

Variation of the Glottal Stop /ʔ/ in South Estonian Lative Forms

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ABSTRACT

One of the most striking features of South Estonian among other Finnic languages is the occurrence of the glottal stop /ʔ/ as a phoneme, which in modern Võro and Lutsi orthographies is represented by the letter *q*. While the other grammatical and lexical functions of /ʔ/ are shared amongst the South Estonian varieties, the distribution of the glottal stop in the lative forms varies across dialects, caused by the conservative nature of Lutsi and Kraasna, and the innovations in the western subdialects of Võro. This article examines the occurrence of the glottal stop /ʔ/ at the end of the lative forms *manoq* ~ *mano* 'towards' and *kuuq* ~ *kodoq* ~ *kodo* '(towards) home', adverbialised illative and allative forms *mahaq* ~ *maaha* 'downwards', *pääleq* ~ *pääle* 'onto', and at the end of illative forms in Leivu South Estonian and the Hargla subdialect of Võro. This study combines qualitative historical analysis with synchronous quantitative analysis.

KEYWORDS

South Estonian, lative, glottal stop, language islands, variation.

1. Introduction

This paper investigates the word-final variation of the glottal stop /ʔ/ in South Estonian lative adverbs and postpositions, i.e., items expressing a motion to location. Previous research has thoroughly documented the occurrence of the glottal stop /ʔ/ in several grammatical constructions shared among the South Estonian dialects (Nigol 1994 : 69–73; Keem & Käsi 2002 : 31–32; Iva 2003; 2005; Vaab 2023). However, the occurrence and variation of a glottal stop in South Estonian lative adverbs and postpositions has received little and unsystematic mention. Notes on the topic appear in descriptions of Võro South Estonian (Keem & Käsi 2002 : 31; Iva 2007 : 53) and Hargla subdialect of Võro (Nigol 1994 : 69–70), but no study has examined this variation across South Estonian dialects.

This paper fills this gap by analysing the word-final variation /ʔ/ ~ ∅ in lative adverbs and postpositions. Various different lative endings, e.g., *-η, *-k, *-n, *-ń, *-s, and *-j have been simultaneously attested in the modern Uralic languages or reconstructed to different proto stages (Janhunen 1982 : 30; Ylikoski 2011 : 256; 2019; Aikio & Ylikoski 2016 : 100–101; Prillop & Saar 2020 : 194; Luobbal Sámmol Sámmol Ánte 2022 : 12–14). With the spread of Uralic, new branches used different strategies to develop new local cases.

In Finnic languages, the lative case itself is lost, but the previous lative forms may be preserved in modern languages as adverbs or postpositions (Luobbal Sámmol Sámmol Ánte 2022 : 14). For instance, in Livonian, frequent lative adverbs *kuodāj* 'to home', *kōgaz* 'to far', and *tagā* 'to behind' reflect historical *j*-, *s*-, and *k*-latives, respectively (Viitso 2016 : 156). In South Estonian, lative adverbs may exhibit different word-final forms even within the same stem and are listed as synonyms in the dictionaries. For example, the Võro-Estonian-Võro dictionary gives *mano(q)* 'towards' as the equivalent of Estonian *juurde*, which indicates that variants both with and without the glottal stop occur in the language. This does not coincide with the tendencies in some South Estonian dialects to drop the glottal stop — such variation is never indicated by parentheses in dictionaries. The aim of this paper is to systematically describe the distribution of the glottal stop in lative adverbs and postpositions in South Estonian varieties, using data from corpora, dictionaries and text collections (see 1.2. for Materials and methods).

1.1. South Estonian varieties and their word-final consonants

South Estonian is a Southern Finnic language that consists of four spoken (Mulgi, Tartu, Võro, Seto) and three extinct (Leivu, Lutsi, Kraasna) varieties (see Map 1). The language islands Leivu, Lutsi, and Kraasna ceased to function as everyday spoken languages in the 20th century (Nigol 1988; Balodis & Pajusalu 2021 : 24; Weber 2021 : 344). Lutsi was spoken around the town of Ludza in eastern Latvia. Its speakers originated from Võro-speaking area and migrated there in several waves over a period beginning at least three centuries ago (Balodis 2021 : 216). Kraasna was spoken around Krasnogorodsk in Pskov Oblast, Russia, its speakers originated from the eastern Seto area from the late 16th century onwards (Balodis & Pajusalu 2021 : 11). Including Kraasna and Lutsi is therefore essential for this study for assessing the earlier patterns of language use. Contrary to other two language islands, Leivu speakers are indigenous to Latvia, descending from a Finnic population historically distributed further south than the present-day Estonian-Latvian border (see Kallio 2021; Valk 2021). It has recently been classified as the first offshoot of South Estonian (Kallio 2021 : 132–136).

The change **-k > ʔ* occurred universally in Finnic languages with few exceptions (Laanest 1975 : 29, 77; Prillop & Saar 2020 : 135–136), but South Estonian is the only Finnic language in which the glottal stop remains a phoneme. Phonetically, glottal stop /ʔ/ could also be attested as a gemination of a following consonant, creaky voice, or be lost entirely, with its realisation conditioned by word structure and following segments (Iva 2003; 2005). Regional differences are well documented: /ʔ/ is retained more frequently in Kraasna, Lutsi, Seto, and eastern Võro, while western Võro, Tartu, and Leivu tend to drop it (Vaab 2023). Besides the changes **-k*, **-t > ʔ/*, the glottal stop /ʔ/ may occasionally replace **-h* and **-n* in nouns (Nigol 1994 : 69–73; Keem & Käsi 2002 : 31–32; Iva 2003; 2005; Vaab 2023), e.g., *pereh* ~ *pereʔ* 'family', *hoonõh* ~ *hoonõʔ* 'building', **asõn* > *asõ* ~ *asõʔ* 'place'. These replacements are explained by the analogy of historical **-Ek > -Eʔ*-denominals (Nigol 1994 : 69–72). Since *mano* and *kodo* do not have *E*-stems, they are not a subject to **-En > -E* ~ *-Eʔ*. Thus, any glottal stop in the lative adverbs examined here reflects either the historical **-k*, or later innovation within South Estonian.



MAP 1. The area of South Estonian and its varieties at the beginning of the 20th century with contemporary borders. Map design by the author, based on spatial data of the Estonian Land and Spatial Development Board as of 01.01.2025. Base Map is by Natural Earth.

This paper analyses the variation of four lexemes: the historical lative forms *manoq* ~ *mano* 'towards' and *kuuq* ~ *koduq* ~ *kodo* '(to) home', and the adverbialised illative *mahaq* ~ *maaha* 'downwards' and the adverbialised allative *pääleq* ~ *pääle* 'onto'. Additionally, examples where the glottal stop /ʔ/ functions as an illative marker in Leivu and Hargla are investigated.

1.2. Materials and methods

The material of this article consists of early-to-mid-20th-century spoken South Estonian and is drawn from four sources:

- 1) Corpus of Estonian Dialects (EMK), from which Mulgi, Tartu, Võro, and Seto data were extracted;
- 2) Dictionary of Estonian Dialects (EMS), which contains example sentences from all South Estonian varieties;
- 3) Weber's article "A linguistic analysis of Heikki Ojansuu's phonograph recordings of Kraasna" (2021), which provides transcriptions of recordings of Kraasna;

4) "Lõunaeesti keelesaarte tekstid" (Mets et al. 2014), a collection of texts from Leivu, Lutsi, and Kraasna.¹

The size of the selected sources varies considerably. The EMK contains 336,252 South Estonian tokens, distributed as follows: Võro 112,125; Tartu 80,617 tokens; Seto 79,506; Mulgi 64,004 tokens. The EMS includes over 70,000 lexical entries, although the exact proportion originating from South Estonian is unknown. "Lõunaeesti keelesaarte tekstid" (Mets et al. 2014) comprises approximately 40,000 tokens (based on an estimate derived from the word count on two randomly selected pages). Weber's (2021) Kraasna transcriptions contain 2,806 words.

The EMK query combined lemma-based and morphology-based searches in cases when a lexeme permitted multiple analyses (for example, 'home-wards' has been analysed as an adverb *koju* and as an illative noun *kodu*). The items queried in the Mulgi, Tartu, Võro and Seto were *manu* 'towards', *koju* 'homewards', *kodu* marked as illative, *peale* 'onto', and *maha* 'downwards'. The query results along with information on the subdialect, word analysis and surrounding clauses were compiled into a dataset.

Additional data were collected from "Lõunaeesti keelesaarte tekstid" (Mets et al. 2014) by searching the Estonian translations in the PDF for the Estonian equivalents of the target lexemes of this study: *juurde* 'towards', *koju* 'home.ILL', *peale* 'onto', and *maha* 'downwards'. The corresponding forms were added to the dataset. From Weber (2021), all occurrences of *manu*, *kodo*, *pääle*, and *maaha*, including their variants, were extracted. Finally, the EMS was searched for *manu*, *mano*, *kodu*, *kodo*, *koo*, *maha?*, *maaha*, *maahha*, *pääle?*, and *pääle*. Entries containing example sentences and subdialect information were incorporated into the dataset, providing comprehensive geographical and lexical coverage for this analysis. The combined dataset includes 695 tokens of *manu*, 421 of *kodo*, 657 of *maha*, and 1664 of *pääle*, including their different variants.

The rest of this article presents all attested variants of each lexeme and examines their distribution across South Estonian varieties. The conventions of written Võro are followed, with the letter *q* used to represent the glottal stop /ʔ/. Language distribution maps were created using QGIS (2024).

2. Distribution of forms by lemma

To reduce phonetic and orthographic variation, the original forms in the dataset were coded into standardised types to best represent the distribution of glottal-stop-ending forms. For that, the convention of Võro literary language was followed, retaining *-o* in the non-initial syllable and using *q* to mark the glottal stop. For instance, the forms *manuq*, *manoq*, *mānuq*, *mānq*, *munuq*, as well as the variant with the *-ki* clitic showing gemination (*man^uki?*), were all coded as *manoq*, based on the assumption that the *q* reflects the historical lative **-k*. In the illustrative examples, however, the original orthography is retained.

¹In addition to new transcriptions of recordings from Leivu (EMH 0001, EMH 0003a, EMH 0003b, EMH 0004a, EMH0004b, EMH 0005, EMH 0006, EMH 0087; F 157, F 158), and Lutsi (EMH 0191, EMH 0192), this volume contains previous manuscripts of Heikki Ojansuu (Early 1910's in Leivu: ES MT 198; and Kraasna: AES202, ES MT 224), Paulopriit Voolaine (1920s in Leivu: ES MT 166, and Lutsi, ES MT 22, ES MT 102), August Sang (1930's in Lutsi: ES MT 178, ES MT 216, ES MT 247), Valter Niilus (1930's in Leivu: ES MT 203).

2.1. *mano* ~ *manoq* 'towards'

The Võro-Estonian-Võro Dictionary (VEVS) lists the form as *mano(q)*, presenting variants both with and without a word-final glottal stop, but provides no further explanation of their use as adverbs or postpositions. The Dictionary of Seto (Käsi 2016) lists only the form *mano* and includes an explanation of its potential usage contexts as adverbs and postpositions. Previous research notes that the postposition *mano* may occur with a glottal stop in the western Võro area (Iva 2007 : 53), defined as the Karula and Urvaste parishes (Keem 1997 : 13–16) together with parts of neighbouring regions (Iva 2007 : 23–25).

As shown in Table 1, the vowel-final *mano* is more frequent in South Estonian overall and *mano* and *manoq* do not seem to differ in terms of functions: both occur as postpositions and as adverbs and the distribution of postpositions and adverbs is proportionately the same between *mano* (29% adverbs) and *manoq* (30% adverbs).

TABLE 1. Distribution of *mano* and *manoq* as postpositions and adverbs in South Estonian

Standardised form	Postpositions	Adverbs
<i>mano</i>	353 (71%)	146 (29%)
<i>manoq</i>	137 (70%)	59 (30%)

As illustrated in Map 2 which combines the spread and functions of the form *manoq*, the glottal-stop-final form has a clear regional spread. While across most of South Estonian (including Mulgi, in which the glottal stop is not preserved as a phoneme, the larger part of Tartu, eastern Võro, and Seto), the form *mano* consistently ends with a vowel. The glottal-stop-final *manoq* is attested in the language islands, and in the western Võro (Karula, Urvaste) together with its neighbouring parishes (Hargla, Rõuge), both as postpositions (ex. 1) and as adverbs (ex. 2).

(1) *ku üt's lännüq tiä man u q sinnäq*
 when one go.PTCP 3SG.GEN towards there
 'When someone went to his/her place' (Karula, EMS)

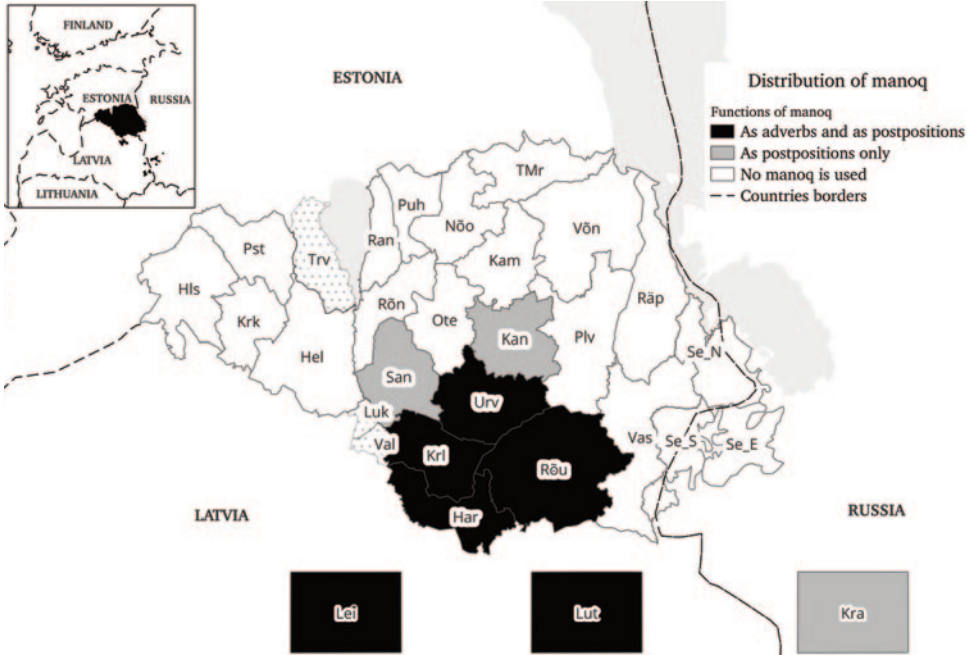
(2) *pañti linnu ka man u ?*
 put.IPS.IPF linen.PL.PRT also towards
 'The linen was also added' (Karula, EMS)

In Sangaste and Kanepi where *manoq* was found, it appeared to be functionally restricted with *manoq* was used only in postpositions (ex. 3) and *mano* only in adverbs (ex. 4). This, however, may be an artefact of data sparsity.

(3) *aho man u q*
 stove.GEN towards
 'To the stove' (lit. 'stove's towards') (Kanepi, EMK)

(4) *veitkese soodat kah man o ja sai paremp*
 little soda.PRT also towards and get.IPF.SC3 good.CMP
 'Added a bit of soda and it became better' (Kanepi, EMK)

In both Kraasna and the Sangaste subdialect of Tartu, only postpositional *manoq*-forms were documented, no adverbial uses of either *mano* or *manoq* were found. It is noteworthy, however, that in Heikki Ojansuu's Kraasna



MAP 2. The spread and functions of the glottal-stop-final *manõq* 'towards' across South Estonian dialects. Boxes indicate language islands. Dotted area indicates no data. Spatial data of the Estonian Land and Spatial Development Board as of 01.01.2025. Base Map is by Natural Earth.

phonographic transcriptions, presented in Weber (2021 : 385–390), the glottal stop is present in all instances of *manõq* postpositions. Some forms showed a reduction (ex. 5) or a complete loss (ex. 6) of a vowel before the final consonant, a feature that is particularly characteristic of Seto (Pajusalu 2022 : 369) and Kraasna (Weber 2021 : 356–357).

(5) *egäüt's lätvã? uma tare manõ?²*
 each go.PL3 own.GEN house.GEN towards
 'Everyone goes to their own house' (ES MT 224; Mets et al. 2014 : 280)

(6) *vajã minnä? papi mã n?*
 need go.INF priest.GEN towards
 'You have to go to the priest' (530/5 (a530a_05); Weber 2021 : 388)

In cases of vowel loss, glottal stop is the only segment to differentiate a lative *manõq* 'towards' between a locative *man* 'at'. This distinction has been overlooked, *manõq* has been misleadingly translated as a locative 'at', rather than a lative 'to' (Weber 2021 : 360). The form *man^(v)ki?* (ex. 7) indicates assimilation of a glottal stop as the expected output of *mano* + the emphatic clitic *-kiq* would have been **manõgiq*.

(7) *mähke mähkühe ni vei tare man^(v)ki?³*
 wrap.IPF.SG3 diaper.ILL and bring.IPF.SG3 house.GEN towards
 'Wrapped the diapers and brought [it] to the house' (AES 202; Mets et al. 2014 : 277)

² The same part is transcribed in 530/5 (a530a_05), Weber 2021 : 388 as *tare põle*.

³ The same part is transcribed in 530/5 (a530a_05), Weber 2021 : 388 as *tarõ män?*.

In the areas where *manoq* is used, the vowel-final *mano* also occurs (although there is a clear preference for *manoq*): for example, in the Hargla subdialect, 61 out of the 95 examples had a glottal stop, with no functional difference between the *manoq* and *mano*. This suggests that the variation between *manoq* and *mano* in these areas represents a regular $q \sim \emptyset$ variation, where q is more likely to be dropped in certain morphophonological contexts, e.g., in unstressed syllables and before a vowel (Vaab 2023).

The Lutsi material in Mets et al. (2014) raises questions regarding the trustworthiness of the manuscripts. Some narratives contain only vowel-ending *mano* (pages 109–126, ES MT 122), some contain only *manoq* (pages 157–167, ES MT 247). The homogeneity of forms within individual manuscripts could reflect the differences between individual speakers, who carried different dialects of South Estonian to Lutsi language island. On the other hand, variation between *mano* and *manoq* in the transcriptions of Lutsi recordings is not speaker-specific: a single speaker could vary different forms within the same narrative (pages 212–248, recordings EMH 191 and EMH 192). This raises the possibility that forms used in the manuscripts reflect a transcriber's linguistic knowledge or an attempt at standardisation, making it necessary to be cautious when drawing conclusions about phonetic features and their variation on the basis of the manuscripts.

By contrast, the eastern Võro and Seto material shows no variation. None of the 139 examples from Põlva, Vastseliina, Räpina, and Seto had a word-final glottal stop in *mano*. Given that the glottal stop is otherwise frequent in eastern Võro and Seto in other constructions (Vaab 2023), the absence of final q in *mano* cannot be interpreted as a regular $q \sim \emptyset$ variation, but rather as a lexeme-specific restriction: the only form used in Eastern Võro and Seto is *mano*. Since q developed from earlier $*-k$, *manoq* can be reconstructed as $*manok$ (Ernits 1977 : 82). The absence of *manoq* in the material suggests a different historical lative form, $*manoj > mano$, which replaced earlier $*manok > manoq$. Because the South Estonian language islands preserved older linguistic features and *manoq* appears across all of them, it can be inferred that *manoq* was historically more widespread in the South Estonian core area. The replacement of *manoq* by *mano* in eastern Võro and Seto must therefore have occurred after the formation of the language islands but before the early twentieth-century records. The completeness of this shift is particularly noteworthy. To evaluate this properly, the change must be considered in a broader context and compared with other lative adverbs.

In addition to the evidence provided by the language islands for earlier language use, older written sources of South Estonian may also offer indirect evidence for the occurrence of a glottal stop. However, as written Tartu did not mark glottal stops with a dedicated grapheme, their presence must be inferred from the sound change $o > u$ in non-initial syllables. The change $o > u$ is shared by Estonian as well as Mulgi, Tartu, Leivu, and parts of Võro and Lutsi South Estonian. From the 16th century onwards, variation between o and u in non-initial syllables can be seen in written sources: in open syllables, o was preserved, and in closed syllables, u was used (Prillop 2009 : 601–602) In his late 18th century letter, kept in the Matsi Jaan from Võnnu parish (the easternmost subdialect of Tartu) used his native dialect to write about his devotion to God (UA, R.22.43.10.a.) In that letter, every o in non-initial open syllables is preserved, as in *Ello* 'life', *kahjo* 'pity', *kokko* 'together', *armo*

Töö 'work of love, grace', and raised to *u* in closed syllables, as in *suures armus* 'great.TRA grace.TRA'. The only instance in which *u* appears in a non-initial open syllable, was *mannu* 'towards' (ex. 9), although a structurally comparable form *minno* 'me.GEN' (ex. 8) retains *o*. This suggests that a glottal stop was the consonant that closed the syllable at the end of *mannu*, resulting $o > u$, and that in the 18th century, a glottal-stop-ending *mannuq* was used in Tartu South Estonian as well.

(8) *päle se Tõmas se armas Öñ: m i n n o henne pole*
 after this.GEN pull.IPF.3SG this dear Saviour 1SG.GEN self.GEN side
 'After that, our dear Saviour drew me to Himself' (VAKK, Matsi Jaan, 1794, p. 6)

(9) 1794 [*aplri*] 16 Päiväl tuli üts libbilenne welli
 1794 April.GEN 16.GEN day.ADE come.IPF.3SG one butterfly brother
Temmä m a n n u
 3SG.GEN towards
 'On 16th April 1794, a butterfly brother came to him' (VAKK, Matsi Jaan, 1794, p. 6)

This is just one example and for clearer evidence, older written sources of Tartu literary language would have to be thoroughly studied. To make conclusions about systematic replacement of $*k > q$ -ending lative adverbs to $*j > \emptyset$ -ending latives in some varieties, other lative adverbs and postpositions must be studied.

2.2. *kodoq* ~ *kodo* ~ *kuuq* '(towards) home'

In the Võro-Estonian-Võro Dictionary, *kodo* is exceptional in that its illative form *kodo* is also listed under the dictionary entry for nominative *kodo* (VEVS). The dictionary does not include the archaic form *kuuq* nor the frequently used western Võro variant *kodoq*. The Dictionary of Seto (Käsi 2016) also lists only *kodo* as the Seto equivalent of Estonian *koju*.

Although *kodoq* ~ *kodo* ~ *kuuq* 'homewards, (to) home' is not an adverb in the strict sense, its illative form is irregular in comparison with those of other nouns, and its development can be compared with that of adverbs derived from Proto-Uralic. Regular illative forms developed from the illative ending $*-hen$ (Prillop, Saar 2020 : 291–292), e.g., $*vete-hen > vette$ 'into water'. By contrast, *kodoq*, *kodo* and *kuuq* have not developed from the illative, rather they reflect an old Uralic lative. The weak-grade *kuuq* is phonological equivalent to the Estonian illative form *koju*, which traces back to the archaic $*k$ -final lative form $*kotok$ (Prillop 2020 : 141). The strong-grade form *kodo* indicates the absence of a historical word-final consonant, since a closed syllable would have led to fricativisation and subsequent loss of $*-t-$. This also excludes the possibility of $*-n$ or $*-ń$ -lative forms, which would not have produced a word-final glottal stop and would likewise have closed the syllable and led to consonant loss, as seen from the first-person singular paradigm: $*laton > *laðon > lao$ 'stack.1SG'. In South Estonian, the ending $-n$ has disappeared except in the northernmost subdialects bordering Estonian. Therefore, the lative *kodo* can be traced back to a j -lative form $*kotoj$. A parallel can be seen in Livonian, where the form expressing motion towards home, *kuodāj* 'to home' (Viitso 2016 : 156), is also irregular in comparison

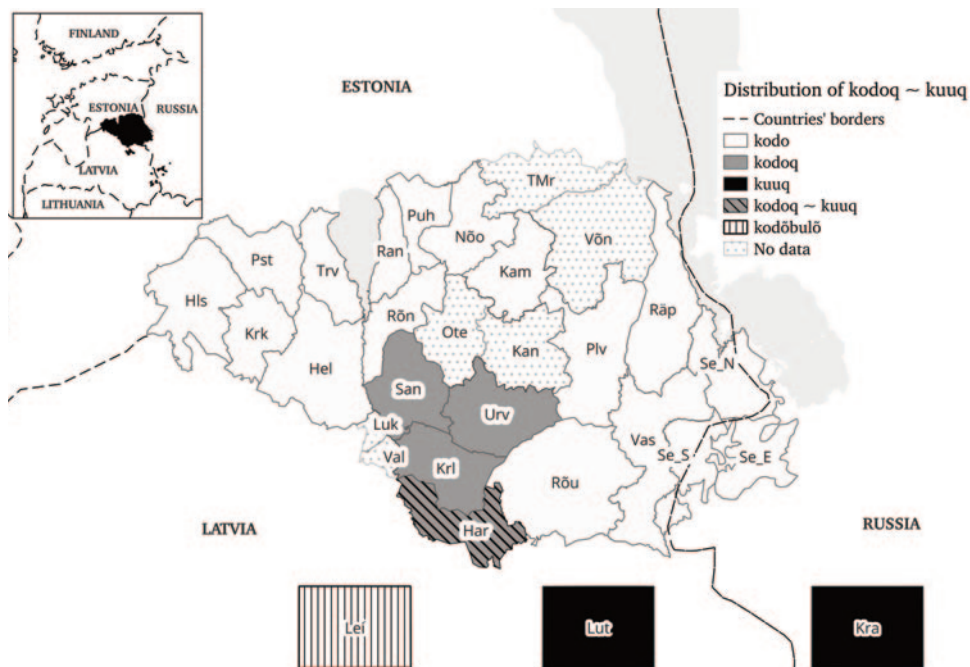
with other illatives, which show $-z(\ddot{o})$ (e.g., $p\bar{u}'z\ddot{o}$ 'tree.ILL') or gemination (e.g., $k\bar{a}'dd\ddot{o}$ 'hand.ILL'), but never $-j$ (Laakso 2022 : 384).

There were two changes made to the initial material gathered from the corpus and dictionaries. First, a form *kodoq* in the EMK, which was mistakenly transcribed in a text from Vastseliina, was removed. The underlying audio recording was checked and contains no glottal stop. Similarly, a form *kuu* 'to home' (Mets et al. 2014 : 105) was removed from the Leivu material. Although formally homonymous with *kuuq* ~ *kuu*, the surrounding context shows that this instance of *kuu* represents the conjunction *ku*, produced by the speaker with a lengthened vowel.

Map 3 illustrates the illative forms of *kodo* and its variants in South Estonian subdialects, which can be categorised into three groups:

1. Disyllabic, strong grade *kodo* ~ *kodu* without a glottal stop (white).
2. Disyllabic, strong grade *kodoq* ~ *koduq* with a glottal stop (grey).
3. Monosyllabic, weak grade *kuuq* ~ *kuu* (black).

Areas with diagonal stripes indicate mixed usage.



MAP 3. Occurrence of the glottal stop in *kodoq* ~ *kodo* ~ *kuuq* 'to home' across South Estonian dialects. Boxes mark language islands, dotted area indicates no data. Spatial data from the Estonian Land and Spatial Development Board as of 01.01.2025. Base Map is by Natural Earth.

As can be seen in Map 3, most South Estonian dialects use the strong grade vowel-final *kodo*. This strategy is used in Mulgi, most of Tartu, eastern Võro, and Seto. As with *mano* ~ *manoq* 'towards', the forms for 'homewards' in Võro and Seto do not match forms in Lutsi and Kraasna, which reflect the South Estonian spoken in the 17th century (Balodis 2021 : 216). In eastern Võro and Seto, 0 out of 58 examples show any traces of the glottal stop (ex. 10).

- (10) *ta lammass tull' uma jalaga k o d o*
 DEM sheep come.IPF.3SG own.GEN foot.COM home
 'That sheep came home on its own' (EMK, Vastseliina)

In Lutsi, 119 out of 127 forms were *kuuq*, 6 were *kuu* and two were *kotto*. Two most frequent variants, *kuuq* and *kuu*, represent regular *q* ~ Ø variation. The form *kotto*, also attested in Kraasna, is an illative formed by analogy with other illatives and reflects the historical ending **-hen* (as in **vetehen* > *vette* 'into water'). These do not fit in this paper, as they do not derive from nor replace the lative. In Kraasna, *kuuq* ~ *kuu* is likewise the most common form for 'homewards', and the strong-grade *kodo* does not occur as a lative adverb. Although a Kraasna recording contains the sentence *ma l'ã kodo bolë* 'I go home' (Weber 2021 : 387; 530/4 (a530a_04)), this form has not replaced the archaic *kuuq* and can therefore be regarded as not fully grammaticalised. In Leivu, however, the older forms have been replaced by the analytical form *kuodõbolõ*, which is used instead of earlier lative forms.

In the Hargla subdialect, which is a subdialect of western Võro bordering Leivu, *kuuq* (11) is attested alongside *koduq* (12), both with numerous examples.

- (11) *ma olõ uma liinjaani k u u ʔ unõtanu*
 1SG be.SG1 own.GEN ruler.GEN home forget.PTCP
 'I have left my ruler at home' (EMS, Hargla)
- (12) *illatsõl aol `saie õdakult k o d u ʔ*
 late.ADE time.ADE get.IPF.1SG evening.ABL home
 'I got home late in the evening' (EMS, Hargla)

The strong-grade form *kodoq* with a word-final glottal stop must be a new development in western Võro and in the neighbouring Sangaste subdialect (marked with grey in Map 3), since historic **-k* would have resulted in the loss of *d*.

Considering that the speakers of both Lutsi and Kraasna were migrants from the Võro and Seto language areas (Mets et al. 2014 : 12–14), it can be argued that *kodo* < **kotoj* replaced the earlier form *kuuq* << **kotok*. The reasons for this are not clear. On the one hand, the development parallels that of *manoq*, where the language islands reflect old **-k* > *q*, while the eastern Võro and Seto show no traces of it, indicating a different lative ending, likely **j* > Ø. One speculative explanation for the change is suggested by a sentence from Lutsi in which *är lät's jo kuu?* 'went home' carries the additional meaning 'died' (EMS). Therefore, replacing one form with another may have been influenced by taboo or superstition.

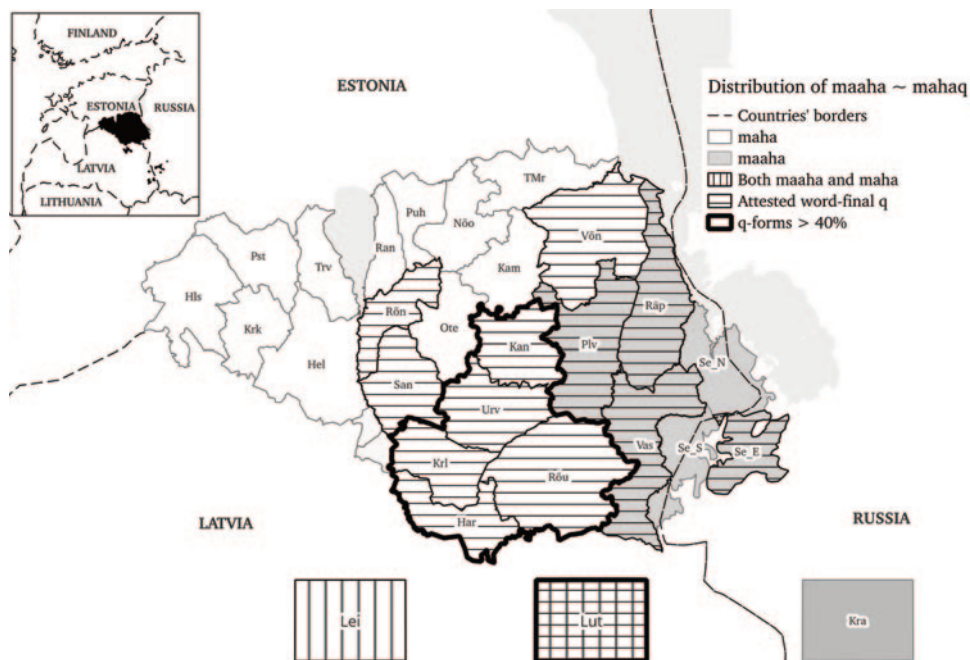
The development of the secondary *q* in western Võro *koduq* raises the question of whether *manoq* in the same area reflects an older **manok* or a parallel secondary development which is added to **manoj* > *mano*. To evaluate this, the distribution of the glottal stop showing motion towards a location in other adverbs must be first mapped.

The variation in the illative forms of *kodo* is greater than what is given in the Võro dictionary. Including *kodoq* and the most archaic form *kuuq* would provide a better representation of South Estonian dialectal diversity, which is reflected in several other adverbs with limited local use.

2.3. Secondary glottal stop in adverbialised illative *maaha* ~ *mahaq* 'down(wards), off, out' and allative *pääle* ~ *pääleq* 'onto' forms

When Proto-Finnic developed a differentiation between inner and outer locative cases, the Proto-Uralic lative (Luobbal Sámmol Sámmol Ánte 2022 : 14) split into two cases: the illative **-sen* 'into' and the allative **-lleEn* 'onto' (Prillop, Saar 2020 : 195, 197). In South Estonian, these have developed into **-hV*, as in *maaha* 'down(wards), off, out' (lit. 'into the ground'), and *-le/-lõ*, as in *pääle* 'onto' (lit. 'onto the head'). Both forms have grammaticalised and function as adverbs and components of phrasal verbs, while also carrying additional semantic meanings.

The Võro dictionary (VEVS) lists two forms for 'down(wards)': *maaha* and *mahaq*. The form *maaha* has preserved the long vowel of the original stem *maa* 'ground', to which the illative suffix *-hV* is added. The second form, *maha*, has a short vowel in the first syllable, a feature it shares with Mulgi and Tartu South Estonian as well as with Estonian (Prillop, Saar 2020 : 291). Map 4 illustrates the distribution of *maha*, *maaha*, *maahaq*, and *mahaq* in the South Estonian dialects.



MAP 4. Distribution of the glottal stop in *maaha* ~ *maha* 'downwards' in South Estonian. Spatial data is from the Estonian Land and Spatial Development Board as of 01.01.2025. Base Map is by Natural Earth.

As shown in Map 4, the glottal stop in *maahaq* ~ *mahaq* is a feature of Võro, Lutsi, and the southernmost dialects of Tartu. In western Võro and southernmost Tartu, the glottal stop *q* is added to *maha*, in eastern Võro and eastern Seto, the glottal stop is added to *maaha*. In Lutsi, both *mahaq* and *maahaq* are attested. In Mulgi and northern Tartu, *maha* is used, in

northern and southern Seto, and in Kraasna, the form *maaha* is used. In Lutsi and Leivu, both long- and short-vowel variants occur, but in Leivu, no glottal stop is attested.

The statistics presented in Table 2 reveal a familiar pattern: the secondary glottal stop is particularly frequent in western Võro and Lutsi. The column *ma(a)ha* represents the total number of tokens of forms without a glottal stop (*maha*, *maaha*, *maalõ*, *maahha*, *maa_la*, *mahha*, *mahalõ*, *mahagi*). The column *ma(a)haq* represents the total number of forms with a glottal stop (*mahaq*, *maahaq*, *maahhaq*).

TABLE 2. Distribution of *q* in *maha* and *maaha* in South Estonian

Dialect	Subdialect	<i>ma(a)ha</i>	<i>ma(a)haq</i>
Tartu	Sangaste	5 (71%)	2 (29%)
	Võnnu	16 (94%)	1 (6%)
	Rõngu	21 (95%)	1 (5%)
western Võro	Kanepi	8 (47%)	9 (53%)
	Urvaste	3 (21%)	11 (79%)
	Karula	25 (56%)	19 (44%)
	Hargla	15 (15%)	82 (85%)
	Rõuge	0 (0%)	6 (100%)
eastern Võro	Põlva	30 (94%)	2 (6%)
	Räpina	7 (88%)	1 (12%)
	Vastseliina	23 (88%)	3 (12%)
Seto	northern Seto	30 (100%)	0 (0%)
	eastern Seto	30 (91%)	3 (9%)
	southern Seto	28 (100%)	0 (0%)
Language islands	Leivu	22 <i>ma(h)alõ</i> (100%)	0 (0%)
	Lutsi	15 (21%)	58 (79%)
	Kraasna	2 (100%)	0 (0%)

As can be seen from Table 2, most examples from western Võro and Lutsi contain a word-final glottal stop. Only in Karula does *maha* occur more frequently than *mahaq*, but compared to other South Estonian subdialects, the overall frequency is still high. Elsewhere, glottal-stop-final forms are rare, with only one to three examples recorded in each subdialect. Their presence demonstrates the ambiguity of the glottal stops and its positions and indicates that the glottal stop is not a mere reflex of Proto-Finnic *-k, but also a pragmatic tool for emphasising. No functional differences were observed between forms with (ex. 13) and without (ex. 14) a glottal stop.

(13) *kupõrdi kupõrdi, satte m a a h a ʔ*

lurch.IPF stagger.IPF fall.IPF down

'Lurched and staggered, fell' (EMS, Põlva)

(14) *tuu oll' orre ala sadanugi `m a a h h a*

3SG be.IPF henroost.GEN under fall.PTCP.CL under

ni rassõ oll'i õt

so heavy be.IPF that

'S/he had fallen under the henroost, s/he had been so heavy' (EMK, Eastern Seto)

In Lutsi, both variants *mahaq* and *maaha* were common, with the latter recorded more frequently. As shown in the Map 4, the distribution of *mahaq* and *maaha* follows the split between the western and eastern Võro. This suggests that the forms attested in Lutsi originate from different South Estonian dialect areas, and the additional *q* in short-vowel form *mahaq* was already in use by the time the Lutsi language island was formed. Several migration waves forming the Lutsi language area has been noted before in the variation of inessive case endings *-h*, *-n* and *-hn*, which reflects the similar western and eastern variation in the Võro and Seto area, and shows the heterogeneous origins of its speakers (Balodis 2022). The additional *q* in *maahaq* is most likely a later development, but it cannot be ruled out that such forms may have occasionally appeared at the time of the migrations to the Lutsi area.

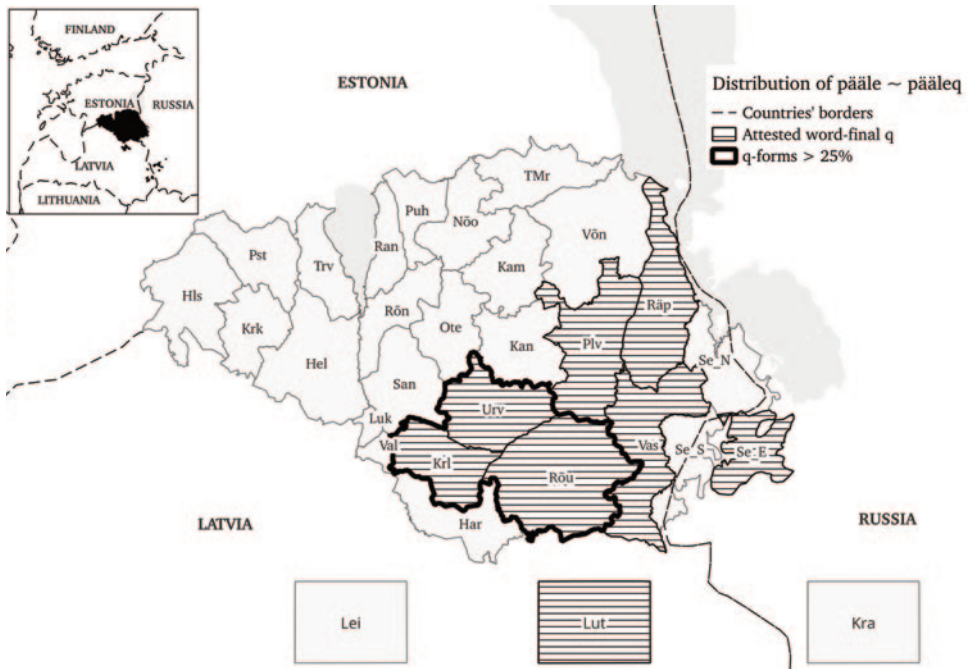
Although Leivu shares several features with western Võro, it did not adopt the addition of a glottal stop to *mahaq*. Rather, it uses the older form *maaha* (ex. 15) or different forms with the added allative suffix *-lE*. This suffix may be attached directly to *maa* (yielding *maalõ*) (ex. 16), or to the already grammaticalised *maha*, creating *mahalõ* (ex. 17), where the subsequent loss of *h* is regular.

- (15) *tu tõmbass su m a a, a*
 DEM pull.3SG SG2.GEN down
 'It will pull you down' (Leivu, EMS)
- (16) *sanna (.) laod'i tekki m a a l õ*
 sauna.ILL drape.IPF.1SG blanket.GEN ground
 'I put down the blanket in the sauna' (Leivu, EMSUKA EMH0088)
- (17) *puista m a h a l õ*
 strew.1SG down
 'I strew [it] on the ground' (Leivu, EMS)

The additional case-like ending *-lõ* seen in example (17) highlights the necessity to mark motion towards a location. Similarly, in Helme, the easternmost dialect of Mulgi, an illative suffix *-de* appears in certain adverbs for which the Võro counterpart would have a glottal stop, e.g., Võro *sinnäq* 'there, thither', Helme *sinnäde* (EMS). A parallel case of reinforced directional movement with additional case-like endings in directional adverbs is attested in Courland Livonian, e.g., *sã'ldõ-st* 'from_there-ELA', where the forms with additional case endings may be linked to emphasis (Tomingas 2023 : 109–112, 190–192). This suggests that in some instances, the lexicalised form alone was insufficient to express directional meaning, leading to the addition of suffixes otherwise used to indicate movement. Although this may partly serve an emphatic function, double marking is also attested in other grammatical categories in western Võro and in Leivu. In Karula and Hargla, for instance, double tense marking (e.g., *oll-i-si* 'be-IPF-IPF') and imperative marking (e.g., *ol-kõ-ga* 'be-JUS-JUS') have been recorded (Keem, Käsi 2002 : 17, 50–51). Such double marking in Võro has been attributed to migrations from Latvia (Keem 1997 : 13), but its presence in Leivu (e.g., *ol-ka-ga* 'be-JUS-JUS'; Niilus 1936b, AES0181) raises a possibility of broader areal development. That could be related to language attrition or to a weakening of the semantics of the original forms.

Nevertheless, the area in which the secondary *q* appears in *mahaq* ~ *maahaq* is much larger than the area where double-marked forms occur. Because *mahaq* is most common in western Võro, where *manuq* 'towards' is mostly attested and where a secondary glottal stop in *koduq* 'homewards' is common, it is plausible that *mahaq* follows the same pattern of adding *q* to adverbs expressing motion towards a location. To confirm that, additional adverbialised historical case forms must be studied.

In the Võro-Estonian-Võro Dictionary (VEVS), both *pääle* and *pääleq* are listed, without providing further explanation of possible functional differences between the two variants. Based on the examples given in the dictionary, *pääle* is used in phrasal verbs as well as in pre- and postpositional constructions. Iva (2007 : 53) has suggested that the glottal stop in the postposition *pääleq* is a feature of western Võro. Map 5 illustrates the distribution of *pääleq*.



MAP 5. Distribution of the glottal stop in *pääle* ~ *pääleq* 'onto' in South Estonian. Spatial data is from the Estonian Land and Spatial Development Board as of 01.01.2025. Base Map is by Natural Earth.

As can be seen in Map 5, the glottal stop in *pääleq* is attested in Võro, Lutsi, and eastern Seto. Elsewhere, only *pääle* is used. The statistics shown in Table 3 reveal a pattern similar to that observed for *mahaq*: the secondary glottal stop is particularly frequent in western Võro, with only occasional occurrences elsewhere.

Compared to *mahaq*, the grammaticalised allative form *pääleq* is not recorded at all in Kanepi or Hargla. In Urvaste, however, it was overwhelmingly the dominant variant (9 *pääle*, 36 *pääleq*). Because *mahaq* is more widespread than *pääleq* and is well attested in Lutsi, whereas *pääleq* occurs there only once, it is plausible that the development of the glottal stop in

TABLE 3. Distribution of *q* in *pääle* and *pääleq* in South Estonian

Dialect	Subdialect	<i>pääle</i>	<i>pääleq</i>
western Võro	Kanepi	48	0
	Urvaste	9	36
	Karula	63	23
	Hargla	93	0
eastern Võro	Rõuge	47	44
	Põlva	119	3
	Räpina	22	3
	Vastseliina	53	3
Seto	northern Seto	75	0
	eastern Seto	129	2
	southern Seto	143	0
Language islands	Leivu	68	0
	Lutsi	128	1
	Kraasna	42	0

pääle > *pääleq* is later than *maha* > *mahaq*, postdating the formation of the Lutsi language island. The form may have developed by analogy, since the bisyllabic *e*-final form *pääle* is structurally similar to the pattern of many *-Ek* > *-Eq* deverbals, e.g., **loottadak* 'to create' : **lootõk* 'fetus, creation' > *loodõq* 'fetus'.

However, data indicate that in Urvaste, Karula, and Rõuge, as well as in Põlva, *pääleq* is functioning both as a postposition and an adverb anywhere in the utterance (ex. 18).

- (18) *vijle om iä pääle? angõtnu*
 water.ALL be.3SG ice onto freeze.PTCP
 'Ice has covered the water.' (Karula, EMS)

In contrast, in Vastseliina, *pääleq* appears in postpositional and adverbial roles, but is restricted to utterance-final positions (ex. 19).

- (19) *pußilõ_istu pääle?*
 bus.ALL sit.IMP onto
 'Sit on the bus!' (Vastseliina, EMS)

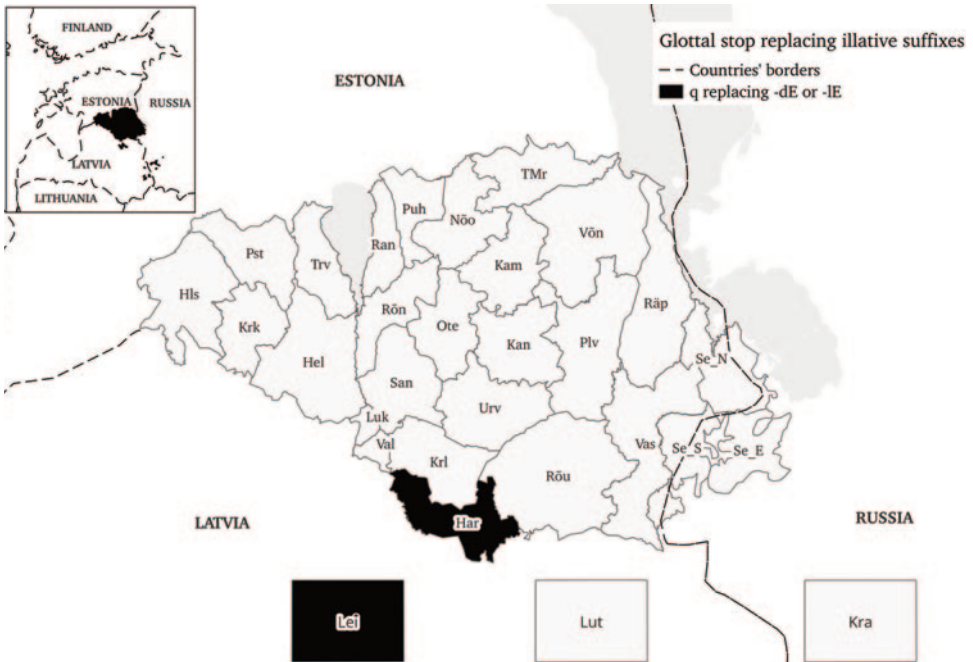
Similarly, in Räpina, *pääleq* is attested solely in postpositional use and at the end of an utterance (ex. 20).

- (20) *pini põrglanõ es mõista? imp*
 dog devil NEG.IPF understand.CNG more
kodo tulla? õigõ ajo pääle?
 home.ILL come.INF right.NEG time.NEG onto
 'The hellish dog couldn't come home on time anymore' (Räpina, EMS)

Although Sulev Iva's claim that the postposition *pääleq* is a feature of western Võro (Iva 2007 : 53) does not fully reflect the present-day South Estonian situation, western Võro might have been the starting point from which the form has spread to other dialects, possibly including areas not represented on this map due to a lack of recordings of contemporary South Estonian.

3.4. Glottal stop in illative forms of Hargla Võro and Leivu South Estonian

While *kuuq* developed directly from the old lativic **kotoke* and the glottal stop in *mahaq* and *pääleq* is a secondary development in western Võro, Leivu and the Hargla subdialect of Võro (see Map 6) share a tertiary development: the use of a glottal stop to mark motion towards a location in certain illative and allative forms. All attested instances of this illative-marking glottal stop occur utterance-finally, a position that favours the presence of a glottal stop in South Estonian (Iva 2007 : 44), even in contexts without historical **-k* (Nigol 1994 : 72).



MAP 6. Subdialects Hargla and Leivu where the glottal stop is occasionally used in illative forms.

Illative suffixes vary across South Estonian dialects. Standard Võro uses *-he* (*lämmä-he* 'warm-ILL'), whereas western Võro uses *-dE*, as in *lämmä-de* 'warm-ILL'. The Hargla subdialect and Leivu share the *dE*-illative with Tartu South Estonian. In certain forms, a short illative based on the older **-hen* could be used, e.g., **käte-hen* > *kätte* 'into hand'. In Standard Võro, the short illative of *Tsooru* would be *ʔTsuuru* (VEVS), yet in the Hargla subdialect, a word-final glottal stop may be added (21):

- (21) *ma lä ʔTsuuruʔ*
 1SG go.1SG Tsooru.ILL
 'I go to Tsooru' (Hargla, KN 85305, VN38)

On some occasions, the glottal stop could replace the illative suffix altogether. In this example, the illative *ʔlämmäde* is replaced by *ʔlämmäq* 'into the warm'.

(22) *un jova pienembä `pistamize `l ä m m ä q*
and grain.PL small.CMP.PL sticking.PL warm.ILL

'And smaller grains are to be put into a warm [place]' (Leivu, EMSUKA EMH0088)

In South Estonian, a short illative form of *lämmi* 'warm' cannot be formed (*`lämmä); consequently, in *lämmäq*, the glottal stop does not complement but replaces an overt illative ending. This feature is shared by Leivu and the Hargla subdialect. Example (23) from Hargla illustrates the replacement of the allative ending with a word-final glottal stop *q*. Elsewhere in South Estonian, the adverb 'elsewhere' is attested with an allative ending: *muialõ* in Võro (VEVS) and Seto (Käsi 2016). In Hargla, however, a glottal-stop-final form occurs.

(23) *mine m u i a ? , mis _sa mi _poolõ tulõt*
go.IMP elsewhere why SG2 PL1.GEN side come.SG2

'Go somewhere else, why do you come to us?' (Hargla, EMS)

Although these examples are very rare, the presence of a similar function in two neighbouring varieties suggests that they are more than just speech errors, especially in the context of adding a glottal stop to forms expressing motion towards a location. Rather, these few examples further demonstrate the interpretation of the glottal stop as a lative marker and as a device for signalling directional movement.

Conclusions

The marking of lative adverbs and the expression of motion towards a location vary across the South Estonian varieties. Each adverb has its own set of forms with different geographical distributions within the language area. At least six main areas can be identified regarding the presence of a glottal stop in lative adverbs (see Table 4).

TABLE 4. Variation of the glottal stop /ʔ/ in South Estonian lative forms

Area	<i>q</i> in <i>manoq</i>	<i>q</i> in <i>kodoq</i>	<i>q</i> in <i>mahaq</i>	<i>q</i> in <i>pääleq</i>	<i>q</i> < ILL
Mulgi, northern Tartu	no	no	no	no	no
eastern Võro, Seto	no	no	sometimes	sometimes	no
Lutsi, Kraasna	yes	yes, <i>kuuq</i>	sometimes	sometimes	no
western Võro, southern Tartu	yes	yes, <i>koduq</i>	yes	yes	no
Hargla	yes	yes, <i>koduq</i>	yes	no	sometimes
Leivu	yes	no	no	no	sometimes

The Mulgi-Tartu area has generally lost the glottal stop, therefore it represents an area where lative forms also lack glottal stops. Also in eastern Võro and Seto, where the glottal stop is otherwise preserved well, the lative forms are still predominantly realised without a glottal stop. By contrast, the language

islands Lutsi and Kraasna preserve forms that reflect the Võro and Seto varieties of roughly 300 years ago, such as **kotok* > *kuuq* '(to) home'. So, while *q* appears in western Võro as well, Lutsi and Kraasna data represent more archaic patterns, whereas western Võro and southern Tartu show more innovative developments. Leivu does not align with the other language islands: the lative adverbs in Leivu are largely innovative. The only feature it shares with the other language islands and with western Võro is the occurrence of *q* in *manoq*. The Hargla subdialect occupies an intermediate position between western Võro and Leivu. While it shares the innovative forms *kodoq* and *mahaq* with the western Võro area, *pääleq* is not established there. Both Leivu and Hargla also extend the use of *q* to replace allative and illative endings. It is noteworthy that although considered very conservative varieties, eastern Võro and Seto have shared innovations in lative adverbs even after the formation of the Lutsi and Kraasna language islands.

Proto-Finnic **manok* 'towards' developed into *manoq*, a form that survived longest in the language islands and is now used only in western Võro. Most South Estonian dialects, however, replaced *manoq* with **manoj* > *mano*. The presence of *manoq* in the Kraasna and Lutsi language islands suggests that the glottal stop is not an innovation of western Võro, but rather a preserved feature of earlier Võro and Seto.

A similar development can be observed in **kotok* > *kuuq* 'to home', which persisted longest in the language islands of Leivu, Lutsi and Kraasna and is now used only in the Hargla Võro area. In most South Estonian dialects, *kuuq* was replaced by *kodo*, derived from **kotoj*. In the western Võro dialects, a secondary glottal stop was added, resulting the widely used *kodoq*.

The glottal stop in *mahaq* and *pääleq* appears to be a western Võro innovation that later spread eastward. It likely originated from an utterance-final glottal stop in postpositional constructions and was later reanalysed as part of the lexeme itself. A comparable phenomenon can be observed in the Hargla and Leivu dialects, where glottal stops in certain illative forms seem to have developed in the same way, first appearing in utterance-final positions before becoming a morphological feature.

South Estonian stands out among the Finnic languages in preserving reflexes of two different lative endings **-j* and **-k*, surviving until today simultaneously in the same stems: **manok* ~ **manoj* and **kotok* ~ **kotoj*. In the contemporary language, the distinction is not expressed as a clear functional contrast between regular adverbs and postpositional constructions, but rather as a dialectal split between different varieties.

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Appendix 1. Occurrence of the glottal stop in *mano* ~ *manoq*
'towards' across South Estonian subdialects

Count of *mano* ~ *manoq*

Form	Subdialect	Post	Adv	Grand Total
<i>mano</i>	Võn	8	1	9
	Vas	11	4	15
	Urv	1		1
	Trv	13	3	16
	Rõu	1	2	3
	Rõn	20	3	23
	Räp		3	3
	Ran	8	1	9
	Puh	2	5	7
	Pst	2	15	17
	Se_N	23	8	31
	Plv	17	14	31
	Ote	11	3	14
	Nõo	25	2	27
	Lut	64	8	72
	Se_S	11	17	28
	Lei	15	7	22
	Krl	24	11	35
	Krk	29	14	43
	Kra	1		1
	Kan	8	5	13
	Kam	3		3
	Se_E	23	6	29
	Hls	2		2
	Hel	3		3
	Har	28	5	33
<i>mano</i> Total		353	137	490
<i>manoq</i>	Urv	6	2	8
	San	2		2
	Rõu	17	13	30
	Lut	46	14	60
	Lei	3	7	10
	Krl	10	4	14
	Kra	18		18
	Kan	2		2
Har	42	19	61	
<i>manoq</i> Total		146	59	205
Grand Total		499	196	695

Appendix 2. Occurrence of the glottal stop in *kuuq* ~ *kodu* ~ *koduq* 'homewards' across South Estonian subdialects

Form	Subdialect	Count of a form	Form	Subdialect	Count of a form
<i>kuuq</i>	Har	18	<i>kodu</i>	Har	5
	Kra	13		Hel	5
	Lut	119		Hls	3
<i>kuu</i>	Kra	5		Se_E	46
	Lut	6		Kam	4
<i>kottu</i>	Kra	2		Krk	17
	Krl	1		Krl	4
	Lut	2		Se_S	8
	Puh	2		Nõo	21
	Ran	1		Plv	21
<i>koju</i>	Se_S	1		Se_N	8
	Pst	1		Pst	14
<i>koduq</i>	Har	2		Puh	14
	Krl	14		Ran	15
	San	1		Räp	5
	Urv	5	Rõn	3	
<i>kodõpoolõ</i>	Lei	15	Rõu	10	
			Trv	5	
			Urv	1	
			Vas	7	

Appendix 3. Occurrence of the glottal stop in *mahaq* ~ *maahaq* 'under, down' across South Estonian subdialects

Subdialect	<i>maha</i>	<i>mahaq</i>	<i>maaha</i>	<i>maalõ</i>	<i>maahaq</i>	<i>mahalõ</i>
Har	15	82				
Lut	10	37	5	21		
Krl	25	19				
Plv	2	2	28		5	
Se_E	6	3	24			1
Nõo	34					
Se_N	3		27			
Krk	29					
Se_S	9		19			
Vas	8	1	15		2	
Trv	23					
Pst	23					
Rõn	21	1				
Lei				22		
Kan	8	9				
Võn	16	1				
Puh	16					
Hel	14					
Urv	3	11				
Ote	14					
Kam	11					
Räp	1		6		1	
San	5	2				
Hls	6					
Rõu		6				
Ran	5					
Kra			2			

Appendix 4. Occurrence of the glottal stop in *pääle* ~ *pääleq* 'onto' across South Estonian subdialects

Subdialect	<i>pääle</i>	<i>pääleq</i>
Se_S	143	
Se_E	129	2
Lut	128	1
Plv	119	3
Har	93	
Rõu	47	44
Krl	63	23
Pst	84	
Se_N	75	
Trv	74	
Lei	68	
Nõo	61	
Krk	56	
Vas	53	3
Puh	56	
Kan	48	
Urv	9	36
Võn	45	
Rõn	44	
Kra	42	
Räp	22	3
Ote	23	
Ran	22	
Kam	20	
Hel	19	
Hls	6	
Grand Total	1549	115

Abbreviations

EMK — Liina Lindström & Triin Todesk & Maarja-Liisa Pilvik, Eesti murrete korpus. <https://doi.org/10.23673/RE-365>; **EMS** — Anu Haak & Evi Juhkam & Mari-Liis Kalvik & Mari Kendla & Tiina Laansalu & Varje Lonn & Helmi Neetar & Ellen Niit & Piret Norvik & Vilja Oja & Valdek Pall & Hanna Pook & Eevi Ross & Aldi Sepp & Mari-Epp Tirkkonen & Jüri Viikberg, Eesti murrete sõnaraamat. <https://arhiiv.eki.ee/dict/ems/>; **KN** — Eesti Keele Instituudi kohanimekartoteek veebis, <https://eki.ee/koha/nimed>; **QGIS** — Development Team 2024, QGIS Geographic Information System. <https://www.qgis.org>; **UA** — Unitätsarchiv. <https://www.unitaetsarchiv.de>; **VAKK** — Annika Viht & Anu Pedaja-Ansen & Mari-Vivian Ellam & Tene Hook & Helga-Johanna Kuusler & Inge Käsi & Ruari Emil Morrison & Külli Prillop & Dagne-Anete Soonatalu & Ave Teesalu & Tuuli Tuisk, Vana Kirjakeele Korpus: Vennastekoguduse alamkorpus. <https://vakk.ut.ee>; **VEVS** — Mariko FASTER & Laivi Org & Urmas Kalla & Sulev Iva & Triin Iva, Võru-eesti sõnaraamat. Eesti-võro sõnaraamat. <https://synaq.org>.

ABL — ablative case, **ADE** — adessive case, **ALL** — allative case, **CL** — clitic, **COMP** — comparative, **CNG** — connegative, **DEM** — demonstrative, **ELA** — elative case, **GEN** — genitive case, **ILL** — illative case, **IMP** — imperative, **INF** — infinitive, **IPF** — imperfect, **IPS** — impersonal, **JUS** — jussive, **NEG** — negation particle, **PL** — plural, **PRT** — partitive case, **PTCP** — participle, **TRA** — translative case.

Subdialects: **Hls** — Halliste, **Pst** — Paistu, **Krk** — Karksi, **Trv** — Tarvastu, **Hel** — Helme, **Ran** — Rannu, **Rõn** — Rõngu, **San** — Sangaste, **Ote** — Otepää, **Kam** — Kambja, **Nõo** — Nõo, **Puh** — Puhja, **TMr** — Tartu-Maarja, **Võn** — Võnnu, **Krl** — Karula, **Har** — Hargla, **Rõu** — Rõuge, **Urv** — Urvaste, **Kan** — Kanepi, **Plv** — Põlva, **Räp** — Röpina, **Vas** — Vastseliina, **Se_N** — northern Seto, **Se_E** — eastern Seto, **Se_S** — southern Seto, **Lei** — Leivu, **Lut** — Lutsi, **Kra** — Kraasna.

References

- Aikio, Ante & Ylikoski, Jussi** 2016, The origin of the Finnic *l*-cases. — Fenno-Ugrica Suecana Nova Series 15, 59–158.
- Balodis, Uldis** 2021, Lutsi speakers and rememberers in the late 20th and early 21st centuries. — ESUKA 12 (2), 211–249. <https://doi.org/10.12697/jeful.2021.12.2.09>
- — 2022, The distribution of inessive case endings in Lutsi. — Helle Metslang, Miina Norvik, Andra Kalnača (eds), Insights into the Baltic and Finnic Languages: Contacts, Comparisons, and Change, Berlin: Peter Lang (Potsdam Linguistic Investigations 36), 41–61. <https://doi.org/10.3726/b18341>
- Balodis, Uldis & Pajusalu, Karl** 2021, Introductory survey of the South Estonian language islands. — ESUKA 12 (2), 7–31. <https://doi.org/10.12697/jeful.2021.12.2.01>
- Ernits, Enn** 1977, EST. *manu* : *man* : *mant*. — XIII, 81–83. <https://doi.org/10.3176/lu.1977.2.01>
- Iva, Sulev** 2003, Võru kõrisulghäälik. — Lõunaeesti häälikud II, Tartu (Tartu Ülikooli eesti keele õppetooli toimetised 27), 68–91.
- — 2005, Glottal Stop in Võro South Estonian. — LU XLI, 123–133.
- — 2007, Võru kirjakeele sõnamuutmissüsteem, Tartu: Tartu Ülikooli Kirjastus (Dissertationes Philologiae Estonicae Universitatis Tartuensis).
- Janhunen, Juha** 1982, On the structure of Proto-Uralic. — FUF. Band XLIV. <https://doi.org/10.33339/fuf.109829>
- Kallio, Petri** 2021, The position of Leivu. — ESUKA 12 (2), 123–143. <https://doi.org/10.12697/jeful.2021.12.2.05>
- Käsi, Inge** 2016, Seto sõnastik, Tallinn: Eesti Keele Instituut.
- Keem, Hella** 1997, Võru keel, Tallinn: Eesti Teaduste Akadeemia Emakeele Selts.
- Keem, Hella & Käsi, Inge** 2002, Võru murde tekstid, Tallinn: Eesti Keele Instituut (Eesti murded VI).
- Laakso, Johanna** 2022, Livonian. — Marianne Bakró-Nagy, Johanna Laakso, Elena Skribnik (eds), The Oxford Guide to the Uralic Languages. 1st edition, Oxford: Oxford University Press, 380–391. <https://doi.org/10.1093/oso/9780198767664.003.0022>
- Laanest, Arvo** 1975, Sissejuhatus läänemeresoome keeltesse, Tallinn: Eesti NSV Teaduste Akadeemia Keele ja Kirjanduse Instituut.
- Luobbal Sámmol Sámmol Ánte (Aikio, Ante)** 2022, Proto-Uralic. — Marianne Bakró-Nagy, Johanna Laakso, Elena Skribnik (eds), The Oxford Guide to the Uralic Languages. 1st edition, Oxford: Oxford University Press, 3–27. <https://doi.org/10.1093/oso/9780198767664.003.0001>
- Mets, Mari & Haak Anu & Iva, Triin & Juhkason, Grethe & Kalmus, Mervi & Norvik, Miina & Pajusalu, Karl & Teras, Pire & Tuisk, Tuuli & Vaba, Lembit & Niit, Ellen & Päll, Peeter** 2014, Lõunaeesti keelesaarte tekstid, Tallinn: Eesti Keele Instituut, Tartu Ülikool (Eesti murded IX).
- Nigol, Salme** 1988, Anton Boks (1908–1988), viimane leivu. — KK, 755.
- — 1994, Hargla murraku konsonantism, Tallinn: Eesti Teaduste Akadeemia Eesti Keele Instituut.
- Pajusalu, Karl** 2022, Seto South Estonian. — Marianne Bakró-Nagy, Johanna Laakso, Elena Skribnik (eds), The Oxford Guide to the Uralic Languages. 1st edition, Oxford: Oxford University Press, 367–379. <https://doi.org/10.1093/oso/9780198767664.003.0021>
- Prillop, Külli** 2009, Järgsilpide *o* ja *u* varieerumine ning traditsioonid vanas kirjakeeles. — KK, 595–607.
- — 2020, Eesti keele ajalooline fonoloogia. — Külli Prillop & Karl Pajusalu & Eva Saar & Sven-Erik Soosaar, Tiit-Rein Viitso, Eesti keele ajalugu, Tartu: Tartu Ülikooli Kirjastus (Eesti keele varamu VI), 74–168.

- Prillop, Külli & Saar, Eva** 2020, Eesti keele ajalooline morfoloogia. — Külli Prillop & Karl Pajusalu & Eva Saar & Sven-Erik Soosaar, Tiit-Rein Viitso, Eesti keele ajalugu, Tartu: Tartu Ülikooli Kirjastus (Eesti keele varamu VI), 169–336.
- Tomingas, Marili** 2023, Pro-forms in spoken Courland Livonian, Tartu: University of Tartu Press (Dissertationes Philologiae Uralicae Universitatis Tartuenssis 23).
- Vaab, Janek** 2023, Lõunaeesti kõrisulghääliku varieerumine. MA Thesis, University of Tartu.
- Valk, Heiki** 2021, Finnic language islands in Eastern Latvia: archaeological background and perspective. — ESUKA 12 (2), 95–122. <https://doi.org/10.12697/jeful.2021.12.2.04>
- Viitso, Tiit-Rein** 2016, The essive in livonian. — ESUKA 7 (1), 145–175. <https://doi.org/10.12697/jeful.2016.7.1.07>
- Weber, Tobias** 2021, A linguistic analysis of Heikki Ojansuu's phonograph recordings of Kraasna. — ESUKA 12 (2), 343–390. <https://doi.org/10.12697/jeful.2021.12.2.13>
- Ylikoski, Jussi** 2011, A survey of the origins of directional case suffixes in European Uralic. — Seppo Kittilä & Katja Västi & Jussi Ylikoski (eds), Case, Animacy and Semantic Roles, Amsterdam: John Benjamins Publishing Company (Typological Studies in Language 99), 235–282. <https://doi.org/10.1075/tsl.99.09yli>
- — 2019, Välikatsaus suomen sijojen juuriin. — Sananjalka 61, 262–272. <https://doi.org/10.30673/sja.83911>

Варьирование гортанной смычки /ʔ/ в лативных формах южноэстонского языка

Янек Вааб

Одной из особенностей южноэстонских языков по сравнению с другими прибалтийско-финскими языками является наличие гортанной смычки /ʔ/ и вариативность её произношения. Хотя грамматические и лексические функции гортанной смычки в южноэстонских идиомах в целом сходны, её реализация в лативных формах варьируется от диалекта к диалекту. Это связано как с консервативным характером говоров лутси и краасна, так и с инновациями западных диалектов вырусского языка. В статье рассматривается употребление гортанной смычки в лативных формах *manoq* ~ *mano* 'к (кому-либо)', *kuuq* ~ *kodoq* ~ *kodo* 'домой', в адвербиализованной форме иллатива *mahaq* ~ *maaha* 'вниз', а также в формах аллатива *pääleq* ~ *pääle* 'на' и в окончании иллатива в языке лейву и харгласком диалекте вырусского языка.

Kõrisulghääliku /ʔ/ varieerumine lõunaeesti latiiivsetes vormides

Janek Vaab

Üks lõunaeesti keele iseärasusi teiste läänemeresoome keelte seas on kõrisulghäälik /ʔ/ ja selle varieeruv hääldus. Kuigi /ʔ/ grammatilised ja leksikaalsed funktsioonid on lõunaeesti keeltes samad, erineb kõrisulghääliku esinemus latiiivsetes vormides keeliti ja murdeti. See on tingitud nii Lutsi ja Kraasna murraku konservatiivsusest kui ka võro keele läänemurrete innovatsioonidest. Selles artiklis uuritakse kõrisulghääliku esinemist latiiivsetes vormides *manoq* ~ *mano* 'juurde', *kuuq* ~ *kodoq* ~ *kodo* 'koju', adverbialiseerunud illatiivivormides *mahaq* ~ *maaha* 'maha' ja allatiivivormides *pääleq* ~ *pääle* 'peale' ning illatiivi lõpus leivu keeles ja võro keele Hargla murrakus.