

## A remark on the Salos Glossing Rules: Verb forms

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ALEKSEY ANDRONOV

St. Petersburg State University

This remark addresses the article by Nicole Nau and Peter Arkadiev “Towards a standard of glossing Baltic languages: The Salos Glossing Rules” (further—SGR) published in the 6th volume of *Baltic Linguistics*. This article is very useful for the “task of bridging the gap between Baltic linguistics and general linguistics” (SGR 236). The authors point out that these rules are also intended to unify the presentation of data of the two Baltic languages: “Inner-Baltic comparison will be facilitated by adopting the same rules of segmentation and categorization for Latvian and Lithuanian” (SGR 197). However, in this respect, the article is not free from local traditions (especially in the case of approaches to Latvian material), and this hinders a comparison. My remark aims to focus attention on two points of alleged “significant differences” (SGR 197) between Latvian and Lithuanian. No clear rationale is given in the article for the different treatment of: (1) stem vowels of verbs and (2) the reflexive morpheme in the two languages.

Being essentially a technical device, standardized glossing is by no means intended to solve all theoretical questions of morpheme segmentation. Problematic items may be left unspecified when possible, but elaboration of glossing rules should not be used for promoting one of the existing approaches at the expense of the other with no arguments supplied.

“Significant differences” between Latvian and Lithuanian in verbal morphology are mentioned several times in SGR. One would expect the description of glossing for verb forms of the two languages to be organised in a parallel way to make these differences evident. However, the authors seem to have written their respective sections separately: both the composition and the glossed examples of the same categories differ across the text (some striking deviations will be mentioned below). Thus one cannot help feeling that it is the personal preferences of the authors,

rather than a contrastive analysis of the two systems, which give rise to these “significant differences”.

There are two traditions of segmentation of finite verbal forms in the Baltic languages. One, found mostly in handbooks and school grammars, treats thematic vowels as incorporated into personal endings (Latv. *aug-am*, Lith. *aug-ame* ‘we grow’), which corresponds to what J. Baudouin de Courtenay called “shortening the themes for the benefit of the endings” (1888/2005, 19). The other, more theoretical approach rejects reanalysis and assigns these vowels to the stem (Latv. *auga-m*, Lith. *auga-me*). For modern Lithuanian the second approach was established by Vladas Žulys (1975) and was adopted by the Academy Grammar, edited by Vytautas Ambrazas (GLJA 1985, DLKG 1994, LG 1997). For modern Latvian the same approach to segmentation was proposed by Andronov (2000) and consistently applied in Andronov (2002).

Morphophonological rules for the stem vowels of the two languages look as follows (Andronov 2000, 38–39):

- Lithuanian: (1) the long stem vowels *o-*, *ė-* alternate with short *a-*, *e-*, and the short ones (*a-*, *i-*) disappear before vocalic endings (those beginning with vowels); (2) otherwise (before consonantal endings or before a zero-ending), the stem vowels are preserved without any transformation (cf. LG 1997, 296);
- Latvian: (1) both long and short stem vowels disappear before vocalic endings; (2) the long stem vowel (*ā-*) is shortened to *a* and the short stem vowel (*a-*) disappears before a pause; (3) otherwise (before consonantal endings and reflexive *-s*), the stem vowels are preserved.

The Lithuanian segmentation of Žulys (and the Lithuanian Academy Grammar) is followed in SGR without any discussion, although there have been some objections to it (Holvoet 2006).<sup>1</sup> Surprisingly, a rejection of the same segmentation for Latvian is advocated by Nicole Nau (the author of the section on glossing the Latvian verb) by arguments equally applicable to Lithuanian. The same holds true with respect to segmenta-

<sup>1</sup> Holvoet considers the approach of the Academy Grammar inconsistent, since the singling out of the thematic vowel is postulated only for verbal and not for nominal forms. However this “difference” exists only from a historical perspective. Stem vowels are not absolute values; their status should be established by synchronic analysis. There is no obligatory parallelism between verbal and nominal morphology in a language, so synchronically one cannot demand equal treatment of the segments which only *historically* have been stem vowels of verbs and nouns (Andronov 2008).

The approach of Žulys vs. Academy Grammar is not followed in the *Lithuanian Language Morphemics Database* (<http://tekstynas.vdu.lt/page.xhtml?id=morfema-db>) and Rimkutė *et al.* (2011, I-6).

tion of the reflexive morpheme. Let us compare several claims of Nau (for Latvian, left) and Arkadiev (for Lithuanian, right).

### 1. Thematic vowel of the finite verb

SGR 224 (Latvian):

“...there is no easy answer to the question of which part of the form contains which information [...] The author of this section (Nicole Nau) holds that there is no segment that could be glossed as ‘past’ or ‘present’. Instead, this information is either expressed by the choice of a stem (as in the 1SG forms *pæ:rk-u* vs. *pīrk-u*) or the combination of a particular stem and ending (as in 2SG *pērc* [zero ending] vs. *pīrk-ī*). The solution favored by this author therefore is to refrain from segmenting present and past tense forms of verbs, or to segment only the personal ending and ascribe the tense meaning to the stem”

(72) *pæ:rk-u*      *pīrk-a*  
           buy.PRS-1SG buy.PST-3  
           *pæ:rk-am*    *pīrk-ām*  
           buy.PRS-1PL buy.PST-1PL

SGR 219 (Lithuanian):

“In the simplest and most general case, a Lithuanian finite verbal form consists of a stem, a tense/mood suffix and an ending expressing person and number (61a). In some cases [...] the tense-mood affix coalesces with the personal ending (61b); in the third person, the personal ending is technically null, but for the sake of clarity and economy we recommend glossing these endings as cumulatively encoding tense/mood and person (61c).”<sup>2</sup>

(61) a. *bėg-a-me*      *bėg-o-me*  
           run-PRS-1PL run-PST-1PL  
       b. *bėg-u*            *bėg-au*  
           run-PRS.1SG run-PST.1SG  
       c. *bėg-a*            *bėg-o*  
           run-PRS.3      run-PST.3

The advice “to segment only the personal ending” does not eliminate the problem of placing the boundary. Nau prefers to have two sets of endings *-am/-ām* 1PL and *-at/-āt* 2PL (SGR 224), but mentions the possibility of operating with the endings *-m* and *-t* respectively, and assigning the preceding vowel to the stem (SGR 225). At any rate, the category of tense is bound to the stem. Arkadiev singles out this thematic vowel as a separate suffix (in some forms fused with the personal ending) and ascribes the category of tense to it.

Similar differences in segmentation can be observed in the section on participles (SGR 229–230). For Latvian, a separate status for the tense suffix is rejected, the latter being merged with the present passive participle suffix: *las-ām-i* ‘read-PRS.PP-NOM.PL.M’ or, alternatively, with the stem:

<sup>2</sup> Although this is not important for glossing, one should not be misled by the superficially similar segmentation *bėg-u* (1SG), *bėg-i* (2SG), *bėg-a* (3): the final vowel in *bėg-u* and *bėg-i* is the personal ending, whereas in *bėg-a* it is the stem vowel (tense/mood suffix).

*lasā-m-i* ‘read-PRS-PP-NOM.PL.M’. For the Lithuanian participle, the suffix is singled out as in finite forms: *sak-o-m-as* ‘say-PRS-PA-NOM.SG.M’.

Surprisingly, when claiming that “Andronov’s analysis presumes underlying forms and morphophonological rules for the derivation of surface forms, which cannot be reflected in interlinear glosses following general principles accepted here” (SGR 225, fn. 6), Nau does not notice that deep forms and morphophonological rules of the same kind underlie Žulys’ segmentation for Lithuanian, which is generally accepted in SGR.<sup>3</sup>

Resorting to the “most modern descriptions of Latvian morphology” (SGR 225), such as the new Academy Grammar (LVG 2013, 518), seems inappropriate: one would rather expect the qualification “most *traditional* descriptions” here, since with respect to segmenting personal endings they do not deviate from the approach dating back to the first Latvian grammar by J. G. Rehehusen (1644, 14–15): “Appositivæ, quæ in fine verbis apponuntur. Adjiciatur ergo *am* primæ *att* secundæ personis pluralibus in præsentī & imperfecto.”<sup>4</sup>

One should not be misled by the rich vowel and consonant alternations in the stem of the verb *pīrkt* ‘to buy’, chosen by Nau to illustrate the cumulative encoding of tense and mood: numerous alternations can easily be found in Lithuanian verbs as well, cf. present and past forms of *pīrkti* ‘to buy’ and *plėsti* ‘to expand’:

<i>perk-ù</i>	<i>perk-ì</i>	<i>peĩrk-a</i>	<i>peĩrk-a-me</i>
buy-PRS.1SG	buy-PRS.2SG	buy-PRS.3	buy-PRS-1PL
<i>pĩrk-aũ</i>	<i>pĩrk-aĩ</i>	<i>pĩrk-o</i>	<i>pĩrk-o-me</i>
buy-PST.1SG	buy-PST.2SG	buy-PST.3	buy-PST-1PL
<i>pleĩci-ù</i>	<i>plet-ì</i>	<i>plėĩci-a</i>	<i>plėĩci-a-me</i> <sup>5</sup>
expand-PRS.1SG	expand-PRS.2SG	expand-PRS.3	expand-PRS-1PL
<i>plėĩci-aũ</i>	<i>plėt-eĩ</i>	<i>plėt-ė</i>	<i>plėt-ė-me</i>
expand-PST.1SG	expand-PST.2SG	expand-PST.3	expand-PST-1PL

<sup>3</sup> However, Arkadiev himself claims that his glossing does not assume any underlying forms, and the segmentation of Latvian presented in Andronov 2000, according to his view, is probably not based on underlying forms either (personal communication).

<sup>4</sup> At the same time, Nau does not feel embarrassed to object to the new Academy Grammar when she has a different opinion, cf. on intervocalic *j* in verbal stems: “the glide is purely phonologically conditioned” (SGR 224) vs. “present stem is derived by adding suffix *-j-* of the present tense to the stem of the infinitive” (LVG 2013, 548).

<sup>5</sup> Note also the quantitative alternation here, which is not reflected in the orthography: the root vowel becomes long under stress: [p’l’æ:č’æ], [p’l’æ:č’æm’æ].

## 2. Vocalic suffix of the verb stem

SGR 224 (Latvian):

“Some scholars may be inclined to identify the segment *-ij-* in the past tense forms of *rakstīt* ‘write’ as a marker of past tense. However, the respective thematic vowel appears in other stems as well (for example, in the infinitive and in future forms, see below) and cannot be regularly associated with past tense, while the glide is purely phonologically conditioned. In the verbs of the type *strādāt* ‘work’ the thematic vowel is present in all stems and cannot be regarded as a tense marker”

- (73) a. *rakst-u*      *rakst-ām*  
           write.PRS-1SG    write.PRS-1PL  
   b. *rakstij-u*      *rakstij-ām*  
           write.PST-1SG    write.PST-1PL  
 (74) a. *strādāj-u*      *strādāj-am*  
           work.PRS-1SG    work.PRS-1PL  
   b. *strādāj-u*      *strādāj-ām*  
           work.PST-1SG    work.PST-1PL

SGR 220–221 (Lithuanian):

“Lithuanian verbs may have different stems in different tenses and moods. The default recommendation is to leave the specific segments forming different stems unsegmented and unglossed (64a), but other possible options, such as the use of the gloss ТН “thematic formative”, can also be used if necessary, e.g. (64b);<sup>6</sup> in some rare cases the tense meaning can even be reasonably ascribed to the stem formative rather than to the ending, e.g. (64c).”

- (64) a. *kalb-a*              *kalbėj-o*  
           speak-PRS.3      speak-PST.3  
           *kalbė-ti*  
           speak-INF  
   b.                              *kalb-ėj-o*  
                                       speak-TH-PST.3  
           *kalb-ė-ti*  
           speak-TH-INF  
   c. *žin-o*                  *žin-oj-o*  
           know(PRS)-3      know-PST-3

One can see that the use of the same vocalic suffix in different stems does not prevent Arkadiev from glossing it as PST (cf 64c and the infinitive of the same verb *žin-o-ti*), but constitutes the main argument for Nau not to do so.<sup>7</sup> Actually, Lith. *žinoti*, *žino*, *žinojo* is structurally completely equivalent to Latv. *rakstīt*, *raksta*, *rakstija*. In general, by not segmenting the vocalic suffix, Nau does not mean that the category of tense is expressed outside the stem: surprisingly, identical stems of the verb *strādāt* are glossed differently (*strādāj-am* ‘work.PRS-1PL’ and *strādāj-ām* ‘work.PST-1PL’), however the example would suggest that the difference is in the vowel *a/ā* (being part of the ending or, with segmentation advocated in Andronov 2000, of the stem). I believe that it is the stem vowel which should be glossed as the tense marker, although possible homonymy

<sup>6</sup> The notion of thematic formative seems vague. Does the possibility of singling it out in *kalb-ė-ti* presuppose the same for *dal-y-ti* ‘to divide’ and *dal-in-ti* ‘idem’ or for *mok-ė-ti* ‘to know how’ and *mok-y-ti* ‘to teach’?

<sup>7</sup> Yet for the Latvian past participles, “alternative” glossing of the verb stem is also allowed: *lasij-uš-i* ‘read-PST.PA-NOM.PL.M’, *lasī-t-i* ‘read-PST.PP-NOM.PL.M’ (SGR 230).

occurs here (cf. Lith. *žin-o* and *žinoj-o*, Latv. *rakst-a* and *rakstīj-a* mentioned above). The difference in the stem vowels is not explicit in the case of morphophonological fusion: Latv. 1SG *strādāj-u* for both present (< \**strādāj-a-u*) and past (< \**strādāj-ā-u*), Lith. present active participle *mok-a-nt-is* both for *mokėti* ‘to know how’ (PRS.3 *mok-a*) and *mokyti* ‘to teach’ (PRS.3 *mok-o*). Since the stem vowel merges with the ending, tense is glossed after the dash: Lith. *žin-au* (< \**žin-o-u*) ‘know-PRS.1SG’, Latv. *zin-u* (< \**zin-ā-u*).

### 3. Reflexive postfix

SGR 228 (Latvian):

“We refrain from segmenting suffixes where this would create further allomorphs of personal or non-indicative endings, for example 1SG *-o* (in *-o-s* ‘1SG-RFL’)”

(83) a. *ceļ-os*                      *ceļ-am-ies*  
           rise<sup>8</sup>.PRS-1SG.RFL rise.PRS-1PL-RFL

SGR 222 (Lithuanian):

“The reflexive marker is clearly identifiable and should be segmented and glossed even when lexicalized, in order not to obliterate the identification of personal endings”

(67) *keli-uo-si*                      *bij-o-mė-s*  
           raise-PRS.1SG-RFL fear-PRS-1PL-RFL

These representations differ in every possible aspect; one can hardly believe that they belong to the same article. Arkadiev does not bother to go into any details of the variants of the Lithuanian reflexive postfix (*-s*, *-si*, *-s(i)*, *-is*, whose distribution was meticulously described by Akelaitienė (1987)), and is happy with two allomorphs for every preceding morpheme. For Latvian, Nau<sup>9</sup> sticks to the traditional descriptions, although the point is not elaborated there (see Andronov 2000, 37). Nothing is said about glossing reflexive nouns and participles (would Nau deny a boundary between a case ending and the reflexive marker in the past active participle: *slēp-us-ie-s* ‘hide-PST.PA-NOM.SG.F-RFL’, *slēp-uš-ā-s* ‘GEN.SG.F’, *slēp-uš-o-s* ‘ACC.SG.F?’), or the Latgalian supine *slāp-tū-s* (only the nonreflexive supine *makltā-tu* is analysed (SGR 218)). The invariability of the Latvian reflexive morpheme makes segmentation much more transparent than in Lithuanian, and allomorphs of the preceding morpheme accord with the history of these forms (endings have been shortened in the final syllable and are preserved when protected by reflexive clitic). However, one can prefer assigning the vowel (Lith. *i*, Latv. *ie*) to the re-

<sup>8</sup> A mistake for ‘raise’.

<sup>9</sup> Or both authors—cf. the plural “including the present authors” in the description of the approach (SGR 227).

flexive morpheme in both languages: Lith. *kel-si-s* (Žulys 1975, 67–68), Latv. *cel-sie-s* (Andronov 2000, 40, fn. 8) ‘raise-FUT.3-RFL’ as opposed to Lith. *kel-s-is* (Akelaitienė 1987, 6–7), Latv. *cel-s-ies* (SGR 228). This entails two variants of segmentation for other forms ending in a consonant:<sup>10</sup> Lith. active participles in *-qs-is* or *-qsi-s*, *-ęs-is* or *-ęsi-s*, gerunds in *-nt-is* or *-nti-s*, *-us-is* or *-usi-s*, reflexive noun in *-as-is* or *-asi-s*; Latv. 1PL in *-m-ies* or *-mie-s* (and the homonymous gerund), 2PL in *-t-ies* or *-tie-s*, evidential in *-uot-ies* or *-uotie-s*, infinitive in *-t-ies* or *-tie-s*.

Turning back to the “task of bridging the gap between Baltic linguistics and general linguistics” (SGR 236), I would like to remind the reader that there exists another gap—that between Latvian and Lithuanian linguistics, and bridging it is of no less importance. To sum up the present discussion, I see no reason for different segmentation of Latvian and Lithuanian verbal forms (whether the historical stem vowel is assigned to the stem or ending). Suggested common rules for segmentation and glossing of verb forms of the two languages are given in the appendix (for more theoretical details see Andronov 2000).

### Aleksey Andronov

*St Petersburg State University*

*Philological Faculty, Department of General Linguistics*

*Universitetskaja nab. 11, RU-199034 St Petersburg*

*baltistica@gmail.com*

## ABBREVIATIONS

ACC — accusative, CVB — converb, DEB — debitive, EVD — evidential, F — feminine, FUT — future, GEN — genitive, HAB — habitual, IMP — imperative, INF — infinitive, IND — indicative, IRR — irrealis, M — masculine, NOM — nominative, PA — active participle, PL — plural, PP — passive participle, PRM — permissive, PRS — present, PST — past, RFL — reflexive, SG — singular, SUP — supine

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<sup>10</sup> Except for nominal endings where degemination takes place: *keliančios + si* → *keliančiosi*.

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APPENDIX<sup>11</sup>

## Finite verb forms

indicative	present	<i>gied-u</i> <i>dzied-u</i> sing-PRS.1SG (sing-PRS-1SG)	<i>gied-i</i> <i>dzied-i</i> sing-PRS.2SG (sing-PRS-2SG)	<i>gied-a</i> sing-PRS.3 (sing-PRS-3) <i>dzied</i> sing-PRS.3	<i>gied-a-me</i> <i>dzied-a-m</i> sing-PRS-1PL	<i>gied-a-te</i> <i>dzied-a-t</i> sing-PRS-2PL
	past	<i>giedo-j-au</i> <i>dziedāj-u</i> sing-PST.1SG (sing-PST-1SG)	<i>giedo-j-ai</i> <i>dziedāj-i</i> sing-PST.2SG (sing-PST-2SG)	<i>giedo-j-o</i> <i>dziedāj-a</i> sing-PST.3 (sing-PST-3)	<i>giedo-j-o-me</i> <i>dziedāj-ā-m</i> sing-PRS-1PL	<i>giedo-j-o-te</i> <i>dziedāj-ā-t</i> sing-PST-2PL
	habitual past (Lith.)	<i>giedo-dav-au</i> sing-HAB-PST.1SG (sing-HAB-PST-1SG)	<i>giedo-dav-ai</i> sing-HAB-PST.2SG (sing-HAB-PST-2SG)	<i>giedo-dav-o</i> sing-HAB-PST.3 (sing-HAB-PST-3)	<i>giedo-dav-o-me</i> sing-HAB-PST-1PL	<i>giedo-dav-o-te</i> sing-HAB-PST-2PL
	future	<i>giedo-si-u</i> <i>dziedā-š-u</i> sing-FUT-1SG	<i>giedo-s-i</i> <i>dziedā-s-i</i> sing-FUT-2SG	<i>giedo-s</i> <i>dziedā-s</i> sing-FUT.3	<i>giedo-si-me</i> (-s-ime) <i>dziedā-si-m</i> (-s-im) sing-FUT-1PL	<i>giedo-si-te</i> (-s-ite) <i>dziedā-si(e)-t</i> (-s-i(e)t) sing-FUT-2PL
irrealis		<i>giedo-či-au</i> <sup>12</sup> sing-IRR-1SG	<i>giedo-tum</i> sing-IRR.2SG	<i>giedo-tų</i> sing-IRR.3	<i>giedo-tumė-me</i> -tum-ėme) sing-IRR-1PL	<i>giedo-tumė-te</i> (-tum-ėte) sing-IRR-2PL
		<i>dziedā-tu</i> sing-IRR				
imperative			<i>giedo-k(i)</i> <sup>13</sup> <i>dzied-i</i> sing-IMP.2SG	<i>te-gied-a</i> PRM-sing-PRS.3 (PRM-sing-PRS-3)	<i>giedo-ki-me</i> (-k-ime) sing-IMP-2PL	<i>giedo-ki-te</i> (-k-ite) sing-IMP-2PL <i>dzied-ie-t</i> sing-IMP-2PL
		evidential (Latv.) <sup>14</sup>	<i>dzied-uot</i> sing-PRS-EVD	<i>dziedā-š-uot</i> sing-FUT-EVD	debitive (Latv.)	<i>jā-dzied</i> DEB-sing-IND <sup>15</sup>

<sup>11</sup> Latvian verb forms are written according to a tradition of presenting linguistic examples: *e*, *ē* and *æ*, *ā* are distinguished, and *uo* stands for the diphthong [uo]. For those who prefer the traditional variant of segmentation, a broken hyphen (-) is used to show the resegmented boundaries (those claimed to have disappeared), or, if necessary, the entire form with traditional segmentation is given in parentheses (the category of tense remains expressed by the stem).

<sup>12</sup> See Žulys (1974, 70) (SGR 220 does not segment -*čau*).

<sup>13</sup> *i* is not a personal ending (Žulys 1974, 69).

<sup>14</sup> No evidential forms for Lithuanian are given here: “In Lithuanian there are no dedicated evidential morphemes. Evidential forms always coincide with participles and should be glossed as such” (SGR 233). The same holds for evidential forms of the past tense in Latvian (SGR 232).

<sup>15</sup> IND stands for indicative.

## Participles and converbs

active	present	<i>gied-a-nt-ys</i> sing-PRS-PA-NOM.PL.M <i>dzied-uoš-i</i> sing-PRS-PA-NOM.PL.M	<i>gied-a-nči-os</i> sing-PRS-PA-NOM.PL.F <i>dzied-uoš-as</i> sing-PRS-PA-NOM.PL.F	<i>gied-a-nt</i> <sup>16</sup> sing-PRS-CVB <i>dzied-uot</i> sing-PRS-CVB	<i>giedo-dam-i</i> <i>dziedā-dam-i</i> sing-PRS.CVB-PL.M	<i>dzied-a-m</i> <sup>17</sup> sing-PRS-CVB
	past	<i>giedoj-ę</i> <sup>18</sup> sing-PST.PA-NOM.PL.M <i>dziedāj-uš-i</i> sing-PST.PA-NOM.PL.M	<i>giedoj-usi-os</i> <sup>18</sup> <i>dziedāj-uš-as</i> sing-PST.PA-NOM.PL.F	<i>giedoj-us</i> <sup>16 18</sup> sing-PST.CVB		
	habitual past (Lith.)	<i>giedo-dav-ę</i> <sup>18</sup> sing-HAB-PST.PA.NOM. PL.M	<i>giedo-dav-usi-</i> <i>-os</i> <sup>18</sup> sing-HAB-PST.PA-NOM.PL.F	<i>giedo-dav-</i> <i>-us</i> <sup>16 18</sup> sing-HAB-PST.CVB		
	future (Lith.)	<i>giedo-sia-nt-ys</i> <i>(-si-ant-ys)</i> sing-FUT-PA-NOM.SG.M	<i>giedo-sia-nči-os</i> <i>(-si-anči-os)</i> sing-FUT-PA-NOM.PL.F	<i>giedo-sia-nt</i> <sup>5</sup> <i>(-si-ant)</i> sing-FUT-CVB		
passive	present	<i>gied-a-m-i</i> <i>dzied-a-m-i</i> sing-PRS-PP-NOM.PL.M	<i>gied-a-m-os</i> <i>dzied-a-m-as</i> sing-PRS-PP-NOM.PL.F			
	past	<i>giedo-t-i</i> <i>dziedā-t-i</i> sing-PST.PP-NOM.PL.M	<i>giedo-t-os</i> <i>dziedā-t-as</i> sing-PST.PP-NOM.PL.F		infinitive	<i>giedo-ti</i> <i>dziedā-t</i> sing-INF
	future (Lith.)	<i>giedo-si-m-i</i> <i>(-s-im-i)</i> sing-FUT-PP-NOM.PL.M	<i>giedo-si-m-os</i> <i>(-si-m-os)</i> sing-FUT-PP-NOM.PL.F		supine (Lith.)	<i>giedo-tų</i> sing-SUP

<sup>16</sup> I suggest labelling the “gerunds” of both languages consistently as cvb instead of glossing the Lithuanian ones as non-inflecting (i.e. lacking inflectional categories) active participles (SGR 231) and retaining an indication of the category of tense for Latvian as well.

<sup>17</sup> I see no reason for treating this Latvian converb “as an endless present passive participle” (SGR 231), since there is no passive meaning.

<sup>18</sup> Lithuanian past active participles deviate from the standard type of morphological alternation of the stem vowel: not only short, but also long vowels disappear before a morpheme starting with a vowel (Andronov 2000, 40, fn. 7).

Finite verb forms

indicative	present	<i>keli-uo-si</i> <i>ceļ-uo-s</i> raise-PRS.1SG-RFL (raise.PRS.1SG-RFL)	<i>kel-ie-si</i> <i>cel-ie-s</i> raise-PRS.2SG-RFL (raise.PRS.2SG-RFL)	<i>keli-a-si</i> <i>ceļ-a-s</i> raise-PRS.3-RFL (raise.PRS.3-RFL)	<i>keli-a-mė-s</i> <i>ceļ-a-mie-s</i> (-am-ies) raise-PRS.1PL-RFL	<i>keli-a-tė-s</i> <i>ceļ-a-tie-s</i> (-at-ies) raise-PRS.2PL-RFL
	past	<i>kėli-au-si</i> <i>cėļ-uo-s</i> raise-PST.1SG-RFL (raise.PST.1SG-RFL)	<i>kėl-ei-si</i> <i>cėļ-ie-s</i> raise-PST.2SG-RFL (raise.PST.2SG-RFL)	<i>kėl-ė-si</i> <i>cėļ-ā-s</i> raise-PST.3-RFL (raise.PST.3-RFL)	<i>kėl-ė-mė-s</i> <i>cėļ-ā-mie-s</i> (-ām-ies) raise-PST.1PL-RFL	<i>kėl-ė-tė-s</i> <i>cėļ-ā-tie-s</i> (-āt-ies) raise-PST.2PL-RFL
	habitual past (Li.)	<i>kel-dav-au-si</i> raise-hab-PST.1SG-RFL (raise-HAB.PST.1SG-RFL)	<i>kel-dav-ai-si</i> raise-hab-PST.2SG-RFL (raise-HAB.PST.2SG-RFL)	<i>kel-dav-o-si</i> raise-HAB-PST.3-RFL (raise-HAB.PST.3-RFL)	<i>kel-dav-o-mė-s</i> raise-HAB-PST.1PL-RFL	<i>kel-dav-o-tė-s</i> raise-HAB-PST.2PL-RFL
	future	<i>kel-si-uo-si</i> <i>cel-š-uo-s</i> raise-FUT.1SG-RFL	<i>kel-s-ie-si</i> <i>cel-s-ie-s</i> raise-FUT.2SG-RFL	<i>kel-si-s</i> (-s-is) <i>cel-sie-s</i> (-s-ies) raise-FUT.3-RFL	<i>kel-si-mė-s</i> (-s-imė-s) <i>cel-si-mie-s</i> (-s-im-ies) raise-FUT.1PL-RFL	<i>kel-si-tė-s</i> (-s-itė-s) <i>cel-si(e)-tie-s</i> (-s-i(e)t-ies) raise-FUT.2PL-RFL
irrealis		<i>kel-či-au-si</i> raise-IRR.1SG-RFL	<i>kel-tum-ei-si</i> raise-IRR.2SG-RFL	<i>kel-tų-si</i> raise-IRR.3-RFL	<i>kel-tumė-mė-s</i> (-tum-ėmė-s) raise-IRR.1PL-RFL	<i>kel-tumė-tė-s</i> (-tum-ėtė-s) raise-IRR.2PL-RFL
		<i>cėl-tuo-s</i> raise-IRR-RFL				
imperative			<i>kel-ki-s</i> <i>cel-ie-s</i> raise-IMP.2SG-RFL	<i>te-si-keli-a</i> PRM-RFL-raise-PRS.3 (PRM-RFL-raise-PRS-3)	<i>kel-ki-mė-s</i> (-k-imė-s) raise-IMP.1PL-RFL	<i>kel-ki-tė-s</i> (-k-itė-s) raise-IMP.2PL-RFL <i>cel-ie-tie-s</i> (-iet-ies) raise-IMP.2PL-RFL

## Participles and converbs

active	present	<i>keli-q-si</i> raise-PRS.PA.NOM. PL.M-RFL <i>ceļ-uoš-ie-s</i> raise-PRS.PA.NOM. PL.M-RFL	<i>keli-a-nči-o-si</i> raise-PRS-PA-NOM.PL.F-RFL <i>ceļ-uoš-ā-s</i> raise-PRS.PA-NOM.PL.F-RFL	<i>keli-a-nti-s</i> (-ant-is) raise-PRS-CVB-RFL <i>ceļ-uotie-s</i> (-uot-ies) raise-PRS.CVB-RFL	<i>kel-dam-ie-si</i> <i>cēl-dam-ie-s</i> raise-PRS.CVB-PL.M-RFL	<i>ceļ-a-mie-s</i> (-am-ies) raise-PRS-CVB-RFL
	past	<i>kēl-ē-si</i> raise-PST.PA.NOM. PL.M-RFL <i>cēl-uš-ie-s</i> raise-PST.PA.NOM. PL.M-RFL	<i>kēl-usi-o-si</i> <i>cēl-uš-ā-s</i> raise-PST.PA-NOM.PL.F-RFL	<i>kēl-us-is</i> (-usi-s) raise-PST.CVB-RFL		
	habitual past (Lith.)	<i>kel-dav-ē-si</i> raise-HAB-PST.PA.NOM. PL.M-RFL	<i>kel-dav-usi-o-si</i> raise-HAB-PST.PA.NOM. PL.F-RFL	<i>kel-dav-us-is</i> (-usi-s) raise-HAB-PST. CVB-RFL		
	future (Lith.)	<i>kel-si-q-si</i> raise-FUT-PA.NOM. PL.M-RFL	<i>kel-sia-nči-o-si</i> (-si-anči-o-si) raise-FUT-PA-NOM.PL.F-RFL	<i>kel-sia-nt-is</i> (-si-anti-s) raise-FUT-CVB-RFL		
passive	present	<i>keli-a-m-a-si</i> raise-PRS-PP-NA-RFL			infinitive	<i>kel-ti-s</i> <i>cel-tie-s</i> (-t-ies) raise-INF-RFL
	past	<i>kel-t-a-si</i> raise-PST-PP-NA-RFL			supine (Lith.)	<i>kel-tų-si</i> raise-INF-RFL