# Some remarks on the system of Lithuanian and Latvian conjugation

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The verbal systems of Lithuanian and Latvian are basically similar, but the differences between the traditional approaches to their description often make a comparison difficult. Three conjugations are posited for both Lithuanian and Latvian verbs. However, this superficial coincidence is misleading inasmuch as different criteria of classification are used. This paper is an attempt to show the systems of verbal inflection of these languages from a common point of view.\*

## CONJUGATIONS OR VERBAL CLASSES?

In the system of verbal inflection there are two basic features that can serve as a basis for formal classification: the set of personal endings and the structural relationship between the main stems. Similar sets of personal endings are conventionally grouped into conjugations (conjugational types), whereas similar relationships between stems are taken to characterize verbal classes. This approach is realized in Lithuanian grammar: the conjugation is determined by the stem vowel in the Present (and, consequently, by a different paradigm). The same holds true for many other languages (Russian, Latin, etc.). On the other hand, the traditional Latvian "conjugations" are concerned with the structural verb types usually referred to as primary, secondary and mixed type verbs.

It seems, however, that such "conjugations", even though they may more or less successfully serve the purpose of inventorizing verbs according to the relation between their main stems, do not prove to be of much use for the description of verbal inflection in general.

First, especially in the case of the primary verbs, they are practically useless in one important respect, viz., if their purpose would be to predict the lacking verbal stems on the basis of the verbal class and one of the stems given. In order to do this, one has to take into account many exceptions with regard to the length of the vowel in the root (e.g. nemt, næm, nema 'to take', lekt, lec, leca 'to jump, to hop'2) and the alternation of the last consonant of the stem (e.g.

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<sup>&</sup>lt;sup>1</sup> Several classifications based on an analysis of the relationship between the verbal stems have been proposed for Latvian (Fennell 1986), see also p. 42.

<sup>&</sup>lt;sup>2</sup> In the present article the letters  $\tilde{x}$  and  $\tilde{x}$  are used to denote the corresponding open sounds in Latvian words, the diphthong |uo| is always written uo.

 $n\bar{a}kt$ ,  $n\bar{a}k$ ,  $n\bar{a}ca$  'to come'). Some verbs that appear to be at the intersection of two classes (cf. kust, kūstu, kusa 'to thaw, to melt' – infix and st-suffix, i.e. traditional 3rd and 5th subclasses respectively) require special consideration. It seems therefore that, for every (primary) verb, the three main stems should be given, but not generated by rules.

Next, if one knows the three main stems, one is able to determine the verbal class, or the traditional "conjugation" and subclass (thus, the verbal class can be established deductively and adds nothing new). Still, this information is not sufficient for establishing the correct conjugation of a verb, because classifications dealing with the verbal stems do not reflect the paradigms of endings. The following table shows the relationship between the three traditional "conjugations" and the personal endings:

conjugation	1Sg	2Sg	3	1Pl
I (primary verbs)	-u	-ø, -i	-ø	-am
II (secondary verbs)	-u	(j)-ø	(j)-ø	-am
III (mixed type verbs)	-u	- <i>i</i>	-ø, -а	-am, -ām

In consequence, it seems that, whatever the classification dealing with verbal stems may be, it is of little use for the description of verbal conjugation. The information necessary and sufficient for this purpose comprises the three main verbal stems (for the discussion of how many verbal stems are necessary see below, p. 41) and the appropriate set of endings.<sup>3</sup>

## **CONJUGATIONS**

## Long and Short conjugation in Latvian

The conjugation of the Latvian verb from the point of view of its ending systems, i.e., historically, from the point of view of the stem vowels, was presented in Andronovs 1997c. In this case, Latvian verbs in the Present tense can be divided into two conjugations: the Short one and the Long one. Verbs with the 3rd person zero ending, or -as for reflexive verbs (historically, \*a- and \*i-stems) belong to the Short conjugation, whereas verbs with the endings -a, or  $-\bar{a}s$ , respectively ( $*\bar{a}$ - and (in the Past tense)  $*\bar{e}$ -stems), belong to the Long conjugation. The Past tense uses the long conjugational paradigm.

<sup>&</sup>lt;sup>3</sup> One may note a curious situation: in most standard Latvian grammars there is neither a special section, nor even a paragraph containing a description of personal endings, these being merely illustrated by examples of verb conjugation (Soida 1963; Pauliņš 1978; Ceplītis 1991; etc.); MLLVG 1957, 625 offers only a very superficial overview.

<sup>&</sup>lt;sup>4</sup> Unfortunately, the same terms are used in a completely different sense by T.G. Fennell (1980, XX), with the term "Short conjugation" referring to the traditional 1st conjugation, and the term "Long conjugation" to the traditional 2nd conjugation. For my part, as pointed out above, I prefer, in this connection, to speak of structural verb types (primary and secondary verbs respectively), rather than of conjugations.

		Short	Long		
non r	eflexive: di	uot 'to give', mā	cīt 'to teach	ı'	
1Sg	-u	duod-u	-u	māc-u	
2Sg	-i, -ø	duod-ø	-i	māc-i	
3	-ø	duod-ø	-a	māc-a	
1Pl	-am	duod-am	-ãm	māc-ām	
2P1	-at	duod-at	-āt	māc-āt	
reflex	ive: duotie-	s 'to depart', mo	ācītie-s 'to	learn'	
1Sg	-uo-s	duod-uo-s	-uo-s	māc-uo-s	
2Sg	-ie-s	duod-ie-s	-ie-s	māc-ie-s	
3	-a-s	duod-a-s	-ā-s	māc-ā-s	
1P1	-amie-s	duod-amie-s	-āmie-s	māc-āmie-s	
2P1	-atie-s	duod-atie-s	-ātie-s	māc-ātie-s	

Each personal ending in Lithuanian and Latvian has two allomorphs depending on the presence or absence of a reflexive morpheme in word-final position. In Lithuanian, the reflexive morpheme itself has several allomorphs (-si, -s(i), -s, -is,as well as -si- in prefixed verbs). Their distribution was described exhaustively by G. Akelaitienė (1987). In Latvian the reflexive morpheme (-s) has no variants.<sup>5</sup>

A description of the Latvian conjugation based on the approach proposed here can be found in the Internet (Andronov 1997b). The formation of the Present tense is the most complicated of all inasmuch as additional rules appear necessary, especially with regard to the 2Sg form. Here the relevant fragment from Andronov 1997b can be quoted:

While conjugating, the stem remains the same in all forms, except for the 2Sg, where an alternation of the last consonant of the stem may occur and closed e,  $\bar{e}$  are always used. The 2Sg form of the verbs of the Short conjugation (in the Present) needs some additional commentary. Its construction is described by the following rules:

- k, g in the end of the stem change to c, dz (an exception is the verb mācēt: māku, māki, māk ('to know how to'));
- in the end of the stem of non-reflexive verbs j disappears (except used after a vowel in a primary verb stem);

<sup>5</sup> In some descriptions of Latvian conjugation, the reflexive morpheme -s is not given a special structural cell, but two series of endings are posited: "non-reflexive" (1Sg -u, 2Sg -i, infinitive -ti, etc.) and "reflexive" (-uos, -ies, -ties, respectively) (Soida 1963, 127; Paulipš 1978, 93; Ceplītis 1991, 67; etc.). A morphological segmentation, however, is not only possible here, but also reasonable both on formal and semantic grounds. On the other hand, one cannot agree with the segmentation proposed by R. Veidemane (1972), who operates with a reflexive morpheme -ies obviously extracted from the form of the Infinitive (cf. MLLVG 1959, 555, with the hyphen misplaced in a similar way: koncentrē-ies, koncentrē-j-os 'to concentrate'). In this case it is not even clear which other allomorphs the author would posit. Since the Infinitive suffix is separated from the reflexive morpheme, the personal endings should be treated in a similar way. Thus, it seems reasonable to assume two allomorphs for each ending. But, for the same reason, two allomorphs of the Infinitive suffix would yield a perfectly harmonious system.

- "narrowing" consonants (see Laua 1997, 115) change to the respective "non-narrowing":  $l \rightarrow l, r \rightarrow r, \check{s} \rightarrow s$  or  $t, \check{z} \rightarrow z$  or d (the original consonant can be seen in the Past stem of the verb, cf. plest plesu, plet, ples pleta (or  $pl\bar{e}ta$ ) ('to spread') and  $pl\bar{e}st pl\bar{e}su$ ,  $pl\bar{e}s$ ,  $pl\bar{e}s$ ,  $pl\bar{e}s$  ('to tear'));
- the ending -i is present in the 2Sg of the following non-reflexive verbs:
  - with the suffix -st-,
  - with the following vowel alternation in the stem of the Infinitive and Present: a-uo,  $i-\bar{i}$ ,  $u-\bar{u}$ , if the last root consonant is d, t, or p,
  - with the infinitive suffix -ēt, if there is no suffix in the Present stem,
  - verb  $b\bar{u}t$ : es-i ('to be').

If this rule is too complicated, then the 2Sg form should be given in the dictionaries ...

In the 3rd person Present, non-reflexive verbs lose j stem-finally, i.e., if the 3rd person Present form ends in a long vowel, one must add j to it in order to obtain the Present stem (balsuot, balsuo (balsuojam), balsuoja 'to vote').

Note that, according to the representation suggested here, there are only two irregular verbs in Latvian:  $b\bar{u}t$ , ir (esam), bija 'to be' and iet, iet (ejam),  $g\bar{a}ja$  'to go', whereas the verb duot, duod, deva 'to give' is absolutely normal from the point of view of endings.

## Morphophonological rules for the stem vowels

In general, Lithuanian distinguishes four stem vowels: a-, i-, o-,  $\dot{e}$ -, whereas Latvian distinguishes only two: short a- and  $\log \bar{a}$ -. The question may be posed whether nowadays these stem vowels still belong to the stem, or whether they have already become absorbed by the endings. If stem vowels could be considered part of the stem, it would appear that all finite verbal forms are derived by means of a single set of endings. For Lithuanian, this possibility was shown by V. Žulys (1975), and it is realized in the Academy grammar, where the following simple morphophonological rules are formulated (DLKG 1994, 332):

the long stem vowels o-,  $\dot{e}$ - alternate with short a-, e-, and short ones (a-, i-) disappear before vocalic endings;

otherwise (before consonantal endings or before a zero-ending) the stem vowels are preserved without any transformation.

duoti, duoda	davė 'to	give', due	otis, duodasi,	davėsi	'to yield'
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		Praes. a-stem	duoda-	Praet. o-stem davė-		
1Sg	-u	duoda-u	→ duodu	davė-u	→ daviau	
2Sg	-i	duoda-i	→ duodi	davê-i	→ davei	
3	-ø	duoda-ø	→ duoda	davė-ø	$\rightarrow dav\dot{e}$	
1P1	-me	duoda-me	$\rightarrow$ duodame	davė-me	→ davėme	
2P1	-te	duoda-te	$\rightarrow$ duodate	davė-te	→ davėte	
1Sg	-uo-si	duoda-uo-si	→ duoduosi	davė-uo-si	→ daviausi	
2Sg	-ie-si	duoda-ie-si	→ duodiesi	davė-ie-si	→ daveisi	
3	-ø-si	duoda-ø-si	→ duodasi	davė-ø-si	→ davėsi	
1Pl	-mė-s	duoda-mė-s	→ duodamės	davė-mė-s	→ davėmės	
2P1	-tė-s	duoda-tė-s	→ duodatės	davė-tė-s	→ davėtės	

Note the two additional morphophonological processes that can be formulated as follows: the change  $eu \rightarrow iau$  occurs in the 1Sg, and the over-long tautosyllabic sequences undergo shortening in the 1Sg and 2Sg of the reflexive verbs<sup>6</sup> (-o-uo-si / -ė-uo-si  $\rightarrow$  -(i)auosi  $\rightarrow$  -(i)ausi, -o-ie-si / -ė-ie-si  $\rightarrow$  -aiesi / -eiesi  $\rightarrow$  -aisi / -eisi).

Analogous rules can be formulated for Latvian conjugation:

both long and short stem vowels disappear before vocalic endings;
the long stem vowel $(\bar{a})$ is shortened to $a$ and the short stem vowel $(a)$
disappears before a pause;
otherwise (before consonantal endings and reflexive-s) the stem vowels
are preserved.

		Praes. Short	(a-)stem duoda-	Praet. Long	(ā-)stem devā-
1Sg	-u	duoda-u	$\rightarrow duodu$	devā-u	→ devu
2Sg	-ø, -i	duoda-ø	$\rightarrow$ duod	devā-i	$\rightarrow$ devi
3	-ø	duoda-9	$\rightarrow$ duod	devā-ø	$\rightarrow$ deva
1 P l	-m	duoda-me	$\rightarrow$ duodam	devā-me	→ devām
2P1	-t	duoda-te	$\rightarrow duodat$	devā-te	$ ightarrow devar{a}t$
1Sg	-uo-s	duoda-uo-s	→ duoduos	devä-uo-s	→ devuos
2Sg	-ie-s	duoda-ie-s	→ duodies	devā-ie-s	$\rightarrow$ devies
3	-Ø-S	duoda-ø-s	$\rightarrow$ duodas	devā-ø-s	→ devās
1P1	-mie-s	duoda-mie-s	$\rightarrow$ duodamies	devā-mie-s	$\rightarrow$ devāmies
2P1	-tie-s	duoda-tie-s	$\rightarrow$ duodaties	devā-tie-s	$\rightarrow$ devāties

Of course, additional rules are still necessary for the 2Sg and the 3rd person Present forms (see p. 37).

In Latvian, as well as in Lithuanian, these rules are universally valid for all finite verb forms. Let us consider some other advantages of this new approach to Latvian conjugation (for the same approach applied to Lithuanian verbal inflection see DLKG 1994).

In the traditional description, Present and Preterite stems of primary verbs sometimes coincide, cf. augt, aug-, aug- 'to grow'; sist, sit-, sit- 'to beat' whereas in the model outlined above the stem vowels always differentiate Present and Preterite stems: augt, auga-, augā-. This provides us with a convenient rule for the derivation of the participles as well: here the same morphophonological rules hold true. Thus, in the Present passive participle the consonantal suffix -m- causes no changes in the stem: duoda-m-s  $\rightarrow$  duodams,  $m\bar{a}c\bar{a}$ -m-s  $\rightarrow$   $m\bar{a}c\bar{a}ms$ . The Debitive form represents the bare stem with shortening of the stem vowel before a pause:  $j\bar{a}duoda$ -#  $\rightarrow$   $j\bar{a}duod$ ,  $j\bar{a}m\bar{a}c\bar{a}$ -#  $\rightarrow$   $j\bar{a}m\bar{a}ca$ . It appears without personal ending, which is in concordance with the fact that the Debitive form by

<sup>&</sup>lt;sup>6</sup> The same shortening is characteristic of the archaic forms of the 3rd person Imperative: *rašo* 'to write' → *te-raša-ie* → *terašai*, and Present active participles: *rašo-nt-is* → *rašantis*.

itself does not distinguish the category of person - a personal ending would seem odd and hardly explicable here from the synchronic point of view.

As far as the other forms are concerned, the problem consists in mere reformulation of existing rules. Thus, the stem vowel disappears before vocalic affixes in the following forms:

- 2Pl Imperative: Present stem +-ie-: duoda-ie- $t \rightarrow duodiet$ ,  $m\bar{a}c\bar{a}$ -ie- $t \rightarrow m\bar{a}ciet$ ;
- Present active participle: Present stem + -uoš-: duoda-uoš-s → duoduošs, mācā-uoš-s → mācuošs;
- Past active participle: Preterite stem + -is / -us-:  $dev\bar{a}$ -is  $\rightarrow$  devis (Nom.Sg. masc.),  $dev\bar{a}$ -us-i  $\rightarrow$  devusi (Nom.Sg.fem.); an additional rule for the depalatalization of the stem-final consonant is needed  $(c, dz \rightarrow k, g)$ , e.g. beidz, beidz 'to finish':  $beidz\bar{a}$  + -us-i  $\rightarrow$  beigusi, a palatalized consonant appears only in the Nom.Sg.masc. before a front vowel: beidzis.

However, the Future tense requires a separate comment. Due to the short Future stem vowel *i*-, its conjugation follows the pattern of the Short stem and has the same set of endings, but it causes difficulties in respect to the 2Pl form in -iet, used alongside the regular form in -it (būsit: būsiet, cf. MLLVG 1959, 596-597). The problem of the final -sies in the 3rd person of reflexive verbs (duosies) remains as well (in accordance with the general rules one would expect \*-sis here: \*duosis) (Endzelīns 1951, 907).8

The acceptance of morpheme status for the stem vowels requires certain modifications in the morphological segmentation of verb forms (see p. 44).

It is convenient to determine the conjugational type in Latvian, as well as in Lithuanian, by using the 3rd person form, which clearly indicates the stem vowel. This is why the 3rd person form should be given in the dictionaries to represent the Present and Preterite stems. Unfortunately, Latvian dictionaries have so far always quoted the 1Sg form, which leaves the conjugational type obscure because any stem vowel is dropped before the vocalic ending -u, cf. e.g. homonymous 1Sg forms  $l\dot{u}oku$  of the verb lakt,  $l\dot{u}ok$ , laka 'to lap' following the Short conjugation and  $l\dot{u}oku$  of the verb  $l\dot{u}oc\hat{t}t$ ,  $l\dot{u}oka$ ,  $l\dot{u}oc\tilde{t}ja$  'to fold, to bend'9 following the Long conjugation (see also the table on p. 36). In the 1Sg form

<sup>&</sup>lt;sup>7</sup> A certain problem is caused by the formation of the Past active participle in Lithuanian: the stem vowel does not undergo the expected shortening before the vocalic suffix -es/-us-, but disappears completely (thus, baigė-+-us-i does not yield \*baigiausi but baigusi (Nom.Sg.fem.)). The disappearance of the stem vowels is barely touched upon in the Academy grammar (cf. DLKG 1994, 357) and the exception from the morphophonological rule receives no special comment. Another interesting point is the difference between the palatalization of the last stem consonant in valgiusi (valgyti, valgo, valgė 'to eat') as against the lack of palatalization in baigusi. This should obviously be explained with the influence of the stem suffix of the so-called mixed type verbs which is explicitly present in the Infinitive and is represented by zero allomorphs in the Present and Past, in the latter case inducing the palatalization of the preceding consonant (see footnote 12).

<sup>&</sup>lt;sup>8</sup> This case can be compared, however, with the Subjunctive mood, if one posits two allomorphs for both suffixes: -tuo- and -sie- immediately before a reflexive morpheme and -tu- and -si- elsewhere: duotu- $\theta$  - duotuo-s, duosi- $\theta$  ( $\rightarrow$  duos) - duosie-s.

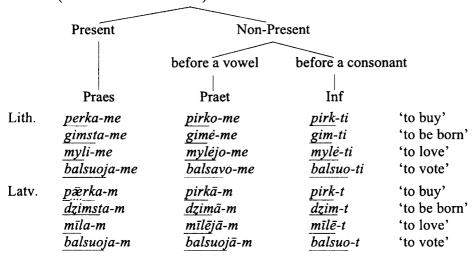
<sup>&</sup>lt;sup>9</sup> Macrons indicating long vowels are retained contrary to J. Endzelīns' tradition of accent marking.

homonymy of the Present and Past tense is often observed: augt, augu, augu 'to grow'; duomāt, duomāju, duomāju 'to think' – cf. the 3rd person forms aug, auga; duomā, duomāja. The 3rd person form is also more convenient because it is unmarked and can be derived from every verb, being at the same time the only possible finite form for impersonal verbs. Because of its informativeness, the 3rd person form appears in some descriptions and lists of Latvian verbs (see Fennell 1971; Lelis 1983, 80, 126–134; Mathiassen 1997, 83; etc.) and sometimes even in the traditional sources (e.g. MLLVG 1959, 678–679; LVPPV 1995, 18–19). Still, in most of the descriptions the 1Sg form is quoted – traditionally, but not rationally (so, unfortunately, also in Fennell 1980).

### VERBAL CLASSES

The verbal classes and structural types should be discussed in a separate chapter of the grammar. They appear to be useful for the purpose of predicting some details of conjugational paradigms (the stem vowel in Lithuanian, Long or Short conjugation and the presence of the 2Sg ending -i in Latvian). This matter, in its part concerning primary verbs, poses several difficulties to a description.

The first question that should be discussed is that of the hierarchy between the traditional three main verbal stems. As noted by T.V. Bulygina for Lithuanian (Bulygina 1977, 252–253), and as is even more obvious for Latvian, Infinitive and Preterite bases<sup>10</sup> can be grouped together as opposed to the Present base. Thus, the first distinction is that between the Present and the Non-Present base, whereas the subtypes of the Non-Present base appear in mutually exclusive contexts: the Infinitive base before a consonant and the Preterite base before a vowel (verbal bases underlined):



<sup>&</sup>lt;sup>10</sup> I use the term 'base' to refer to that part of the stem which is left after the stem vowel is dropped (the Infinitive stem, having no stem vowel, coincides with the Infinitive base).

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There are certainly irregular verbs characterized by a specific relationship between the main stems and therefore not matching the system described above (cf. Lith. ima-me, ėmė-me, im-ti 'to take', Latv. duoda-m, devā-m, duo-t11). In Lithuanian mixed type verbs such as daro-me, darė-te, dary-ti 'to do' the correspondence between the Infinitive and the Preterite stem is obscured by the use of a zero allomorph of the suffix (-y-/-ø-) in the latter, cf. Latv. darā-m, darijā-m, darī-t. Furthermore, the Lithuanian verb has two different Preterite stem vowels which are not directly connected with the form of the other stems (see DLKG 1994, 329-332). Inasmuch as Modern Latvian lacks the distinction between Preterite stem vowels (a former distinction being sometimes reflected in the alternation of the last consonant), the derivation of the Preterite stem on the basis of the Present and Infinitive seems to be possible (cf. Mathiassen 1997, 83). However, a thorough analysis of this problem would require a separate study. For the present, we shall accept the traditional three main verbal stems, bearing in mind that the most important distinction is between the Present and Non-Present stems.

As was pointed out above, the problem of the relationship between the main verbal stems in Latvian is traditionally viewed as the problem of classifying verbs into conjugations. In consequence, it appeared to be one of the central problems of the description of verbal inflection and was analyzed by many scholars. At least three classifications are relevant. The first and the most popular one goes back to A. Bielenstein (1863, 334-477) and was accepted later, with minor modifications, by J. Endzelins and K. Mühlenbachs (Endzelins 1907, 68-78). Bielenstein has 5 subclasses of primary verbs, arranged on a historical basis. A revised version of this classification, with the five classes consolidated into three, was suggested by E. Soida (1963, 128-135), who put forward the criterion of morphological structure of the Present stem. The most recent classification, proposed by T.G. Fennell (1971; 1980, 906-909), deals with 12 subclasses (with exceptions), which he distinguishes from a purely synchronic point of view. One could agree, however, with V. Zeps, who comments: "Since criteria of classification can and do conflict, no determination of what the "right" classification is can be made" (Zeps 1981, 390).

Thus it seems reasonable to change the very approach to the description: only those features which are relevant to every verb can serve as a basis for a non-contradictory classification. Only morphological distinctions meet this condition.

<sup>&</sup>lt;sup>11</sup> In the examples below, the Lithuanian form is given first, unless otherwise indicated; if the meanings coincide, the translation is given only after the Latvian word.

For Lithuanian there are three such features:

- 1) structural verb type: primary, mixed<sup>12</sup> or secondary (Lithuanian mixed type verbs should be divided into two subclasses: those having a suffix in the Infinitive only, and those having a suffix both in the Infinitive and in the Past).
- 2) Present stem vowel: a-, i-, o-,
- 3) Preterite stem vowel: o-,  $\dot{e}$ -.

The following possible combinations are realized, which yields 7 verbal classes:

	type	Praes.	Praet.	Nr	
primary		а-	0-	1	bėgti, bėga, bėgo 'to run'
		а-	ė-	2	nešti, neša, nešė 'to carry'
m	inf.: praes., praet.	0-	ė-	3	daryti, daro, darė 'to do'
i	inf., praet. : praes.	а-	0-	4	drebėti, dreba, drebėjo 'to tremble'; giedoti, gieda, giedojo 'to chant'
e		i-	0-	5	mylėti, myli, mylėjo 'to love'
d		0-	0-	6	žinoti, žino, žinojo 'to know'
	secondary	а-	0-	7	vėdinti, vėdina, vėdino 'to air'; balsuoti, balsuoja, balsavo 'to vote'; etc.

In Latvian, where the Past tense always has the Long  $\bar{a}$ -stem, only two factors determine the verbal class:

- 1) verbal structural type: primary, mixed or secondary,
- 2) Present stem vowel: a-,  $\bar{a}$ -.

Thus, the Latvian verb has 4 classes:

type	Praes.	Nr	
primary	a- (Short)	1	bēgt, bæg, bēga 'to flee'; nest, næs, nesa 'to carry'
mixed	a- (Short)	2	drebēt, dræb, drebēja 'to tremble'; dziedāt, dzied, dziedāja 'to sing'; mīlēt, mīl, mīlēja 'to love'
	ā- (Long)	3	vēdināt, vēdina, vēdināja 'to air'; zināt, zina, zināja 'to know'; darīt, dara, darīja 'to do'
secondary	a- (Short)	4	balsuot, balsuo (balsuojam), balsuoja 'to vote'; etc.

<sup>&</sup>lt;sup>12</sup> The traditional description of mixed type verbs as those having a suffix in one stem and no suffix in the other (DLKG 1994, 325–326) is probably not exact theoretically: stem suffix determine a certain meaning of the verb which is naturally preserved in all verbal stems, cf. Lith. mokéti, moka, mokéjo, Latv. mācēt, māk, mācēja 'to know how to' and Lith. mokyti, moko, moké, Latv. mācīt, māca, mācīja 'to teach'. Thus it would be correct to speak of zero allomorphs of the same suffix in the Present (and Preterite).

Other features distinguishing verbal stems belong to the sphere of morphophonology. Further division of verbs into groups does not seem expedient, since these groups would appear to intersect. That is why, after determining the principal verbal class, it is suggested to characterize every verb through a certain set of characteristics, paying special attention to the difference between AUTOMATIC alternations and NON-AUTOMATIC morphophonological changes. The strict differentiation of these two aspects, allowing to separate principal and secondary features, has not received due consideration in the existing classifications. Sometimes it is even obscured by a too minute analysis of surface distinctions (Fennell 1980; Mathiassen 1997) (on the latter see Andronov 1998a, 148–151).

In earlier works<sup>13</sup> I did not distinguish between automatic and non-automatic alternations but between morphophonological and morphological changes respectively. However, inasmuch as neither of the alternations is associated with meaning, they cannot be referred to morphology. Thus, in modern Lithuanian and Latvian, after the fading away of the athematic conjugation, Present stem formants (former affixes) never appear as the only markers of the Present stem. They are always a mere additional (and optional) indication, the main tense meaning being carried by the stem vowels. That is why I now consider verbal bases to represent allomorphs of one and the same morpheme. The contrast between the bases is not due to the difference of their morphological structure, but to allomorph variation.

The following particular distinctions are of a non-automatic character:

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• specific submorphs (Kasevich 1986, 83-95) in the Present stem:
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-- -j-: liauti, liauja, liovė 'to stop', laut, lauj, lāva 'to allow'
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--- -st-: gimti, gimsta, gimė, dzimt, dzimst, dzima 'to be born' --- -n-: auti, auna, avė, aut, aun, āva 'to put shoes on/off'

— -d-: virti, verda, virė, virt, værd, vira 'to boil'

- "infix" in Lithuanian: rasti, randa, rado 'to find'

## • consonant alternations:

— j-palatalization in the Present stem:

leisti, leidžia, leido, laist, laiž, laida 'to let' kentėti, kenčia, kentėjo 'to suffer'; gulēt, gul, gulēja 'to lie'

— i-palatalization in the Preterite stem in Latvian: nākt, nāk, nāca 'to come'

• vowel alternations in the Present stem:

— as a relic of the Indo-European ablaut or Common Baltic vowel lengthening:

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ø: : ø pirkti, perka, pirko, pirkt, pærk, pirka 'to buy' -: : - lekti, lekia, leke 'to fly', lekt, læc, leca 'to jump'
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— as a relic of an infix:

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šalti, šąla, šalo 'to freeze'; rast, ruod, rada 'to find' rigzti, ryzga, rizgo 'to get tangled'; krist, krīt, krita 'to fall'
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<sup>&</sup>lt;sup>13</sup> The Lithuanian verbal classes were reviewed in Andronov 1997a, the same approach to the Latvian verb was briefly characterized in Andronov 1998b (cf. E. Soida's classification of the Latvian conjugations in Soida 1963, 128–135).

One often observes a combination of several non-automatic distinctions in one stem (cf. the above-mentioned verb Lith. *lėkti*, Latv. *lēkt* combining vowel and consonant alternations in the Present stem).

The distinctions can be rendered more complex by various automatic changes. The following items require special consideration in the analysis of the structure of verbal stems:

• the status of the intervocalic *j* at the end of the Present base (cf. Andronov 1998a, 148–149): a submorph or an automatic glide, cf.:

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ryti, ryja, rijo,
dalyti, dalija, dalijo 'to divide',
balsuoti, balsuoja, balsavo, 14
liauti, liauja, liovė 'to stop',
joti, joja, jojo,

rīt, rij, rija 'to swallow'
cienīt, cienī (cienījam), cienīja 'to
respect'
balsuot, balsuo (balsuojam), balsuoja
'to vote'
laut, lauj, lāva 'to allow'
jāt, jāj, jāja 'to ride'
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- the functional equivalence of the submorph-j- and the corresponding consonant alternation (j-palatalization) in the Present stem in Latvian, cf.: glābt: glābju, glābj 'to save' plēst: plēšu, plēs, plēš 'to tear'
- the presence or absence of the consonant alternation k c, g dz (*i*-palatalization) in the Preterite stem in Latvian:

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degt, dæg, dega 'to burn' rēkt, ræc, rēca 'to cry'
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• refashioning of the pattern of vowel alternation in some verbs with former nasal infix after the model of verbs with inherited Indo-European ablaut in Latvian; there seems no point in classifying these verbs into different groups nowadays as it is done in the traditional descriptions (MLLVG 1959, 669–670), cf.:

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likt, liek, lika 'to put' tikt, tiek, tika 'to find oneself'
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- morphophonological quantitative alternation of the root vowels in Latvian:
   art, àr, ara 'to plough'; skart, skàr, skåra 'to touch'; kart, kar, kara 'to hang'
- the use of the closed e in the Present stem of primary verbs in Latvian not determined by the position (after the loss of soft r in the Standard language): dzert, dzer (< dzer) 'to drink', cf.  $cer\bar{e}t$ , cxr 'to hope' (mixed type verb)

In the present article only a general approach to the description of verbal classes is outlined. The complete description of this aspect of Lithuanian and Latvian conjugation should be made the object of a thorough separate study. The ideal classification should offer the possibility to construct, on the basis of

<sup>&</sup>lt;sup>14</sup> Consider specific vowel alternation in Lithuanian secondary verbs suffix -uo-: -av- - similar to the change in the primary verb root: duoti, duoda, davé.

the Infinitive stem and classificational characteristics, the remaining stems. I hope that it would help to present the inflection of every verb of the two languages in grammatical dictionaries similar to Zaliznjak 1987.

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