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NOMINALS, ADJECTIVES, PRONOUNS, NUMBERS, VERBS,

THIS STRUCTURALLY-ORIENTED OUTLINE OF BIELORUSSIAN
PHONOLOGY AND MORPHOLOGY IS ONE OF THE VERY FEW DESCRIPTIVE
LINGUISTIC WORKS ON BIELORUSSIAN WRITTEN IN A WESTERN
LANGUAGE. THE AUTHOR INCLUDES SECTIONS ON--(1) THE PHONOLOGY
AND WRITING SYSTEM, (2) MORPHOPHONEMIC ALTERNATIONS, (3)
NOUNS, (4) ADJECTIVES, (5) PRONOUNS, (6) NUMERALS, AND (7)
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BY

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Preface

The present outline of Bielorussian morphology grew out of my structural formulations for a seminar in Slavic descriptive linguistics which I directed during the winter term of 1966-67 and in which Miss Regine Dalchow and Messers Ronald Breininger, John Wagner, and Larry Weiner, graduate students of Slavic Studies, participated. It is believed that the present study will constitute a concrete contribution, in as much as there is presently no grammar of Bielorussian in English or indeed, to my knowledge, in any western language, other than the brief sketch in de Bray's Guide to the Slavonic Languages (London, 1951) which is based on partly obsolete Bielorussian grammars published 30-40 years ago outside the Soviet Union and is not structurally oriented.

The sources of this outline are primarily published grammars and handbooks as enumerated below. I am particularly grateful to the Most Reverend Professor Uladislau Ryžy-Ryski for making available to me various sources listed below and for other information in connection with my Bielorussian studies.

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1.1 Phonology.

Vowels:	i	u
	e	o
	a	

The vowels /u o/ are back rounded, while /e i/ are front (i.e. non-back, non-rounded). After non-palatalized consonants the front vowels have central allophones. With regard to the dimension high-low (or close-open) there is a gradational (ternary in this case) contrast: high /i u/, mid /e o/, low /a/. In the low vowel /a/ the contrast back-front is neutralized; /a/ is phonetically unrounded and central.

All five vowels occur under stress. In syllable immediately preceding stress, with few exceptions, only /i a u/ appear. In unstressed syllable other than the immediately pretonic /i e a u/ appear (the phonological statements of Lomtev and Hurski seem to indicate that only /i a u/ occur in all unstressed, not only pretonic syllables; however the phonetic transcription in Hurski, p.85, as well as a tape recording I possess indicate a contrast /e ≠ a/ in non-pretonic unstressed position).

Consonants:	labial	dental	post- alveolar	velar
stops	p b	t d		k g
fricatives	f v	s z	š ž	x h
affricates		c ɟ	č ǰ	
nasals	m	n		
liquids			glide (semivowel)	
lateral		l		
trill		r	j	

Stops, fricatives, and affricates show the contrast voiceless-voiced; /v/ is a voiced consonant only before vowel; before consonant or juncture it has a semi-vowel allophone [w].

In addition to the above non-palatalized consonants, the following palatalized counterparts exist:

labial	/p' b' f' v' m'/	
dental	/s' z' c' ʒ' n'/	lateral /l'/
velar	/k' g' h'/	and possibly /x'/

Non-palatalized /ʒ/ as well as /g g'/ are of rare occurrence, being limited mostly to loanwords.

1.2 The writing system (the following brief remarks on Bielorussian spelling presuppose knowledge of the Russian writing system).

Bielorussian is usually written with a Cyrillic alphabet derived from and quite similar to, the Russian alphabet, so that anyone familiar with Russian spelling will easily read Bielorussian. The orthography of modern Bielorussian, being more recent than the Russian orthography, is more consistent than the latter and shows fewer irregularities. Bielorussian spelling has like Russian a double series of vowel letters, one

а э ы о у used initially or if the preceding consonant is not palatalized, and the other я е і ё ю

used to indicate palatalization of preceding consonant or (excepting і) /j/ plus vowel if no consonant letter precedes. Note that і is used rather than the Russian letter ъ. A palatalized consonant not followed by vowel is indicated, as in Russian, by the "soft sign"

ь . The consonant letters are essentially the same as in the Russian alphabet, except that ґ represents /h/ in the vast majority of cases, though the letter is also used to note the few occurrences of /g/ (the phoneme /g/ is rare in Bielorussian, as Common Slavic /g/ became /h/ rather than remaining /g/ as in Russian). The phoneme /v/ has two representations, one в representing the prevocalic allophone [v] and the other ǎ representing the allophone [w] occurrent before consonant or word-boundary. The phonemes /ʒ ʒ/ are written with the digraphs жз жж.

Bielorussian spelling, like Russian, combines the phonemic and the morphophonemic-etymological principles, with the great difference however, that in Bielorussian writing the phonemic principle is dominant (e.g. automatic vowel changes are indicated), while in Russian the morphophonemic-etymological principle prevails. Bielorussian spelling will however not be used in this outline; rather all Bielorussian matter will be given in transcription, as indicated in the following section.

1.3 Transcriptions used.

All Bielorussian example words are cited in a quasi-phonemic transcription. Word stress is marked, but since full utterances are not cited, but only isolated morphological words, suprasegmental phenomena occurring over longer stretches are not indicated. The transcription of vocalic and consonantal segments is phonemic, except that neutralization of voicing is not indicated at word-boundary, the morphophonemically

justified consonant being indicated in every case. In citation of items hierarchically less than a word (i.e. stems, affixes, endings, morphemes) the transcription is a morphophonemic one in which automatic morphophonemic changes are not reflected, but each segment is noted with the phoneme which appears in the position of maximum differentiation; it is particularly important to keep this in mind regarding the vowels, which in Bielorussian, as in Russian, are subject to a number of automatic changes depending upon position of stress and adjacent consonants (see 2.1 below). Thus the masculine and neuter genitive adjective ending is noted -oŋo, though in fact it appears, depending on position of stress only in these phonemic shapes /óŋa, ahó, aha/, which however, given the morphophonemic rules and knowledge of the position of stress, are readily derived from the morphophonemic transcription. So too, I note the verbal suffix, which appears as /av/ after /bud/ in budavác' 'to build', as -ov-, since it appears so under stress, cf. p'erabudóvvac' 'to be rebuilding'.

The symbols used herein are those customary in linguistic writings: / / indicate phonemic transcription, [] phonetic transcription; Ø is 'zero', C 'consonant', V 'vowel', ∩ 'alternates with', and → means 'is replaced by'. Where necessary, morpheme boundary may be indicated by a hyphen; stems and prefixes will be cited terminating with a hyphen, while final suffixes begin with a hyphen; non-final elements are cited with a hyphen on each side. The cases are

abbreviated N A G L D I, i.e. 'nominative, accusative, genitive, locative, dative, instrumental', the three genders m. f. n. (sometimes masc. and fem. are used), the two numbers sg. and pl., while the persons are indicated as 1. 2. 3. Abbreviations of forms, e.g. pres., inf. etc. are transparent; 1.sg.pres. would be read 'first person singular, present tense'.

2.0 Morphophonemic alternations.

2.1 Vowel alternations.

It was noted earlier (1.1) that only in stressed syllables do all five vowels appear; if stress shifts, a vowel non-occurrent in unstressed positions (/o e/ in immediately pretonic syllables, /o/ in all unstressed syllables) must be replaced. In immediately pretonic syllables and in all unstressed syllables after "hardened" consonants (see following paragraph) /o e/ are automatically replaced by /a/; in other unstressed syllables /e/ remains, but /o/ is replaced by /a/ after "plain" consonant and, after palatalized consonant, by either /a/ (simple replacement /ó → a/ in all positions) or by /e/ ("basic vowel alternation").

In terms of the morphophonemic alternations which they condition in neighboring phonemes, it is useful to divide Bielorussian consonants into three groups: (a) "plain" consonants, i.e. non-palatalized consonants which possess a palatalized counterpart (here /c' ʒ'/ are considered the morphophonemic palatalized counterparts of /t d/, not of /c ʒ/), (b) "hardened" consonants, i.e. those with no palatalized counterpart,

namely /š ž č ž c ʒ r/, (c) palatalized consonants, including /j/, which has no plain counterpart. In the formulas of the table below, C represents any consonant, pC "plain" consonant, Č "hardened" consonant, C' palatalized consonant, while comma represents "either...or".

The "basic vowel alternation" displayed in the table below is partly automatic, partly non-automatic. The changes in stressed syllables are non-automatic, since in some morphemes /o e/ do not alternate; replacement in immediately pretonic syllable and after pC, Č in other unstressed syllables is automatic, but the replacement after C' is not, since /ó/ not participating in basic vowel alternation undergoes simple replacement /ó→a/ in all unstressed positions. An example of such simple replacement is given by adjective endings containing /o/, cf. m.n.G ending -oho in maladóha 'young', ródnaha 'native', s'in'aha 'blue', and us'ahó 'all'.

The following table illustrates the basic vowel alternation as conditioned by the enviroing consonants.

Basic Vowel Alternation

stressed syllable	pretonic	all other unstressed	
(pC̣C, # ʌ C', čC̣C, # ʌ C', čC', č)	ʌ C̣C	ʌ pC, čC̣C, # ʌ C' eC, #	
aknó	žic'c'ó ružžó	dreva móra	pól'e NASg. ending -o
aknóm	žic'c'óm ružžóm	drevám móram	pól'em ISg. ending -om
pól'e	v'ódri n'as'óm b'aróm	pal'í v'adró n'es'ac'é b'erac'é	prós'ec'e first conjugation ending vowel, 1.pl., 2.sg., 2.pl. noun stem 'devil', sg. pl.
	čórt	čérc'i	

pC̣ "plain" consonant C' palatalized consonant C any consonant
 C "hardened" consonant # word boundary

The alternations between stressed syllables and unstressed syllables are automatic, i.e. basic /e/ or /o/ in stressed syllable is automatically replaced in unstressed position as indicated in the above table; alternation in stressed syllable is non-automatic, partly because we have cases of non-alternating /e/ and /o/ under stress: l'és'c'i 'to crawl', m. past. l'éz.

Further, there are cases where /e/ and /o/ alternate not in accordance with the above table. Thus the past tense of verbs like n'és'c'i 'to carry' have /e/ in the f. and n. forms before pC (apparently by analogy to the plural with /e/ before C'): m. n'ós n.f. n'ésla pl. n'és'l'i. Likewise, the first conjugation ending vowel /e/ remains before word boundary in 3.sg.pres. (n'asé etc.) due to an older form (retained in dialects) where /e/ was followed by /c'/ as in the second conjugation. Replacement of final palatalized labial by plain labial before word boundary does not condition replacement of /e/ by /o/.

Alternation of vowel and zero. Items ending in consonant clusters before vowel often show forms with vowel intercalated between the last two consonants when preceding word-boundary or consonant. The intercalated vowels are those of the basic vowel alternation above, i.e. /e/ or /o/ under stress alternating with /e/ or /a/ unstressed depending upon adjoining consonants. The choice of unstressed inserted vowel is completely automatic, that

of stressed inserted vowel almost so, there being a few exceptions such as l'év: il'vá 'lion', xrib'ét : xriptá 'mountain range'.

vowel	zero	
<u>stressed</u>		
pCoC		
p'asók	p'askú	'sand'
C', ČopC		
av'ós	avsá	'oats'
kružók	krušká	'circle'
C', ČeC', Č		
kas'éc	kascá	'reaper'
salav'éj	salav'já	'nightingale'
tvaréc	tvarcá	'creator'
hlušéc	hlušcá	'deaf person'
<u>unstressed</u>		
pC, ČaC		
vókan	aknó	'window'
hórac	hórcá	'mountaineer'
lókac'	lókca	'elbow'
l'istóčak	l'istóčka	'leaflet'
C'eC		
p'ís'em	p'is'mó	'letter'

In one item, až'(i)n- 'one', there is inserted /i/.

In certain verbs, vowel/zero alternation is between the two stem variants. Consonant root verbs with stems in /r/ have zero in the present stem, basic vowel alternation in the infinitive stem. A few a-dropping verbs of the first conjugation have basic vowel in the present stem and zero in the infinitive stem. Thus

2.sg.pres.	inf.	m. past.	
trěš	c'érc'i	c'ór	'to wipe'
b'arěš	brác'	bráv	'to take'
zav'ěš	zvác'	zváv	'to call'

2.2 Alternation of vowel with consonant.

automatic

/u-v/ Word-initial /u/ preceding consonant is replaced by /v/ after an item ending in a vowel (and no intervening major juncture):

užó 'already' a jamú vžó 'and to him already'

Word-initial /u/ preceding consonant is replaced by /v/ if the following consonant is replaced by a vowel.

uz'ác' : vóz'm'eš 'to take (inf. and 2.sg.pres.)'

ujěš : v'íc' 'to wind' (2.sg.pres. and inf.)'

Cf. too the alternants of the preposition u 'in, into'

/v/ after item ending in vowel: dráma v v'éršax 'drama in verse'

/va/ before item beginning with /u/ (which /u/ in turn is replaced by /v/): va vs'ix 'in all'.

non-automatic

/i/ɤ/j/ and /a/ɤ̃ (nasal consonant); for discussion and examples, see the section on verbs (root verbs) below.

2.3 Consonant changes,

2.3.1 Automatic changes.

Voiced vs. voiceless. Morphophonemically the consonants are:

voiceless p t k f s š x c č

voiced b d g - z ž h ʒ ʒ̃

The palatalized counterparts of the above are also respectively voiced or voiceless. All other consonants are neutral with regard to voicing contrast.

Voicing contrast is neutralized at word-boundary. Before juncture, only voiceless (and neutral) consonants appear; voiced consonants are replaced by their voiceless counterparts.

xl'éba : xl'ép 'bread (G and N.)'

Within consonant clusters, voiced or voiceless consonants are assimilated with regard to voicing to the last consonant of the cluster for which voicing is distinctive.

kaš'íc' : kaš'bá 'to reap : the harvest'

móhla : maščí 'to be able (past f. and inf.)'

Before /š ž č ʒ/, /s z/ are replaced by /š/ or /ž/.

s 'with' žónka 'woman' šápka 'hat'

žžónkaj 'with a woman' ššápkaj 'with a hat'

Assimilation with regard to palatalization takes place as follows:

Before all palatalized labial and dental consonants and /j/, /s z/ are replaced by /s' z'/.

Before palatalized /v' /, /t d/ → /c' ʒ'/.

Before all palatalized dental consonants but /l' /, /n → n' /.

Before palatalized dental consonants, palatalized /c' ʒ'/ →

/t d/. ʒ'én' : dn'á 'day (N and G)'

Morphophonemically, /c' ʒ'/ function as palatalized counterparts to /t d/ respectively, while the phonetically closer /c ʒ/ may be regarded as lacking morphophonemic palatalized counterparts. Except for /l ≠ l' /, the palatalization distinction is neutralized before the dental consonants /t d s z c n l r/, palatalized consonants being replaced by their non-palatalized counterparts:

aʒ'in : adná 'one (m. and f.N)'

s'as'c'ór : s'astrá 'sister (G pl. and N sg.)'

p'éc' : p'atnāccac' 'five; fifteen'

but l'ón : il'nú 'flax'

Palatalized labials do not appear in word-final position; they are replaced by their non-palatalized counterparts.

v'érf'i : v'érf 'shipyard (G and N sg.)'

s'am'í : s'ém 'seven (G and N sg.)'

Non-palatalized velars do not appear before /i/; before elements beginning with /i/ plain velars are replaced by their palatalized counterparts.

stróhaja : stróh'i 'strict (N f. and m.)'

vóblaka : vóblak'i 'cloud (N sg. and pl.)'

straxá : stráx'i 'roof (N sg. and pl.)'

Except in recent borrowings, /e/ does not occur after plain consonants with morphophonemic palatalized counterparts; plain consonants are replaced by their palatalized counterparts before elements beginning with /e/.

aknó : akn'é 'window (N and L sg.)'

Word-initial /IV/↔/ilC/, /l'V/↔/il'C/.

l'ón : ilhú 'flax (NGsg.)'

lób : ilbá 'forehead (NGsg.)'

l'év : il'vá 'lion (NGsg.)'

Word-initial /mV/↔/imC/ in one item:

móx : imx'í 'moss (Nsg. and pl.)'

Word-initial /o/ does not occur in most items; thus when unstressed /a/ alternates with stressed /o/ word-initially, a /v/ is preposed to /o/ (alternation /v↔o/ conditioned by alternation /o↔a/).

aknó : vókni 'window (Nsg. and pl.)'

In the sequence C + j, when C is a consonant other than /r/ or labial consonant, C is replaced by its palatalized counterpart (unless it has none) and doubled, unless C is already preceded by a consonant, while /j/ is deleted. Thus, with the ending -ju of the instrumental sg. of kós'c' type nouns we have:

Nsg.	Isg.	
v'érf	v'érfju	'shipyard'
kós'c'	kós'c'u	'bone'
nóč	nóčču	'night'
hús'	hús's'u	'gander'

In the formation of the verbal noun by addition of /j/ plus aknó endings to the past passive participle formant: Inf.

ap'isác' 'describe', participle ap'ísan, verbal noun ap'isán'n'e (n + j → n'n').

2.3.2 Non-automatic changes.

J-change (substitutive softening)

labial C → labial + /l'/

c, k, t ⇨ c' → č

d ⇨ ž → ǰ

x, s ⇨ s' → š

h, z ⇨ z' → ž

This alternation is very widespread; it occurs in noun and verb derivation, in verb morphology (before 1.sg.pres. ending, II. conj., between present and infinitive stem of I.conj. a-dropping verbs, etc.) and elsewhere.

kup'íc' : kupl'ú : kúpl'eni 'to buy (inf. 1.sg.pres., past pass.part.)'

p'akú : p'áčés' : p'ací 'to bake (1.2.sg.pres., 2.sg.imper.)'

v'ázac' : réžu 'to cut (inf., 1.sg.pres.)

L-change (occurs in noun morphology)

k → c ruká : rucé 'hand (N and DLsg.)'
 h → z' nahá : naz'é 'leg (N and DLsg.)'
 x → s' straxá : stras'é 'roof (N and DLsg.)'

t, d → s, before /c'/ in verb morphology

pl'atú : pl'és'c'i 'to plait (1.sg.pres. and inf.)'

jadúc' : jés'c' : jas'c'é 'to eat (3.pl., 3.sg., 2.pl.)'

t, d → ∅, before /l v m s'/ in verb morphology

pl'atú : pl'alá : pl'óv : pl'óvši 'to plait (1.sg.pres.,
 past f. and m., past act. part.)'

jadúc' : jém : jas'í 'to eat (1.2.sg.pres.)'

k → ∅ before inf. formant

p'akú : p'ačí 'to bake (1.sg.pres., inf.)'

l ∪ v /l/ before vowel alternates with /v/ before consonant or word boundary. There are few examples; the principal one is the formant -l- of the past which alternates with /v/ before zero ending in the past masculine and before the -š- formant of the past active participle. Cf. too póv-, palóva 'half'.

3.0 The Noun.

sg.

	<u>stól</u>	<u>aknó</u>	<u>žónka</u>	<u>kós'c'</u>
N	- \emptyset (-o)	} -ou-e	-a	} - \emptyset
A	~		-u	
G	-an-u	-a	-i	} -i
D	-u	-u	} -e/i	
L	-e/i~ -u	-e/i~ -u		
I	-om~ -em	-om~ -em	-oj (u)	-ju

pl.

N	-i
A	~
G	-ov, - \emptyset , -ej
D	-am
L	-ax
I	-am'i (-m'i) (-ima)

Distribution of genders: stól-nouns are solely masculine, aknó nouns neuter, and kós'c'-nouns feminine; žónka-nouns are all feminine except for personal names with Nsg. in stressed -a (kuzná 'Cosmas'), which are masculine and s'iratá 'orphan', which is masculine or feminine depending on the sex of the person denoted.

3.1 Remarks on the endings.

- (1) In Nsg. some personal names of the stól-type have the end-

ing -o.

(2) In aknó nouns with stems ending in palatalized consonant and /j/, when the ending is unstressed, the Nsg. and Isg. endings -o and -om are replaced by -e and -em (in accord with basic vowel alternation, see 2.1).

(3) In the Asg. stól-nouns and in Apl. all nouns are in a form identical with the genitive, if they designate animate beings; or with the nominative, if they designate inanimate objects.

(4) In Gsg. of stól-nouns designating inanimates the ending -u frequently occurs, either in free variation with -a or more usually as the sole ending; -u tends to occur in nouns designating abstractions, processes, or non-individuated masses and substances.

(5) In DLsg. žónka-noun stems ending in non-palatalized consonants with palatalized counterparts ("plain" consonants) take the ending -e (which causes I-change of a preceding velar and palatalization of remaining consonants); if endings are unstressed the ending -e is replaced by -i after /c/ resulting from /k/ by I-change. Stems ending in plain consonants without palatalized counterparts ("hardened" consonants), palatalized consonants and /j/ take the ending -i.

(6) In Lsg. stól and aknó nouns show the endings (e↔i)↔u. -e and -i: -e/i vary according to the same conditions outlined for DLsg. of žónka-nouns, while -u occurs in place of -e/i partly in free variation and partly as the sole ending for many items.

After stems in /k/ only -u occurs and there is a strong tendency for it to occur after other velars; only -u occurs in items designating persons.

(7) In the Isg. of žónka-nouns the ending -oj alternates with the longer and less frequent -oju. In the Isg. of kós'c'-nouns, the ending -ju occasions the usual morphophonemic change (see 2.3.1 C+j).

(8) In Gpl. the distribution of endings is:

-ov in the overwhelming majority of stól-nouns, in free variation with zero in most aknó-nouns (as the sole ending in non-syllabic stems and after certain clusters), in kós'c'-nouns with unstressed ending and stem in "hardened" consonant and in free variation with -ej in other kós'c'-nouns with unstressed ending, in žónka-nouns with stems ending in clusters and optionally (sometimes in free variation with zero) in some other žónka-nouns.

-ov in the majority of žónka-nouns (though in variation with -ov in many items, with -ov tending to prevail after stems ending in consonant clusters); in aknó nouns, usually in free variation with -cv, which tends to prevail after stems in palatalized or "hardened" consonant; in a very few stól nouns, but including all stól-nouns which drop the suffix -'in- in the plural.

-ej is the prevailing ending in kós'c'-nouns, except after stems in "hardened" consonant, where -ov occurs if the ending is unstressed; -ej occurs in a few items each in stól, aknó and

žónke nouns; unstressed after "hardened" consonant, it is replaced by -aj.

(9) In Ipl. a few items in each of the noun classes show the alternate ending -m'i, while a few items designating objects occurring pair-wise have the alternate ending -ima. Both alternate endings usually occur in free variation with -am'i and sometimes with each other.

(10) In archaic language a no-longer standard vocative occurs with stól-nouns. The ending is -e, -u. -e tends to occur after plain consonant, except /k/; it causes J-change of velars and /c/, -u tends to occur after palatalized consonants, /j/, and "hardened" consonants, and always after /k/.

(11) In Dpl. stól-nouns have the archaic variants D -om, L -ox.

(12) Pluralia tantum (nouns occurring only in plural) have the endings characteristic of the plural; all three Gpl. endings are represented in the various pluralia tantum.

3.2 Stem changes.

(1) The inserted vowels /o e/ occur before zero ending.

(2) The nouns sus'éd 'neighbor', čórt 'devil', and kal'éna 'knee' palatalize their stem-final consonants in the plural (Npl. sus'é₃'i, c'érc'i, kal'én'i).

(3) ž'én' 'day' depalatalizes its stem-final consonant in the Gpl. Before \emptyset -endings, this noun has inserted /e/ in Nsg. and /o/ in Npl. (following the basic vowel alternation 2.1).

(4) The aknó-nouns vúxa 'ear' and vóka 'eye' show J-change of stem-final consonant in plural; Gpl. ending is -ej, and Ipl. -am'i.

(5) The aknó-noun n'éba 'sky; heaven', extends its stem in the plural by -'os- (Npl. n'ab'ósi)

(6) A fair number of stól-nouns have the suffix -'in- in the singular, which suffix is dropped in the plural. Such nouns have Gpl. ending $-\emptyset$ and, if -'in- is preceded by -an-, the Npl. has the irregular ending -e:

Nsg.	balhárin 'Bulgar'	haražán'in 'townsman'
Npl.	balhári	haražán'e
Gpl.	balhár	haražán

n.b. -an- /an'/ before -'in- and -e.

2.2 Mixed noun types.

(1) The feminine noun mác'i 'mother' has the stem-extension -i- in Nsg. and -er- in the remaining forms (Asg. mác'eru). After -i- the ending is $-\emptyset$; in all other forms (after -er-) the endings are those of žonka nouns (-ej in GA pl.). Alternately, this noun has the form mác'i in all cases of the singular.

(2) Masculine nouns with the ending -a in Nsg. (denoting male persons) have žonka-endings in NAGsg. and stól-endings in DLIsg.; in the Gpl. they have either $-\emptyset$ or -ov with a tendency for -ov to occur after consonants clusters and with free variation in some items. Alternatively, these nouns may have žonka-endings in DLIsg. and, for those with stem-final palatalized consonant, in Isg.

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(3) Stem extending mixed neuter nouns

Certain nouns (mostly denoting the young of various species) extend their stem by -at- in pl. and by -ac' in GDLsg. In NAGDLsg. these have žónka-endings, In Isg., and alternately in Nsg., they have aknó-endings. In pl. A is like G and both have -ø. One noun, z'ic'á 'child', follows this pattern in sg., but in pl. has no extension, changes the stem to z'ec' and has -ej in Gpl.

p. 16: Please note that the plural endings given apply to all classes of nouns.

Nouns denoting persons of either sex with -a in Nsg. have this mixed declension when they denote a male person and žónka declension when they denote a female person. Masculine names with stressed -a in Nsg. and s'iratá 'orphan', which is masculine or feminine depending on the sex of the person denoted, do not belong to this mixed declension, but are declined as žónka-nouns.

3.4 The stress patterns of the nouns.

Fixed stress (on stem or ending).

(a) fixed stress on stem: perhaps the majority of nouns of all classes, particularly those with polysyllabic stems.

(b) fixed stress on endings: confined to stól-nouns and to a small number of aknó-nouns.

Shifting stress (from stem to ending or vice-versa).

SE - stress on stem in singular, or ending in plural; a fair number of stól-nouns plus a smaller number of aknó-nouns, and at least one mixed masc. a-noun (3'á3'ka).

sín, sína, siní 'son'

plót, plóta, platí 'fence'

véčar, véčara, večarí 'evening'

pól'e, pal'í 'field'

3'á3'ka, 3'a3'k'í 'uncle'

SE (loc) - stress on stem in sg., except for Lsg., on ending in Lsg. and plural; confined to a number of inanimate stól-nouns.

bók,	na bakú,	bak'í	'side'
bój,	u bajú,	bají	'combat'
rój,	ab rajú,	rají	'swarm'

SM - stem-stress in all sg. and in NA pl., ending stress in the remaining plural forms; a fair number of kós'c'-nouns, a few stól-nouns, and two aknó-nouns (vóka, vúxa), and the mixed noun mác'i.

nóč,	nóči,	načěj	'night'
zúb,	zúbi,	zubóv	'tooth'
vóka,	vóci,	vačěj	'eye'
mác'i,	mác'eri,	mac'arěj	'mother'

ES - ending-stress in singular, stem-stress in plural; a fair number of aknó and žónka nouns, plus at least one stól-noun (kon').

aknó,	vókni	'window'	dušá,	dúši	'soul'	
asá,	vósi	'wasp'	kón',	kan'á,	kón'i	'horse'
vadá,	vódi	'water'	hlib'iná,	hlib'íni	'depth'	

However, žónka nouns with ES stress retain stress on the Npl. ending when used in conjunction with the numerals 2-3-4.

EM - The noun pl'acó 'shoulder' shows the apparently isolated stress pattern: stem-stress in NA pl., ending stress in sg. and all remaining plural forms: pl'acó, pl'ěci, pl'acěj.

Special patterns:

(a) The mixed neuter nouns with stem-extension ac'vat- have stress on that extension in all forms in which it appears,

and on the ending elsewhere: jahn'ó, jahn'óm, jahn'ác'i,
jahn'áti 'lamb'.

(b) The mixed neuter nouns with stem-extension -en' on- stress the syllable preceding the extension in the singular and the extension in the plural, as does the isolated noun n'éba 'sky, heaven' which has a stressed extension -'os- in the plural only: n'éba, n'ab'ósi.

(c) vóz'era 'lake' shifts its stress within the stem in the plural: az'óri.

General remarks:

(1) Fixed ending stress is automatically carried to the last syllable of the stem, when zero ending occurs.

(2) Pluralia tantum have either fixed stress (S or E) or stem stress in N(A) and ending stress in the remaining forms, as in SM above. The noun 3'v'ér 'door' has the apparently isolated pattern: ending stress in G, ^{pl.} stem stress in remaining forms.

4.0 The Adjective.

	masc.	neuter	fem.		pl.
N	-i	} -oje	-aja	N	-ija
A	<u>u</u>		-uju	A	<u>u</u>
G	-oho	} -oj	-oj, -oje	G	} -ix
D	-omu		L		
L	} -im		D	-im	
I		-oj, -uju	I	-im'i	

Morphophonemic o is always replaced by /a/ when unstressed (see 2.1).

(1) Masc. and pl. have endings identical with genitive if animate, with nominative if inanimate, in the accusative.

(2) A certain number of adjectives have short noun-like endings (masc. = stól-decl., neuter = aknó-decl., fem. = žónka-decl.), in the nominative, which are used predicatively. In poetic language the short forms may be used attributively, and occur also in accusative and masc/neuter genitive and dative. The short endings are:

	masc.	neuter	fem.	pl.
N	-∅	} -o	-a	-i
A	∩		-u	∩
G	-a			
D	-u			

Before zero-ending, stems ending in consonant clusters may show an inserted vowel (as in the noun).

(3) Possessive adjectives with the suffixes -ov-, -in- have regular adj. endings, but in the NA they have short endings; in an older variant of the standard language masc/neuter GD also have the short endings.

(4) Adjectives are stressed either on the stem or on the ending. Under ending stress disyllabic endings are stressed on their first syllable. Some pronominal adjectives are designated as having "special ending stress"; this means the masc/neuter GD and the alternate fem. G -oje are stressed on their second syllable.

- (5) While the long forms of regular adjectives have fixed stress in all forms, the position of stress in the short forms, though in most items corresponding to that of the long forms, in some adjectives shows a shift of position.
- (6) a3'(i)n- 'one' (Nsg.m. /a3'ín/ with inserted /i/, remaining forms, Nsg.n. etc. /adnó/) have short endings in NA, long endings in remaining forms, and special ending stress.
- (7) naš- 'our' and vaš- 'your' have short endings in NA (with alternate forms with long endings in KAfem., neuter, and pl.), have long endings in the remaining forms. Stress is on the stem.
- (8) uv'es- (form with inserted /e/ occurring before zero ending) us- 'all' has short endings in NAm.n.f., special short ending -e in Npl. (and alternating with G ending in Mpl.), and long endings in remaining forms. Special ending stress.
- (9) moj- 'my', tvoj- 'thy', svoj- 'one's own', čyj- 'whose' have short endings in NA, long endings in the remaining cases; in the GDM.n. the initial vowel of the ending is truncated, leaving /-ho -mu/; in Npl. (and alternating with G ending in Apl.) we have the special short ending -e. Special ending stress.
- (10) t- 'that' has the special ending -oj in the Nm. and long endings elsewhere. Special ending stress.
- (11) het- 'this' has short endings in NA neuter and fem. (alternately long endings occur in these forms) and long endings

elsewhere. Stem stress.

(12) The adjective sam- 'self' has short endings in the N masc. and pl. (A is like G) and in the NA fem. and neuter, elsewhere long endings. Alternately, Af. has the long ending. The stem changes to sam'- in the Dlg. masculine/neuter and in the plural. Ending stress except in Npl., which has stem stress. Not to be confused with the adjective sémi 'same, the very' which has long endings throughout and stem stress.

5.1 Pronouns (personal).

sg.	1.	2.	reflex.
N	já	tý	—
AG	m'an'é	c'ab'é	s'ab'é
DL	mn'é	tab'é	sab'é
I	mnój(u)	tabój(u)	sabój(u)

Note that in DLI the endings are those of the žónka-noun.

pl.	1.	2.	
N	mí	ví	Note that in NDI
AGL	nás	vás	the endings are those
D	nám	vám	of the plural noun.
I	nám'i	vám'i	

third personal pronoun

sg.	m.	n.	f.	pl.
N	jón	janó	janá	N janí
AG	} jabó		jažé	AGL jíx
D	} jamú			D jím
L	} } jím		jój	I jím'i
I	} } jím		(u)joju	

Note that the stem is N jón- alternating with j- in the remaining cases. A of all pronouns is identical with G. Endings are short adjective endings in N, long adjective endings in the remaining cases (disyllabic variant of G fem.). Special ending stress.

5.2 Pronouns (interrogative).

	'who'		'what'
N	xtó	}	štó
A	kahó		
G			čahó
D	kamú		čamú
LI	k'ím		čím

Note that xtó except in N and štó except in NA have respectively the stems k- and č- and long adjective endings with special ending stress.

6.0 Numerals

	'2' (m.n.)	'2' (f.)	'3'	'4'
N	dvá	3'v'é	trí	čatíri
A	(like N if inanim., like G if anim.)			
GL	dvúx	3'v'úx	tróx	čatiróx
P	dvúm	3'v'úm	tróm	čatiróm
I	dvumá	3'v'umá	trimá	čatirmá

'both' abódva m.n., ab'é^{f.}3'v'e has the declension of dva
 'two' with abo- prefixed to the masculine forms, ab'e- to

the feminine forms.

5 p'ác'	10 3'és'ac'	15 p'atnáccac'
6 šés'c'	11 a3'ináccac'.	16 šasnáccac'
7 s'ém	12 dvanáccac'	17 s'emnáccac'
8 vós'em	13 trináccac'	18 vas'emnáccac'
9 3'év'ac'	14 čatirnáccac'	19 3'ev'atnáccac'
20 dváccac'	30 trícac'	

replacement of /c'/ by /t/ in the first element of '15' and '19' is due to automatic replacement of palatalized by non-palatalized consonant before dental.

The simple numerals 5-30 are declined as singular kós'c'-nouns: NA p'ác' GDL p'ac'í I p'ac'c'ú; vós'em has inserted vowel /e/. The two stems in /m'/ (s'ém'-; vós'(e)m'-) have the I ending -'u (s'am'ú, vas'm'ú). Monosyllabic stems (5-8) have ending stress (with automatic change of pretonic /e/ to /a/) in oblique forms, the remaining forms fixed stem stress.

50 p'a3'3'es'át	70 s'ém3'es'at
60 šéz'3'3'es'at	80 vós'em3'es'at

The numerals 50-60-70-80 are declined in both parts as singular kós'c'-nouns; the second element -3'es'at has stem-final /t/ in NA, /c'/ in the remaining cases: NA p'a3'3'es'át GDL p'ac'í3'es'ac'í I p'ac'c'ú3'es'ac'c'ú. Except in the NA of '50', the first element is stressed. The first element is declined as when indepen-

dent.

'40' and '100' have NA sórak, stó, GDJI saraká, stá. '90' has the unchanging form z'ev'anósta.

The numerals '200' to '900' are bipartite; the first part is in all cases the appropriate case form of the numerals from '2' to '9', while the second part is -s'c'e in z'v'és'c'e '200' NA, -sta (G of stó) in trísta '300' NA, čatírista '400' NA, and -sot (Gpl. of sto, with inserted /o/) in the NA of 500 through 900. The second part of the remaining case forms are the appropriate plural forms of the base st- '100'. Thus:

NA	<u>z'v'és'c'e</u>	<u>trísta</u>	<u>p'ác'sót</u>
G	<u>dvùxsót</u>	<u>tròxsót</u>	<u>p'ac'ìsót</u>
L	<u>dvùxstáx</u>	<u>tròxstáx</u>	<u>p'ac'ìstáx</u>
D	<u>dvùmstám</u>	<u>tròmstám</u>	<u>p'ac'ìstám</u>
I	<u>dvumàstám'i</u>	<u>trimàstám'i</u>	<u>p'ac'c'ùstám'i</u>

The items tís'ača '1000', m'il'ón 'million', m'il'árd 'milliard (= American billion)' are declined as nouns; the latter two are stól-nouns; the first is a žónka noun, but has the alternate Isg. kós'c'-form tís'ačču.

Collective numerals:

'both'	<u>abóje</u>	7.	<u>s'am'óra</u>
2.	<u>dvóje</u>	4.	<u>čac'v'óra</u>
3.	<u>tróje</u>	5.	<u>p'ac'óra</u>
		6.	<u>šas'c'óra</u>
		8.	<u>vas'm'óra</u>
		9.	<u>z'ev'ác'era</u>
		10.	<u>z'es'ác'era</u>

The collectives have the aknó-ending -o in N and plural adjective endings in the remaining cases. Stress is on the stem in N, on ending in the remaining cases: dvóje, dvajix etc.; p'ac'óra, p'ac'arix etc.

7.0 The Verb.

7.1 Verb stem classes.

In the following outline stems are classified according to their structure. In terms of their structure verb stems may be divided into two broad groups; those that maintain a fairly stable stem-shape throughout their paradigm (not taking into account morphophonemic changes conditioned by individual formants or endings) and those that differentiate two basic stem shapes, present stem (the stem for the present tense, present participles and gerunds, and imperative) and infinitive stem (the stem for the infinitive, past, past participles and gerunds); the two basic shapes differing in that the stem vowel which terminates the infinitive stem is dropped in the present stem.

In terms of their selection of endings and formant in present stem forms (except the imperative) verb stems are divided into two conjugations. The two dichotomies (of stem structure and of conjugational type) do not coincide. All second conjugation verbs are vowel dropping verbs, while first conjugation verbs comprise both stable stem and vowel dropping verbs.

Stable stem verbs can be further subdivided into root verbs, and verbs with stable stem vowels.

The following morphophonemic rule has general application in verb inflection: stems ending in a vowel, whether a root-final vowel, a stable stem-vowel, or vowel resulting from alternation of suffix, automatically add a /j/ in present stem forms. Thus:

hul'á-c'	'to walk'	1. sg. pres.	hul'á-j-u
mí-c'	'to wash'	1. sg. pres.	mí-j-u
budavá-c'	'to build'	1. sg. pres.	budú-j-u

Verbs given as examples accompanying the classification below will be generally given in the infinitive and in the 3. pl. pres. where necessary for illustration the morphophonemic stem is also given.

7.1.1 Conjugation I.

(1) Consonant root verbs. Stems consist of a root of this shape (C)CVC. Stems exist ending in / p b v s z t d k h r/.

sop-	sapc'í	'to puff'
hrob-	hrépc'i	'to row'
rov-	ravc'í	'to roar'
n'os-	n'és'c'i	'to carry'
l'ez-	l'és'c'i	'to creep'
pl'ot-	pl'és'c'i	'to plait'
klad-	klás'c'i	'to put'
p'ok-	p'ačí	'to bake'
strih-	stríxči	'to shear'

In many verbs morphophonemic -o- of the root is replaced by morphophonemic -e- in the infinitive, past forms other than masculine, and before the past passive participle formant -on-. Thus, n'és'c'i, past n'ós, n'ésla, n'és'l'i, past passive participle (pri)n'és'eni. When stress shifts, of course, immediately pretonic -o- and -e- are both replaced by /a/: present n'asú, n'as'éš etc., but maxčí (moh-), past móh, móhla etc.

C-root verbs in /r/ have present stems of the shape (C)Cr- in the present stem alternating with (C)C'or- in the infinitive stem (morphophonemic -o- alternates as stated above): Thus c'érc'i 'to rub' present trú, trés etc., past c'ór, c'érla, past passive participle (pra)c'órti.

In one verb l'éxči 'to lie down', morphophonemic -o- in the infinitive stem l'oh- alternates with -a- in the present stem l'ah-: present tense l'áhu, l'ážaš, etc.

Three roots ending in /iv/ (and their prefixed derivatives) lose /v/ in the infinitive stem. These are živ- 'to live', pliv- 'to swim', sliv 'to be reputed':

žíc': živúc' 'to live'

The root rost- 'to grow' loses /t/ in the infinitive stem:

rastúc': ras'c'í: past m. rós 'to grow'

(2) Vowel root verbs. Stem consists of a root of the shape (C)CV.

<u>mí-</u>	<u>míc'</u> : <u>míjuc'</u>	'to wash'
<u>hn'i-</u>	<u>hn'íc'</u> : <u>hn'ijúc'</u>	'to rot'
<u>ču-</u>	<u>čúc'</u> : <u>čújuc'</u>	'to hear'

In the verb m'éc' 'to have', the infinitive stem m'e- alternates with present stem ma-:

m'éc': májuc' 'to have'

Root verbs showing alternation, infinitive stem C'j- present stem C'j-:

b'íc': b'júc' 'to beat'

(3) Root verbs showing alternation, infinitive stem (C)C + 'a- present stem (C)CN- (N standing for nasal consonant; C standing for any C; if susceptible of palatalization, it is replaced by its palatalized counterpart before /a/.

žác': žmúc' 'to press'

m'ác': mnúc' 'to crumple'

uz'ác': vóz'muc' 'to take'. In this verb, the root has inserted /o/ with concomitant alternation /u → v/ (before V) in the present.

Verbs with the infinitive stem -n'a- have present stem -n'im- (/a/ is replaced by /m/, inserted vowel /i/ occurs between the two consonants, /n'/ remains palatalized before /i/) or alternatively -dim-, after prefixes ending in consonant, but after prefixes ending in vowel verbs with the infinitive stem -n'a- have present stem -jm- (/a/ replaced by /m/, /n'/ replaced by /j/).

padn'ác': padn'imuc' or padimu 'to raise'

nan'ác': najmúc' 'to rent'

(4) Stable stem-vowel verbs

(Stem consists of root, or root plus suffixes, plus stem vowel -a- or -e-)

hul'ác': hul'ájuc' 'to stroll'

z'el'an'éc': z'el'an'éjuc' 'to be green'

(5) Vowel dropping verbs

(Stem consists of a root plus stem vowel or a root plus suffixes plus stem vowel; stem vowel is dropped in present stem.)

a-dropping verbs. In a number of these, the consonant before dropped -a- undergoes J-change in the present stem. A smaller number, with monosyllabic stems, inserts a vowel in the present stem (when -a- is dropped).

brác': b'arúc' 'to take'

v'éjac': v'éjuc' 'to wave'

zváč': zavúc' 'to call'

rézac': réžuc' 'to cut'

-v-a- dropping verbs. These drop both the vowel -a- and the preceding suffix -v-. There are few of these; only the following verbs and their prefixed derivatives: davác' 'to give', -znavac' 'to know', stavác' 'to place', žavác' 'to put on', -tavac' 'to thaw'

davác': dajúc' 'to give'

-ov-a-ŋ-u- verbs. In these verbs, the suffix -ov- (usually appearing as unstressed /av/; it appears stressed as /ov/ in secondary imperfective derivatives such as p'erabudóvvac' 'to

rebuild' (← perabudavác') is replaced with -u- when -a- is dropped in the present stem.

budavác': budújuc' 'to build'

-o- dropping verbs. In this small group of verbs -o- is preceded by morphophonemic o plus /r/ or /l/. One verb (malóc' 'to grind') replaces o by morphophonemic e in the present stem. /l/ is palatalized in the present stem.

baróc': bóruc' 'to fight'

malóc': m'él'uc' 'to grind'

kalóc': kól'uc' 'to stab, prick'

-e- dropping verb. This class consists only of one verb (and its prefixed derivatives). /c'/ undergoes J-change (to /č/) in the present stem.

xac'éc': xóčuc' 'to wish, want'

(6) Verbs with the suffix -nu-, which loses -u- in the present stem.

v'arnúc': v'arnúc' 'to return'

Some verbs of this type lose the suffix -nu- in some or all of the infinitive stem forms other than the infinitive itself.

sóxnuc': sóxnuc' 'to dry', past sóx, sóxla etc.

The following verbs have the nasal suffix (in its form -n-) in the present stem only and lose it in all infinitive stem forms.

stác': stánuc' 'to stand, become'

3'éc': 3'énuc' 'to put'

stréc': strénuc' 'to meet'

kl'as'c'í: kl'anúc' 'to curse' (This verb adds /s/ in the infinitive, which is lost in the remaining infinitive stem forms, e.g. past kl'áv, kl'alá)

7.1.2 Conjugation II (all are vowel dropping verbs).

i-dropping: baran'íc': barón'ac' 'to defend'

Preceding dropped -i- there is always a palatalized or "hardened" consonant, or /j/.

e-dropping: v'arc'éc': v'érc'ac' 'to turn'

Preceding dropped -e- there is always a palatalized consonant.

a-dropping: mavčác': mavčác' 'to be silent'

Preceding dropped -a- there is always a "hardened" consonant or /j/. There are two exceptions -- spác' 'to sleep' and hnác' 'to drive'. Both palatalize the consonant preceding dropped -a- in the present stem and hnác' (3.pl. pres. hón'ac') has inserted /o/ in the present stem.

Productivity. Stable stem-vowel verbs are productive, stable a- verbs more so than stable e- verbs; a-dropping -ov-a- verbs are a highly productive class; nu- suffix verbs are likewise productive. Of the second conjugation verbs, only i-dropping verbs are productive.

7.1.3 Irregular stem alternation (all are conjugation I).

The a-dropping verb jéxac' 'to ride' has the infinitive stem jex-a-, present stem jed-

The root verb bíc' 'to be' has the infinitive stem bi-

and present stem bud- plus an anomalous present tense form jós'c' 'there is'.

The root verb is'c'í 'to go' has the stem id- in the present stem and in the infinitive, išo- in the masculine past and in the past active participle and gerund, and iš- in the remaining infinitive stem forms. Its prefixed derivatives replace /i/ by /j/ after prefix-final vowel.

7.2 The verb forms.

7.2.1 Present tense.

The present-tense endings consist (except for the first person sg. where the ending is -u) of an ending vowel plus a final element. The ending vowel is /e/ (which becomes /o/ before "plain" consonant, if stressed) in 2.3.sg., 1.2.pl. and /u/ in 3.pl. of the first conjugation, and /i/ in 2.3.sg., 1.2.pl. and /a/ in 3.pl. of the second conjugation. The final elements are:

	1.pl. -m	
2.sg. -š		2.pl. -c'e
	3.sg. and pl. -c'	

In the first conjugation the third person final element -c' is replaced by zero, except before the reflexive particle s'a. The final element /c/ combined with the particle results in -cca.

The endings are accordingly:

	I.		II.
sg.1.		-u	
2.	-eš		-iš
3.	-e		-ic'
pl.1.	-em ~ -'om		-im
2.	-ec'e		-ic'e
3.	-uc'		-ac'

When endings are stressed, the second vowel of the bisyllabic 2.pl. ending is stressed, and the ending vowel /e/ of the first syllable is automatically replaced by /a/. Likewise, when endings are unstressed, ending vowel /e/ is replaced by /a/ after "hardened" consonants (cf. basic vowel alternation, 21).

Stem changes before the endings: Stem final consonant undergoes J-change before 1.sg. -u in second conjugation. Velars undergo J-change before ending vowel /e/ (and its replacement /o/); remaining "plain" consonants are replaced by their palatalized counterparts before this vowel.

7.2.2. Present active participle and gerund.

The formation of the present active participle parallels the formation of the present tense forms, particularly the 3.pl. Thus, there is a formative vowel (/u/ in conjugation I, /a/ in conjugation II, just as in the 3.pl. pres.) followed by the formative consonant /č/ (itself the J-change replacement for the 3.pl.pres. ending consonant /c'/); taken together these constitute the formant -u^č- (conjugation I) or -a^č- (conjugation II).

The participle consists of the present stem plus the formant plus the regular adjective endings:

3. sg. pres.	pres. active part. (m. nom.)	
p'íšuc'	p'ísuči	'writing'
panújuc'	panújuči	'ruling'
havórac'	havórači	'speaking'

The present gerund has the same formant (-u^č- or -a^č-) as

the present active participle, plus the adverb-forming suffix -i. It has thus the same phonemic shape as the masculine nominative of the present active participle.

These forms are made primarily or exclusively on the stems of imperfective verbs.

7.2.3 Present passive participle.

This form is little used and is formed on the stems of certain imperfective verbs only. The formant is -om- (automatically replaced by -em- when unstressed following palatalized consonant or /j/) in conjugation I and -im- in conjugation II. This participle is formed on the present stem by addition of the formant plus regular adjective endings:

infinitive	pres. pass. part. (N. sg. m.)	
budavác'	budújemi	'built'
čitác'	čitájemi	'read'
v'és'c'i	v'adómi	'led'
l'ub'íc'	l'ub'ími	'loved'

Verbs which drop -v-a- in the present tense, retain these elements in the present passive participle: vidavác', vidavájemi 'issued'.

7.2.4 Imperative (second person forms).

formant: -'ϕ √ -'i- (Before this formant, velars undergo J-change and other consonants susceptible of palatalization undergo palatalization). The formant is -'i- if (a) the formant is stressed, or the verb has the stressed prefix vi-, but is

derived by prefixation from a simple verb with stressed formant, or (b) the stem ends in a consonant cluster.

Endings: 2.sg. $-\emptyset$ 2.pl. -c'e

Stress falls either upon the stem or the formant; the formant is stressed, if the 1.sg. present ending is stressed.

The imperative is formed from the present stem, except for root verbs with a stem ending in /C'i/ which form it from the infinitive stem. Thus: p'íc' 'to drink', p'í- \emptyset - \emptyset , p'í- \emptyset -c'e. The athematic verb jés'c' 'to eat' (stem jed-) subjects the stem-final consonant to the change /d \rightarrow ž/ in the imperative: jéž, jéšč'e.

čitác'	čitáju	čitáj- \emptyset - \emptyset	'read'
p'ač'í	p'akú	p'ač- í- \emptyset	'bake'
brác'	b'arú	b'ar- í- \emptyset	'take'
n'és'c'i	n'asú	n'as'-í- \emptyset	'carry'
k'ínuc'	k'ínu	k'ín'- \emptyset - \emptyset	'throw'

There is also a 1.pl. imperative form, but statements in the sources concerning its formation are confused and contradictory. The clearest, in Hurski, implies that, if the formant is $-\emptyset$ the ending is -mo; if the formant is -i- in the other imperative forms, it changes to -e- in the 1.pl. and adds the ending -m. Thus, kín'ma; hul'ájma; b'arém, kup'ém

7.2.5 The infinitive.

The infinitive is formed from the infinitive stem by addition of the infinitive formant. The formant is -c' (after vowels) \cup -c'i (after consonants except /h k/) \cup -č'i (after /h k/). Before it / ; d. v / \rightarrow /s/ and /k/ \rightarrow \emptyset .

p'isác'		'to write'
xa ₃ 'íc'		'to go'
klás'c'i	(stem: kiad-)	'to put'
n'és'c'i		'to carry'
p'ačf	(stem p'ok-)	'to bake'
stríxči	(stem strih-)	'to shear'

7.2.6. The past tense.

The past tense consists of a stem plus formant plus endings. The endings are the short adjective nominative endings: m. - \emptyset , n. -o, f. -a, pl. -i. The formant is - \emptyset -~v-~-l-~-l'-. /l/ occurs before n, -o and f. -a, /l'/ occurs before plural -i and /v/ occurs before m. - \emptyset , except when preceded by a consonant, in which case it is replaced by - \emptyset -. Examples:

	čitác'	p'ačf	pl'és'c'i
	'to read'	'to bake'	'to plait'
m.	čitá-v- \emptyset	p'ók- \emptyset - \emptyset	pl'ó-v- \emptyset
n.	čitá-l-a	p'ak-l-ó	pl'a-l-ó
f.	čitá-l-a	p'ak-l-á	pl'a-l-á
pl.	čitá-l'-i	p'ak-l'-í	pl'a-l'-í

Before the past formant (l-formant) stem final /t d/ are lost; this rule takes effect before the masculine formant-variants -v-~ \emptyset are selected.

7.2.7 Past active partictiple and gerund.

The formant for these two forms is -vš- (after vowel) ~-š- (after consonant). The formant is attached to the infinitive stem.

which loses stem-final /t d/ before this formant, as in the past tense. The participle is made by attaching the regular adjective endings after the formant; the gerund by attaching the adverbial element -i. Accordingly, the gerund has the same form as the masculine nominative of the participle:

inf.	part.	
v'és'c'i	v'óvši	'having lead'
sp'ačí	sp'ókši	'having baked'
pračitác'	pračitávši	'having read'

7.2.8 The past passive participle.

This participle is formed from the infinitive, except in the case of second conjugation verbs with stem-vowel -i-, which form it from the present stem (ie. dropping -i-). The participle consists of stem plus formant plus regular adjective endings. The formant is -on-^h-n-^h-t-. -on- is attached to stems ending in consonants except /r/. Before it, stem-final velars undergo J-change, as do also all stem-final consonants in second conjugation i-dropping verbs, while the remaining stem-final consonants are palatalized. The vowel of -on- is then automatically replaced if unstressed by /e/ after palatalized consonant (and /j/) and by /a/ after "hardened" consonants. -n- is attached to stems ending in /a/ and /e/ (excepting root verbs where /a/ alternates with nasal consonant and root verbs with /e/). -t- is attached to stems consisting of a root ending in vowel, to stems with the suffix -nu-, and to those ending in /o/.

zb'eraxčí	zb'eražóni	'protected'
razhrař'íc'	razhrařl'óni	'lined'
kup'íc'	kúpl'eni	'bought'
pasal'íc'	pasól'eni	'salted'
pasaz'íc'	pasážani	'seated'
raskazác'	raskázani	'told'
padn'ác'	padn'áti	'raised'
razmíc'	razmíti	'washed'
sahnúc'	sahnúti	'bent'
víc'erc'i	víc'erti	'rubbed out'

7.3 Irregularities.

7.3.1 The root verb b'éxči 'to run' (stem: b'eh-) is irregular in that it has second conjugation endings with J-change of stem-final /h→ž/ in all present tense forms except 1.sg. and 3.pl.

7.3.2 The athematic verbs jés'c'i 'to eat', dác' 'to give'.

present

sg.1	jém	dám	-m
2	jas'í	das'í	-s'i
3	jés'c'	dás'c'	-c'
pl.1	jaž'ím (jamó)	daž'ím (damó)	-i+mn -mo
2	jas'c'é (jas'c'ó)	das'c'é (das'c'ó)	-c'e+ -c'o
3	jadúc'	dadúc'	-utc'

The stems are jed-, dad-; final /d/→/s'/ before elements beginning with /c'/ and falls before elements beginning with any other consonant; /d/ is palatalized to /ž'/ before ending vowel

/i/. Ending stress where possible.

In remaining forms, jés'c'i has the stem jed- (past jév, jéla, past active participle jévši), except in the imperative where the stem is jež- with stem stress: jež, ješc'e. dác' has the stem da- (with added /j/ in the imperative) in all other forms: past dáv, dalá, past act. part. dávši, imperative dáj, dájc'e.

7.4 The stress patterns of the verb.

Verbs, other than root verbs, which in the infinitive stress a non-dropping suffix or an element preceding a stem-suffix have fixed stress. Thus, all verbs with stable stem-vowel /a/ or /e/ have fixed stress, as do vowel dropping verbs, with stress on a syllable preceding the dropped stem vowel. (An exception is p'éc' 'to sing', which stresses the stem vowel in the infinitive stem forms and ending or formant in the present stem forms).

Verbs, other than root verbs, stress the identical syllable in the past tense and in the past active participle and gerund, as in the infinitive. Verbs which stress a dropped stem vowel (other than those with the suffix complex -ov-a in the infinitive stem) stress the ending in the 1.sg. present tense and the formant in the imperative. The remaining forms of the present tense in such verbs may then either stress the ending or, more usually, shift stress one syllable forward onto the stem. The past passive participle in such verbs stresses the stem syllable, if present tense forms other than 1.sg. stress the stem, and stresses the

formant (in 2.conj. i-dropping verbs) or the non-stable stem vowel (in other stem-vowel dropping verbs), if present tense forms other than 1.sg. retain the stress of 1.sg. The present passive participle always, and the present active participle and gerund usually, stress their formant, if present endings other than 1.sg. are stressed. However, some verbs which stress present endings in forms other than 1.sg. show a shift in the present active participle and gerund -- a few shift stress one syllable forward, while more shift stress to the ending.

Verbs with -ov-a- in the infinitive stem, stress either the -a- or a syllable preceding the suffix complex. If a preceding syllable is stressed, stress is, of course, fixed. If -a- is stressed in the infinitive stem forms, the suffix variant -u- will be stressed in the present stem forms.

All perfective verbs with the prefix vi- have fixed stress on that prefix; otherwise, prefixes are not normally stressed.

Root verbs (other than those stressing vi-) stress, in the infinitive, either the root, or in the case of some consonant root verbs, the formant. If the formant is stressed, the endings will usually be stressed in the past and usually shifted to the root in the past passive participle (exceptionally some stress the formant in this form). In the past active participle and gerund, endings are never stressed; stress always falling on the root (or prefix vi-). Root verbs which stress the root in the infinitive retain this stress in all infinitive stem forms,

except that a small number of such verbs stress the endings of the past. Most root verbs stress the ending (or formant, as the case may be) in present stem forms. A very few of those with stem stress in the infinitive stem forms, retain this stress in the present stem forms. Very few root verbs as maxčí 'to be able' and uzác' 'to take' have ending stress in 1.sg.pres. and stem stress in the remaining present tense forms.

Examples:

<u>inf. stem</u>	(vowel dropping verbs)			(root verb)
inf.	lav'íc'	malóc'	budavác'	p'ačí
m.past.	lav'ív	malóv	budaváv	p'ók
f.past.	lav'íla	malóla	budavála	p'aklá
p.p.p.	(z)lóvl'eni	(z)mólati	(ad)budaváni	(pat) p'éčani
<u>pres. stem</u>				
2. sg.	lów'iš	m'él'eš	budúješ	p'ačés
1. sg.	lavl'ú	m'al'ú	budúju	p'akú
imp.	lav'í	m'al'í	budúj	p'ačí

7.5 The reflexive forms.

The reflexive particle -s'a may be attached as a final element to any verb form. Before the reflexive particle first conjugation verbs show the final ending element /c'/ (as in conjugation II'), rather than \emptyset which appears when no reflexive particle is present. The basic shape of this particle is /s'a/, but attached to any element ending in /c'/ (namely the infinitive, when its formant is -c', and the third person singular and plural, present

tense) the sequence /c' + s'a/ is replaced by /cca/.

simple	reflexive	
míju	míjus'a	'I wash'
míjem	míjems'a	'we wash'
míje	míjecca	'he washes'
míjuc'	míjucca	'they wash'
míc'	míc'ca	'to wash'

7.6 Verb constructions.

Verb constructions are verb phrases which may appear in the same syntactic slots as simple verb forms. The following occur in Bielorussian:

7.6.1 Imperfective future construction

The present tense of bíc' 'to be', as auxiliary, plus the infinitive of an imperfective verb: budu havaríc' 'I shall talk.'

7.6.2 Conditional construction

The 1-form (past tense form) of the verb plus the enclitic particle bi (after consonant) b (after vowel). Usually the particle appears immediately after the verb form, but it may appear after the first stressed element of the clause, particularly if it is a clause introducer such as kal'i 'if'

havarí^v bi 'he would speak

prišlá b 'she would come'

tréba dapamaxčí jím kab janí vikanál'i plán

'One must help them to fulfill the plan.'

If the subject in the subordinate clause is impersonal or

the same as the subject of the main clause, the 1-form of the verb may be replaced by the infinitive.

tréba nac'ísnuč' kab vikanác' plán 'It is necessary
to make an effort to fulfill the plan.'

7.6.3 Optative construction

The optative construction is used only in the first and third persons. In the third person it consists of n'axáj, xáj plus the third person present (perfective or imperfective) of the verb:

n'axáj n'e ubiváje 'let it not kill'

xáj l'ac'íc' 'may it fly'

xáj čakájuc' 'let them wait'

In the first person it consists of the imperative form daváj (more rarely davájc'e, dáj) plus the first person singular or plural present, or the infinitive, of perfective verbs.

dáj já pahl'ažú 'Let me have a look'

daváj jaščé papróbuju 'Let my try once again'

davájc'e pójz'em 'Let's go'

daváj z'aml'ák paskérim krók 'Fellow countryman, let us
hasten our pace.'