

# Writing down Lutsi: Creating an orthography for a South Estonian variety of Latgale

## *Rakstu formas izveide Ludzas apkārtnes dienvidigauņu valodas izloksnei*

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Lutsi Estonian is a variety of South Estonian historically spoken in the pre-World War II rural parishes of Pilda, Nirza, Brigi, and Mērdzene near the city of Ludza in Latgale (eastern Latvia). Lutsi developed independently from other South Estonian dialects for at least several centuries and, as a result, differs in several respects from the South Estonian presently spoken in the Võro and Setu regions of Estonia and adjacent areas in Russia. Since early 2013, I have been documenting the remaining language and culture knowledge among present-day Lutsi descendants and revisiting the villages documented by Oskar Kallas in 1894 as having Estonian (Lutsi) speaking inhabitants. The goal of this research is to write a Lutsi language primer with which Lutsi descendants as well as other interested individuals can reacquaint themselves with one of the historic languages of Latgale. This article presents the Lutsi practical orthography I have designed. I begin by introducing the Lutsi people, their language, and the history of its documentation. In discussing the Lutsi language I address the particular issues involved in writing Lutsi and present Livonian as a model for writing a Finnic language for a primarily Latvian-speaking population. I then present the current form of the Lutsi practical orthography at the end of this article.

**Keywords:** Lutsi, South Estonian, Võro, Seto, Latvia, Latgale, orthography, phonology, written language, standardization.

## 1. Introduction

The area surrounding the city of Ludza in Latgale (eastern Latvia) has been home to a population of South Estonian speakers for at least several centuries. This group, called the Lutsi Estonians or Lutsis, derives its name from the Estonian word for Ludza. The dialect spoken by this group is a South Estonian variety similar to the language still currently spoken by the Setu people of southeastern Estonia and the adjacent Pechorsky District in Russia.

The purpose of this article is to present the practical orthography I have designed for writing the Lutsi language. I begin by giving an introduction to the Lutsi people and their language as well as the history of their documentation. In discussing the Lutsi language, I address the particular issues involved in writing Lutsi and present Livonian as a model for writing a Finnic language for a population

that is now primarily Latvian-speaking. I then discuss the current form of the Lutsi practical orthography at the end of this article.

My current work with the Lutsis began in April 2013. I am working to document the remaining knowledge among Lutsi descendants of their ancestors' language and culture. Funded by the Kone Foundation in Finland, the end goal of the current work is to take this information and create a Lutsi language primer written in Latvian. This primer will serve as an introduction to the Lutsi language for contemporary Lutsi descendants as well as anyone else interested in learning about this community, which forms part of the historic linguistic and ethnic diversity of Latvia.

As it will be discussed in greater detail below, Lutsi has almost no history of use as a written language by its speakers. During the course of its documentation, researchers such as Oskar Kallas and Paulopriit Voolaine have used an orthography modelled on Estonian for writing Lutsi, while others, like August Sang, have used the Finno-Ugrian transcription system. Neither of these transcription types is suitable as a practical orthography for a lay audience no longer speaking Lutsi. While the Finno-Ugrian transcription system would be too technical and include detail beyond that which is necessary for writing Lutsi, the Estonian-based orthography used in the past encodes too few details necessary for clearly conveying the pronunciation of Lutsi for potential speakers with no intuition for some features of Lutsi pronunciation.

Therefore, the difficulty in creating a Lutsi orthography lies at finding the balance between too much detail and too little for a community that no longer has any living fluent speakers, who could model pronunciation for language learners or others interested in Lutsi.

## 2. Location, origins, and nearest relations

The Lutsis form one of three groups of South Estonian speakers often collectively referred to as the Estonian language islands (Estonian *Eesti keelesaared*) and are shown in Figure 1. The other two groups – the Leivu and Kraasna Estonians – also no longer speak their varieties of South Estonian. The Leivu Estonians lived near Alūksne in northeastern Latvia in and around the villages of Ilzene and Lejasciems. The Kraasna Estonians lived rather close to the Lutsis but about 30 km across the present-day border into Russia in a network of villages near the city of Krasnogorodsk. The Kraasna Estonians were the first to be mostly assimilated already before the World War II and are now Russian-speaking. Leivu Estonian lost its last speaker in 1988 and this community is now Latvian-speaking (Kallas 1894, 1903, Niilus 1937, Korjus 2001, Pajusalu 2009).

As a dialect of South Estonian, Lutsi is a member of the Finnic sub-branch of the Finno-Ugrian language family, which itself constitutes a branch of the Uralic family of languages. Historically, the Lutsis have referred to themselves by the term *mārahva* 'country folk, country people' and their language as *mākīl* or *māvärkki* 'country language, country speech'. Lutsis are primarily Catholic and have traditionally worked as fishermen, beekeepers, and farmers specializing in growing flax. The origin of the Lutsis is uncertain, though popular theories involve them having come to Latgale as refugees from the Great Northern War or as

Catholics fleeing forced conversion to Lutheranism. The similarity of the Lutsi spoken in the twentieth century with contemporary varieties of Setu suggest that a separation of several hundred years is likely.

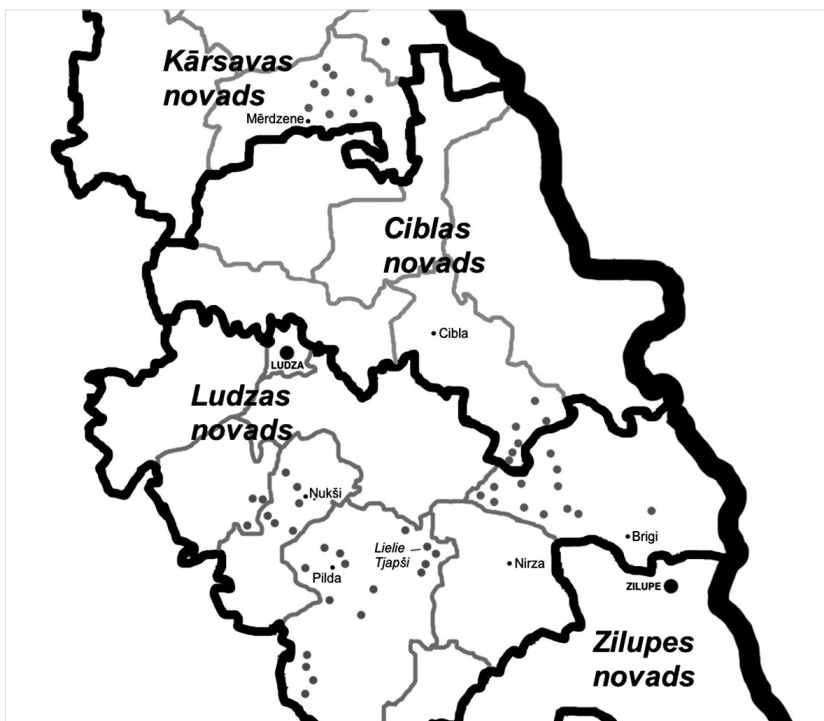


**Figure 1.** The Estonian language islands and South Estonian dialects in Estonia (map from Iva, Pajusalu 2004)

The isolation of the Lutsi community is evidenced by the preservation of features, which have become rare or are no longer encountered in other Finnic languages and even in the South Estonian spoken currently in Estonia. Lutsi maintains archaic forms and features such as intervocalic /g/ in *jegā* ‘ice’ (cf. South Estonian [Võro] *i(g)ä* ~ *ijä*, Finnish *jää*, North Sámi *jiékŋa*, Hungarian *jég*)<sup>1</sup>. Lutsi also preserves the archaic *-hn* form of the inessive noun case and two different third person plural verb endings: (1) *-vaq/vāq*, cognate with Finnish *-vat/vät*, Estonian *-vad* and (2) *-seq*. Diphthongs can be found in Lutsi words, such as *süövāq* ‘they eat,’ which are absent in cognate Estonian (*söövad*) or South Estonian [Võro] (*süvvāq*) forms, but present in cognate Finnish forms (*syövät*). Lutsi also shows a considerable influence in its vocabulary and phonology from Latvian, Russian, and Polish due to language contact (Ariste 1981).

<sup>1</sup> Lutsi language examples in this article are taken from Sang 1936a, 1936b.

The first extensive documentation of the Lutsis and their language was conducted by Estonian researcher Oskar Kallas in 1893. Figure 2 shows the villages noted by Kallas as having Estonian (i.e., Lutsi) speaking inhabitants. As the extent of Lutsi use has only decreased since Kallas' time, this map can be considered to show the maximum known extent of the Lutsi-speaking region.



**Figure 2.** Lutsi villages visited by Oskar Kallas

By the last decades of the twentieth century, Lutsi was still actively spoken by a few individuals in the village of Lielie Tjapši (Lutsi *Jānikūlā*), which is also identified on the map. Note that the villages divide into three clusters: to the south near Pilda, to the east near Nirza, and to the north near Mērdzene. The administrative boundaries, which have changed quite a bit since before the World War II, reflect the boundaries of the rural parishes (Latvian *pagasts*) as they were from the 1990s until their dissolution in 2009. The darker boundaries are those of the current administrative divisions known as municipalities (Latvian *novads*).

Following his landmark documentation of the language and extent of the Lutsi community, Kallas published his findings in the volume *Lutsi maarahvas* (Lutsi kinfolk) in 1894. Kallas' description contains the only known information regarding the Lutsi dialect of the northern Mērdzene region, which was the first of the Lutsi dialects to become extinct. Further documentation of Lutsi followed by other researchers in the first decades of the twentieth century leading up to the World War II. In 1911, Finnish linguist Heikki Ojansuu documented the Lutsi

spoken in many of the villages of the Pilda area. Estonian linguist August Sang documented Lutsi in the 1930s and created many high quality linguistic transcripts of Lutsi speakers also from the Pilda area. Estonian researcher Paulopriit Voolaine began his work with the Lutsis in the 1920s and worked closely with them over the span of his entire life. During his decades of research, Voolaine documented the language of Lutsi speakers in the Nirza and Pilda regions, although he worked most closely with Pilda area speakers. Voolaine worked to raise the national conscience of the Lutsis and encouraged them to use their language. In his final years he had a close relationship with the final native fluent speakers of Lutsi living in Lielie Tjapši (Lutsi *Jānikülā*).

### 3. The Lutsi language

Figure 3 shows the consonant phonemes of Lutsi written out in the International Phonetic Alphabet (IPA). This phonemic inventory is quite similar to that of Estonian and other South Estonian varieties. Note that Lutsi has a phonemic glottal stop, just as other South Estonian dialects. One common place to see the glottal stop is in distinguishing nominative singular and plural forms: *akna* ‘window’ → *akna?* ‘windows’, *täi* ‘louse’ → *täi?* ‘lice’

Plosives, fricatives, and affricates are voiced intervocally. All consonants, other than the glottal stop, can be palatalized. The lateral is velarized unless preceding a front vowel. Consonants in parentheses are found only in borrowed words.

	LABIAL		CORONAL			DORSAL		LARYNGEAL
	Bilabial	Labio-dental	Dental	Alveolar	Palato-alveolar	Palatal	Velar	Glottal
Nasal	m		n					
Plosive	p		t				k	ʔ
Fricative		(f) v		s	(ʃ)(ʒ)		(x)	h
Affricate			ts					
Approximant						j		
Tap/Trill			r					
Lateral approximant			ɭ					

Palatalized consonants: m<sup>j</sup>, n<sup>j</sup>, p<sup>j</sup>, b<sup>j</sup>, t<sup>j</sup>, d<sup>j</sup>, k<sup>j</sup>, g<sup>j</sup>, f<sup>j</sup>, v<sup>j</sup>, s<sup>j</sup>, z<sup>j</sup>, ʃ<sup>j</sup>, ʒ<sup>j</sup>, ts<sup>j</sup>, dz<sup>j</sup>, r<sup>j</sup>, ɭ<sup>j</sup>

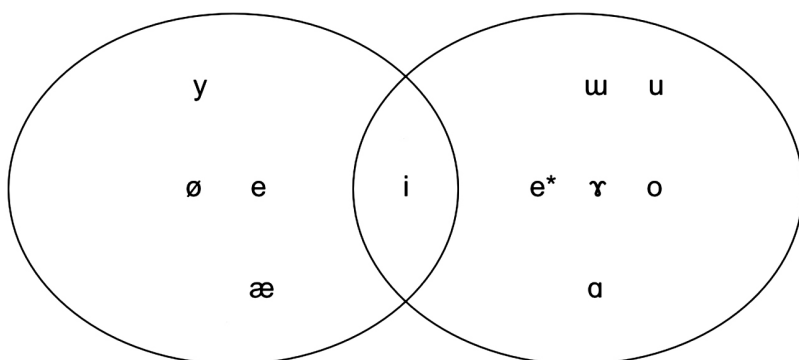
Voiced allophones: b, d, g, z, dz

**Figure 3.** Lutsi consonant phonemes<sup>2</sup>

<sup>2</sup> Finno-Ugrian transcription equivalents to IPA where not the same: ʃ = š, ʒ = ž, ʔ = ʔ. Palatalization is shown in Finno-Ugrian transcription using an acute accent (e.g., s<sup>j</sup> = š, t<sup>j</sup> = t').

While voicing is not contrastive, palatalization is contrastive, though not for all consonants. Consonants are palatalized when followed by /i/ and sporadically when followed by other front vowels. However, palatalized consonants can occur in all positions. One environment where contrastive palatalization appears is word-finally in some verbs, cf. *laul* ‘s/he sings’, *laulʲ* ‘s/he sang’; *u:t* ‘s/he expects’, *u:tʲ* ‘s/he expected’; *jauh* ‘s/he grinds’, *jauhʲ* ‘s/he ground’. This word-final palatalization arose as a result of historic assimilation of front vowels by preceding consonants.

As in other dialects of South Estonian dialects and many Finnic languages, Lutsi has vowel harmony. Figure 4 shows the Lutsi vowels arranged according to their permitted grouping within words. /i/ is a neutral vowel and can occur within words containing vowels from either group. /e/ has a retracted allophone written as <e\*> in Figure 4. This allophone does not occur in initial syllables, but is instead found in non-initial syllables within words containing back vowels. In existing transcribed texts, [u] appears to be in free variation with [ɤ] and therefore these two vowels are treated as a single phoneme in this article. However, as acoustic studies of Lutsi do not exist, a more detailed description of [ɤ] and [u] and their relationship is currently unavailable.



**Figure 4.** Lutsi vowels<sup>3</sup> arranged according to vowel harmony groups

Quantity is contrastive for both vowels and consonants. As in other Estonian and South Estonian dialects, Lutsi distinguishes three quantities. The quantity distinctions are not a segmental distinction, but instead are a foot-level phenomenon found in disyllabic feet. While the duration of a disyllabic foot as a whole stays about the same, the ratio of syllable length between stressed and unstressed syllables changes. This phenomenon is referred to as foot isochrony. These differences in syllable quantity impact the length of vowels and consonants within those syllables.

Figure 5 shows examples of the three-way quantity contrast in Lutsi. In nouns, a common place to encounter this is in the nominative/genitive, partitive,

<sup>3</sup> Finno-Ugrian transcription equivalents to IPA where not the same: y = ü, ø = ö, æ = ä, ɤ = e, ɯ = i. e\* is not an IPA symbol. The Finno-Ugrian transcription symbol used for this vowel is e̊.

and illative case forms of CV.CV disyllables. Quantity 1 (Q1) or “short”, where the initial syllable is short and the second syllable longer, is seen in the nominative/genitive case forms. Quantity 2 or “long”, where the initial and second syllables are of approximately equal length, is observed in partitive case forms. Quantity 3 or “overlong”, where the initial syllable is longer than the second syllable, is seen in illative case forms. In general, phonetically long vowels are Q3 in CV monosyllables.

	Q1 ‘short’ (nominative/genitive)	Q2 ‘long’ (partitive)	Q3 ‘overlong’ (illative)
‘deep’	<i>sy.væˑ</i>	<i>syv.væˑ</i>	<i>syvˑ.væ</i>
‘name’	<i>ni.miˑ</i>	<i>nim.meˑ</i>	<i>nimˑ.me</i>
‘ice’	<i>je.gæˑ</i> (nom.)	<i>jek.kæˑ</i>	<i>jekˑ.kæ</i>

**Figure 5.** Examples of Lutsi quantities in CV.CV disyllables

Thus, it can be said that the important features of the Lutsi sound system, which should be noted in a Lutsi orthography are (1) palatalization, (2) voicing, (3) quantity distinctions.

## 4. History of writing Lutsi

Lutsi has no established written tradition of its own. The only attempts to write Lutsi by its speakers came in the 1930s when Estonian researcher Paulopriit Voolaine along with members of the Lutsi community in eastern Latvia wrote a number of letters in a practical Lutsi orthography to Oskar Kallas who was working in the Estonian diplomatic service during that time. One such letter<sup>4</sup> is shown in Figure 6.

The orthography used in these letters is based on the Estonian orthography. The vowels æ, ø, y, ɤ are written as they are in Estonian: ä, ö, ü, õ, respectively. Long vowels and consonants are marked by doubling that vowel or consonant. Palatalization, which is not written in Estonian, is marked by Voolaine with an apostrophe when it cannot be otherwise predicted, as in *ait'umma*. The glottal stop is also marked using an apostrophe as in *vanõmba'*. The orthography used in this letter is very reasonable for the Lutsi community of the 1930s, when there was still a relatively large number of Lutsi speakers remaining.<sup>5</sup>

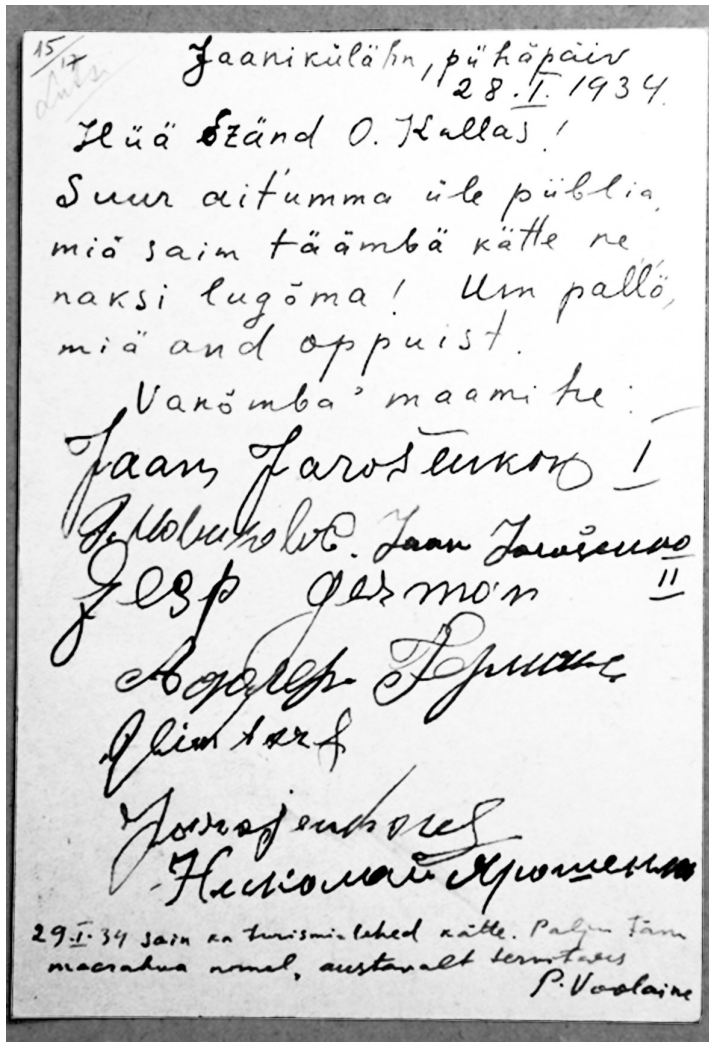
<sup>4</sup> The translation of this letter reads: “In Jānikulā (Lielie Tjapši), Sunday 28. I. 1934. Dear Mr. O. Kallas! A great thanks for the Bible, which we received today and started to read. There is much that gives knowledge (to us). The elder Lutsis:”. [Thank you to Karl Pajusalu for checking this translation.]

<sup>5</sup> Heikki Ojansuu (1912) and Villem Grünthal (1912) found no more than 200 Lutsi speakers. Paulopriit Voolaine (1925) placed the number of Lutsi speakers at 120. August Sang (1936c) estimated that there were 30-40 native speakers of Lutsi.



Following the example of Estonian, the three quantity distinctions are not marked in all situations. This again reflects the different state of the Lutsi language in the 1930s as compared to the present. Quantity distinctions in Estonian and Lutsi are often predictable from context for speakers. Additionally, with living native speakers still present and Lutsi actively in use in at least a few of the historical Lutsi villages, pronunciation issues would largely have been cleared up just by consulting with living speakers.

The present day situation is different. With no living speakers and no environment where one can go and hear Lutsi spoken on a daily basis, a more specific orthography is necessary.



**Figure 6.** Letter in Lutsi written by Paulopriit Voolaine and Lieli Tjapši (Lutsi Jānikülā) community members to Oskar Kallas (from the archives of the Estonian Literary Museum)



## 5. Livonian as a model for Lutsi orthography design

The Lutsi community has presently shifted entirely to speaking Latvian and the Latgalian variety of Latvian. For this reason, the ideal orthography for use in writing Lutsi language materials is one based on the orthographic conventions with which this community will be most comfortable, those of Latvian and Latgalian.

Within Latvia there is a model for representing a Finnic language in writing for people who speak and are literate in Latvian. That model is Livonian. The Livonian orthography employs the Latvian methods for marking vowel length and palatalized consonants. Vowel length is marked with a macron and palatalization with a comma under the palatalized letter. As the number of speakers of Livonian has continued to decrease and the base of speakers has become increasingly composed of speakers of the Eastern dialect of Livonian, the Livonian orthography has changed to meet the shifting needs of the community writing and reading Livonian (Ernštreits 2010, 153–154).

The changes in the Livonian community are similar to those experienced by Lutsi descendants. Prior to the World War II, the Livonian orthography would have been used primarily by Livonian speakers. Some books and a newspaper (*Līvli*) were published using this orthography. However, in the decades that followed, the Livonian orthography has been used less by native speakers of the language in colloquial everyday contexts such as writing letters or publishing articles in newspapers and increasingly by non-speakers and/or learners of Livonian.

The representation of half-long vowels is an example of a change in the way Livonian has been written over the course of the twentieth century. Prior to the World War II, half-long vowels were written as short vowels. This is because half-long vowels occur predictably in Livonian, as they do in Lutsi, in the second-syllable of CV.CV disyllables. The same is also true for parallel forms in Estonian. For the pre-World War II population of Livonians it was unnecessary to mark this predictable feature, because there were still sufficient speakers present who could model proper pronunciation. However, in the last several decades this situation has changed. Now with very few fluent or near-fluent speakers of Livonian remaining, it has become necessary to mark this difference in phonetic length in the written form of Livonian in order to ensure that this nuance of Livonian pronunciation is not lost.

Therefore, in the absence of a living speech community, it becomes necessary for the orthography itself to take on a teaching role when the likely user of that orthography has gone from being a fluent speaker of a language to being a language learner or a non-fluent speaker of that language instead. At the same time, care must be taken to not overburden an orthography with too much detail as that can make such a system cumbersome to use exactly for the people whom it is intended to help.

## 6. Lutsi orthography

As Lutsi finds itself in a similar situation to Livonian with very few speakers and a target population for its orthography, which is presently entirely Latvian-speaking, the Livonian orthography is a good starting point for Lutsi. Livonian

marks vowel length using the macron, consonant length using doubling of the lengthened consonant, and palatalization using the Latvian comma diacritic. All of these symbols are understandable to Latvian speakers and these are all features, which need to be marked for Lutsi. The low front unrounded vowel /æ/ written as <ä> in Livonian can also be likewise written for Lutsi.

In Livonian, the mid back unrounded vowel /ɤ/ is written as it is in Estonian using <õ>. However, for Lutsi it makes sense to write this vowel as <y>, which is the symbol used for the similar-sounding high central unrounded vowel /ɨ/ in the written form of the Latgalian variety of Latvian. As Lutsi descendants are either speakers of the Latgalian variety of Latvian or are familiar with Latgalian due to the fact that Latgalian is actively used as a medium of daily communication, it is useful to incorporate <y> into the Lutsi orthography in order to ensure that users of this orthography will be able to internalize and put it into use quickly and easily.

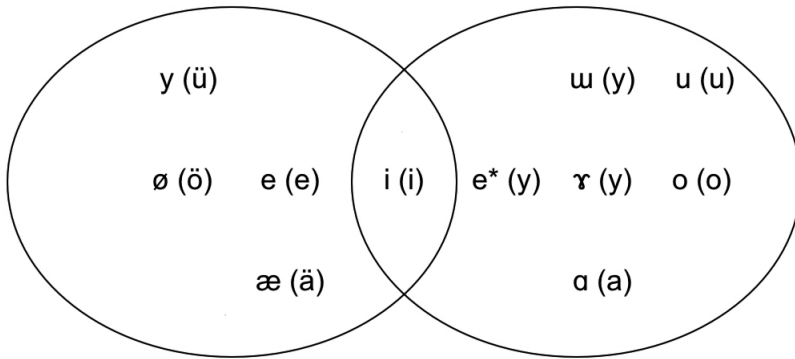
Other sounds, such as the high and mid front rounded vowels /ø/ and /y/ can be written as in Estonian with <ö> and <ü>, respectively. The glottal stop can be written, using <q> as is the practice in the South Estonian orthography. Furthermore, as palatalization is predictable for consonants preceding /i/, it must be explicitly written only for palatalized consonants in other environments, thereby freeing written Lutsi from an overabundance of palatalization diacritics.

Figure 7 shows the phoneme chart displaying the Lutsi orthographic equivalent for each sound. Voiced consonants, though allophonic, are written explicitly as voiced. This is done to ensure that these consonants are pronounced by present-day users of the Lutsi orthography as they were by earlier speakers of Lutsi, as the intervocalic environment, in which voicing occurred allophonically for native Lutsi speakers, is not an environment for allophonic voicing for Latvian speakers. The palatalized consonants may appear overwhelming at first; however, most of these symbols would be quite rare in use as a great deal of the palatalization, which does occur in Lutsi, is found before /i/.

	LABIAL		CORONAL			DORSAL		LARYNGEAL
	Bilabial	Labio-dental	Dental	Alveolar	Palato-alveolar	Palatal	Velar	Glottal
Nasal	m		n					
Plosive	p		t				k	q
Fricative		(f) v		s	(š)(ž)		(h)	h
Affricate			ts					
Approximant						j		
Tap/Trill				r				
Lateral approximant			l					

Palatalized consonants: ṁ, ṇ, Ṗ, ṭ, ḑ, ḅ, ḁ, ḟ, ṡ, ṣ, ṣ̣, ṣ̥, ṣ̦, ş̣, ṣ̨, ṣ̩, ṣ̪, ṣ̫, ṣ̬, ṣ̭, ṣ̮, ṣ̯, ṣ̰, ṣ̱, ṣ̲, ṣ̳, ṣ̴, ṣ̵, ṣ̶, ṣ̷, ṣ̸, ṣ̹, ṣ̺, ṣ̻, ṣ̼, ṣ̽, ṣ̾, ṣ̿, ṣ̻̥, ṣ̻̦, ş̣̻, ṣ̨̻, ṣ̻̩, ṣ̻̪, ṣ̻̫, ṣ̻̬, ṣ̻̭, ṣ̻̮, ṣ̻̯, ṣ̻̰, ṣ̻̱, ṣ̻̲, ṣ̻̳, ṣ̴̻, ṣ̵̻, ṣ̶̻, ṣ̷̻, ṣ̸̻, ṣ̻̹, ṣ̻̺, ṣ̻̻, ṣ̻̼, ṣ̻̽, ṣ̻̾, ṣ̻̿, ṣ̻̻̥, ṣ̻̻̦, ş̣̻̻, ṣ̨̻̻, ṣ̻̻̩, ṣ̻̻̪, ṣ̻̻̫, ṣ̻̻̬, ṣ̻̻̭, ṣ̻̻̮, ṣ̻̻̯, ṣ̻̻̰, ṣ̻̻̱, ṣ̻̻̲, ṣ̻̻̳, ṣ̴̻̻, ṣ̵̻̻, ṣ̶̻̻, ṣ̷̻̻, ṣ̸̻̻, ṣ̻̻̹, ṣ̻̻̺, ṣ̻̻̻, ṣ̻̻̼, ṣ̻̻̽, ṣ̻̻̾, ṣ̻̻̿, ṣ̻̻̻̥, ṣ̻̻̻̦, ş̣̻̻̻, ṣ̨̻̻̻, ṣ̻̻̻̩, ṣ̻̻̻̪, ṣ̻̻̻̫, ṣ̻̻̻̬, ṣ̻̻̻̭, ṣ̻̻̻̮, ṣ̻̻̻̯, ṣ̻̻̻̰, ṣ̻̻̻̱, ṣ̻̻̻̲, ṣ̻̻̻̳, ṣ̴̻̻̻, ṣ̵̻̻̻, ṣ̶̻̻̻, ṣ̷̻̻̻, ṣ̸̻̻̻, ṣ̻̻̻̹, ṣ̻̻̻̺, ṣ̻̻̻̻, ṣ̻̻̻̼, ṣ̻̻̻̽, ṣ̻̻̻̾, ṣ̻̻̻̿, ṣ̻̻̻̻̥, ṣ̻̻̻̻̦, ş̣̻̻̻̻, ṣ̨̻̻̻̻, ṣ̻̻̻̻̩, ṣ̻̻̻̻̪, ṣ̻̻̻̻̫, ṣ̻̻̻̻̬, ṣ̻̻̻̻̭, ṣ̻̻̻̻̮, ṣ̻̻̻̻̯, ṣ̻̻̻̻̰, ṣ̻̻̻̻̱, ṣ̻̻̻̻̲, ṣ̻̻̻̻̳, ṣ̴̻̻̻̻, ṣ̵̻̻̻̻, ṣ̶̻̻̻̻, ṣ̷̻̻̻̻, ṣ̸̻̻̻̻, ṣ̻̻̻̻̹, ṣ̻̻̻̻̺, ṣ̻̻̻̻̻, ṣ̻̻̻̻̼, ṣ̻̻̻̻̽, ṣ̻̻̻̻̾, ṣ̻̻̻̻̿, ṣ̻̻̻̻̻̥, ṣ̻̻̻̻̻̦, ş̣̻̻̻̻̻, ṣ̨̻̻̻̻̻, ṣ̻̻̻̻̻̩, ṣ̻̻̻̻̻̪, ṣ̻̻̻̻̻̫, ṣ̻̻̻̻̻̬, ṣ̻̻̻̻̻̭, ṣ̻̻̻̻̻̮, ṣ̻̻̻̻̻̯, ṣ̻̻̻̻̻̰, ṣ̻̻̻̻̻̱, ṣ̻̻̻̻̻̲, ṣ̻̻̻̻̻̳, ṣ̴̻̻̻̻̻, ṣ̵̻̻̻̻̻, ṣ̶̻̻̻̻̻, ṣ̷̻̻̻̻̻, ṣ̸̻̻̻̻̻, ṣ̻̻̻̻̻̹, ṣ̻̻̻̻̻̺, ṣ̻̻̻̻̻̻, ṣ̻̻̻̻̻̼, ṣ̻̻̻̻̻̽, ṣ̻̻̻̻̻̾, ṣ̻̻̻̻̻̿, ṣ̻̻̻̻̻̻̥, ṣ̻̻̻̻̻̻̦, ş̣̻̻̻̻̻̻, ṣ̨̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̩, ṣ̻̻̻̻̻̻̪, ṣ̻̻̻̻̻̻̫, ṣ̻̻̻̻̻̻̬, ṣ̻̻̻̻̻̻̭, ṣ̻̻̻̻̻̻̮, ṣ̻̻̻̻̻̻̯, ṣ̻̻̻̻̻̻̰, ṣ̻̻̻̻̻̻̱, ṣ̻̻̻̻̻̻̲, ṣ̻̻̻̻̻̻̳, ṣ̴̻̻̻̻̻̻, ṣ̵̻̻̻̻̻̻, ṣ̶̻̻̻̻̻̻, ṣ̷̻̻̻̻̻̻, ṣ̸̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̹, ṣ̻̻̻̻̻̻̺, ṣ̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̼, ṣ̻̻̻̻̻̻̽, ṣ̻̻̻̻̻̻̾, ṣ̻̻̻̻̻̻̿, ṣ̻̻̻̻̻̻̻̥, ṣ̻̻̻̻̻̻̻̦, ş̣̻̻̻̻̻̻̻, ṣ̨̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̩, ṣ̻̻̻̻̻̻̻̪, ṣ̻̻̻̻̻̻̻̫, ṣ̻̻̻̻̻̻̻̬, ṣ̻̻̻̻̻̻̻̭, ṣ̻̻̻̻̻̻̻̮, ṣ̻̻̻̻̻̻̻̯, ṣ̻̻̻̻̻̻̻̰, ṣ̻̻̻̻̻̻̻̱, ṣ̻̻̻̻̻̻̻̲, ṣ̻̻̻̻̻̻̻̳, ṣ̴̻̻̻̻̻̻̻, ṣ̵̻̻̻̻̻̻̻, ṣ̶̻̻̻̻̻̻̻, ṣ̷̻̻̻̻̻̻̻, ṣ̸̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̹, ṣ̻̻̻̻̻̻̻̺, ṣ̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̼, ṣ̻̻̻̻̻̻̻̽, ṣ̻̻̻̻̻̻̻̾, ṣ̻̻̻̻̻̻̻̿, ṣ̻̻̻̻̻̻̻̻̥, ṣ̻̻̻̻̻̻̻̻̦, ş̣̻̻̻̻̻̻̻̻, ṣ̨̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̩, ṣ̻̻̻̻̻̻̻̻̪, ṣ̻̻̻̻̻̻̻̻̫, ṣ̻̻̻̻̻̻̻̻̬, ṣ̻̻̻̻̻̻̻̻̭, ṣ̻̻̻̻̻̻̻̻̮, ṣ̻̻̻̻̻̻̻̻̯, ṣ̻̻̻̻̻̻̻̻̰, ṣ̻̻̻̻̻̻̻̻̱, ṣ̻̻̻̻̻̻̻̻̲, ṣ̻̻̻̻̻̻̻̻̳, ṣ̴̻̻̻̻̻̻̻̻, ṣ̵̻̻̻̻̻̻̻̻, ṣ̶̻̻̻̻̻̻̻̻, ṣ̷̻̻̻̻̻̻̻̻, ṣ̸̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̹, ṣ̻̻̻̻̻̻̻̻̺, ṣ̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̼, ṣ̻̻̻̻̻̻̻̻̽, ṣ̻̻̻̻̻̻̻̻̾, ṣ̻̻̻̻̻̻̻̻̿, ṣ̻̻̻̻̻̻̻̻̻̥, ṣ̻̻̻̻̻̻̻̻̻̦, ş̣̻̻̻̻̻̻̻̻̻, ṣ̨̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̩, ṣ̻̻̻̻̻̻̻̻̻̪, ṣ̻̻̻̻̻̻̻̻̻̫, ṣ̻̻̻̻̻̻̻̻̻̬, ṣ̻̻̻̻̻̻̻̻̻̭, ṣ̻̻̻̻̻̻̻̻̻̮, ṣ̻̻̻̻̻̻̻̻̻̯, ṣ̻̻̻̻̻̻̻̻̻̰, ṣ̻̻̻̻̻̻̻̻̻̱, ṣ̻̻̻̻̻̻̻̻̻̲, ṣ̻̻̻̻̻̻̻̻̻̳, ṣ̴̻̻̻̻̻̻̻̻̻, ṣ̵̻̻̻̻̻̻̻̻̻, ṣ̶̻̻̻̻̻̻̻̻̻, ṣ̷̻̻̻̻̻̻̻̻̻, ṣ̸̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̹, ṣ̻̻̻̻̻̻̻̻̻̺, ṣ̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̼, ṣ̻̻̻̻̻̻̻̻̻̽, ṣ̻̻̻̻̻̻̻̻̻̾, ṣ̻̻̻̻̻̻̻̻̻̿, ṣ̻̻̻̻̻̻̻̻̻̻̥, ṣ̻̻̻̻̻̻̻̻̻̻̦, ş̣̻̻̻̻̻̻̻̻̻̻, ṣ̨̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̩, ṣ̻̻̻̻̻̻̻̻̻̻̪, ṣ̻̻̻̻̻̻̻̻̻̻̫, ṣ̻̻̻̻̻̻̻̻̻̻̬, ṣ̻̻̻̻̻̻̻̻̻̻̭, ṣ̻̻̻̻̻̻̻̻̻̻̮, ṣ̻̻̻̻̻̻̻̻̻̻̯, ṣ̻̻̻̻̻̻̻̻̻̻̰, ṣ̻̻̻̻̻̻̻̻̻̻̱, ṣ̻̻̻̻̻̻̻̻̻̻̲, ṣ̻̻̻̻̻̻̻̻̻̻̳, ṣ̴̻̻̻̻̻̻̻̻̻̻, ṣ̵̻̻̻̻̻̻̻̻̻̻, ṣ̶̻̻̻̻̻̻̻̻̻̻, ṣ̷̻̻̻̻̻̻̻̻̻̻, ṣ̸̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̹, ṣ̻̻̻̻̻̻̻̻̻̻̺, ṣ̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̼, ṣ̻̻̻̻̻̻̻̻̻̻̽, ṣ̻̻̻̻̻̻̻̻̻̻̾, ṣ̻̻̻̻̻̻̻̻̻̻̿, ṣ̻̻̻̻̻̻̻̻̻̻̻̥, ṣ̻̻̻̻̻̻̻̻̻̻̻̦, ş̣̻̻̻̻̻̻̻̻̻̻̻, ṣ̨̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̩, ṣ̻̻̻̻̻̻̻̻̻̻̻̪, ṣ̻̻̻̻̻̻̻̻̻̻̻̫, ṣ̻̻̻̻̻̻̻̻̻̻̻̬, ṣ̻̻̻̻̻̻̻̻̻̻̻̭, ṣ̻̻̻̻̻̻̻̻̻̻̻̮, ṣ̻̻̻̻̻̻̻̻̻̻̻̯, ṣ̻̻̻̻̻̻̻̻̻̻̻̰, ṣ̻̻̻̻̻̻̻̻̻̻̻̱, ṣ̻̻̻̻̻̻̻̻̻̻̻̲, ṣ̻̻̻̻̻̻̻̻̻̻̻̳, ṣ̴̻̻̻̻̻̻̻̻̻̻̻, ṣ̵̻̻̻̻̻̻̻̻̻̻̻, ṣ̶̻̻̻̻̻̻̻̻̻̻̻, ṣ̷̻̻̻̻̻̻̻̻̻̻̻, ṣ̸̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̹, ṣ̻̻̻̻̻̻̻̻̻̻̻̺, ṣ̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̼, ṣ̻̻̻̻̻̻̻̻̻̻̻̽, ṣ̻̻̻̻̻̻̻̻̻̻̻̾, ṣ̻̻̻̻̻̻̻̻̻̻̻̿, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̥, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̦, ş̣̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̨̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̩, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̪, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̫, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̬, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̭, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̮, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̯, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̰, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̱, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̲, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̳, ṣ̴̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̵̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̶̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̷̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̸̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̹, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̺, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̼, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̽, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̾, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̿, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̥, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̦, ş̣̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̨̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̩, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̪, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̫, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̬, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̭, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̮, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̯, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̰, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̱, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̲, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̳, ṣ̴̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̵̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̶̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̷̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̸̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̹, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̺, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̼, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̽, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̾, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̿, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̥, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̦, ş̣̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̨̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̩, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̪, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̫, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̬, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̭, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̮, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̯, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̰, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̱, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̲, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̳, ṣ̴̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̵̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̶̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̷̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̸̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̹, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̺, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̼, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̽, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̾, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̿, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̥, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̦, ş̣̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̨̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̩, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̪, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̫, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̬, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̭, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̮, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̯, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̰, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̱, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̲, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̳, ṣ̴̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̵̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̶̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̷̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̸̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̹, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̺, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̼, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̽, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̾, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̿, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̥, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̦, ş̣̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̨̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̩, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̪, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̫, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̬, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̭, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̮, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̯, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̰, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̱, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̲, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̳, ṣ̴̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̵̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̶̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̷̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̸̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̹, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̺, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̼, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̽, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̾, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̿, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̥, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̦, ş̣̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̨̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̩, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̪, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̫, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̬, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̭, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̮, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̯, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̰, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̱, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̲, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̳, ṣ̴̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̵̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̶̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̷̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̸̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̹, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̺, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻, ṣ̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻̻

Figure 8 shows the Lutsi vowels written as they would be in the Lutsi orthography in parentheses next to their IPA equivalents. The retracted /e/ written as <e\*> in Figure 7, is written as <y> in the Lutsi orthography. This follows the equivalent practice in the South Estonian orthography where /ɤ/ and retracted /e/ are both written using <ö>. This is possible because, just as in Lutsi, /ɤ/ only occurs in initial syllables and retracted /e/ only occurs in non-initial syllables. Thus, it is possible to use the same character for these non-overlapping sounds. As [u] and [ɤ] at this time appear to be a single phoneme, both vowels are written with the character <y> in Lutsi.



**Figure 8.** Lutsi vowels in the Lutsi orthography

The marking of quantity in Lutsi is resolved by writing vowel half-length consistently. This allows all three quantities to be differentiated in writing and ensures that the target audience for the Lutsi orthography composed of speakers of Latvian and the Latgalian variety of Latvian will pronounce Lutsi in a fashion similar to that of historical Lutsi speakers. Consonant half-length is not overtly marked. Figure 9 shows the examples from Figure 4 rewritten in the Lutsi practical orthography.

	Q1 'short' (nominative/genitive)	Q2 'long' (partitive)	Q3 'overlong' (illative)
'deep'	sū.vā	sūv.vā	sūv.vā
'name'	ni.mī	nim.mē	nim.me
'ice'	je.gā (nom.)	jek.kā	jek.kā

**Figure 9.** Examples of Lutsi quantities in CV.CV disyllables

## 7. Conclusion

The first major application of the Lutsi practical orthography discussed in this article has already taken place. I have used it in the website I have designed describing my current Lutsi research (<http://www.lutsimaa.lv/>). The next major

use will be in the Lutsi language primer, which I am presently writing. The orthography I have designed for Lutsi reflects the principle, which I consider to be the most important. This is that the orthography will help to ensure that users of this orthography will be able to pronounce Lutsi as similarly as possible to the pronunciation of the Lutsi native speakers documented in linguistic records throughout the course of the twentieth century. The most logical means for this is to design an orthography that utilizes the principles of the orthographies most familiar to the target users. For this reason, I sought to design the Lutsi orthography based on the orthographies of Latvian and Latgalian variety of Latvian with an eye on the way in which the phonetic detail of a Finnic language is represented to Latvian speakers in Livonian, a language with a very similar orthographic target audience to that of Lutsi.

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## Kopsavilkums

Ludzas igauņu valoda ir dienvidigauņu valodas izloksne, kuru runāja apmēram 50 ciemos pirms Otrā pasaules kara Pildas, Nirzas, Brigu un Mērdzenes pagastā mūsdienu Ludzas, Ciblas un Kārsavas novadā. Nav skaidrs, kā Ludzas igauņi nonākuši šajā apvidū, taču Ludzas igauņu valoda pietiekami atšķiras no dienvidigauņu valodas, ko mūsdienās runā Igaunijas dienvidaustrumos un Pečoru rajonā Krievijā. Visticamāk, Ludzas igauņi bijuši šķirti no pārējiem dienvidigauņu valodas runātājiem vismaz vairākus gadsimtus. Ludzas igauņu valodas neatkarīga attīstība redzama fonoloģijas un vārdu krājuma īpatnībās, kā arī morfoloģijas arhaismos. Vērojama arī liela latviešu valodas augšzemnieku dialekta, krievu un poļu valodas ietekme. Raksta autors kopš 2013. gada sākuma apceļojis bijušos Ludzas igauņu ciemus un intervējis Ludzas igauņu pēctečus, lai dokumentētu gan mūsdienu Ludzas igauņu valodas stāvokli, gan vēl esošās valodas un folkloras zināšanas. Viens no pētījuma mērķiem ir uzrakstīt Ludzas igauņu valodas “ābeci”, ar kuru būs iespējams no jauna iepazīstināt Ludzas igauņu pēctečus, kā arī citus interesentus. Šajā rakstā sniegta autora izveidotā Ludzas igauņu valodas ortogrāfija. Raksta ievaddaļā īsi aplūkota Ludzas igauņu vēsture, tālāk aprakstīti Ludzas igauņu valodas fonētikas pamati. Kā Ludzas igauņu ortogrāfijas paraugs izmantota lībiešu valodas ortogrāfija. Raksta nobeigumā piedāvāta autora izveidotā Ludzas igauņu valodas ortogrāfija.