LIVONIAN FEATURES IN ESTONIAN DIALECTS

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Abstract. This article presents linguistic innovations which are typical of both Courland and Salaca Livonian and are also known in the neighbouring Estonian dialect areas. These innovative features are phonological, morphological, and morphosyntactic. The features are present mainly in western and southwestern Estonia, but also more specifically in areas close to the current western border between Estonia and Latvia. This article discusses the nature and chronology of these linguistic features, taking into account their distribution. Broadly spread common features can be mostly explained as inherent innovations of western Finnic when they are not shown to be caused by contacts with Germanic or Baltic languages. Features which are spread in the immediate vicinity of the former Livonian language area can be classified as a Livonian substrate in sub-dialects of western and insular Estonian.

Keywords: Livonian, Estonian, historical linguistics, language contacts, substrate

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1. Introduction

Estonian and Livonian belong to the southern group of Finnic languages and they share a number of common features which are not known in other Finnic languages both in phonology (Pajusalu 2012) and morphosyntax (Grünthal 2003). The previous study of contacts between Livonian and other languages has mostly focused on vocabulary and the Latvian, German, Swedish, and Estonian influences in Livonian (see Winkler 2014; Grünthal 2015). There has also been some research into the Livonian substrate in Latvian (Ernštreits, Kläva 2014), but only a few studies on Livonian-like features in phonology and grammar of Estonian dialects.
In this article we look at the phonological, morphological, and morphosyntactic features of both Courland and Salaca Livonian which have equivalents in insular, western, and southern Estonian dialects. We also observe the spread and historical background of such features, taking into account possible influences by other languages. The treatment of Livonian data is mainly based on Viitso (2008a), Pajusalu (2009, 2011, 2014), and Livonian dictionaries (LW (Kettunen 1938), LELS (Viitso, Ernštreits 2012), SLW (Winkler, Pajusalu 2009)); Estonian dialect data is analysed using commented text volumes of relevant dialects and their phonological and grammatical introductory surveys (Tanning 1961; Juhkam, Sepp 2000; Lonn, Niit 2002), Estonian dialect dictionaries (EMS; VMS), and previous comparisons of Estonian and Livonian dialects (e.g., Ariste 1954; Tanning 1958; Pajusalu 1996; Pajusalu et al. 2009; Pajusalu 2013; O’Rourke 2015).

2. Background

The history of comparative study of Livonian and Estonian dialects is quite long but periodic. In the middle of the 19th century a question was raised concerning the relationship between Livonian and the Leivu dialect spoken in a South Estonian linguistic enclave in northern Latvia. Sjögren (1850) and Wiedemann (1869) showed that Leivu was not Livonian but a South Estonian dialect. Ariste (1954) was the first researcher to compare Livonian and Estonian dialect data systematically, focusing on Courland Livonian and insular Estonian lexical and phonological data and concluding that the insular dialect is the Estonian variety which is the closest to Livonian (Ariste 1954: 260–289).

Tanning (1958) gave a thorough overview of phonological, morphological, and lexical commonality between Livonian and the western (Mulgi) dialect of South Estonian. Aside from Salaca Livonian, which was spoken in the vicinity of the South Estonian dialect area, she compared the Mulgi dialect with Courland Livonian and found several innovations which were common in both main varieties of Livonian and Mulgi. Pajusalu (1996) extended, in his dissertation, the comparison of southwestern Estonian dialects and Livonian, indicating a broader contact area between Livonian and Estonian dialects.

Recent work has also pointed to Southwest Estonia as a contact area between Livonian and Estonian dialects (cf. Pajusalu et al. 2009; Sutrop, Pajusalu 2009; O’Rourke 2015). Results of dialectometric
studies indicate that Salaca Livonian has an extensive lexical similarity not only with the Leivu linguistic enclave, but also with southwestern and western Estonian dialects (Pajusalu et al. 2009: 296–297); Leivu phonology also has Livonian features (Viitso 2009).

Various common features of Livonian and the Häädemeeste sub-dialect of western Estonian have been addressed in Sutrop, Pajusalu (2009), and Pajusalu (2013). Structural similarities between Livonian and Häädemeeste were discussed in O’Rourke (2015), suggesting the possibility of a Livonian substrate not only in the territory of the former Häädemeeste Parish between Pärnu and the Latvian border, but also in southwestern Estonia more broadly.

As Livonian and Estonian have been spoken next to each other for more than a millennium, contacts between the two closely related languages have to be divided chronologically to determine the nature of contacts. The oldest shared features could point to a common southwestern Finnic proto-dialect. After the divergence of Livonian into a separate South Finnic language, the possibility and extent of a Livonian substrate in Estonian dialects should be taken into consideration. Also, individual Estonian dialects have influenced Courland and Salaca Livonian after Common Livonian. Finally, recent shared areal innovations can possibly originate either from one or the other, or from a third source (e.g., Baltic German).

Therefore, contacts between Livonian and Estonian can be divided into prehistoric, medieval, and more recent times. As the Livonian-speaking area has dwindled from the beginning of the Middle Ages (on Salaca Livonian cf. Vunk (2014)), the earliest contacts are also likeliest to be the most widespread, between contemporary southern Estonia and northern Latvia. Besides common contacts around the entire Bay of Rīga, there have been separate areas of contact between Saaremaa and Courland and between the Bay of Pärnu and Livland (Vidzeme).

3. Phonological innovations

Livonian is characterized by a number of phonological innovations (see Pajusalu 2014: 152–162 and Kallio’s article in this volume, p. 39–65) which appear in Estonian dialects, too. Among them are several changes of vowel and consonant systems as well as word prosody. Here we will discuss ten phonological features.
3.1. Broken tone

In word prosody the most striking innovation is the formation of broken tone: *kuo’ig* ‘ship’, *lā’ðō* ‘to go’ (Lehiste et al. 2008; Tuisk 2015). In Estonian dialects, a tonal distinction is related to the quantity system, i.e., in the case of the overlong quantity degree there is a falling pitch contour in the initial stressed syllable (see Lippus et al. 2011). Perception tests have shown that the tonal distinction is essential for Estonians who come from the western islands and western parts of the mainland Estonia, including the southwestern Mulgi dialect area (Lippus, Pajusalu 2009). However, the broken tone is found only in the Leivu linguistic enclave and also sporadically in the Lutsi linguistic enclave in eastern Latvia (Pajusalu 2014: 153; Balodis et al., in press). Eberhard Winkler has described the broken tone as a feature of the southernmost Finnic varieties spoken in Latvia (Winkler 1999, 2000).

3.2. Loss of *h*

The occurrence of the broken tone was historically connected to the loss of *h* in Livonian because the broken tone appeared in the syllables where *h* was lost. The general loss of *h* also could be a phonological change influenced by Latvian. In Estonia, the word-initial *h* has generally disappeared in North Estonian (excl. westernmost sub-dialects of Saaremaa and some northern coastal varieties) and western dialects of South Estonian. In the middle of a word, *h* could be lost in the insular, western, and southwestern dialects, e.g., EstW *kaessa* ‘eight’ (< *kaheksa*), Sa sporadic *raa* ‘money’ (< *raha*), Hää *vael* ‘sometimes’ (< *vahel*). The verb stem *läää*- ‘go’ (< *lähe-*) is generally without *h* in Estonian southwestern dialects and South Estonian.

3.3. Prepalatalisation

Prepalatalisation is another sound change which has an effect on the prosodic structure of a word. It is a characteristic of Livonian and southwestern dialects of Estonian, also in Livonian–like Latvian dialects in Courland and Vidzeme (Pajusalu, Teras 2012; Pajusalu 2014: 161). In the western and southwestern dialects, pronunciation of *i* before the (earlier) palatalised consonants is typical, e.g., Krk *näin* ‘grandmother’ (< *nänni*), Tõs *suip* ‘soup’ (< *suppi*), in the insular dialect
the transitional vowel is e: Sa koel ‘school’ (< *kooli), paet ‘boat’ (< *paatti), Khn aet ‘grandfather’ (< *atti). In addition to prepalatalisation, depalatalisation has also occurred in these dialects (Pajusalu, Teras 2012: 163–165).

A special case of Livonian prepalatalisation is the history of *kj. In Salaca Livonian, *kj has changed to a palatal consonant which was written in various ways in old manuscripts: aģ ~ ad’ ~ ad’a ~ adja ‘edge; shore’ (< *akja) (see SLW: 41). Prepalatalisation and depalatalisation of k’ appear sporadically in Salaca Livonian: aig ‘pike’ (< *hauki), koig ‘ship’ (< *koki) but in Courland Livonian the change takes place regularly: aigā ‘edge; shore’ (< *akja), laigā ‘wide, broad’ (< *lakja). Prepalatalisation of k’ is allophonic in most southern Estonian dialects: Rõn la’gā ‘wide, broad’ (< *lakja), tü’k ‘piece’ (< *tükki); however, in western South Estonian it has become phonemic in some words: Krk puik ‘fairy’ (< *puuki). Salaca Livonian and the Mulgi dialect also reveals metathetic ki > ik after alveolars: Sal katik ‘broken’ (< *katki), kirik ‘cricket’ (< *kirki), Mu katik ‘broken’ (< *katki), pütsik ‘parsnip’ (< *putski), kennigi ‘somebody’ (< *kenki) (ibid. 165–166).

3.4. Umlaut

Alongside prepalatalisation, umlaut occurs in Livonian and in neighbouring Estonian varieties. Livonian umlaut is similar to Germanic umlaut changing the first syllable back vowel to a front vowel and non-high front vowel to a higher front vowel if there is a high front vowel in the next syllable, cf. ärb ‘scar’ (< *arpī), lemm ‘warm’ (< *lämmi). In Estonia, such metaphonic changes occur typically in southwestern coastal dialects and on southwestern islands, e.g., lämp ‘flat foot’ (< *lampī), lemm ‘disease which causes suffocation (e.g., asphyxia, diphtheria)’ (< *lämpii). (ibid. 170–171).

3.5. Vowel reduction

A prosodic innovation which has caused several other changes in the Livonian sound system is weakening of secondary stress (see Pajusalu 2014: 153–154). Its consequences are the late syncope and apocope in non-initial unstressed syllables: tupākst ‘haycocks’ (< *tupukset), Sal lapsk ‘with a child’ (< *lapseka), velidst ‘from brothers’ (< *velidesta) (Pajusalu 2011: 224). In Estonian dialect areas, such extensive late syncope
and apocope are most widespread in southwestern dialects, e.g., Hää tömmaśt ‘(they) pulled’ (< *tömbasit), Saa inimest ‘people’ (< *inimeset) (Juhkam, Sepp 2000: 44), Hls kateksi ‘(we) two’ (< *katekesi), Krk matets ‘is buried’ (< *matetakse) (Tanning 1961: 34–35).

3.6. Raising of au > ou

There are also other common changes in Courland and Salaca Livonian vowel and consonant systems which have equivalents in Estonian dialects. A change with wide distribution is au > ou: loul ‘song’, sounõ ‘to (the) sauna’. This sound change is known to be also in Baltic German and Baltic Yiddish (Verschik 1999: 273). In Estonia, it has been spread in western insular dialects, for example, in western Hiiumaa: Emm lout ‘barn’, Rei roud ‘iron’ (Ariste 1939: 37); in southwestern Saaremaa: Jäm kounis ‘beautiful’ (< *kaunis), koup ‘goods’ (< *kaup) (Lonn, Niit 2002: 30). In the western mainland of Estonia, the change au > ɔu is attested in some coastal dialects: Rid lound ‘table’ (< *lauð), Han soun ‘sauna’ (< *saun), Var ɔug ‘pike’ (< *haug) (Juhkam, Sepp 2000: 18–19).

3.7. Raising of e > i

In Livonian, there are several changes in the quality of e. In some words, e is raised to i in a stressed syllable: kis ‘who’, is ‘didn’t’, liib ‘will (fut.’). In Estonian dialects, e > i is spread lexically. For example, the pronoun kis instead of kes is used in a large territory of western and southern Estonia (EMS II: 1036), is instead of es is known only from Hargla and Leivu South Estonian (EMS I: 799), liib instead of leeb from the Kihnu island in southwestern Estonia (EMS V: 32). The change e > i occurs in Livonian in unstressed syllables, too, e.g., julgi ‘brave’ (< *judulja), vanińi ‘parent’, Sal vanim ‘older’ (< *vanembi: vanemma-). Similarly e > i is attested in West Estonian: Han enni ‘earlier’ (< *enne), tulik ‘coming’ (< *tulek) (Juhkam, Sepp 2000: 19), Hää isi ‘self’ (< *ise), ülgi ‘seal’ (< *hülge) (ibid. 629, 631).

3.8. Lowering of e > ä

The opposite change in the initial syllable is the lowering of e > ä: Cour ä’b ‘no’ (< *epi), sālga ‘back’ (< *selgä), tä’ddi ‘yours (pl.)’
(< *teiden), Sal säld ‘clear’ (< *selte). Here we see again different lexical diffusion in Estonian dialects. The negative eb- ~ ep-stem is pronounced as äb(a)- ~ äp in the insular and western sub-dialects (EMS I: 542, 768; Metslang et al. 2015), sälg ‘back’ has a large South Estonian distribution. In the insular dialect, e can be lowered before r, n, and h: Kaa ärälöi ‘apart’ (< *erälti), Muh änäm ‘more’ (< *enempi), rähè ‘rake’ (< *reha) (Lonn, Niit 2002: 25–26). The variation of e ~ ä in the initial syllable is common in the western mainland dialect, as well: vävama ‘to carry’ (< *vetä-), Vig päsa ‘nest’ (< *pesä), Kse täräv ‘grains’ (< *terä); in the northern sub-dialect it is seen as an influence of Estonian Swedish (Juhkam, Sepp 2000: 13–14).

3.9. Secondary a in non-initial syllables

A secondary a occurs in several Livonian words in non-initial syllables: käbā ‘cone’ (cf. Fin käpy, Est käbi ‘id.’), mänga- ‘to play’ (Est mängi- ‘id.’), tulā- ‘to come’ (Fin, Est tule- ‘id.’). The Estonian equivalents with a secondary a have as a rule a southwestern distribution, for example see Figure 1.

![Figure 1. The spread of the word käba ‘cone’ in the Estonian dialect area.](image-url)
3.10. Loss of $v$ or $v > b$

An innovation in the Livonian consonant system is the loss of $v$ in the second syllable: kazāb ‘grows’ (cf. Est kasvab ‘id.’), ka’z, Sal kaze ‘growth’ (< *kasvo), pīla, Sal pilu ‘cloud’ (< *pilve). In Estonia, the loss of $v$ in the same position is typical for western and southwestern dialects. On the other hand, in some instances, $b$ appears instead of a regular $v$: nīlba ‘lousy; shabby’ (cf. Fin nilva, Est nilv ‘slime’; SSA 2: 222), Cour vöräböz ‘squirrel’ (cf. Fin orava, Est orav ‘id.’), dürbal ‘turf, clod’ (cf. Fin turve, Est turvas ‘id.’). In some loanwords, e.g., dürbal, the -b- can reflect an original occurrence, but there are also several clear instances of the secondary $v > b$ which occurs in a broad area of western Estonian (see Juhkam, Sepp 2000: 11).

Summing up the spread of Livonian phonological innovations in Estonian dialects, a difference in distribution of these features is noticeable. Some of them characterise widely southwestern varieties of Estonian, e.g., prepalatalisation, loss of $h$, late syncope and apocope, including both insular and western dialects and Mulgi South Estonian; some common features have a wide western ($e > i$, secondary $a$, $v > b$) or a narrower insular and western distribution ($au > ou$, umlaut). Besides these West Estonian occurrences there are phonological similarities with broad ($e > ä$) or limited (broken tone) southern distribution. Three Estonian dialect areas – southern sub-dialects of Saaremaa, a southern group of the western mainland dialect (Häädemeeste, Saarde), and the western dialect of South Estonian – have the most phonological similarities with Livonian. Often these features were developed in the same contact area with (eastern) Scandinavian and (western) Baltic varieties but there has also been important secondary contact with Livonian at later times.

4. Morphophonological and morphological innovations

Livonian and Estonian dialects also share a number of morphophonological and morphological innovations which are especially characteristic of southwestern Finnic varieties. Among these are typologically significant developments, such as changes in paradigmatic grade alternation, resulting in limitation of qualitative alternation and broadening of quantity alternation patterns. In addition, several specific cases of formation of certain inflectional and derivational forms occur. Here we will discuss six morphophonological and morphological features.
4.1. Personal pronouns

The common nominal features of Livonian and southwestern Estonian dialects are prominent in the declination of pronouns. The partitive case for the 3rd person singular personal pronoun tämā ‘he/she’ is with a consonant stem: Cour tānda, Sal tämd ~tänd ~ tend (< *tāmtā). In Estonia, the form tend ~ tänd is used in southwestern sub-dialects, see Figure 2.

![Figure 2. tend ‘him/her’ in Estonian dialects (according to Sutrop, Pajusalu 2009).](image)

The genitive forms of the 1st and 2nd person plural personal pronouns Cour mā’d, Sal mād ~ mede ‘our’ (< *me-ten), Cour tā’d, Sal tād ~ ted ‘yours (pl.)’ (< *te-ten) have similar broad southwestern distributions in dialects of the Estonian mainland (cf. Viitso 2008b: 94, fig. 3). These inflectional patterns apparently have been characteristic already for the ancient Finnic proto-dialect spoken around the Livonian (i.e., Rīga) Gulf.
4.2. Gradation

In Livonian and southwestern Estonian varieties, there are also common secondary developments in gradation such as formation of strong grade in adjectives ending *-ai(nen) > -i, for example, Cour aigi, Krk aigine ‘timely’ (< *aikainen); Cour kuldi, Muh, Krk kuldine ‘golden’ (< *kultainen).

4.3. Nominal derivation

A similar distribution of common formation is observable in nominal derivation, as well. For example, the derivational suffix -l(a) is used secondarily both in Courland and Salaca Livonian: Cour dūrbal ‘turf’ (< *turβa-), mātāl ‘turf’ (< *māttā-), Sal siemīl ‘seed’ (< *seeme-). The word turbal ~ turval ~ turvel ‘turf’ is attested in insular and western Estonian dialects and the word seemel is characteristic of western Mulgi South Estonian sub-dialects.

4.4. First person singular suffix

The historical suffix of the first person singular -n disappeared in Livonian and largely in North Estonian insular and western dialects as well as in South Estonian. Both in Courland and Salaca Livonian, the marker of the third person singular -b was adopted in the first singular forms, e.g., tulāb ‘(I) come; (he/she) comes’ but in the West Courland and Salaca varieties the older form ūo ‘am’ was preserved (see Pajusalu 2014: 164). In Estonia, the form oo ‘am’ is known from insular and western dialects (Lonn, Niit 2002: 37; Juhkam, Sepp 2000: 23; cf. VEMA, maps 94 and 83).

4.5. Past participle

In Livonian, the active past participle is formed with the suffix -n in many verb types: Cour andōn, Sal annen ‘given’, Sal ollen ‘been’ (but cf. Cour vōnd ‘id.’). In Estonian, such formation with -n is especially typical of Kihnu island (Lonn, Niit 2002: 36) and its northern vicinity on the mainland (Juhkam, Sepp 2000: 51). The past participle forms with -n is used in Mulgi, too, e.g., Hls, Krk andōn, Pst, Trv, Hel andan ‘given’.
4.6. Verbal derivation

In Mulgi South Estonian, morphophonological replacement $e > u$ is also attested, which is comparable to Livonian cognates, cf. Cour $panūb$ ‘puts’ (cf. Est $panēb$ ‘id.’); Cour $lopūb$ ‘ends’, Mulgi Krk $lōpus$ ‘ends’ (cf. Est $lōpeb$ ‘id.’), $tōuzus$ ‘rises’ (Est $tōuseb$ ‘id.’) (Pajusalu 1996: 63). In Mulgi, the secondary $-u$ can be interpreted as a reflexive suffix. Some Livonian verbal derivational suffixes appear in the western dialect of South Estonian, cf. e.g., Livonian $-g(ō)$ and Mulgi $-gu$: CourW $virgōb$, Krk $vōrēus$ ‘becomes alienated’ (LW: 494; Pajusalu 1996: 60).

According to this data it is possible to conclude that the occurrence of Livonian morphophonological and morphological features have sometimes surprisingly wide southwestern distribution as in the case of the loss of the first singular ending $-n$. However, more often there is a narrower southwestern distribution for the features, among them the genitive and partitive forms of the 1st and 2nd plural pronouns, strong grade adjectives, past participle $-n$, common nominal and verbal derivational suffixes, etc. Sometimes these are old western Finnic innovations such as the forms of pronouns. There are also relatively recent changes, which show historical contacts between Livonian and neighbouring Estonian dialects such as the verbal derivational suffixes.

5. Morphosyntactic and syntactic innovations

In the following sections, we will discuss seven morphosyntactic and syntactic Livonian innovations.

5.1. Use of postpositions

Alongside prosodic changes, some syntactic innovations of Livonian have a typological character due to the introduction of the structural properties of fusional languages. One such significant change is the use of postpositions instead of case endings, especially $pāl$ ‘onto: on’ and $pālt$ ‘off, off of’ in the function of external local cases: $lōda$ $pāl$ ‘onto the table; on the table’ (cf. Est $laua(e)$ ‘id.’), $lōda$ $pālt$ ‘off the table’ (cf. Est $laualt$ ‘id.’). Analytic constructions have been regarded as a characteristic feature of Livonian (Wälchli 2000: 216). In Estonia, analytic formation is widespread in western varieties, but it is possible to explain such constructions, at least to some extent, as an influence of Indo-European contact languages (cf. Grünthal 2003: 53–56).
5.2. Convergence of lative and locative cases

Unlike in Indo-European languages, the separation of lative and locative cases is typical of Uralic languages. However, in Livonian the allative and adessive cases have merged almost totally (cf. Viitso 2011: 213) and the illative and inessive cases have a similar form for some pronouns, e.g., *kus* ‘where to; where’. In Estonia, the merger of the allative and adessive case has taken place in certain insular and western North Estonian dialects as well as in western South Estonian dialects such as varieties of Sõrve, Hiiumaa, the Estonian-Swedish contact area in northern Läänemaa or western Mulgi (VEMA: map 27). The use of *kus* ‘where to’ pro *kuhu* is widespread in insular and southwestern Estonian.

5.3. Marginalisation of external local cases

Some changes in the Livonian case system can also be interpreted as consequences of a broader typological drift. For example, external local cases in Livonian usually express a general locative meaning and internal local cases are largely used instead of external local cases for indicating a definite direction or location: *kuordōs* ‘high’ (cf. Est *kõrgel* ‘id.’), *tōvās* ‘deep’ (cf. Est *sügaval* ‘id.’). In Estonian, such use is characteristic of western and sometimes even central North Estonian. In southernmost South Estonian varieties, which were spoken in Latvia, there has been a predominant tendency to use external local cases instead of internal ones (Pajusalu 2008: 164). In both cases, a superior use of one series of local cases instead of two is obvious.

5.4. Object marking in the imperative

Concerning the use of grammatical cases in Livonian, an imperative clause takes the object in the genitive case: Sal *утa sūmīz* ‘take the food’ (cf. the nominative case in Estonian: *vōta sōōk* ‘id.’). The use of the genitive object is also common in Häädemeeste and some other coastal dialects of West Estonian (Pajusalu 2011: 226).

5.5. Quotative

In Livonian the quotative is formed with a suffix *-ji* which corresponds to the agent noun suffix: *tē’ji* ‘is said to do’, *opātīji* ‘is said to
teach’ (Kehayov et al. 2012). In Estonian, a similar formation of the quotative is known only in the sub-dialect of Häädemeeste: *tegeja ~ tegeje, õpetaja ~ õpetaje* (ibid.; Juhkam, Sepp 2000: 55).

5.6. Jussive

The jussive in Livonian is often formed with the *laz ~ las*-particle and the third person form of the imperative: Cour *laz ma tięgo* ‘let me do’, Sal *las ma olg* ‘let me be’. The verb in a relative clause is also in the imperative mood in Livonian: *vō’tōb, la’z šūmōd vōlkōd* ‘(It) foams, to have foam’. In addition, the imperative is also used in questions: *Kui siedā laz tięgo?* ‘How should that be done?’ In Estonian, such a formation is registered only in the vicinity of the Livonian language area on Kihnu Island (see Kehayov et al. 2011).

5.7. Future tense

Livonian is an exceptional Finnic language where an analytic formation of the future tense has developed with forms of the verb *līdō* ‘to become’, e.g., *pūoga līb aŗšt* ‘the son will be a doctor’ (LELS: 167). There are some semantic peculiarities of the Livonian *līdō*-future but it expresses basic meanings of the tense (Norvik 2015). In the 20th century, similar forms of the *leema*-verb were preserved only in western Saaremaa, Muhu, and Kihnu (EMS V: 32). In the beginning of the 18th century, these forms were also used in the vernacular of the Pärnu region (Pajusalu 2013: 113–114).

The distribution of these morphosyntactic and syntactic features is again rather diverse. There are some features with wide insular and western distribution, such as the frequent use of postpositions instead of local case endings or the merger of the allative and adessive cases, and the preference for internal local cases. Several features have a narrower insular or western distribution, for example, the *leema*-future and a genitive object in the imperative. In the case of morphosyntactic features which have very limited occurrences, such as those used only in Häädemeeste or Kihnu, a direct Livonian influence should be taken into account, e.g., *ja- ~ je*-suffixed quotative forms and the use of imperative forms in subordinate clauses and in some types of questions.
6. Conclusion

In this article we discussed 23 linguistic innovations of Livonian varieties which have varying distributions in dialects of both North and South Estonian. The distribution of these innovations is rather wide in western and southern Estonia but there are large differences concerning features of various types.

Most notably, Livonian phonological features are mostly widespread across southwestern Estonia and at least some of the features developed due to the influence of similar linguistic contacts with other languages. Livonian morphological features are often spread only in a couple of insular, western, or southwestern sub-dialects. However, some of the phonological and morphological features may originate from the same western Finnic proto-dialect. A couple of morphosyntactic features are present only in Häädemeeste or Kihnu where these features might be connected to a Livonian substrate.

Geographically, direct contacts with Salaca Livonian and probably with other historical Livonian varieties of Vidzeme in Latvia are evident in western Mulgi. Also, North Estonian varieties in Kihnu and Häädemeeste and in western Saaremaa show later direct contact with Courland Livonian.

In general, there is a distribution of Livonian features across a wide area from insular and western varieties of North Estonian to southwestern varieties of South Estonian, with increasing degrees of similarity in a geographic southward continuum. Most of the similar features are significantly concentrated in southwestern Estonia and similarities are the most multi-layered in the southern group of the West Estonian dialect. In addition, there is an apparent relationship between Livonian and the Leivu South Estonian linguistic enclave.

The distribution of the Livonian features would indicate that the relationship between contemporary Livonian and Estonian has involved older and more complex contacts than previously thought.

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Abbreviations


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**Kokkuvõte. Patrick O’Rourke, Karl Pajusalu: Liivi jooned eesti murretes.**

pidada läänepoolse läänemeresoome omapärasteks arenguteks juhul, kui need muutused ei ole põhjustatud kontaktidest germaani ja balti keeltega. Varasema liivi keeleala vahetus läheduses tuntud jooned on aga tõlgendatavad liivi keele substraadiks lääne-eesti ja saarte murrakutes.

**Märksõnad**: liivi keel, eesti keel, keeleajalugu, keelekontaktid, substraat