between masculines and neuters, a distinction threatened by phonological processes, such as the loss of word-final consonants. The idea that there indeed was such a tendency can be labeled the "Segregational Hypothesis", for a hypothesis it is, despite the fact that it is often taken for granted.

Beside the believers in different versions of the ALG hypothesis, there is a "morphological school", the most important modern proponents of which are Georgiev (especially Georgiev 1969) and Orr (especially Orr 2000), although principled opposition to the ALG is by no means new. Osten-Sacken (1922:260) criticized the idea of a narrowing of */o/, "obgleich der Augenschein fast gebieterisch darauf hinweist und man die Flexion der *u*-Stämme nicht für alle Erscheinungen in den anderen Flexionen verantwortlich machen kann". Georgiev and Orr explicitly reject the possibility of sound laws peculiar to the final syllable (although Georgiev is not completely consistent in this matter) and explain all apparent instances of */-oC/ > */-u/ as analogical. It is especially their views that I will discuss.

A third approach, which could be labeled the "sandhi school", is represented by Schmalstieg, often echoed by Shields.[2] According to Schmalstieg, all PIE word-final combinations of a non-front vowel and a nasal merged in PSl. */-um/, which later, depending on the sandhi conditions, produced either -ъ or -ǫ, in some circumstances even -*u*. Schmalstieg (1983b:155) wrote: "One finds then a generalization of the sandhi variants. […] The pattern is there, but it is a sensible structural phonological pattern, not a random selection of possible equations." The model would be sensible if the actual distribution of the variants supported it in any way, which it does not seem to do. Schmalstieg's pattern is not based on the evidence. He has an *a priori* pattern which he forces the evidence to fit by accepting a chaotic distribution of the sandhi variants. The sandhi explanations are not only unprovable (and unfalsifiable), but there is evidence against PSl. sandhi phenomena in general; see, e.g., Galton (1956).

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[2] E.g., Schmalstieg (1965, 1974, 1977, 1997); Shields (1978, 1982).

I support the "strong" ALG hypothesis, the change of PIE */o/ to */u/ before */-s/ and */-N/ in early PSl. This belief is based on

a) the combined weight of the evidence. All individual instances of PSl. */-u/ for PIE */-oC/ can, in isolation, be explained as analogical, but taken together their message is quite clear. Many of the proposed analogies are so far-fetched that they cannot be taken seriously.

b) the lack of counterevidence. The apparent instances of PIE */-oC/ yielding something else than PSl. */-u/ can credibly be explained away, whereas the opposite is not true.

c) the usually offered trigger for analogical developments */-oC/ > */-u/, i.e. a tendency to keep certain morphological categories distinct, can be shown to be even theoretically improbable. Here I will rely heavily on typological evidence.

2. A look at the material

The material that is relevant for the "weak" ALG hypothesis, i.e. */-oN/ > */-u/, includes the following:

(1) The acc. sg. -ъ of */o/-stem masculines, which should continue PIE */-om/, e.g. OCS *bogъ* 'god' from PIE */b^{h}agom/.

(2) The root aorist 1st sg. -ъ, which should continue */-om/, e.g. OCS *bodъ* 'I pierced' from PIE */(e)b^{h}odom/.

A more complicated but still relevant case is the acc. pl. -*y* of the */o/-stem masculines, which should continue PIE */-ons/, e.g. OCS *bogy* 'gods' from */b^{h}agons/. According

to the most common view, the final cluster is simplified after the operation of the ALG, whereby the */u/ is lengthened into */ū/, the latter yielding regularly OCS -*y*.

Related to the */o/-stem acc. pl. ending -*y* is, of course, the corresponding ending -*y* of the */u/-stems, which, according to most scholars, continues PIE */-uns/.

Related to the acc. pl. ending -*y* of the */u/-stem masculines is the corresponding acc. pl. ending -*i* of the */i/-stems. Most scholars derive it from PIE */-ins/ by the same mechanism as the -*y* from */-uns/.

The single piece of counterevidence for */-oN/ > */-u/ is the nom.-acc. sg. -*o* of */o/-stem neuters, which should continue PIE */-om/, e.g. OCS *igo* 'yoke' from PIE */yugom/. Whatever fate we assume for PIE */-om/ in PSl., the neuter form should be identical with the acc. sg. form of */o/-stem masculines.

The material relevant from the point of view of the "strong" ALG hypothesis, */-oN/, */-os/ > */-u/, includes:

(1) The nom. sg. termination -*ъ* of */o/-stem masculines, which should continue PIE */-os/, e.g. OCS *bogъ* 'god' from PIE */bʰagos/.

(2) The dat. pl. ending -*mъ* of all declensions, which should continue PIE */-mos/, e.g. OCS *bogomъ* 'god' from PIE */bʰagomos/.

(3) The pres. 1ˢᵗ pl. ending -*mъ*, which should continue PIE */-mos/, e.g. OCS *deremъ* 'we tear' from PIE */deromos/ (with an analogical theme -*e*- instead of -*o*-, which is retained in the aorist, cp. *bodomъ* 'we pierced').

An apparent piece of counterevidence is the nom.-acc. sg. termination -o of the */es/-stem neuters, which should continue PIE */-os/, e.g. OCS *nebo* 'sky' from PIE */neb^{h}os/.

In addition, there are a few forms the relevance of which for the ALG question depends on what kind of a protoform we reconstruct. The reconstruction of the protoform, on the other hand, depends on what we think of the ALG hypothesis. Relying solely on the comparative method, we cannot reliably reconstruct the PIE termination for

(1) the nom. sg. of the */men/-stem masculines, e.g. OCS *kamy* 'stone' from PIE */aḱ-mon-/ (it is not quite clear how OCS *kamy* relates to PIE */aḱ-men-/, if it does at all; see **Chapter I: 3.2.**).

(2) the masc. nom. sg. of the act. pres. ptcl., e.g. OCS *dery* 'tearing' from PIE */der-ont-/.

(3) the gen. pl. -ъ of all stem classes, e.g. OCS *bogъ* 'gods'. The only PIE termination that we can confidently generate by applying the comparative method is */-õm/. Very few scholars are willing to derive OCS -ъ from this ending (among them is Jasanoff 1983:143-144). Relevant in this connection is also the OCS pres. 1st sg. ending -ǫ, e.g. *derǫ* 'I tear', which most scholars would derive from PIE */-ōm/, whatever its structural nature.

(4) the nom.-acc. pl. -y and the gen. sg. -y of the */ā/-stems, e.g. *ženy* 'woman's, women'.

3. The evidence for the "weak" ALG hypothesis

Three forms will be discussed here: the nom.-acc. sg. of the */o/-stem neuters, the gen. pl. in -ъ, and the root aorist 1st sg. in -ъ. The acc. sg. of the */o/-stem masculines in -ъ will be discussed in a broader context in **5.** below.

3.1. The nom.-acc. sg. of the */o/-stem neuters

Almost everyone would agree that the OCS termination -*o* of the */o/-stem neuters cannot directly continue a PIE */-om/, which is usually reconstructed on the basis of Skt. -*am*, Gk. -ον, Lat. -*um*, and Celtic -ⁿ (the nasal mutation).

It has been suggested (e.g. Seliščev 1951:150, Koschmieder 1956:239-240) that the PSl. */o/-stem neuters indeed ended in */-om/, which yielded regularly late PSl. */-ъ/. This was then replaced under the influence of the pronoun *to* (PIE */tod/) and the */es/-stem neuters in -*o* (*/-os/). A few objections could be raised to this proposal. Neuters with a nom.-acc. sg. in */-ъ/ would undoubtedly have merged with the */o/-stem masculines. If, on the other hand, the nom. sg. of the latter ended at this point in */-o/ (*/-os/), the remodeling of the neuter from */-ъ/ to -*o* would, again, have led to the merger of the masculines and the neuters. The */es/-stem neuters were few, and it is difficult to accept their influence on the much more numerous */o/-stems. According to Kiparsky (1967:64) one should not forget in this connection, "daß zu diesen letzteren [i.e., the */es/-stems] die außerordentlich häufigen Wörter *slovo* 'Wort', *nebo* 'Himmel', *drěvo* 'Baum, Holz', *čudo* 'Wunder', *kolo* 'Rad' gehören". This argument is not as good as it sounds, for the high frequency of many of these words in the OCS corpus has to do with the religious nature of the texts that we have. Whatever analogical changes there were, they took place in the spoken language of pagan Slavs, not in the Christian literary medium of the 9th century. It is difficult to believe that the frequency of such abstractions as *slovo*, *čudo* or even *nebo* would have been especially high among those peasants in comparison with, say, *zrъno* 'grain', *igo* 'yoke', *selo* 'field, acre', *męso* 'flesh, meat', *ramo* 'shoulder', *tьlo* 'ground, surface', *sěno* 'hay', *blato* 'swamp', *žito*

'crop', *lěto* 'summer', or *jato* 'food'. In addition, only a few of the Slavic */es/-stems have morphological counterparts elsewhere, whereas most of them appear to be remodeled */o/-stems (**Chapter I: 3.4.**).

The easiest way out is to reconstruct a bare-stem form for PSl., as is done by, e.g., Rosenkranz (1954:76), Murata (1986:286), Álvarez-Pedrosa Núñes (1998), and Orr (2000:139). PSl. */yugo/ 'yoke' (OCS *igo*), alongside the better established */yugom/ (Lat. *iugum*, Skt. *yugám*), is morphologically well justified whether it is an inherited archaism (as believed by, e.g., Orr) or a PSl. innovation (as I believe on the basis of some indirect evidence for the ending */-m/ in Slavic; see below). The */o/-stems were the only neuter class with a desinence in the nom.-acc. sg. They may have lost the ending under the pressure of other neuter types which always had a bare-stem nom.-acc. sg. (Szober 1927:570). A parallel development, although in the opposite direction, is attested in Celtic, where the final nasal, or rather its nasalizing effect, spread from the */o/-stems to all neuters (Thurneysen 1980:192, 197). Cp. OIr. */o/-stem *scél*[n] 'story', */i/-stem *muir*[n] 'sea', */u/-stem *rind*[n] 'star', */t/-stem *lóchet*[n] 'lightning'. This, too, is understandable, for although the */o/-stems, with their */-m/, were a curiosity among all other neuter classes, they contained the absolute majority of all neuters.

The bare-stem neuter nom.-acc. sg. need not be restricted to PSl. The relic forms in Lith., as well as East-Baltic loans in Finnic, also suggest an endingless neuter.[3] Cp. Lith. predicatively used adjectives like *gẽra* 'good' instead of **gẽrą* and Finnish *heinä* 'hay' from Baltic */šeyna/ (Lith. *šiẽnas*, synchronically a masculine). The OPr. neuter forms in *-n* may have nothing to do with the PIE desinence */-m/ (Smoczyński 2001b). Gmc. */o/-stem neuters, e.g. Goth. *juk* 'yoke', agree both with PIE */yugom/ and */yugo/, but borrowings into Finnic again point to the latter, e.g. Finnish *patja* 'mattress' from Gmc. */badya/ (Goth. *badi* 'bed'). On the other hand, the Goth. adverbs *þan* 'then' and *suman* 'once' more likely continue the nom.-acc. sg. neuter than the acc.

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[3] On the neuter in Baltic, see Scholz (1984), Kortlandt (1994b:47).

sg. masculine of the PIE pronominal stems */to-/, */sm̥ho-/, respectively, thus indicating an ending */-m/ at least in the pronominal inflection. The Hit. evidence for endingless neuters is discussed by Álvarez-Pedrosa Núñes (1998).

One can accept, as a working hypothesis, Hirt's (1892:348-349, see also Kortlandt 1994:94-95) proposal that barytone neuters retained the nasal ending. It is difficult to find a phonetic justification for this idea, but the shift of a number of root-stressed neuters to the masculine gender seems to support it, e.g. OCS *trьnъ* 'thorn' vs. Skt. *tŕnam* 'grass', OCS *darъ* 'gift' vs. Gk. δῶρον, OR *lьnъ* 'linen' vs. Gk. λίνον, and possibly OCS *štitъ* 'shield' vs. Lat. *scūtum*.[4] I find it less likely that PSl. would have replaced the PIE ending */-m/ with a pronominal */-d/, either in all neuters or in oxytone stems only (Kortlandt ibid., Shevelov 1964:157). There are no parallels to such a development, and if we generally accept the possibility that *igo* is analogical, a zero ending is structurally at least as well justified as */-d/. Gmc., of course, does show a pronominal */-d/ in the adjectival declension (e.g. Goth. *naujata* 'new', German *neues*, Sw. *nytt*) but not in the substantival one.

Georgiev (1969:37-38) derives OCS -*o* directly from PIE */-om/ by assuming that */-m/ was lost after a short */o/. This would, however, be the only instance of such a loss. Georgiev (ibid.) regards a bare-stem nom.-acc. sg. as "impossible" because "среден род е гласял в именителен-винителен падеж единствено число ие. **yugo-m*". This is obviously a circular argument and as such not worth much. OCS -*o* in itself provides evidence for an endingless neuter regardless of how we interpret this endinglessness, and it is further supported, or at least not contradicted, by the Baltic and Gmc. evidence.

The OCS nom.-acc. sg. form of the */o/-stem neuters is thus irrelevant for the ALG hypothesis. It continues a PSl. bare-stem form, the reconstruction of which is justified

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[4] The original gender of the 'shield'-word is not certain; OIr. *scíath* 'id.' is masculine. In any case, the radical */e/-grade of *štitъ* makes it closer to OIr. *scíath* (*/skeyto-/) than to Lat. *scūtum* (*/skoyto-/).

both structurally and comparatively. If OCS -*o* can be removed from our list (**2.**), there is no evidence against the "weak" ALG hypothesis, while there is plenty in favor of it.

3.2. The gen. pl. -ъ

Jasanoff (1983:143-144) suggests that in a long circumflex */-õN/ the vowel was narrowed and finally shortened, whereby -ъ would be a regular reflex of the reconstructable PIE termination */-õm/. The problem here is that this would be the only instance of such a change (which, of course, does not make it impossible). Even if this analysis cannot be positively disproven, I join Kortlandt (1983:167) in finding it difficult to believe in "divergent development of acute and circumflex vowels" in PSl.

Stang (1966:185) explains the secondary Slavic radical circumflex in the gen. pl. of nouns with an acuted root, e.g. Cz. *krav* ← *kráva* 'cow', as the result of the shortening of the ending */-ōn/ to */-on/ (OCS -ъ), but he adds that "[d]ie Ursache der Kürzung bleibt aber unbekannt". Here too, the problem is that there is no supporting evidence either for a shortening itself or for the rise of a neo-circumflex as a result of such a shortening.

Georgiev (1969:75, 134) reconstructs */-m̥/, which is unattested and structurally improbable; quantitative ablaut of diphthongs, e.g. */om/ : */m̥/, does not typically operate across morpheme boundaries. For this same reason the thematic masculines never have an acc. sg. in */-m̥/ (but */-om/) or the 1st sg. of the thematic aorist an ending */-m̥/ (but */-om/). In addition, the wide-spread shift of word-final */-m/ to */-n/ in European languages, together with the lack of agreement on the treatment of syllabic nasals among them, suggest that the former development took place before the elimination of the syllabic sonorants. If this is the case, the PSl. ending, before the emergence of the epenthetic vowel, would have been not */-m̥/, but */-n̥/. There would thus be no labial factor to account for the resolution */-un/ (OCS -ъ) instead of */-in/ (OCS -ь). One can also detect a double standard in the way Georgiev evaluates the

comparative evidence. On pp. 37-38 he dismisses the reconstruction of a bare-stem nom.-acc. sg. for PSl. */o/-stem neuters as "impossible" on the very basis of the absence of a zero ending in other IE languages.

Seliščev (1951:150) proposes an ablaut variation */-ōn/ : */-on/ and derives OCS -ъ from the latter. The objection is the same as with Georgiev's hypothesis. The long vowel in the gen. pl. termination was a contraction product that simply had no "grade" */-on/.

Most scholars prefer to derive -ъ from */-om/, which is explained as an original non-thematic termination. In PSl. it spread to the thematic inflection, whereas in most other IE branches the thematic */-õm/, contracted from */-o-om/ and */-ā-om/ (or possibly only the latter) was extended to the athematic classes (Sihler 1995:254-255).

> Álvarez-Pedrosa Nuñes (1998:103) suggests the */o/-stem neuter nom.-acc. sg. form in */-m/ would be an original gen. pl. which would have been reanalyzed as an agreeing attribute, e.g., in constructions like */rēǵom ǵenos/ 'kin of kings' > 'royal kin'. The length in the gen. pl. desinence would then have arisen morphologically to distinguish it from the now homophonic neuter nom.-acc. sg. form. PSl., with a zero desinence in the neuter sg. form, would have had no homophony and thus no need to lengthen the gen. pl. ending. This sounds fine, but then one would like to know why Lith., which also appears to have had an endingless neuter form, unambiguously has a long ending in the gen. pl.

Jasanoff (ibid.:142) protests that an "IE gen. pl. in */-om/ cannot be independently motivated outside Slavic". Georgiev (see above) also rejects */-om/ as a source for OCS -ъ, apparently for no better reason than his *a priori* denial of the possibility of such a phonetic development. Jasanoff's typological argument is not entirely convincing

because OIr., Umbrian, Hit., OPr. and Lat. do not in any way rule out */-om/, although their testimony is less unambiguous than that of OCS. Moreover, an extension of either a thematic */-õm/ or an athematic */-om/ into all declensions would be structurally very understandable, just like the spread of either an endingless neuter nom.-acc. sg. to the */o/-stems or an ending */-m/ to all other declensions.

Orr (2000:164-165), who himself derives the gen. pl. ending -ъ from a deictic particle */u/, criticizes the derivation of, e.g., *bogъ* from */bʰagom/ and asks "[w]hat happened to the theme vowel? Would *-om* have been suffixed directly to the root?" Diachronically yes, synchronically no. There were no theme vowels in late PIE. Here I disagree also with Andersen (1971:953), who considers thematic vowels as separate entities as late as in PSl. Due to the merger of */o/ and */ā/ with following endings that either consisted of a vowel or began with one (e.g. nom. pl. */-o-es/ > */-õs/), they were reanalyzed as belonging to the ending even in those paradigmatic forms where they phonologically survived intact. Late PIE */gwenā/ 'woman' and */dʰūmos/ 'smoke' no longer consisted of a root (*/gwen-/, */dʰūm-/), a theme (*/-ā-/, */-o-/) and an ending (*/-ø/, */-s/) but of a stem (*/gwen-/, */dʰūm-/) and a monomorphemic ending (*/-ā/, */-os/). That an original theme vowel is still visible does not mean that it is still a theme vowel. For example, it is theoretically still possible to segment a Goth. */u/-stem nom. pl. form *sunius* 'sons' into *sun-* (root), *-iu-* (stem forming element) and *-s* (ending). That this segmentation is not synchronically justified and that *-iu-* has become part of an unsegmentable ending *-ius* is shown by the fact that *-ius* as a whole has been transferred to certain consonantal stems, e.g. *broþrius* 'brothers', which otherwise retain their consonantal inflection, e.g. dat. sg. *broþr*, gen. sg. *broþrs*.

According to Orr (2000:166), the original gen. pl. ending */-ōm/, which would have yielded OCS -ǫ, was liquidated because it would have merged with the masc. */o/-stem acc. pl. ending */-ons/, which, according to Orr's anti-ALG phonological theory, would also have yielded OCS -ǫ. There are two problems with this theory: a) The OCS */o/-

stem acc. pl. ending is not -ǫ but -y which, as Orr believes, was borrowed from the */u/-stems to avoid the merger of the acc. pl. and acc. sg. A merger of the gen. pl. and the acc. pl. would thus have already been avoided. b) There would have been no need for a remodeling of the gen. pl. form in non-thematic stem classes.

The pres. 1ˢᵗ sg. ending -ǫ can best be derived from */-ōm/. It is not difficult to imagine */-ōm/ arising from a combination of the PIE thematic ending */-ō/ and the secondary ending */-m/ (Kieckers 1920:127). The OIr. absolute 1ˢᵗ sg. ending -u, e.g. *biru* 'I carry', may directly reflect PIE */-ōm/. A very close parallel is offered by Skt., where an athematic */-mi/ is added to the old thematic */-ō/, e.g. *bhár-ā-mi* 'I carry'[5], possibly also by OHG., e.g. *ladōm* 'I invite' (Cowgill 1959). Thus, although */-ōm/ is meagerly attested, it is not structurally unexpected. Schmalstieg (1983b:154) denies the possibility of deriving the verbal termination -ǫ from */-ōm/ on the grounds that such an ending is not attested anywhere. Schmalstieg himself suggests that -ǫ goes back to a PIE secondary ending */-om/ and adds that "Slavic is perhaps somewhat exceptional in that it is the only Indo-European language showing the old secondary ending in present function". It is remarkable that Schmalstieg rejects */-ōm/ because it would be unique, but accepts */-om/ despite the fact that it, as a present ending, would also be unique.

A piece of unambiguous evidence for a PIE athematic gen. pl. ending */-om/ may be recoverable from the Goth. ending -e, which is restricted to masculines and neuters of all classes and to the */i/- and to consonantal stems of all genders (with the exception of the feminine */n/-stems). The Goth. ending has often been derived from PIE */-ẽm/, a seemingly plausible ablaut variant of */-õm/ (e.g., Prokosch 1948:239-240, for further discussion see Eska 1988). The problems of this explanation are discussed by Brugmann (1914). It is not clear why a thematic non-feminine ending would spread to feminine */i/- and consonantal stems but not to other feminines. Equally unclear are

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[5] For a slightly different analysis of the OCS and Skt. endings, see Kerns & Schwartz (1968). Mańczak (1997:55) derives Skt. *bhárāmi* from */bʰeromi/ by Brugmann's Law.

*/i/-stems forms like *gaste* 'of guests' instead of **gastje*. Brugmann (ibid.:279) suggests we are dealing with an original nom.-acc. sg. of an adjective with a formant */-ēy-o-(m)/. Thus, for example, *qene* changed its meaning from 'female' to 'women's' (cp. Álvarez-Pedrosa Nuñes above). Brugmann's account would explain the actual form but not the distribution of the ending. The approach chosen by Must (1952) is more fruitful. He believes *-e* is a mere graphic innovation, designed to avoid ambiguities, and that it stands for *-ei*, i.e., /-ī/. The vacillation between <ei> and <e> is not uncommon in Goth. (e.g. Streitberg 1900:21). If the actual ending is /-ī/, it is directly derivable from */-ey-om/, that is, the gen. pl. termination of the */i/-stems with the full-grade stem formant and a short ending */-om/. The form *gaste* (= /gastī/) 'of guests' would then continue Gmc. */gasteyan/ < PIE */gʰost-ey-om/ and be identical to OCS *gostьjь*. The ending survived in the */i/-declension, where it originally belonged, but otherwise it specialized as a non-feminine ending, whereas the original */ā/-stem ending *-o* (from */-õm/) was extended to feminines of most other classes.

It thus seems impossible to derive OCS *-ъ* directly from PIE */-õm/. There is no supporting evidence for such a phonological development, and the verbal ending *-ǫ* offers direct counterevidence. As a PIE ending */-om/, although meagerly attested, is structurally well motivated, it can be said with some certainty that the gen. pl. ending *-ъ* offers additional evidence for the "weak" ALG hypothesis.

3.3. The aorist 1ˢᵗ sg. -ъ

The OCS 1ˢᵗ sg. ending *-ъ* of the root aorist, e.g. *bodъ* 'I pierced', is one of the most solid pieces of evidence for an Auslautgesetz */-om/ > */-u/ (> *-ъ*), cp. Gk. ἔ·λιπ-ον 'I left', Skt. *á·vid-am* 'I found'. The shortcoming of this evidence is that the Slavic sigmatic aorist has the same ending, e.g. *rěxъ* 'I said' (*/rēk-s-/). Comparison with other languages suggests that this form ended in a syllabic nasal, e.g. Gk. ἔ·λεξ-α 'I said' (*/leg-s-m̥/). In principle, it is thus possible that either */-om/ or */-m̥/ was extended to both aorist types.

Georgiev (1969:44), reluctant to accept the possibility of */-om/ > */-u/, derives the aorist 1ˢᵗ sg. ending -ъ from */-m̥/. But, as noted by Andersen (1971:952), it is not very likely that an isolated athematic ending would have intruded into an otherwise perfectly regular thematic flection (e.g. 1ˢᵗ pl. *bodomъ*). Georgiev's explanation requires that */-m̥/ yielded */-um/ rather than */-im/. I do not believe in the */u/-epenthesis before an original syllabic nasal in any environment (the apparent instances rather reflect obsolete ablaut patterns and are linked to the labiovelar clusters, see the **Introduction: 5.2.**), but as this view does not represent the communis opinio, I shall not use it as an argument in this specific case. However, Georgiev's explanation also fails to account for the contradicting treatment of the syllabic nasal in the sigmatic 3ʳᵈ pl. aorist, e.g. *rěšę* 'they said'.

There are no objective reasons to deny the derivation of the ending -ъ from the root aorist termination */-om/. The spread of the ending of the sigmatic aorist to the root aorist would have no motivation, whereas the opposite is not true. After the First Palatalization, especially after the phonemicization, due to secondary vowel changes, of the phones *[k], *[g], *[x] and *[č], *[ž], *[š], a morphophonological variation entered the root aorist paradigm: the 1ˢᵗ sg. of velar stems had a non-palatalized sound, whereas the rest of the singular forms had a palatalized one, e.g. *vlěkъ* 'I dragged', *mogъ* 'I was able to' vs. 2ⁿᵈ/3ʳᵈ sg. *vlěče*, *može*. This pattern may have spread to the sigmatic aorist, thus replacing a late PSl. 1ˢᵗ sg. */rěšь/ (*/rēk-s-m̥/) with the attested *rěxъ*.

3.4. Conclusion to section 3.

The aorist 1ˢᵗ sg. ending -ъ cannot be credibly explained as having come from anything else than PIE */-om/. The reconstruction of a gen. pl. ending */-om/ is structurally justified, whereas no other equally good source can be given for OCS -ъ. The neuter */o/-stem nom.-acc. sg. ending -*o* is easily explained as the reflex of a bare stem. These forms offer evidence for the "weak" ALG hypothesis, but none against it.

4. The evidence for the "strong" ALG hypothesis

Two forms will be discussed below: the 1st pl. ending *-mъ*, and the dat. pl. ending *-mъ*. The masculine */o/-stem nom. sg. in -ъ will be dealt with in **5.** below.

4.1. The 1st pl. ending *-mъ*

OCS (as Slavic in general) does not distinguish between primary and secondary endings in the 1st pl., e.g. *vlěčemъ* 'we drag', *vlěkomъ* 'we dragged'. Beside *-mъ*, which is also continued by Ru. *-m*, there are three other 1st pl. endings attested in Slavic: SCr./Ukr. *-mo*, Blg./Cz. *-me*, and Po. *-my*.

Po. *-my* is clearly influenced by the 1st pl. personal pronoun *my*. The remodeling may have been motivated by the spread of the late PSl. athematic 1st sg. ending */-mь/ to other conjugations and the loss of final jers, which would have made the endings */-mь/ and */-mъ/ homophonous. This is, of course, a chicken-and-egg question. Had */-mъ/ not been replaced by *-my*, the 1st sg. */-mь/ would obviously have had less of a chance to spread. In Ru. the 1st sg. */-mь/ is restricted to (the remnants of) the athematic conjugation (*em* 'I eat', *dam* 'I (will) give'), and the threatening homophony with the 1st pl. form is eliminated (or prevented) by stem alternation (*dadím*, *edím*, cp. OCS *damъ*, *jamъ*).

Comparative evidence suggests the present tense desinence ended in */-s/, cp. Lat. *ferimus* 'we carry', Skt. *bhárāmaḥ* 'id.', both from */b^heromos/, although the Skt. form can also continue */b^heromes/. The aorist desinence apparently had no final */-s/, cp. Skt. *á·vidāma* 'we found' from */ewidomo/ or */ewidome/. Gk. -μεν (as in φέρομεν 'we carry') can be joined with a pres. ending */-mes/ or a past ending */-me/, but the final nasal is peculiar. It could be a generalized ν ἐφελκυστικόν. On the other hand, -μεν can be related to Hit. *-meni* in the same way the Classical Skt. *-masi* is related to Lat. *-mus* (Watkins 1969:35). On the history of the Gk. problem, and an analogical solution, see

Shields (1982b). In any case, Lat. and Gk., like OCS, do not distinguish between primary and secondary endings in the 1ˢᵗ pl.

It is clear, regardless of whether one accepts or rejects the "strong" ALG hypothesis, that the OCS ending -*mъ* cannot continue either PIE */-mo/ or */-me/. The only reasonable source for -*mъ* for which there is independent evidence is */-mos/. Kortlandt (1983:181-182), reluctant to accept the possibility of such a phonological development, prefers to derive -*mъ* from a */-mom/, which he compares to Gk. -μεν. While this idea is theoretically possible, there is not the slightest bit of evidence for a PIE, or even dialectal, */-mom/.

Savčenko (1960:49) reconstructs two PIE pres. endings, */-mos/ and */-mes/, and derives the Cz./Blg. -*me* from the latter. Watkins (1969:220), Mareš (1978:201) and Reinhart (2002:139) believe */-mos/ is the only inherited ending, while -*me* and -*mo* are Slavic innovations. Since it is not likely that PSl. inherited from PIE several functionally equal desinences, I would suggest -*mъ* is a generalized present tense ending */-mos/, while either -*mo* or -*me* is a generalized aorist ending (i.e. */-mo/ or */-me/). To determine which one of the latter, */-mo/ or */-me/, is original, we should examine which one could more credibly be explained as an analogical formation. The Blg./Cz. ending -*me* can easily have replaced */-mъ/ under the influence of, on the one hand, the preceding stem vowel, cp. OCS *vlěčemъ*, which itself, influenced by the rest of the paradigm, has replaced */-o-/, and, on the other hand, the 2ⁿᵈ pl. ending, cp. OCS *vlěčete*. No similar explanation seems to be available for the Ukr./SCr. -*mo*.

Summing up, it can be assumed that the disintegrating late PSl. had a pres. 1ˢᵗ pl. form in */-mъ/, continuing PIE */-mos/, and an aor. 1ˢᵗ pl. one in */-mo/, continuing PIE */-mo/.

4.2. The dat. pl. in *-mъ*

One cannot reconstruct a single PIE dat. pl. desinence, but the available evidence provides strong indications of its vocalism: Skt. *-bhyaḥ* (theoretically from */-bʰyos/, */-bʰyas/, or */-bʰyes/), Lat. *-bus* (theoretically from */-b⁽ʰ⁾os/ or */-b⁽ʰ⁾us/), Gaulish -βo (from */-bʰo/ or */-bo/). The only reconstruction that agrees with all of these forms (with respect to the vowel) is */-bʰ(y)o(s)/. The Skt. desinence may reflect the attachment of */-os/ to a pre-existing ending */-bʰi/ (as in Gk. -φι, Skt. *-bhiḥ* and OIr. *-b'*), rather than to the primary element */-bʰ-/ (as in Lat. and Gaulish). See, however, Poultney (1967).

The "strong" ALG hypothesis allows the derivation of OCS *-mъ* directly from */-mos/, which, apart from the initial consonant, is supported by comparative evidence. Georgiev (1969:59-60) and Kortlandt (1983:181) explain the ending away by comparing it to OLith. *-mus*, thereby suggesting an original */u/. I believe this is circumventing the problem rather than solving it, for an original */-mus/ would also require an explanation. Georgiev's idea that */-mus/ replaced */-mos/ under the influence of the loc. pl. ending */-su/ is, in my opinion, very much ad hoc and very unsatisfactory. It is equally unlikely that it could have been influenced by the Lith. */o/-stem acc. pl. in *-us*, as shown by Stang (1966:186). From the methodological point of view, since the Slavic ending can also be used as evidence for the "strong" ALG hypothesis, it cannot independently be used as evidence for a genuine */u/. As there is no structural explanation for an original Balto-Slavic */-mus/ and as the comparative evidence points to */o/ rather than */u/, it must be assumed that the vowel in both OCS *-mъ* and OLith. *-mus* arose secondarily. One possibility is that OLith. *-mus*, instead of *-mas* which is attested in OPr., stems from a proto-Baltic (or Balto-Slavic) dialect which shared the Verdumpfung of */o/ in closed final syllables. Another possibility, suggested by Kazlauskas (1968), is that *-mus* arose independently of Slavic from an invariably unaccented *-mas*.

4.3. Conclusion to section 4.

While the PIE background of either a 1st pl. ending or a dat. pl. ending is not completely unambiguous, the best reconstructions reachable by the comparative method have an auslaut */-os/. As there are no credible alternative explanations for the OCS -*mъ* in either case, it is safe to say that they lend some support to the "strong" ALG hypothesis.

5. The masculine */o/-stem nom.-acc. sg. in -*ъ*

The forms discussed in the two previous sections (**3**. and **4**.) are more or less isolated. The less functional load a phoneme in a morpheme has, the more likely it represents regular sound changes and not morphological rearrangements, for example, remedial innovations in the sense in which Andersen (1980:10) uses the term:

> "*Remedial innovations* are innovations in signantia, innovations that serve to reestablish distinctions between signantia which have become identical […] or have come to have identical realizations […] through sound change."

The final vowel of the OCS verbal 1st pl. ending has very little functional load, because the preceding consonant alone makes the desinence completely unambiguous. The insignificance of the vowel quality is shown by the great variation in modern Slavic languages, e.g., Ru. -*m*, SCr. and Ukr. -*mo*, Cz. and Blg. -*me*, Po. -*my*. Because the forms discussed so far are isolated and because there is neither obvious nor credible motivation for a remedial or other analogical innovation, they constitute the strongest evidence for the "weak" and the "strong" ALG hypothesis.

Nevertheless, the dispute over the ALG does not usually revolve around these forms. Instead, scholars of both camps have been of the opinion that the ALG hypothesis either stands or falls depending on the interpretation of the masculine */o/-stem nom.-acc. sg. form in -*ъ*. It is largely accepted that the accusative ending -*ъ* regularly continues PIE

*/-om/, but the homophonous nom. sg. desinence -ъ is nowadays generally seen as an analogical Neubildung.

According to most versions of the "weak" ALG hypothesis, a PIE masculine */o/-stem nom. sg. */bʰagos/ would have regularly yielded late PSl. */bogo/. The attested OCS *bogъ* was influenced by the corresponding form of the */u/-stem masculines, where the vowel was historically regular, e.g. *synъ* 'son' from PIE */sūnus/, and/or by the acc. sg. form *bogъ* from */bʰagom/ (e.g., Illič-Svityč 1979, cited in Orr 2000:101). It is difficult to imagine an unmotivated extension of -ъ from either source. The acc. sg. would be the only paradigmatic form of the */o/-stem masculines with ъ, and much more expected would be the influence of the nom. sg. on the acc. sg. than vice versa.

Thus, even if there had been an "attempt to introduce symmetry into the relations of these forms [i.e. the nom. and the acc. sg.] in *u*- and *o*-stems" (Shevelov 1964:157), one would expect the emergence of a secondary late PSl. acc. sg. */bogo/. If Kortlandt (1983:173) is right in assuming that the narrowing of */o/ to */u/ before a nasal consonant was a common Balto-Slavic development, Lith. shows just such a change: nom. sg. *diẽvas* 'god', acc. sg. *diẽvą* (instead of **diẽvų*). Cp., e.g., the gloss *draugum suum, id est consocium*, from 1212, beside Lith. *draũgas* 'friend' (Kiparsky 1967:25). Similarly, if Hit. had an Auslautgesetz */-oN/ > *-un*, the acc. sg. *attan* 'father' is rebuilt according to the nom. sg. *attaš* (Pedersen 1953). The */u/-stems may have constituted a larger class in prehistoric Slavic (see, e.g., Otkupščikov 1983, Orr 1996) but, nevertheless, given their relative marginality with respect to the */o/-stems, one would feel more comfortable with a spread of the */o/-stem ending */-o/ to the */u/-stem paradigm than the opposite. What the anti-ALG hypothesis needs, then, is a) a motivation for the replacement of the original masculine nom. sg. ending, and b) a plausible mechanism for the replacement process. I believe it can be shown that the anti-ALG model fails in both respects.

5.1. "Gender-driven" morphological change; or, *why* it supposedly happened

> "Suppose, […], that in a particular community the random drift of sound change threatens to wipe out a contrast that carries a certain functional load. If that load is sufficiently high, is it possible that exigencies of communication would prevent the impending coalescence? How high must the load be for this effect?" (Hockett 1967:300)

It is a rather common view that late PSl. masculine nom. sg. */bogo/ gave way to *bogъ* in order to distinguish it from the nom.-acc. sg. form of the */o/-stem neuters, e.g. *igo*. As the latter was a bare stem in PSl., it avoided the narrowing predicted by the "weak" ALG hypothesis, and the loss of the masculine ending */-s/, as a result of the general loss of word-final consonants, erased the distinction between the two genders. There thus was a motivation for the elimination of */bogo/, and a new ending was borrowed from either the acc. sg. *bogъ* or the */u/-stem declension, or from both.

> Kortlandt (1982:5) puts aside the gender issue and offers an alternative motivation for the masculine ending -ъ. He suggests that the pronoun *tъ* 'that (one)' continues not a nom. sg. */tos/ but rather the acc. sg. */tom/. "When final */-s/ was lost, the nom. and acc. sg. endings of the */i/- and */u/-stems merged […]. It is probable that this merger evoked the replacement of nom. **so synъ* with acc. **tъ synъ*, which in turn led to the replacement of nom. **so vьlko* with acc. **tъ vьlko*." However, there is not the slightest bit of evidence for a nom. sg. */so/ in Slavic. Lith. *tàs*, *tà* shows that the spread of the PIE oblique stem */to-/ to the masculine and feminine nom. sg. was an early development and had nothing to do with paradigmatic mergers. Besides, the loss of the case distinction in the noun would rather have strengthened the position of */so/ as the only indicator of case.

Since an unmotivated change from */bogo/ to *bogъ* is not likely, the anti-ALG hypothesis requires a motivation. The motivation offered implies that there was in PSl. a tendency to prevent the merger of the masculine and the neuter genders in the */o/-stem declension. Orr (1986:178) formulates this in the following way:

> "[…] one of the motive forces in the development of C[ommon]S[lavic] nominal morphology was a strong tendency to preserve the neuter gender as a separate category, despite a widespread tendency among the IE languages to lose their neuter gender."

The assumed tendency implies that the functional load contained by the gender-distinguishing morphemes is great enough to trigger a morphological rearrangement when the morphemes cease to be distinct. While the quantification of the functional load of a particular formal distinction is difficult, we should perhaps ponder on the semantic content of the PSl., or late PIE, grammatical gender, and also look at what is known to have happened in the gender systems of other IE languages.

According to Priestley (1983:340), "[t]he loss of a gender-category requires both semantic and phonological impetus; that is, an opposition in gender is in jeopardy if, simultaneously, it both expresses a vague or inconsistent semantic opposition, is semantically 'opaque', and is expressed by a weak formal opposition". The first condition, the semantic opaqueness of grammatical gender, is certainly met by the three-gender system inherited by IE languages from their common ancestor. While nouns denoting females and males are, as a rule, assigned to the feminine and masculine gender, respectively, the distribution of inanimates between the three genders is synchronically arbitrary. It is difficult to recognize categorial semantic distinctions between, say, Ru. *xram* 'temple' (masculine), *svjatílišče* 'sanctuary' (neuter), and *cérkov'* 'church' (feminine). Moreover, there were additional factors in Slavic that weakened the position of the neuter. Priestley (1983:350-351):

"Since all the Slavic languages developed the $[^+/_-$ animate] opposition, in one form or other and to differing extents,[6] they were (potentially) even more likely to lose the N[euter] on semantic grounds (i.e., phonological 'triggers' aside): not only was the N vs. non-N opposition 'illogical', but the N was (partly, at least) superfluous, as well as being the most marked gender."

The opposition between neuters and masculines was semantically opaque, meaning that the opposition had no semantic content. It was a morpho-syntactic category, a formal ghost of some early (or pre-) Indo-European, semantically based distribution of nouns, in Sihler's (1995:246) words, "a purely formal and syntactic system of morphology and concord". In addition, the development of the category of animacy vs. inanimacy made this opposition "illogical" and "superfluous". (Birnbaum 1979:52, rather boldly in my opinion, suggests the possibility that the Slavic animate-inanimate opposition could in fact be related to the oldest Pre-Indo-European gender distinction.) One can then safely state that the neuter gender indeed was in jeopardy. All that was needed for its abolition was a "phonological trigger", a sound change that would destroy the only supporting pillar of the masculine-neuter opposition, i.e., its formal manifestation.

Is it likely that a "remedial" innovation arises to save a semantically opaque, that is, purely formal, gender opposition? Gender, as a category of nominals, is very different from, say, the category of number. The latter cannot be purely formal, devoid of semantic content, because it is an expression of the absolute, extra-linguistic world in which we live. The semantic distinction between 'one' and 'more than one' remains, whether or not it finds a manifestation on the formal level. If a sound law erases the markers that distinguish 'one' from 'more than one', it can be expected that their formal distinction, extremely useful for communicative purposes, will be restored, in one way or another, even if this required the creation of new desinences *ex nihilo*.

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[6] See, e.g., Berneker (1904), Huntley (1980).

It seems that homophony between the singular and the plural is tolerated only if it occurs in a marginal group of nouns, such as Eng. *sheep*, *fish*, or Ru. *kengurú, póni*. In Scandinavian, regular sound change has erased the plural marker of neuters, e.g. Sw. *uk* : *uk* 'yoke(s)', *ord* : *ord* 'word(s)' (cp. Goth. *juk* : *juka, waúrd* : *waúrda*), but the homophony is only apparent. Placed in a context, the forms *uk* and *ord* can only denote the indefinite plural. The singular forms are always accompanied by an article (*ett uk/ord, uket, ordet*). The same is true of the typical French plural, whose -*s* is only graphical.

In the case of a semantically empty gender opposition, the loss of the formal (i.e., the only) aspect more likely leads to the loss of the gender opposition, because a) such an opposition is communicatively redundant, and b) there is nothing left to trigger a restoration of the lost formal oppositions. A restoration of number markers is triggered by extra-linguistic semantics. A semantically empty gender opposition has no such "life insurance".

The statement above is based on theoretical reasoning, but it is supported by actual evidence from a number of IE languages in which the opposition between one or more genders is threatened by phonological developments. Old English lost its genders because the morphology, due to phonological erosion in final syllables, no longer supported them.[7] The same is true of the Swedish masculine-feminine opposition and of the neuter-masculine opposition in modern Romance.[8] Modern German, on the other hand, has indeed to a large extent lost the morphological opposition between nouns of the three genders; nothing external suggests that *Versuch* 'attempt' is a masculine but *Buch* 'book' a neuter. This, however, has not led to the disappearance of gender, which

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[7] The English situation is, however, rather complicated, see Priestley (1983:342-343) and the literary references there. Cp. also Minkova (1991).
[8] On the neuter in Romance, see Hall (1965).

is still manifested in pronominal and adjectival inflection. Why this is significant will be discussed below.

Slavic itself shows evidence of the instability of the neuter, and the readiness to let it perish as a category when phonological processes weaken its formal marking. In most southern Russian dialects, undoubtedly due to the merger of unstressed /a/ and /o/, on the one hand, and /'a/ and /'e/, on the other, the neuter is in the process of being lost.[9] In the Slovene dialect of Sele Fara the neuter has been completely lost due to the retraction of stress from, and the consequent reduction of, final syllables.[10] Even the oldest records of Slavic reveal a tendency to eliminate neuters whenever they have become indistinguishable from masculines. As, due to the loss of word-final consonants, the singular forms of */u/-stem masculines and neuters became identical, the neuter *medъ*, rather than being (secondarily) formally differentiated from the masculines, *became* a masculine (see **Chapter I: 4.2.**). A number of PIE */o/-stem neuters seem to have become */o/-stem masculines in PSl. (see **3.1.**). Even more noteworthy is the masculine-neuter gender syncretism in the nom. sg. of the act. pres. and past participles, e.g. *nesy* 'carrying' and *nesъ* 'having carried'. This formal syncretism is a PSl. *innovation*.

The extra-Slavic evidence makes the Segregational Hypothesis very suspicious, and the Slavic evidence presented above hardly supports Orr's "strong tendency to preserve the neuter gender as a separate category". Two conclusions may be drawn from all this:

a) The disappearance of the formal distinction between the bulk of PIE masculines and neuters (i.e. the */o/-stems) in PSl. as a result of phonological developments would not have led to a restoration of the lost opposition, but rather to the loss of the neuter as a

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[9] Kuznecov (1960:99, id. 1973:102-103).
[10] Priestley (1983:353-355). The elimination of neuters was still in progress during the 20th century.

category. The classical "trigger" of a morphological change of */bogo/ to *bogъ* is thus non-existent.

Let us return to Hockett's question, quoted at the beginning of this section. In American English, the pairs *ladder* : *latter*, *sweetish* : *Swedish* are, due to sound change, homophonous. Hockett (1967:391): "Now, if we could meaningfully quantify the functional load carried by this particular contrast before it was lost, we would know, at least, that *that* much load is *not* enough to prevent a coalescence - because, in fact, it didn't." We can make the induction that the functional load carried by the contrast between the masculine and neuter */o/-stems in Slavic would not have triggered a remedial morphological change, because elsewhere it clearly does not.

b) The fact that there is a formal distinction between masculines and neuters in Slavic indicates that this distinction was not lost. This implies that the late PSl. nom. sg. of the */o/-stem masculines could not have ended in */-o/, which would have merged with the neuter *-o*. This, in turn, suggests that PIE */-os/ did not yield late PSl. */-o/. "Suggests", rather than "confirms", since it cannot be ruled out completely that the masculine nom. sg. ending -ъ does not phonologically continue PIE */-os/ but rather */-us/ (from the */u/-stems) or */-om/ (from the acc. sg.). However, as I said in **5.**, it does not seem likely that either of these endings would have replaced the reflex of */-os/, unless such a replacement was motivated.

5.2. The mechanism of the change; or, *how* it supposedly happened

The "classical" PIE grammatical gender, still essentially alive in PSl., has to do with agreement more than with anything else. The belonging of a noun to a particular gender is not determined by the shape and inflection (or, in the case of inanimates, the semantics) of the noun, but rather by the markers that a gender-sensitive attribute, agreeing with the noun, takes. According to Priestley (1983:340-341), the preservation of a gender opposition by the noun presupposes its preservation by the adjective and the

pronoun. This is actually more trivial than it sounds. If the pronoun and/or the adjective does not distinguish genders, there is no gender agreement and thus no gender. It might be tempting to say that the Lat. words *locus*, *forum* and *stela* are masculine, neuter, and feminine, respectively, because they are inflected with masculine, neuter, and feminine desinences, respectively, e.g., the nom. pl. *loci*, *fora*, *stelae*. But the English nouns *locus*, *forum*, *stela* form the pl. form in exactly the same way, and yet it would not cross anyone's mind to say there are three grammatical genders in English. The gender of Lat. *locus*, *forum* and *stela* lies in the agreement, e.g. *hic locus*, *hoc forum*, *haec stela*, whereas the genderlessness of the corresponding English words derives from the absence of such an agreement. Thus, if the pronoun and/or the adjective loses its sensitivity to gender, i.e. its ability to agree in gender, the gender system collapses even if some formal indicators of gender survive in some nominal declensional classes. On the other hand, if the pronoun retains its markings for gender, the system may survive even if the nominal morphology does not support it anymore. As Carstairs-McCarthy (1994:767) says, "[…] a gender system does not require any overt marking on controllers [i.e., nouns]. The controller gender which a noun belongs to may show up only through the agreement markers exhibited on its targets." Such is the case, e.g., in Modern German.

Lehmann (1958:197) writes: "Gender was possible only after the development of the thematic nouns, for these alone of the three groups of Indo-European nouns […] have a thoroughgoing gender distinction." This is not correct. Gender was possible with any morphological system as long as the gender had a semantic content, i.e., was not opaque. When it became opaque, the three-gender system was only possible after the development of the thematic adjective and/or pronoun, which had a thoroughgoing gender-agreement.

If the "strong" ALG hypothesis is wrong, PIE */-os/ yielded regularly late PSl. */-o/. This would have resulted in a merger of the nom. sg. form of masculines and neuters

not only in by far the largest class of PSl. masculine and neuter nouns, but also in the class that contained all PSl. pronouns and virtually all adjectives. If the late PSl. */o/-stem masculines and neuters, after the loss of word-final consonants, both ended in */-o/ in the nom. sg., which is required for an analogical remedial change of */bogo/ to *bogъ*, the formal opposition between masculines and neuters would have vanished in the */o/-stems and thus in the pronominal and adjectival declensions. This would have eliminated the opposition between these two grammatical genders. Had the congruence been lost, the neuter would have been lost. Had the neuter as a category been lost, there would have been no trigger for an analogical remodeling of */bogo/. The lost, semantically empty grammatical gender could not have been resurrected from zero.

The objection might be raised that even if the nom. sg. forms of the masculine and neuter */o/-stems, due to the development PIE */-os/ > late PSl. */-o/ and the loss of final consonants, had merged, the acc. sg. (OCS *bogъ* vs. *igo*), the voc. sg. (*bože* vs. *igo*), the nom.-acc. pl. (*boǧi*, *bogy* vs. *iga*), and the nom.-acc.-voc. du. (*boga* vs. *iǧě*) forms would have remained distinct. The gender opposition could have survived owing to these forms, and the analogical change */bogo/ to *bogъ* could simply have reinforced the distinction. Although this is possible, it is against everything we know about the relative attractive force of the nom. sg. form with respect to the rest of a paradigm. As we saw in **3.1.**, a number of barytone */o/-stem neuters, which may have retained the nom.-acc. sg. desinence */-om/, changed gender although it was only their nom.-acc. sg. form that merged with the masculine inflection. The */es/-stem neuters, e.g. *nebo* 'heaven' are, already in OCS, in the process of merging with */o/-stems, e.g. *igo* 'yoke', although the only overlapping paradigmatic form is the nom.-acc. sg. The */i/- and */u/-stem masculines are, already in OCS, in the process of being transferred to the */yo/- and */o/-stems, again due to the formal merger of only one paradigmatic form, the nom.-acc. sg. Similar developments can be seen outside of Slavic as well. Lat. */o/-stem neuters in Romance were able to retain a distinct nom.-acc. pl. even after their singular forms merged with the corresponding masculines, e.g. Spanish *hoja* from Lat.

folia 'leaves'. Such forms, however, were not enough to keep the neuter alive, and forms like *hoja* were reinterpreted as the nom. sg. form of a historical */ā/-stem feminine.

5.3. Conclusion to section 5.

Even if there had been a tendency in PSl. to preserve a distinct neuter gender, for which there is no evidence but against which there is plenty of counterevidence both within Slavic and elsewhere (**5.1.**), an analogical remodeling of */bogo/ to *bogъ* would have been impossible. The merger of the nom. sg. forms of the */o/-stem masculines and neuters would have erased the masculine-neuter opposition in the pronoun and the adjective, which in turn would have eliminated the neuter and thus removed the possibility of restoring the lost gender distinction. In this case, thus, the prerequisite (merger) of a remedial change makes the remedial change impossible.

Because there was no tendency to preserve the neuter in PSl., historically recorded Slavic has a distinct neuter for the very reason that there never was a "phonological trigger" that could have led to its elimination. This implies that the final-syllable vowel in the nom. sg. of the late PSl. */o/-stem masculines was something else than */o/ (characteristic of the */o/-stem neuters) prior to the loss of the word-final */-s/. As there would have been no motivation for an analogically generated change from PIE */bʰagos/ to PSl. */bagus/, it must be assumed that we are dealing with a genuine sound law, a narrowing, or Verdumpfung, of */o/ to */u/ in closed final syllables.

6. The counterevidence

The forms dealt with in **3.** and **4.** offer support for the "strong" ALG hypothesis. The nom.-acc. sg. of the */o/-stem masculines (**5.**), in my opinion, makes it an inevitability. That a narrowing of */o/ to */u/ is typologically more likely before a nasal than a fricative (Shevelov 1964:156) is of some significance, but, as noted by Schleicher (1994:22), "[…] languages and language reconstructions meet up to typological

expectations at varying degrees from nearly impossible to nearly perfect and everywhere in-between". The fact that the processes we reconstruct for PSl. are not directly attested does not justify an assumption that the language was in every respect a typological mediocrity. Finally, as Kortlandt (1985:185) writes, "[t]ypological considerations are an extremely useful heuristic device. They can never take the place of the evidence, however." The basic flaw of the anti-ALG hypothesis is, indeed, its lack of respect for the evidence.

The question, then, is not *whether* the single piece of strong evidence *against* the narrowing of */o/ to */u/ before */-s/, the nom.-acc. sg. of the */es/-stem neuters, e.g. *nebo* 'sky' from PIE */neb^{h}os/, is phonologically irregular but *how* it is irregular. I would propose the following development, which may not be the right one but for which a case can be made with the aid of typological parallels.

If a PSl. change */-os/ > */-us/ actually took place, we would expect the nom.-acc. sg. of the */es/-stem neuters to end in -ъ. This, probably, would also have led to the elimination of the */es/-declension and the transfer of the neuters in question to the masculine */o/-stems, as seems to have been the case with original barytone */o/-stem neuters. It is, in fact, possible that certain Slavic */o/-stem masculines are old */es/-stem neuters, e.g. OCS *jadъ* 'poison' as opposed to Gk. οἶδος 'swelling, tumour', OCS *lěsъ* 'forest' vs. Gk. ἄλσος 'grass, grove, glade', and OCS *vidъ* 'sight' vs. Gk. εἶδος 'form, shape, figure' (for a similar development in Lith., see, e.g., Arumaa 1985:45). Unlike in the case of the */o/-stem neuters, one can hardly resort to accentology to account for the twofold treatment of the */es/-stems. The comparative evidence unanimously points to a fixed root accent in this neuter class (Arumaa 1985:46). A few scholars, e.g. Rosenkranz (1955:87) and Murata (1986:282), suggest that a regular late PSl. */nebъ/ was transformed into *nebo* in order to distinguish it from the */o/-stem masculines, but as I have argued above, there was no tendency to save the neuter from merging with the masculine. It is, of course, possible that instead of a remedial change we are dealing

with an unmotivated spread of the prototypical neuter ending *-o* to the */es/-stems as well, but forms like *jadъ* do indicate that the merger in the nom.-acc. sg. with the masculine */o/-stems was in fact enough to trigger the transfer of these neuters to that declension.

Čekman (1979:135-136) suggests the */es/-stem neuters dropped the final */-s/ in the nom.-acc. sg. and compares this to the loss of */-m/ in the nom.-acc. sg. of the */o/-stem neuters. However, the neuter auslauts */-s/ and */-m/ cannot be compared, because the latter is an inflectional ending while the former is part of the stem. According to Lunt (1981:17, 22, 45, 67, 83), the */i/- and */u/-stem nom. sg. terminations */-is/ and */-us/ were retroflected to */-ix/ and */-ux/, and the retroflection spread analogically to the */o/-stem masculines, producing */-ox/. The nom.-acc. sg. of the neuter */es/-stems in */-os/ would remain due to its different morphological structure. An analogical spread of the retroflection would not be unexpected, cp. aor. 1st sg. forms like *znaxъ* 'I knew, found out' and the */ā/-stem loc. pl. in *-axъ*; but, as Orr (2000:112) comments, it is not clear why */-x/ would cause a narrowing of a preceding */-o-/, while */-s/ would not. Besides, there is no evidence for (or against, to be sure) a retroflection of */-s/ in auslaut, and the theory would not help us with the other evidence for the "strong" ALG hypothesis, i.e., the pres. 1st pl. *beremъ* and the dat. pl. *bogomъ*.

Let us take a look at the vowel quality of the suffix */-es-/ in non-Slavic languages. Gk., Lat., and OIr. unambiguously point to */-os/ in the nom.-acc. sg., */-es-/ in other paradigmatic forms, e.g. Gk. τέγος, τέγεος 'roof', OIr. *tech*, *tige* 'id.'[11], Lat. *genus*, *generis*. Goth. has a fixed */e/-grade throughout the paradigm, e.g. *riqis* 'darkness' vs. Gk. Ἔρεβος 'a place of nether darkness, above the still deeper Hades', as does Hit., e.g. *nepiš* 'sky' vs. Gk. νέφος 'cloud'. Whether the Goth. and Hit. */-es/ represents paradigmatic leveling or old ablaut variation cannot be proven.[12] Skt., due to the merger

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[11] The quality of the lost suffix vowel is betrayed by the effect it had on the root vowel.
[12] The vowel gradation of */es/-stems is discussed by Schindler (1975) and Arumaa (1985:47).

of PIE */o/ and */e/, is ambiguous: *rájaḥ* 'space, air' can be derived from either */regwes/ or */regwos/. The palatalization of the velar in the nom.-acc. sg. points to an */e/-grade (as in Goth. and Hit.), but this feature can equally well have been transferred from the oblique forms (e.g. gen. sg. *rájasaḥ*), which certainly had */e/, as shown by both the palatalization and the absence of length by Brugmann's Law. In any case, late, "dialectal", PIE appears to have vacillated between neuter */es/-stem nom.-acc. sg. forms in */-os/ and */-es/.

Let us assume that early PSl. had */es/-stem neuters with the nom.-acc. sg. in both */-os/ and */-es/. Either the latter variant represented a leveling and thus an innovation, or both types were inherited. Well in line with the innovation hypothesis is the fact that another PSl. neuter consonantal class, the */men/-stems, e.g. OCS *brĕmę* 'burden', also has a generalized */e/-grade throughout the paradigm. The final *-ę* most probably does not continue PIE */-ņ/ as, e.g., in Gk. φέρμα 'id.'.

Excursus: OCS neuter */en/-stem nom.-acc. sg.

It has been customary to derive Slavic *-ę* in *brĕmę* from */-ēn/, e.g. Brugmann (1904:379), Leskien (1909:9, 50), Vondrák (1912:135), Słoński (1950:58), Seliščev (1951:149), Rosenkranz (1955:41), Schenker (1995:125). Such a reconstruction is morphologically and accentologically improbable and phonologically unnecessary, because *-ę* can be derived from */-en/. Here I agree with Schmalstieg (1983:100), Kortlandt (1983:176-177), Szemerényi (1989:180), and Orr (2000:26-27).

The reason behind the reconstruction */-ēn/ is the assumption, probably going back to Müllenhoff (1878, cited in Orr 2000:98), that short vowels either were not nasalized before a final nasal which itself was subsequently lost, or, in any case, lost the nasalization before Slavic was first attested. This assumption, in its turn, has been necessary for the derivation of the

consonantal stem loc. sg., e.g. *kamene*, from */-men-en/ (an endingless locative followed by a postposition */-en/).

OCS *kamene* can well be an old gen. sg., as suggested by Kortlandt (1983:176-177) and Orr (2000:153). The replacement of an inherited loc. sg. */kamenь/ (*/aḱmeni/, cp. Gk. ἄκμονι, Skt. *áśmani*) may have been motivated by the merger of this form with the non-neuter acc. sg. *kamenь* (*/aḱmenṃ/, cp. Gk. ἄκμονα). Such a merger would have caused ambiguity in prepositional constructions like */vъ kamenь/, */na kamenь/, */o kamenь/. The normal consonantal stem loc. sg. ending */-i/ survives in the non-feminine forms of the anaphoric, interrogative and demonstrative pronouns, e.g. *jemь* (*/jь/, */je/ 'it') ≈ Av. *yahmi* (*yō*, *yaṭ* 'who, which'), *komь* (*kъto* 'who') ≈ Av. *kahmi* (*kō*, *kaṭ* 'who, which, what'), *tomь* (*tъ*, *to* 'that') ≈ Av. *tahmi* (*hō*, *taṭ* 'this, he, it'). The element *-m-* apparently somehow continues the reconstructed PIE consonantal stem numeral */sem-/ 'one' (Gk. masculine εἷς, neuter ἕν) in the zero grade */-sm-/, although the loss of */-s-/ cannot be purely phonological. On the element */-sm-/, see Lane (1961), Cohen (1976), Schmalstieg (1997) and Carruba (2000).

On the other hand, if PSl., together with Skt. and OIr., also inherited an endingless */en/-stem loc. sg. (cp. Skt. *áśman* beside *áśmani*), a late PSl. form */brěmę/ might have been replaced with the gen. sg. *brěmene* in order to distinguish it from the now identical, remodeled nom.-acc. sg. *brěmę*. Or, it is possible that the leveling which produced the nom.-acc. sg. *brěmę* (instead of */brěmь/ < */bʰermṇ/ = Gk. φέρμα) was the very factor that led to the elimination of the homophonous loc. sg. This explanation is less likely, since no IE language uses the endingless locative as an exclusive variant.

Another possibility is that the *-e* continues a locational or directional particle */e/, attested also in the Av. */u/-stem loc. sg., e.g. *gātav-a* (*gātuš* 'place, bed') beside the normal termination */-ōw/ as in *pasāu* (*pasuš* 'small cattle'), and the Skt. */o/-stem dat. sg. *yugā́y-a* (*yugám* 'yoke') = Gk. ζυγῷ.

I have no theory regarding the distribution of the */es/-stem neuters with the nom.-acc. sg. in */-os/ and */-es/. In any case, the former termination, due to narrowing, yielded PSl. */-us/, which merged with the nom. sg. termination of both the */o/-stems and the */u/-stems, whereby former neuters like *jadъ*, *lěsъ*, *vidъ* changed gender and the declensional type. The neuters in */-es/ yielded regularly after the loss of word-final consonants */-e/. There is evidence of such an ending in Cz. *nebe*, Blg. *nebé*. Lower Sorbian *njebjo*, with its secondary *-o* (Shevelov 1964:424-425), also agrees with a late PSl. */nebe/.

A dialectal late PSl. */nebo/, continued by OCS, Ukr., SCr. *nebo*, Po. *niebo* etc., may have emerged as a result of attraction by the neuter */o/-stems in *-o*. When the palatal glide in the neuter */yo/-stems, e.g. OCS *lože* 'bed' from PIE */logʰyo(m)/, palatalized the root-final consonant, umlauted the following vowel, and itself ceased to be an independent element, the neuter termination *-e* became associated with a preceding palatal sound, and *-o* with a non-palatal one, although there were no phonotactic rules restricting the occurrence of *-o* and *-e* after a non-palatal sound (with the exception that a velar could not occur before *-e*). As Birnbaum (1979:42) points out, "[…] it can be considered a firmly established fact that front vowels did not as such phonemically (but only perhaps to some degree phonetically) palatalize preceding consonants in C[ommon]S[lavic]". Thus, while the late PSl. */nebe/ was *an sich* phonotactically fine, it was an oddity with respect to the large majority of neuter nouns in having a non-palatal consonant followed by a front vowel. That would have offered a plausible motivation for the emergence of a variant */nebo/.

7. The accusative plural

In this section I shall discuss the acc. pl. endings of the stems in */-u/, */-i/, */-o/ and */-ā/. As these forms are closely interconnected, a few preliminary notes are in order.

Most scholars would agree that PIE */-uns/ and */-ins/ are reflected by -*y* and -*i*, respectively, in OCS. This is suggested by the acc. pl. forms *syny* 'sons', (cp. Goth. *sununs*), *gosti* 'guests' (Goth. *gastins*). It is, however, true that these are the only more or less unambiguous instances of PIE */-uns/ and */-ins/ in Slavic. In addition, we are dealing with inflectional endings which are more liable to analogical, both motivated and unmotivated, influence than are root syllables. As Jasanoff (1983:141) points out in another context, "[a] sound law invented to explain a single morpheme, unless exceptionally well-motivated on structural or typological grounds, is always suspect". Only a devil's advocate would say that the sound law in question is not well-motivated, but since it was indeed invented to explain a single morpheme, one must remain wary.

While there is a virtual consensus that PIE */-uns/ and */-ins/ yielded late PSl. */-y/ and */-i/, there is no general agreement on the mechanism of the development. The vowel length required by -*y* and -*i* is usually seen as compensatory, generated by the loss of either */-n-/ or */-s/. For different views, see, e.g., Leskien (1909:51), Vondrák (1912:136), Seliščev (1951:151), Rosenkranz (1955:41), Shevelov (1964:334), Schmalstieg (1983:44), Xaburgaev (1986:151), Trunte (1991:157), and Schenker (1995:124). De Chene & Anderson (1979:508) criticize the traditional concept of "compensatory lengthening" and propose the following:

> "We will argue that these processes [i.e., compensatory lengthening] can be understood as the transition of the consonant, through loss or reduction of its occlusion, to an eventual glide G. It is the monopthongization of the resulting sequence (X)VG(Y) which gives rise to a syllable nucleus that is interpreted as distinctively long. In consequence, cases of apparent compensatory

lengthening can be analysed […] as a combination of consonantal weakening in certain positions followed by monophthongization; and compensatory lengthening per se can be eliminated as an independent member of any inventory of phonetic process-types."

I see no reason to reject this analysis of the process (see, however, Hock 1986), although I also see no reason to stop using the convenient term "compensatory lengthening". If de Chene & Anderson are right, a development */-uns/, */-ins/ > */-ūs/, */-īs/ > -y, -i is more likely than */-uns/, */-ins/ > */-ūn/, */-īn/ > -y, -i.

Orr (2000:63-65) considers that PIE */-uns/ and */-ins/ (as well as */-uN/ and */-iN/) yielded late PSl. */-ǫ/ and */-ę/, respectively. Orr applies the proposal, first expressed by Uhlenbeck (1901), that early PIE was an ergative language.[13] The direct object of a transitive verb and the agent of an intransitive one were expressed by an endingless absolutive form which later became the accusative of the "classical" PIE. According to Orr, the spread of the younger acc. desinence */-m/ was more limited in Slavic than elsewhere and it never entered the */u/- and */i/-declensions. Thus, the acc. sg. *synъ* and *gostъ* do not continue PIE */sūnum/ and */gʰostim/ but */sūnu/ and */gʰosti/, forms faithful to their absolutive past. Correspondingly, he derives the acc. pl. *syny* and *gosti* not from */sūnuns/, */gʰostins/, but */sūnūs/ and */gʰostīs/.

The shortcoming of the absolutive explanation is, of course, the contradicting external evidence. Most IE languages, including Baltic, unambiguously show the nasal ending in the acc. sg. of */u/- and */i/-stems. Even those languages that have not actually retained it, e.g. Gmc., do not rule it out. This, in my opinion, makes it very likely that PIE, long before its disintegration, had become a language with a marked accusative. PSl. was not geographically peripheral or isolated, and it would be truly odd if it actually had

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[13] A discussion of various modifications of the idea can be found in Rumsey (1987). Luraghi (1987) sees traces of the ancient ergative structure in Hittite.

retained non-marked forms like */gʰosti/ and */sūnu/. Even more difficult is the acc. pl. If there was no nasal, where does the length in *syny* and *gosti* come from?

From the point of view of the "weak" ALG hypothesis, the acc. pl. of the */o/-stem masculines in -*y* is unproblematic. The vowel in */-ons/ underwent narrowing, yielding */-uns/, which later shared the fate of the corresponding */u/-stem ending. According to the most common view, the acc. pl. ending -*y* of the */ā/-stems continues PIE */-āns/ which, as a result of the shortening of diphthongs and the merger of PIE */o/ and */a/ into PSl. */a/ (late PSl. */o/), likewise yielded */-uns/ and, at a later stage, -*y* (see, e.g., Shevelov 1964:333).

According to Georgiev (1969) and Orr (2000), PIE */-ons/ and */-āns/ yielded late PSl. */-ǫ/. One might ask what this confidence is based on, as there is, to my knowledge, not a single instance of OCS -*ǫ* for which a prototype */-ons/ or */-āns/ could be reconstructed. Orr (2000:24) argues that if PIE */-ons/ ultimately led to OCS -*y*, we would expect PIE */-ont/ to have likewise yielded -*y*. For example, PIE root aor. 3ʳᵈ pl. */(e)bʰodont/ should have given OCS **body* instead of the attested *bodǫ* 'they pierced'. That Orr's argument is a *non sequitur* is shown by some contrastive evidence. In Gk., PIE */-ons/ lost its nasal whereby the preceding vowel was lengthened and raised, e.g. acc. pl. ἀγρούς 'fields' from PIE */aǵrons/ (Goth. *akrans*). However, PIE aor. 3ʳᵈ pl. */(e)bʰeront/ yielded Gk. ἔ·φερον 'they carried' where the nasal is preserved and the vowel remains unchanged. This shows that OCS *bodǫ* can tell us nothing about the fate of PIE */-ons/ in PSl. It is quite plausible that the denasalization and the lengthening of the vowel took place before a final */-s/ but not before a stop.

Georgiev (1969:58) believes the masculine */o/-stem -*y* was borrowed from the */u/-stems. He does not explain, though, why an acc. pl. ending */-ǫ/ would have been problematic. It would not, according to Georgiev's own phonological theory, coalesce with any other ending of the */o/-stem paradigm. The solution offered for the */ā/-stem

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-y (Georgiev 1969:93-94) is, to say the least, original. Georgiev reconstructs a PSl. */ū/-stem acc. pl. termination */-ūs/ which was borrowed by the */ā/-stems to restore the distinction between the acc. sg. and the acc. pl. While the motivation for a morphological change is plausible, nothing else in the explanation is. There is no evidence for a PSl. */ū/-stem acc. pl. in */-ūs/. OCS acc. pl. *svekrъvi* 'mother-in-law', at least as far as the shape of the stem vowel is concerned, unambiguously continues a PIE form in */-uwn̥s/ which is also supported by the comparative evidence. Even if the */ū/-stems did have a PSl. non-attested acc. pl. in */-ūs/, it would be difficult to understand why the */ā/-stems borrowed an ending from this moribund and marginal declension and not, for example, from the */i/-stems which, like the */ā/-stems, were a productive feminine class. After all, according to Georgiev, the */o/-stems borrowed the corresponding ending from the only other quantitatively significant masculine declension, i.e. the */u/-stems, and not, say, from the consonantal stems.

Orr (2000:135-136) attempts a holistic solution that also involves the nom. sg. of the */o/-stem masculines:

a) The PSl. */o/- and */yo/-stem nom. sg. terminations */-as/ (PIE */-os/) and */-yas/ (PIE */-yos/) yielded late PSl. */-o/ and *-/ʼe/.

b) The */o/- and */ā/-stem acc. sg. terminations */-aN/ ~ */-yaN/ (PIE */-om/ ~ */-yom/) and */-āN/ ~ */-yāN/ (PIE */-ām/ ~ */-yām/), as well as the acc. pl. */-ans/ ~ */-yans/ of both classes, all merged in */-ǫ/ ~ */-ʼę/.

c) In order to retain the gender distinction in the sg., */o/-stems borrowed the acc. sg. ending -ъ from the */u/-stems, whereas -ǫ specialized as a feminine ending. The termination -ʼę, which originally belonged to the acc. sg. of */yo/-stems and the acc. pl. of */yo/- and */yā/-stems, became an exclusively plural ending, while the attested acc. sg. -ʼъ of OCS */yo/-stems is merely an umlauted variant of the */o/-stem -ъ.

d) The */o/-stem acc. pl. */-ǫ/ from */-ans/ was replaced with the */u/-stem ending -y which then spread to */ā/-stems as well, in order to restore the distinction between the acc. sg. and the acc. pl. Because, due to the loss of final */-s/, the */ā/-stem gen. sg. (in */-ās/) and nom. pl. (in */-ās/) coalesced with the nom. sg. (in */-ā/), the acc. pl. ending -y ~ -'ę spread there, too.

I see a number of problems in Orr's seemingly reasonable account. While I agree that there was indeed a need to keep singular and plural forms distinct (e.g. the acc. sg. and the acc. pl.), I do not understand why the acc. sg. -ǫ would specialize as a feminine ending. There clearly was no need to differentiate either the masculine and feminine acc. sg. and acc. pl. forms in the */i/-stems or the consonantal declensions, or the masculine and feminine loc. sg. forms in the */o/- and */ā/-stems. More serious is the problem of relative chronology. According to Orr's model, */o/-stems and later */ā/-stems borrowed the acc. pl. ending -y from */u/-stems because, due to the loss of word-final */-s/, the late PSl. acc. sg. */-ǫ/ (from */-aN/) and the acc. pl. */-ǫs/ (from */-ans/) merged. However, as */-s/ was lost, the distinction between the */ā/-stem acc. sg. */-ǫ/ and acc. pl. */-ǫs/, on the one hand, and between the nom. sg. */-ā/ and the gen. sg. and nom. pl. */-ās/, on the other, disappeared *simultaneously*. After the loss of */-s/, the late PSl. forms in question, if made from */žena/ 'woman' and */bogo/ 'god', would thus have looked like this:

nom. sg.	*/žena/	*/bogo/
acc. sg.	*/ženǫ/	*/bogǫ/
nom. pl.	*/žena/	[the masc. form not relevant here]
acc. pl.	*/ženǫ/	*/bogǫ/

The loss of */-s/ erased the distinction between */bogo/ and */o/-stem neuters in the nom. sg., while the merger of */-āN/ and */-aN/ wiped out the distinction between masculines and feminines in the acc. sg. This led to the borrowing of -ъ from */u/-stems

to both masc. sg. forms and, then, to the spread of the */u/-stem acc. pl. -*y* to the acc. pl. of */bogo/. Thence -*y* spread to the */ā/-stem acc. pl. to restore the distinction between the acc. sg. and the acc. pl. and finally to the nom. pl. and the gen. sg. in order to make them distinct from the nom. sg. This means that while the ending -*y* was pushing its way from a) the */u/-stem acc. pl. to the */o/-stem acc. pl., b) from the */o/-stem acc. pl. to the */ā/-stem acc. pl., and c) from the */ā/-stem acc. pl. to the */ā/-stem nom. pl. and gen. sg., a process that must have taken some time, the last two forms, namely the gen. sg. */žena/ and the nom. pl. */žena/, remained identical to the nom. sg. */žena/, patiently waiting for a suitable ending to arrive. The merger of the nom. sg., the gen. sg., and the nom. pl. in the largest feminine declension clearly constituted an intolerable situation which could not last long.

7.1. The relative chronology of Verdumpfung and umlaut

If PIE */-ins/ is reflected by OCS -*i*, as is usually believed, the "strong" ALG hypothesis has a problem of relative chronology. The nom. and acc. sg. forms of the */o/- and */yo/-stems show that the narrowing of */o/ must have taken place before the umlaut caused by */y/. Had the order of events been the opposite, PIE */-yos/, */-yom/ would have given */-yes/, */-yem/ and late PSl. */-'e/, */-'ę/. On the other hand, the acc. pl. ending -*ę* of the */yo/-stems appears to require that the narrowing did *not* take place before the umlaut. If it did, PIE */-yons/ should have yielded PSl. */-yuns/, later */-yins/ and finally */-'i/.

Arumaa (1964:134) and Georgiev (1969:65) suggest the possibility that the OCS */yo/-stem ending -*'ь* continues not */-yos/ but a contracted */-is/, and they compare the latter to Lith. -*is*, as in *brólis* 'brother'. Whatever the history of the Lith. ending (see Stang 1964:188-190), it is not comparable to the Slavic type *końь*, for an ending */-is/ would have yielded **konь*. The palatalization of the root-final consonant requires a following */-y-/ which, in turn, was possible only before a following vowel.

One possibility is that the */yo/-stem nom.-acc. sg. form, e.g. *końь* 'horse', is analogical. After the loss of final consonants, the */yo/-stems would have been the only group of vocalic-stem masculines without a syncretic nom.-acc. sg., i.e. nom. sg. */końe/ vs. acc. sg. */końę/. Furthermore, the acc. sg. */końę/ would have been homophonous with the acc. pl. *końę*, and the nom. sg. */końe/ with the nom.-acc. sg. of the */yo/-stem neuters, e.g. *lože* 'bed'. In a similar fashion, the */yo/-stem gen. pl. */końę/ would have been replaced with *końь* to level it with the corresponding form of other paradigms and to distinguish it from the acc. pl. For a similar solution, and a few other possible ones, see Vermeer (1991:277).

While this analysis is simple and plausible, I would like to reconsider the history of the */i/-stem acc. pl. *gosti* and the fate of PIE */-ins/. As observed in **7.**, there is no independent evidence for a development */-ins/ > OCS *-i*. The question is whether there are counterexamples. What little we have suggests rather that PIE */-iNs/ is continued by OCS *-ę*. I can think of two instances:

a) The aor. $2^{nd}/3^{rd}$ sg. of verbs with a radical infinitive stem in a nasal, i.e. *klęti* 'to curse' → aor. $2^{nd}/3^{rd}$ sg. *klę*, *jęti* 'to take' → *ję*, *ras·pęti* 'to crucify' → *·pę*, *vъ·čęti* 'to begin' → *·čę* which should continue PSl. */klin-s/, */im-s/, */pin-s/, */kin-s/, respectively.[14]

I admit that these forms offer no compelling evidence for */-iNs/ > -*ę*. The aorist forms in general are built from the infinitive stem, and theoretically *klęti, jęti, ·pęti, ·čęti* can continue full grades */klen-/, */em-/, */pen-/, */ken-/ rather than the zero grades that are certainly attested in the present inflection (1st sg. *klьną, imą, pьną, čьną*). For instance, Kortlandt (1985b:114) identifies *jęti* with Lith. *im̃ti* and *ję* with Lith. *ɇ̃mė* 'took'. However, whenever we can distinguish, the root aorist of verbs that show ablaut is

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[14] These forms are usually extended with an element *-tъ* of unclear origin (see, e.g., van Wijk 1926, 1937).

derived from a zero-grade root, e.g. *vrěšti* (*vrěg-ti*) 'to throw', pres. 1st sg. *vrьgǫ*, aor. 1st sg. *vrьgъ*, and *pro·nisti* (*·niz-ti*) 'to pierce', pres. 1st sg. *pro·nьzǫ*, aor. 1st sg. *pro·nьzъ*. So, even if the nasal stems do have ablaut, something we cannot verify, the aorist forms should reflect the zero-grade variant.

Even if it is likely that the PSl. aor. 2nd sg. of, e.g., *klęti* was */klin-s/, the probative force of these forms (regarding the assumption */-iNs/ > -ę) is limited. Due to the loss of word-final consonants, the 2nd and 3rd sg. forms of the aorist (as well as the imperfect) were identical in all verbs. It may not be likely that under such circumstances a small handful of verbs could have in any case retained distinct forms of the type 2nd sg. *kli (from */klin-s/) vs. 3rd sg. *klę* (from */klin-t/ or */klin-s-t/). Rather, *kli would have been analogically leveled to the attested *klę*.

b) The masculine-neuter nom. sg. of the act. pres. ptcl. of the IV conjugation verbs, e.g. *služę* 'serving, one who serves' from *služiti* 'to serve'. The termination can hardly continue anything else than */-ins/, simplified from */-ints/. Holzer (1980:10-11, 13) reconstructs */-eyn(t)s/ with a subsequent simplification to */-en(t)s/. This model has two problems: the assumption of such a simplification is completely arbitrary, and a tautosyllabic sequence */VyN/ does not occur in IE, which no doubt means it was phonotactically impossible in the proto-language. It is theoretically possible that PSl. retained or restored the stop */-t-/ in the nom. sg. and that the nasal vowel developed thanks to the following stop, as in the aor. 3rd pl. *věsę* 'they led' from */wedʰ-s-ṇt/. However, this possibility is ruled out by participles like *nesy* 'carrying, one who carries', instead of which we should have *nesǫ. It does not seem possible that *služę* ended in */-ints/ but *nesy* in */-ons/. Zucha (1985:134-135) attempts to rescue the case but fails to convince: according to him, original */-ins/ and */-uns/, e.g. in the acc. pl. of the */i/- and */u/-stems, were denasalized and lengthened to */-īs/ and */-ūs/, respectively. Thereafter, */-t-/ was lost in the present participle, e.g. */nesans/ 'carrying', */molins/ 'praying'. The sequence */-ans/ was labialized to */-ons/, raised to

*/-uns/ and denasalized to */-ūs/ (> OCS *nesy*), whereas the secondary */-ins/ was lowered to */-ens/ (> OCS *molę*). It remains completely obscure why the secondary */-uns/ would have merged with the primary one, if */-ins/ did not. It is equally obscure why */-ans/ would have been raised if the secondary */-ins/ was simultaneously lowered.

The instr. pl. ending *-mi*, which is sometimes adduced as independent evidence for */-iNs/ > OCS *-i*, is briefly discussed below:

Excursus: The non-*/o/-stem instrumental plural ending *-mi*

With the expection of the */o/-stems, which constitute a separate problem, all OCS nominal stems build the instr. pl. form with an ending *-mi*, somehow linked to the corresponding non-feminine instr. sg. ending *-mь*. The latter is to be derived from PIE */-mi/, a variant of */-bʰi/ which is attested as such in Lat. (dat. sg. *tibi* 'to you'), Skt. (*tubhyam* 'id.', apparently from *tubhi* and influenced by the nom. *tvam*, the latter itself influenced by *aham* 'I', also Av. *taⁱbyā* 'id.'), and Gk. (Homeric gen.-dat. sg. and pl. ὄρεσφι from ὄρος 'mountain'). OCS *tebě* 'to you' apparently continues an */o/-grade */-bʰoy/. For possible traces in Toch., see Shields (1977a). PIE */bʰi/ : */bʰey/ was probably an enclitic with an instrumental or dative meaning (cp. Gmc. */bī/ > Germ. *bei*, Eng. *by*), originally indifferent to number, as is suggested by the Gk. evidence. For discussion, see Szemerényi (1989:174), Adrados (1989:29), Sihler (1995:249). It is a Balto-Slavic peculiarity that */-mi/ has spread to nearly all nominal declensions, although the distribution in the two branches is different, no doubt due to secondary Slavic developments.

While in the singular the element */bʰi/ ~ */mi/ is largely restricted to some pronouns, in the plural it appears to have had an established instrumental function already in PIE, extended with a pluralizing */-s/. A protoform */-bʰis/ ~

*/-mis/ can be reconstructed for Skt. *-bhiḥ* (instr. pl.), Av. *-biš* (instr. pl.), Lith. *-mìs* (instr. pl.), OIr. *-b'* (dat. pl.), possibly (e.g. Schmidt 1990:9-10) also for Goth. *-m* (dat. pl.). OCS *-mi,* on the other hand, requires a long vowel, since the direct reflex of PIE */-mis/ would have been late PSl. */-mь/. That we do not have the latter in OCS is understandable, for it would have coalesced with the corresponding singular desinence *-mь,*[15] but the actual background of *-mi* is not clear. Some scholars, e.g. Leskien (1909:113) and Georgiev (1969:75), have proposed a PSl. */-mins/, a product of contamination with the acc. pl. */-ins/. Subjectively, such a contamination does not seem very likely. If it can be shown with independent evidence that */-ins/ yields OCS *-i,* this phonological law can be used to account for *-mi,* but the latter, as such, does not qualify as evidence for the said phonological law.

Kortlandt (1994:98) explains the length in *-mi* by positing a laryngeal, i.e. */-miHs/. This is not really an explanation, for the comparative evidence, such as Skt. *-bhiḥ* and OIr. *-b',* positively rules out a laryngeal. Reconstructing unexplained laryngeals is not in any way more acceptable than directly reconstructing an unexplained lengthening, i.e. */-mīs/. More likely solutions might be available. There was a need to restore the lost distinction between the singular ending *-mь* (PIE */-mi/) and the plural desinence */-mь/ (PIE */-mis/). The possibility of borrowing another instr. pl. allomorph from another declension was limited by the near-global distribution of */-mis/. The */o/-stems with *-y ~ -i* of unclear origin were the only exception.[16]

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[15] For some reason Birnbaum & Schaeken (1997:21 and passim) derive the singular ending *-mь* from */-mis/.

[16] In my opinion, the most plausible explanation presented so far for *-y ~ -i* is that the former is a hard-stem backformation from the soft-stem *-i* which is the regular outcome of PIE */-oys/ or */-ōys/ (e.g. Hujer 1910:160-164, Lüdtke 1966:128). Brugmann (1907) proposed a borrowed ending */-ūs/ from the */u/-stems, but the evidence for such a form is restricted to Avestan and is tenuous even there. The phonological explanations for *-y* are ad hoc and, in my opinion, unsatisfactory, see Fortunatov (1952, cited in Orr 2000:126), Meillet (1897, ibid.), Rosenkranz (1955:77), Mareš (1962:20), Kortlandt (1979:265), Jasanoff (1986:144-145), and Xaburgaev (1986:152).

It is possible that a) the instr. pl. */-мь/ was remodeled to -*mi* under the influence of the soft */o/-stem ending -*i*, or b) vowel length was applied as an indicator of plural based on the model of the contrast between acc. sg. *gostъ* 'guest' : acc. pl. *gosti*, acc. sg. *synъ* 'son' : acc. pl. *syny*, and acc. sg. *materъ* 'mother' : acc. pl. *materi*. Finally, it cannot be ruled out that OCS -*mi* continues a full-grade */-meys/. However, this alternative, judged by the comparative evidence and the accentology (e.g. Ru. *det'mí* 'by children'), does not seem likely.

If we assume that PIE */-ins/ yields regularly OCS -*ę*, the relative chronology of Verdumpfung and umlaut poses no difficulties. The */yo/-stem acc. pl. developed from PIE */-yons/ to PSl. */-yuns/ to */-yins/ to OCS -*'ę*. The nom.-acc. sg. *bogъ* and *koń́ь*, and the acc. pl. *bogy* and *koń́ę* are all regular. Two questions must then be addressed: 1) Where does *gosti* come from? 2) How can it be that PSl. */-uns/ (from both PIE */-ons/ and */-uns/) yielded OCS -*y*, i.e. lost the nasalization, while */-ins/ gave OCS -*ę*, i.e. retained it?

7.2. The */i/-stem acc. pl.

IE languages show evidence for two different terminations in the acc. pl. of */i/-stems. Gk. dialectal -ινς and and Goth. -*ins* point to a PIE */-ins/. Av. -*īš*, Lith. -*ìs*, OIr. -*i*, Lat. -*īs* (which, from the Augustan period on, gives way to -*ēs*) all agree with PIE */-īs/, although many scholars (Thurneysen 1980:193, Sommer 1902:418, Stang 1966:213, Sihler 1995:317) are willing to derive them from */-ins/ as well. Since the variant */-ins/ is structurally more transparent (stem vowel + case marker + number marker), the variant */-īs/ requires an explanation.

> It is commonly (e.g. Szemerényi 1989:173-174, Sihler 1995:254, 263) thought that the complex */-ns/ consists of the acc. marker */-m-/ and a pluralizing */-s/. As natural as an assimilation */-ms/ > */-ns/ may seem, it

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cannot be taken for granted. For example, in Goth. *mimz* 'flesh' the cluster is evidently ancient, cp. OCS *mẹso*, Skt. *māṃsám*. Since there would be no motivation for a change */ns/ > */ms/ in Goth., it must be assumed that */ms/ was inherited as such, with no assimilation. It may thus be that the acc. pl. */-ns/ requires another explanation.

Skt. */i/-stems have both endings, with a clear distribution: *-īn* for masculines, *-īḥ* for feminines. Sihler (1995:313 fn.18) proposes that the *-īḥ* is an analogy from the */ā/-stems, which seem to have had a syncretic nom.-acc. pl. already in PIE, i.e. */-ãs/. This merger is probably the result of regular phonological processes, since both */-ā-es/ and */-ā-ns/ were contracted to */-ãs/.

I agree with Sihler that Skt. *-īḥ* is an innovation, but I do not think it is an *Indic* innovation. The analogy was rather PIE. As word-final combinations of a long vowel followed by */-ns/ were contracted into a circumflex vowel plus */-s/, the distinction between the nom. and the acc. pl. was erased in two major feminine declensions, the */ā/-stems and the devī-stems. The vocalic declensions that retained the distinction were the */o/-stems (exclusively masculine), the */u/-stems (predominantly masculine) and the */i/-stems (mixed but mostly feminine). Under these circumstances it is understandable that the feature "nom. pl. = acc. pl." was reinterpreted as characteristic of the feminine gender and spread to the feminine */i/-stems, while a nasalized acc. pl. became a feature of masculine vocalic stems. (In a somewhat similar manner, the distribution of the Gk. nom. pl. endings -οι and -ες, originally conditioned by the declensional class, became in Modern Gk. conditioned by the gender). In IE Einzelsprachen, other than Skt., this conditioning factor became obsolete, and the variation in the */i/-declension was eliminated by generalizing either */-īs/ or */-ins/ to both masculines and feminines.

We can thus assume that in PSl., as in several other IE languages, the */i/-stem acc. pl. variant */-īs/ prevailed and regularly produced the attested -*i*. Futhermore, if the gender-based distribution of */-ins/ and */-īs/ survived into late PSl., masculine acc. pl. forms in */-ins/ which, after the narrowing and the umlaut, coalesced with the corresponding */yo/-stem termination */-yins/ (from */-yons/), may, together with the merger of the nom.-acc. sg. forms, have contributed to the transfer of */i/-stem masculines to the */yo/-stem declension, a development that was in progress in OCS.

7.3. Proto-Slavic */-uns/ vs. */-ins/

I have argued that the regular reflex of PSl. */-uns/ is OCS -*y*, while PSl. */-ins/ is regularly reflected by OCS -*ę*. Can it be that one high vowel lost its nasality in the same environment where the other one retained it? When I claim that the regular reflexes of */-uns/ and */-ins/ are -*y* and -*ę*, respectively, I do not say that we are dealing with purely phonological processes. Rather, we are looking at sound changes that led to an environmentally conditioned variation which was later eliminated by distributing the phonetically produced variants according to morphological criteria. Before going further, I will take an example of such a process from Gmc. The account of the events is based on Prokosch (1948:132-134).

Shortly after its disintegration, Gmc. lost the short vowels */a/ and */e/ in final (= unstressed) syllables, unless they were followed by a consonant cluster. Cp., e.g., Goth. nom. sg. *wulfs* 'wolf' from Gmc. */wulfaz/, voc. sg. *wulf* from */wulfe/, but acc. pl. *wulfans*. Only Runic Scandinavian retains the final vowel in all positions. The high vowels */u/ and */i/ showed a bit more resistance. Runic Scandinavian, again, retained them always, but in old North-West Gmc. languages their retention or loss was conditioned by the environment in which they occur: they were lost after a long syllable (or two syllables) but retained after a short one. Cp. OE *hand* 'hand' from */xanduz/ vs. *sunu* 'son' from */sunus/; *dæd* 'deed' from */dēþiz/ vs. *mete* 'food' from */matiz/. In Goth. the picture is different. Gmc. final-syllable */i/ was lost in both environments,

while */u/ was retained in both: *handus* and *sunus*, *ga·deþs* and *mats*. The Goth. distribution cannot be original. The phonological development produced two variants of a final-syllable */i/ and */u/: */i/ ~ */ø/ and */u/ ~ */ø/. The environmental factor (the quantity of the preceding syllable) became obsolete and was replaced by a morphological one (the declensional class). The asymmetrical generalization of one of the two variants, i.e. */i/ ~ */ø̱/ vs. */u̱/ ~ */ø/, removed the harmony between the two declensional types but restored it within each one of them.

I believe the parallelism between the Goth. development and the one I am about to propose for Slavic is great enough to give the latter some degree of credibility. As Orr (2000:1) formulates, "[…] if a reconstructed development can be DEMONSTRATED to have ACTUALLY occurred AT LEAST ONCE, the respective development is thereby rendered more likely."

We know that combinations of the high vowels */u/ and */i/ and a following nasal produced late PSl. nasal vowels word-internally in tautosyllabic positions, cp. OCS *dǫti, dъmǫ* 'to blow' = Lith. *dùmti, dumiù*, OCS *jęti, ·ьmǫ* 'to take' = Lith. *im̃ti, imù*. There is, however, a high degree of agreement that word-finally */-uN/ and */-iN/ simply lost the nasal, with no nasalization of the vowel, e.g. acc. sg. *synъ, gostь*. The conclusion that can be drawn is that */u/ and */i/ indeed were nasalized as were all other vowels, but their nasalization was weaker and ultimately lost in final syllables, unless, apparently, that syllable was closed by a stop (cp. the aor. 3rd pl. *věsę*). Typological evidence seems to indicate that high nasal vowels tend to be the first to denasalize (Ruhlen 1978:225-226).

As the nasalization of */u/ and */i/ was weak and unstable in final syllables, it can be assumed to have been more liable to the effect of the environment than the other nasalized vowels. The */o/- and */yo/-stem accusative plurals */-uns/, */-yins/ yielded */-ų̱s/ and */-į̱s/, respectively, where the vowel, due to the compensatory lengthening,

was inherently long. The factor that determined the loss or retention of the unstable nasalization was in all likelihood, as in the case of Goth., the quality of the preceding root. It is *a priori* plausible that either a) the nasalization was retained after a root containing a nasal (assimilation), or b) the nasalization was lost after a root containing a nasal (dissimilation). There is some evidence in Slavic for a tendency of dissimilatory denasalization: OCS *měsęcь* 'Moon, month' is probably dissimilated from */męsęcь/, which continues a (hypothetical) PIE */mēns-n̥-k-o-/ (Shevelov 1964:320, Beekes 1982:55, Erhart 1998). The derivational mechanism of *měsęcь* from the zero grade of an old */en/-stem is similar to, e.g., Gk. μαλθακός 'soft' (*/ml̥d^h-n̥-k-o-/) from μάλθων (Forssman 1965:285-286). Similarly, *po·měnǫti* 'to recollect, remember' beside *po·męnǫti* 'id.' and *mьněti* 'to think'.

The environmentally conditioned variation of the nasalized and non-nasalized reflexes of PSl. */-uns/ and */-yins/ would thus have produced acc. pl. pairs like */baguns/ 'gods' vs. */zǫbūs/ 'teeth' and */vad'i̯s/ 'leaders' vs. */kańīs/ 'horses'. As the environmental conditioning became obsolete, and/or in order to eliminate the variation within the declensional types, one member of each nasal/non-nasal pair was generalized. The generalization was asymmetrical, as it was in Goth., producing */bagūs/ (OCS *bogy*) and */zǫbūs/ (*zǫby*), */wad'i̯s/ (*voždę*) and */kańi̯s/ (*konę*). If the variation persisted until after the reduction of the number of nasal vowels from four (*/ǫ/, */ę/, */ų/, */į/) to two (*/ǫ/, */ę/),[17] the late PSl. vowel shift and the loss of final consonants, the corresponding pairs would have been */bogǫ/ vs. */zǫby/ and */wod'ę/ vs. */końi/. Under these circumstances, the historical connection between */-ǫ/ and */-y/, on the one hand, and */-ę/ and */-i/, on the other, would have become completely opaque, rendering a generalization of only one variant even more likely. The choice of *-y* (instead of */-ǫ/) and *-ę* (instead of */-i/) to be generalized can also be motivated. An acc. pl. */końi/ would have coalesced with the nom. pl. when a syncretic nom.-acc. pl.

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[17] Shevelov (1964:329). The fact that the Third Palatalization of velars took place after *ę* from */in/ but not after that from */en/ indicates that the reduction was a late development.

was characteristic of the *feminine* gender (see **7.2.**), while */bogǫ/ would have been identical to the feminine acc. sg.

7.4. The gen. sg. and the nom.-acc. pl. of the */ā/-stems

The */ā/-stems have a phonologically syncretic form for the gen. sg. and the nom.-acc. pl., e.g. *ženy*, although the two paradigmatic forms were apparently separated by accent. Cp. Ru. *žený* vs. *žëny* (synchronically only nom. pl.).

It seems *a priori* artificial to separate historically the gen. sg. *ženy* and the nom.-acc. pl. *ženy*, not least because the two forms were apparently identical already in PIE. Cp. Lat. *fabās* 'bean' (also the gen. sg. in OLat.), OIr. *mná* 'woman', and Goth. *grabos* 'ditch' etc., which all point to PIE */-ãs/. In all probability, this syncretism was the result of contractions from */-ā-^e_os/ (gen. sg.), */-ā-es/ (nom. pl.) and */-ā-ns/ (acc. pl.). The few attempts to invent a separate history for the gen. sg. cannot, in my opinion, be taken seriously.

Leskien (1909:109), Rosenkranz (1955:81), and Holzer (1980:10) suggest an */en/-stem form, comparable to Goth. *qinons* 'woman's'. This idea is a failure because the */en/-stem feminines constitute a large and productive class in Goth. (as in Lat.), while there are no traces of such a noun type in Slavic. Secondly, Goth. *qinons* is the regular descendant of Gmc. */kwenōnez/ via the loss of the final-syllable vowel, cp. Lat. *statiō*, *statiōnis* 'standing'. There was no such loss in Slavic, as is clearly shown by the masculine and neuter */en/-stems (gen. sg. *kamene*, *imene*). The OCS counterpart of Goth. *qinons* would be **ženane*, not *ženy*.

Georgiev (1969:93, 104) believes the gen. sg. ending *-y* continues */-ūd/, an ablative sg. termination of the */ū/-stems which arose under the influence of the */o/-stems and which was borrowed by the */ā/-stems after the loss of word-final consonants and the merger of the gen. sg. with the nom. sg. The first problem is that there is no evidence

whatsoever for an */ū/-stem abl. sg. in */-ūd/ either in PIE, in individual IE languages, or in Slavic. The second problem is that the abl.-gen. sg. of the Slavic */ū/-stems ends in -ъve which quite regularly continues PIE */-uwes/, heavily supported by the comparative evidence. Even if the ad hoc form in */-ūd/ did exist, Georgiev's theory would imply that PSl. retained separate forms for the abl. (*/-ūd/) and the gen. (*/-uwes/) sg. until the loss of word-final consonants. Again there is no evidence for this. Thirdly, while the need to prevent the merger of the nom. sg. and the gen. sg. is undoubtedly real, it is difficult to understand why a new ending would be borrowed from the marginal */ū/-declension and not, say, from the */i/-stems. The fourth difficulty is the corresponding */yā/-stem termination -'ę that unambiguously points to the presence of a nasal element in the gen. sg. form.

Słoński (1950:59) suggests that -y regularly continues PIE */-ā-s/, while the soft-stem termination -ę arose analogically after the proportion -y ~ -ę in the acc. pl., e.g. rǫky 'hands' vs. dušę 'souls', and the nom. sg. of the act. pres. ptcl., e.g. nesy 'carrying' vs. znaję 'knowing'. The explanation for the */yā/-stem -'ę is interesting enough, but it does not seem likely that */-ās/ would have yielded OCS -y. As acc. sg. ženǫ from */gwenām/, pres. 1st sg. berǫ from */bʰerōm/, aor. 2nd sg. zna 'you knew' from */(e)ǵnōs/ (Gk. ἔ·γνως), aor. 2nd sg. sta 'you stood up, stopped' from */(e)stās/ (Skt. á·sthāḥ, Gk. ἔ·στης) clearly show, long vowels did not participate in the narrowing. Zucha (1985:135-136) suggests that the aorist form is analogical, created by "Systemzwang" (e.g. aor. 3rd sg. sta from */stā-t/). It cannot be proven that zna, sta etc. are not secondary but, on the other hand, nothing indicates they are.

As OCS -y cannot be derived from PIE */-ãs/ and the */yā/-stem ending has a nasal element, it is safe to assume that the gen. sg. form is historically the nom.-acc. pl. The question is then, where the latter comes from and why it spread to the gen. sg. as well.

Even if it could yield OCS -*y*, which does not seem likely, the usually reconstructed acc. pl. in */-āns/ is historically unjustified. Most IE languages point to a syncretic, non-nasal nom.-acc. pl. form of the */ā/-stems. The reasons behind this syncretism are discussed above. Gk. shows evidence for a nasal ending, e.g. ῥοάς 'streams'; an original */ā/ would have yielded Attic-Ionic η as in the gen. sg. ῥοῆς. The nasal is easily explained as */o/-stem influence, which can also be seen in the nom. pl. ῥοαί and the dat. pl. ῥοαῖς. The OCS endings -*y* and -'*ę* are thus outright borrowings from the */o/-stem masculines.

As PSl. lost word-final consonants, the nom. sg. in */-ā/, the gen. sg. in */-ãs/ and the nom.-acc. pl. in */-ãs/ all merged in later */-ā/. A nom.-acc. pl. form like *ž*ena* had to be replaced with something because a sg.-pl. syncretism in the major feminine declension could not persist for long. The new forms *ženy* and *buŕę* 'storms' were created in analogy to the masculine acc. pl. forms *bogy* and *końę*. No separate nom. pl. forms were created (of the type *ž*eni* and *buŕi*), because the */ā/-stems already had a syncretic nom.-acc. pl. form. The ending also spread to the gen. sg. for two obvious reasons. Firstly, the inherited late PSl. gen. sg. */žena/ from */gwenãs/ had to be replaced with *something*. Unlike in the case of the nom.-acc. pl. desinence, the */o/-stem ending -*a* (from */-õd/) was, of course, useless. Secondly, in that way the inherited identity between the gen. sg. and the nom.-acc. pl. in the */ā/-declension was restored, only with different phonetic material.

7.5. Conclusion to section 7.
The PIE */o/-stem acc. pl. endings */-ons/ and */-yons/ underwent the narrowing of */o/ and yielded */-uns/ and */-yuns/, respectively, thereby coalescing with the original */u/-stem termination */-uns/. After the umlaut after palatals, */-yuns/ changed to */-yins/. The two endings, */-uns/ and */-yins/, had a parallel development, yielding */-ųs/ and */-įs/ with a long nasalized vowel. The nasalization of the long high vowels in final syllables was unstable and susceptible to the influence of the phonological

environment. The environmental conditioning of the distribution of the nasalized and the non-nasalized variants of */-ųs/ and */-įs/ was replaced by morphological conditioning (**7.3.**), whereby only */-ūs/ and */-įs/ survived.

The OCS */i/-stem acc. pl. ending -*i* does not continue */-ins/ but */-īs/, which was a PIE analogical innovation. In PSl. it spread to all */i/-stems, as it did with certainty in Avestan and possibly in OIr. and Lat.

The */ā/-stem endings -*y* and -*'ę* were borrowed from the */o/-stems because the loss of final consonants led to the merger of the nom.-acc. pl., on the one hand, and the gen. sg., on the other, with the nom. sg.

The ending -*i* of the consonantal stems does not continue PIE */-ņs/ but was borrowed from the */i/-stems, as was the case with the majority of plural endings.

8. The nom. sg. of masculine */en/-stems in -*y*

The OCS termination -*y* of the masculine */en/-stems, the only synchronically existing representatives of which are *kamy* 'stone' and *plamy* 'flame', is of obscure origin. The corresponding PIE ending is traditionally reconstructed as */-ōn/, with a lengthened */o/-grade of the suffix */-en-/ (see, e.g., Kortlandt 1994:98, Szemerényi 1996:168-173, and Birnbaum & Schaeken 1997:32). It is apparently impossible to derive -*y* from */-ōn/, which most likely would yield OCS -*ǫ*; cp. the pres. 1st sg. -*ǫ* from */-ōm/ and the */ā/-stem acc. sg. -*ǫ* from */-ām/.

One must bear in mind that the reconstruction */-ōn/ is in no way supported by the comparative evidence. Only Gk. points to such a termination, e.g. ἀγών 'assembly'. Lat. *homō* 'man', OIr. *brithem* 'judge', Skt. *ukṣā́* 'bull', Lith. *akmuõ* 'stone', and Toch. B *ku* 'dog' all agree with PIE */-õ/ with a circumflex vowel from a contraction of some kind. The situation is slightly different in Goth. where, if one believes in a distinction

between PIE simple and circumflex length as I do (see **Introduction: 5.1.**), the masculine *aúhsa* 'ox' requires previous */-ō/, whereas the feminine *kalkjo* 'harlot' from */-õ/ is in line with the evidence of most of IE.

This contradicting comparative evidence (*/-õ/, */-ō/, */-ōn/) does not directly help us in dealing with *-y*, for the latter cannot be derived from any of the attested variants. Streitberg (1891:295) and, later, Jasanoff (1983:144, 147) suggested that a circumflex */-õ/ yielded PSl. and Baltic */-ũ/, which later produced OCS *-y*. Schmalstieg's objection (1983:152), based on the fact that OCS *kamy* is root-accented, is not valid because *-y*, if it directly reflected PIE */-õ/, could easily have spread from some extinct nouns corresponding to the type Gk. ἀγών, Skt. *ukṣā́* to the type *kamy*, *plamy*. A more serious problem in Streitberg's and Jasanoff's idea is that it requires a differing treatment of PIE */-õ/ and */-ō/ in Slavic, something for which there is no evidence whatsoever. Schmalstieg's own proposal (ibid.:152-153) that unstressed */-ō/ became OCS *-y* while stressed */-ō/ yielded *-a* (e.g. nom.-acc. du. *boga*) is not more fruitful because there is no further evidence for it and counterevidence might be presented. The OCS */o/-stem abl. sg. ending *-a*, Lith. *-o* (from PIE */-õd/) must have been unstressed if Mažiulis (1965:20) and Kortlandt (1983:169) are right in assuming that Lith. *o* might continue not only PIE */ā/ but also */ō/ in unstressed position.

The contradicting evidence, however, helps us indirectly in the sense that it establishes the *absence* of a common protoform from which the attested forms should be derived. Thus, since either Gk. -ων or */-õ/ elsewhere *must* be a Neubildung, OCS *-y* might also be the outcome of some analogical process.

Georgiev (1969:118-123) and Orr (1986:179, 2000:158-160), in very different ways, derive the final vowel of *kamy* from the */ū/-stem nom. sg., e.g. *l̗uby* 'love'. According to Orr, the analogy was motivated by the tendency to distinguish the masculine */en/-stems from the neuter ones. He believes PSl. inherited not only a PIE termination */-ōn/

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but also */-ēn/, a type best attested in Gk., cp. αὐχήν, -ένος 'neck', κηφήν, -ῆνος 'drone-bee', and a few others. Orr correctly states that both */-en/ (the corresponding neuter ending) and */-ēn/ would have yielded late PSl. */-ę/ which, in turn, would have resulted in a merger of the masculines and the neuters. As I argued in **5.1.**, a tendency to keep the two genders apart did not exist, but even if it did, the mechanisms of change proposed by Georgiev and Orr are hardly attractive. According to Orr (1986:177-178) such dialectal forms as Ru. *kama* 'stone' are original and continue the variant */-õ/ ~ */-ō/. As Jasanoff (1986:183) convincingly shows, more likely explanations for *kama* are available.

Georgiev believes that *kamy* is formally an original acc. pl. form from */aḱ-mn-ns/ which, through some bizarre sound changes, yielded a PSl. */akmūs/. The latter, then, came to be used as a nom. sg. as well, because the PIE */ū/-stems also had an acc. pl. form identical to the nom. sg. It is difficult to decide where to begin with this analysis but suffice it to say that:

1) An */en/-stem acc. pl. form with the zero grade of the suffix is attested in an archaic layer of this nominal class. Examples are Goth. *aúhsnuns* 'oxen', which occurs once in 1. Cor. 9,9, spelled <auhsunns>, and Skt. *ukṣnáḥ*, both from PIE */uks-n-ns/, as well as OIr. *cona* 'dogs', Gk. κύνας, and Skt. *śúnaḥ*, all three from PIE */ḱu-n-ns/. However, the productive */en/-stem declension, to which the word for 'stone' seems to have belonged, had a full-grade suffix in the acc. pl. Cp. Skt. *áśmanaḥ* and Gk. ἄκμονας from PIE */aḱ-m$^e_0$n-ns/, both of which agree considerably well with the OCS acc. pl. *kameni*. So does Goth. *gumans* 'men' if it has been haplologized from */gumanuns/.

2) A PIE sequence */-mn-/ hardly simplified to OCS -*m*- rather than -*n*-, cp. *těnь* 'shadow' from PSl. */taym-ni-/, derived from the root of *tьma*

'darkness', *tina* 'slime, mud', cp. *timĕnьje* 'id.', and possibly *pĕna* 'foam' if from PSl. */(s)paym-n-ā/, cp. Lat. *spūma* 'id.' (Shevelov 1964:323).

3) If PSl. inherited an acc. pl. */akmnn̥s/, where does the attested *kameni* come from?

4) PIE */ū/-stems hardly had an acc. pl. in */-ūs/, cp. Skt. *bhúvaḥ* 'earths'. Gk. ἰχθῦς 'fish' is a contraction of ἰχθύας. Both Skt. *bhúvaḥ* and Gk. ἰχθύας agree well with the attested OCS */ū/-stem acc. pl., e.g. *žrьnъvi* 'millstones'.

5) Even if PIE */n̥/ could have yielded PSl. */un/ in a labial environment, that condition would have been absent in */akmnn̥s/.

Georgiev's account thus requires the existence of an unattested late PSl. acc. pl. */kamy/, an unattested acc. pl. */žrьny/, and the reconstruction of an unlikely PIE */ū/-stem acc. pl. in */-ūs/. To say the least, the explanation is not convincing.

The biggest question is, of course, why the */en/-stems, which were all masculine, would have been influenced in such a dramatic way by the */ū/-stems, which were all feminine. Orr (1986:179) gives a rather puzzling argument: "At first sight this solution seems implausible, but when one bears in mind that there were no feminine *-*mĕn*-stems in C[ommon]S[lavic], it is possible that *-y* could have been perceived as a non-neuter rather than as a feminine ending." The fact that there also were no masculine */ū/-stems makes it unlikely to the extreme that *-y* could have been perceived as anything but a *feminine* ending. Moreover, *if* masculine and neuter */en/-stems had merged and *if* that was a problem, there indeed were more attractive sources of analogy for reshaping the masculine form, i.e. the */o/- and */u/-stem masculines in -ъ and the */i/-stem masculines in -ь.

Attempts to derive the termination *-y* from an original */-ū(s)/ fail because such an ending would have to have been borrowed from elsewhere and there is no credible source for that borrowing. It seems to be phonologically impossible (or at least unprovable) that *-y* could continue PIE */-ō/ or */-õ/. If it is accepted that OCS *-y* can phonologically continue PIE */-ons/, we should then examine our chances of reconstructing such a termination for the nom. sg. of the */en/-stem masculines. I believe there are two equally likely possibilities, and these will be discussed next.

8.1. An inherited archaism

As I hinted above, I do not believe that *any* of the attested */en/-stem nom. sg. forms in various IE languages reflects the PIE situation. In order to establish the protoform, and to begin the historical analysis of the Slavic form, we need a good deal of internal reconstruction.

There seems to have been a universal PIE (or, perhaps, Pre-Indo-European) nom. sg. ending for all masculine and feminine nominal stems, */-s/. As Szemerényi (1989:121-123) describes, most consonants were assimilated to the nom. sg. ending */-s/ so that, e.g., */ped-s/ 'foot' yielded */pess/, and */senyos-s/ 'older' gave */senyoss/. Because a final */-ss/ was phonotactically impossible, the forms underwent a metathesis of quantity whereby */pess/ and */senyoss/ yielded */pēs/ and */senyōs/ (Lat. *pēs*, Skt. *sányāḥ*). This is not unlike the metathesis that produced the Attic-Ionic gen. sg. νεώς 'ship' from (Homeric) νηός (Sihler 1995:74) or possibly Lat. *quattuor* 'four' from *quātuor (Kent 1927, for a different view Ward 1948). A similar solution has also been proposed for the acc. sg. of PIE diphthongal stems, e.g., Skt. *gā́m*, Gk. (Dor.) βῶν 'cow' from */gwōm/ < */gwomm/ < */gwowm/ (Mayrhofer 1986:163-164).

It appears that PIE */-rs/ was not simplified into */-ss/ but */-rr/. Thus */bʰrāter-s/ 'brother' yielded */bʰrāterr/, which was subsequently metathesized to */bʰrātēr/. In this context, it would seem logical that an */en/-stem termination */-on-s/ ~ */-en-s/ would

likewise have yielded */-ōn/ ~ */-ēn/ (Szemerényi 1989:121-123). However, this assumption is based on a "symmetry-belief" rather than on what the evidence of IE tells us. The */o/-stem acc. pl. termination */-ons/ unambiguously testifies that a word-final */-ons/ remained in PIE and also in some daughter languages, e.g. */aǵrons/ > Goth. *akrans* 'fields'. Sihler (1995:230) attempts to rescue the acc. pl. form by assuming that this termination was actually */-oms/, not */-ons/. This is not supported by any evidence. There are no indications of a development */-ons/ > */-ōn/ in later languages either. If PIE */-ons/ had been simplified at all, it would have yielded rather */-ōs/ than */-ōn/. Cp. Lat. acc. pl. *virōs* 'men' from */wirons/, OIr. *firu* 'id.' from earlier */wirōs/ < */wirons/, Gk. εἷς 'one' from */sems/, OE *gós* 'goose' from Gmc. */gans-/, and Phr. ας 'to' from */ēs/ < */ens/ = Gk. ἐις 'id.'.

Since a nom. sg. in */-ons/ ~ */-ens/ should, from the phonological point of view, remain unchanged in PIE, neither the Gk. */-ōn/ nor the */-ō/ or */-õ/ elsewhere can be "original". I would like to propose the following development, which not only explains OCS *kamy* but also accounts for the variation */-ōn/ ~ */-ō/ ~ */-õ/ in the */en/-stems and */-ēr/ ~ */-ē/ ~ */-ẽ/ in the */er/-stems.

Prior to the assimilation of word-final clusters and the subsequent quantitative metathesis, we can posit the following nom. sg. forms for three major productive consonantal nominal stem classes, the */en/-, */er/-, and */es/-stems, respectively. The illustrative lexemes are */uksen-/ 'ox', */sweser-/ 'sister', and */senyes-/ 'older':

    */uksons/   */swesors/   */senyoss/

This stage can be labeled Pre-Indo-European and is probably purely hypothetical, at least for */senyoss/. Changes most likely began as soon as the ending */-s/ was attached to these stems. At the next stage, */-rs/ was assimilated to */-rr/:

*/uksons/   */swesorr/   */senyoss/

The quantitative metathesis produced forms that we would expect to find in PIE:

*/uksons/   */swesōr/   */senyōs/

Synchronically, from the point of view of a speaker, such forms as */senyōs/ and */swesōr/ *appeared* to have a termination consisting of a lengthened suffix vowel and the stem-final consonant without a case marker. Although diachronically both */senyōs/ and */swesōr/ were the result of a regular phonological development, these characteristics had synchronically become morphologically conditioned. It is therefore not surprising that they spread dialectally to the third productive consonantal declension, the */en/-stems. In some branches, the structural imitation was complete, and */uksons/ yielded */uksōn/ which was diachronically irregular but synchronically well in line with */swesōr/ and */senyōs/. This is the case in Gk., where ἀγών, as to the shape of the auslaut, agrees with θέλκτωρ 'charmer' and ἠώς 'dawn', whereas αὐχήν 'neck' agrees with ὀπτήρ 'spy', ἀειδής 'unseen' (masc. & fem.).

But in most dialects the assimilation was partial, whereby only the length of the suffix vowel was transferred from */swesōr/ and */senyōs/ to */uksōns/. The final */-s/, which had no phonological reason to drop, remained. For late, disintegrating PIE we can thus reconstruct three different nom. sg. forms for the */en/-stems, one that is regular and two that are to a greater or lesser extent influenced by the stems in */-er-/ and */-es-/:

*/uksons/   */swesōr/   */senyōs/
*/uksōns/
*/uksōn/

At this point, */uksōns/ fell prey to the regular loss of a nasal after a long vowel and before a final */-s/, whereby the preceding vowel was lengthened by one mora, i.e., to a circumflex vowel: */uksõs/. It is this form, I believe, that indirectly hides behind the */-õ/ and */-ō/ that we find in most IE languages.

It is widely (yet not universally) accepted that, at least in some instances, the so-called */s/ mobile, occurring sporadically at the beginning of certain IE roots, was captured in the flow of speech from the auslaut of a preceding word, e.g. Skt. *páśyati* 'to see' vs. Lat. *spectāre* 'to watch' (Mayrhofer 1986:119-120, Szemerényi 1989:98). If this was the case, we would expect the *preceding form to have lost* the */-s/, much the same way English *a nickname* arose from Middle English *an ekename*, or OCS *vъ ńe* 'into it' from */vъn je/. I propose this is exactly what happened with the */en/-stem nom. sg. form in */-õs/, which may have been a major factor in the emergence of the */s/ mobile. To take a simple illustration, PIE */uksõs peḱyeti/ 'the ox is watching' was reanalyzed as */uksõ speḱyeti/. The final */-s/ in this form was redundant, or even likely to have been lost, because the other derived consonantal stems did not have a nom. sg. ending and because its loss did not increase the anomality of the nom. sg. as opposed to the rest of the */en/-stem paradigm. Why the superficially similar nom. sg. of the */es/-stems (in */-ōs/) did not lose the final */-s/ is obvious: it was associated with, and protected by, the suffix consonant */-s-/ that occurred in all oblique forms.

Most dialects of IE, after attempting to harmonize the nom. sg. forms of the three consonantal declensions, thus ended up with a new asymmetric situation:

> */uksõ/   */swesōr/   */senyōs/

Gmc., OIr. and Toch. tolerated the asymmetry the best, but in Gmc. there was a tendency to level the vowel quantity of */uksõ/ with that of */swesōr/ and */senyōs/. As was the case with the stem vowels of the */i/- and */u/-stems in Goth. (**7.3.**), the free

variation between the "original" termination */-õ/ and the leveled */-ō/ was eliminated by redistributing the variants according to morphological criteria, in this case the grammatical gender. That this redistribution was late is shown by the different arrangements within Gmc. Goth. and ON apply */-ō/ for masculines and */-õ/ for non-masculines, whereas in WGmc. the exact opposite took place (Prokosch 1948:251): cp. Goth. masculine *guma* 'man' against feminine *qino* 'woman' and neuter *namo* 'name'. OIr. and Toch. do not distinguish between simple and circumflex length: Toch. B *ku* 'dog' vs. *pācer* 'father' and OIr. *cú* 'dog' vs. *athair* 'father'. There are no non-neuter */es/-stems in any of these languages.

In Indic and Baltic, the vocalic auslaut of */uksõ/ was reinterpreted as a morphological feature. In the former branch it spread to the */er/-stems, transforming the proportion */uksõ/ : */swesōr/ to */uksõ/ : */swesō/ > Skt. *ukṣā́* : *svásā*. The same is true of Lith., *šuõ* 'dog', *sesuõ* 'sister', but here the leveling seems to have been extended to the */es/-stems as well, as is indicated by the isolated *ménuo* 'month, Moon', gen. sg. *ménesio*. There is no justification in deriving *ménuo* from a */mēnōt/ and comparing it to Goth. *menoþs* (LEW, s.v. *ménuo*) since the latter is a regular */t/-stem (e.g., dat. sg. *menoþ*), whereas the Lith. word is not.

Extra-Slavic evidence points to an */en/-stem nom. sg. termination */-ōn/ ~ */-õ/ ~ */-ō/. OCS *kamy* cannot continue any of these variants. Internal reconstruction of PIE allows us to establish a "regular" ending */-ons/ which, due to a combination of morphological and subsequent phonological processes, was transformed into the attested forms. We can assume that PSl., possibly alone among the IE languages, did not participate in the general trend to level the nom. sg. form of the */en/-stems with that of other major derivative consonantal declensions. OCS *kamy* and *plamy* directly continue the unaffected, phonologically regular PIE variant in */-ons/ and can thus be used as evidence for the "weak" ALG hypothesis.

8.2. An early Proto-Slavic innovation

Another possibility is that PSl. indeed inherited a nom. sg. form in */-õ/ or */-ō/, as claimed by Orr (above). Slavic has eliminated the qualitative ablaut of the suffix */-(m)en-/, but there is little doubt that the nom. pl. and the nom.-acc. du. of the masculine */en/-stems used to have an */o/-grade, cp. Skt. *áśmānaḥ* 'stones', *áśmānā* 'two stones' (*-ā-* from an ablauting */o/ by Brugmann's Law) and Goth. nom. pl. *gumans* (as opposed to gen. sg. *gumins*). In order to regularize the synchronically irregular nom. sg. form, the nom. sg. ending */-s/ could have been added secondarily to the oblique stem */-m^e_on-/, as is the case with the Latv. */en/-stems, e.g. *akmens* 'stone' (vs. Lith. *akmuõ*) and *ûdens* 'water' (vs. Lith. *vanduõ*), see Schmalstieg (1995:149). I agree with Jasanoff (1983:139-140) on the unlikelihood of a process in which */-n-/ and */-s/ would have been restored to the old nom. sg. in */-ō/. There would be no parallels for such a development and, from the phonological point of view, */-ōns/ would probably have yielded OCS -*ǫ* rather than -*y*. The selection of the */o/-grade, instead of the more common */e/-grade, as the basis for a new nom. sg. form could be explained as leveling with the other nominative forms, i.e., PIE nom. pl. */aḱmones/ and nom.-acc. du. */aḱmonō/. If this explanation is the right one, *kamy* is still to be derived from */aḱmons/, but the latter is a Slavic innovation rather than an inherited PIE archaism. Later, */aḱmons/ fell prey to the Slavic Auslautgesetz (*/akmuns/ > */akmūs/), became "irregular" again, and could not be affected by the subsequent leveling whereby the nom. pl. and the nom.-acc. du. */aḱmones/ and */aḱmonō/ yielded PSl. */akmenes/ and */akmenā/, respectively.

If PSl. never developed an */en/-stem nom. sg. in */-õ/ ~ */-ō/, and if the latter analogically gave rise to an */er/-stem nom. sg. in */-ẽ/ ~ */-ē/ as I have suggested, we can infer that the two remnants of the latter declension, *mati* 'mother' and *dъšti* 'daughter', indeed ended in */-ēr/ in PSl. However, due to the loss of word-final consonants, it is impossible to resolve this issue. The derivation of *sestra* 'sister' from **swesōr* via metathesis (Holzer 1980:11) is questionable. There is no evidence that

metathesis took place in word-final positions, the prothetic -t- does not appear in secondary -sr- clusters (cp. *sramъ* 'shame'), and the attachment of a thematic vowel to the oblique stem of former consonantal stems is a common phenomenon in Slavic and Baltic (cp. OCS *vesna* 'spring' < */wes-n-/ and Lith. *jẽknos* 'liver' < */yekʷ-n-/; see **Chapter I: 3.8.**). It is possible that the lost final */-r/ is somehow responsible for the vowel -i instead of the expected *-ě, but the -i may also be the result of some analogical process (for discussion, see Jasanoff 1983:146-147, Schmalstieg 1983b:152-153 and passim, Kortlandt 1983:176). Perhaps the most attractive solution is offered by Kortlandt (ibid.), who proposes that PIE */-ēr/ regularly produced PSl. */-ī/ and gives a typological parallel from Dutch. True, this would be the only such instance but, then again, the nom. sg. of the non-neuter */er/-stems seems to have been the only instance of */-ēr/ in PIE. As Nassivera (2000:60) states, "[…] lacking counterexamples, unique occurrences may well be accounted for by unique sound laws". I leave the question open, however, since it has no direct relevance for the ALG question.

9. The masc. nom. sg. of the act. pres. ptcl. in -y

Here, as in the nom. sg. of the masc. */en/-stems, the variation among IE languages is so great that the comparative method cannot give us a reliable protoform. What should be clear is that structurally the termination consisted of the participial suffix */-nt-/ and the nom. sg. ending */-s/.

A cluster */-nt-s/ probably could not have existed in PIE. It seems that */t/ was lost in any sequences of the type */ntC/. PIE */bʰer-o-nt-s/ 'carrying' therefore never existed on the phonological level but rather yielded */bʰerons/. The form was thus identical to the nom. sg. of the masc. */en/-stems and, not surprisingly, shared the fate of the latter in most IE languages. PIE */bʰerons/ gave way to a dialectal */bʰerōn/, influenced by the stems in */-ter-/, */-es-/ and */-en-/, and yielded Gk. φέρων, similar to ἄκμων. As with */en/-stems, most dialects only took the vowel length from other suffixal nominal

stems and ended up with */bʰerōns/ which evolved regularly into */bʰerõs/ and, in sandhi, to */bʰerõ/.

However, we do not find reflexes of a PIE */bʰerõ/ in the daughter languages. Skt. has *bháran*, Goth. *baírands* and Lat. *ferēns*. An */en/-stem nom. sg. form */uksõ/ was an oddity, considering the rest of the paradigm, but oddities can be tolerated as long as they do not pose a threat to the system of contrasts. A participial form */bʰerõ/, at least after the loss of circumflex length in most IE dialects, fell together with the pres. 1ˢᵗ sg. form */bʰerō/. The (near or complete) ambiguity in a construction like */steygʰō bʰerõ/ from either */steygʰ-o-nt-s bʰerõ/ or */steygʰō bʰer-o-nt-s/ was removed by restoring the ending */-s/ to the oblique stem of the participle. The actual outcome depended on the phonotactic restrictions different dialects had developed for the auslaut. Gmc. allowed the cluster as shown by Goth. *baírands*, while in Skt. only the first element of a word-final cluster survives: *bharant-s > bharan*. Lat. drops the obstruent: *ferēns*, as did PIE.

As in the case of */en/-stems, there was no true motivation for the remodeling of PIE */bʰerons/. We can assume that it actually survived intact in that dialect of late PIE which gave rise to PSl. Direct support may be seen in the OLith. act. pres. ptcl. *sargus* 'custodiens' (Stang 1966:186, 264), which may continue an unaltered PIE form in */-ons/. The current form in -*ą̃s*, e.g. *vežą̃s*, is in any case a Baltic innovation, similar to Goth. -*ands* etc., since a PIE */-ons/ would be reflected by Lith. -*us*, as it is in the */o/-stem acc. pl.

It is also possible that PSl., like most IE dialects, inherited PIE */bʰerõ(s)/. Later, within PSl., there would have arisen a dialectal, purely analogical */beruns/ from */berant-s/. This might be suggested by such forms as OR *bera* and *nesa*, which, nevertheless, may equally well have arisen analogically, under the influence of the III and IV class verbs' ending -'*a*, as suggested by Kudrjavskij (1912, cited and supported by Kiparsky 1967:240-241) and Ferrell (1965).

10. Lithuanian clues

Borrowings from Language A to Language B are often a useful way to trace phonological developments in A, especially if the borrowing took place in prehistorical times and if the phonological systems of A and B were sufficiently similar to eliminate the possibility of large-scale sound substitution. The dangers of the latter factor can be best illustrated by Old Persian borrowings in Gk. Forms like Ξέρξης and Δαρεῖος would give us a very strange picture of OP phonology and morphology if the latter itself was not attested (*Ĥšayārša, Dārayavauš*).

PSl. and Baltic, for all we know, had a very similar vowel system, which gives us a reason to believe that borrowings from the former to the latter more or less retained their original shape. I would like to suggest that at least one peculiar form in Lith., the adjective *vẽtušas* 'old', is a borrowing from Slavic and directly supports a PSl. change */-os/ > */-us/.

Lat. *vetus*, *veteris* 'old' and Gk. ἔτος, ἔτεος 'year' suggest a PIE gradating */°ₑs/-stem */wetos/, */wetes-/. That OCS *vetъxъ* and Lith. *vẽtušas* have become */o/-stems is, of course, no wonder since all athematic adjectives have been thematicized in Balto-Slavic. The vowel */-u-/, however, is mysterious. The expected forms would be OCS **vetosъ* or **vetesъ*, Lith. **vẽtasas* or **vẽtesas* (or, perhaps, **vãtasas*, cp. *vãkaras* 'evening' and *vãsaras* 'summer', see Hamp 1970). That the */-u-/ is old is shown by the retroflection of the following */-s-/. It is usually suggested that *vetъxъ* and *vẽtušas* continue an */us/-stem variant */wetus-/ (Arumaa 1985:47, Smoczyński 2001:163), but there is no independent evidence for such a form, and the */us/-stems in general seem to have been a very marginal class, with certainty attested only in Skt., e.g. *náhuḥ* 'neighbor', and Lat., e.g. OLat. *fulgus*, *-uris* 'lightning', possibly also in Gk., cp. the type νέκυς 'body' (gen. sg. νέκυος, dat. sg. νέκυϊ, nom. pl. νέκυες), which, at least phonologically, is directly superimposable on the Skt. type *náhuḥ* (gen. sg. *náhuṣaḥ*, loc. sg. *náhuṣi*, nom. pl. *náhuṣaḥ*). Sihler (1995:320) explains the Gk. inflection as */ū/-

stem influence, but that leaves the similarly behaving */i/-stems unexplained. Gk. ἔχις 'viper', gen. sg. ἔχιος, and nom. pl. ἔχιες correspond to Skt. *śocíḥ* 'glow', gen. sg. *śocíṣaḥ*, and nom. pl. *śocíṣaḥ*, and also to Lat. nom. sg. *cinis* 'ashes, ruins' and gen. sg. *cineris*. In the case of the ἔχις type, one cannot resort to an */ī/-stem influence, cp. γενέτειρα 'mother' from */ǵenətrī/ = Skt. *jánitrī*, Lat. *genitrī-x*.

In terms of the "strong" ALG hypothesis, OCS *vetъxъ* is unproblematic. The PIE consonantal stem */wetos/ yielded PSl. */wetus/ which was later, at a time when the narrowing law no longer was productive, thematicized into */wetus-a-/. This form underwent the regular retroflection, *[wetuṣa-]. Later, Balto-Slavic *[ṣ] was retracted to *[x] before back vowels in PSl. (see the **Excursus** below). Lith. *vĕtušas* lacks an internal explanation but corresponds exactly to the reconstructed early PSl. */wetusa-/ = *[wetuṣa-].

Excursus: The retroflection in Proto-Slavic

> PSl. inherited from PIE the fricative */s/ and its allophone *[z]. PIE *[z] became phonemic when it was joined by the satem reflex of */ǵ/, */ǵʰ/, but this coalescence was in all likelihood relatively late, as suggested by the Lith. evidence and the reflex of */ḱ/ (see below).

> The inherited */s/ (with the allophone *[z]) aquired another allophone in the environment between */u i r k/ and a vowel. This process is called "retroflection". The outcome is reflected in OCS as *x* before a back vowel and *š* before a front one, but it is not clear which one is older. Most probably, on the basis of the Indo-Aryan and Lith. evidence (Skt. *ṣ*, Av. *š*, Lith. *š*), the original product was a hushing sibilant. One can conjecture either an early retraction to *[x] in all positions and a late palatalization to *[š] before front vowels (as part of the First Palatalization), or a late retraction to *[x] before back vowels and a retention of *[š] before front vowels. I believe the latter

option is more likely, thus agreeing with Schenker (1995:81) rather than with Shevelov (1964:127). In any case, the split *[š] vs. *[x] became phonemic only when the PSl. dipthongs */ew/ and */aw/ were monophongized and the late PSl. sequences */šu/ and */xu/ emerged.

The split of */s/ to *[s] (in most positions) and the retroflex allophone became phonemic either when the latter, due to morphological analogy, spread outside its original environments (e.g., the loc. pl. */-i-su/ and */-u-su/), or when the cluster */ks/ was simplified. The latter process was part of the operation of the "Law of Open Syllables", and thus relatively late, and there are indications that the spread of the retroflected */-su/ to */ā/-stems was also late (Shevelov 1964:329). We can therefore reconstruct a PSl. phoneme */s/ with three allophones, *[s], *[z], and a retroflex *[ṣ], the latter symbol standing for two possible sub-variants, *[ṣ] and *[x]. For instance: PIE */snusV-/ 'daughter-in-law' > PSl. */snusā-/ = *[snuṣā-] > OR *snъxa*, cp. Skt. *snuṣā́*, Gk. νυός 'id.', and Lat. *nurus* 'id.'.

11. The phonetic likelihood of */-os/ > */-us/: analogically generated sound change?
Slavic probably never developed accentological conditions (such as a fixed non-final stress) that would have especially favored the emergence of Auslautgesetze, sound changes peculiar to the final syllable. The evolution of the Slavic accentology is summarized in Kortlandt (1994). Shevelov (1964:156) notes that "[n]arrowing of vowels before nasals in a closed syllable is a frequent phenomenon known in many languages. It is easily explained phonetically. But narrowing before -*s* would have no phonetic justification."

I stress again that typological probabilities cannot take the place of the evidence. There is plenty of evidence for the change */o/ > */u/ before a final consonant and, as I have tried to demonstrate, that evidence has not been credibly explained in any other way.

Secondly, while a narrowing of */o/ before a nasal is more common than before */s/, typological considerations, if applied as Shevelov does, would make even the "weak" ALG hypothesis unacceptable. In Phrygian, for instance, *o* and *e* are indeed frequently raised to *u* and *i*, respectively, before a following nasal (and a liquid), but that tendency is attested in all syllables, whether final or not, e.g. σιμουν ~ σεμουν ~ σεμον 'to this' and αββιρετορ ~ αββερετορ 'brings'. In Latin, on the other hand, */o/ is narrowed before both */s/ and nasals, but again in *all* closed syllables. If we accept *any* variant of the ALG hypothesis, as most of us do, we already accept a typologically less typical development.

If we nevertheless consider an Auslautgesetz */-os/ > */-us/ less likely than an Auslautgesetz */-om/ > */-um/, a different status can be suggested for the two sound changes.

We could assume that, purely from the phonetic point of view, only the "weak" ALG hypothesis is correct. In PSl., and possibly also in Baltic (Kortlandt 1983:173), word-final */-om/ regularly yielded */-un/, whereby PIE nom. sg. */ǵomb^{h}os/ and acc. sg. */ǵomb^{h}om/ (Skt. *jámbhaḥ*, *jámbham* 'tooth', Gk. γόμφος, γόμφον 'bolt, nail') gave Balto-Slavic */žambas/ and */žambun/, respectively. In Lith., the change was canceled by restoring the original vowel analogically, whence we have *žam̃bas*, *žam̃bą* 'sharp object'.

The three consonants that for certain occurred in absolute auslaut in PSl. were */-s/, */-n/ (the latter from PIE */-m/ or */-n/) and */-t/ (in secondary verbal endings).[18] There is some very tenuous evidence for */-d/, e.g. *tožde* 'also', if from */tod-yo(d)/ (Shevelov 1964:226), and */-r/, e.g. *i* 'and', if comparable to Lith. *ir̃* 'id.' and not to Gk. εἴ 'if',

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[18] I use the term "secondary" in the traditional sense. If we went deep enough into the prehistory, we might find that the primary endings with */-i/ arose from the secondary ones (Savčenko 1960, Watkins 1969:24, 45).

Goth. *ei* 'so that', etc. (See ESRJa, s.v. *i*.) The idea that the nom. sg. of */o/-stem neuters ended in */-od/ (see **3.1.**) has no basis. It seems likely that the pres. 3rd sg. ending *-tъ* is an original pronoun (Watkins 1969:219) rather than the reflex of a PIE medial ending */-tor/ (Milewski 1932, cited in Orr 2000:105, Galabov 1973:17fn.26), an interpretation that is supported by the OPr. evidence (Stang 1966:410).

The two PIE final consonants that surely were there in PSl., viz. */-s/ and */-m/, were very common in endings and equally often occurred after a preceding */o/, e.g. the */o/-stem nom. sg. */-os/, the verbal 1st pl. */-mos/, the dat. pl. */-mos/, the */o/-stem acc. sg. */-om/, the gen. pl. */-om/ and the aor. 1st sg. */-om/. When */-om/ phonetically yielded PSl. */-un/, the frequency of */o/ in closed final syllables was reduced by one half. I would consider it possible that */-os/, regardless of its morphological function, subsequently yielded */-us/ as an analogical development. The analogy was not morphologically triggered, as a change of the */o/-stem nom. sg. */-os/ to */-us/ under the influence of the acc. sg. */-un/ would have been. It was rather the sound change */o/ > */u/ itself that spread. In other words, a conditioned rule

 */-oC/ > */-uC/ if */C/ = */m/

was generalized into

 */-oC/ > */-uC/

Thus both */-os/ > */-us/ and */-om/ > */-um/ would have been regular sound changes in the sense that they were blind to morphological categories, but only the latter would have been a phonetic change.

I do not think the disputed change */-os/ > */-us/ needs a phonetic justification or typological support because the widely approved development */-om/ > */-un/ in only

one environment (final syllable) is equally atypical. Both are supported by the actual evidence and must therefore be considered real. The explanation I offered above would, however, account for the seemingly different treatment of a final-syllable */o/ in closely related Baltic and Slavic. They both generalized one half of a phonetic rule. In Slavic, "*/-oC/ > */-uC/ if */C/ = */m/" became "*/-oC/ > */-uC/", while in Baltic the reverse took place: "*/-oC/ > */-oC/ if */C/ ≠ */m/" was replaced with "*/-oC/ > */-oC/".

12. Conclusion

There is, in historical Slavic, evidence both for different types of ALG and against them. Any phonological model leaves exceptions that must be analogical. Either the nom. sg. *bogъ* or the nom.-acc. sg. *nebo* regularly reflect PIE */-os/, but both of them cannot be regular. Similarly, either the nom.-acc. sg. *igo* or the acc. sg. *bogъ* is regular. Instead of evaluating the phonetic likelihood of the proposed models, I have focused on the explanations that have been offered for the exceptions left by the "strong" and the "weak" ALG hypothesis, and the anti-ALG hypothesis. In this respect, the anti-ALG model is the biggest failure.

The acc. sg. *bogъ* cannot be analogical, influenced by the */u/-stems, because there is no motivation for such an analogy. Even if there was a tendency to prevent the merger of genders, against which there is evidence, PIE */bʰogom/ would not have merged with the */ā/-stem acc. sg. in */-ām/. There is not one single instance where OCS -*ǫ* could be derived from */-om/. Assuming such a sound law is thus an *a priori* idea and not based on the material that we have. Likewise, the aor. 1st sg. *bodъ* can only be derived from PIE */(e)bʰodom/. From the structural point of view, there is no reason to see in -*ъ* the ending of an old sigmatic aorist. From the phonological point of view, there is no reason why PIE */-m̥/ would have produced OCS -*ъ* instead of -*ь*.

The gen. pl. *bogъ* must be adduced as evidence for the "weak" ALG hypothesis, on the one hand, for the simple reason that there is no evidence for a phonological

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development */-ōm/ > -ъ and, on the other, because a reconstruction */-om/ is structurally well motivated. Furthermore, */-om/ agrees well with the Hittite, the Celtic and the Italic evidence, and may have direct support in Germanic. The reconstruction */-m̥/ is unjustified structurally, and the development */-m̥/ > -ъ phonologically.

The combined weight of the evidence speaks for the "weak" ALG hypothesis, and the single piece of counterevidence, the nom.-acc. sg. *igo*, is not fatal because the reconstruction of a bare-stem form is justified both structurally and from the comparative point of view.

As to the "strong" ALG hypothesis, the nom.-acc. sg. *nebo* strongly speaks against it. The isolated pres. 1st pl. *beremъ* and the dat. pl. *bogomъ* support the hypothesis, mainly because their final -ъ cannot credibly be derived from anything else than */-os/. An original dat. pl. ending */-mus/ is structurally and comparatively questionable, as is a pres. 1st pl. */-mom/. For both endings, the comparative evidence is somewhat ambiguous, but most of it agrees with */-mos/. The decisive piece of evidence is the nom. sg. *bogъ*. As we saw in **5.1.**, the idea that there was a PSl. tendency to prevent the merger of masculines and neuters is not tenable. Without a motivation, analogical influence from either the acc. sg. or the */u/-declension cannot be accepted. Furthermore, if the regular reflex of PIE */-os/ had been OCS -*o*, this would have led to the merger of the masculine and neuter */o/-stems, the loss of the masculine-neuter gender distinction in the adjective and the pronoun and, finally, the loss of the neuter. The fact that OCS has a neuter gender thus actually proves that there was no such merger and makes the "strong" ALG hypothesis necessary.

As the "strong" ALG hypothesis is necessary, and also supported by a number of independent instances (*beremъ*, *bogomъ*, *vetъxъ*) which alone taken would not be compelling, the form *nebo*, although it looks deceptively regular, must be irregular. In **6.** I have offered one possible model to account for *nebo*.

If we consider the "weak" ALG hypothesis valid, we can state that the acc. pl. *bogy* and *końę* regularly reflect PIE */-ons/. The corresponding */ā/-stem forms *ženy* and *buŕę* arose analogically under the influence of the masculines, replacing the inherited late PSl. forms */žena/ and */buŕa/ which merged with the nom. sg. The ending -*y* ~ -*ę* spread further to the */ā/-stem gen. sg. to restore the distinction between the nom. and the gen. sg., on the one hand, and the identity between the gen. sg. and the nom.-acc. pl., on the other. The ending cannot be derived from the usually reconstructed */-āns/, which probably never existed and which, even if it did exist, probably would not have yielded -*y* ~ -*ę* since long vowels did not participate in the narrowing.

The nom. sg. of the act. pres. ptcl. *bery* and the */en/-stem *kamy*, due to the unclear situation in PIE, cannot independently be adduced as evidence for the "weak" ALG hypothesis. However, if the latter can be confirmed on the grounds of other evidence, as seems to be the case, it can be used to explain both *bery* and *kamy*. A protoform in */-ons/ can be reconstructed for both of them, whether as an inherited archaism or a PSl. innovation.

The */i/-stem acc. pl. ending -*i* does not continue */-ins/, as is usually reconstructed, but */-īs/, which was a PIE analogical innovation. The regular reflex of PIE */-ins/ is most likely OCS -*ę*. This is both required by the strong ALG hypothesis and supported by (admittedly meager) independent evidence. The different treatment, with respect to the nasalization, of PSl. */-uns/ (PIE */-ons/ and */-uns/) and */-ins/ is the result of a morphological redistribution of original environmentally conditioned variants.

The narrowing of PIE */o/ was a very early development, as is suggested by many facts. 1) It most likely took place before the Balto-Slavic delabialization of */o/ and its merger with PIE */a/. Another issue is whether */a/, a rare sound, occurred at all in closed final syllables. 2) It took place when the retroflection of PIE */s/ was still productive, as is indicated by *vetъxъ*. 3) It took place when PSl. still had consonantal-

stem adjectives, as is shown by the same *vetъxъ*. 4) It took place before the umlaut of vowels after palatals, as is shown by the nom.-acc. sg. *końь*.

Word-final combinations of the high vowels */u/ (either from PIE */o/ or */u/) and */i/ and a nasal are continued by OCS -*ъ* and -*ь*, respectively: for example, the acc. sg. *synъ*, *bogъ*, and *gostь*. All other word-final vowel-nasal sequences, regardless of the vowel length, are reflected by OCS nasal vowels, e.g. the nom. sg. *brěmę* 'burden', the acc. sg. *ženǫ* 'woman'. The nasalization thus has nothing to do with the length of the vowel (cp. Georgiev 1969:42), but with its quality.

Let it be repeated that I accept the "strong" ALG hypothesis not because there is *an sich* anything wrong with deriving the counterevidence, *nebo*, directly from */-os/. It is rather the case that the nom. sg. *bogъ* and the preserved distinction between masculines and neuters make life without the hypothesis very difficult. The explanations that I offer for *nebo*, as well as those given to *gosti*, *bery*, and *kamy*, are speculative. It remains a fact, however, that they *require* a non-traditional explanation because it can be shown that */-os/, */-ō/, and */-ōn/ do not yield OCS -*o* and -*y*. The proposed analogical developments, I believe, do not represent "unqualified recourse to the magic agency of analogy" (Birnbaum 1979:44) but are credibly motivated.

References:

Adrados, Francisco R.

    1989   Agglutination, suffixation or adaptation?, *Indogermanische Forschungen* 94, 21-44.

Álvarez-Pedrosa Núñes, J.A.

    1998   Reconstruction of IE thematic nom.-acc. sg. neuter, *Indogermanische Forschungen* 103, 93-111.

Andersen, Henning

    1971   Review of Georgiev, *Language* 47, 949-953.

1980 Morphological change: towards a typology, in Jacek Fisiak (ed.): *Recent Developments in Historical Morphology*, 1–50. (Trends in Linguistics. Studies and Monographs, 17.) The Hague.

Anttila, Raimo

1989 *Historical and comparative linguistics*. Amsterdam.

Arumaa, Peeter

1964 *Urslavische Grammatik I: Einleitung - Lautlehre*. Heidelberg.

1985 *Urslavische Grammatik, Band III*. Heidelberg.

Beekes, Robert S.P.

1982 GAv. *må*, the PIE word for 'Moon, month,' and the perfect participle, *Journal of Indo-European Studies* 10, 53-64.

Berneker, Erich

1904 Der Genetiv-accusativ bei belebten Wesen im Slavischen, *Zeitschrift für vergleichende Sprachforschung* 37, 364-386.

Birnbaum, Henrik

1979 *Common Slavic: Progress and problems in its reconstruction*. Columbus.

Birnbaum, Henrik & Jos Schaeken

1997 *Das altkirchenslavische Wort: Bildung - Bedeutung - Herleitung*. (Slavistische Beiträge, 348.) München.

Brugmann, Karl

1904 *Kurze vergleichende Grammatik der indogermanischen Sprachen*. Strassburg.

1907 Der slav. Instr. Plur. auf -*y* und der aw. Instr. Plur. auf *-us*/*-ūš*, *Indogermanische Forschungen* 22, 336-339.

1914 Der gotische Genitivus Pluralis auf *-ē*, *Indogermanische Forschungen* 33, 272-284.

Carruba, Onofrio

2000 Indo-European *sem*/*sm*- in the pronouns: "singulative" plurals, *Journal of Indo-European Studies* 28, 341-357.

Carstairs-McCarthy, Andrew

    1994   Inflection classes, gender, and the principle of contrast, *Language* 70, 737-788.

Čekman, V.N.

    1979   *Issledovanija po istoričeskoj fonetike praslavjanskogo jazyka*. Minsk.

de Chene, Brent & Stephen R. Anderson

    1979   Compensatory lengthening, *Language* 55, 505-535.

Cohen, Gerald Leonard

    1976   On the origin of *-sm-* in Indo-European pronouns, *Indogermanische Forschungen* 81, 18-24.

Cowgill, Warren

    1959   The inflection of the Germanic *ō*-presents, *Language* 35, 1-15.

Erhart, Adolf

    1998   Der indogermanische Mondname, *Linguistica Baltica* 7, 63-69.

Eska, Joseph F.

    1988   The origin of the Gothic genitive plural in *-ē*, *Indogermanische Forschungen* 93, 186-196.

Ferrell, James

    1965   A note on the history of the form of the Russian gerund in *-a*, *Wiener Slavistisches Jahrbuch* 12, 13-17.

Forssman, Bernhard

    1965   ἱππάκη, ein verkapptes skythisches Lehnwort im Griechischen, *Zeitschrift für vergleichende Sprachforschung* 79, 285-290.

Galabov, Ivan

    1973   Urslavische Auslautprobleme, *Wiener Slavistisches Jahrbuch* 18, 5-17.

Galton, Herbert

    1956   Did sandhi exist in Old Slav?, *Indogermanische Forschungen* 62, 167-176.

Georgiev, Vladimir

    1969   *Osnovni problemi na slavjanskata diaxronna morfologija*. Sofija.

Hall, Robert A. Jr.

    1965   The "neuter" in Romance: A pseudo-problem, *Word* 21, 421-427.

Hamp, Eric P.

    1970   Productive suffix ablaut in Baltic, *Baltistica* 6, 27-32.

Hirt, Hermann

    1892   Zu den slawischen Auslautgrenzen, *Indogermanische Forschungen* 2, 337-363.

Hock, Hans Henrich

    1986   Compensatory lengthening: in defence of the concept "mora", *Folia Linguistica* 20, 431-460.

Hockett, Charles F.

    1967   The quantification of functional load, *Word* 23, 300-320.

Holzer, Georg

    1980   Die urslavischen Auslautgesetze, *Wiener Slavistisches Jahrbuch* 26, 7-27.

Hujer, Oldřich

    1910   *Slovanská deklinace jmenná*. Praha.

Huntley, David

    1980   The evolution of genitive-accusative animate and personal pronouns in Slavic dialects, in Jacek Fisiak (ed.): *Recent Developments in Historical Morphology*, 189–212. (Trends in Linguistics. Studies and Monographs, 17.) The Hague.

Jasanoff, Jay H.

    1983   A rule of final syllables in Slavic, *Journal of Indo-European Studies* 11, 139-149.

    1986   Reply to Orr, *Journal of Indo-European Studies* 14, 183-184.

Kazlauskas, Jonas

    1968   O balto-slavjanskoj forme datel'nogo pad. mn. i dv. č., *Baltistica* IV/2, 179-183.

Kent, Roland G.

    1927   The -TT- in Latin *quattuor*, *Language* 3, 12-14.

Kerns, J. Alexander & Benjamin Schwartz

    1968   Chronology of athematics and thematics in Proto-Indo-European, *Language* 44, 717-719.

Kieckers, E.

    1920   Zur 1. Sing. ind. praes. auf -ǫ im Altbulgarischen, *Indogermanische Forschungen* 39, 126-127.

Kiparsky, Valentin

    1967   *Russische historische Grammatik, Band II*. Heidelberg.

Kortlandt, Frederik

    1979   On the history of the Slavic nasal vowels, *Indogermanische Forschungen* 84, 259-272.

    1982   Innovations which betray archaisms, *Baltistica* 18, 4-9.

    1983   On final syllables in Slavic, *Journal of Indo-European Studies* 11, 167-186.

    1985   Proto-Indo-European glottalic stops: the comparative evidence, *Folia Linguistica Historica* 6, 183-201.

    1985b   Long vowels in Balto-Slavic, *Baltistica* 21, 112-124.

    1994   From Proto-Indo-European to Slavic, *Journal of Indo-European Studies* 22, 91-112.

    1994b   Tokie šalti rytai, *Baltistica* 28, 45-48.

Koschmieder, E.

    1956   N. van Wijks Einwand gegen die 2. Metatonie, in *Festschrift für Max Vasmer*, 235-244. Berlin.

Kuznecov, P.S.

 1960 *Russkaja dialektologija (3. izdanie)*. Moskva.

 1973 *Russkaja dialektologija*. Moskva.

Lane, George S.

 1961 On the formation of the Indo-European demonstrative, *Language* 37, 469-475.

Lehmann, W.P.

 1958 On earlier stages of the Indo-European nominal inflection, *Language* 34, 179-202.

Leskien, August

 1909 *Grammatik der altbulgarischen Sprache*. Heidelberg.

Lüdtke, Helmut

 1966 *Gibt es urslavische Auslautgesetze?*, Annali dell' Istituto Universitario Orientale Sezione Slava, 117-141.

Lunt, Horace

 1981 *The progressive palatalization of Common Slavic*. Skopje.

Luraghi, Silvia

 1987 Reconstructing Proto-Indo-European as an ergative language: a test, *Journal of Indo-European Studies* 15, 359-379.

Mańczak, Witold

 1997 La désinence primaire de la 1[re] pers. sing. des verbes thématiques *-ō* ou *-omi*, Lingua Posnaniensis 39, 51-56.

Mareš, F.V.

 1978 Das slavische Konjugationssystem des Präsens in diachroner Sicht, *Wiener Slavistisches Jahrbuch* 24, 175-209.

Mayrhofer, Manfred

 1986 *Indogermanische Grammatik, Band I - 1/2*. Heidelberg.

Mažiulis, V.

    1965   Nekotorye fonetičeskie aspekty baltoslavjanskoj fleksii, *Baltistica* 1/1, 17-30.

Minkova, Donka

    1991   *The history of final vowels in English: The sound of muting.* (Topics in English Linguistics, 4.) Berlin.

Murata, Ikuo

    1986   The *o*-stem nom.-acc. sg. form and the fate of neuter nouns in East-Baltic, *Journal of Indo-European Studies* 14, 273-288.

Must, Gustav

    1952   The Gothic genitive plural in -*e*, *Language* 28, 218-221.

Nassivera, Michele

    2000   The development of the PIE words for 'sky', 'cow' and 'ship' and the relative chronology of Osthoff's Law, *Zeitschrift für vergleichende Sprachforschung* 113, 57-70.

Orr, Robert

    1986   Some developments in final syllables in Slavic: a new synthesis (A comment on Jasanoff, Schmalstieg, and Kortlandt), *Journal of Indo-European Studies* 14, 173-182.

    1996   Again the **ŭ*-stems in Common Slavic, *Journal of Slavic Linguistics* 4, 312-343.

    2000   *Common Slavic nominal morphology, a new synthesis.* Bloomington.

Osten-Sacken, W. Frhr. v. d.

    1922   Litauischer Vokalismus im Inlaut und Auslaut, *Indogermanische Forschungen* 40, 251-260.

Otkupščikov, Ju. B.

    1983   Baltijskie i slavjanskie prilagatel'nye s -*u*-osnovoj, *Baltistica* 19, 23-39.

Pedersen, Holger

    1953   Hittitisch -*aš*, -*an*, -*at*, *Lingua Posnaniensis* 4, 60-63.

Poultney, James Wilson

    1967   Some Indo-European morphological alternations, *Language* 43, 871-882.

Priestley, Tom M.S.

    1983   On "drift" in Indo-European gender systems, *Journal of Indo-European Studies* 11, 339-363.

Prokosch, Eduard

    1948   *A comparative Germanic grammar*. Philadelphia.

Reinhart, Johannes

    2002   Morphologische Innovationen des Altkirchenslavischen, *Wiener Slavistisches Jahrbuch* 48, 133-148.

Rosenkranz, Bernhard

    1954   *Historische Laut- und Formenlehre des Altbulgarischen*. Heidelberg.

Ruhlen, Merrit

    1978   Nasal vowels, in Joseph Greenberg (ed.): *Universals of Human Language. 2. Phonology*, 203-241. Stanford.

Rumsey, Alan

    1987   Was Proto-Indo-European an ergative language, *Journal of Indo-European Studies* 15, 19-37.

Savčenko, A.N.

    1960   Problema proisxoždenija ličnyx okončanij glagola v indoevropejskom jazyke, *Lingua Posnaniensis* 8, 44-56.

Schenker, Alexander

    1995   *The dawn of Slavic*. New Haven.

Schindler, Jochem

    1975   Zum Ablaut der neutralen s-Stämme des Indogermanischen, in H. Rix (hg.): *Flexion und Wortbildung*, 259-267. Wiesbaden.

Schleicher, Charles

    1994   A chronology of the PIE. obstruents, *Indogermanische Forschungen* 99, 21-41.

Schlerath, Bernfried

    1987   On the reality and status of a reconstructed language, *Journal of Indo-European Studies* 15, 41-46.

Schmalstieg, William

    1965   Slavic *o-* and *ā*-stem accusatives, *Word* 21, 238-243.

    1974   Some morphological implications of the Indo-European passage of *-ON* to *-Ō*, *Zeitschrift für vergleichende Sprachforschung* 88, 187-198.

    1977   Speculations on the development of the Indo-European nominal inflection, *Folia Linguistica* 10, 109-149.

    1983   *Old Church Slavic*. Columbus.

    1983b   Slavic *kamy* and *mati*: a structural view, *Journal of Indo-European Studies* 11, 151-165.

    1995   A note on the sigmatic nominative, *Lingua Posnaniensis* 36, 149-154.

    1997   The origin of the neuter nominative-accusative singular in *-OM*, *Journal of Indo-European Studies* 25, 401-407.

Schmidt, Karl Horst

    1990   Zur Deklination der *o*-Stämme in den "westindogermanischen Sprachen", *Lingua Posnaniensis* 31, 3-10.

Scholz, Friedrich

    1985   Der Verlust des Neutrums im Baltischen und seine Folgen, *Zeitschrift für vergleichende Sprachforschung* 98, 269-279.

Seliščev, Afanasij

    1951   *Staroslavjanskij jazyk*. Moskva.

Shevelov, George A.

    1964   *A prehistory of Slavic*. Heidelberg.

Shields, Kenneth, Jr.

    1977   Speculations on the development of the Indo-European nominal inflection, *Folia Linguistica* 10, 109-149.

    1977a   Evidence of I.E. *-bhi* in Tocharian, *Folia Linguistica* 11, 281-286.

1978   Some remarks concerning early Indo-European nominal inflection, *Journal of Indo-European Studies* 6, 15-30.

1982   The Indo-European origins of the Old Hittite directive case, *Journal of Indo-European Studies* 10, 273-282.

1982b   The origin of the Greek first person plural active suffix *-men*, *Glotta* 60, 197-204.

Sihler, Andrew L.

1995   *New comparative grammar of Greek and Latin*. Oxford.

Słoński, Stanisław

1950   *Gramatyka języka starosłowiańskiego*. Warszawa.

Smoczyński, Wojciech

2001   *Język litewski w perspektywie porównawczej*. Kraków.

2001b   Zum Neutrum im Altpreußischen, in Juhani Nuorluoto, Martti Leiwo, Jussi Halla-aho (eds.): *Papers in Slavic, Baltic and Balkan Studies*, 142-165. (Slavica Helsingiensia, 21.) Helsinki.

Sommer, Ferdinand

1902   *Handbuch der lateinischen Laut- und Formenlehre*. Heidelberg.

Stang, Christian

1966   *Vergleichende Grammatik der Baltischen Sprachen*. Oslo.

Streitberg, Wilhelm

1900   *Gotisches Elementarbuch*. Heidelberg.

Szemerényi, Oswald

1989   *Einführung in die vergleichende Sprachwissenschaft*. Darmstadt.

Szober, Stanisław

1927   Słowiański Nom.-Acc. Sg. neutr. tematów na *-o*, *-es-*, *Prace Filologiczne* 12, 563-571.

Thurneysen, Rudolf

1980   *A grammar of Old Irish (6ᵗʰ edition)*. Dublin.

Trunte, Hartmut

1991   *Ein praktisches Lehrbuch des Kirchenslavischen in 30 Lektionen.* München.

Uhlenbeck, C.C.

1901   Agens und Patiens im Kasussystem der idg. Sprachen, *Indogermanische Forschungen* 12, 170-171.

Ward, Ralph L.

1948   Analogical consonant lengthening in numerals, *Language* 24, 51-55.

Watkins, Calvert

1969   *Indogermanische Grammatik, Band III/1*. Heidelberg.

van Wijk, N.

1926   Die slavischen Partizipia auf *-to-* und die Aoristformen auf *-tъ*, *Indogermanische Forschungen* 43, 281-289.

1937   Eine bisher unbekannte altkirchenslavische 3. Pers. Sg. Aor. auf *-tъ*, *Zeitschrift für slavische Philologie* 14, 270-272.

Vermeer, Willem

1991   The mysterious North Russian nominative singular ending *-e* and the problem of the reflex of the Proto-Indo-European **-os* in Slavic. *Die Welt der Slaven* 36, 271-295.

Vondrák, Wenzel

1912   *Altkirchenslavische Grammatik*. Berlin.

Xaburgaev, Georgij

1986   *Staroslavjanskij jazyk*. Moskva.

Zucha, Ivo

1985   Zu den Endungen *-y, -ę, -ě* im G. Sg. und N. Pl. der slawischen Deklination und zu den Nasalvokalen, *Wiener Slavistisches Jahrbuch* 32, 133-137.

CHAPTER III

On the dative singular endings in Old Church Slavic

1. Introduction

Of the nominal types occurring in OCS, the stems in */-u/, */-ū/, */-ā/ and a consonant show dat. sg. endings that can be derived from reconstructable PIE elements by applying known sound laws. The ending proper is in all cases PIE */-ey/.

> OCS *nova* 'new' (fem.) → *novĕ* from PIE */newãy/ < */newā-ey/, cp. Gk. νέᾳ 'id.', Lat. *novae* 'id.', Goth. *niujai* 'id.', and Lith. *naũjai* 'id.'

> OCS *ĺuby* 'love' (fem.) → *ĺubъvi* from PIE */lewbʰuwey/ < */lewbʰū-ey/

> OCS *synъ* 'son' → *synovi* from PIE */sūnew-ey/, cp. Skt. *sūnáve* 'id.'

> OCS *mati* 'mother' → *materi* from PIE */māter-ey/, cp. Lat. *māterī* 'id.', and OPhr. *materey* 'id.'

Things are different in the largest masculine and neuter declension, the */o/-stems, and the second largest feminine (with a few masculines) declension, the */i/-stems, e.g. *novъ*, *novo* 'new' (masc., neut.) → *novu*, *gostь* 'guest' (masc.), *noštь* 'night' (fem.) → *gosti*, *nošti*. Neither form has a close parallel in the IE languages, at least in the dative function.

2. Old Church Slavic *gosti*

The */i/-stem dat. sg. in *-i* is phonologically identical to the gen. sg. and the loc. sg. forms of the same declension. The gen. sg. *gosti* and the loc. sg. *gosti* regularly

continue PIE */gʰost-ey-s/ (cp. Skt. *páteḥ* 'lord' and Lith. *naktiẽs* 'night') and */gʰost-ēy/ (cp. Goth. *waíhtai* 'thing') respectively.[1]

It is not unthinkable that OCS would use an original loc. sg. form in the dative function as well. This is known to be the case in Gk., with the exception of the */o/-stems, cp. dat. sg. οἴκῳ 'house' from */woykᵏõy/ < */woyᵏo-ey/ vs. loc. sg. οἴκοι 'at home', and possibly of the */ā/-stems, since νέᾳ can continue both */newā-i/ and */newā-ey/. Certainly original locatives are the "datives" νυκτί 'night', μητρί 'mother', πόληι 'city', etc. Similarly in Goth., cp. *naht* 'night' from Gmc. */naxti/, *broþr* 'brother' from Gmc. */brōþri/ etc., and Celtic, cp. Gaulish dat. sg. Μαγουρειγι (Schmidt 1980:181).

The locative possibility seems, however, to be excluded for OCS *gosti*, for the loc. sg. and the dat. sg. are distinguished by accent. The former shows Balto-Slavic acute, pointing to a long diphthong, cp. Ru. loc. sg. *v nočí*. The long diphthong */-ēy/ is directly shown in Gk. πόληι and Goth. *waíhtai* and has a parallel in the morphologically close */u/-declension, e.g. OCS *domu*, cp. Ru. *na domú* 'at home'. The OCS dat. sg. *gosti*, on the other hand, is root-accented, pointing to a Balto-Slavic circumflex, i.e., short diphthong, cp. Ru. *nóči*. This observation is confirmed by the Lith. dialectal *-ie*, e.g. *ãvie* ← *avìs* 'sheep' (Stang 1966:207).[2]

Excursus: The Proto-Indo-European */u/- and */i/-stem locative singular

PIE had an invariable loc. sg. desinence */-i/, attached to the stem-forming element of a noun. Hamp (1970) suggests that all locatives were originally bare stems to which the element */-i/ was later added "as a clarifying device, a hypercharacterization". Relics of the old state of affairs would be such */en/-stem forms as Skt. *áśman* 'stone'. It is, in fact, possible that the

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[1] Szemerényi (1989:186-187).
[2] Proto-Baltic */ey/ (and */ay/) are metathesized in Lith., originally under stress and probably through a stage *[ẹ̄], see Hirt (1892:37), Mathiassen (1995).

"ending" */-i/ was rather an enclitic whose complete agglutination to the stem did not take place until the "dialectal period". This is suggested by the fact that it seems to have remained syllabic even after vocalic stems, cp. Gk. οἴκοι 'at home' as if from */woyḱoi/ vs. nom. pl. οἶκοι from */woyḱoy/ (cp. Mayrhofer 1986:161, also Streitberg 1896).

When */-i/ was attached to a full-grade */i/-stem, the theoretical outcome was */-ey-i/, with a phonotactically impossible sequence */yi/. It seems that this dilemma was solved by fusing the ending to the stem formant, whereby the disyllabic sequence */-ey-i/ was replaced with a monosyllabic but long */-ēy/. In the */u/-stems, the problem did not exist and the form in */-ew-i/ did arise, as shown by Skt. *sūnávi* 'son'. However, the synchronically opaque */i/-stem termination */-ēy/ spread as a structural feature to the morphologically similar */u/-declension and gave rise to a secondary */-ēw/ which is attested in Skt. *sūnáu* 'son' and OCS *synu* 'id.'. Goth. *sunau* 'id.' is ambiguous since it can continue */sunōw/, with a shortening of the diphthong (Prokosch 1948:235, Bammesberger 1990), or */sunowi/, with a loss of the unstressed final short vowel (Antonsen 1990:288).

Formally, OCS dat. sg. *gosti* could be a paradigmatic borrowing from the gen. sg. *gosti*, which continues */gʰost-ey-s/, cp. Lith. *aviẽs* 'sheep', but there seems to be no reason why a gen. sg. form should be used as a dat. sg. In addition, there is every reason to believe that the OCS dat. sg. ending *-i* and the Lith. dialectal *-ie* derive from the same source. Another formal possibility is the voc. sg. *gosti*, Lith. *aviẽ*, which continues a bare stem */-ey/ but semantically this idea is so far-fetched that it can be ignored. OCS *gosti* also cannot (*pace* Vondrák 1899) regularly continue a reconstructable PIE */gʰost-ey-ey/ which is suggested both by Skt. *pátaye* 'lord' and the parallel */u/-stem *synovi*. An expected form would be **gostьji*, cp. nom. pl. *gostьje* from PIE */gʰost-ey-es/ and gen. pl. *gostьjь* from PIE */gʰost-ey-om/ (see **Chapter II: 3.2.**).

After establishing where OCS *gosti* cannot come from, let us take a look at three plausible explanations:

1) Morphological haplology triggered by a "repeated morph constraint" (Menn & MacWhinney 1984). Stemberger (1981:792) writes: "[...] an affix of the shape Z does not appear if, e.g., the stem to which it is added ends in Z". Thus PIE */gʰost-ey-ey/ would have been haplologized to */gʰost-ey/, which would have regularly yielded the attested OCS *gosti*. This solution for OCS *-i*, and Lith. *-ie*, is accepted by Rosenkranz (1955:71), Stang (1966:207), and Szemerényi (1989:187).

2) The *-i* is not an */i/-stem ending at all. Schenker (1995:124) suggests that */i/-stems borrowed the *-i* from consonantal stems (i.e., */-ey/). The analogical influences between the */i/-stems and the moribund consonantal stems seem to have been in one direction only, from the former to the latter, which makes the idea of a borrowing unlikely. Schenker's model needs a refinement. As Hirt (1917:225-226) suggested, the ending *-i* may have been retained by and spread from those */i/-stems that continue PIE radical nouns. These include a huge portion of the simplex */i/-stems in both Slavic and Baltic (see **Chapter I: 3.7.**).

It is quite possible that the dat. sg. forms *nošti* 'night', *myši* 'mouse', *soli* 'salt', *vьsi* 'village' and *zvĕri* 'beast' directly continue PIE */nokt-ey/, */mūs-ey/, */sal-ey/, */wiḱ-ey/, and */gʰwēr-ey/, respectively, and that under their influence the etymological */i/-stems like *gostь* replaced their original dat. sg. **gostьji* with *gosti*. Such a development has a close parallel in the Latin "3ʳᵈ declension" which is a merger of consonantal and */i/-stem inflection: *nox* 'night' has retained a consonantal stem gen. sg. ending */-es/ (*noctis*) and the dat. sg. ending */-ey/ (*noctī*), both of which have spread further to original */i/-stems as well, e.g. *hostis* 'enemy' → gen. sg. *hostis*, dat. sg. *hostī*.

3) The ending -*i* does not continue any historical dat. sg. desinence but is rather a structural transfer from the largest feminine declension, the */ā/-stems, where the loc. and the dat. sg. had a syncretic ending for historical reasons (see above).

All these three solutions are good. I would, however, propose a fourth one, based on a few other dat. sg. endings in OCS.

3. Old Church Slavic *novu*

The Slavic */o/-stem dat. sg. ending -*u* has inspired a multitude of proposals, none of which is very good. The best PIE reconstruction for this termination would be */-õy/, from */-o-ey/. Cp. Gk. νέῳ, Skt. *návāy-a*, and Lith. *diẽvui* 'God' (through *-uoi* with the normal treatment of PIE */ō/, see Stang 1966:181).

It does not seem likely that OCS -*u* could be phonologically derived from */-õy/, as proposed by Milewski (1932, cited in Orr 2000:126), and Jasanoff (1983:144-145), although there are no quite certain instances of */õy/ in Slavic. A possible one, but in inlaut, is OR *sěmija* 'family', cp. Lith. *káima* 'village', Gk. κώμη 'id.', and Goth. *haims* 'id.'. PIE */ay/, */oy/, and */ãy/ clearly yield *ě*, cp.

OCS *cě* 'although, even if' from */kay/, cp. Gk. καί 'and',

OCS loc. sg. *nově* (masc.-neut.) from */newoy/, cp. Gk. οἴκοι 'at home', and

OCS loc.-dat. sg. *nově* (fem.) from */newãy/, cp. Goth. *gibai* 'gift',

or, at best, *i* (nom. pl. masc. *novi* from */newoy/, cp. Gk. νέοι 'id.')[3]. Since PIE */ō/ merged with */ā/ and */o/ with */a/, there is no reason to believe */-õy/ could yield anything but *-ě*.

It is possible that PIE sporadically simplified */-õy/ to */-õ/, or even that */-ō/ is the older ending (Mažiulis 1967), but there is plenty of evidence that */-ō/ yielded OCS *-a*, not *-u*, as it does word-internally, cp. nom.-acc. du. masc. *nova* from */newō/, cp. Gk. νέω, Skt. *návā*. Lautgesetzlich the ending *-u* can only continue PIE */-ow/, according to some scholars also */-ew/ (see the **Excursus** below).

Excursus: The Proto-Slavic diphthongs in */w/

The PSl. diphthongs */aw/ and */ew/ yielded a new phoneme, the so-called */ū/$_2$, late PSl. */u/. This is probably a misnomer, since the initial outcome was in all likelihood *[ō], as suggested by borrowings from Gmc. (e.g. Gmc. */bōkō/ 'book' > OCS *buky*) and from Baltic Finnic (*/rōtsi/ 'Swedes, Sweden' > OR *Rusь*), and the fact the */ū/$_2$ did not merge with PSl. */ū/.

It is likely that */ew/ and */ēw/, prior to the monophthongization, developed a palatal on-glide, i.e. *[yew] (or *[yaw] as in Lith., Schmalstieg 1983:43), which subsequently palatalized a preceding consonant, cp. OCS *ĺudьje* 'people' vs. Lith. *liáudis*, Gk. ἐλεύθερος 'free (man)', and OCS *šujь* 'left' vs. Skt. *savyá-* 'id.', whereas */aw/ and */āw/ did not, e.g. OCS *turъ* 'bull' vs. Gk. ταῦρος, Lat. *taurus*, Lith. *taũras* 'bull'. Similar views on the late PSl. */ju/ and */u/ reflexes of the */w/ diphthongs are expressed by Berneker (1899), Diels (1932:56), Słoński (1950:25), Seliščev (1951:117), Rosenkranz (1955:12), and Shevelov (1964:275). Different opinions are voiced by Vondrák (1912:115) and Xaburgaev (1986:92).

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[3] There is no consensus on the apparent *i*-reflexes of */-oy/, see e.g. Vondrák (1912:90-91), Shevelov (1964:287-288), Schenker (1995:86).

Hujer (1910, cited in Orr 2000:125-126) suggests the ending was borrowed from adverbs of the type OCS *vrьxu* 'above'. This is very unlikely considering that the adverb cited is clearly an */u/-stem locative, not a dative, cp. Lith. *viršùs* 'top, peak'. In addition, it is suffix-stressed (cp. Ru. *naverxú*) while the */o/-stem dative is not. The */u/-stem loc. sg. ending *-ú* (PIE */-ōw/) retains its stress even when it is borrowed by an original root-stressed */o/-stem, as in Ru. *v lesú* 'in the woods' (cp. *o lése* 'about the woods').

Mareš (1962, cited ibid.) believes the ending *-u* goes back to an original */yu/-stem termination */-yewey/ which was simplified into */-wey/ and then metathesized into */-yew/. This yielded late PSl. */-'u/ which spread to */yo/-stems and thence, as */-u/, to */o/-stems. The likelihood of this complicated model is lessened by the fact that the */u/-stem termination */-owey/ (OCS *-ovi*) was not treated this way, which would be expected since */u/- and */yu/-stems did not constitute two separate declensional types. In addition, the possible debris of */yu/-stems in OCS (*zmijevi* etc.[4]) suggests the ending *-'evi* did survive until relatively late, while the proposed development */-yewey/ > */-wey/ > */-yew/ would have had to occur before the simplification of diphthongs in general and the diphthong */ey/ in particular. In addition, there are indications that PIE */ey/ was monophthongized earlier than the other diphthongs (see the **Excursus** below). The reflex of PIE */-yewey/ would thus have been PSl. */-yewī/ and, after the simplification, */-wī/, which could hardly have been metathesized into */-yew/.

Excursus: The Proto-Slavic diphthongs in */y/

> There are some indications that the monophthongization of */ey/ to */ī/ was a separate process, predating the general simplification of diphthongs, as it was in Gmc.[5] From the phonetic point of view this is understandable regarding the small contrast between the syllabic element and the glide, as compared to

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[4] So, e.g., Rosenkranz (1955:73-74).
[5] Goth. <ei> is a graphic means of conveying /ī/.

the other diphthongs. The combinations */ew/, */ēw/, */aw/, */āw/, */ay/, */āy/, and */ēy/ survived before vowels (as late PSl. */ev/, */ěv/, */ov/, */av/, */oj/, */aj/, */ěj/), i.e., in non-diphthongal position. This created synchronic irregularities like

OCS *ŕuti* 'to roar' : *revǫ* 'I roar'

OCS *pluti* 'to sail' : *plovǫ* 'I sail' : *plavati* 'to sail'

OCS *pěti* 'to sing' : *pojǫ* 'I sing'

However, late PSl. */i/ from */ey/ does not dissolve into */-ej-/ before vowels, cp. nom. pl. masculine *trьje* 'three' from */treyes/. This may suggest that the change */ey/ > */ī/ was not so much a monophthongization, caused by the Law of Open Syllables, than a case of assimilation. See Vondrák (1912:83), Diels (1932:63), Słoński (1950:29-30), Seliščev (1951:125), Dobrev (1982:27).

Kazlauskas (1969:11-12) suggests that the OCS */i/-stem ending *-ьje* (as in *trьje*) does not continue PIE */-eyes/ but */-iyes/, which arose secondarily "путем введения основообразующего *-i-* в форму им. пад. мн. ч.". This theory is contradicted by other evidence. We would expect a parallel development in the */u/-stems, a nom. pl. form *synъve* instead of *synove* for instance. Most important is that a combination *-ej-* from PIE */-ey-/ does not exist at all in Slavic, which strongly suggests that *-ьje* is a product of phonological, not morphological, development.

Schmalstieg has on many occasions (e.g. 1965:242-243, 1983:73) advanced the hypothesis that *-u* goes back to PSl. */-ų/, an early sandhi variant of */-um/ which he, in turn, derives from an earlier */-am/. He compares that ending to the Latv. depronominal *cilvēkam* 'to the man'. This explanation is very unsatisfactory, to say the least. Why

would an early denasalization have taken place only in this single form? Why would the result of the denasalized */-ų/ be *-u* in Po. and Slo. as well, where the back nasal vowel generally yielded *-ǫ*/*-ę* and *-o*, respectively? Furthermore, the Latv. pronominal ending *-m* is clearly related to OCS *-mu* (e.g., *tomu*), OLith. *-mui* (*tamui*), and OPr. *-smu* (*schismu*), see Stang (1966:233, 241). Therefore an OCS parallel, even if the phonetic development suggested by Schmalstieg be accepted, to Latv. *cilvēkam* would be **bogomu*, not the attested *bogu*.[6]

The idea surfaces from time to time (e.g. Rosenkranz 1955:77) that the ending *-u* might be of pronominal origin and that the demonstrative *semu* 'this' might have something to do with the Phr. σεμου, presumably with the same meaning, occurring in the curse formula ιος σεμου κνουμανει κακουν αδδακετ[7] 'Whoever does harm to this tomb (vel sim.)...'. This comparison is very arbitrary for a number of reasons. 1) In Phr., ου does not denote a diphthong (which the OCS *-u* has to continue) but is one of many graphical means of conveying /u/. There is other evidence that PIE */-ō/ regularly yields Phr. /-u/, cp. the verb form ειτου in the apodosis of the same formula: τετικμενος ειτου '...let him go (or be) cursed (vel sim.)', from PIE */ey-tōd/ or */es-tōd/. It is also possible that -ου is the regular outcome of PIE */-õy/ (Jokl 1929:147, Diakonoff & Neroznak 1985:8). 2) The usual form is not σεμου but σεμουν or σεμυν, which makes one wonder whether this is a true dat. form at all. Neumann (1970) went so far as to propose that σεμουν in the formula is the acc. sg. of an indefinite pronoun and agrees not with κνουμανει but with κακον. This syntactic reinterpretation does not seem to be tenable, as shown by Heubeck (1987), but σεμουν ~ σεμυν may indeed reflect the confusion of the original acc. and dat. forms in a dead (or at least moribund) language of the ritual. An identical instance of an accusative pronoun with a dative noun can be found in Calder's (1911) LX: ιος νι σαν κακουν αδδακε μανκαι besides a "correct" dat. in XXXV: ιος νι σαι

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[6] It is worth mentioning that such dative singular forms did emerge later in Cassubian dialects, e.g. *koniomu ~ koniemu* 'to a/the horse', see Stone (1993:770-771).

[7] This partly reconstructed variant is Calder's (1911) no. LXV.

κακουν αδδακεμ <u>μανκαι</u>. That σεμουν is formally an old acc. sg. form is also suggested by the fact that -οι, from either */-oy/ or */-ōy/, is an attested pronominal dat. sg. termination, cp. ιοι θαλαμει (IV), ιοι αναρ (XV). There are thus several possible explanations for σεμου(ν) (dat. sg. in */-ō/ or */-õy/, acc. sg. in */-om/), none of which seems applicable to OCS -*u*.

4. Old Church Slavic *novu*, *gosti*, and *synovi*: a structural rearrangement

Georgiev (1969:72-73) believes the OCS */o/-stem dat. sg. ending -*u* arose within the */u/-declension. He states that the usual[8] OCS */u/-stem dat. sg. ending is -*u* rather than -*ovi*. According to Georgiev, -*u* is the original loc. sg. ending, which in PSl. began to be used in the dat. sg. as well. He further assumes that the dat. sg. form, identical to the loc. sg., arose under the influence of a number of other declensional types where the two forms were also identical. I believe Georgiev is looking in the right direction but his model has several problems.

The fact that the nouns that have been classified as historical */u/-stems show two kinds of dat. sg. endings proves absolutely nothing. OCS has no distinct */u/-declension (cp. Leskien 1909:117-118). The historical */o/- and */u/-stems have largely merged into a single masculine declension with two sets of endings for several case forms. A dat. sg. form *synu* 'son', instead of the "expected" *synovi*, may well represent an extension of an original */o/-stem desinence, just as the nom. pl. form *darove* 'gifts' certainly represents the spread of an */u/-stem termination to an */o/-stem noun.

The -*u* is certainly not an old */u/-stem loc. sg. ending. The */u/-stem locative -*u* goes back to a long diphthong */-ēw/ or */-ōw/, as is shown by Skt. *sūnáu* and the stress in relic forms like Ru. *na domú* (see above). The */o/-stem dat. sg. -*u* is not stressed.

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[8] It is not clear whether Georgiev means "обикновено" diachronically or synchronically.

Despite Georgiev's claim, the loc. sg. and the dat. sg. forms were identical only in the */ā/-stems (for reasons going back to PIE), the */i/-stems, and, under the influence of the latter, to some extent also in feminine consonantal stems. Furthermore, if there was a tendency to merge the loc. and dat. sg., why would the */u/-stem ending *-u* be used to prevent such a merger in the */o/-declension? In the latter, the PIE loc. sg. */newoy/ and the dat. sg. */newõy/ would both have yielded OCS *novĕ*.

I agree with Georgiev that the dat. sg. ending *-u* is an intruder from the */u/-declension, and I would suggest the following solution.

Let us consider for a while what happens when distinctions in a paradigm are reduced due to phonetic development. If morphological distinctions within a paradigm are destroyed or weakened enough, their power to do their job is lost. Ultimately, the case system itself is in danger because a case system cannot exist without morphological manifestation as a pure abstraction. Cassidy (1937:245):

> "'Case' will be properly used and will continue to have some meaning only if the association with inflection be fully recognized, and if stretching of the term to include other sorts of 'formal' distinction be abandoned."

It would be absurd to claim that the noun *George* is in the nom. sg. in *George hits Osama*, the acc. in *Osama hits George*, the instr. in *Osama is hit by George*, and the dat. in *Osama gave George an apple*. We have just one form, *George*, which is neutral with respect to case, not four case forms which are identical. We can say this because the syntactic role of *George* is expressed not by the form itself but by its position in the chain of words and/or by an accompanying preposition. It makes a little more sense to say that the Russian word *kengurú* 'kangaroo' has six case forms which happen to be identical (cp. Zaliznjak 1967:204-210). This is due to the fact that such words as *kengurú* are an exception to the rule, while in English all nouns behave like *George*. As

Lehmann (1958:187) states, "[…] a particular case is non-existent unless it is represented by forms which contrast in a system with others."

A language about to lose its inflectional morphology has in principle two ways to go. Either the lost morphological distinctions are restored by borrowing morphemes from other paradigms and/or creating new ones, or the job of expressing syntactic relations is assigned to word-order or prepositions. The latter option is in fact more radical because it means a systemic change in the language.

Gothic */s/-stem neuters lost their singular inflection due to regular phonological development. As a result of the loss of unstressed short vowels, and the elimination of the paradigmatic qualitative ablaut, the PIE nom.-acc. sg. */agʰos/ (Gk. ἄχος 'pain'), gen. sg. */agʰeses/ (Gk. ἄχεος), and loc. sg. */agʰesi/ (Gk. ἄχει) all merged into Goth. *agis* 'fear'. This merger is confirmed by the gen. sg. *hatis* 'hatred' (from PGmc. */xatezes/), which is attested once in the Codex Ambrosiani B: [...] *jah wisum* [...] *barna hatis* (Eph. 2:3). However, normally Goth. does inflect the historical */s/-stems; *agis* has a gen. sg. *agisis* and a dat. (loc.) sg. *agiza*, both of which are */o/-stem forms. That we are dealing with a remedial morphological analogy (Andersen 1980:10), rather than an unmotivated extension of the most common set of desinences, is suggested by the fact that these endings did not spread to those consonantal stem neuters whose inflection, or rather the contrasts in the inflection, was not destroyed by the said phonological developments; cp. nom.-acc. sg. *wato* 'water', gen. sg. *watins*, and dat. sg. *watin* (and not *watinis, *watina).

In OE, the phonetic erosion in final syllables had gone further. The */n/-stems had lost most inflectional markers, and the noun *éare* 'ear' had, beside the nom.-acc. sg. form, a gen. pl. *éarena* and a dat. pl. *éarum*. For the gen.-dat. sg. and the nom.-acc. pl. there was a single form, *éaran*. During the OE period, the form *éaran* gradually replaced even the gen. pl. *éarena* and dat. pl. *éarum*. There was thus no remedial analogy to

rescue the inflection, as in Goth., but rather the elimination of even those few forms that remained distinct. Why was that?

It seems that in order for a remedial analogy to take place, there must, for one thing, be a living case system in which the inflectional morphemes still have functional load. It is, after all, the case system that is being defended when destroyed morphological distinctions are replaced by importing morphemes from one paradigm into another. For another thing, in order for a morphological distinction to be restored in one paradigm, it must have survived in another paradigm. Gerd & Menzel (2002:34) write: "It is well known that old desinencies are not replaced by newly 'invented' ones but rather by 'loans' from paradigmatic contexts that are in some respect similar." The sound changes that had left the */n/-stem neuter paradigm with insufficient contrasts had wrought havoc in all OE paradigms. The case forms, with the exception of the gen., were no longer able (or trusted) to convey their function alone, and were always accompanied by a preposition. That is, the noun form itself ceased to express the case, which task was now assigned to the preposition, and the noun turned from "a grammatical nucleus into a grammatical satellite" (Seiler 1956:323) of the preposition. The situation is similar in Modern German, where a noun like *Buch* 'book' can be said to have a dat. sg. form *Buche*. We do not, however, usually say *im Buche*, but rather *im Buch*, because all the information we need to determine the syntactic position of the *Buch* is contained by the preceding preposition and the article. The case has become a pronominal category, as it had in OE, and the dat. marker in *Buch-e* has become an obscure signal of "obliqueness" which has no real function and can therefore be jettisoned. As there is no longer a category of case, there is no need to restore or maintain any distinctions. The OE "dat. pl. ending" in *éarum* was simply a satellite of a "datival" preposition (like *on* or *tó*), and could therefore be leveled to *éaran* in accordance with the rest of the paradigm.

Thus Goth. and OE show that a) a remedial analogy in inflectional morphology can be expected if the distinctions are lost only in some paradigms (Goth. */s/-stems), and b) a remedial analogy does not take place if the distinctions are lost in all or most paradigms. In the latter case, it is the case system that is lost. On the other hand, if the number of nouns with inadequate morphological distinctions is very small, the speaker may choose just to live with them, with neither restoration (or introduction) of oppositions nor changes in the structure of the language. As an example, we might take the few indeclinable borrowings in Russian, e.g. *póni* 'pony' and *kengurú* 'kangaroo', although their morphological ambiguity is due not to phonological change but to the fact that there are no native models in the inflectional system of Russian for a nom. sg. in *-i* or *-u*. They are not inflected but the speaker pretends they are, i.e., (s)he does not resort to analytic means to express the syntactic function of such words. A syntactically exact Russian equivalent for the English sentence *The man was killed by dogs* would be *Čelovék byl ubít sobákami*. However, it is impossible to give an unambiguous verbatim Russian translation for the sentence *The man was killed by kangaroos*, because the agent of a passive construction is expressed by the instrumental, which *kengurú* does not have, nor has it a distinct plural. Thus, *Čelovék byl ubít kengurú* can refer to any number of kangaroos, and even their syntactic relation to the rest of the sentence is not unambiguous without some additional information, an inflected attribute for instance. Russian tolerates cases like *kengurú* and *póni* because they are marginal both qualitatively and quantitatively.

It is interesting that although German, like late OE, has eliminated a distinct dat. pl. form from the */n/-stem paradigm (late OE *naman*, German *Namen*), it has restored a distinct gen. sg. form by borrowing the desinence *-s* from other non-feminine paradigms: *Namens*.[9] There is no true motivation for this restoration, because obviously a distinct gen. sg. form is not necessary in German; no feminine noun has one. There thus appears to be a competition between a paradigm-internal tendency to abolish forms

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[9] Cp. Plank (1980:297).

that deviate from the prototypical "oblique" form (e.g. OE *éarum → éaran*), and a tendency to maintain the opposition between gen. sg. and non-gen. sg. in masculine nouns (gen. sg. **Namen → Namens*), on the model of the dominant masculine and neuter types, e.g. *Tag-es*, *Buch-es*, where the gen. form was never lost. I believe the Germanic developments give us some tools for approaching the OCS dat. sg. forms *novu*, *synovi* and *gosti*.

The loss of final consonants in PSl. significantly weakened the case distinctions in two classes of nouns, the */u/- and */i/-declension, which, apart from some analogical innovations in the feminine */i/-stems, were morphologically identical. The nom. and acc. sg. merged into an unmarked non-oblique form: */gastis/ : */gasti(n)/ > *gostъ*, */sūnus/ : */sūnu(n)/ > *synъ*.[10] The gen., loc., and voc. sg. fused into a phonologically unified oblique form, although the loc. was prosodically distinguished from the other two: gen. */gasteys/ : loc. */gastēy/ : voc. */gastey/ > *gosti*, gen. */sūnaws/ : loc. */sūnāw/ : voc. */sūnaw/ > *synu*. The expected OCS singular paradigms of these two nouns would then be:

nom.	*gostъ*	*synъ*
acc.	*gostъ*	*synъ*
gen.	*gosti*	*synu*
loc.	*gosti*	*synu*
dat.	**gostьji*	*synovi*
instr.	*gostьmь*	**synъmь*
voc.	*gosti*	*synu*

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[10] I take no stand here whether the zero-desinence acc. sg. is an original "absolutive" form, as suggested by Orr (2000:63), or represents the loss of word-final PSl. */-n/ < PIE */-m/, as assumed by most scholars. See **Chapter II: 7**.

The only case forms that remained phonologically unambiguous were the instr. sg., which was frequentatively marginal, and the dat. sg. Otherwise the singular paradigm took a great step towards a non-oblique (in *-ь, -ъ*) vs. an oblique (*-i, -u*) marking. I propose that this, as in the case of the OE */n/-declension, triggered a paradigm-internal leveling whereby the prototypical oblique shape in *-i, -u* spread to the dat. sg. form as well. As we saw in **2.**, the */i/-stem dative form may even have arisen earlier through haplology (*/gʰosteyey/ > */gʰostey/), through retention and spread of a consonantal stem inflection (*/noktey/ → */gʰostey/), or through leveling with the */ā/-declension. If such was the case, the intraparadigmatic spread of an "oblique" ending *-u* in the */u/-stems may have been supported by an already syncretic gen.-loc.-dat. sg. form in the morphologically identical */i/-stems.

The dat. sg. ending *-u* thus arose in the */u/-declension, as proposed by Georgiev, and a dat. sg. form *synu* is "original" in the sense that it was not influenced by the */o/-stems. But the ending *-u* was neither inherited nor borrowed from any specific paradigmatic form, any more than the late OE dat. pl. termination in *éaran* can be said to have been borrowed from the nom.-acc. pl. The dat. sg. *synu* simply represents the elimination of a deviant form and the further extension of an already dominant "oblique" shape in *-u*.

The new dat. sg. ending *-u* was unable to oust the inherited *-ovi*, probably because the case syncretism within the */u/-declension, brought about partly by phonological development and partly by leveling, was counteracted by influence from other masculine declensions where the damage caused by phonological processes to the morphology was significantly lighter. The */u/- and */i/-declensions, with their inadequate case markings, were too small to force the language toward a more analytic structure. The situation was thus not comparable to that in OE, where all nominal declensions were struck almost equally severely. The */u/- and */i/-stems were, however, too numerous to be left permanently with uncontrastive morphology. Their position was not comparable to the Ru. word class represented by *kengurú* and *póni*.

Rather, the lost distinctions began to be restored, as in the case of the Goth. */s/-stem neuters.

The historical */u/-stems gradually began to use the endings of the largest masculine nominal class, the */o/-stems, in those cases where their original desinences had become ambiguous. This led to the fusion of the two declensions. The merged inflectional class had three competing dat. sg. endings, the inherited */u/-stem *-ovi* (*/-ewey/), the innovated */u/-stem *-u* and the inherited */o/-stem *-ě* (*/-õy/). The latter fell out of use, probably because it was less distinctive than either of the two other options (cp. loc. sg. *-ě* from */-oy/) and because it was homophonous with the corresponding feminine termination *-ě* (from */-õy/). One can assume that of the competing */u/-stem dat. sg. endings, *-u* and *-ovi*, the former was originally used with those nouns that made otherwise use of old */o/-stem endings (and where it consequently contrasted with all other forms), and the latter with those nouns that otherwise used the original */u/-stem endings.

In OCS, the distribution of historical */o/- and */u/-stem endings, gen. sg. in *-a* ~ *-u*, dat. sg. in *-u* ~ *-ovi*, voc. sg. in *-e* ~ *-u*, nom. pl. in *-i* ~ *-ove*, and gen. pl. in *-ъ* ~ *-ovъ*, is more or less chaotic, especially in nouns with a monosyllabic stem. The free variation of endings was eliminated in all Slavic dialects by completely dropping one variant or by redistributing the endings "on the basis of semantic or phonological criteria" (Gerd & Menzel 2002:21). In Serbo-Croatian, for instance, the old */o/-stem loc. sg. ending *-ě* has been completely ousted by *-u*. The */u/-stem instr. sg. ending *-ъmь* has replaced *-omь* in all of North Slavic. In Polish and Ukrainian the gen. sg. ending *-a* and the dat. sg. ending *-ovi* have become the norm for nouns denoting living beings, and the endings *-u* and *-u* for those naming lifeless entities. In Russian, the gen. sg. ending *-u* has developed a special partitive meaning with certain nouns. These are clearly examples of a redistribution on "semantic criteria". Phonological criteria explain the frequent use of

the loc. sg. and voc. sg. ending -*u*, instead of the palatalizing -*ě* and -*e* respectively, in stems ending in a velar in Ukrainian.

5. Old Church Slavic *gosti* vs. *synovi*

It is an obvious question why the */i/-stems tolerated the minimal contrasts in the singular paradigm while the */u/-stems did not. The very small */u/-declension contained two animates with a presumably quite high frequency, *synъ* 'son' and *volъ* 'ox'. The */i/-stem feminines, which constituted a huge majority in that stem class, denoted exclusively inanimates. It seems intuitively clear that a noun denoting an animate needs contrastive morphology more than one with inanimate reference, as testified by, e.g., the Slavic genitive-accusative. Of the three forms that phonologically coalesced (excluding the vocative), viz. the gen. sg. *synu*, *gosti*, the loc. sg. *synu*, *gosti*, and the dat. sg. *synu*, *gosti*, the locative was used almost exclusively with the prepositions *vъ*, *na*, *o*, and *pri*, which never governed the gen. sg. or the dat. sg. The Slavic dative is only used for the indirect object and thus seldom occurs with inanimate nouns. The contrast between the gen. sg. and the dat. sg., the two cases usually used independently without a preposition, is vital only for nouns referring to animates. This neatly explains the "resistance" in the */u/-declension against the analogical dat. sg. -*u* versus the acceptance by the */i/-stems of -*i*, provided the latter did not emerge earlier for other reasons. The different significance of the contrasts for semantically different noun types may also have contributed to the transfer of the masculine */i/-stems, the large majority of which denoted animates (**Chapter I: 4.1.1.**), to the */yo/-stems. This change is in progress in OCS, many */i/-stems showing occasional */yo/-stem endings. With some nouns the process is completed, e.g. *końь* 'horse' (from */kob-ni-/, cp. *kobyla* 'mare'), and *vepŕъ* 'boar' (*/wep-ri-/, cp. Skt. *vápati* 'to ejaculate'), see **Chapter I: 4.1.2**.

6. Conclusion

PIE */u/- and */i/-stems lost much of their contrastive case morphology in the singular due to regular phonological processes. This triggered a further leveling within the singular paradigms whereby the most common oblique ending -*u* and -*i* spread even to the dat. sg. which, from the phonological point of view, retained a distinctive case ending. It is possible that this process took place in a parallel fashion in both declensions, but it is also possible that the */i/-stem ending -*i* arose independently from one of several possible sources (haplology, retention of a consonantal stem ending, or influence from another paradigm) and influenced the otherwise similar */u/-declension.

The effects of these phonological processes and the paradigmatic leveling were canceled. Quantitatively more significant nominal classes retained a complex case morphology, and the syncretism that had arisen in the */u/- and */i/-declensions was unable to force the language toward a more analytic structure. It could be said that a tendency towards a transformation of PSl. from a synthetic language to an analytic one was triggered in these two noun classes by phonological processes and then halted by the other nominal declensions. The */u/- and */i/-stems were, nevertheless, too significant to be left without adequate morphological markings. The lost distinctions in the */u/-stem paradigm were restored by borrowing appropriate endings from the */o/-stems. The latter, on the other hand, adopted the secondarily created */u/-stem dat. sg. ending -*u*, possibly to strengthen the contrast between the masc.-neut. dat. sg., on the one hand, and the loc. sg. in -*ě* and the */ā/-stem dat. sg. in -*ě*, on the other.

References:

Andersen, Henning

1980   Morphological change: towards a typology, in Jacek Fisiak (ed.): *Recent Developments in Historical Morphology*, 1–50. (Trends in Linguistics. Studies and Monographs, 17.) The Hague.

Antonsen, Elmer H.

1989   Review of Nielsen, *Diachronica* 6, 287-290.

Bammesberger, Alfred

1990   *Die Morphologie des urgermanischen Nomens*. Heidelberg.

Calder, W.M.

1911   Corpus Inscriptionum Neo-Phrygiarum, *Journal of Hellenic Studies* 31, 161-215.

Cassidy, F.G.

1937   "Case" in Modern English, *Language* 13, 240-245.

Diakonoff, I.M. & V.P. Neroznak

1985   *Phrygian*. New York.

Georgiev, Vladimir

1969   *Osnovni problemi na slavjanskata diaxronna morfologija*. Sofija.

Gerd, Hentschel & Thomas Menzel

2002   Marker productivity, structural preferences and frequency: observations about morphological change in Slavonic languages, *Indogermanische Forschungen* 107, 1-46.

Hamp, Eric P.

1970   Locative singular in -ει, *Indogermanische Forschungen* 75, 105-106.

Heubeck, Alfred

1987   Phrygiaka I-III, *Zeitschrift für vergleichende Sprachforschung* 100, 70-85.

Hirt, H.

1892   Vom schleifenden und gestossenen Ton in den indogermanischen Sprachen, *Indogermanische Forschungen* 1, 1-42.

1917   Zu den lepontischen und den thrakischen Inschriften, *Indogermanische Forschungen* 37, 209-236.

Jasanoff, Jay H.

    1983   A rule of final syllables in Slavic, *Journal of Indo-European Studies* 11, 139-149.

Jokl, Norbert

    1929   Phryger, *Reallexikon der Vorgeschichte* 10, 141-153.

Lehmann, W.P.

    1958   On earlier stages of the Indo-European nominal inflection, *Language* 34, 179-202.

Leskien, August

    1909   *Grammatik der altbulgarischen Sprache*. Heidelberg.

Mathiassen, Terje

    1995   Nochmals zum *ie*-Komplex im Ostbaltischen, *Linguistica Baltica* 4, 41-53.

Mayrhofer, Manfred

    1986   *Indogermanische Grammatik, Band I - 1/2*. Heidelberg.

Mažiulis, V.

    1967   K baltijskomu i indoevropejskomu dativu ed. č. (prodolženie), *Baltistica* III/1, 29-46.

Menn, Lise & Brian MacWhinney

    1984   The repeated morph constraint: toward an explanation, *Language* 60, 519-541.

Neumann, G.

    1970   Das phrygische Pronomen σεμο-, *Zeitschrift für vergleichende Sprachforschung* 84, 211-215.

Orr, Robert

    2000   *Common Slavic nominal morphology, a new synthesis*. Bloomington.

Plank, Frans

    1980   Encoding grammatical relations: acceptable and unacceptable non-distinctness, in Jacek Fisiak (ed.): *Recent Developments in Historical*

Morphology, 289–326. (Trends in Linguistics. Studies and Monographs, 17.) The Hague.

Prokosch, Eduard

    1948   *A comparative Germanic grammar*. Philadelphia.

Rosenkranz, Bernhard

    1954   *Historische Laut- und Formenlehre des Altbulgarischen*. Heidelberg.

Schenker, Alexander

    1995   *The dawn of Slavic*. New Haven.

Schmalstieg, William

    1965   Slavic *o*- and *ā*-stem accusatives, *Word* 21, 238-243.

    1983   *Old Church Slavic*. Columbus.

Schmidt, Karl Horst

    1980   Continental Celtic as an aid to the reconstruction of Proto-Celtic, *Zeitschrift für vergleichende Sprachforschung* 94, 172-197.

Seiler, Hansjakob

    1956   Review of Debrunner, *Language* 32, 321-324.

Shevelov, George A.

    1964   *A prehistory of Slavic*. Heidelberg.

Stang, Christian

    1966   *Vergleichende Grammatik der Baltischen Sprachen*. Oslo.

Stemberger, Joseph Paul

    1981   Morphological haplology, *Language* 57, 791-817.

Stone, Gerald

    1993   "Cassubian", in Bernard Comrie & Greville G. Corbett (eds.): *The Slavonic languages*, 759-794. London & New York.

Streitberg, Wilhelm

    1896   Die griechischen Lokative auf -εί, *Indogermanische Forschungen* 6, 339-341.

Szemerényi, Oswald

    1989   *Einführung in die vergleichende Sprachwissenschaft*. Darmstadt.

Vondrák, Wenzel

    1899   Zur Erklärung des aksl. Dat. Sg. *pǫti*, *kosti*, *Indogermanische Forschungen* 10, 113-116.

    1912   *Altkirchenslavische Grammatik*. Berlin.

Zaliznjak, Andrej A.

    1967   *Russkoe imennoe slovoizmenenie*. Moskva.

Appendix to Chapter I

The words of this appendix are given in their Latin alphabetical order. When several prefixal compounds are derived from one root, they are given under one entry. For example: *věstь* 'message, news', *iz·věstь* 'sincerity', *ne·věstь* 'ignorance', *po·věstь* 'tale, teaching', *sъ·věstь* 'conscience' ← *věděti* 'to know'.

1. Agent nouns in *-tel-*
1.1. From root infinitives

  blago·dětelь 'benefactor' ← *děti* 'to put, place, do'

  datelь 'giver' ← *dati* 'to give'

  podъ·jętelь 'supporter, defender' ← *podъ·jęti* (*·im-*) 'to support, defend'

  vlastelь 'ruler, lord' ← *vlasti* (*vlad-*) 'to rule'

  žętelь 'reaper' ← *žęti* (*žьn-*) 'to reap'

  žitelь 'inhabitant' ← *žiti* 'to live'

1.2. From *-a-*/*-ě-*-infinitives

  dělatelь 'worker' ← *dělati* 'to do, work'

  kazatelь 'guide, mentor' ← *kazati* 'to show, point, teach'

  lъže·sъ·vědětelь 'false witness' ← *sъ·věděti* 'to witness, testify'

  ob·rětatelь 'discoverer' ← *ob·rětati* 'to discover'

  prijatelь 'friend' ← *prijati* 'to sympathize, assist'

  slyšatelь 'listener' ← *slyšati* 'to listen'

  šaro·pisatelь 'painter (with colors)' ← *pьsati* 'to write, draw'

  zьdatelь 'builder' ← *zьdati* 'to build'

1.3. From *-i*-infinitives

  cělitelь 'healer' ← *cěliti* 'to heal'

  čistitelь 'purifier' ← *čistiti* 'to purify'

  dělitelь 'sharer, distributor' ← *děliti* 'to share'

  gonitelь 'persecutor' ← *goniti* 'to persecute'

  gubitelь 'destroyer' ← *gubiti* 'to destroy'

  is·kusitelь 'teaser' ← *is·kusiti* 'to tease'

iz·baviteĺь 'redeemer' ← *iz·baviti* 'to redeem'

krъstiteĺь 'baptist' ← *krъstiti* 'to baptize'

mǫčiteĺь 'torturer' ← *mǫčiti* 'to torture'

ob·ličiteĺь 'accuser' ← *ob·ličiti* 'to accuse'

po·běditeĺь 'winner' ← *po·běditi* 'to win'

po·grebiteĺь 'undertaker' ← *po·grebiti* 'to bury'

praviteĺь 'leader' ← *praviti* 'to lead'

prositeĺь 'beggar' ← *prositi* 'to beg, ask'

roditeĺь 'begetter' ← *roditi* 'to beget'

sǫditeĺь 'judge' ← *sǫditi* 'to judge'

služiteĺь 'servant' ← *služiti* 'to serve'

strojiteĺь 'builder' ← *strojiti* 'to build'

světiteĺь 'enlightener' ← *světiti* 'to lighten'

svoboditeĺь 'savior' ← *svoboditi* 'to save'

tomiteĺь 'torturer' ← *tomiti* 'to torture'

tьliteĺь 'destroyer' ← *tьliti* 'to destroy'

učiteĺь 'teacher' ← *učiti* 'to teach'

xraniteĺь 'protector' ← *xraniti* 'to protect'

za·štititeĺь 'defender' ← *za·štititi* 'to defend'

1.4. Secondary forms in *-itel-*

po·daditeĺь 'giver, donator', beside *po·dateĺь*; cp. pres. 3rd pl. *dadętъ* 'they give'

vьse·drъžiteĺь 'the almighty' ← *drъžati* 'to hold'

žižditeĺь 'builder', beside *zьdateĺь*; cp. pres. 3rd sg. *žiždetъ* 'builds'

2. Agent nouns in *-ar-*

boĺaŕь 'aristocrat, nobleman'

grъnьčaŕь 'potter'

klevetaŕь 'accuser' ← *kleveta* 'accusation'

kĺučaŕь 'keykeeper' ← *kĺučь* 'key'

mytaŕь 'tax collector, publican' ← *myto* 'toll, bribe' or ← Goth. *motareis* 'id.'

rybaŕь 'fisherman' ← *ryba* 'fish'

vinaŕь 'vinedresser' ← *vino* 'wine'

vrataŕъ 'doorman, gatekeeper' ← *vrata* (pl. tant.) 'door, gate'

vrьtogradaŕъ 'gardener' ← *vrьtogradъ* 'garden'

3. Nouns in *-ĕn-*

egÿpьtĕne 'Egyptians'

izdrailitĕne 'Israelis'

izmailitĕne 'Ismailites'

nazarĕne 'Nazarenes'

persĕne 'Persians', beside *persi*

samarĕne 'Samaritans'

sÿrĕne 'Syrians'

4. Nouns in *-'an-*

damaštane 'Damascenes'

galilejane 'Galileans'

gomoŕane 'Gomorrans'

graždane 'city dwellers, citizens' ← *gradъ* 'city'

ijerusalimĺane 'Jerusalemians'

korÿnθjane 'Corinthians'

rimĺane 'Romans'

sodomĺane 'Sodomans'

soluńane 'Thessalonicans'

xersońane 'Khersonians'

5. Verbs with an act. past ptcl. in *-ъs-*

5.1. Radical consonantal infinitive and present stem

blusti (*blud-*) 'to watch'

blęsti (*blęd-*) 'to talk nonsense'

bosti (*bod-*) 'to pierce'

dąti (*dъm-*) 'to blow'

gnesti (*gnet-*) 'to squeeze'

greti (*greb-*) 'to bury'

gręsti (*gręd-*) 'to go, walk'

grysti (*gryz-*) 'to gnaw'

jęti (*im-*) 'to take'

jasti (*jad-*) 'to eat'

klasti (*klad-*) 'to place'

klęti (*klьn-*) 'to curse'

krasti (*krad-*) 'to steal'

lĕsti (*lĕz-*) 'to go'

lęšti (*lęk-*) 'to stretch'

mesti (*met-*) 'to cleanse'

męsti (*męt-*) 'to shake'

mošti (*mog-*) 'can'

nesti (*nes-*) 'to carry'

pasti (*pad-*) 'to fall'

pešti (*pek-*) 'to bake'

plesti (*plet-*) 'to plait'

plěti (*plěv-*) 'to uproot'

pręsti (*pręd-*) 'to spin'

pręšti (*pręg-*) 'to fix, attach'

rasti (*rast-*) 'to grow'

rešti (*rek-*) 'to say'

sěšti (*sěk-*) 'to cut'

soti (*sop-*) 'to play the flute'

strěšti (*strěg-*) 'to watch, guard'

strišti (*strig-*) 'to cut'

tešti (*tek-*) 'to run'

teti (*tep-*) 'to hit'

tręsti (*tręs-*) 'to shake'

trьti (*tьr-*) 'to wipe'

vesti (*ved-*) 'to lead'

vesti (*vez-*) 'to transport'

vęsti (*vęz-*) 'to tie, bind'

vlasti (*vlad-*) 'to rule'

zęti (*zęb-*) 'to tear'

zvęšti (*zvęg-*) 'to tell'

žešti (*žeg-*) 'to burn'

žiti (*živ-*) 'to live'

žlěsti (*žlěd-*) 'to repay'

žęti (*žьm-*) 'to press'

žrěti (*žьr-*) 'to sacrifice'

5.2. Gradating root-class verbs

cvisti (*cvit-*, *cvьt-*) 'to bloom'

mrěti (*mer-*, *mьr-*) 'to die'

o·prěti sę (*o·per-*, *o·pьr-*) 'to lean'

ot·vrěsti (*ot·vrěz-*, *ot·vrьz-*) 'to open'

po·črěti (*po·črěp-*, *po·črьp-*) 'to draw water'

po·žrěti (*po·žer-*, *po·žьr-*) 'swallow'

pro·nisti (*pro·niz-*, *pro·nьz-*) 'to pierce'

pro·strěti (*pro·ster-*, *pro·stьr-*) 'to stretch'

ras·kvrěti (*ras·kver-*, *ras·kvьr-*) 'to melt'

tlěšti (*tlěk-*, *tlьk-*) 'to knock'

vrěšti (*vrěg-*, *vrьg-*) 'to throw, cast'

vъ·vrěti (*vъ·ver-*, *vъ·vьr-*) 'to throw, cast'

6. Simple deverbal */i/-stem feminines

blędь 'idle talk' ← *blęsti* (*blęd-*) 'to talk rubbish'

jadь 'food', *sъn·ědь* 'id.' ← *jasti* (*jad-*) 'to eat'

pędь 'span' ← *pęsti (**pęd-*); cp. Lat. *pendere* 'to weigh, consider', Lith. *spė́sti*, *spéndžiu* 'to catch in a trap', Eng. *span*

po·konь 'beginning' ← *po·čęti* (·*čьn-*) 'to begin'

po·xotь 'lust' ← *xotěti* 'to wish, want'

pro·padь 'ravine, abyss' ← *pasti* (*pad-*) 'to fall'

skrъbь 'sorrow' ← *skrъběti* 'to mourn'

tinь 'whip' ← *tęti (**tьn-*); cp. Ru. *tjat'*, *tnu* 'to strike, hit'

tvarь 'creation', *u·tvarь* 'decoration' ← *tvoriti* 'to do, make, create'

vědь 'knowledge', *za·po·vědь* 'commandment', *is·po·vědь* 'confession', *po·vědь* 'teaching', *pro·po·vědь* 'sermon', *sъ·vědь* 'conscience' ← *věděti* 'to know'

vodo·nosь 'vessel (for water)' ← *nositi* 'to carry'

sěnь 'shadow' ← PIE. */sḱoyn-i-/; cp. Goth. *skeinan* 'to shine'; note also the masculine *stěnь* 'shadow'

sěčь 'fight' ← *sěšti* (*sěk-*) 'to cut, chop, slay'

žalь 'grave'[1] ← *želěti* 'to wish, want'; cp. *žeĺa* 'sorrow, grief'

7. Simple deadjectival */i/-stem feminines

laskrъdь 'lust', haplologized from **lasko·srьdь* ← **lasko·srьdъ* 'greedy, lustful' (cp. Ru. *lasko·sérdyj*); cp. *milo·srьdъ* 'warm-hearted, merciful'

sytь 'satiety' ← *sytъ* 'satisfied, with a full stomach'; here, probably, belongs also *ne·ję·sytь* 'pelican', the elements of which are not well understood

študь 'manner' ← *štuždь* 'foreign', ultimately from Gmc. */þewþ-/ 'people'

tvrьdь 'firmness' ← *tvrьdъ* 'firm'

zъlь 'evil' ← *zъlъ* 'evil' (adj.)

8. Deverbatives in */-t-i-/

blago·dětь 'blessing' ← *děti* 'to put, place'; cp. Gk. θέσις 'setting', Goth. *ga·deþs* 'deed'

čьstь 'honor, glory, generosity, value', *prě·čьstь* 'charity', *ne·čьstь* 'profanation' ← *čisti* (*čьt-*) 'to appreciate, value, esteem'

děti (pl. tant.) 'children' ← *dojiti* 'to suckle'

is·pytь 'test, trial' ← **py-*; cp. *pъvanьje* 'hope, expectation, courage'

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[1] This noun occurs only once in the Codex Marianus. The primary meaning is 'sorrow, grief', as shown by Ru. *žal'*, SCr. *žao*, Cz. *žal*, Po. *žal* etc.

lьstь 'intrigue' possibly from Goth. *lists* 'id.', the latter from *lisan* 'to gather', the original causative of which is *laisjan* 'to teach' (Germ. *lehren*, Sw. *lära*).[2]

mastь 'ointment' ← *mazati* 'to anoint'

moštь 'ability, power', *ne·moštь* 'illness', *po·moštь* 'help' ← *mošti* (*mog-*) 'can'; cp. Goth. *mahts* 'ability, power', *un·mahts* 'illness'

mьstь 'punishment, revenge', originally a deverbal noun from an obsolete root **mьs-*; cp. *mьzda* 'reward'

na·pastь 'accident, misfortune', *pro·pastь* 'abyss' ← *pasti* (*pad-*) 'to fall'; cp. *pro·padь* 'abyss'

pa·mętь 'memory' ← *mьněti* 'to think'; cp. Lat. *mēns* 'mind', Lith. *mintìs* 'thought', Skt. *matís* 'id.', Goth. *ga·munds* 'id.'

peštь 'oven' ← *pešti* (*pek-*) 'to bake'

ratь 'war, battle, enemy army' and *retь* 'quarrel, competition' ← PIE */re-/ : */er-/ : */r̥-/ : */or-/; cp. Gk. ἔρις 'strife, quarrel', Skt. *r̥tíḥ* 'attack, quarrel'

rǫkov·ętь 'armful' ← *jęti* (*im-*) 'to take'; the first component is the gen.-loc. du. *rǫku* 'hands' in a heterosyllabic position

strastь 'suffering, pain' ← *stradati* 'to suffer'

sъ·mrьtь 'death' ← *mrěti* (*mьr-*) 'to die'; cp. Lith. *mirtìs*, Lat. *mors*, *mortis* etc.

veštь 'thing, matter, subject' ← obsolete **vek-* < PIE */wekw-/; cp. Goth. *waíhts* 'id.'

věstь 'message, news', *iz·věstь* 'sincerity', *ne·věstь* 'ignorance', *po·věstь* 'tale, teaching', *sъ·věstь* 'conscience' ← *věděti* 'to know'; cp. the asuffixal *vědь* 'knowledge' etc. (**6.**)

vlastь 'power', *ob·(v)lastь* 'power, jurisdiction' ← *vlasti* (*vlad-*) 'to rule'

za·bytь 'oblivion', *po·bytь* 'trophy, bounty' ← *·byti* 'to be'

za·vistь 'envy', *ne·na·vistь* 'hatred' ← *·viděti* 'to see'

u·žastь 'astonishment, horror, unconsciousness' ← *u·žasnǫti* 'to be astonished'

žitь 'life' ← *žiti* (*živ-*) 'to live'

9. Deverbatives in -*znь*

bojaznь 'fear' ← *bojati sę* 'to fear'

bolěznь 'sickness' ← *bolěti* 'to be sick'

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[2] From the phonological point of view *lьstь* could be cognate to *lists*, but within Slavic it lacks a source of derivation.

kajaznь 'remorse' ← *kajati sę* 'to regret'

kъznь ~ kyznь 'means, plot, intrigue' ← *kovati* 'to forge'[3]

pěsnь 'song' ← *pěti* (*poj-*) 'to sing'

prijaznь 'friendship, fidelity', *ne·prijaznь* 'evil, devil' ← *prijati* 'to assist, sympathize'

žiznь 'life' ← *žiti* (*živ-*) 'to live'

10. Deverbatives in *-ělь*

dětělь 'act, action' ← *děti* 'to put, place, do'

gybělь 'disaster, loss', *po·gybělь* 'id.' ← *gybnǫti* 'to perish'

kǫpělь '(place for) swimming'

krastělь 'quail'

obitělь 'dwelling'

ob·rětělь 'scribble', *pri·ob·rětělь* 'profit' ← *(pri·)(ob·)rěsti* (*ob·rět-*) 'to invent, find, obtain'

pečalь 'suffering, grief' ← *pešti* (*pek-*) 'to bake'

skrižalь 'table of testimony'

svirělь 'flute, pipe'

tvrъdělь 'firmament' ← *tvrъdъ* 'firm'; cp. the asuffixal *tvrъdь* 'id.'

11. Miscellaneous simple feminine */i/-stems

čeĺadь 'servants'

čędь 'people, friends'

čęstь 'lot, fate'

dlanь 'palm (of the hand)'

gnьsь 'filth'

kobь 'fate'

kokošь 'hen', derived from an onomatopoetic root

koristь 'prey'

lětь 'permission'

mědь 'copper, coin'

nozdri (pl. tant.) 'nostrils', somehow derived from *nosъ* 'nose'; cp. Eng. *nostril*

opašь 'tail'

plъtь 'body, flesh'

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[3] For the metaphora, cp. Eng. *forgery* ← *forge*.

pustošь 'nonsense' ← *pustъ* 'empty'

sětь 'net'

trъstь 'stick'

vrъvь 'rope'

xlębь 'waterfall'

zlъčь 'gall', dissimilated from **žlъčь* in the same way as *stuždь* 'foreign' from *štuždь* (cp. Ru. *žëlč*); from PIE */gʰol/- : */gʰl̥-/, cp. Gk. χόλη, χόλος, Lat. *fel* 'id.'

12. Deadjectival feminines in *-ostь*

bělostь 'whiteness' ← *bělъ* 'white'

blagostь 'goodness' ← *blagъ* 'good'

bujestь 'stupidity' ← *bujь* 'stupid'

bъdrostь 'briskness' ← *bъdrъ* 'brisk, alert'

čistostь 'purity' ← *čistъ* 'clean, pure'

dobĺestь '(feat of) valor' ← *dobĺь* 'valiant'

dobrostь 'goodness' ← *dobrъ* 'good'

drъzostь 'courage, impudence' ← *drъzъ* 'brave, impudent'

goŕestь 'bitterness' ← *goŕьkъ* 'bitter'

grъdostь 'pride' ← *grъdъ* 'proud'

inokostь 'pilgrimage' ← *inokъ* 'pilgrim, hermit' (substantivized)

jarostь 'fury, anger' ← *jarъ* 'furious, angry'

junostь 'youth' ← *junъ* 'young'

krěpostь 'strength' ← *krěp(ъk)ъ* 'strong'

krotostь 'meekness' ← *krotъkъ* 'meek'

lěnostь 'laziness' ← *lěnъ* 'lazy'

ĺutostь 'severity' ← *ĺutъ* 'severe'

mądrostь 'wisdom' ← *mądrъ* 'wise'

milostь 'mercifulness' ← *milъ* 'merciful'

mrъtvostь 'dying' ← *mrъtvъ* 'dead'

mrъzostь 'abomination' ← *mrъzъkъ* 'abominable'

mьdlost 'slowness' ← **mьdlъ* 'slow'

nagostь 'nudity' ← *nagъ* 'naked'

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němostь 'muteness' ← *němъ* 'mute'

ostrostь 'blade' ← *ostrъ* 'sharp'

pravostь 'justice, fairness' ← *pravъ* 'just, straight'

prisnostь 'eternity' ← *prisnъ* 'eternal'

prostostь 'open-heartedness' ← *prostъ* 'simple, free, straight'

radostь 'joy' ← *radъ* 'merry'

rьvьnostь 'enthusiasm, envy' ← **rьvьnъ*

skǫdostь 'scarcity' ← *skǫdъ* 'scant, niggardly'

skǫpostь 'stinginess' ← **skǫpъ*; cp. Ru. *skupój* 'stingy'

skorostь 'speed' ← *skorъ* 'fast'

skvrьnostь 'filth, desecration' ← *skvrьnъ* 'filthy'

slabostь 'weakness' ← *slabъ* 'weak'

sladostь 'sweetness' ← *sladъkъ* 'sweet'

starostь 'old age' ← *starъ* 'old'

stydostь 'impudence' ← *stydъkъ* 'impudent'

světьlostь 'light, shine' ← *světьlъ* 'light'

svętostь 'holiness, sanctuary' ← *svętъ* 'holy'

sytostь 'satiety' ← *sytъ* 'satisfied'; cp. *sytь* 'id.'

teplostь 'warmth' ← *teplъ* 'warm'

tęgostь 'strain, burden' ← *tęžьkъ* 'heavy'

tęžestь 'strain, burden' ← *tęžьkъ* 'heavy'

tixostь 'silence, tranquility' ← *tixъ* 'quiet'

tvrьdostь 'firmness, trustworthiness' ← *tvrьdъ* 'firm'

xudostь 'weakness, sickness' ← *xudъ* 'weak, sick'

xytrostь 'skill, wisdom, invention' ← *xytrъ* 'sly, cunning, wise'

žestostь 'harshness' ← *žestokъ* 'harsh, severe'

13. Borrowed feminine */i/-stems

agarь[4] ← Ἀγάρ

akridь 'cricket' ← ἀκρίς

antinopolь ← Ἀντίπολις

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[4] Attested only in the nom. sg.

elisavetь ← Ἐλισαβέθ

eresь 'heresy' ← αἵρεσις

ijezavelь ← Ἰεζάβελ

paprǫdь 'purple'[5] ← πορφύρα

psalъtyrь 'psalter'[6] ← ψαλτήριον

raxilь[7] ← Ῥαχήλ

rutь[8] ← Ῥούθ

varь 'palace' ← βᾶρις

vitьleemь[9] ← Βηθλεέμ

xrusopolь ← Χρυσόπολις

ÿpostasь 'essence, nature' ← ὑπόστασις

14. Masculines that occasionally show */u/-stem endings

činъ 'order, detachment'

polъ 'half, sex, gender'

rędъ 'line, order'

rodъ 'birth, tribe, family'

sadъ 'plant, garden'

sanъ 'rank, position'

synъ 'tower'

udъ 'organ, limb'

volъ 'ox'

15. Deadjectival feminines in -*ńi*

blagyńi 'goodness, possession' ← *blagъ* 'good'; cp. *blagostь* 'id.'

grъdyńi 'pride' ← *grъdъ* 'proud'; cp. *grъdostь*, *grъždenьje* 'id.'

lьgyńi 'relief' ← *lьgъkъ* 'light, easy'; for the derivational structure, cp. *cěly* 'healing' (still an
   ū-stem) ← *cělъ* 'whole'

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[5] Also */ā/-stem *paprǫda*.
[6] Also masculine */yo/-stem *psaltyŕь*.
[7] Attested only in the nom. sg.
[8] Attested in the gen. sg. in the Savvina Kniga: *voozъ že rodi ovida otъ ruti*. The Zographensis has *roty*, as if from an */ā/-stem *rota*.
[9] Also masculine */o/-stem *vitьleemъ*.

pravyńi 'justice, rightness' ← *pravъ* 'right, just, straight'; cp. *pravota, pravostь, pravьda* 'id.'

prostyńi 'deliverance, freedom, forgiveness' ← *prostъ* 'simple, free, straight'.

pustyńi 'wilderness, desert' ← *pustъ* 'empty, desolate'; the meaning has probably developed from 'emptiness', cp. *pustota* 'emptiness'

svętyńi 'holiness, sanctification, temple' ← *svętъ* 'holy'; cp. *svętьba* 'consecration, sanctification', *svętostь* 'holiness, sanctuary'

16. Denominal feminines in -*ńi*

blagostyńi 'goodness' ← *blagostь* 'id.'; cp. also *blagyńi* 'id.'

bogyńi 'goddess' ← *bogъ* 'god'

gospodyńi 'lady' ← *gospodь* 'lord'

egÿpьtěnyńi 'Egyptian' ← *egÿpьtěninъ* 'id. (masc.)'

elinyńi 'Greek' ← *elinъ* 'id. (masc.)'

krьstijanyńi 'Christian' ← *krьstijaninъ* 'id. (masc.)'

magъdalyńi 'Magdalene' ← Gk. Μαγδαληνή

milostyńi 'mercy, charity, alms' ← *milostь* 'mercifulness'

poganyńi 'heathen' ← *poganinъ* 'id. (masc.)'

prěgyńi 'wild mountainous region'

rabyńi 'slave' ← *rabъ* 'id. (masc.)'; cp. *raba* 'id.'

samarěnyńi 'Samaritan' ← *samarěninъ* 'id. (masc.)'

są·sědyńi 'neighbor' ← *są·sědъ* 'id. (masc.)'

soluńanyńi 'Thessalonican' ← *soluńaninъ* 'id. (masc.)'

sÿro·finikissanyńi 'Phoenician woman from Syria' ← Gk. Συροφοινίκισσα

17. Nouns in */-iy-ī-/

17.1. Feminines

krabьji 'chest, coffin, box'; possibly related to Lat. *corbis* 'basket', or borrowed from OHG *korb*, itself a borrowing from Lat.

ladьji 'boat, ship'

mlьnьji 'lightning'

17.2. Masculines

alъnьji 'fallow deer', related to *jelenь* 'deer'

balьji 'physician'; cp. *balovanьje* 'healing', *balьstvo* 'medicine'

sǫdьji 'judge' ← *sǫdъ* 'justice, judgment, court of law'

větьji 'orator, speaker' ← *větъ* 'agreement'

18. Masculines in */-kiy-ī-/

korabьčьji 'sailor' ← *korabь ~ korabĺь* 'ship'

krъmьčьji 'steersman' ← *krъma* 'stern'

kъńigъčьji 'scribe, book-learned person' ← *kъńigy* 'scriptures'

samъčьji 'ruler' ← *samъ* 'self'

sokačьji 'butcher'

šarъčьji 'painter' ← *šarъ* 'color, paint'

19. Borrowed proper nouns in */-ī/

eremioni ← Ἑρμιόνη (female name)

ijuliani ← Ἰουλιανή (female name)

iosьji ← Ἰωσῆ (male name)

manasьji ← Μανασσῆς (male name)

melitini ← Μελιτινή (town)

pÿ̈ronьji ← Πυρώνη (female name)

savińi ← Σαβῖνα (female name)

semelьji ← Σεμέλη (female name)

trojańi ← Τροϊανή (female name)

vitъfagьji ← Βηθφαγή (village)

20. Borrowed appellatives in */-ī/

amemurmnьji 'caliph' ← ἀμεμουρμνῆς

eresevьji 'a plant disease (of rye)' ← ἐρυσίβη

milotьji 'sheepskin' ← μηλωτή

paraskevьgьji 'Friday' ← παρασκευή

skinьji 'tent, dwelling' ← σκηνή

21. Simple masculine */o/-stems

čari (pl. tant.) 'witchcraft, magic'	*čьvanъ* 'vessel, pint'
člověkъ 'man'	*dǫbъ* 'tree'

dědъ 'ancestor'

gněvъ 'anger'

gradъ 'hail'

grozdъ 'grape'

groznъ 'grape'[10]

jarьmъ 'yoke'

jezerъ 'lake'

jugъ 'south, southern wind'

kalъ 'dirt, filth'

klasъ 'ear of corn'

konobъ 'kettle'

koprъ 'dill, anise'

kratъ 'time'

kurъ 'rooster'

lǫgъ 'meadow'

mělъ 'lime'

mirъ 'world, peace'

mostъ 'bridge'

mrazъ 'frost'

mъskъ 'mule'

na·rodъ 'people, crowd'

ne·dǫgъ 'illness'

nevodъ 'net (for fishing)'

nravъ 'custom, habit'

plěnъ 'hostage, booty'

pĺuskъ 'voice, noise'

podъ·metъ 'hem (of a clothe)'

po·jasъ 'belt'

pragъ 'doorpost'

praxъ 'dust'

prǫgъ 'locust'

prьstъ 'finger'

pьsъ 'dog'

rǫgъ 'mockery'

slědъ 'trace, track'

snopъ 'bundle'

spodъ 'group, cluster'

srьpъ 'sickle'

stlъpъ 'tower'

stropъ 'ceiling'

strupъ 'wound'

svarъ 'quarrel'

tlъkъ 'interpreter'

trǫdъ 'illness'

trǫtъ 'army'

trudъ 'work, effort'

trupъ 'corpse'

tukъ 'fat, grease'

tulъ 'quiver'

u·korъ 'outrage, insult'

u·kropъ 'hot soup'

věkъ 'age, eternity'

větъ 'agreement', *za·větъ* 'covenant', *iz·větъ* 'cause, reason', *ob·ětъ* 'promise', *otъ·větъ* 'answer', *pri·větъ* 'intention', *sъ·větъ* 'advice', *u·větъ* 'encouragement'

vragъ 'enemy'

vranъ 'raven'

vrědъ 'wound, illness'

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[10] The variation between *grozdъ* and *groznъ* is real, not due to a scribal error, as shown by their later reflexes, e.g. Ru. *grozd*, Cz. *hrozn*.

xladъ 'cool wind'	*xrьbьtъ* 'spine, back'
xlapъ 'servant, slave'	*za·stąpъ* 'assistance, defense'
xramъ 'house, building'	*žьzlъ* 'stick, staff'

22. Simple deverbal masculine */o/-stems

blądъ 'fornication, prostitution, perversion' ← *blęsti* (*blęd-*) 'to talk rubbish'; cp. */i/-stem *blędь* 'idle talk'

cvĕtъ 'flower' ← *cvisti* (*cvьt-*) 'to bloom'

grobъ 'grave' ← *po·greti* (·*greb-*) 'to bury'

gromъ 'thundering' ← *grьmĕti* 'to thunder'

kovъ '(evil) plot', *o·kovi* (pl. tant.) 'shackles, chains' ← *kovati*, *kovą* 'to forge'

krovъ 'roof, dwelling', *po·krovъ* 'id.', *sъ·krovъ* 'hiding place, refuge', *za·krovъ* 'cover, sanctuary, refuge' ← *kryti* 'to hide'

kvasъ 'leaven', related to *kysĕlъ* 'sour, tart, acid'

ląkъ 'bow' ← *sъ·lęšti* (·*lęk-*) 'to bend'

mrakъ 'darkness' ← *mrьknąti* 'to become dark, eclipsed'

ob·ązъ 'caution, suspicion', *sъ·vązъ* 'union, chain' ← *vęsti* (*vęz-*) 'to bind'

ob·ĕdъ 'dinner', *velьje·jadъ* 'glutton' ← *jasti* (*jad-*) 'to eat'; cp. */i/-stem *jadь* 'food'

o·pasъ 'attention', *sъ·pasъ* 'savior, salvation' ← *pasti* (*pas-*) 'to shepherd, save'

plotъ 'fence', *o·plotъ* 'id.' ← *plesti* (*plet-*) 'to twine, plait'

po·klonъ 'kneeling' ← *klęti* (*klьn-*) 'to curse, swear'

po·kojь 'rest' ← *po·čiti* 'to rest'

po·nosъ 'reproach', *pri·nosъ* 'offering' ← *nesti* (*nes-*) 'to carry'; cp. */i/-stem *vodo·nosь* 'vessel (for water)'

po·topъ 'flood' ← *(is·)tonąti* 'to drown'

pri·kladъ 'symbol' ← *klasti* (*klad-*) 'to put, place'

pri·logъ 'addition', *sъ·logъ* 'gift of speech' ← *lešti* (*leg-*, *lęg-*) 'to lie down'.[11]

ras·ponъ 'cross (as an means of execution)' ← *ras·pęti* (·*pьn-*) 'to crucify'

rastъ 'growth', *vъzd·rastъ* 'age' ← *rasti* (*rast-*) 'to grow'

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[11] The inherited *logъ* has, due to extensive borrowing, been to some extent confused with Gk. λόγος 'word, speech'. The original meaning is well evident in the */yo/-stem *lože* 'bed' and the denominal *(po·)ložiti* 'to lay, put'.

rokъ 'time, term', *za·rokъ* 'order', *na·rokъ* 'judgment, verdict', *ob·rokъ* 'payment', *po·rokъ* 'vice', *pri·rokъ* 'nickname', *pro·rokъ* 'prophet', *ot·rokъ* 'child'[12] ← *rešti* (*rek-*) 'to say, speak'

rovъ 'hole, ditch', *prě·rovъ* 'grave' ← *ryti* 'to tear'

sǫ·prǫgъ 'spouse' ← *sъ·pręšti* (*·pręg-*) 'to yoke, bind, marry'[13]

sǫ·sědъ 'neighbor' ← *sěsti* (*sěd-*, *sęd-*) 'to sit down'

smradъ 'stench' ← *smrьděti* 'to stink'

spǫdъ 'vessel' ← obsolete **spęd-*; cp. Gk. σπονδή 'drink-offering' ← σπένδειν 'to pour out a drink-offering'

stolъ 'throne, chair', *prě·stolъ* 'throne' ← *stьlati, stelǫ́* 'to spread, stretch'

studъ 'shame, outrage' ← *styděti (sę)* 'to feel ashamed'

světъ 'light' ← *svьtěti* 'to illuminate'

sъlъ 'ambassador, messenger' ← *sъlati, sъlǫ́* 'to send'

tǫ·tьnъ 'noise', as if from **/ton·tṇ-/*; cp. Lat. *tin·tināre* 'to tinkle'

tokъ 'stream', *vъs·tokъ* 'rising, east', *po·tokъ* 'water-drain, stream', *o·tokъ* 'island' ← *tešti* (*tek-*) 'to run, stream'

trǫsъ 'earthquake' ← *tręsti* (*tręs-*) 'to shake'

u·brusъ 'towel', related to *brysalo* 'id.' (with a long zero grade)

u·kazъ 'testimony, example' ← *kazati, kažǫ* 'to show'

u·kruxъ 'fragment, piece' ← obsolete **kŕus-*; cp. Gk. κρούειν 'to knock, strike, smite', Lith. *krùšti* 'id.'

u·žasъ 'tremor, terror' ← *u·žasnǫti (sę)* 'to be horrified'

vratъ 'wheel' ← *vrьtěti sę* 'to turn round'

vъ·prosъ 'question, bid' ← obsolete **pres-*; cp. Lith. *piršti, peršù* 'to propose, woo', Lat. *precor* 'I ask', *procus* 'wooer', Goth. *fraíhnan* 'to ask'

vъz·dvigъ 'raising, lifting', *po·dvigъ* 'battle, heroic deed' ← *dvignǫti* 'to move'

vъ·zorъ 'sight', *za·zorъ* 'suspicion', *po·zorъ* 'sight, spectacle, shame' ← *zьrěti* 'to see, watch'

za·imъ 'loan', *o·imъ* 'soldier', *sъn·ьmъ* 'gathering, meeting' ← *jęti* (*im-*) 'to take'

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[12] Cp. Lat. *in·fāns*, Po. *nie·movlę* 'child'.

[13] For the semantics, cp. Lat. *con·iux* 'spouse', Skt. *sa·yúj-* 'companion'.

za·konъ 'law', *po·konъ* 'beginning' ← *·čęti* (*·čьn-*) 'to begin'; cp. */i/-stem *po·konь*
  'beginning'

za·padъ 'descent, west' ← *pasti* (*pad-*) 'to fall, descend'; cp. */i/-stem *pro·padь* 'ravine'

zьdъ 'wall, construction' ← *zьdati*, *ziždǫ* 'to build'

23. Borrowed */o/-stem masculines

23.1. From Gmc.

bĺudъ 'tray' from Gmc. */bewda-/; cp. Goth. *biuþs* 'table'[14]

dlъgъ 'debt' from Gmc. */dulga-/; cp. Goth. *dulgs* 'id.'[15]

kladęžь 'well' from Gmc. */kaldinga-/; cp. Goth. *kalds* 'cold'

kotьlъ 'kettle' from Gmc. */katila-/; cp. Goth. *katils* 'id.'

kupъ 'trade', *pri·kupъ* 'profit' from Gmc. */kawp-/; cp. Goth. *kaupon* 'to traffic'[16]

kъnęžь 'prince' from Gmc. */kuninga-/; cp. OHG *kuning* 'king'

likъ 'dance' from Gmc. */layk-/; cp. Goth. *laiks* 'id.'

lukъ 'garlic' from Gmc. */lawka-/; cp. ON *laukr* 'id.'

lьvъ 'lion', possibly from Goth. **liwa* ← Lat. *leō* 'id.'[17]

mečь 'sword' from Gmc. */mēkya-/; cp. Goth. *mekeis* 'id.'

mъnixъ 'monk' from OHG *munih*, the latter from Vulgar Lat. *monicus* 'id.'

ocьtъ 'vinegar' from Goth. *akeit* (and *aket*), the latter from Lat. *acetum* 'id.'

osьlъ 'donkey' from Gmc. */asilu-/; cp. Goth. *asilus* 'id.'

pěnęžь 'money, coin' from Gmc. */penninga-/; cp. OHG *pfenning*, the latter ultimately from
  Lat. *pondus* 'weight, value'

plъkъ 'army' from Gmc. */fulka-/; cp. Eng. *folk*

skotъ 'cattle, animal' from Gmc. */skatta-/; cp. Goth. *skatts* 'money'

skъlęžь 'coin' from Gmc. */skillinga-/; cp. OE. *scilling*[18]

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[14] The meaning, the */e/-grade of the root, and the vacillation between genders (neuter *bĺudo* also occurs) suggest that the word is rather a borrowing than a native deverbative from *bĺusti* (*bĺud-*) 'to watch, guard'.

[15] Vasmer believes the Slavic and Goth. forms are more likely related. If this is the case, *dlъgъ* must have arisen from *dlьgъ*, also attested, through vowel harmony. (ESRJa, s.v. *dolg*).

[16] OCS *kupъ* is a native backformation from *kupiti* 'to buy' which is the borrowing proper.

[17] Vasmer (ESRJa, s.v. *lev*) derives *lьvъ* from OHG *lëwo*, which does not really explain the radical -*ь*-. That Goth. **liwa* is not attested, does not mean it did not exist.

[18] PSl. has replaced */ь/ with ъ to avoid the Second Palatalization of the velar (Shevelov 1964:362). Note, however, Russian Church Slavic *stĺazь* from */scьlęžь/.

šlěmъ 'helmet' from Gmc. */xelma-/; cp. Goth. *hilms* 'id.'

velьbǫdъ 'camel' from Goth. *ulbandus* 'id.'[19]

vrъtogradъ 'garden' from Gmc. */urtigarda-/; cp. Goth. *aúrtigards* 'id.'[20]

vъ·kusъ 'tasting', *is·kusъ* 'temptation' from Gmc. */kaws-/; cp. Goth. *kausjan* 'to prove, test, taste'[21]

xlěbъ 'bread' from Gmc. */xlayba-/; cp. Goth. *hlaifs* 'id.'

xlěvъ 'cowshed' from Gmc. */xlaywa-/; cp. Goth. *hlaiw* 'tomb, grave'

xlъmъ 'hill' from Gmc. */xulma-/; cp. Sw. *holm* 'id.'

xyzъ 'hut, house' from Gmc. */xūsa-/; cp. OE *hús* 'id.'

23.2. From Gk.

adъ 'hell' from Gk. Ἅιδης 'Hades, the god of the lower world'

kitъ 'whale' from Gk. κῆτος 'sea-monster, huge fish, whale'[22]

stixъ 'verse' from Gk. στίχος 'row, line, verse'

23.3. From other sources

dъxъtorъ 'pillow', possibly from Turkic Bulgarian

šarъ 'color', probably from a Turkic source

xrъzanъ 'whip' from an Iranian source

24. Deverbal */yo/-stems

gnojь 'dung, excrement' ← *gniti* 'to putrefy'

graždь 'manger'; the same root as in *gradъ* 'town', possibly directly from the verbal stem of *graditi* 'to build'.

krajь 'edge, end, rim, riverbank' ← non-attested **krojiti*; cp. Ru. *kroít'* 'to shear (cloth)'

kričь 'scream' ← *kričati* 'to scream'

nožь 'knife' ← *(vъ·)nisti* (·*nьz*-) 'to pierce'; cp. Gk. νύσσειν 'to pierce', ἔγχος 'spear'

plačь 'cry' ← *plakati* 'to cry'[23]

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[19] The phonologically regular outcome of Goth. *ulbandus* would be **vlъbǫdъ*. It was obviously influenced by the root *vel-* 'big'. The "non-root" *-bǫdъ* was occasionally replaced with *-blǫdъ* 'adulterer' which, of course, made little sense, or with *-blúdъ* as in *blústi* (*blúd-*) 'to watch, guard'.

[20] Note also the backformation *vrъtъ* 'id.'.

[21] The OCS nouns are native formations from *kusiti* 'to taste' which is borrowed from Gmc.

[22] The fact that the Gk. word is an */es/-stem neuter made no difference to Slavs. It entered the Slavic masculine */o/-declension as did all Gk. nouns in -ος.

raz·bojь 'murder, killing', *u·bojь* 'id.' ← *biti* 'to hit, kill'

stražь 'guard' ← *strěšti* (*strěg-*) 'to watch, guard'

sǫ·pьŕь 'adversary' ← *pьrěti*, *pьŕǫ* 'to argue'; cp. *sǫ·pьrьnikъ* 'id.', *pьŕa* 'quarrel'

voždь 'leader' ← *vesti* (*ved-*) 'to lead'

vъpĺь 'scream, cry' ← *vъpiti*, *vъpĺǫ* 'to scream, cry'

znojь 'burning heat' ← **zniti*

zъlo·dějь 'criminal, wrongdoer', *čaro·dějь* 'wizard' ← *děti* 'to put, place, do'

25. Masculines in */-i-y-o-/

črěvьjь 'shoe'

gvozdvьjь 'nail' ← *gvozdь* 'id.'

gvozdьjь 'nail' ← *gvozdь* 'id.'

vrabьjь 'sparrow'

zmьjь 'dragon' ← the zero grade of *zemĺa* 'earth'; cp. Gk. χαμαί 'on the ground'

žrěbьjь 'dice'

26. Borrowings in */-i-y-o-/

assarьjь 'farthing' ← ἀσσάριον

asÿrьjь 'Assyrian' ← Ἀσσύριος

dinarьjь 'dinar' ← δηνάριον

kapiklarьjь 'prison guard' ← καπικλάριος

komentarisьjь 'prison guard' ← κομενταρήσιος

korentьji (pl. tant.) 'Corinthians' ← Κορίνθιοι; cp. *korÿnθjane* 'id.'

lentьjь 'linen cloth' ← λέντιον

patrikьjь 'patrician, noble' ← πατρίκιος ← Lat. *patricius*

pretorьjь 'praetor′s headquarters' ← πραιτώριον ← Lat. *praetōrium*

skorъpьjь 'scorpion' ← σκορπίος

stadьjь 'stadium' ← στάδιον

27. Diminutives in */-ey-t-y-o-/

dětištь 'child' ← *děti* (pl. tant.) 'children'

grъličištь 'young turtle-dove' ← *grъlica* 'turtle-dove'

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[23] Goth. *flōkan* 'to lament', Gk. πληγή 'strike' suggest a PIE root */plōg-/. It cannot be ruled out that OCS *plak-* is a borrowing from Gmc., see ESRJa, s.v. *plákat'*.

kagrъličištь 'turtle-dove'[24]

kozъlištь 'kid' ← *kozьlъ* 'goat'; cp. *kozьlę* 'id.'

mladeništь 'child' ← *mladenъ* 'young'

ot·ročištь 'child' ← *ot·rokъ* 'id.'; cp. *ot·ročę* 'id.'

prъtišti (pl. tant.) 'rags, tatters'

pъtištь 'sparrow'; cp. *pъtica* 'bird', *pъtenьcь* 'fledgling'

robičištь 'servant, slave'; cp. *rabъ* 'id.'[25]

28. Nouns in -ъkъ

be(s)·sramъkъ 'shameless person' ← *sramъ* 'shame'

iz·bytъkъ 'remnant, relic', *pri·bytъkъ* 'profit, income' ← *byti* 'to be'

na·čętъkъ 'beginning, origin' ← *na·čęti* (*·čьn-*) 'to begin'; cp. *na·čęlo* 'id.'

o·prěsnъkъ 'unleavened bread'

o·statъkъ 'remain', *ne·do·statъkъ* 'lack' ← *o·stati* 'to remain'

o·stanъkъ 'remain'; cp. the previous

po·slědъkъ 'end' ← *slědъ* 'trace, track'

sъ·pletъkъ 'braiding' ← *sъ·plesti* (*·plet-*) 'to twine, twist, enfold'

sъ·vitъkъ 'chapter (of a book)' ← *sъ·viti* 'to roll, wrap up, turn'

šipъkъ 'rose'

29. Nouns in -ikъ

ǫzьnikъ 'prisoner'

ǫžьnikъ 'prisoner'

be(s)·studьnikъ 'shameless person'

bes·xramьnikъ 'homeless person'

bez·mъzdьnikъ 'penniless person'

bez·umьnikъ 'mindless person'

blago·datьnikъ 'benefactor'

blaženikъ 'holy (man)', *o·blaženikъ* 'id.'

blǫdьnikъ 'adulterer, perverse'

blędьnikъ 'babbler'

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[24] This form occurs three times and cannot therefore be a scribal error for *grъličištь*.

[25] This is a hapax in the Codex Suprasliensis and shows the West-Slavic reflex of PSl. */arb-/ from PIE */orb^h-/.

dělьnikъ 'workshop'

dlъžьnikъ 'debtor'

dvьrьnikъ 'doorkeeper'

gostinьnikъ 'innkeeper'

gradьnikъ 'city dweller, inhabitant, citizen', *bez·gradьnikъ* 'person with no homeland'

grěšьnikъ 'sinner'

ino·plemenьnikъ 'foreigner, person of another tribe', *svoje·plemenьnikъ* 'fellow countryman, of the same tribe', *sъ·plemenьnikъ* 'id.', *tožde·plemenьnikъ* 'id.'

ino·věrьnikъ 'heretic, person of another religion'

is·kusьnikъ 'investigator'

is·točьnikъ 'spring, source', *slьzo·točьnikъ* 'one who sheds tears'

is·xodatajьnikъ 'assistant, defender'

iz·bavьnikъ 'redeemer', *o·bavьnikъ* 'wizard'

jarьmьnikъ 'beast of burden'

językъnikъ 'heathen', *ino·językъnikъ* 'foreigner'

kaženikъ 'eunuch'

klevetьnikъ 'false accuser, slanderer'

klirosьnikъ 'clerk'

kopijьnikъ 'wand-bearer'

korabĺьnikъ 'captain of a ship'

kovьnikъ 'rebel'

kramolьnikъ 'rebel'

krъmĺenikъ 'suckling'

krъmьnikъ 'helmsman'

kyznьnikъ 'artificer, artist'

kъńižьnikъ 'book-learned (person), scribe', *ne·kъńižьnikъ* 'unlearned person'

ĺubĺenikъ 'lover'

mǫčenikъ 'martyr'

měsęce·slovesьnikъ 'liturgical calendar'

mętežьnikъ 'rebel'

mlьčalьnikъ 'monk'

molitvьnikъ 'asker, beggar, one who prays'

mьstьnikъ 'avenger'

na·imьnikъ 'paid laborer', *prě·imьnikъ* 'successor', *sъ·pri·imьnikъ* 'partaker'

na·městьnikъ 'successor'

na·slědьnikъ 'heir'

na·stavьnikъ 'leader, teacher', *pri·stavьnikъ* 'housekeeper', *sъ·stavьnikъ* 'defender'

nǫždьnikъ 'violent person, rapist'

ne·dǫžьnikъ 'sick person'

ne·izd·rečenьnikъ 'indescribable creature'

ne·po·dobьnikъ 'wicked person'

ne·věstьnikъ 'bridegroom'

ob·ličьnikъ 'accuser'

ob·rětelьnikъ 'inventor', *pri·ob·rětelьnikъ* 'id.'

obьštьnikъ 'companion, partaker'

orǫžьnikъ 'heavy-armed soldier'

ot·ročьnikъ 'unripe grape'

o·xodьnikъ 'one who has retreated to seclusion'

pa·gubьnikъ 'killer'

pa·kostьnikъ 'torturer, tyrant'

pǫtьnikъ 'traveler, foreigner'

pěnęžьnikъ 'moneychanger'

plěnьnikъ 'hostage, prisoner'

po·bědьnikъ 'winner'

po·črъpalьnikъ 'vessel (for water)'

po·dražьnikъ 'imitator'

po·dvižьnikъ 'fighter'

po·klonьnikъ 'worshipper'

po·mazanьnikъ 'anointed'

po·moštьnikъ 'helper, assistant'

po·rǫčьnikъ 'guarantor'

po·slušьnikъ 'listener'

po·spěšьnikъ 'helper', *sъ·po·spěšьnikъ* 'id.'

postьnikъ 'one who fasts'

po·zorьnikъ 'watcher'

praštьnikъ 'slinger'

pravьdьnikъ 'right, just person', *ne·pravьdьnikъ* 'unjust person'

prazdьnikъ 'holiday, feast'

prě·danьnikъ 'betrayer'

prě·davьnikъ 'betrayer', *raz·davьnikъ* 'person who sells away his possessions'

prědъ·borьnikъ 'foremost fighter'

prě·lьstьnikъ 'deceiver'

prě·měnьnikъ 'successor'

prě·selьnikъ 'alien, immigrant'

prěždьnikъ 'assistant to helmsman'

pri·čęstьnikъ 'partaker, accomplice', *ne·pri·čęstьnikъ* 'person with no share in something, bereft of something', *sъ·pri·čęstьnikъ* 'partaker'

pri·čьtьnikъ 'clerk'

pro·kudьnikъ 'killer'

pro·myslьnikъ 'defender'

pro·po·vědьnikъ 'herald', *is·po·vědьnikъ* 'supporter, backer'

protivьnikъ 'adversary, enemy', *sǫ·protivьnikъ* 'id.'

pustinьnikъ 'hermit who lives in the desert'

rabotьnikъ 'servant'

ratьnikъ 'soldier, adversary, enemy'

raz·bojьnikъ 'robber, killer'

rovьnikъ 'abyss'

rъvenikъ 'well'

sǫ·pьrьnikъ 'enemy, adversary'

skǫdьlьnikъ 'potter', also 'pot'

skvrьnьnikъ 'abominable, disgusting person'

stlъpьnikъ 'stylite, pillar saint'

stranьnikъ 'foreigner', *ino·stranьnikъ* 'id.'

strastьnikъ 'saint, martyr'

svarьnikъ 'quarrelsome person', *bogo·svarьnikъ* '(person) fighting against God'

svěštьnikъ 'candle holder'

světilьnikъ 'candle, lamp, lantern'

svęštenikъ 'priest'

sъ·dějьstvьnikъ 'helper, brother in arms'

sъ·stolьnikъ 'partaker, assistant'

sъtьnikъ 'centurion'

sъ·vadьnikъ 'quarrelsome person'

sъ·větьnikъ 'counselor', *u·větьnikъ* 'helper, comforter'

sъ·vъz·drъžьnikъ 'co-ascetic'

sьrebrьnikъ 'silver coin'

tajьbьnikъ 'one initiated to a secret'

trěbьnikъ 'altar'

trudьnikъ 'advocate, champion'

trъžьnikъ 'moneychanger'

tysęštьnikъ 'commander of a thousand man, legionary tribune'

tъčьnikъ 'age mate'

tьmьničьnikъ 'prisoner'

učenikъ 'pupil'

u·dvorьnikъ 'joint inhabitant, denizen'

u·godьnikъ 'one who pleases (God)'

věstьnikъ 'messenger'

vinьnikъ 'blamable, guilty, culprit'

vratьnikъ 'doorkeeper'

xǫdožьnikъ 'creator, artist'

xulьnikъ 'heretic'

xyštьnikъ 'robber', *vъs·xyštьnikъ* 'id.'

za·konьnikъ '(person) versed in law'

za·sědьnikъ 'crooked, bribed person'

za·stǫpьnikъ 'assistant, defender, aid', *prě·stǫpьnikъ* 'lawbreaker', *za·kono·prě·stǫpьnikъ*
    'id.'

za·štitьnikъ 'defender'

za·vistьnikъ 'envious person', *ne·na·vistьnikъ* 'one who hates'

zvěro·krъmьnikъ 'animal feeder'

žestoko·lěganьnikъ 'ascetic (one who sleeps uncomfortably)'

30. Nouns in *-ьсь*

30.1. Diminutives

agnьсь 'lamb'; cp. *agnę* 'id.'

cvětьсь 'flower' ← *cvětъ* 'id.'

gostinьсь 'street'

gradьсь 'small town' ← *gradъ* 'town'

konьсь 'end' (lit. 'a small beginning') ← *konь* 'beginning'

korьсь 'measure'; a native diminutive from Gk. κόρος 'id.'

kovьčežьсь 'case or bag for money' ← *kovьčegъ* 'box, coffer, urn, ark'

ob·(v)lačьсь '(small) cloud' ← *ob·(v)lakъ* 'cloud'

o·drьсь 'pan of coals' ← *o·drъ* 'bed, bier'

otьсь 'father', also *pra·otьсь* 'forefather' ← */at-/; cp. Goth. *atta*, Gk. ἄττα 'id.'

pъtenьсь ~ pъtěnьсь 'young bird', probably from an old */en/-stem */put-en-/; cp. *pъtica*
    'bird', Latv. *putns* 'id.', Skt. *putráḥ* 'son', Lith. *paũtas* 'egg'

rožьсь 'little horn' ← *rogъ* 'horn'

sǫčьсь 'dry twig' ← *sǫkъ* 'branch'

sъsьсь 'nipple' ← *sъsъ* 'breast'

telьсь 'calf' ← *telę* 'id.'; cp. Ukr. *teljá* 'id.'

věnьсь 'crown'

vlьčьсь 'thistle, thorn' (lit. 'little wolf')[26]

žrěbьсь 'foal'; cp. *žrěbę* 'id.'

30.2. Deadjectival animates

črьnьсь 'monk' ← *črьnъ* 'black'

junьсь 'young ox' ← *junъ* 'young'

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[26] Cp. Goth. *aíhva·tundi* 'thorn', lit. 'horse-tooth'.

ĺutьcь 'severe person' ← *ĺutъ* 'severe'

mladьnьcь 'child' ← *mladьnъ* 'infantile, young'

mrьtvьcь 'corpse' ← *mrьtvъ* 'dead'

prьvěnьcь 'first-born child' ← an obsolete adjective **prьvěnъ*

slěpьcь 'blind person' ← *slěpъ* 'blind'

starьcь 'old man' ← *starъ* 'old'

studenьcь 'well' ← *studenъ* 'cold'

svętьcь 'saint' ← *svętъ* 'holy'

šesto·krilatьcь 'six-winged' ← *krilatъ* 'winged'

xromьcь 'crippled person' ← *xromъ* 'crippled'

xytrьcь 'sly person' ← *xytrъ* 'sly'

30.3. Denominal agent nouns

be(s)·studьcь 'shameless person' ← *studъ* 'shame'; cp. *be(s)·studьnikъ* 'id.'

bělo·rizьcь 'layman', *črьno·rizьcь* 'monk' ← *riza* 'clothe'

kaznьcь 'warlord' ← *kaznь* 'punishment, order'

lьstьcь 'cheater' ← *lьstь* 'plot, intrigue'

samo·vlastьcь 'autocrat', *četvrьto·vlastьcь* 'tetrarch' ← *vlastь* 'power'

trь·ząbьcь 'trident' ← *ząbъ* 'tooth'

30.4. Deverbal agent nouns

bogo·ĺubьcь 'who loves God', *životo·ĺubьcь* 'who loves life', *kroto·ĺubьcь* 'peace-loving person', *slovo·ĺubьcь* 'who loves words, literature', *sьrebro·ĺubьcь* 'avaricious person', *xrьsto·ĺubьcь* 'who loves Christ', *čisto·ĺubьcь* 'who loves purity' ← *ĺubiti* 'to love'

bogo·nosьcь 'who bears God', *strasto·nosьcь* 'martyr' ← *nositi* 'to carry'

bogo·slovьcь 'theologian', *pravo·slovьcь* '(an) orthodox' ← *sluti (slov-)* 'to be known as'

borьcь 'fighter', *bogo·borьcь* 'who fights with God', *xrьsto·borьcь* 'who fights with Christ' ← *brati, bor̨ą* 'to fight'; cp. *bor̨ę* 'fighter', *prědъ·borьnikъ* 'foremost fighter'

davьcь 'giver, donator', *blago·davьcь* 'benefactor', *žizno·davьcь* 'who gives life', *za·imo·davьcь* 'debtor', *za·kono·davьcь* 'legislator', *mьzdo·davьcь* 'who rewards (or punishes)', *mьzdo·otъ·davьcь* 'id.' ← *dati* 'to give'; cp. *dateĺь* 'giver', *blago·datьnikъ* 'benefactor', *prě·danьnikъ* 'betrayer', *prě·davьnikъ* 'id.'

člověko·u·bijьcь 'killer' ← *u·biti* 'to kill'

čьtьcь 'reader, lector', *bogo·čьtьcь* 'who worships God' ← *čisti* (*čьt-*) 'to read, honor, respect'; cp. *pri·čьtьnikъ* 'clerk'

doma·živьcь 'local inhabitant' ← *žiti* (*živ-*) 'to live'; cp. *žiteĺь* 'inhabitant'

ǧvězdo·zьrьcь 'astrologer, astronomer' ← *zьrěti* 'to see, watch'; cp. *po·zorьnikъ* 'watcher'

jędro·pišьcь 'stenographer', analogically for **jędro·pisьcь*; cp. pres. 1ˢᵗ sg. *pišą*, inf. *pьsati* 'to write'

kupьcь 'merchant' ← *kupiti* 'to buy'

lovьcь 'hunter' ← *loviti* 'to hunt'

ĺubo·dějьcь 'adulterer' ← *dějati* or *děti* 'to do, make'; cp. *ĺubo·děję* 'id.', *blago·děteĺь* 'benefactor'

myto·imьcь 'tax collector, publican', *mьzdo·imьcь* 'id.', *stranьno·pri·imьcь* 'hospitable person' ← *jęti* (*im-*) 'to take'

o·šьlьcь 'hermit', *pri·šьlьcь* 'newcomer' ← *iti* (*id-*, *šьd-*) 'to go'

plęsьcь 'dancer' ← *plęsati* 'to dance'

prьvo·rodьcь 'first-born son' ← *roditi* 'to beget'

samo·drьžьcь 'autocrat' ← *drьžati* 'to keep, hold'

sěčьcь 'executioner, headsman' ← *sěšti* (*sěk-*) 'to cut, behead'

skopьcь 'eunuch' ← *skopiti* 'to castrate'

sopьcь 'flutist' ← *soti* (*sop-*) 'to play the flute'

srьdьce·vědьcь 'who knows the human heart' ← *věděti* 'to know'

strasto·trьpьcь 'martyr' ← *trьpěti* 'to suffer'

suxo·jadьcь 'who eats dry food during fast' ← *jasti* (*jad-*) 'to eat'

svirьcь 'flutist' ← *svirati* 'to play the flute'

tvorьcь 'creator', *čudo·tvorьcь* 'miracleworker', *miro·tvorьcь* 'peacemaker', *po·bědo·tvorьcь* 'winner', *rodo·tvorьcь* 'creator', *živo·tvorьcь* 'who gives life' ← *tvoriti* 'to make'

vidьcь 'eyewitness', *bogo·vidьcь* 'who sees God', *samo·vidьcь* 'eyewitness' ← *viděti* 'to see'

žьrьcь 'sacrificer, priest' ← *žrěti* (*žьr-*) 'to sacrifice'

31. Simple neuter */o/-stems

čelo 'forehead'	*kolěno* 'generation, knee'
gnězdo 'nest'	*město* 'place'
jadra 'bosom, embrace, bowels'	*monisto* 'necklace'

obьdo 'possession, heritage, treasure'

olovo 'led'

plesno 'foot'

plešte 'shoulder'

sukъno 'broadcloth'

sьrebro 'silver'

usta (pl. tant.) 'mouth'

utro 'morning'

vědro 'pail, bucket'

věko 'eyelid'

želězo 'iron'

32. Denominal neuters in */-i-y-o-/

brъselьje 'ostraca'

brьnьje 'dirt, filth' ← *brьna* 'id.'

dǫbьje 'trees' ← *dǫbъ* 'tree'

gobьǧьje 'abundance' ← Goth. *ga·bigs* 'rich'

groznovьje 'grapes' ← *groznъ* 'grape' (apparently an old */u/-stem)

kamenьje 'stones' ← *kamy*, *kamene* 'stone'

kopьje 'spear'

korenьje 'roots' ← *korenь* 'root'

listvьje 'foliage, leaves' ← *listъ* 'leaf' (the -*v*- is probably taken from *větvьje*)

lozьje 'vine-twigs' ← *loza* 'vine-twig'

ob·(v)ilьje 'abundance'; cp. *ob·(v)ilъ* 'abundant'

prǫtьje 'whips' ← **prǫtъ*; cp. Ru. *prut* 'whip'

raždьje 'twigs, branches'

rěpьje 'thistles, thorns'

trupьje 'corpses' ← *trupъ* 'corpse'

trьnьje 'thistles, thorns' ← *trьnъ* 'thistle, thorn'

trьstьje 'reeds, reed-bed' ← *trьstь* 'reed'

větвьje 'branches' ← *věja* 'branch'

větvьje 'branches' ← *větvь* 'branch'

vrьbьje 'willow (thicket)' ← **vrьba*; cp. Ru. *vérba* 'willow'

vъz·vitьje 'profit' ← *vъz·vitъ* 'interest'

zelьje 'plant', cp. *zelenъ* 'green', *zlakъ* 'greenness, verdure'

žьzlьje 'sticks' ← *žьzlъ* 'stick'

33. Neuters in */-dʰl-o-/

brysalo 'towel'

cvĕtilo 'meadow' ← *cvĕtъ* 'flower'

črъnilo 'ink' ← **črъniti*; cp. *črъnъ* 'black'; Cz. *černidlo*

is·kračilo 'an instrument of torture'

kadilo 'incense' ← *kaditi* 'to burn as incense'; Cz. *kadidlo*, Po. *kadzidło*

mĕrilo 'balance (the instrument)' ← *mĕriti* 'to weigh, measure'

na·kovalo 'anvil' ← *kovati* 'to forge'

nosila (pl. tant.) 'bier' ← *nositi* 'to carry'

o·dĕjalo 'cloth(ing)' ← *o·dĕjati* 'to dress'

oralo ~ ralo 'plow' ← *orati* 'to plow'; Cz. *rádlo*

po·črъpalo 'a vessel to draw water with' ← *po·črъpati* 'to draw water'

pravilo 'rule' ← *praviti* 'to lead'; Cz. *pravidlo*, Po. *prawidło*

rylo 'hoe, pickaxe' ← *ryti* 'to tear'; cp. *rъvenikъ* 'well', i.e. '(that which is) dug'

sĕdalo 'chair' ← *sĕdati sę* 'to sit down'; Cz. *sedadlo*

solilo 'cup, bowl'

stavilo 'balance' ← *(po·)staviti* 'to set, place'

strĕkalo 'spike' ← *strĕkati* 'to pierce'

sušilo 'brushwood' ← *sušiti* 'to dry'

svĕtilo 'lamp' ← *svĕtiti* 'to lighten'

svĕštilo 'lampstand'

svętilo 'sanctuary, holy place' ← *svętiti* 'to sanctify'

točilo 'the vessel under a winepress' ← *točiti* 'to spill'

xranilo 'guard, watch' ← *xraniti* 'to watch, protect'

zrъcalo 'mirror'; Cz. *zrcadlo*

žęlo 'spike'

34. Neuters in */-i-k-o-/

ajьce 'egg'

brašьnьce 'food' ← *brašьno* 'id.'

čędьce 'child' ← *čędo* 'id.'

imĕnьjьce 'possessions' ← *imĕnьje* 'id.'

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mladętьce 'child'

plesnьce 'sandal, slipper' ← *plesno* 'foot'

slъnьce 'sun'

srъdьce 'heart'

35. Neuters in *-ište*

ǫzilište 'prison'; cp. *ǫza* 'shackles', *ǫzьnikъ* 'prisoner'

blǫdilište 'brothel' ← *blǫditi* 'to prostitute'

crьkъvište 'heathen temple' ← *crьky* 'temple'

gnojište 'heap of dung' ← *gnojь* 'dung'

grebište 'grave' ← *po·greti* (*·greb*-) 'to bury'

grobište 'grave' ← *grobъ* 'id.'

is·xodište 'exit' ← *xoditi* 'to go'

kapište 'idol' ← *kapь* 'icon'

nyrište 'refuge, sanctuary' ← *nyriti; cp. *pro·nyriti* 'to cheat'

po·krovište 'cover', *sъ·krovište* 'hiding place, treasury' ← *po·kryti* 'to hide, cover' or from
     po·krovъ 'cover'

po·pьrište 'stadium (as a measure of length)' ← *po·pьrati* (*·per*-) 'to tread'

po·zorište 'theater, spectacle' ← *zьrěti* 'to watch, see'

pri·běžište 'sanctuary', *u·běžište* 'id.' ← *pri·běžati* 'to flee for refuge'

pri·stanište 'haven, port' ← *pri·stati* 'to arrive'

sǫdilište 'court of law' ← *sǫditi* 'to judge'; cp. *sǫdište* 'id.'

sǫdište 'court of law' ← *sǫditi* 'to judge'

selište 'dwelling place' ← *selo* 'village, field'

sědalište 'seat, court of law' ← *sědati sę* 'to sit down'

svętilište 'temple, shrine' ← *svętiti* 'to sanctify'

sъn·ьmište 'synagogue, gathering, council' ← *sъn·ęti sę* (*·ьm*-) 'to gather, meet'

tajilište 'cache, hoard' ← *tajiti* 'to hide'

trěbište 'temple, altar' ← *trěba* 'offering, sacrifice'

trъžište 'market, square' ← *trъgъ* 'id.'

vъ·lagalište 'sack, bag' ← *vъ·lagati* 'to put (in)'

xranilište 'hiding place, storage' ← *xraniti* 'to hide, store'

žilište 'dwelling' ← *žiti* 'to dwell, live'; cp. *žište* 'id.'

žište 'dwelling' ← *žiti* 'to live, dwell'

župište 'grave'

36. Neuters in *-ьstvo ~ -ьstvьje*

apostolьstvo 'apostleship' ← *apostolъ* 'apostle'

ǫrodьstvo 'ignorance, stupidity' ← *ǫrodъ* 'stupid'

ǫžičьstvo 'kinship' ← *ǫžika* 'relative'

balьstvo 'medicine, cure' ← *balьji* 'physician'

běstvo 'escape' ← *běgati* 'to run, escape'

blaženьstvo 'bliss' ← *blaženъ* 'blessed'; cp. *blaženьje* 'id.'

blądьničьstvo 'prostitution' ← *blądьnikъ* 'prostitute'

bogatьstvo, bogatьstvьje 'wealth' ← *bogatъ* 'wealthy'

božьstvo 'divinity' ← *bogъ* 'God'

brato·ĺubьstvo, brato·ĺubьstvьje 'brotherly love' ← *ĺuby* 'love' or *ĺubiti* 'to love'

bratrьstvo 'fraternity, brotherhood' ← *bratrъ* 'brother'

bujьstvo 'ignorance, thoughtlessness' ← *bujь* 'ignorant, thoughtless, mad'; cp. *bujestь* 'id.'

cěsarьstvo, cěsarьstvьje 'kingdom, empire, dominion' ← *cěsaŕъ* 'emperor'

člověčьstvo 'humanity' ← *člověkъ* 'man, human'

čujьstvo 'sense, sensing' ← *čuti, čują* 'to sense'

čuvьstvo, čuvьstvьje 'sense, sensing' ← *čuti, čują* 'to sense'

debelьstvo 'fatness' ← *debelъ* 'fat'

dějьstvo 'action, deed' ← *dějati* 'to do'

děvьstvo 'virginity' ← *děva* 'virgin'

dobĺьstvo 'heroic deed' ← *dobĺь* 'heroic, manly'; cp. *dobĺestь* 'id.'

do·stojinьstvo 'solemnity, dignity' ← *do·stojinъ* 'worthy'

dręxlьstvo 'grief' ← *dręxlъ* 'sad'

episkupьstvo 'episcopacy' ← *episkupъ* 'bishop'

gospodьstvo, gospodьstvьje 'supremacy' ← *gospodь* 'lord'

gubitelьstvo 'destruction' ← *gubiteĺь* 'destroyer, killer'

inočьstvo 'monkhood' ← *inokъ* 'monk'

jedinьstvo 'unity' ← *jedinъ* 'one'; cp. *jedińenьje* 'id.'

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lǫkavьstvo, *lǫkavьstvьje* 'badness' ← *lǫkavъ* 'bad, evil'

lixo·imьstvo, *lixo·imьstvo* 'greediness' ← *jęti* (*im-*) 'to take, have'

lice·měrьstvo 'hypocrisy' ← *lice·měrъ* 'hypocrite'

mǫdrьstvo 'wisdom, wit' ← *mǫdrъ* 'wise'; cp. *mǫdrostь* 'id.'

mǫžьstvo 'manliness' ← *mǫžь* 'man'

mladenьstvo 'youth, childhood' ← *mladenъ* 'young'

mъnožьstvo, *mъnožьstvьje* 'great number, mass' ← *mъnogъ* 'many, numerous'

ne·vědьstvo 'ignorance' ← *vědь* 'knowledge'

obьštьstvo 'fellowship, society' ← *obьštь* 'common'; cp. *obьštenьje* 'id.'

otьčьstvo, *otьčьstvьje* 'family, generation, homeland' ← *otьcь* 'father'

popьstvo 'priesthood, clergy' ← *popъ* 'priest'

pro·kazьstvo 'badness, evil' ← *pro·kaza* 'leprosy'

pro·ročьstvo 'prophecy' ← *pro·rokъ* 'prophet'

pro·stranьstvo 'space, room' ← *pro·stranъ* 'wide, broad'

pьjanьstvo, *pьjanьstvьje* 'drunkenness' ← *pьjanъ* 'drunken'

raz·bojьstvo 'crime, robbery' ← *raz·bojь* 'id.'

ritorьstvo 'eloquency', translating Gk. ῥητωρεία

roditeĺьstvo 'nature, character' ← *roditeĺь* 'parent, cause, creator'

rodьstvo 'birth, kinship' ← *rodъ* 'birth, family'

roždьstvo 'birth, labor, birthday, Christmas' ← *rodъ* 'birth', influenced by *roždenьje* 'birth'

sąštьstvo 'creation, being, essence' ← the act. pres. ptcl. *sy*, *sąšt-* 'being'; translates Gk. οὐσία 'id.' ← ὀντ- 'being'

sirotьstvo 'orphanhood' ← *sirota* 'orphan'

starějьšinьstvo 'rank, position' ← *starějьšina* 'leader, ruler'

strojiteĺьstvo 'management of household' ← *strojiteĺь* 'manager of household'

sverěpьstvo 'extravagance' ← *sverěpъ* 'extravagant'

světьlьstvo 'brightness' ← *světьlъ* 'bright'; cp. *světьlostь*, *světьlota* 'id.'

synovьstvo 'position as a son' ← *synъ* 'son'

trъžьstvo 'celebration, feast' ← *trъgъ* 'market place'; imitates Gk. παν·ήγυρις 'high festival, solemn assembly' ← ἀγορά 'market place'

u·bijьstvo 'murder' ← *u·biti* 'to kill'; also *u·bojьstvo* 'id.' from *u·bojь* 'id.'

učiteĺьstvo 'teaching' ← *učiteĺь* 'teacher'

veličьstvo, veličьstvъje 'greatness' ← *velikъ* 'great'; cp. *velikota* 'id.'

velьjьstvo 'greatness' ← *velьjь* 'great'

veštьstvo 'reality, materiality' ← *veštь* 'thing'

vladyčьstvo, vladyčьstvъje 'power' ← *vladyka* 'sovereign'

vlъšьstvo, vlъšьstvъje 'sorcery, magic' ← *vlъxvъ* 'sorcerer, witch'

voje·vodьstvo 'military command' ← *voje·voda* 'military commander'

vojinьstvo 'army' ← *vojinъ* 'soldier'

xǫdožьstvo, xǫdožьstvъje 'skill, art, slyness, wit' ← **xǫdogъ* ← Gmc. **/xandaga-/*; cp. Goth.
    handugs 'clever, wise'

xodatajьstvo 'defense' ← *xodatajь* 'defender'

zъlo·věrьstvo 'heresy' ← *věra* 'faith'

ženьstvo 'womanliness, female characteristics' ← *žena* 'woman'

37. Simple */ā/-stems

baba 'wet nurse'

brazda 'furrow'

brъzda 'muzzle, halter'

děva 'virgin'

dręzga 'meadow'

dъna 'podagra'

gǫba 'sponge'

glava 'head'

ǧvězda 'star'

jama 'ditch'

jazva 'wound'

klada 'collar of wood (as a means of
    confining a prisoner)'

kotъka 'anchor'

krada 'pyre'

krasa 'decoration'

krъma 'stern, poop'

kyka 'hair'

lopata 'spade, shovel'

loza 'grape'

luna 'Moon'

ńiva 'field'

měna 'exchange'

muxa 'fly'

mьzda 'reward'

o·meta 'edge (of a garment)'

pazuxa 'bosom'

pěny (pl. tant.) 'foam'

pęta 'heel'

po·doba 'manner'

rana 'wound'

riza 'cloth, linen'

ryba 'fish'

sila 'power, force, miracle'

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skovrada 'pan of coals, fireplace, altar for burnt offerings'	*sъ·vada* 'quarrel'
	tetъka 'aunt'
skvara 'smoke (from a burnt offering)'	*tisa* 'cedar tree'
slina 'spit'	*tlъpa* 'crowd, group'
sluga 'servant'	*tьma* 'darkness'
slъza 'tear'	*vapa* 'swamp, standing water'
srěda 'middle, center, company'	*vina* 'fault, cause, excuse'
stěna 'wall, rock'	*vlaga* 'moisture'
stopa 'foot'	*žaba* 'toad'
strěla 'arrow'	*žila* 'sinew'

38. Simple deverbal */ā/-stems

ǫza 'shackle' ← *vęsti* (*vęz-*) 'to tie, bind'

be(z)·sěda 'discussion, speech, dialect' ← *sěsti* (*sěd-*, *sęd-*) 'to sit'

běda 'need, distress'; cp. Gk. πείθειν 'to persuade, mislead, stir up'[27]

dira 'hole' ← *dьrati, derǫ* 'to tear'

lǫka 'intrigue, plot, slyness' ← *·lęšti* (*·lęk-*) 'to bend'; cp. Lith. *leñkti* 'to bend'

mlъva 'fuss, stir, hubbub' ← *mlъviti* 'to make noise, stir up'

o·grada 'fence, enclosure' ← *o·graditi* 'to fence'

o·pona 'curtain' ← *·pęti* (*pьn-*) 'to tie, fix'

o·sъpy (pl. tant.) 'plague' ← *sъpati, sъplᶖǫ* 'to sleep'

pa·guba 'ruin' ← *gъ(b)nǫti* 'to bend over' or directly from the causative *gubiti* 'to kill, destroy'

po·xoda 'walk' ← *iti* (*id-*, *šьd-*) 'to go' or directly from the iterative *xoditi* 'to move, walk'

prě·věsa 'curtain' ← *visěti* 'to hang' (intransitive) or *věsiti* 'to hang' (transitive)

pri·sęga 'oath' ← *pri·sęšti* (*·sęg-*) 'to touch'

pro·kaza 'leprosy' ← **čez-*; cp. *išteznǫti* (*iz·čeznǫti*) 'to disappear', *ištazati* 'id.'[28]

pro·kuda 'ruin, defamation, desecration' ← *kuditi* 'to blaspheme, slander', *čudo* 'wonder, monster'

rǫka 'hand'; cp. Lith. *rankà* 'id.' ← *riñkti, renkù* 'to gather'

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[27] The */o/-grade may be seen in OCS *běditi* 'to force, compel', the zero grade in Goth. *bidjan* 'to ask, beg' and, probably, Gk. πίθηκος 'ape'.

[28] Cp. ON *hvika* 'to hesitate', pret. 1st sg. *hvak* < */kweǵ-/ : */kwoǵ-/.

rozga 'twig, branch'; cp. Lith. *règzsti, rezgù* 'to twist, twine, tie', Skt. *rájjuḥ* 'rope'

slava 'fame, glory, reputation, gratitude' ← *sluti* (*slov-*) 'to be known as'

trava 'grass, plants' ← *na·truti* (*·trov-*) 'to feed, nourish'

uzda 'bridle', probably from PIE */ows-/ 'mouth' and */dʰē-/ 'put' or */dā-/ 'to give'

xula 'blasphemy' ← *xuliti* 'to blaspheme'

za·vida 'envy', *ob·(v)ida* 'injustice, insult' ← *viděti* 'to see'; cp. *za·vistь* 'envy'

za·vora 'bolt' ← *za·vrěti* (*·vьr-*) 'to close'

39. Simple deadjectival */ā/-stems

mąka 'flour' ← *mękъkъ* 'soft'

o·slaba 'relief' ← *slabъ* 'weak'

svoboda 'freedom, free man' ← *svobodь* 'free'

tąga 'fear, suffering' ← *tęžьkъ* 'heavy'

u·těxa 'relief, comfort' ← *tixъ* 'quiet, peaceful'

40. Borrowed */ā/-stems

brъńę (pl. tant.) 'breastplate' ← Goth. *brunjo* 'id.'

cęta 'small coin' ← Goth. *kintus* 'id.' ← late Lat. *centus*

dъska 'plate, board, tablet' ← Lat. *discus*

kolęda '1ˢᵗ day of a month' ← Lat. *Kalendae*

kramola 'revolt', probably from OBav. *karmala*

kъmotra 'godmother' ← late Lat. *commāter*

kъńigy (pl. tant.) 'book, writings' ← a Turkic source

lixva 'interest' ← Goth. *leihva*

męta 'mint', probably from Lat. *menta*

misa 'board, plate' ← Lat. *mēnsa* 'table'

mьša 'mass' ← Lat. *missa*

pila 'saw', probably from OHG *fīl* 'file'

pira 'bag' ← Gk. πήρα

polata 'palace' ← Gk. παλάτιον ← Lat. *palatium*

praprąda 'purple cloth' ← Gk. πορφύρα

raka 'grave, coffin', probably from Goth. *arka* 'moneybox, chest' or directly from Lat. *arca* 'chest, coffer, coffin'

sǫbota 'Saturday, Sabbath' ← Gk. σάββατον

spira 'contingent' ← Gk. σπεῖρα

trǫba 'horn', probably from OHG *trumba*

trěba 'need' ← Gmc. */þerb-/; cp. Goth. *þarba* 'poverty, need, want', *þaúrban* 'to need, be in want', *þaúrfts* 'need, necessity'[29]

41. Nouns in *-ina*

blьvotina 'vomit' ← *blьvota ← blьvati, bľujǫ* 'to vomit'

čistina 'purity' ← *čistъ* 'pure, clean'; Cp. *čistostь, čistota* 'id.'

desętina 'one tenth' ← *desętь* 'ten' or *desętъ* 'tenth'

družina 'companions, company' ← *drugъ* 'other, friend'

dupina 'opening, hole'

glǫbina 'depth, abyss' ← *glǫbokъ* 'deep'

godina 'time, hour, season' ← *godъ* 'time, year'

istina 'truth, reality' ← *istъ* 'true, real'

jazvina 'den, lair, hole' ← *jazva* 'wound'

kǫpina 'bramble, prickly bush'

konьčina 'end, death' ← *konьcь* 'id.'

maslina 'olive tree' ← *maslo* 'olive oil'

obьština 'that which is common, shared' ← *obьštь* 'common, real'

ot·ročina 'childhood' ← *ot·rokъ* 'child'

otьčina 'homeland' ← *otьcь* 'father'

pa(j)ǫčina 'cobweb' ← *pa(j)ǫkъ* 'spider'

pastvina 'pasture' ← *pastva* 'herd'

pǫčina 'open sea'

ras·palina 'hollow, chasm'

rogozina 'bast mat'

sědiny (pl. tant.) 'gray hair' ← *sědъ* 'gray'

slatina 'salt water' ← *slatъ* 'salty'; cp. *slanъ* 'id.'

starějьšina 'leader, ruler' ← *starějь*, gen. sg. *starějьša*, the comparative-superlative of *starъ* 'old'

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[29] The Gmc. root is related to OCS *trъpěti* 'to endure, put up with, suffer'.

tatьbina 'theft, robbery' ← *tatьba* 'id.'

tišina 'silence' ← *tixъ* 'silent'

u·davĺenina 'flesh of a strangled animal' ← *u·davĺenъ* ← *u·daviti* 'to strangle'

uńьšina 'that which is better or best' ← *uńьjь*, gen. sg. *uńьša* 'better, best'

xlěvina 'house, building, dwelling' ← *xlěvъ* 'cowshed'

xramina 'house, building, dwelling' ← x*ramъ* 'id.'

xyzina 'hut' ← *xyzъ* 'id.'

42. Nouns in *-ota*

čistota 'purity, piety' ← *čistъ* 'pure, clean, pious'; cp. *čistostь, čistina* 'id.'

dlьgota 'length' ← *dlьgъ* 'long'

dobrota 'virtue, beauty' ← *dobrъ* 'good'; cp. *dobrostь* 'id.'

junota 'youth, young man' ← *junъ* 'young';[30] cp. *junostь* 'youth'

krasota 'beauty, pleasure' ← *krasa* 'id.'

lěpota 'beauty' ← *lěpъ* 'beautiful'

nagota 'nudity' ← *nagъ* 'naked'; cp. *nagostь* 'id.'

ništeta 'poverty' ← *ništь* 'poor'

pěgoty (pl. tant.) 'leprocy'; cp. Lat. *pingere* 'paint, tattoo'

pravota 'justice' ← *pravъ* 'just, straight'; cp. *pravostь, pravyńi* 'id.'

pustota 'emptiness, void' ← *pustъ* 'empty'

rabota 'slavery' ← *rabъ* 'slave'[31]

rěsnota 'reality, truth' ← **rěsnъ* 'real'

sirota 'orphan' ← *sirъ* 'deprived'

skorota 'speed' ← *skorъ* 'quick, swift, fast'; cp. *skorostь* 'id.'

slěpota 'blindness' ← *slěpъ* 'blind'

sramota 'shame' ← *sramъ* 'id.'

suxota 'dryness, drought' ← *suxъ* 'dry'

sujeta 'vanity' ← *sujь* 'vane, futile'

světьlota 'shine, splendor' ← *světьlъ* 'shining, bright'; cp. *světьlostь* 'id.'

širota 'width' ← *širokъ* 'wide'

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[30] Cp. the two meanings of Eng. *youth*.

[31] However, *rabъ* seems to be an original adjective, cp. Lat. *orbus* 'deprived'. The notion "desubstantival" should therefore be understood only in a synchronic sense.

štedrota 'gentleness, mildness, compassion' ← *štedrъ* 'gentle, compassionate'

tęgota 'weight, burden, grief' ← *tęžькъ* 'heavy'; cp. *tęgostь*, *tęžestь* 'id.'

tixota 'compliance, humility' ← *tixъ* 'quiet, compliant, humble'; cp. *tixostь* 'id.', *tišina* 'silence'

toplota 'warmth, heat' ← *toplъ* 'warm, hot'; cp. *teplostь* 'id.'

tъšteta 'harm, loss' ← *tъštь* 'empty'

velikota 'great number, mass' ← *velikъ* 'great'; cp. *veličьje*, *veličьstvo*, *veličьstvьje* 'id.'

vysota 'height, highness' ← *vysokъ* 'high'

43. Simple */yā/-stems

43.1. Deverbal

buŕa 'storm'; cp. Lat. *furere* 'to rage, be furious', Skt. impv. 3ʳᵈ pl. *bhurántu* 'to quiver'

drěvo·dĕĺa 'carpenter', *ne·dĕĺa* 'Sunday' ← *dĕlati* 'to work'

kapĺa 'drop (of liquid)' ← *kapati*, *kapĺǫ* 'to drop' and/or *ka(p)nǫti* 'id.'

kropĺa 'drop' ← *kropiti* 'to sprinkle'; cp. the previous

krъmĺa 'food' ← *krъmiti* 'to feed'; cp. *krъma* 'id.'

kupĺa 'trade, market' ← *kupiti* 'to buy'; cp. *kupъ* 'id.'

na·dežda 'hope' ← *·dĕti*, *·deždǫ* 'to put, place, do'

nužda 'violence, intimidation, need, necessity' ← *nuditi* 'to do violence, intimidate, force'

pišta 'food' ← *pitěti* 'to feed, nourish'

po·steĺa 'bed' ← *stъlati*, *steĺǫ* 'to spread, stretch out'

prědъ·teča 'forerunner' ← *tešti* (*tek-*) 'to run'

pri·tъča 'parable' ← *tъknǫti* 'to touch'

pьŕa 'quarrel' ← *pьrěti* 'to argue'

srъdo·boĺa (sg. tant.) 'kin, family, relatives' ← *bolěti* 'to be sick, feel pain'

straža 'guard, watch' ← *strěšti* (*strěg-*) 'to watch, guard'

struja 'stream'; cp. Skt. *srávati* 'to flow'

sъ·ręšta 'attack, meeting' ← *sъ·rěsti* (*·ręšt-*) 'to meet'

šija 'neck' ← *šiti*, *šijǫ* 'to sew'[32]

tьĺa 'corrosion, rust, decay' ← *tьlěti* 'to decay'

velьmoža 'aristocrat' ← *mošti* (*mog-*) 'can, to be able to'

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[32] The original meaning of *šija* seems to have been 'collar' (ESRJa, s.v. *šeja*).

věja 'branch' ← *vějati, věją* 'to blow (of wind)'; cp. Skt. *vāyúḥ* 'wind'

věžda 'eyelid' ← *věděti* 'to know' (originally 'to have seen')

zaŕa 'dawn, daybreak, light' ← *zьrěti* 'to see, watch'[33]

zoŕa 'dawn, daybreak, light'; cp. the previous and Lith. *žarà* 'dusk'

žeĺa 'grief, sorrow' ← *želěti* 'to wish, want, long for'

žęžda 'thirst' ← *žędati, žęždą* 'to thirst, long for'

43.2. Deadjectival

rъžda 'rust'; cp. Lith. *rùdas* 'reddish brown'

suša 'dry land' ← *suxъ* 'dry'

tęža 'quarrel' ← *tęžьkъ* 'heavy, important, difficult'

43.3. Desubstantival

duša 'soul' ← *duxъ* 'spirit, ghost'

gospožda 'lady' ← *gospodь* 'lord'

koža 'skin' ← *koza* 'goat'

radošta 'joy' ← *radostь* 'id.'

svěšta 'candle' ← *světъ* 'light'

večeŕa 'supper' ← *večerъ* 'evening'

zažda 'spine' ← **zadь*; cp. *zadi* adv. 'behind, back'

zmьja 'snake' ← *zmьjь* 'dragon'

44. Nouns in *-ica*

ǫdica 'fish-hook'

ǫsobica 'revolt'

bagъrěnica 'purple cloth' ← **bagъrěnъ* 'purple' ← *bagъrъ* 'purple color'

blǫdьnica 'prostitute, adulteress' ← *blǫdьnъ* 'indecent, obscene'

bogo·rodica 'mother of God' ← *roditi* 'to beget, give birth to'

cěsarica 'empress' ← *cěsaŕь* 'emperor'

cěvьnica 'lyre' ← **cěvьnъ* ← **cěva*

crъkъvica 'chapel' ← *crъky* 'church, temple'

črьnica 'nun, mulberry' ← *črьnъ* 'black'

desnica 'right hand' ← *desnъ* 'right'

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[33] Cp. OIr. *súil* 'eye', probably from PIE **/sūl-/* 'sun'.

děvica 'girl, maiden' ← *děva* 'maiden, virgin'

dojilica 'wet nurse' ← the act. past ptcl. *dojilъ* ← *dojiti* 'to breast-feed'

dvьrьnica 'female gatekeeper' ← *dvьrьnъ* 'pertaining to doors'

dъštica 'small tablet, plate' ← *dъskъ* 'tablet, plate'

dьnьnica 'Morning star' ← *dьnьnъ* 'pertaining to days, daily'

gorьnica 'room, chamber' ← *gorьnъ* 'above, on high'

grěšьnica 'sinner woman' ← *grěšьnъ* 'sinful'

grъlica 'turtle-dove' ← *grъlo* 'throat'

is·po·vědьnica 'advocate, proponent' ← *is·po·vědьnъ* 'advocating, supporting'

junica 'young cow' ← *junъ* 'young'

kadilьnica 'censer' ← *kadilьnъ* 'pertaining to incense'

kapištьnica 'pagan temple' ← *kapištьnъ* 'heathen, pagan'

kašica 'porridge' ← **kaša*; cp. Ru. *káša* 'id.'

kolesьnica 'chariot' ← **kolesьnъ* ← *kolo, kolese* 'wheel'

košьnica 'basket' ← **košьnъ* ← *košь* 'id.'

krinica 'spring, source' ← Gk. κρήνη 'id.'

krupica 'crumb'

krъvo·točica 'haemophiliac woman' ← *točiti* 'to spill, shed'

kumirьnica 'pagan temple' ← **kumirьnъ* ← *kumirъ* 'idol, pagan deity'

kъńižica 'document, message' ← *kъńigy* (pl. tant.) 'books, writings, scriptures'

ladьjica 'boat' ← *ladьji* 'ship, boat'

lěgalьnica 'bedroom' ← **lěgalьnъ* ← **lěgalo* 'bed'; cp. *sědalo* 'seat'

lěstvica 'staircase', probably from **lěstva* < **lěstъ*, a deverbal nomen actionis in **/-t-u-/* from
    lěsti (*lěz-*) 'to go, walk'

ĺubo·dějica 'prostitute' ← *dějati, dějǫ* 'to do, make'

mǫčenica 'martyr' ← the pass. past ptcl. *mǫčenъ* ← *mǫčiti* 'to torment, torture'

mědьnica 'coin' ← *mědьnъ* '(made of) bronze'

mytьnica 'the Customs' ← **mytьnъ* ← *myto* 'gift, bribe'

mъšica 'fly'

mьzdьnica 'the Customs' ← **mьzdьnъ* ← *mьzda* 'reward, payment'

nožьnicę (pl. tant.) 'sheath, scabbard' ← *nožьnъ ← *nožь* 'knife'[34]

ob·noštьnica 'night service (at church)' ← *ob·noštьnъ* 'lasting all night'

ot·rokovica 'girl' ← *ot·rokъ* 'child, boy'[35]

palica 'rod, stick'

panica 'vessel'

paničica 'vessel' ← *panica*

peštьnica 'oven' ← *peštьnъ* 'pertaining to ovens' ← *peštь* 'oven'

plaštanica 'towel' ← *plaštanъ ← *plaštь* 'cloak, mantle'

plenica 'chain'

plěnьnica 'prisoner, hostage' ← *plěnьnъ ← *plěnъ* 'captivity, imprisonment'

plěvьnica 'granary' ← *plěvьnъ* 'pertaining to chaff'

po·moštьnica 'helper, assistant' ← **po·moštьnъ* ← *po·moštь* 'help'

pońavica 'towel' ← *pońava* 'id.'

pro·ročica 'female prophet' ← *pro·rokъ* 'prophet'

puštenica 'divorced woman' ← the pass. past ptcl. *puštenъ* ← *pustiti* 'to let go'

pъtica 'bird'; cp. *pъtenьcь* 'fledgling'

pьjanica masc. 'drunkard' ← *pьjanъ* 'drunken'

pьšenica 'corn, grain' ← obsolete pass. past ptcl. *pьšenъ ← *pьxati; cp. Ru. *pixát'* 'to jostle, push', Lat. *pistrīnum* 'mill, bakery', Skt. *pináṣṭi* 'to crush', pass. past ptcl. *piṣṭá-*

roditelьnica 'mother' ← *roditelьnъ 'pertaining to parents' ← *roditéĺь* 'father, begetter'

rybica 'fish' ← *ryba* 'id.'

sěnьnica 'hay barn' ← *sěnьnъ ← *sěno* 'grass, hay'

skrinica 'coffin, box' ← *skrińa* 'id.'

služitelьnica 'servant' ← *služitelьnъ 'pertaining to servants' ← *služitéĺь* 'servant'

smokъvьnica 'fig tree' ← *smokъvьnъ* 'pertaining to fig'

sračica 'underwear, shirt'

stьklěnica 'cup, vessel' ← *stьklěnъ ← *stьklo 'glass'; cp. Ru. *stekló* 'glass'

šujica 'left hand' ← *šujь* 'left'

telica 'calf' ← *telę 'calf'; cp. Ukr. *teljá* 'calf'

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[34] The adjective *nožьnъ* occurs but only in the sense 'pertaining to legs', i.e. from *noga* 'leg'.

[35] One would expect **ot·ročica*. The form may have been influenced by *děvica* 'id.'.

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tręsavica 'ague, malaria' ← from **tręsava* ← *tręsti* (*tręs-*) 'to shake'

tьmьnica 'prison, jail' ← *tьmьnъ* 'dark'

učenica 'pupil, disciple' ← the pass. past ptcl. *učenъ* ← *učiti* 'to teach'

u·myvalьnica 'washbowl' ← **u·myvalьnъ* ← **u·myvalo*; cp. Cz. *u·myvadlo* 'id.'

utrьnica 'morning service, matins' ← *utrьńь* 'morning'

vijalica 'storm' ← an obsolete act. past ptcl. **vijalъ* ← *vějati, vějǫ* 'to blow (of wind)'

vladyčica 'lady' ← *vladyka* 'lord, ruler'

vratarica 'female gatekeeper' ← *vrataŕь* 'gatekeeper'

vrьbьnica 'Palm Sunday' ← **vrьbьnъ* ← **vrьba* 'willow'; cp. *vrьbьje* (coll.) 'willows'

vъz·glavьnica 'pillow' ← *glavьnъ* 'pertaining to heads'

vьdovica 'widow' ← *vьdova* 'id.'

za·stǫpьnica 'assistant, aid, helper' ← **za·stǫpьnъ* ← *za·stǫpъ* 'assistance, help'

zĕnica 'pupil (of the eye)'

zlatica 'gold coin' ← *zlato* 'gold'

žitьnica 'granary' ← *žitьnъ* 'pertaining to grain, crops'

45. Nouns in -ьca

45.1. Masculines

jadьca 'glutton, hog' ← *jasti* (*jad-*) 'to eat'

pivьca 'drunkard', *vino·pivьca* 'id.' ← *piti, pьjǫ* 'to drink', with a liaison consonant -*v*-

sĕčьca 'executioner, headsman' ← *sĕšti* (*sĕk-*) 'to cut, chop off, behead'; cp. *sĕčьcь* 'id.'

u·bijьca 'killer, murderer' ← *u·biti, u·bьjǫ* 'to kill'; also *u·bojьca*, as if from *u·bojь* 'murder, manslaughter'

vino·pьjьca 'drunkard' ← *piti, pьjǫ* 'to drink'

45.2. Feminines

dvьrьcę (pl. tant.) 'door' ← *dvьrь* 'id.'

myšьca 'hand, shoulder, muscle' ← *myšь* 'mouse'

ovьca 'sheep' ← **ovь*; cp. Lith. *avìkė* 'lamb' ← *avìs* 'sheep'

trojьca 'trinity' ← *tri, troji* 'three'

46. Nouns in -ьba

alъčьba 'fast' ← *alъkati, alъčǫ* 'to fast'; cp. *alъkanьje* 'id.'

cĕlьba 'healing, cure' ← *cĕliti* 'to heal, cure'; cp. *cĕly* 'id.'

družьba 'friendship' ← *drugъ* 'friend'

lěčьba 'healing' ← **lěkъ* 'medicine' or *lěčiti* 'to heal' ← Goth. *lekeis* 'physician', *lekinon* 'to heal'

molьba 'request, prayer' ← *moliti* 'to ask, beg, pray'; cp. *moĺenьje*, *molitva* 'id.'

sǫdьba 'judgment, verdict, justice, decision' ← *sǫditi* 'to judge'

svatьba 'wedding' ← **svatati* 'to marry, propose'

svętьba 'consecration, sanctification' ← *svętiti* 'to sanctify' or directly from *svętъ* 'holy'; cp. *svętyńi* 'holiness, sanctification, temple', *svętostь* 'holiness, sanctuary'

služьba 'service, assistance' ← *služiti* 'to serve, assist' or directly from *sluga* 'servant'; cp. *služenьje* 'id.'

stradьba 'suffering' ← *stradati, straždǫ* 'to work, suffer'; cp. *stradanьje, strastь* 'id.'

stražьba 'guard, watch' ← *stražь* 'guard (person)'

tatьba 'theft, robbery' ← *tatь* 'thief'

vlъšьba 'magic, witchcraft' ← *vlъxvъ* 'witch, wizard'; cp. *vlъšьstvo* 'id.'

vračьba 'cure, treatment, medicine' ← *vračь* 'physician'

žladьba '(financial) loss' (for older **žlědьba*) ← *žlěsti* (*žlěd-*) 'to repay, compensate'

47. Nouns in *-tva*

britva 'razor' (originally 'shaving') ← **briti* 'to shave'; cp. Ru. *brit'* 'to shave'

klętva 'oath, curse' ← *klęti* (*klьn-*) 'to swear'

lovitva 'hunt, prey, catch' ← *loviti* 'to hunt, catch'

molitva 'request, prayer' ← *moliti* 'to ask for, beg, pray'

pastva 'herd' ← *pasti* (*pas-*) 'to shepherd'

rъvatva 'pain, ache' ← **rъvati*; cp. Ru. *rvat'* 'to tear, break'

želětva 'grief' ← *želěti* 'to wish, want'; cp. *žeĺa* 'id.'

žętva 'harvest' ← *žęti* (*žьn-*) 'to reap, harvest'

žrьtva 'sacrifice, offering' ← *žrěti* (*žьr-*) 'to sacrifice, offer'

48. Asuffixal adjectives

ǫrodъ 'stupid'

blagъ 'good'

čistъ 'pure, clean'

gluxъ 'deaf'

grǫbъ 'uneducated, ignorant'

dragъ 'dear, expensive'; cp. Latv. *dārgs* 'id.'[36]

junъ 'young'

lěnъ 'lazy'; cp. Lith *lė́nas* 'slow, calm', Lat. *lēnis* 'smooth, gentle, easy, calm'

milъ 'gentle, kind'

nagъ 'naked'

němъ 'mute'; cp. Latv. *mēms* 'id.'[37]

plavъ 'gold-colored'

ploskъ 'flat, even, level'

pustъ 'empty, desolate'

radъ 'glad'

sědъ 'gray (of hair)'

sirъ 'deprived'

skorъ 'fast, quick'

sugubъ 'twofold, double'

sujь 'vane, futile'

sverěpъ 'wild, untamed, savage'

tixъ 'silent, quiet'

tvrьdъ 'solid, adamant, manly'

u·dobъ 'easy, facile'

49. Asuffixal desubstantival adjectives

četvrě·nogъ 'four-legged' (i.e. 'animal'), *suxo·nogъ* 'crippled' ← *noga* 'leg'

gromъ·glasъ 'having a thunderous voice' ← *glasъ* 'voice'

ino·čędъ 'one-born, only (of a child)' ← *čędo* 'child'

ino·rogъ 'one-horned' (i.e. 'unicorn') ← *rogъ* 'horn'

malo·věrъ 'of little faith', *po·dobьno·věrъ* 'trustworthy' ← *věra* 'faith'

prosto·vlasъ 'having disheveled hair' ← *vlasъ* 'hair'

suxo·rǫkъ 'having a withered hand' ← *rǫka* 'hand'

xudo·silъ 'weak' ← *sila* 'strength'

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[36] The Slavic circumflex pitch (Ru. *dórog*, SCr. *drâg*) does not exactly agree with Latv. *ā*.
[37] Slavic has dissimilated the initial nasal (ESRJa., s.v. *nemój*).

xudo·umъ 'unintelligent' ← *umъ* 'intellect, reason'

zlato·ustъ 'having a golden mouth' ← *usta* (du. tant.) 'mouth', translates the Gk. proper
    name Χρυσό·στομος

žesto·srъdъ 'hard-hearted, severe', *milo·srъdъ* 'sweet-tempered, gentle', *tęžьko·srъdъ* 'hard-
    hearted, heartless' ← *srъdь(ce)* 'heart'

50. Asuffixal deverbal adjectives

lěpъ 'beautiful, proper' ← *pri·lьpati*, *pri·lьpl̨ǫ* 'to stick, cling to', *pri·lьpěti*, *pri·lьpl̨ǫ* 'id.',
    pri·lěpiti 'to attach, add'

pravъ 'right, straight, just', as if from */prō·bʰw-o-/ ← */bʰū-/ 'be', OCS *byti*; cp. Lat. *pro·
    bus* 'good, clever', Skt. *pari·bhú-* 'surrounding'

prostъ 'simple, honest, unlearned, free', as if from */pro·stə-/ ← */stā-/ : */stə-/ 'to stand'

slabъ 'weak, fatigued' ← */slēb-/; cp. Goth. *slepan* 'to sleep'

slěpъ 'blind' ← *o·slьpnǫti* 'to go blind'

xudъ 'small, weak, miserable' ← */kwsowd-/ : */kwsewd-/; cp. Gk. ψεύδειν 'to cheat', Skt.
    kṣódati 'to grind'

51. Adjectives in */-n-o-/

desnъ 'right'; cp. Lith. *dẽšinas*, Skt. *dákṣina-*, Lat. *dexter*, Gk. δεξιός, Goth. *taíhswo*

groznъ 'terrible' ← *groza* 'horror'

jasnъ 'bright, clear, clean'; cp. Lith. *áiškus* 'clear'

na·prasnъ 'swift, strong'; cp. Ru. *prask* 'clatter, din, roar'

prisnъ 'eternal'; cp. Lat. *prīscus* 'old, ancient'

pri·tranъ 'piercing, strong'; cp. Ru. *toropít'* 'to hurry'

pro·stranъ 'wide, spacious, broad' ← *pro·strěti*, *pro·stьrǫ* 'to stretch'

slanъ 'salty' ← *solь* 'salt'

těsnъ 'narrow'; cp. Ru. *tískat'* 'to squeeze'

želěznъ 'made of iron' ← *želězo* 'iron'

52. Adjectives in *-inъ*

52.1. From appellatives

amemurmnьjinъ 'caliph´s' ← *amemurmnьji* 'caliph'

bogo·rodičinъ 'mother of God´s' ← *bogo·rodica* 'mother of God'

golǫbinъ 'dove´s, pertaining to doves' ← *golǫbь* 'dove'

gvozdьjinъ 'pertaining to nails' ← *gvozdьjь* 'nail'

igъlinъ 'needle´s' ← **igъla* 'needle'; cp. Ru. *iglá*

lędvьjinъ 'pertaining to kidneys' ← *lędvьję* (pl. tant.) 'kidneys'

mamoninъ 'mammon´s' ← *mamona* 'mammon'

ne·prijazninъ 'devil´s, diabolic, demonic' ← *ne·prijaznь* 'evil, devil, demon'

osьlętinъ 'ass´s, asinine' ← *osьlę* 'ass'

rabyńinъ 'slave´s' ← *rabyńi* 'female slave'

smokъvinъ 'pertaining to fig' ← *smoky, smokъve* 'fig'

sotoninъ 'Satan´s, satanic' ← *sotona* 'Satan'

voje·vodinъ 'commander´s' ← *voje·voda* 'commander'

zmьjinъ 'snake´s, dragon´s' ← *zmьja* 'snake' and *zmьjь* 'dragon'

zvěrinъ 'pertaining to animals, bestial' ← *zvěrь* 'animal'

52.2. From foreign proper names

ijemenijinъ ← **ijemenija* ← Gk. Ἰεμενί

ijudinъ ← *ijuda* ← Gk. Ἰούδας; cp. *ijudovъ* 'id.'

ijulijaninъ ← *ijulijani* ← Gk. Ἰουλιανή

ilijinъ ← *ilija* ← Gk. Ἠλίας

ioninъ ← *iona* ← Gk. Ἰωνᾶς

irodijadinъ ← *irodija*, gen. *irodijady* ← Gk. Ἡρῳδιάς, gen. Ἡρῳδιάδος[38]

isaijinъ ← *isaija* ← Gk. Ἡσαῖας

kaijafinъ ← *kaijafa* ← Gk. Καϊάφας

levьgijinъ ← *levьgijь* ← Gk. Λευί

manasijinъ ← *manasьji* ← Gk. Μανασσῆς

marijinъ ← *marija* ← Gk. Μαρία

mosijinъ ← *mosijь* ← Gk. Μωσῆς; cp. *moseovъ* 'id.'

navginъ ← **navgьji* ← Gk. Ναυῆ

pionijinъ ← *pionijь* ← Gk. Πιόνιος

susьjinъ ← **susьji* ← Gk. Χουσί

urijinъ ← *urija* ← Gk. Οὐρίας

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[38] OCS has retained the (from the synchronic point of view) heteroclitic nature of the Gk. original.

varaaxijinъ ← **varaxija* ← Gk. Βαραχίας

xuzěaninъ ← **xuza* ← Gk. Χουζᾶ

zaxarijinъ ← *zaxarija* ← Gk. Ζαχαρίας

θominъ ← *θoma* ← Gk. Θωμᾶς

53. Adjectives in *-ěnъ*

asijanъ 'Asian' ← *asija* 'Asia'

bes·tъlěnъ 'indestructible' ← *tъlěti* 'to decay, be destroyed'

cvětьčanъ 'blooming, covered with flowers' ← *cvětьcь* 'flower'

dobro·dějanъ 'virtuous' ← *děti*, *dějati* 'to do, make'

drěvěnъ 'wooden, made of wood' ← *drěvo* 'tree'

jęčьněnъ 'made of barley', probably assimilated from **jęčьměnъ* ← **jęčьmy* or **jęčьmenь*
'barley'; cp. Ru. *jačméń* 'barley'

kaměnъ 'stony, rocky, made of stone' ← *kamy* 'stone'

lьněnъ 'flaxen, linen' ← **lьnъ* 'linen'; cp. Ru. *lën*, Cz. *len*, Gk. λίνον, Lat. *linum*

měděnъ 'bronze, made of bronze' ← *mědь* 'bronze'

moždanъ 'pertaining to brain, marrow' ← **mozgъ* 'brain, marrow'; cp. Ru. *mozg* 'brain'

ocьtěnъ 'spiced with vinegar' ← *ocьtъ* 'vinegar'

plaměnъ 'fiery' ← *plamy* 'flame'

plъtěnъ 'bodily, carnal' ← *plъtь* 'flesh, body'

praxněnъ 'decayed, rotten, decomposed' ← *praxъ* 'dust'[39]

pьjanъ 'drunken' ← *piti*, *pьją* 'to drink'

rožanъ 'made of horn' ← *rogъ* 'horn'

ruměnъ 'florid, rosy', as if from **/rowdʰ-men-/*; cp. *ruda* 'ore', *rъžda* 'rust'

sъ·do·stojanъ 'proper, corresponding' ← *stojati*, *stoją* 'to stand'

šipъčanъ 'prickly' ← *šipъkъ* 'rose'

trъněnъ 'thorny, made of thorn' ← *trъnъ* 'thorn'; cp. *trъnovъ* 'id.'

usměnъ 'of skin, leathern' ← **usma*; cp. OR *usmá* 'leather'

usnijanъ 'of skin, leathern' ← **usnьje*; cp. OR *usnьje* 'leather'

vlasěnъ 'made of (horse) hair' ← *vlasъ* 'hair'

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[39] The *-n-* may have been inserted to prevent the First Palatalization of the preceding velar.

54. Adjectives in *-ьnъ*

54.1. From nouns

aerьnъ 'aerial' ← *aerъ* 'air'

ǫgъlьnъ 'fundamental, basic' ← *ǫgъlъ* 'corner, angle'

ǫtrobьnъ 'pertaining to abdomen, intestines' ← *ǫtroba* 'intestines, internal organs, womb'

bědьnъ 'poor, needy, distressed' ← *běda* 'poverty, need, distress'

běsьnъ 'demonic' ← *běsъ* 'demon'

blǫdьnъ 'indecent, obscene' ← *blǫdъ* 'fornication, prostitution'

blędьnъ 'talking rubbish' ← *blędь* 'nonsense'

bolьnъ 'sick' ← *bolь* 'sickness'

bolěznьnъ 'sick' ← *bolěznь* 'sickness'

božьstvьnъ 'divine' ← *božьstvo* 'divinity'

bračьnъ 'pertaining to marriage' ← *brakъ* 'marriage'

brěmenьnъ 'heavily laden' ← *brěmę* 'burden'

brěžьnъ 'pertaining to a steep bank' ← *brěgъ* 'steep bank'

brьnьnъ 'made of dirt, dust' ← *brьna* 'dirt, dust'

burьnъ 'stormy' ← *buŕa* 'storm'

cělъvьnъ 'healing' ← *cěly* 'healing, cure'

cělьbьnъ 'healing' ← *cělьba* 'healing, cure'

crькъvьnъ 'ecclesial, pertaining to church' ← *crьky* 'church'

cvětьnъ 'blooming, covered with flowers' ← *cvětъ* 'flower'

časьnъ 'pertaining to time' ← *časъ* 'time'

čęstьnъ 'partial, unfinished' ← *čęstь* 'part'

čislьnъ 'defined, counted' ← *čislo* 'number'

člověčьnъ 'human' ← *člověkъ* 'man'; cp. *člověčь* 'id.'

črěvьnъ 'pertaining to stomach' ← *črěvo* 'stomach'

črьmьnъ 'red' ← **črьmь* 'worm'; cp. Lith. *kirmìs* 'worm'

čudesьnъ 'astonishing, wonderful' ← *čudo* 'wonder'

čudьnъ 'astonishing, wonderful' ← *čudo* 'wonder'

čuvьstvьnъ 'perceived by senses' ← *čuvьstvo* 'sense'

čьstьnъ 'honorable, respected' ← *čьstь* 'honor, respect'

dǫbravьnъ 'wooded, pertaining to forests' ← *dǫbrava* 'grove'

dějьstvьnъ 'acting, doing' ← *dějьstvo* 'action'

děvьstvьnъ 'virgin´s, virgin-like' ← *děvьstvo* 'virginity'

divьnъ 'astonishing, wondrous' ← *divo* 'wonder', *divъ* 'astonishment'

dlъžьnъ 'indebted, encumbered, appropriate' ← *dlъgъ* 'debt'

dobĺestьnъ 'valiant, noble' ← *dobĺestь* 'valor'

do·volьnъ 'sufficient' ← *do·volь* 'sufficiency'

drьžavьnъ 'powerful, mighty, pertaining to kingdoms' ← *drьžava* 'power, might, kingdom'

dušьnъ 'pertaining to souls' ← *duša* 'soul'

dъždevьnъ 'rainy, pertaining to rain' ← *dъždь*, a former */u/-stem; cp. *dъždevъ* 'id.'

dъždьnъ 'rainy' ← *dъždь*; cp. *dъždevъ*, *dъždevьnъ* 'id.'

dьnevьnъ 'daily, pertaining to days' ← *dьnь* 'day', analogical; cp. *dьńь* 'id.'

dьnьnъ 'daily, pertaining to days' ← *dьnь* 'day'; cp. *dьńь*, *dьnevьnъ* 'id.'

gadьnъ 'disgusting' ← *gadъ* 'snake, reptile'

glavьnъ 'pertaining to heads' ← *glava* 'head'

glinьnъ 'made of clay' ← **glina* 'clay'; cp. Ru. *glína*

gnǫsьnъ 'repulsive, disgusting'; cp. *gnǫsiti sę* 'despise, reject'

gněvьnъ 'angry' ← *gněvъ* 'anger'; cp. *gněvьlivъ* 'id.'

gnojьnъ 'covered with boils, ulcers' ← *gnojь* 'dung, pus'

gorьnъ 'mountainous' ← *gora* 'mountain'

goŕušьnъ 'pertaining to mustard' ← **goŕuxъ* or **goŕuxa*

gradьnъ 'pertaining to cities, towns' ← *gradъ* 'city, town'

grěšьnъ 'sinful' ← *grěxъ* 'sin'

grobьnъ 'pertaining to graves' ← *grobъ* 'grave'

gromьnъ 'thundering' ← *gromъ* 'thunder'; cp. *gromovъ* 'id.'

gubitelьnъ 'destructive, pernicious' ← *gubiteĺь* 'destroyer'

is·konьnъ 'original' ← *konь* 'origin, beginning'

is·kusьnъ 'tried, experienced' ← *is·kusъ* 'trial, test, experience'

is·po·vědьnъ 'confessing, acknowledging' ← *is·po·vědь* 'confession'

istinьnъ 'real, true, correct, just' ← *istina* 'truth, reality'

is·xodьnъ 'pertaining to departures' ← *is·xodъ* 'departure, Exodus'

iz·borьnъ 'selected' ← **iz·borъ* 'selection' ← *iz·bьrati* 'to select'

izd·rędьnъ 'unusual' ← *rędъ* 'line, order'

iz·věstьnъ 'certain, known' ← *věstь* 'news, message, announcement'; cp. *iz·věstъ* 'id.'

jamьnъ 'pertaining to ditches' ← *jama* 'ditch'

jazvьnъ 'wounded' ← *jazva* 'wound'

języčьnъ 'chatty, garrulous, heathen' ← *językъ* 'tongue, language, nation'

junotьnъ 'youthful' ← *junota* 'youth, young man'

kadilьnъ 'pertaining to incense' ← *kadilo* 'incense'

kamenьnъ 'stony, made of stone' ← *kamy* 'stone'; cp. *kamĕnъ* 'id.'

kanъdilьnъ 'pertaining to lamps' ← *kanъdilo* 'lamp'

kapištьnъ 'heathen, pertaining to heathen idols' ← *kapište* 'idol'

kinъsьnъ 'pertaining to taxes or taxation' ← *kinъsъ* 'tax'; cp. *kinъsovъ* 'id.'

klevetьnъ 'slandering' ← *kleveta* 'slander, false accusation'

klętvьnъ 'pertaining to oaths' ← *klętva* 'oath, curse'

kolesьničьnъ 'chariot´s, pertaining to chariots' ← *kolesьnica* 'chariot'

konьčьnъ 'final, last' ← *konьcь* 'end'

końьnъ 'horse´s, pertaining to horses' ← *końь* 'horse'

kotorьnъ 'quarrelsome' ← *kotora* 'quarrel'

kožьnъ 'made of leather' ← *koža* 'leather'

krasьnъ 'beautiful' ← *krasa* 'beauty'

krotostьnъ 'humble' ← *krotostь* 'humbleness'

krъčažьnъ 'made of clay' ← *krъčagъ* 'clay pot'

krъvьnъ 'bloody' ← *krъvь* 'blood'

krьstьnъ 'of cross, pertaining to crosses' ← *krьstъ* 'cross'

kupĺьnъ 'commercial, pertaining to trade' ← *kupĺa* 'trade'

kvasьnъ 'sour' ← *kvasъ* 'leaven'

kъńižьnъ 'literary, pertaining to books' ← *kъńigy* 'books, scriptures'

ląžьnъ 'pertaining to groves, woods' ← *lągъ* 'grove'

lětьnъ 'temporal, pertaining to time' ← *lěto* 'summer, year, time'

lozьnъ 'pertaining to grapes' ← *loza* 'grape'

lъbьnъ 'pertaining to heads, skulls' ← **lъbъ*; cp. OR *lъbъ* 'skull'

lъžьnъ 'false, lying' ← *lъža* 'lie'; cp. *lъžь, lъživъ* 'id.'

lьstьnъ 'deceitful, sly' ← *lьstь* 'intrigue, slyness'; cp. *lьstivъ* 'id.'

ĺubъvьnъ 'pertaining to love, loving' ← *ĺuby* 'love'

maslinьnъ 'pertaining to olive trees' ← *maslina* 'olive tree'

mǫčьnъ 'pertaining to pain, torture' ← *mǫka* 'suffering, pain, torture'

mědьnъ 'bronze, made of bronze' ← *mědь* 'bronze'; cp. *měděnъ* 'id.'

měsęčьnъ 'lunar, monthly' ← *měsęсь* 'Moon, month'

mętežьnъ 'rebellious, revolting' ← *mętežь* 'revolt, rebellion'

milo·srъdьnъ 'gentle, merciful' ← *srъdь(ce)* 'heart'; cp. *milo·srъdъ* 'id.'

milostьnъ 'pertaining to mercy, compassion' ← *milostь* 'mercy, compassion'

mirьnъ 'peaceful' ← *mirъ* 'peace'

mirьnъ 'earthly, mundane, pertaining to the world' ← *mirъ* 'world'

mlěčьnъ 'milky, of milk' ← *mlěko* 'milk'

mokrotьnъ 'wet, moist' ← *mokrota 'moisture, wetness' ← *mokrъ* 'wet, moist'

molitvьnъ 'asking, begging' ← *molitva* 'prayer, asking'

moštьnъ 'able, capable, possible' ← *moštь* 'power, ability'

mračьnъ 'dark' ← *mrakъ* 'darkness'

mrazьnъ 'frosty, pertaining to frost' ← *mrazъ* 'frost'

myslьnъ 'thinking, wise, spiritual' ← *myslь* 'thought, intention, opinion'

mÿrьnъ 'pertaining to myrrh' ← *mÿra* and *mÿro* 'myrrh'

nǫždьnъ 'violent, necessary' ← *nǫžda* 'violence, necessity'

nebesьnъ 'heavenly' ← *nebo* 'heaven'

noštьnъ 'nightly, nocturnal' ← *noštь* 'night'

nožьnъ 'pertaining to legs, feet' ← *noga* 'leg, foot'

ńivьnъ 'pertaining to fields' ← *ńiva* 'field'

ob·(v)itělьnъ 'inhabitable' ← *ob·(v)itělь* 'dwelling'

ob·(v)lačьnъ 'cloudy' ← *ob·(v)lakъ* 'cloud'

ob·(v)yčajьnъ 'common, usual' ← *ob·(v)yčajь* 'custom, manner, habit'

осьtьnъ 'sour' ← *осьtъ* 'vinegar'; cp. *осьtěnъ* 'spiced with vinegar'

očesьnъ 'pertaining to eyes' ← *oko* 'eye'

ognьnъ 'fiery' ← *ognь* 'fire'

o·deždьnъ 'pertaining to clothes' ← *o·dežda* 'cloth, dress'

o·statъčьnъ 'remaining' ← *o·statъkъ* 'remains, relic'

o·voštьnъ 'for fruits' ← *o·vošte* 'fruits'

pa·gubьnъ 'destructive' ← *pa·guba* 'destruction, ruin'

pǫtьnъ 'pertaining to roads' ← *pǫtь* 'road'

pečalьnъ 'mournful, sad' ← *pečalь* 'mourning, sadness, grief'

pešterьnъ 'pertaining to caves' ← *peštera* 'cave'

peštьnъ 'pertaining to ovens' ← *peštь* 'oven'

pěnьnъ 'foamy, foaming' ← *pěny* (pl. tant.) 'foam'

pěsnьnъ 'pertaining to singing, songs' ← *pěsnь* 'song, singing'

pismenьnъ 'written' ← *pismę* 'letter'

pištьnъ 'filled with joy, pleasure' ← *pišta* 'food, bliss, pleasure'

plačevьnъ 'pertaining to crying' ← *plačь* 'cry', possibly an old */yu/-stem

plamenьnъ 'fiery, flaming' ← *plamy* 'flame'; cp. *plaměnъ* 'id.'

plaštaničьnъ 'pertaining to towels' ← *plaštanica* 'towel'

plemenьnъ 'tribal' ← *plemę* 'tribe'

plěvьnъ 'pertaining to chaff' ← *plěva* 'chaff'

plodьnъ 'fruitful, fertile' ← *plodъ* 'fruit'; cp. *plodovitъ* 'id.'

plъtьnъ 'carnal, pertaining to flesh' ← *plъtь* 'flesh, body'; cp. *plъtěnъ* 'id.'

po·dobьnъ 'similar, proper, worthy' ← *po·doba* 'manner'

po·kojьnъ 'peaceful, quiet' ← *po·kojь* 'peace, tranquility'

po·lьǧьnъ 'useful' ← *po·lьǧa* 'usefulness, benefit'

postьnъ 'pertaining to fast' ← *postъ* 'fast'

potьnъ 'sweaty' ← *potъ* 'sweat'

pravьdьnъ 'just, true, proper' ← *pravьda* 'justice, truth'

pustynьnъ 'deserted, desolate' ← *pustyńi* 'desert, wasteland'

pьсьlьnъ 'pitchy' ← *pьсьlъ* 'pitch'

pьšeničьnъ 'made of wheat, pertaining to wheat, grain' ← *pьšenica* 'wheat, grain'

pьšenьnъ 'made of wheat, pertaining to wheat, grain' ← **pьšeno*; cp. Ukr. *pšonó*

rabotьnъ 'pertaining to service, slavery' ← *rabota* 'slavery, service'

radostьnъ 'merry, glad' ← *radostь* 'joy'

ratьnъ 'hostile, adversary' ← *ratь* 'war, fight'

rǫčьnъ 'pertaining to hands, manual' ← *rǫka* 'hand'

rǫžьnъ 'mocking, malicious' ← *rǫgъ* 'mockery'

rěčьnъ 'pertaining to rivers' ← *rěka* 'river'

rizьnъ 'pertaining to cloaks' ← *riza* 'cloak'

roždьstvьnъ 'related by blood' ← *roždьstvo* 'birth'

sǫdьnъ 'pertaining to judge, court, justice' ← *sǫdъ* 'judgment, court of law, verdict'

selьnъ 'pertaining to fields' ← *selo* 'field'

sětьnъ 'mournful, sad' ← *sětь* 'net, trap'

silьnъ 'strong, mighty' ← *sila* 'strength, might'

skotьnъ 'pertaining to cattle' ← *skotъ* 'cattle'; cp. *skotьjь* 'id.'

skrъbьnъ 'mournful, sad' ← *skrъbь* 'mourning, grief'

skvrьnъ 'impure, repulsive' ← an obsolete **skvrъ* or **skъrъ*, related to Gk. σκώρ 'dung'

slastьnъ 'pleasant, sweet' ← *slastь* 'pleasure'

slavьnъ 'famous, glorious' ← *slava* 'fame, glory'

slovesьnъ 'pertaining to words, speech, talking' ← *slovo* 'word, speech'

službьnъ 'pertaining to service' ← *služьba* 'service'

slъnьčьnъ 'sunny' ← *slъnьce* 'sun'

slьzьnъ 'pertaining to tears' ← *slьza* 'tear'

smokъvьničьnъ 'pertaining to fig' ← *smokъvьnica* 'fig tree'

smokъvьnъ 'pertaining to fig' ← *smoky* 'fig'

smradьnъ 'stinking' ← *smradъ* 'stench'

solьnъ 'salty' ← *solь* 'salt'; cp. *slanъ* 'id.'

spěšьnъ 'worthy of effort' ← *spěхъ* 'effort'

sramьnъ 'shameful, pertaining to shame' ← *sramъ* 'shame'

srьdьčьnъ 'pertaining to heart' ← *srьdьce* 'heart'; cp. *milo·srьdъ, milo·srьdьnъ* 'gentle, kind-hearted'

stepеньnъ 'pertaining to staircases or steps' ← *stepеnь* 'step'

stranьnъ 'foreign' ← *strana* 'country, side, region'

strastьnъ 'suffering, tormenting' ← *strastь* 'suffering, torment'

strašьnъ 'terrible, frightening' ← *straхъ* 'terror, fear'

strojьnъ 'proper, favorable' ← *strojь* 'order'

strъpъtьnъ 'crooked' ← **strъpъtъ*; cp. *strъpъtivъ* 'id.'

studьnъ 'shameful' ← *studъ* 'shame'

sujetьnъ 'small, insignificant' ← *sujeta* 'vanity'

svętynьnъ 'holy, sanctified' ← *svętyńi* 'sanctuary, holiness, sanctification'

sьrebrьnъ 'made of silver' ← *sьrebro* 'silver'

šesto·krilьnъ 'six-winged' ← *krilo* 'wing'; cp. *krilatъ* 'winged'

šumьnъ 'noisy' ← *šumъ* 'noise'

tǫčьnъ 'pertaining to rain' ← *tǫča* 'rain'

tělesьnъ 'corporal, carnal, physical' ← *tělo* 'body, corpse'

tęgotьnъ 'fatigued, tired' ← *tęgota* 'heaviness, burden'

tinьnъ 'dirty, muddy' ← *tina* 'dirt, mud'; cp. *tinavъ* 'id.'

trǫbьnъ 'pertaining to trumpets, horns' ← *trǫba* 'trumpet, horn'

trepetьnъ 'shaking, trembling, frightening' ← *trepetъ* 'tremor, fear'

trěbьnъ 'sacrificial' ← *trěba* 'sacrifice'

trěvьnъ 'covered with grass' ← *trěva* 'grass'

trudьnъ 'difficult' ← *trudъ* 'effort, work'

tučьnъ 'greasy, fat' ← *tukъ* 'grease, fat, lard'

tъštetьnъ 'empty, vane' ← *tъšteta* 'harm, loss'

tьmьnъ 'dark' ← *tьma* 'darkness'

udьnъ 'pertaining to organs, limbs' ← *udъ* 'organ, limb'

umьnъ 'intellectual, pertaining to reason' ← *umъ* 'mind, reason, thought, intellect'

vesnьnъ 'of springtime' ← *vesna* 'spring'

veštьnъ 'material' ← *veštь* 'thing, matter'

věčьnъ 'eternal, permanent' ← *věkъ* 'age, eternity'

věrьnъ 'faithful, trustworthy, believing' ← *věra* 'faith'

větrьnъ 'windy, pertaining to winds' ← *větrъ* 'wind'

vinьnъ 'guilty' ← *vina* 'guilt'

vinьnъ 'pertaining to wine' ← *vino* 'wine'

vlьnьnъ 'pertaining to waves' ← *vlьna* 'wave'

vodьnъ 'pertaining to water' ← *voda* 'water'

vrědьnъ 'harmful' ← *vrědъ* 'harm, wound, sickness'

vrěmenьnъ 'temporary, transitory, mundane' ← *vrěmę* 'time'

vьsьnъ 'rural' ← *vьsь* 'village'

xladьnъ 'cool, refreshing' ← *xladъ* 'cool breeze'

xlěbьnъ 'pertaining to bread or grain' ← *xlěbъ* 'bread, grain'

xulьnъ 'slandering, blasphemous' ← *xula* 'blasphemy, slander, accusation'

xvalьnъ 'praised, worthy of praising, grateful' ← *xvala* 'praise, glory, gratitude'

xytrostьnъ 'skillful' ← *xytrostь* 'skill'

zǫbьnъ 'pertaining to teeth' ← *zǫbъ* 'tooth'

zemьnъ 'earthly' ← *zemĺa* 'earth'

zimьnъ 'wintry, cold' ← *zima* 'winter, frost, storm'

zlatьnъ 'golden' ← *zlato* 'gold'

zvěrьnъ 'pertaining to animals, bestial' ← *zvěrь* 'animal'; cp. *zvěrinъ* 'id.'

žędьnъ 'thirsty' ← *žęžda* 'thirst'[40]

žętvьnъ 'pertaining to harvest' ← *žętva* 'harvest'

žitьnъ 'pertaining to life' ← *žitь* 'life'

žitьnъ 'pertaining to crops' ← *žito* 'crops'

životьnъ 'pertaining to life, animals' ← *životъ* 'life'

žiznьnъ 'making alive' ← *žiznь* 'life'

žrьnъvьnъ 'pertaining to millstones' ← *žrьny, žrьnъve* 'millstone'

žrьtvьnъ 'sacrificial' ← *žrьtva* 'sacrifice, offering'

54.2. From verbs

alъčьnъ 'hungry, starving' ← *alъkati, alъčǫ* 'to starve'

bogo·borьnъ 'fighting God' ← *brati, boŕǫ* 'to fight'

do·stojьnъ 'worthy, proper' ← *stojati, stojǫ* 'to stand'

mǫdьnъ 'hesitating' ← *mǫditi* 'to hesitate'

ob·(v)yčьnъ 'common, usual' ← *ob·(v)yknǫti* 'to get used to', pass. past ptcl. *ob·(v)yčenъ*, act. past ptcl. *ob·(v)ykъ*

u·běžьnъ 'pertaining to hiding, refuge' ← *u·běgnǫti, u·běžati* 'to flee, hide, escape'

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[40] In adjectives in *-ьnъ*, derived from */yo/- and */yā/-stem nouns, the yodization of the root-final consonant is usually analogically retained although there is no phonological motivation for it. The word *žędьnъ* is a conservative exception.

živo·tvorьnъ 'making alive' ← *tvoriti* 'to make'; cp. *živo·tvorivъ* 'id.'

54.3. From adjectives

adovьnъ 'hell´s, infernal' ← *adovъ* 'id.'

ǫrodьnъ 'stupid, ignorant' ← *ǫrodъ* 'id.'; cp. *ǫrodivъ* 'id.'

blažьnъ 'blessed' ← *blagъ* 'good, nice'

bogo·veselьnъ 'befitting God' ← *veselъ* 'glad, merry'

bogo·lěpьnъ 'befitting God' ← *lěpъ* 'beautiful'

čajemьnъ 'waited, expected' ← the pass. pres. ptcl. *čajemъ* ← *čajati* 'to wait, expect'

do·stojьnьnъ 'worthy, proper' ← *do·stojьnъ* 'id.'

lǫkavьnъ 'sly, cunning' ← *lǫkavъ* 'id.'

ĺubo·dějьnъ 'perverse' ← *ĺubo·dějь* 'id.'

ĺubьnъ 'beloved' ← *ĺubъ* 'dear'

mǫčilьnъ 'pertaining to torture' ← the act. past ptcl. *mǫčilъ* ← *mǫčiti* 'to torture'

mladьnъ 'children´s, pertaining to childhood' ← *mladъ* 'soft, fresh, youthful, childish'

mlьčalьnъ 'quiet, peaceful' ← the act. past ptcl. *mlьčalъ* ← *mlьčati* 'to be silent'; cp.
  mlьčalivъ 'id.'

na·sǫštьnъ 'daily' ← the act. pres. ptcl. *sy, sǫšt-* ← *byti* 'to be'; a morpheme-by-morpheme
  imitation of Gk. ἐπι·ούσιος

ob·(v)ilьnъ 'abundant' ← *ob·(v)ilъ* 'id.'

obьštьnъ 'common' ← *obьštь* 'id.'

pročьnъ 'other, remaining' ← *prokъ* 'id.'; cp. *pročь* 'id.'

raz·ličьnъ 'different' ← *raz·ličь* 'id.'

rěsnotivьnъ 'real, certain' ← **rěsnotivъ* ← *rěsnota* 'reality, truth'

skvrьnьnъ 'crooked' ← *skvrьnъ* 'id.'

slonovьnъ 'made of ivory' ← **slonovъ*; cp. Ru. *slonóvyj* 'id.'

sugubьnъ 'double, twofold' ← *sugubь* 'id.'

svobodьnъ 'free' ← *svobodь* 'id.'

trojьnъ 'threefold, treble' ← *troji* 'three'

u·dobьnъ 'easy' ← *u·dobь* 'id.'

zvěrinьnъ 'bestial, pertaining to animals' ← *zvěrinъ* 'id.'

54.4. Source of derivation unclear

domovьnъ 'pertaining to households' ← *domъ*; cp. *domovitъ* 'id.'

duševьnъ 'pertaining to souls' ← *duša* 'soul'; an analogical formation, cp. *dušьnъ* 'id.'

duxovьnъ 'spiritual, pertaining to spirits' ← *duxъ* 'spirit', as if an */u/-stem;[41] cp. *vъz·dušьnъ* 'pertaining to air, aerial' ← *vъz·duxъ* 'air'

grěxovьnъ 'sinful' ← *grěxъ* 'sin', possibly an old */u/-stem; cp. *grěšьnъ* 'id.'

studovьnъ 'shameful' ← *studъ* 'shame', as if an */u/-stem; cp. *studьnъ* 'id.'

světovьnъ 'pertaining to light' ← *světъ* 'light', as if an */u/-stem

věrovьnъ 'pertaining to faith' ← *věrovati* 'to believe' or *věra* 'faith'; cp. *věrьnъ* 'id.'

vinovьnъ 'guilty' ← **vinovati* 'to accuse' or *vina* 'guilt'; cp. *vinьnъ* 'id.'

volovьnъ 'pertaining to bulls' ← *volъ* 'bull', nom. pl. *volove*; also *volьnъ* 'id.', as if from an */o/-stem

vrьxovьnъ 'highest, supreme' ← *vrьxъ* 'top, peak', nom. pl. *vrьxove*

55. Adjectives in *-ьńь*

55.1. From nouns

bratrьńь 'fraternal, brotherly, brother´s' ← *bratrъ* 'brother'

družьńь 'friend´s, pertaining to friends' ← *drugъ* 'friend'

gospodьńь 'lord´s' ← *gospodь* 'lord'

materьńь 'mother´s, maternal' ← *mati* (*mater-*) 'mother'; cp. *materь* 'id.'

vladyčьńь 'lord´s, ruler´s' ← *vladyka* 'lord, ruler'

55.2. From adverbs and prepositions

ǫtrьńь 'inner, internal', *vъn·ǫtrьńь* 'inner, internal' ← *ǫtrь* adv. 'inside', *vъn·ǫtrь* adv. 'id.'

dalьńь 'distant, next' ← **dalь* adv. 'far'; cp. the comparative *dalé* 'farther, further'

dolьńь 'low, lowest' ← *dolu* adv. 'downwards', *dolě* adv. 'down, at the bottom'

dьnьsьńь 'today´s' ← *dьnьsь* adv. 'today'

gorьńь 'highest, living in heights' ← *gorě* adv. 'high, on top'[42]

iskrьńь 'near' ← *iskrь* adv. and prep. 'near'

is·podьńь 'lowest, deepest' ← *podъ* prep. 'below, beneath, under'

o·krъstьńь 'surrounding, close' ← *o·krъstь* adv. and prep. 'around, by, near'

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[41] Comparative evidence strongly suggests *duxъ* is an original */o/-stem, e.g. Lith. *daũsos* (pl. tant.) 'air', Goth. *dius* (neuter) 'animal'.

[42] But *gorьńь* can also be derived from *gorьnъ* 'mountainous'.

po·slědьńь 'last, final' ← *po·slědь* and *po·slědi* adv. 'subsequently, later, then'

prědьńь 'first, previous' ← *prědъ* prep. 'before, in front of'

prěmьńь 'opposite' ← *prěmь* adv. 'right, straight'

srědьńь 'middle', *po·srědьńь* 'middle, in between' ← *srědě* adv. 'in the middle, inside, amongst', *po·srědě*, *po·srědu* adv. 'in the middle, in the meanwhile'

utrьńь 'early' ← *utro* adv. 'early, in the morning, tomorrow'

večerьńь 'pertaining to evening' ← *večerъ* adv. 'in the evening'

vъs·krajьńь 'near' ← *vъs·krajь* adv. and prep. 'near(by)'

vysprьńь 'highest' ← *vysprь* adv. 'high, on top'

55.3. From comparatives

bližьńь 'near' ← *blizъ* adv. 'near', comparative *bliže*

drevĺьńь 'old, ancient' ← *drevĺe* adv. 'earlier, before, long ago'

nižьńь 'lowest' ← *nizъ* adv. 'down, at the bottom', *nizu* 'downwards, at the bottom', comparative-superlative *niže*

prěždьńь 'older, previous' ← *na·prěždь* adv. 'forward'

vyšьńь 'highest, top' ← *vysoko*, *vysocě* adv. 'high', comparative-superlative *vyše*

55.4. From adverbs in *-ě* and *-a*

domašьńь 'domestic' ← *doma* adv. 'at home'

kroměšьńь 'external, outer' ← *kromě* adv. 'away, at distance, outside'

nyněšьńь 'present, current' ← *nyně* adv. 'now'

utrěšьńь 'tomorrow´s' ← *utrě* adv. 'tomorrow'

vъčerašьńь 'pertaining to yesterday, yesterday´s' ← *vъčera* adv. 'yesterday'

vъněšьńь 'outer, external' ← *vъně* adv. 'outside'

56. Adjectives in *-atъ, -itъ*

bogatъ 'rich, wealthy' ← *bogъ* 'god' (originally 'wealth')

domovitъ 'pertaining to a household' ← *domъ* 'house', an */u/-stem

dъvo·po·mostitъ 'two-storied' ← **po·mostъ* 'floor'

imenitъ 'famous, named' ← *imę* 'name'

jadovitъ 'poisonous' ← *jadъ* 'poison', seemingly an old */u/-stem

krilatъ 'winged' ← *krilo* 'wing'

mastitъ 'greasy, oily' ← *mastъ* 'grease, oil'

mъnogo·očitъ 'many-eyed' ← *očь 'eye', nom.-acc. du. *oči*

na·ročitъ 'famous, special' ← *na·rokъ* 'verdict'

pьrьnatъ 'pertaining to birds'; cp. *pьrati*, *perǫ* 'to fly'

plodovitъ 'fruitful, fertile' ← *plodъ* 'fruit', seemingly an old */u/-stem

sanovitъ 'high-ranking' ← *sanъ* 'rank', an */u/-stem

sǫkatъ 'branchy, twiggy' ← *sǫkъ* 'branch, twig'

trǫdovitъ 'ill, sick' ← *trǫdъ* 'sickness', seemingly an old */u/-stem

znamenitъ 'distinguished, remarkable' ← *znamę; cp. Ru. *známja* 'flag, standard'

57. Adjectives in */-r-o-/

bystrъ 'swift, fast', possibly from PIE */bʰewdʰ-/ with a long zero grade

bъdrъ 'brisk, alert, awake' ← *bъděti*, *bъždǫ* 'to be awake'

dobrъ 'good'; cp. *u·dobь* 'easy', *debelъ* 'fat', *po·doba* 'manner'[43]

jędrъ 'swift, fast'

mǫdrъ 'wise'

mokrъ 'wet'; cp. *močiti* 'to wet, sprinkle'

ostrъ 'sharp'; cp. Lat. *acer*, Gk. ὀξύς 'id.'

štedrъ 'empathetic, merciful' ← *štęděti* 'to spare, have mercy' with a nasal infix; the */o/-grade is seen in *skǫděti* 'to run short, ebb', *skǫdъ* 'scanty'

xrabrъ 'brave', possibly from */ksorb-r-o-/; cp. Latv. *skarbs* 'sharp', OE *scearp* 'id.'

xytrъ 'skillful' ← *vъs·xytiti* 'to take, capture', *xvatati* 'to catch'

58. Adjectives in */-y-o-/

58.1. From native vocabulary

bez·umĺь 'unwise' ← *umъ* 'intellect, reason, mind'; cp. *bez·umajь* 'id.'

bъždŕь 'brisk, alert, awake' ← *bъdrъ* 'id.'

člověčь 'human, of man' ← *člověkъ* 'man'

děvičь 'virgin-like, pertaining to a maiden' ← *děvica* 'maiden, girl, virgin'

dobĺь 'manly'; cp. *dobrъ* 'good'

dьńь 'daily, of one day' ← *dьnь* 'day'

gospodińь 'lord's' ← *gospodinъ* 'lord'

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[43] Possibly cognate to Lat. *faber* 'smith' ← PIE */dʰab-r-o-/, if the latter is a former adjective (perhaps from *faber homō 'skillful man').

grěšьničь 'sinner´s' ← *grěšьnikъ* and *grěšьnica* 'sinner'

ino·rožь 'unicorn´s' ← *ino·rogъ* 'unicorn'

jarьmьničь 'pertaining to a beast of burden' ← *jarьmьnikъ* 'beast of burden'

jeleńь 'reindeer´s' ← *jelenь* 'reindeer'

junьčь 'of a young bull' ← *junьcь* 'young bull'

lovьčь 'hunter´s, pertaining to hunting' ← *lovьcь* 'hunter'

lъžь 'lying, false' ← *lъža* 'lie'

mateŕь 'mother´s, maternal' ← *mati* (*mater-*) 'mother'

mladьньčь 'children´s' ← *mladьньcь* 'child'

ne·gъbĺь 'undying, unyielding' ← *sъ·gъbati*, *sъ·gъbĺǫ* 'to bend'

obьštь 'common, shared'

orьĺь 'eagle´s' ← *orьlъ* 'eagle'

osьĺь 'donkey´s' ← *osьlъ* 'donkey'

otьčь 'father´s, paternal' ← *otьcь* 'father'

ovьčь 'sheep´s' ← *ovьcь* 'sheep'

ovьńь 'ram´s' ← *ovьnъ* 'ram'

pročь 'other, remaining' ← *prokъ* 'id.'

pro·ročь 'prophet´s, prophetic' ← *pro·rokъ* 'prophet'

protivьničь 'enemy´s, hostile' ← *protivьnikъ* 'enemy'

starьčь 'adult, mature' ← *starьcь* 'old man'

štuždь 'foreign' ← *študa ← Gmc. */þewdō/; cp. Goth. *þiuda* 'people'

telьčь 'calf´s, veal' ← *telьcь* 'calf'

tomiteĺь 'tormentor´s' ← *tomiteĺь* 'tormentor'

tvorьčь 'pertaining to the Creator' ← *tvorьcь* 'creator'

tъštь 'empty, vane' ← *tъska; cp. OR *tъska* 'grief'

učeničь 'pupil´s' ← *učenikъ* 'pupil, disciple'

velьjь 'great, large'[44]

58.2. From borrowed appellatives

cěsaŕь 'emperor´s' ← *cěsaŕь* 'emperor'

dijavoĺь 'diabolic, devil´s' ← *dijavolъ* 'devil'

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[44] This is probably an old */i/-stem, as suggested by such compounds as *velь·glasьnъ* 'loud-voiced'.

episkupĺь 'bishop´s' ← *episkupъ* 'bishop'

erъmuńь 'pertaining to the Mount Hermon' ← *erъmonъ*

faraońь 'Pharaoh´s' ← *faraonъ*

faraošь 'Pharaoh´s' ← *faraosъ*

ijerusalimĺь 'of Jerusalem' ← *ijerusalimъ*

kъnęžь 'prince´s' ← *kъnęğь* 'prince'

sіońь 'Zion´s' ← *sіonъ*

velьbążdь 'camel´s' ← *velьbądъ* 'camel'

58.3. From foreign proper names

arońь ← *aronъ* ← Gk. Ἀαρόν

avraamĺь ← *avraamъ* ← Gk. Ἀβραάμ

aÿriliańь ← *aÿrilianъ* ← Lat. *Aurelianus*

ijakovĺь ← *ijakovъ* ← Gk. Ἰακώβ

ionadavĺь ← **ionadavъ* ← Gk. Ἰωναδάβ

konstantińь ← *konstantinъ* ← Gk. Κωνσταντῖνος

markijańь ← *markijanъ* ← Gk. Μαρκιανός

matusaĺь ← **matusalъ* ← Gk. Μαθουσάλα

nevъftalimĺь ← **nevъftalimъ* ← Gk. Νεφθαλίμ

paÿĺь ← **paÿlъ* ← Gk. Παῦλος

pilaštь ← *pilatъ* ← Gk. Πιλᾶτος

salańь ← **sala* ← Gk. Σαλά

simońь ← *simonъ* ← Gk. Σίμων

solomońь ← *solomonъ* ← Gk. Σολομών

tarańь ← **tara* ← Gk. Θάρα

venьjamińь ← *venьjaminъ* ← Gk. Βενιαμίν

xuzańь ← **xuza* ← Gk. Χουζᾶ

59. Adjectives in */-i-y-o-/

beštьstьjь (*bez·čьstьjь*) 'not honored' ← *čьstь* 'honor'

bezъ·ratьjь 'peaceful' ← *ratь* 'war, fight'

božьjь 'God´s, divine' ← *bogъ* 'god'

divьjь 'wild, untamed' ← *divo* 'wonder, monster'

kurьjь 'rooster´s' ← *kurъ* 'rooster'

lьvьjь 'lion´s' ← *lьvъ* 'lion'; cp. *lьvovъ* 'id.'

ot·ročьjь 'child´s, childrens´' ← *ot·rokъ*

pitьjь 'drinkable', probably from the pass. past ptcl. *pitъ* ← *piti* 'to drink'

pьsьjь 'dog´s, canine' ← *pьsъ* 'dog'

rabьjь 'slave´s, slavish' ← *rabъ* 'slave'

skotьjь 'pertaining to cattle' ← *skotъ* 'cattle'

vražьjь 'enemy´s, hostile' ← *vragъ* 'enemy'

60. Adjectives in -*avъ*

krъvavъ 'bloody' ← *krъvь* 'blood'

ląkavъ 'bad, evil, cunning' ← *ląka* 'plot, intrigue'

sědinavъ 'gray' ← *sědiny* (pl. tant.) 'gray hair'

skvrьnavъ 'filthy, dirty' ← *skvrьna* 'filth, dirt'

tinavъ 'dirty, sludgy' ← *tina* 'dirt, mud'

veličavъ 'swaggering, braggart' ← *velikъ* 'great, grand'[45]

61. Adjectives in -*ivъ*

ąrodivъ 'stupid, ignorant' ← *ąrodъ* 'id.'; cp. *ąrodьnъ* 'id.'

blago·tvorivъ 'benefactor', *živo·tvorivъ* 'making alive' ← *tvoriti* 'to do, make'

bogo·nosivъ 'carrying God in oneself', *zlato·nosivъ* 'carrying gold' ← *nositi* 'to carry'

bъdrьlivъ 'brisk, alert' ← **bъdrьlъ*; cp. *bъdrъ*, *bъždŕь* 'id.'

čьstivъ 'fearing God, pious' ← *čьstь* 'honor, respect'

dobro·raz·umivъ 'knowing, wise' ← *raz·umъ* 'mind, understanding'

gągьnivъ 'stammering, stuttering' ← a reduplicated and probably onomatopoetic **gągьnъ*, i.e. **gъn·gъnъ*

gladivъ 'hungry, starving' ← *gladъ* 'hunger, starvation'

gněvьlivъ 'angry' ← **gněvьlъ* ← *gněvъ* 'anger'

krъvo·jadivъ 'bloodthirsty', *plъto·jadivъ* 'flesh-eating' ← *jasti* (*jad-*) 'to eat'

krъvo·pivъ 'bloodthirsty' ← *piti* 'to drink'

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[45] The First Palatalization is probably analogical rather than caused by an historical -*ě*-; cp. *veličati* 'to exaggarate, praise', *veličiti* 'id.'.

lěnivъ 'lazy' ← *lěnъ* 'id.'

lopotivъ 'stuttering, stammering', probably from an onomatopoetic **lopotъ*

lъživъ 'false, lying' ← *lъža* 'lie'; cp. *lъžь* 'id.'

lьstivъ 'cunning, sly' ← *lьstь* 'cheat, slyness' or *lьstiti* 'to cheat'

ĺubivъ 'loving' ← *ĺubiti* 'to love'

ĺubo·pьrivъ 'quarrelsome' ← *pьŕa* 'quarrel' or *pьrěti, pьŕǫ* 'to argue, disagree'

milostivъ 'warmhearted, charitable' ← *milostь* 'warmheartedness, mercifulness'

mlьčalivъ 'silent' ← *mlьčati, mlьčǫ* 'to be silent'

na·prasnivъ 'strong, fierce' ← *na·prasnъ* 'swift'

ne·dǫživъ 'sick, weak' ← *ne·dǫgъ* 'sickness, weakness'

ob·(v)idьlivъ 'unjust, harmful' ← *ob·(v)ida* 'injustice, insult, harm'

o·pasivъ 'watchful, accurate, precise' ← *o·pasъ* 'attention, accuracy'

o·slušьlivъ 'disobedient', *po·slušьlivъ* 'obedient' ← *o·slušati* 'to disobey', *po·slušati* 'to obey'

pa·mętivъ 'with good memory' ← *pa·mętь* 'memory'

pěgotivъ 'leper' ← *pěgoty* (pl. tant.) 'leprosy'

po·bědьlivъ 'victorious' ← *po·běda* 'victory' or *po·běditi* 'to win'

po·draživъ 'similar, resembling' ← *po·dražiti* 'to imitate, resemble'

po·lučivъ 'ready, prepared' ← *po·lučiti* 'to receive, get'

po·učalivъ 'teaching, educational, instructive' ← the pass. past ptcl. *po·učalъ* ← *po·učati* 'to teach'

pravьdivъ 'just' ← *pravьda* 'justice'

prěmьdivъ 'obliged' ← **prěmьda* ← *prěmь* 'correctly, right'

prě·trěbivъ 'restless' ← *trěba* 'need, necessity'

prijaznivъ 'friendly' ← *prijaznь* 'friendship, devotion'

pro·kazivъ 'sly, cunning' ← *pro·kaza* 'leprosy' or *pro·kaziti* which occurs once in the Euchologium Sinaiticum in the phrase *pro·kaziti ot·ročę* 'to abort a fetus'

pro·nyrivъ 'bad, evil' ← *pro·nyriti* 'to cheat away'

pro·zorьlivъ 'sharp-eyed' ← *·zorъ* 'sight' or *·zoriti* 'to see, watch'

rěčivъ 'eloquent' ← *rěčь* 'speech, word'

rьvьnivъ 'zealous, quarrelsome' ← *rьvьnьje* 'malice'

strašivъ 'fearful, frightened' ← *strašiti* 'to frighten'

strupivъ 'leper' ← *strupъ* 'wound, boil'

strъpъtivъ 'crooked, perverse' ← related to *strupъ* 'wound, boil'

trъpělivъ 'patient' ← the act. past ptcl. *trъpělъ* ← *trъpěti, trъpĺǫ* 'to be patient, endure, put up with'

tъštivъ 'swift, quick' ← *tъštь* 'empty, void'

vъ(s)·stanivъ 'devoted' ← *vъ(s)·stati* 'to rise'

vъs·točivъ 'violent, wild, fierce', *krъvo·točivъ* 'suffering from bleeding disorder' ← *tokъ* 'running, streaming' or *točiti* 'to run, make something run'

za·vidьlivъ 'envious' ← **za·vidьlъ* ← *za·vida* 'envy'

za·vistьlivъ 'envious' ← **za·vistьlъ* ← *za·vistь* 'envy'

zъlobivъ 'bad, evil' ← *zъlobь* 'badness, evil'

žesto·srъdivъ 'hard-hearted' ← *srьdь(ce)* 'heart'; cp. *žesto·srъdъ* 'id.'

62. Adjectives in *-ovъ*

62.1. From appellatives and geographic names

adovъ 'of hell, infernal' ← *adъ* 'hell'

arxangelovъ 'archangel´s, pertaining to archangels' ← *arxangelъ* 'archangel'

arxiereovъ 'high priest´s' ← *arxierejь* 'high priest'

arxisÿnagogovъ 'chief of synagogue´s' ← *arxisÿnagogъ* 'chief of synagogue'

aspidovъ 'snake´s' ← *aspida* 'snake'

avorovъ 'of common maple' ← *avorъ 'common maple' ← OHG *ahorn* 'maple'

cěsaŕevъ 'emperor´s' ← *cěsaŕь* 'emperor'; cp. *cěsaŕь* 'id.'

damaskovъ 'Damascene' ← *damaskъ* 'Damascus'

dijavolovъ 'devil´s, diabolic' ← *dijavolъ* 'devil'; cp. *dijavoĺь* 'id.'

duksovъ 'commander´s' ← *duksъ* 'commander'

exidьnovъ 'viper´s' ← *exidьna* 'viper'

faraonovъ 'pharaoh´s' ← *faraonъ* 'pharaoh'; cp. *faraońь* 'id.'

fariseovъ 'Pharisee´s, Pharisaic' ← *farisejь* 'Pharisee'

gromovъ 'of thunder, thundering' ← *gromъ* 'thunder'

igemonovъ 'ruler´s' ← *igemonъ* 'ruler'

ijerusalimovъ 'Jerusalem´s' ← *ijerusalimъ*; cp. *ijerusalimĺь* 'id.'

ioŕъdanovъ 'Jordan´s, pertaining to the river Jordan' ← *ioŕъdanъ* 'river Jordan'

istovъ 'real, true' ← *istъ* 'id.'

izdrailévъ 'Israel´s, Israeli' ← *izdrailь* 'Israel'

jugovъ 'southern' ← *jugъ* 'south'

kesarovъ 'emperor´s' ← *kesarъ* 'emperor'

kesaŕevъ 'emperor´s' ← *kesaŕь* 'emperor'

kinъsovъ 'pertaining to taxes' ← *kinъsъ* 'tax'

kitovъ 'whale´s' ← *kitъ* 'whale'

kranьjevъ 'of a skull', in *kranьjevo město* 'place of execution'; imitates Gk. κρανίου τόπος

lьvovъ 'lion´s' ← *lьvъ* 'lion'; cp. *lьvьjь* 'id.'

mǫčitelévъ 'executioner´s' ← *mǫčitelь* 'executioner'

pastuxovъ 'shepherd´s' ← *pastuxъ* 'shepherd'

patriarxovъ 'patriarch´s, patriarchal' ← *patriarxъ* 'patriarch'

prě·daditelévъ 'betrayer´s' ← *prě·daditelь* 'betrayer'

roditelévъ 'ancestral' ← *roditelь* 'parent, creator, cause'

směverovъ 'northern' ← *směverъ* 'north, north wind'

sionovъ 'Zion´s' ← *sionъ* 'mount Zion'; cp. *siońь* 'id.'

skǫdьlьnikovъ 'potter´s' ← *skǫdьlьnikъ* 'potter'; cp. *skǫdьlьničь* 'id.'

sÿnagogovъ 'pertaining or belonging to the chief of synagogue' ← *sÿnagogъ* 'chief of synagogue'

sъ·pasitelévъ 'savior´s' ← *sъ·pasitelь* 'savior'

sъ·pasovъ 'savior´s' ← *sъ·pasъ* 'savior'

tektonovъ 'carpenter´s' ← *tektonъ* 'carpenter'

trъnovъ 'thorny' ← *trъnъ* 'thorn'

učitelévъ 'teacher´s' ← *učitelь* 'teacher'

vračevъ 'physician´s' ← *vračь* 'physician'

xanaanovъ 'pertaining to the land of Canaan' ← *xanaanъ* 'the land of Canaan'

zmьjevъ 'dragon´s' ← *zmьjь* 'dragon'

ženixovъ 'bridegroom´s' ← *ženixъ* 'bridegroom'

62.2. From foreign proper names

adamovъ ← *adamъ* ← Gk. ʾΑδάμ

aleksandrovъ ← *aleksandrъ* ← Gk. Ἀλέξανδρος

alьfeovъ ← **alьfejь* ← Gk. Ἀλφαῖος

aminadavovъ ← *aminadavъ* ← Gk. Ἀμιναδάβ

amosovъ ← *amosъ* ← Gk. Ἀμώς

anьdreovъ ← *anьdrejь* ← Gk. Ἀνδρέας

apolonovъ ← *apolonъ* ← Gk. Ἀπολλώνιος

aramovъ ← *aramъ* ← Gk. Ἀράμ

arfaksadovъ ← **arfaksadъ* ← Gk. Ἀρφαξάδ

arijevъ ← *arijь* ← Gk. Ἄρειος

aronovъ ← *aronъ* ← Gk. Ἀαρών; ср. *aronь* 'id.'

artemidovъ ← *artemida* ← Gk. Ἄρτεμις

asafovъ ← *asafь* ← Gk. Ἀσάφ

avimelexovъ ← **avimelexъ* ← Gk. Ἀβιμέλεχ

avraamovъ ← *avraamъ* ← Gk. Ἀβραάμ; ср. *avraamĺь* 'id.'

davydovъ ← *davydъ* ← Gk. Δαυίδ

efremovъ ← *efremъ* ← Gk. Ἐφραίμ

eliakimovъ ← *eliakimъ* ← Gk. Ἐλιακίμ

elmodanovъ ← **elmodanъ* ← Gk. Ἐλμοδάμ

enosovъ ← **enosъ* ← Gk. Ἐνώς

enoxovъ ← *enoxъ* ← Gk. Ἐνώχ

eslimovъ ← **eslimъ* ← Gk. Ἑσλί

esromovъ ← *esromъ* ← Gk. Ἑσρώμ

everovъ ← **everъ* ← Gk. Ἔβερ

falekovъ ← **falekъ* ← Gk. Φάλεκ

fanuiĺevъ ← **fanuiĺь* ← Gk. Φανουήλ

faresovъ ← *faresъ* ← Gk. Φάρες

filipovъ ← *filipъ* ← Gk. Φίλιππος

filistionovъ ← **filistionъ* ← Gk. Φιλιστίων

iannějevъ ← **iannějь* ← Gk. Ἰανναί

iaredovъ ← **iaredъ* ← Gk. Ἰάρετ

ijakovovъ ← *ijakovъ* ← Gk. Ἰακώβ; ср. *ijakovĺь* 'id.'

ijezekijьĺevъ ← *ijezekijь* ← Gk. Ἰεζεκιήλ

ijeseovъ ← *ijesejь* ← Gk. Ἰεσσαί

ijudovъ ← *ijuda* ← Gk. Ἰούδας

ilijevъ ← *ilija* ← Gk. Ἠλί

ioanańevъ ← **ioanańь* ← Gk. Ἰοανάμ

ioanajevъ ← **ioananъ* ← Gk. Ἰωανάν

ioanovъ ← *ioanъ* ← Gk. Ἰωάννης

ioaramovъ ← *ioaramъ* ← Gk. Ἰωράμ

iosifovъ ← *iosifъ* ← Gk. Ἰωσήφ

iosiovъ ← *iosьji* ← Gk. Ἰωσῆ

irovъ ← **irъ* ← Gk. Ἤρ

isaakovъ ← *isaakъ* ← Gk. Ἰσαάκ

isaavovъ ← **isaavъ* ← Gk. Ἠσαύ

isaijevъ ← *isaija* ← Gk. Ἠσαΐας

isusovъ ← *isusъ* ← Gk. Ἰησοῦς

kadъmovъ ← **kadъmъ* ← Gk. Κάδμος

kainanovъ ← **kainanъ* ← Gk. Καϊνάν

kleopovъ ← *kleopa* ← Gk. Κλεοπᾶς

koreovъ ← **korejь* ← Gk. Κορέ

kosamovъ ← **kosamъ* ← Gk. Κωσάμ

lamexovъ ← **lamexъ* ← Gk. Λάμεχ

lavaanovъ ← **lavanъ* ← Gk. Λάβαν

lazarovъ ← *lazarъ* ← Gk. Λάζαρος

lotovъ ← *lotъ* ← Gk. Λώτ

maatovъ ← **maatъ* ← Gk. Μαάθ

mainanovъ ← **mainanъ* ← Gk. Μεννά

maleleiĺevъ ← **maleleiĺь* ← Gk. Μαλελεήλ

mattatajevъ ← **mattatajь* ← Gk. Ματταθά

mattatijevъ ← **mattatijь* ← Gk. Ματτάθιος

mattatovъ ← *mattatъ ← Gk. Ματθάτ

meleannovъ ← *meleannъ ← Gk. Μελεά

melъxisedekovъ ← *melъxisedekъ* ← Gk. Μελχισεδέκ

melъxijevъ ← *melъxijь ← Gk. Μελχί

moseovъ ← *mosьjь* ~ *mosьji* ← Gk. Μωσῆς

naangeovъ ← *naangejь ← Gk. Ναγγαί

naasonovъ ← *naasonъ ← Gk. Ναασσών

natanovъ ← *natanъ* ← Gk. Ναθάν

naumovъ ← *naumъ* ← Gk. Ναούμ

nauθeovъ ← *nauθejь ← Gk. Ναβουθέ

naxorovъ ← *naxorъ ← Gk. Ναχώρ

nirijevъ ← *nirijь ← Gk. Νηρί

noevъ ← *noe* ← Gk. Νῶε

ovidovъ ← *ovidъ* ← Gk. Ἰωβήδ

pavьlovъ ← *pavьlъ* ← Gk. Παῦλος

petrovъ ← *petrъ* ← Gk. Πέτρος

pilatovъ ← *pilatъ* ← Gk. Πιλᾶτος; cp. *pilaštь* 'id.'

pionovъ ← *pionъ* ← Gk. Πιόνιος

ragavovъ ← *ragavъ ← Gk. Ῥαγαύ

risijevъ ← *risija ← Gk. Ῥησά

rufovъ ← *rufъ ← Gk. Ῥοῦφος

salatiĺevъ ← *salatiĺь* ← Gk. Σαλαθιήλ

salьmonovъ ← *salьmonъ* ← Gk. Σαλμών

saulovъ ← *saulъ* ← Gk. Σαούλ

savinovъ ← *savinъ* ← Gk. Σαβῖνος

semeinovъ ← *semeinъ ← Gk. Σεμεῖν

seruxovъ ← *seruxъ ← Gk. Σερούχ

sevyrovъ ← *sevyrъ ← Gk. Σευήρος

simovъ ← *simъ ← Gk. Σήμ

simonovъ ← *simonъ* ← Gk. Σίμων

sitovъ ← **sitъ* ← Gk. Σήθ

sÿmeonovъ ← *sÿmeonъ* ← Gk. Συμεών

timeovъ ← **timejь* ← Gk. Τιμαῖος

vaalovъ ← **vaalъ* ← Gk. Βάαλ

voozovъ ← *voozъ* ← Gk. Βοός

xamovъ ← **xamъ* ← Gk. Χάμ

xristovъ ← *xrist(os)ъ* ← Gk. Χριστός

zakъxeovъ ← *zakъxejь* ← Gk. Ζακχαῖος

zevedeovъ ← *zevedejь* ← Gk. Ζεβεδαῖος

zinonovъ ← *zinonъ* ← Gk. Ζήνων

zorovaveĺevъ ← *zorovaveĺь* ← Gk. Ζοροβάβελ

θeodorovъ ← *θeodorъ* ← Gk. Θεόδωρος

63. Adjectives in *-ьskъ*

63.1. From nouns

adьskъ 'hell´s, infernal' ← *adъ* 'hell'; cp. *adovъ, adovьnъ* 'id.'

angelьskъ 'angels´, angelic' ← *angelъ* 'angel'

apostolьskъ 'apostles´, apostolic' ← *apostolъ* 'apostle'

arijanьskъ 'Arian, pertaining to Arians' ← *arijani* 'Arians'

arxangelьskъ 'archangelic, pertaining to archangels' ← *arxangelъ* 'archangel'

arxijerejьskъ 'highpriests´, pertaining to highpriests' ← *arxijerejь* 'highpriest'

baǹьskъ 'pertaining to bath' ← *baǹa* 'bath'

boĺarьskъ 'pertaining to nobles, aristocratic' ← *boĺarinъ* 'aristocrat', nom. pl. *boĺare*

božьskъ 'gods´, divine' ← *bogъ* 'god'; cp. *božьjь* 'id.'

branьskъ 'pertaining to war' ← *branь* 'war, fight'

cěsarьskъ 'emperor´s, imperial' ← *cěsaŕь* 'emperor'; cp. *cěsaŕь, cěsaŕevъ* 'id.'

člověčьskъ 'human, pertaining to men' ← *člověkъ* 'man'; cp. *člověčь, člověčьnъ* 'id.'

črьno·rizьčьskъ 'monks´, monastic' ← *črьno·rizьcь* 'monk'

črьnьčьskъ 'monks´, monastic' ← *črьnьcь* 'monk'

demonьskъ 'demons´, demonic' ← *demonъ* 'demon'

děvičьskъ 'virgins´, virgin-like' ← *děvica* 'virgin, maiden'; cp. *děvičь* 'id.'

dětьskъ 'children´s, childish' ← *děti* (pl. tant.) 'children'

elinьskъ 'Greek' ← *elinъ* 'Greek'

eparьšьskъ 'pertaining to governors or their office' ← *eparxъ* 'governor'

episkupьskъ 'bishop´s, episcopal' ← *episkupъ* 'bishop'; cp. *episkupĺь* 'id.'

eretičьskъ 'heretical' ← *eretikъ* 'heretic'

etiopьskъ 'Ethiopian, African' ← *etiopěni* 'Ethiopians'

evangelijьskъ 'evangelical' ← *evangelija* 'Gospel'

evrejьskъ 'Hebrew, Jewish' ← *evrejь* 'Jew'

farisejьskъ 'Pharisean' ← *farisejь* 'Pharisee'; cp. *farisejьnъ, fariseovъ* 'id.'

geonьskъ 'hell´s, infernal' ← *geona* 'hell'

gospodьskъ 'lord´s' ← *gospodь* 'lord'; cp. *gospodińь, gospodьńь* 'id.'

gradьskъ 'city´s, pertaining to cities' ← *gradъ* 'city'; cp. *gradьnъ* 'id.'

grьčьskъ 'Greek' ← *grьkъ* 'Greek'

idolьskъ 'pertaining to idols' ← *idolъ* 'idol'

ijerejьskъ 'priests´´' ← *ijerejь* 'priest'

inočьskъ 'lonely' ← *inokъ* 'hermit'

izdrailitьskъ 'Jews´, Israeli' ← *izdrailitěninъ* 'Jew, Israeli'

języčьskъ 'heathen, pagan' ← *językъ* 'people, language'; cp. *języčьnъ* 'id.'

južьskъ 'southern' ← *jugъ* 'south'; cp. *jugovъ* 'id.'

końьskъ 'pertaining to horses' ← *końь* 'horse'; cp. *końьnъ* 'id.'

krьstijanьskъ 'Christian' ← *krьstijanъ* 'Christian'

kumirьskъ 'pertaining to idols' ← *kumirъ* 'idol'

lavrьskъ 'pertaining to monasteries' ← **lavra* 'monastery'

lunьskъ 'lunar' ← *luna* 'Moon'

lьvьskъ 'lion´s' ← *lьvъ* 'lion'; cp. *lьvьjь, lьvovъ* 'id.'

ĺudьskъ 'people´s' ← *ĺudьje* (pl. tant.) 'people'

manastyrьskъ 'monastery´s, monastic' ← *manastyŕь* 'monastery'

mǫčeničьskъ 'martyrs´, pertaining to martyrdom' ← *mǫčenikъ* 'martyr'; cp. *mǫčeničь* 'id.'

mǫžьskъ 'male' ← *mǫžь* 'man'

mirьskъ 'earthly, mundane' ← *mirъ* 'earth'; cp. *mirьnъ* 'id.'

moŕьskъ 'sea´s, maritime' ← *moŕe* 'sea'

musikijьskъ 'pertaining to music' ← **musikija*

mъnišьskъ 'monks´, pertaining to monkhood' ← *mъnixъ* 'monk'

nebesьskъ 'heavenly, celestial' ← *nebo* 'sky, heaven'; cp. *nebesьnъ* 'id.'

ne·prijaznьskъ 'diabolic, demonic' ← *ne·prijaznь* 'evil, devil, demon'

o·imьskъ 'military' ← *o·imъ* 'soldier'

o·prěsnъčьskъ 'pertaining to unleavened bread' ← *o·prěsnъkъ* 'unleavened bread'

osьlьskъ 'donkey´s' ← *osьlъ* 'donkey'; cp. *osьĺь* 'id.'

patriaršьskъ 'patriarch´s, patriarchal' ← *patriarxъ* 'patriarch'; cp. *patriarxovъ* 'id.'

plъtьskъ 'carnal, corporal, physical' ← *plъtь* 'flesh, body'; cp. *plъtěnъ, plъtьnъ* 'id.'

poĺьskъ 'field-, wild, untamed' ← *poĺe* 'field'

prezvÿterьskъ 'presbyters´, presbyterian' ← *prezvÿterъ* 'presbyter, elder'

pro·ročьskъ 'prophetic' ← *pro·rokъ* 'prophet'; cp. *pro·ročь* 'id.'

psalъmьskъ 'pertaining to psalms' ← *psalъmъ* 'psalm'

pustynьskъ 'pertaining to wilderness, desolate' ← *pustyńi* 'wilderness'; cp. *pustynьnъ* 'id.'

rabьskъ 'slave´s, slavish' ← *rabъ* 'slave'; cp. *rabьjь* 'id.'

rajьskъ 'pertaining to paradise' ← *rajь* 'paradise'

ratьničьskъ 'enemy´s, hostile' ← *ratьnikъ* 'soldier, enemy'

raz·bojьskъ 'murderous, pertaining to killers' ← *raz·bojь* 'murder'

ritorьskъ 'rhetoric', only in *ritorьska xytrostь* translating Gk. ῥητορική τέχνη

roditelьskъ 'parental' ← *roditeĺь* 'parent'; cp. *roditeĺevъ* 'id.'

sadukejьskъ 'Sadducean' ← *sadukejь* 'Sadducee'

sǫdьjьskъ 'judges´´' ← *sǫdьji* 'judge'

sracinьskъ 'Saracen' ← *sracini* (pl. tant.) 'Saracens'

starějьšinьskъ 'pertaining to leaders, chiefs' ← *starějьšina* 'leader, chief'

strastьničьskъ 'martyr´s' ← *strastьnikъ* 'martyr'

svętitelьskъ 'priest´s' ← *svętiteĺь* 'priest'

trojičьskъ 'pertaining to trinity' ← *trojica* 'trinity'; cp. *trojičьnъ* 'id.'

trъtorьskъ 'pertaining to hell' ← *trъtorъ* 'hell'

vladyčьskъ 'ruler´s, lord´s' ← *vladyka* 'ruler, lord'; cp. *vladyčьńь* 'id.'

vlastelьskъ 'ruler´s, lord´s' ← *vlasteĺь* 'ruler, lord'

vlъšьskъ 'pertaining to magic, magical' ← *vlъxvъ* 'wizard, witch'

voje·vodьskъ 'commander´s' ← *voje·voda* 'commander'; cp. *voje·vodinъ* 'id.'

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za·padьskъ 'western' ← *za·padъ* 'sunset, west'; cp. *za·padьnъ* 'id.'

zemьskъ 'earthly, mundane' ← *zem͡la* 'earth'; cp. *zemьnъ* 'id.'

zъlo·dějьskъ 'criminal, criminal´s' ← *zъlo·dějь* 'criminal'; cp. *zъlo·dějьnъ* 'id.'

ženьskъ 'women´s, female' ← *žena* 'woman'

židovьskъ 'Jewish' ← *židovinъ* 'Jew', nom. pl. *židove*

žitьjьskъ 'life´s, pertaining to life' ← *žitьje* 'life'

žьrьčьskъ 'priests´, pertaining to sacrifice' ← *žьrьcь* 'priest, sacrificer'

63.2. From adjectives

adovьskъ 'hell´s, infernal' ← *adovъ*; cp. *adovьnъ, adьskъ* 'id.'

běsovьskъ 'demonic' ← *běsъ* 'demon'; cp. *běsьnъ* 'id.'

oblašьskъ 'civil, lay' ← *oblašь* 'id.'

poganьskъ 'pagan' ← *poganъ* 'id.'

sotoninьskъ 'Satan´s, satanic' ← *sotoninъ* 'id.'

vračevьskъ 'medical, physicians´, pertaining to medicine' ← *vračь* 'physician'; cp. *vračevьnъ* 'id.', *vračevъ* 'physician´s'

vьsěčьskъ 'every, each, all kinds of' ← *vьsěkъ* 'id.'

xerovimьskъ 'cherubic' ← *xerovimъ* 'id.'

zvěrinьskъ 'animals´, bestial' ← *zvěrinъ* 'id.'; cp. *zvěrinьnъ, zvěrьnъ* 'id.'

63.3. From toponyms

afrikьskъ ← *afrikija* ← Gk. Ἀφρική

aleksandrijьskъ ← *aleksandrija* ← Gk. Ἀλεξάνδρεια

amasijьskъ ← *amasija* ← Gk. Ἀμάσεια

amidьskъ ← **amida* ← Gk. Ἀμίδη

amorějьskъ ← *amorijь* ← Gk. Ἀμώριον

ankÿrьskъ ← **ankÿra* ← Gk. Ἄγκυρα

antioxijьskъ ← *antioxija* ← Gk. Ἀντιόχεια

apamijьskъ ← *apamija* ← Gk. Ἀπάμεια

aravijьskъ ← *aravija* ← Gk. Ἀραβία

aravьskъ ← *aravija* ← Gk. Ἀραβία

armenijьskъ ← *armenija* ← Gk. Ἀρμενία

armenьskъ ← *armenija* ← Gk. Ἀρμενία

asijьskъ ← *asija* ← Gk. Ἀσία. Ср. *asijanъ* 'id.'

dalьmatьskъ ← **dalьmatija* ← Lat. *Dalmatia*

dekapolьskъ ← *dekapoĺь* ← Gk. Δεκάπολις

edemьskъ ← **edemъ* ← Gk. Ἐδώμ

efesьskъ ← *efesъ* ← Gk. Ἔφεσος

egÿpьtьskъ ← *egÿpьtъ* ← Gk. Αἴγυπτος

elispontьskъ ← *elispontъ* ← Gk. Ἑλλήσποντος

erъmunьskъ ← *erъmunъ* ← Gk. Ἑρμών; ср. *erъmuńь* 'id.'

galilejьskъ ← *galileja* ← Gk. Γαλιλαία

genisaretьskъ ← *genisaretь* ← Gk. Γεννησαρέτ

gomorьskъ ← **gomora* ← Gk. Γομόρρα

idumějьskъ ← *iduměja* ← Gk. Ἰδουμαία

iorъdanьskъ ← *iorъdanъ* ← Gk. Ἰορδάνης

isaÿrьskъ ← *isaÿrija* ← Gk. Ἰσαυρία

ijerusalimьskъ ← *ijerusalimъ* ← Gk. Ἰερουσαλήμ; ср. *ijerusalimovъ, ijerusalimĺь* 'id.'

ijudejьskъ ← *ijudeja* ← Gk. Ἰουδαία

kedrьskъ ← **kedrъ* ← Gk. Κεδρών

kesarijьskъ ← *kesarija* ← Gk. Καισάρεια

kolonijьskъ ← **kolonija* ← Gk. Κολονία

komanьskъ ← *komana* ← Gk. Κομάνα

kÿprьskъ ← *kÿprъ* ← Gk. Κύπρος

lampsačьskъ ← **lampsakъ* ← Gk. Λάμψακος

laodikijьskъ ← *laodikija* ← Gk. Λαοδίκεια

livanьskъ ← *livanъ* ← Gk. Λίβανος

ĺudijьskъ ← **ĺudija* ← Gk. Λυδία

mamьbrijьskъ ← **mamьbri* ← Gk. Μαμβρή

momsujestijьskъ ← **momsujestija* ← Gk. Μοφουεστία

nanzijanьskъ ← *nanzijanzija* ← Gk. Ναζιανσός

nazaretьskъ ← *nazaretъ* ← Gk. Ναζαρέθ

nikejьskъ ← *nikeja* ← Gk. Νίκαια

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nikomidijьskъ ← *nikomidija* ← Gk. Νικομήδεια

ninevьgitьskъ ← *nineÿi* ← Gk. Νινευή

palestinьskъ ← *palestinъ* ← Gk. Παλαιστίνη

raměnьskъ ← **raměnija* ← Gk. Ἀρμενία

rimьskъ ← *rimъ* ← Gk. Ῥώμη

samarьskъ ← *samarija* ← Gk. Σαμάρεια

selomьskъ ← **selomъ* ← Gk. Σηλώμ

sevastijьskъ ← *sevastija* ← Gk. Σεβάστεια

sidonьskъ ← *sidonъ* ← Gk. Σιδών

siluamьskъ ← *siluamъ* ← Gk. Σιλωάμ; ср. *siluamĺь* 'id.'

sinajьskъ ← *sina* ← Gk. Σινά; ср. *sinajьnъ* 'id.'

sionьskъ ← *sionъ* ← Gk. Σιών; ср. *sionь, sionovъ* 'id.'

skÿθopolьskъ ← *skÿθopolь* ← Gk. Σκυθόπολις

sodomьskъ ← *sodoma* ← Gk. Σόδομα

solunьskъ ← *solunъ* ← Gk. Θεσσαλονίκη

srěmьskъ ← *srěmъ* ← Gk. Σίρμιον

sÿrijьskъ ← *sÿrija* ← Gk. Συρία

tarъsisьskъ ← **tarъsisъ* ← Gk. Θαρσίς

tigrьskъ ← **tigrь* ← Gk. Τίγρις

tiverijadьskъ ← *tiverijada* ← Gk. Τιβέριας

traxonitьskъ ← **traxonitь* ← Gk. Τραχωνίτις

tÿrьskъ ← *tÿrъ* ← Gk. Τύρος; ср. *tÿrovъ* 'id.'

vasanьskъ ← **vasanъ* ← Gk. Βασάν

vavÿlonьskъ ← *vavÿlonъ* ← Gk. Βαβυλών

vidъsaidьskъ ← *vidъsaida* ← Gk. Βηθσαϊδά

vitьleemьskъ ← *vitьleemъ* ← Gk. Βηθλεέμ

vÿzanьtijьskъ ← **vÿzanьtijь* ← Gk. Βυζάντιον

xalkidonьskъ ← *xalkidonъ* ← Gk. Χαλκηδών

xanaanьskъ ← *xanaanъ* ← Gk. Χαναάν; ср. *xanaanovъ* 'id.'

xersonьskъ ← *xersońь* ← Gk. Χερσόνησος

zmÿrьnьskъ ← *zmÿrьna* ← Gk. Σμύρνα

References

Shevelov, George A.

    1964   *A prehistory of Slavic*. Heidelberg.

ESRJa= Max Vasmer, 1964-73, *Ètimologičeskij slovar' russkogo jazyka (I-IV) (transl. from German by O.N. Trubačëv)*. Moscow.