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THE OLD CHURCH SLAVONIC CONJUGATION
(WITH AN APPENDIX ON THE OLD RUSSIAN CONJUGATION)

MORRIS HALLE

The following paper is a description of the Old Church Slavonic conjugation from a purely synchronic point of view. It was conceived as an extension and further illustration of the principles of R. Jakobson's "Russian Conjugation" (*Word*, IV, 155-167).

All descriptions previous to that of Jakobson's had proceeded from the observed fact that almost all Slavic verbs have two clearly distinguishable stems: the so-called infinitive and present stems. It was simply assumed that one of the two stems must be used for the primary classification while the other was to serve for further subdivisions. It was Dobrovský who first selected the infinitive stem as basic and made his sub-classifications on the basis of the present stem. Leskien, on the other hand, chose the present stem as primary form. With this approach it was necessary to know the two verbal stems in order to conjugate any given verb.

In the above-mentioned article Jakobson achieved a greatly simplified description by postulating as basic the stem which contained the maximum "information," regardless of whether it was present or infinitive. As a rule this was the longer of the two stems. In the cases where the two stems were of equal length, the stem chosen as basic was the one from which the other could be derived with the simplest set of rules.

The specialist will not be surprised to learn that the principles which apply to the modern Russian verb, apply also to the Old Russian and Old Church Slavonic verb. Somewhat less obvious may be the fact that in a properly modified form these principles yield very simple descriptions of the verbal flexions in all Slavic languages.¹ This is due to the relatively slow evolution of the word structure in the Slavic languages, where the Common Slavic state of affairs, with its alternation of vowels and consonants and its limitation on clusters of either, has been preserved intact especially in the conjugation. The pivotal feature of the Slavic conjugation: *truncation*; i.e., loss of the final phoneme of the stem or of the initial phoneme of the desinence, is a direct consequence of this structural peculiarity.

Slavic verbal flexion is primarily a process of adding a desinence to a stem. Hence most of the important changes occur at the place of contact between the stem and the desinence. Since stems are treated differently depending on whether they end in 1) vowels, 2) sonorous consonants or 3) plain consonants, and desinences—on whether they begin with 1) vowels or 2) consonants, we have to consider six distinct classes of verbal forms, for any of the three types of stems can be followed by either type of desinence.

¹ Cf. the description of the Macedonian verb by Lunt in *Makedonski Jazik* 2.123-131 (Skopje 1951) and also the article on the Czech verb by Rubenstein in this issue.

The simplest cases are those where a stem ending in a plain or sonorous consonant is followed by a desinence beginning with a vowel, or a stem ending in a vowel is followed by a desinence beginning with a consonant. In these three cases there is just simple addition without any modification in either the stem or the desinence.

nes — “to carry” and the 3. pl. pres. desinence-*qt̃* gives *nesqt̃*; *znaj* — “to know” and the 3. sing. pres. desinence *-et̃* gives *znajet̃*; *glagola* — “to speak” and the infinitive desinence *-ti* gives *glagolati*

When a stem ending in a vowel is followed by a desinence beginning with a vowel, there are two possibilities: either the stem loses its final vowel or the desinence loses its initial vowel, i.e., is truncated.

slyša — “to hear” plus *-it̃* (3. sing. pres.) gives *slyšit̃*; *glagola* — “to speak” plus *-ěaše* (2. or 3. sing. imperfect) gives *glagolaaše*

When a stem ending in a sonorous consonant is followed by a desinence beginning with a consonant, the stem is truncated. The other possibilities do not occur in this position.

znaj — “to know” plus *-ti* (infinitive) gives *znati*

When a stem ending in a plain consonant is followed by a desinence beginning with a consonant, the following possibilities occur:

1) if the resulting consonant cluster is admissible by the structural rules of the language, we have simple addition.

nes — “to carry” plus *-l̃* (masc. sing. pret. act. part. II) gives *nesl̃*

2) if the group is not admissible the final consonant of the stem is lost.

ved — “to lead” plus *-li* (masc. sing. pret. act. part. II) gives *veli*

3) a svarabakhti vowel is inserted between the stem and the desinence.

nes — “to carry” plus *-x̃* (1. sing. aor.) gives *nes-o-x̃*, cf. *glagolax̃*

4) the expected cluster is replaced by a different phoneme or cluster.

pek — “to bake” plus *-ti* (infinitive) gives *pešti*

0.10 Definitions and terminology

Every verbal form consists of a *stem* and a *desinence* consisting of one or more desinential suffixes including zero. E.g. *nesti* consists of stem *nes-* and desinence *-ti*.

0.11 The stem from which all other forms can be derived with the help of the rules given below is the *full stem*. We distinguish three classes of full stems:

open full stems; i.e. full stems ending in a vowel; e.g. *glagola* — “to speak”

closed full stems; i.e. those ending in a sonorous consonant: *-j-*, *-v-*, *-n-*, *-m-*, *-r-*; e.g. *znaj* — “to know”

semi-closed full stems; i.e. full stems ending in a plain consonant, *-s-*, *-z-*, *-t-*, *-d-*, *-p-*, *-b-*, *-k-*, *-g-*, e.g. *nes* — “to carry”

0.12 We distinguish two types of desinences according to their initial phoneme: 1) *consonantal* and 2) *vocalic*.

The desinences consist of two types of desinential suffixes: *non-terminal* which must be followed by another suffix (including zero); *free* which may occur in final position.

0.13 The most important alternation in the conjugation is *truncation*. The truncated stem is the full stem minus its final phoneme. The truncated desinence is the full desinence minus its initial (or only) phoneme. It is to be noted that because of the structure of the Old Church Slavonic word (CVCV), truncated alternants of closed and semi-closed full stems are always open and those of open stems are always closed.

0.20 We shall describe the conjugational system of the language as it is found in the documents of the X and XI centuries which form the basis of the standard treatises on Old Church Slavonic grammar; e.g. those of Diels, Leskien, Trubetzkoy, Vaillant, Van Wijk, Wiedemann² and others. It was necessary to normalize the spelling and to limit our description to verbs without prefixes. An extension of the rules to verbs with prefixes is not difficult. Some other minor omissions will be indicated in the proper place.

0.30 *š, ž, č, št, žd, j* cannot be followed by *ě*, but *a* occurs instead. (This spelling convention of some mss. is followed here consistently.)

0.31 *k, g, x* cannot be followed by front vowels: *e, ě, g, i, v*.

0.32 The basic type of consonantal alternation in the Slavic languages is called "substitutive softening". Church Slavonic has two types of substitutive softening—one with palatal and the other with dental substitutes:

Type A k-č g-ž x-š sk-št
 p-plj b-blj v-vlj m-mlj l-lj (r-rj)
 t-št d-žd s-š z-ž n-nj
 c-č z-ž
 st-št sl-šlj zl-žlj
 tr-štrj dr-ždrj
 stv-štvlj sn-šnj zn-žnj
 ov-uj (only in stems ending in back vowels)

Type B k-c g-з x-s

0.321 If within a word a desinential suffix beginning with a front vowel follows after *k, g, x* or after a cluster of consonants containing these, substitutive softening is automatic: softening of type B occurs in the imperative and softening of type A occurs in all other cases. Elsewhere substitutive softening is not automatic. Note however, rule 0.31 about the orthographic convention of *ě* > *a* after *š, ž, č, št, žd, j*.

1.00 The following are *the rules of truncation*:

1.01 Before consonantal desinences all open full stems remain intact and all closed full stems are truncated.

² P. Diels, *Altkirchenslavische Grammatik* (Heidelberg, 1932).

A. Leskien, *Handbuch der albulgarischen Sprache* (Heidelberg, 1922).

N. Trubetzkoy, Mimeographed notes of lectures on Old Church Slavonic (Vienna, 1934).

A. Vaillant, *Manuel du Vieux Slave* (Paris, 1948).

N. Van Wijk, *Geschichte der altkirchenslavischen Sprache* (Berlin, 1931).

O. Wiedemann, *Beiträge zur albulgarischen Conjugation* (St. Petersburg, 1886).

glagola- "to speak" *-ti* (infinitive) gives *glagolati*; *znaj-* "to know" *-ti* (infinitive) gives *znati*

Semi-closed full stems remain intact before consonantal desinences (*nes-* "to carry" *-ti* (infinitive) gives *nesti*) except under the following conditions:

a. Before desinences beginning in *-t-*: 1) stems ending in dental stops (*-t-*, *-d-*) replace these by *-s-* (*ved-* "to lead" *-ti* (infinitive) gives *vesti*); 2) stems ending in labial stops (*-p-*, *-b-*) are truncated (*greb-* "to dig" *-ti* (infinitive) *greti*) 3) stems ending in velar stops (*-k-*, *-g-*) replace the expected consonant cluster by *-št-* (*pek-* "to bake" *-ti* (infinitive) gives *pešti*).

b. Before desinences beginning in *-l-* full stems ending in a dental stop (*-t-*, *-d-*) are truncated. (*met-* "to sweep" *-lō* (masc. sing. II p.a.p.) gives *melō*)

c. Before desinences beginning in *-x-* the vowel *-o-* is inserted after the closed stem. (*pek-* "to bake" *-xomō* (1.pl. aor.) gives *pekoxomō*)

1.02 a. Before vocalic desinences closed and semi-closed full stems remain intact (except in the imperfect and the pass. pret. part. cf. 4.23) and open full stems are truncated.

met- "to sweep" *-etō* (3. sing. pres.) gives *metetō*; *uměj-* "to know how to do something" *-etō* gives *umějjetō*; *slyša-* "to hear" *-itō* (3. sing. pres.) *slyšitō*

b. If the final vowel of a polysyllabic open full stem is a non-nasal back vowel: the final consonant undergoes substitutive softening before vocalic desinences. *rěza-* "to cut" *-ete* (2. pl. pres.) gives *rěžete* but *dvignō* — "to move" *dvignete* (2. pl. pres.)

c. If the final vowel of a polysyllabic open full stem is a front vowel, the final consonant undergoes substitutive softening before all vocalic desinences except those beginning in *-i-* and *-e-*.

rodi- "to bear" *-o* (1. sing. pres.), *-ō* (I. pass. pret. part.), *-ěaše* (2-3. sing. imperfect) give *roždō*, *roždō*, *roždaaše* respectively, but cf. *rodiši*, *rodjetō* (2. sing. + 3. pl. pres.)

1.03 Vocalic non-terminal suffixes are lost if followed directly by a vocalic free suffix.

slyša- "to hear" *-iši* (2. sing. pres.) *-etō* (3. pl. pres.) give *slyš-i-ši* and *slyšetō*.

1.04 No form can end in a consonant. Hence if a non-terminal suffix or a stem ending in a consonant is followed by a zero free suffix, the final consonant is truncated or a special vowel is added.

znaj- "to know" *-xō* (1. sing. aor.), (2. sing. aor.) give *znaxō* and *zna* (respectively: but *ved-* "to lead" has 2. sing. aor. *vede*.)

1.1 Additional modifications of the stem:

1.11 Full stems ending in *-vr-* undergo the following changes:

a. In the infinitive, supine, and aorist *-vr-* changes to *-rě-*

b. In all other cases before consonantal desinences *-vr-* changes to *-rō-* and before vocalic desinences it remains intact.

mōr- "to die" *-mrěti* (infinitive), *umōremō* (imperative, 1. pl.), *-mrěxō* (1. sing. aor.), *-mrōlō* (pret. act. part. 2) *-mōrō* (pret. act. part. I)

(Note: we consider spellings such as the infinitive *mōrěti* as scribal errors; on the

other hand the imperfect *umъr-ěaxq* is in agreement with our rule. See also appendix 2 0.11)

1.12 Full stems ending in a reduced vowel plus a nasal consonant substitute a nasal vowel for the reduced vowel when the stem is truncated. *-ъ* changes to *-ǣ* and *-ъ* changes to *-ǣ*.

klъn- "to curse" has *klęti* (infinitive) but *klъni* (2. sing. imperative); *dъm-* "to blow" has *dęti* (infinitive) but *dъmy* (pres. act. part.)

1.13 Full stems ending in *-ov-* when truncated change their final (or only) vowel to *-u-*.

slov- "to be famous" *slovetъ* (3. sing. pres.) and *sluti* (infinitive)

2.0 The persons and numbers are expressed by the following free suffixes:

	sing.	pl.	dual
1.	<i>-q/-ъ</i>	<i>-mъ</i>	<i>-vě</i>
2.	<i>-ši/-*</i>	<i>-te</i>	<i>-ta</i>
3.	<i>-*</i>	<i>-ǣ/-q-</i>	<i>-te (-ta)</i>

The 1. pers. sing uses *-q* in the present tense and *-ъ* in the past tenses.

glagola- "to speak" *glagolјq* (1. sing. pres.) *glagolaxъ* (1. sing. aor.)

The 2. sing. uses *-ši* in the present tense. In all other categories which have personal forms the zero (*-**) desinence is used and is identical with the 3. sing. *rěza-* "to cut" *rěžeši* (2. sing. pres.), *rěži* (2./3. sing. imperative), *rěza* (2./3. sing. aor.).

The 3. pl. alternants are distributed as follows:

In the present tense their use is determined by the phonemic composition of the full stem. (cf. 3.0)

ljubi- "to love" *ljubętъ*; *kaza-* "to show" *kažqtъ*

In the past tenses, *-ǣ* is used in the aorist, *-q-* in the imperfect.

ved- "to lead" *vedosę* (3. pl. aor.), *veděaxq* (3. pl. imperfect).

In both 3. pers. sing. and plural the free suffix *-tъ* is added. This is almost regular in the present tense and occasional elsewhere. (cf. Diels, p. 227 note 3)

ved- "to lead" *vedqtъ* (3. pl. pres.) *vede* (3. sing. aor.)

3.0 *The Present Tense.* The present tense is expressed by the non-terminal suffix *-i/-e-*. *-i-* is added to open polysyllabic full stems ending in a front vowel or in *c, 3, š, ž, č, šl, žd* followed by *-a-*. Full stems ending in *-ja-* as well as all other stems use the *-e-* suffix. The personal suffixes are added to the temporal suffixes (cf. 2.0)

rodi- "to bear" *rodiši* (2. sing. pres.), *slyša-* "to hear" *slyšitъ* (3. sing.), *mъně-*

"to mean" *mъnite* (2. pl. pres.) but *krad-* "to steal" *kradeši* (2. sing. pres.),

lъga- "to lie" *lъžemъ* (1. pl. pres.) as well as *sęja-* "to sew" *sęješi* (2. sing. pres.).

Stems taking the suffix *-e-* take *-q-* in the 3. pers. pl. Stems taking the suffix *-i-* take *-ǣ* in the 3. pers. pl. (cf. 2.0) In accordance with rule 1.03 *-i/-e-* are lost before the vocalic suffixes of the 1. sing. and 3. pl.

krad- "to steal" *kradeši* (2. sing.) and *kradotъ* (3. pl.) *krado* (1. sing.); *ljubi-* "to love" *ljubiši* (2. sing.) and *ljubetъ* (3. pl.) *ljubljo* (1. sing.)

3.1 *The Imperative.* The imperative is expressed by the non-terminal desinence *-i/-ě(-a-)*. *-i-* appears in the case of verbs whose 1. pers. sing. pres. ends in: *č, š, ž, št, žd, j* and before the zero desinence (of the 2. and 3. pers. sing. cf. 2.0). In all other cases we have *-ě* (and its alternant *-a-* after *š, ž, č, št, žd, j*; cf. 0.301; cf. also rules of substitutive softening 0.32 f.) The personal suffixes are added to the non-terminal suffixes. (cf. 2.0).

mъně- "to mean" *mъnite* (2. pl.) *mъni* (2./3. sing.); *znaj-* "to know" *znajite* (2. pl.) *znaji* (2./3. sing.)

Monosyllabic semi-closed full stems ending in *-e-* followed by a velar change the stem vowel to *-ъ-*.

rek- "to say" *rъcete* (2. pl.), *rъci* (2. sing.)

3.20 *The Present Participles.* Free suffixes expressing gender, number and case are added to the suffixes expressing the participles.

3.21 The suffix expressing the *present active participle* is *-ę/-y*.

Open full stems (other than those ending in *-nъ-*) and closed full stems in *-j-*, take the suffix *-ę*. All other stems take the suffix *-y*.

znaj- "to know" *znaję, mъně-* "to mean" *mъnę, moli-* "to pray" *molę; glagola-* "to speak" *glagolję* but *dvignъ-* "to move" *dvigny* and *nes-* "to carry" *nesy*.

3.22 The non-terminal suffix expressing the present passive participle is *-i/-e/-o-* followed by *-m-*

Full stems forming their present tense with the non-terminal suffix *-i-*, take the suffix *-im-*. All other stems take *-e/-o-*. The suffix *-o-* is taken by verbs whose present stem ends in a consonant after which *-o-* is admitted, cf. 0.30; in all other cases the suffix is *-e-*.

moli- "to pray" *molimъ; mъně-* "to mean" *mъnimъ; glagola-* "to speak" *glagoljemъ* (cf. *glagoljo* (1. sing. pres)); *znaj-* "to know" *znajemъ; dvignъ-* "to move" *dvignomъ; rek-* "to say" *rekъ* (1. sing. pres.) *rekomъ; nes-* "to carry" *nesomъ* (cf. *neseši* (2. sing. pres.)).

4.00 *The Past Forms.*

4.10 The past tenses are expressed by the following non-terminal suffixes to which the personal free suffixes are added (cf. 2.0): *-x/-s-* appear before free suffixes beginning in a vowel. (Their distribution is, of course, governed by rule 0.321.) *-xo-* appears before free suffixes beginning in labials (*-m-* or *-v-*). Before all other free suffixes the imperfect has the suffix *-še-* and the aorist *-s/-**.

4.11. The *aorist -s-* appears before free suffixes beginning in *-t-*. Before the *free suffix **, *-s-* is automatically dropped, as in Old Church Slavonic a word cannot end in a consonant. After semi-closed full stems *-o/-e-* is inserted: *-e-* before zero, *-o-* in all other cases. Cf. also 1.04

ved- "to lead" *ved-o-x-ъ* (1. sing.) *vedošę* (3. pl.) *ved-o-xo-mъ* (1. pl.) *ved-o-s-te* (2. pl.) *ved-e* (2./3. sing.) *glagola-* "to speak" *glagola-xъ* (1. sing.) *glagolašę* (3. pl.) *glagola-xo-mъ* (1. pl.) *glagola* (2./3. sing.).

Some verbs with full stems ending in *-nъ-* preceded by a consonant lose this

suffix in the aorist (and in all other preterit formations except the infinitive and supine). They are then treated as semi-closed full stems. A list of these verbs will be found in Diels p. 257. *dvignq-* "to move" *dvigozъ* (1. sing. aor.)

4.111 Some verbs having semi-closed full stems as well as the just mentioned verbs in *-nq-* which lose this suffix in the aorist, form an aorist by adding the personal endings of the non-present tenses directly to the stem. *-o/-e-* is inserted between the stem and consonant suffixes. *-e-* appears before zero and before *-t-*, *-o-* in all other cases. The verb *id-* "to go" has the most attested forms of this type of aorist: *id-* "to go" *idъ, ide, ide, idově, ideta, idete, idomъ, idete, idq, dvignq-* "to move" *dvigъ, dviže, etc.*

4.112 Other verbs with semi-closed full stems have, in addition to the regular, the so-called s-aorist. The s-aorist is expressed by the suffix *-x/-s* which is added to the stem without the svarabakhti vowel as in 4.110 and 4.111. Full stems ending in a velar consonant (*k* or *g*) take the suffix *-x-*; all other stems take the suffix *-s-*. All full stems are truncated. In addition the following vowel changes take place:

- a) *e* changes to *ě*. *tek-* "to run" *těxъ* (1. sing.)
- b) *o* changes to *a*. *bod-* "to pierce" *basъ* (1. sing.)
- c) In verbs with vocalic ablaut (see list in 6.0) the full vowel is used. *vrъg-* "to throw" *vrěxъ* (1. sing.) *cvъt-* "to bloom" *cviseę* (3. pl.) see Van Wijk pp. 219 ff. for details.

4.12 The imperfect is expressed by the non-terminal suffix *-ěa/-aa-*. *-aa-* appears always after *š, ž, č, št, žd, j* cf. 0.30. The suffix is added directly to the full stem which is modified as follows:

- a) Full stems ending in *-ěj-* and *-aj-* are truncated and are treated like open full stems in *-ě-* and *-a-*. (See b)
- b) Open full stems in *-ě-* and *-a-* as well as closed full stems in *-ěj-* and *-aj-* (as just explained) cause progressive truncation of the suffix. *znaj-* "to know" *znaaxq* (3. pl.), *vidě-* "to see" *viděaxete* (2. pl.)
- c) All other open full stems are truncated (cf. also 1.02) *rodi-* "to bear" *rožda-axomъ* (1. pl.)

4.20 The Preterit Participles.

4.21 The first preterit active participle is expressed by the non-terminal suffix *-v/-v/-v-*. The alternants are distributed as follows:

- a) Closed full stems in *-j-* and *-v-* and open stem other than those ending in *-i-* and *-nq-* which is lost in the aorist take *-v-*.

plov- "to swim" *-pluvъ; znaj-* "to know" *znavъ; mъně-* "to mean" *mъněvъ, glagola-* "to speak" *glagolavъ, ring-* "to drop" *rinovъ* but *dvignq-* "to move" *dvigъ*

- b) All other full stems take *-v/-v-*. Full stems ending in *-i-* take *-v-* and the rest take *-v-* (cf. 1.02).

nes- "to carry" *nesъ; xvali-* "to praise" *xvaljъ*

Note: In the Supr. full stems in *-i-* are treated almost regularly (84%) like all toher open full stems. e.g. *xvalivъ*. In the rest of the mss. this is a very rare phenomenon. (cf. Wiedemann, p. 134)

4.22. The second preterit active participle is expressed by the non-terminal

suffix *-l-* which is added directly to the stem. The stems are modified in accordance with rules 1.01 and 1.11. Examples see there.

4.23 The *passive preterit participle* is expressed by the non-terminal desinence *-t/-en-*. *-t-* is mandatory only for semi-closed stems in nasals. *-pɔn-* "to crucify" *-pɛtɔ*. All other stems take *-en-*. The suffix is added directly to the full stem which is modified in the following instances:

a) Full stems ending in *-ěj-* and *-aj-* are truncated and are treated like open full stems in *-ě-* and *-a-*.

b) Open full stems in *-ě-* and *-a-* as well as semi-closed full stems in *-ěj-* and *-aj-* (as just explained) cause progressive truncation of the suffix.

sėja- "to sow" *sějjanɔ*; *(raz)uměj-* "to understand" *(raz)uměɔ*

c) All other full stems take *-en-*.

rodi- "to bear" *roďdenɔ*, *rek-* "to say" *rečenɔ*.

d) Stems in *-nɔ-* which lose this suffix in the aorist are treated like semi-closed full stems.

dvignɔ- "to move" *dvizenɔ*.

5.00 *The Infinitive and the Supine.*

5.01 Both the infinitive and the supine are expressed with the non-terminal suffix *-t-*. The infinitive has the free suffix *-i* and the supine has the free suffix *-ɔ* (*-ɔ* after *-št-*, *žď*, cf. 0.30). The suffixes are added to the full stems which are modified as stated in 1.01 and 1.11.

pek- "to bake" *pešti*, *peštɔ*; *rěza-* "to cut" *rězati*, *rězatiɔ*.

6.0 *Irregularities*

6.1. The following five verbs form the present tense with person-number suffixes which differ from those postulated in 2.0: *byti* "to be", *dati* "to give", *jasti* "to eat", *iměti* "to have", *věděti* "to know".

6.2 The following verbs do not follow rule 3.0 in their selection of the alternant for the present tense suffix; *bojati se* "to fear", *dovrlěti* "to satisfy", *stojati* "to stand", *spati* "to sleep", *xolěti* "to want".

6.3 The following verbs do not follow rule 1.02 in the matter of substitutive softening of their final stem consonant: *brati* "to take", *gznati* "to drive", *drati* "to tear", *žbdati* "to wait", *žeti* "to reap", *zvati* "to call", *iskati* "to seek", *kovati* "to forge", *metati* "to throw", *přati* "to beat", *řvati* "to tear", *(ob)rěsti* "to find", *(o)snovati* "to found", *sřsati* "to suck", *třkati* "to weave". (Note: Most of these verbs are also irregular in that they have changes in their stem vowels. It was, therefore, considered unnecessary to formulate any rule which would describe their behavior.)

6.4 The verbs *iti* "to go", **jazati* "to ride", *byti* "to be" use different stems for certain forms (suppletion). *iti* also has an irregular truncation of the stem in the infinitive. (cf. 1.01 a)

6.5 The following verbs undergo vowel changes in their major stems for which we were unable to find simple rules:

o alternates with e: *bŕati, berq* "to take"; *dŕati, derq* "to tear"; *pŕati, perq* "to beat"; *stŕlati, steljo* "to spread".

o alternates with i: *zŕdati, ziždq* "to build"; **lŕzati, ližq* "to lick"; *pŕsati, pišq* "to write"; *čŕto, čisti* "to read"; *cvŕto, cvisti* "to read".

o alternates with ě: *vlŕkoq, vlěšti* "to pull"; *slŕpati, slěpljo* "to gush", *trŕzati, trěžq* "to tear".

-ŭ- alternates with -juj-: *blŭvati, bljujq* "to vomit"; *plŭvati, pljujq* "to spit".

o alternates with e: *gŕnati, ženq* "to drive".

o alternates with o: *zŕvati, zovq* "to call".

o alternates with ě: *brŕgq, brěšti* "to watch"; *vrŕgq, vrěšti* "to throw"; *vrŕzq, vrěšti* "to bind"; *plŕzati, plěžq* "to crawl"; *čŕŕpŕq, čŕěti* "to scoop", *čŕŕpati, čŕěpljo* "to scoop".

o alternates with u: *strŕgati, stružq* "to lacerate".

i alternates with ě: *zijati, zějq* "to yawn"; *lijati, lějq* "to pour"; *smijati, sějq* "to laugh".

ra alternates with or: *brati, borjq* "to struggle".

la alternates with ol: *klati, koljq* "to stab".

lě alternates with el: *mlěti, meljq* "to grind"

ŕ alternates with ě: *sĕdq, sěšti* "to sit"; *(ob)rěšti, (ob)rĕštiq* "to find".

ŕ alternates with e: *lĕgq, lešti* "to lie down".

6.6. The following two verbs do not follow rule 1.11a: *žŕŕq, žŕŕti* "to sacrifice"; *tŕŕq, tŕŕti* "to rub".

6.7. Some verbs with full stems ending in -nŕ- (which is preserved throughout) and others with monosyllabic full stems ending in -uj-, -ij- and -yj- insert a special non-terminal suffix between the stem and the desinence of the passive preterit participle. The alternants of this suffix are -v-/-ŭ-/-ŭ-/-ov-. Verbs in -uj- take the consonantal suffix; verbs in -ij- and -yj- take the suffix beginning with a reduced vowel (-ij- takes -ŭ-; -yj- takes -ŭ-); verbs having the nasal suffix -nŕ- take the suffix beginning with the full vowel. Before this desinence full stems ending in -ij- and -yj- appear in their truncated (open) form, which is then further truncated as an open stem before a vocalic desinence.

(ob)uj- "to shoe" *(ob)uvenŕ*; *šij-* "to sew" *šŭvenŕ*; *kryj-* "to cover" *krŭvenŕ*; *riŕnŕ-* "to push" *riŕovenŕ*. Not all verbs having the mentioned full stems undergo the changes outlined above; for a list of the attested forms see Diels, p. 255 note 6; p. 258.

APPENDIX 1

In the following we shall attempt to show how the selection of the proper full stem is made. As illustrative material we use Diels' classification (cf. *ibid.* pp. 244-281) of the Old Church Slavonic verb.

Class I.1 Verbs whose infinitive stem ends in a consonant which also occurs unsoftened in the present stem. All stems in this class are closed stems. The full stem of verbs in this class is the present stem because all closed and semi-closed full stems remain intact before vocalic desinences. (1.02)

The stems undergo the modifications mentioned in 1.01, 1.11, 1.12, 0.321
tek- "to run" *tekq*, *tečeši*, *tešī*, *nes-* "to carry" *nesq nesti*.

Exceptions are all the verbs which have various kinds of vowel changes in the stem except those mentioned in 1.11 and 1.12: *čisti* "to read", *cvisti* "to bloom", *lešti* "to lie down", *sěsti* "to sit down", *vrěšī* "to throw", *-črěti* "to scoop", *-vrěšī* "to bind", *brěšī* "to watch" *ilěšī* "to push", *vlěšī* "to pull", *zrěti* "to sacrifice", *trěti* "to rub". (12)

Class I.2. Verbs with consonantal stem in the present tense which is related by rules of substitutive softening to that of the infinitive. This small class is composed of exceptions to our rules because of the vowel changes in the stem. *klati* "to pierce", *brati* "to struggle", *mlěti* "to grind", *žgti* "to reap", and the stem *-rěsti* which appears in *sřrěsti* "to meet" and *obrěsti* "to find". (6)

Class I.3: Verbs whose final vowel is *i*, *y*, or *u* which in the present tense is followed by *-j-*. The full stems of this class are the present stems, they are all closed stems.

kryj- "to cover" *kryjq*, *kryti*.

Exception is *pěti* "to sing". (1) Some irregularities in the formation of passive preterit participle are discussed in 6.7.

Class II: Verbs whose infinitive ends in *-nqti*. All verbs in this class have the infinitive stem as full stem: i.e. an open full stem ending in *-nq-*. The two subclasses are distinguished by whether or not the suffix *-nq-* is preserved in the entire conjugation (cf. list in Diels pp. 257-8).

ring- "to push" *ringq*, *ringti*; *dvignq-* "to move" *dvignq*, *dvignqti*

For some exceptions in formation of pass. pret. part. cf. 6.7.

Class III.1 Infinitive stems ends in *-ě-* (*-a-* after *c*, *z*, *š*, *ž*, *č*, *št*, *žd*, *j*) while present stem ends in consonant which undergoes of softening in the 1. pers. sing. only. The present tense suffix is *-i-*. All verbs in this class have the infinitive stem as their full stem; i.e. open full stem. All verbs in this class are polysyllabic and rule 1.02 c. applies here. *bojati sę* "to fear" and *stojati* "to stand" also belong in this class per 3.00.

mъně- "to mean" *mъnjq*, *mъniši*, *mъněti*; *mъlča-* "to be silent" *mъlčq*, *mъlčiši*, *mъlčati*.

Class III.2. Infinitive stems ends in *-ě-* (*-a-* after *c*, *z*, *š*, *ž*, *č*, *št*, *žd*, *j*), present stem ends in *-ěj-/-aj-*. The present stem is the full stem because it is the longer. *bogatěj-* "to become wealthy" *bogatějq*, *bogatėješi*, *bogatěti*

Class IV. Infinitive stem ends in *-i-*, present stem ends in consonant which undergoes softening in the 1. pers. sing. and the present tense is expressed by the suffix *-i-*. All verbs in this class are polysyllabic. Here the infinitive stem is the longer stem; hence it is the full stem. Rule 1.02 c applies here, as in class III.1. *moli-* "to ask" *moljq*, *moliši*.

Class V: All verbs in this class have an infinitive stem ending in *-a-*.

Class V.1. Present stem ends in the same consonant as the infinitive. All stems in this class are bisyllabic and hence they are not in agreement with rule 1.02 (which requires softening of the final consonant). In addition most of the verbs

of this class have a reduced vowel in the first syllable which alternates with a full vowel in the present tense. Thus the entire class consists of exceptions. *sasati* "to suck", *tskati* "to weave", *iskati* "to seek", *metati* "to throw" (*iskati* and *metati* have also present forms which are in agreement with 1.02 i.e. *ištiq* and *meštiq* cf. Diels, p. 269 note 5) *kovati* "to forge", —*snovali* "instigate", *rvati* "to tear", *brati*, "to take", *drati* "to tear", *prati* "to beat", *gnati* "to drive", *zvati* "to call", *ždati* "to wait". (13)

Class V.2. Present stem ends in *c*, *z*, *š*, *ž*, *č*, *št*, *žd*, *j*, i.e. the stem undergoes softening of type A in agreement with rule 1.02. In this class the infinitive stem is our full stem.

glagola- "to speak" *glagoljg*, *glagolješi*, *glagolati*.

Exceptions are formed by verbs which have changes in the stem vowels.

pisati "to write" (the form *pisati* which is found in several mss. is, of course, a regular form), *zodati* "to build", *imati* "to seize" *stlati* "to spread", *stragati* "to lacerate", *plvati* "to spit", *blvati* "to vomit"; probably also the following verbs *lżati* "to lick", *slpati* "to bind", *črpati* "to scoop", *trzati* "to tear", *plzati* "to crawl". (12)

Class V.3. The infinitive stem ends in *-ja-*, the present stem ends in *-j-*. The present tense is formed with the suffix *-e-*. Because of rule 3.00 this entire class is regular with the exception of the verbs which undergo vowel changes. The infinitive stem, being the longer stem, is the full stem.

sėja- "to sow" *sějg*, *sějete*, *sějati*.

Exceptions: *lijati* "to pour", *smijati se* "to laugh", *zijati* "to yawn" (3)

Class V.4. The infinitive stem ends in *-a-*, the present stem ends in *-aj-*. The longer stem is the present stem, hence it is the full stem.

dělaj- "to do" *dělajg*, *dělajete*, *dělati*.

Class VI. Verbs whose infinitive ends *-ovati*, while the present stem ends in *-uj-* and is followed by the suffix *-e-*. The infinitive stem is the full stem. The change from *-ova-* to *-uj-* is in accordance with our rules of substitutive softening 0.32.

darova— "to give" *darujg*, *darujete*, *darovati*.

Class VII. Irregular verbs. The entire class forms exceptions to our rules. *byti* "to be", *jasti* "to eat", *dati* "to give", *věděti* "to know", *iměti* "to have", *spati* "to sleep", *zotěti* "to want", *iti* "to go", **jazati* "to ride", *dovlěti* "to satisfy". Note, however, the verb *stati* "to stand" *stanq*, *stanete* etc. is completely regular if we postulate the present stem *stan-* as the full stem. The imperfect *ostaněaxg* which causes some difficulty to Diels is what we expect before a vocalic desinence.

APPENDIX 2

The Old Russian conjugation is very similar to that of Old Church Slavonic. Only in relatively few places do the above rules have to be modified. Unfortunately the Old Russian material has not been studied as carefully as the Old Church Slavonic and, therefore, many minor problems are still obscure. This

applies in particular to the correct interpretation of variant spellings of one and the same form. However, in its major outlines the system is quite clear.

Old Russian of our earliest manuscripts possessed no nasal vowels. Therefore *g* is regularly replaced by *u* and *g* is regularly replaced by *ä*. Furthermore *z* is replaced by *z*; *šĭ* and *žā* are replaced by *č* or *šč*, and *ž* respectively.

The following rules are re-formations of the rules in the preceding article and refer to the paragraphs indicated:

0.11 Old Russian does not have closed full stem in *-r-*. Verbs of this type; e.g. *mъr-* "to die" change the *-ъr-* group to *-vrě-*. Hence we have to eliminate rule 1.11 and change 3.00.

0.32 Type A: k, t—č; p—plj n—nj
 g, d, z—ž b—blj l—lj
 x, s—š v—vlj r—rj
 m—mlj ov—uj*

1.01 a. 3) Stems ending in velar stops (*-k-*, *-g-*) replace the expected cluster by *-č-*. *pek-* "to bake" plus *-ti* (inf.) *pečĭ*.

1.02 b. If the final vowel of a polysyllabic open full stem is *a* or *o* the final consonant undergoes substitutive softening before vocalic desinences.

kolo- "to cut" gives *kolju* (1. sing. present); *rěza-* "to cut" *rěžu*, *rěžeši* but *gybnu-* "to perish" *gybnu*, *gybneši*.

However, some bisyllabic open full stems having a reduced vowel in the first syllable do not follow this rule. For a list of these verbs see 6.3 below.

1.02 c. If the final vowel of a polysyllabic open stem is a front vowel, the final consonant of the stem undergoes substitutive softening before all vocalic desinences except those beginning with *-i-* and *-ä-*. However, stems ending in *-vrě-* do not admit substitutive softening of the final stem consonant.

rodi- "to bear" *-u* (1. sing. pres.) gives *rožu* while *-iši* (2. sing. pres.) and *-ütö* (3. pl. pres.) give *rodiši* and *rodätö*; *mъrě-* "to die", *mъremö*, *mъru*, etc.

1.11 Omit. See 0.11 and 3.00 of appendix 2.

2.0 In both 3. pers. sing. and plural the free suffix *-tö* is added. This is regular in the present tense and occasional elsewhere.

ved- "to lead" *vedetö* (3. sing. pres.) *vedütö* (3. pl. pres.) but *vede* (3. sing. aorist) and *vedoša* (3. pl. aorist)

3.0 The present tense is expressed by the non-terminal suffix *-i/-e-*. *-i-* is added to open polysyllabic full stems ending 1) in a front vowel (except for stems ending *-vrě-*) and 2) in *-a-* preceded by *c*, *-č-*, *-š-*, *-ž-*. Stems ending in *-vrě-* and those ending in *-ja-* as well as all other stems take the suffix *-e-*. *pъre-* "to lock" *pъru*, *pъretö*, *pъrutö*.

3.20 The present participles of Old Russian have not been sufficiently studied.

4.12 The imperfect is expressed by the non-terminal suffix *-ě/-a-*. *-a-* appears after open full stems ending in *c*, *š*, *ž*, *č*, *j*; *-ě-* elsewhere. Full stems ending in *-ěj-* and *-aj-* are truncated in the imperfect and are treated like open full stems in *-ě-* or *-a-* respectively.

* Only in stems ending in back vowels.

Open stems in *-ě-* and *-a-* as well as closed full stems in *-aj-* and *-ěj-* (as just explained) cause progressive truncation of the suffix.

znaj- "to know" *znaxomъ* (1. pl. ipf.) *vidě-* "to see" *viděxu* (3. pl. ipf.) *ved-* "to lead" *veděxomъ* and *pek-* "to bake" *pečaxomъ* (1. pl. ipf.).

4.20 The preterit participles have not been studied sufficiently except for the second active participle, which does not differ from the Old Church Slavonic form.

6.3 Eliminate as exceptions the following verbs which in Old Russian are regular: *žati, žnu* "to reap"; *iskati, išču* "to seek"; *kovati, kuju* "to forge"; *metati, meču* "to throw"; *(o)snovati, (o)snuju* "to found".

6.5 The following verbs have vowel alternations in their major stems for which we were unable to find simple rules. Their number is considerably smaller than in Church Slavonic. We have not considered clearly Church Slavonic forms found in Old Russian texts.

ъ alternates with *e*: *bъrati, beru* "to take"; *dъrati, deru* "to tear"; *pъrati, peru* "to beat"; *stъlati, stelju* "to spread".

ъ alternates with *i*: *zъdati, zižu* "to build"; *pъsati, pišu* "to write"; *čъtu, čisti* "to read".

-ъv- alternates with *-juj-*: *blъvati, bljuju* "to vomit"; *plъvati, pljuju* "to spit".

ъ alternates with *e*: *gъnati, ženu* "to drive".

ъ alternates with *o*: *zъvati, zovu* "to call".

i alternates with *ě*: *smijati sâ, směju sâ* "to laugh".

â alternates with *ě*: *sâdu, sěsti* "to sit down"; *(ob)râču, (ob)rěsti* "to find".

â alternates with *e*: *lâgu, leči* "to lie".

6.6 Eliminate.

6.7 Eliminate.

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