

The case for Southwest Finnic: areal or genetic grouping?

Original study

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Abstract: This article discusses a group of South Finnic languages and/or dialects that share common phonological features. These languages and dialects are Livonian, Mulgi South Estonian, Island North Estonian and Western North Estonian, all deriving from Proto-Finnic. In contemporary Finnic taxonomy, the first language to diverge from Proto-Finnic was South Estonian, followed by Livonian, and later by North Estonian and Votic. Nevertheless, all the mentioned languages have converged after their initial divergence, resulting in an areal grouping called South Finnic. The contribution of this article is to assess linguistic features shared by the mentioned languages and dialects and what their nature can reveal. I argue that the features point to a new understanding of Finnic taxonomy in that the addition of a narrower group of Southwest Finnic can be justified as a Finnic branch.

Keywords: Southwest Finnic, Livonian, Southwest Estonian, dialectology, phonology, areal linguistics, historical linguistics

INTRODUCTION

The Finnic branch of the Uralic languages is a well studied branch with a long research history. The general understanding of the formation and divergence of the Finnic languages has evolved over the centuries, resulting in the current classification of the Finnic languages (cf. section 1 below). Nevertheless, some questions still remain on the exact nature of the relationship between the languages. One such example is the nature of contacts between the Finnic languages in the Baltic region, that are called South Finnic (cf. Pajusalu 2012). These languages share phonological, grammatical (cf. O'Rourke, Pajusalu 2016) and lexical features (cf. O'Rourke, Pajusalu 2020) that have arisen after the divergence of the languages, and it is the nature of the features that leaves still room for a more precise interpretation. In other words, the question remains whether the linguistic features spread via diffusion between languages or via substrate influence between closely related languages.

Especially the question of Mulgi South Estonian is interesting because its parent language, Pre-South Estonian, was the first to diverge from Proto-Finnic

(cf. section 1 below). While many of the features it shares with Livonian and Island and West North Estonian, that is, the rest of the Southwest Finnic languages, are archaisms, some of the linguistic features it shares with these languages could suggest adstrate influence and diffusion. Yet other features are more restricted in their distribution, which can suggest an underlying genetic branch within the South Finnic areal unit. In this article, the argument is that some of the phonological features in question point to Southwest Finnic as the common ancestor of at least Livonian, West North Estonian and Island North Estonian. The suggestion is that these languages would have formed at least a dialect continuum during prehistoric times, after which historical changes would have caused the dialect continuum to diverge into separate languages due to later contacts with Latvian in the case of Livonian, and Standard North Estonian in the case of Island and West North Estonian.

The argument rests on comparing Livonian phonological and lexical innovations with those of the Estonian dialects. During historical times, Livonian has not been

in a dialect continuum with other Finnic languages and, therefore, represents a clearly defined language. However, dialectal features of North Estonian point to the possibility of a prior, prehistoric dialect continuum after the divergence of Late Proto-Finnic, the terminus post quem for the beginning of the divergence being dated to around the 9th century AD (cf. Kallio 2006, 157).

In this article, I will first describe the latest understanding of South Finnic taxonomy to determine phonological changes that differentiate the South Finnic languages from one another. Following this, I will describe briefly linguistic features that are traditionally indicative of secondary areal influences in South Finnic. I will further present some features the areal distribution of which would suggest Southwest Finnic as the ancestor of not only Livonian, but also Island and West North Estonian. I will then attempt to place the breaking up of the dialect continuum in time and space.

1. FINNIC TAXONOMY

The Finnic languages are a relatively coherent group of languages that has clear external boundaries. However, the historical relationships between the languages as well as their position within the group have been open to discussion. The minimum amount of modern Finnic languages has traditionally been five: Livonian, Estonian, Votic, Finnish and Veps. The older Finnish classification categorises Izhorian, Karelian proper, Olonets Karelian and Ludian as Karelian, if Izhorian is not categorised under Finnish. Soviet scholarship classified Izhorian as an independent language, and more recent Finnish scholarship has raised the status of also Ludian to an independent language. In addition, Olonets Karelian has also been suggested to be an independent language (Salminen 1998, 390). While scholars in the 20th century mostly still tentatively suggested South Estonian to be an independent language in stead of an Estonian dialect that like Livonian diverged early, the primary division between South Estonian and the rest of Finnic has now been accepted in Fennistics (cf. Kallio 2007; 2014), thus amounting to the ten modern Finnic languages: South Estonian, Livonian, North Estonian, Votic, Finnish, Izhorian, Karelian, Olonets Karelian, Ludian, and Veps.

Diachronically, however, the primary division of Finnic proto-dialects has been into seven languages, which do not exhibit overt secondary adstrate influences on each other. The proto-dialects are: Livonian, South Estonian, North Estonian, Votic, West Finnish, Karelian, and Veps. West Finnish diverged later into Finnish proper and Tavastian, Karelian into East Finnish, Izhorian, Karelian proper and Olonets Karelian, and Veps into Ludian and Veps (Salminen 1998, 392). The internal division of these proto-dialects can be binarily divided in a number of ways. Salminen presents seven features (the vowel of the first person plural pronoun, the form of the genitive plural, the suffix of the conditional case, the development of demonstrative pronouns into personal pronouns, the

analogical form of the participle of the verbs **näktäk* 'to see' and **tektäk* 'to do', quantity alternation and more specifically the variation between geminate and single consonants), four of which—the development of demonstrative pronouns into personal pronouns, the analogical form of the participle of the verbs **näktäk* 'to see' and **tektäk* 'to do', quantity alternation and more specifically the variation between geminate and single consonants—Salminen describes as innovations one way or another. The innovations do not, however, overlap in a clear-cut way which has led scholars to classify the Finnic language either according to a binary division of North and South Finnic, East and West Finnic, or South Estonian and the rest of Finnic, or to a ternary division of either North, South and East Finnic or Livonian, South Estonian and the rest of Finnic (Salminen 1998, 393). A recent revision to the taxonomy of Finnic proto-dialects has been proposed by Miikul Pahomov, who following Tiit-Rein Viitso (2008, 64–67) defines Pre-Veps rather as Pre-Ludian (*varhaislyydi*, Viitso: *muinaslüüdi*) because Ludian shares phonological, morphological and lexical similarities between Olonets Karelian and Veps; some features being present also in South Karelian. The historical linguistic development of Olonets and South Karelian can be explained from Ludian without Veps but not without Ludian. In addition, the Ludian qualitative grade alternation can be derived from Proto-Finnic but not from Veps, where grade alternation does not exist, and which is why Veps cannot be the proto-form of the alternation, thus justifying the term Pre-Ludian (Pahomov 2017, 275–276, 283–284).

As mentioned above, the most recent understanding of Finnic divergence is that South Estonian was the first language to diverge from Proto-Finnic. The division was already suggested by Paul Ariste (1956, 14; cf. Pajusalu 1996, 25–26 for further literature). Pekka Sammallahti also argued for South Estonian to have been the first language to diverge from Proto-Finnic, based on Proto-Finnic **kt* > **tt* in South Estonian, as opposed to **kt*, **št* > **ht* in all other Finnic languages, e.g. Proto-Finnic **läkti* 'went.3SG' > Võro *läft* vs. Finnish *lähti* 'id.' (Sammallahti 1977, 133). Although Salminen suggested that the sound change **kt* > **ht* could have spread secondarily across dialectal boundaries based on Sammallahti's own admission of the sound change **e* > *õ* spreading secondarily into South Estonian from North Estonian and thus theoretically justifying Sammallahti's distinguishing sound change also as a secondary spread (Salminen 1998, 394), Petri Kallio further argued for the development not to be secondary, as Proto-Finnic **ht* (< **št*) remained as such in South Estonian, cf. Võro *leht* 'leaf' vs. Finnish *lehti* 'id.' < **lehti* < **lešti* (Kallio 2014, 156) as well as including the sound change **čk* > **tsk* in South Estonian as opposed to **čk* > **tk* in the rest of Finnic as a distinguishing feature, e.g. Proto-Finnic **kački* 'broken' > Võro *katski* vs. Finnish *katki* 'id.', Late Proto-Finnic **kačku* 'plague' > Võro *katsk* vs. Finnish *katku* 'id.'. According to Kallio, this feature precedes the distinction postulated by Sammallahti

The case for Southwest Finnic: areal or genetic grouping?

and would thus be the first isogloss within Proto-Finnic (Kallio 2007, 233–235; 2014, 156–157).

In addition to South Estonian, also Livonian shows archaic isoglosses that distinguish it from the rest of Late Proto-Finnic. For example, Livonian shows a contrary chronology of sound changes when compared to the rest of Finnic in the Livonian word *tõva* (~ *tiva* < *tüva*) ‘deep’ from Early Proto-Finnic **tävā* < **tivā* vs. Finnish *syvä*, Võro *süvä* ‘id.’ from Proto-Finnic **süvä* < **sivā* < **tivā*. The Livonian cognate shows that in Pre-Livonian, the sporadic labialisation of **e*, **i* before **v* occurred before the Late Proto-Finnic change **ti* > **ci* (> **si*), opposite to the rest of Finnic (Kallio 2007, 238). In contrast, the sporadic assimilation of intervocalic **v* before a low vowel did not take place in the Livonian word *õvä* ‘flow’, cf. Finnish *vuo* ‘id.’ < Late Proto-Finnic **voo* < Middle Proto-Finnic **uva* (Kallio 2007, 240). These could in fact be categorised as some of the first isoglosses between Livonian and the rest of Finnic. However, Livonian shares a morphological innovation with the rest of Finnic as opposed to South Estonian, that is, the active indicative third person singular ending **-pi* (Kallio 2014, 156; Viitso 2008, 80). Comparative Uralistics shows that originally, third person singular was without an ending (Kallio 2007, 243; 2014, 156; Janhunen 1982, 34–35).

Livonian and South Estonian share phonological innovations that distinguish them from the rest of Finnic, namely **kn* > **nn*, e.g. Proto-Finnic **näknüt* ‘seen’ > Livonian *nänd*, Võro *nännüq* vs. North Estonian *näinud* vs. analogical Finnish, Karelian *nähnyt*, Veps *nähnu*, Votic *nähnü*. However, Kallio explains this assimilation as an areal innovation, as well as the assimilation **e-ä* > **ä-ä*, e.g. Proto-Finnic **kenkä* ‘shoe’ > Livonian *känga*, Võro *käng* vs. Finnish, Karelian *kenkä*. For the latter change, the oldest sources for both Livonian and South Estonian from the 17th and 19th centuries, respectively, still maintain forms with *e* (Kallio 2014, 158–159).

Despite the lack of unquestionable shared innovations between South Estonian and Livonian, Livonian was undoubtedly the first dialect to diverge from Coastal Finnic, as evidenced by the sporadic development **ai* > **ej* in Gulf of Finland Finnic, e.g. Proto-Finnic **haina* ‘hay’ > Võro *hain*, Livonian *äina* vs. North Estonian *hein*, Votic *einä*, Finnish, Karelian *heinä*. The sporadic nature of this development is indicated by the North Estonian and Votic words which are declined with an etymological **ai*: Proto-Finnic **hainoida* ‘hays.PART.PL.’ > North Estonian *heinu*, Votic *einoja*. As the sound change violated Proto-Finnic vowel harmony, Kallio points out that the sound change is not a natural development, which is why it is a valid argument for the existence of Gulf of Finland Finnic as a branch (Kallio 2014, 159–160).

The third major dialectal split was between North Finnic (the dialect continuum of Finnish, Karelian, Ludian and Veps) and what Kallio calls Central Finnic, that is, Pre-Estonian and Pre-Votic. Kallio argues for the sound change **ë* > **e* as a distinguishing innovation of North Finnic, e.g. Proto-Finnic **mërta* ‘fish trap’ > Finnish, Karelian

merta, Veps *merd* vs. Võro *mörd*, Livonian *mõrda*, North Estonian *mörd*, Votic *mõrta*; Proto-Finnic **tërva* ‘tar’ > Finnish, Karelian *terva*, Veps *terv* vs. Võro *tõrv*, Livonian *tõra*, North Estonian *tõrv*, Votic *tõrva*. This sound change has been traditionally described as a South Finnic innovation **e* > **ë* (cf. Pajusalu 2012, 215–218), but Kallio agrees with Jaakko Häkkinen’s argument that the initial-syllable **ë* arose in Proto-Finnic through Indo-European *a*-stem loanwords that were adopted with initial-syllable **ë* to fit Uralic vowel harmony (Kallio 2014, 160–161). The vowel **ë* itself would have already existed in the language, in that the non-initial syllable **ë* was in fact a development of a previously existing reduced vowel **â/*ə*, as reconstructed by Kallio, e.g. Early Proto-Finnic **ala-nê-pa* > Middle Proto-Finnic **alênëpi* > Late Proto-Finnic **alênëβi* > Finnish *alenee* ‘lowers’; Early Proto-Finnic **ülä-nê-pä* > Middle Proto-Finnic **ülenepi* > Late Proto-Finnic **ülenepi* > Finnish *ylenee* ‘rises’. Such a vowel has been reconstructed even in adjective stems, e.g. Early Proto-Finnic **walkâta* > Middle Proto-Finnic **walkêta* > Late Proto-Finnic **valkêða* > Finnish *valkea* ‘white’ vs. Võro *valgõ* ‘id.’; Early Proto-Finnic **selkâtä* > Middle Proto-Finnic **selketä* > Late Proto-Finnic **selkeða* > Finnish *selkeä* ‘clear’ vs. Võro *sełge* ‘id.’ (Kallio 2012, 170). Mikko Heikkilä, while agreeing with the originality of **ë* in Proto-Finnic, has, however, pointed out that the substitution violates the nature of Finnic vowel harmony, which is a progressive assimilation based on the vowel of the initial syllable, whereas the substitution **ë-a* would entail a regressive assimilation. Still, it is possible that even Early Proto-Germanic had a phonetically back vowel in **/a, ā, u/-stems*, which would have been audible to Proto-Finnic speakers due to the Proto-Finnic initial syllable having more vowel distinctions (Heikkilä 2012, 15–17). Heikkilä argues for the Early Proto-Finnic non-initial-syllable non-low stem vowel to have been an allophonic variation between **i* and **j*, that is, as full vowels that partook in vowel harmony (Heikkilä 2012, 21). Therefore, regardless of the origin of the vowel **ë*, it is reasonable to consider the South Finnic velar vowel harmony to reflect an existing pattern in Proto-Finnic, which was lost in Finnic languages where (non-initial) **ë* was assimilated to **e*.

Central Finnic shows a few common sound changes, which justify the common branch of North Estonian and Votic, such as **a* > *ë*, e.g. North Estonian *lõng*, Votic *lõnka* vs. South Estonian *lang*, Livonian *lānga* ‘yarn’; **o* > *ë*, e.g. North Estonian *õppida*, Votic *õppõa* vs. South Estonian *oppi*, Livonian *oppõ* ‘to study’ (Pajusalu 2012, 217). Yet, with regard to the divergence of North Estonian and Votic, Central Finnic was rather a dialect continuum (Kallio 2014, 163) although a tentative isogloss between North Estonian and Votic could be the sporadic vowel change **ë* > *o* in North Estonian, e.g. North Estonian *kord* vs. Votic *kõrta* ‘time, once’, North Estonian *kodar* vs. Votic *kõtara* ‘the support between the skid and the bottom on a sleigh’ (cf. Kettunen 1962, 132). Tapani Salminen has argued for the early divergence of Votic based on its grade alternation patterns which cannot be directly

derived from secondary contacts with other Finnic languages (Salminen 1998, 396).

Thus, the divergence of the four South Finnic languages shows phonological isoglosses between each of the languages. Having briefly described the divergence of Proto-Finnic into South Finnic languages, I will describe the linguistic features shared between the South Finnic languages which can be derived from contacts with neighbouring Germanic and Baltic languages.

2. SOUTH FINNIC FEATURES

An important distinguishing phonological feature of South Finnic is the phonological distinction between short and long geminates. This distinction occurred already in Late Proto-Finnic, but at that point it was phonetic on the border of a stressed and unstressed syllable: if the unstressed syllable was closed, the geminate was shortened. In modern North Estonian and Livonian, however, extensive apocope and syncope has led to the erosion of the formal conditions for the distinction, yet the opposition between long and short geminates began to carry the distinction between grammatical forms. In addition to the described phenomenon of primary geminates, also secondary geminates developed in Southern Finnic languages. In South Estonian, the distinction between short and long geminates distinguishes grammatical forms within paradigms, e.g. Q2 (long) *källa* 'fish.PART' (< **kalata*) and in Q3 (overlong) *kal'la* 'fish.ILL' (< **kalahen*). The common precondition for a secondary short geminate in Livonian, North Estonian and Votic was a late long vowel or diphthong in the second syllable. The vowel following the short geminate is lengthened in North Estonian and Livonian, either as half-long (North Estonian) or long (Livonian) (Pajusalu 2012, 203–204).

In addition to geminates, such a phonological distinction has spread also to consonant clusters in North Estonian and Livonian, e.g. Estonian Q2 *mušta* 'black.GEN' vs. Q3 *mušta* 'black.PART', Livonian *muštā* 'black.NOM-GEN' vs. *muštō* 'black.PART'. The vowel following an overlong syllable is short and the phonological distinction between long and overlong syllables affected also vowels, e.g. Estonian Q2 *hōne* 'building.NOM' (< **hōneh*) vs. *hōne* 'building.GEN' (< **hōnehen*). In South Estonian, this distinction became even more pronounced by raising the overlong vowels, e.g. Q3 *vyyra* [v̥jra] 'strange.GEN' vs. Q2 *võõras* [v̥ēras] 'strange.NOM' (Pajusalu 2012, 203–205).

Another change in Southern Finnic was the development of foot isochrony. This phenomenon is related to the development of the quantity alternation described above, in that the longer the duration was of the stressed syllable, the shorter the following unstressed syllable became (Pajusalu 2012, 206–207). This change has been explained as a Scandinavian influence by Kalevi Wiik (Pajusalu 2012, 207), but its origin can tentatively be derived from already the Proto-Finnic tendency to prefer disyllabic words, which resulted in the syncope and apocope of words with three or more syllables (Kallio 2007, 240).

A South Finnic phonological change is the vocalisation of word-internal and syllable-final *n* in the cluster *ns* in word stems, e.g. North Estonian *kaas* vs. Finnish *kansi* 'lid', North Estonian *maasikas*, Votic *maazikaz*, Livonian *mōšškōz* vs. Finnish *mansikka* 'strawberry' (Kallio 2014, 162; Pajusalu 2012, 215; Laanest 1982, 124–125). This has been connected with a similar sound change in the ordinal suffix *-*nsi*, e.g. Finnish *kolmas*, Veps *koumans~kuumańz* 'third' as well as the possessive suffixes of the 2nd and 3rd persons singular, e.g. Finnish *poikasi*, dialectally also *poikaas* 'your(SG) son' (Pajusalu 2012, 215; Laanest 1982: 124–125, 181–182), but in the North Finnic case, the sound change is rather a loss of *n* without the accompanying lengthening of the preceding vowel even though it occurs syllable-finally. Therefore, the vocalisation of *n* in the cluster *ns* can be defined as strictly South Finnic if defined to occur in word stems, as opposed to the more general loss of word- and syllable-final *n* (cf. Pajusalu 2012, 214–215).

A phonological change that spread across South Finnic dialect boundaries was the sporadic illabialisation **o* > **ë*. It occurs in Votic the most, decreasing in North Estonian and further in South Estonian and Livonian (Kallio 2014, 161), e.g. **oksa* 'branch' > Votic *õhsa*, North Estonian *oks*, South Estonian *oss*, Livonian *oksā*; **sormi* 'finger' > Votic *sõrmi*, North Estonian *sõrm*, South Estonian *sõrmh*, Livonian *suor̥m* (cf. also Kettunen 1962, 131–132). A more detailed analysis of the sound change's occurrence would shed more light on the exact distribution of the phenomenon. Nevertheless, the cognates of both the North Finnic languages and more distantly related languages would indicate that such a sound change is secondary.

In addition to phonological features shared by all South Finnic languages (at least to some extent), there are certain innovations that have a narrower, more southerly distribution. Such features are discussed below.

3. SOUTHWEST FINNIC

The term Southwest Finnic is based on the definition of Kallio's redefinition of Sammallahti's 'Pre-Estonian' as *Central Finnic*, defining 'Inland Finnic' as *Southeast Finnic* and 'Gulf of Riga Finnic' as *Southwest Finnic*. Southeast Finnic further developed into South Estonian and Southwest Finnic into Livonian, respectively (Kallio 2014, 160, 163).

Kallio has recently reconstructed the approximate chronological order of the major phonological changes, or sound laws, from Proto-Finnic to Proto-Livonian (2016). While also commenting on Proto-Livonian as the common ancestor of Courland Livonian and Salaca, or Livland Livonian, Kallio states Livonian as an exception to the difficulty of classifying intermediate dialects between the Finnic languages since there are no intermediary dialects between Livonian and other Finnic languages (Kallio 2016, 39). The possibility of Southwest Finnic including

The case for Southwest Finnic: areal or genetic grouping?

also Island and West North Estonian would thus rely on comparing the linguistic features of the North Estonian dialects with that of Livonian.

Indeed Lembit Vaba has pointed out phonological and lexical similarities between languages around the Irbe Strait, that is, Island North Estonian, partly West North Estonian, Livonian, and the Dundaga dialect of Latvian, defining the languages as belonging to the *Irbe Strait sprachbund* (1977, 250–251). The geographical location is defined by Ariste in grouping the North Estonian of Saaremaa and Livonian of Dundaga, based not only on common lexicon, but phonological similarities in the personal name of the mythological-historical character *Suur Tõll*, who in Livonian folklore is called *Sūr Teļ*, exhibiting the Courland Livonian change $*\ddot{o} > e$, the etymological variant of the name being $*T\ddot{o}l$ (Ariste 1954, 272–273). Also, Latvian loanwords exhibit phonological changes that are shared across the sprachbund. Such phonological changes listed by Vaba are: 1) the raising $au > ou$, e.g. Island North Estonian *moutsid* ‘mittens’, *proutsima* ‘to roam, drift’; 2) labialisation of $*aa > *\ddot{a}\ddot{a} > oo$, e.g. Island North Estonian *koopel* ‘step over a wooden or stone fence’, *koes* : *koosi* ‘curved stick used for winter seine fishing (NOM : GEN)’ (Vaba 1977, 229). Although the raising $au > ou$ occurs also in Baltic German and Baltic Yiddish (cf. Verschik 1999, 153) and is typologically common, its chronology can still possibly indicate the timespan and location of its occurrence, that is, its origin within a region. This sound change will be discussed in further detail below as well as other Southwest Finnic phonological changes. These features combined will be the basis for arguing Southwest Finnic to be a linguistic group with phonological innovations.

The discussed phonological features are:

1) Raising $au > ou$. In Livonian, Kallio dates the raising $au > ou$ to the proto-stage (Kallio 2016, 54–55). Kallio argues for a late absolute chronology based on Henry’s chronicle of Livonia from the 13th century depicting a linguistic stage considerably earlier than Proto-Livonian (Kallio 2016, 60). The citation *Laula, laula, pappi!* ‘Sing, sing, priest!’ is mentioned as an example indicating Livonian being phonologically close to North Estonian. However, the example should not be considered indicative of 13th-century Livonian, but rather of 13th-century Island North Estonian, as credited by Henry himself in the chronicle. Therefore, it still leaves the question of the chronology of the sound change in Livonian open. Nevertheless, it does point to a possible terminus post quem of the sprachbund, seeing as Livonian, Island North Estonian and West North Estonian (O’Rourke, Pajusalu 2016, 72) do share the sound change. There are, however, minor differences in the occurrence of the sound change between Livonian and West North Estonian, e.g. Varbla *oug* ‘pike’ ($< *haug$) (Juhkam, Sepp 2000, 18–19) and Livonian *aig* ‘id.’ ($< *aigi < *au’gi < *au’gi < *hauki$). The Livonian cognate would indicate prepalatalisation and depalatalisation (Kallio 2016, 53–54), which as a feature would also be Southwest Finnic.

2) Prepalatalisation and depalatalisation. This sound change, or more rather a process of individual changes has occurred in Livonian, West North Estonian, Mulgi South Estonian and Livonian-like Latvian dialects (Pajusalu, Teras 2012; Pajusalu 2014, 161; O’Rourke, Pajusalu 2016, 70). Prepalatalisation is a phonological process where a secondary *i* or *e* is pronounced in the coda of the stressed syllable before a palatalised consonant. The palatalisation of the consonant itself results from a prior *i* or *j* in the following syllable which triggered palatalisation before apocope of the vowel. In the mentioned dialects, prepalatalisation has become phonemic, leading to the depalatalisation of the consonant even if the *i* of the following syllable appears in the word paradigm, e.g. Island North Estonian *paet* : *paadi* ‘boat (NOM : GEN)’ (Pajusalu, Teras 2012, 158). Secondary palatalisation itself is a phonological innovation in Finnic since Proto-Finnic underwent depalatalisation (Kallio 2007, 233), and is explained by contacts with the Baltic and Slavic languages (Pajusalu 2012, 210). Contacts with Latvian has also been explained as a reason for the strengthening of palatalisation in Courland Livonian (Pajusalu, Teras 2012, 162). Prepalatalisation occurs alongside another form of prevocalisation in Southwest Finnic, namely, metaphony or umlaut (Pajusalu, Teras 2012, 171; Kallio 2016, 53).

3) Umlaut of *a*. In Livonian, umlaut was triggered in back vowels and non-high front vowels by the following palatalised consonant, consonant cluster, the palatal consonant $*j$ or the palatal vowel $*j$, that is, a palatal phoneme, e.g. $*pappi > p\ddot{a}p(p)$ ‘priest’, $*l\ddot{a}mpi > lem(m)$ ‘warm’ (Kallio 2016, 51–54). This has been explained as an old Livonian sound change and while prepalatalisation and umlaut are two different routes of development from the same source, prepalatalisation can still be considered a prerequisite for umlaut in that the allophonic pre-vowel altered first the end of the vowel of the first syllable, then changed the quality of the vowel itself (Pajusalu, Teras 2012, 170–171). Umlaut has been registered in southwestern dialects of West North Estonian and Island North Estonian, e.g. *Muhu*, Varbla *l\ddot{a}mp* ‘flatfoot’ $< *l\ddot{a}mpi$, Saaremaa, Tõstamaa *lemm* ‘disease which causes suffocation, e.g. asphyxia or diphtheria’ $< *l\ddot{a}mpi$ (Pajusalu, Teras 2012, 171; O’Rourke, Pajusalu 2016, 71). As pointed out in the literature, the distribution of umlaut in western North Estonian is still to be analysed in detail, although the occurrence of the sound change would coincide with other features under analysis.

4) Loss of *h*. In Livonian, $*h$ was lost in all positions, which is why it is suggested by Kallio to be an independent innovation in the language (Kallio 2016, 42), although he has tentatively suggested the loss of $*h$ after resonants as a Central Finnic innovation, e.g. $*tarha$ ‘fence’ $>$ Votic *tara*, North Estonian *tara*, Livonian *tar\ddot{a}* vs. South Estonian *tahr*, the South Estonian cognate showing the metathesis $*Rh > hR$ (Kallio 2014, 162). Still, *h* is a weakly articulated sound and therefore easily lost. Nevertheless, $*h$ was lost early in Livonian, as suggested by the 13th-century Livonian names documented

in Henry's chronicle of Livonia. Especially word-initial and word-final **h* was lost without a trace, as well as in a post-consonantal and post-diphthongal position, e.g. **jauho* > **javo* > Courland Livonian *jo'v*, Salaca Livonian *jao* 'flour', **laiha* > **laja* > Courland Livonian *lajā* 'thin', **tühjä* > **tühä* > **tūjä* > Courland Livonian *tijä*, Salaca Livonian *tüä* 'empty'. The last word shows a metathesis of **hj* because in a pre-consonantal position **h* was reduced to a glottal stop, e.g. **ahjo* > **aʔjo* > Courland Livonian *ōj*, Salaca Livonian *āi* 'oven'. The reduction took place also in an inter-vocalic position, e.g. **raha* > **raʔa* > Courland Livonian *rō*, Salaca Livonian *rā* 'money'. Being a short-lived sound in Livonian, the glottal stop soon became a suprasegmental feature of the preceding vowel known as the broken tone, giving rise to the tonal distinction in Livonian (cf. next discussed phonological feature below). Inter-vocalically between different vowels, however, the glottal stop became a **v* in a labial surrounding (preceding or following a labial vowel), e.g. **pühä* > **pūʔa* > **püva* > Courland Livonian *pivā*, Salaca Livonian *püa* 'holy', or a **j* in an illabial surrounding, e.g. **rahi* > **raʔi* > **raji* > Courland Livonian *raj* 'chair' (Kallio 2016, 42–43, 49–50). In North Estonian and Mulgi South Estonian, **h* has been lost word-initially. The loss of word-initial *h* has been noted to have occurred in West North Estonian in the 16th century, e.g. *alb* (vs. *halb*) 'bad' (Raun, Saareste 1965, 63). By the end of the 17th century, this change was widespread in North Estonian (Pajusalu 2013, 106; Raun, Saareste 1965, 65). Since the loss of word-initial **h* can be recorded to have been gradually lost in North Estonian, we cannot outright reject the possibility of diffusion between dialects in stead of a shared common origin for the features, but its first recorded occurrence in 16th-century West North Estonian would point to a Southwest Finnic origin of the spread. In addition, word-medial *h* has been lost in Southwest Finnic dialects, e.g. West North Estonian **kaheksa* > *kaessa* 'eight', Saaremaa sporadically *raa* 'money' (O'Rourke, Pajusalu 2016, 70). The distribution of the general loss of *h* in such positions co-occurs regionally with the related phonological phenomenon of tonal distinction, discussed below.

5) Tonal distinction. This phonological feature is related to the quantity opposition in South Finnic, in that in addition to the duration ratio between the first and second syllables, the long stressed syllable acquires a tonal opposition between long and overlong syllables. In the long quantity, the fundamental frequency contour is relatively level, whereas in the overlong quantity, the fundamental frequency contour has a high beginning followed by a fall and a low ending (Lippus et al. 2011). This feature further developed in Livonian into the broken tone, or *stød* (cf. Tuisk 2015). This broken tone is classified as South Finnic by Pajusalu and indeed it is present in both Courland and Salaca Livonian, Leivu South Estonian and Krevinian Votic (Pajusalu 2012, 205–206, cf. also O'Rourke, Pajusalu 2016, 70). In addition, West and Central Estonian (as well as Mulgi South Estonian) speakers are able to distinguish the overlong syllable

based on their fundamental frequency contour, which indicates that a similar development to the broken tone is present also in western North Estonian (Lippus, Pajusalu 2009). Although the broken tone in the southernmost Finnic languages has been explained to be due to influences from the Baltic languages by Winkler (2000; 2010), the North Estonian tonal distinction has been suggested to be due to Scandinavian influence (Pajusalu 2012, 206). The explanations may well be complementary, especially because the phenomena of tonal distinction and the broken tone can be ultimately derived from the same phonological process. Tonal distinction also strengthened word-initial lexical stress that led to the weakening of secondary stress, discussed below.

6) Vowel reduction in unstressed non-initial syllables. The Southwest Finnic languages have undergone extensive stress shifts leading to the shortening of long vowels and diphthongs in non-initial syllables as well as to apocope and syncope of vowels (Pajusalu 2012, 208). In Livonian, prior to this process, low vowels had merged into **a* and central vowels and labial high vowels had merged into **u* in non-initial syllables, leading to three vowels: **a*, **u* and **i*. After a cluster of a liquid and **v*, the high vowels **u* and **i* were lowered to **o* (leading to Courland Livonian *a* and Salaca Livonian *u*), e.g. **järvi* > **järro* > Courland Livonian *jōra*, Salaca Livonian *jaru* 'lake' (Kallio 2016, 43). Following this, non-initial **a* became reduced if preceded by a long vowel in the initial syllable, e.g. **puhdas* > **pu'udaz* > **pu'udəz* > Courland Livonian *pū'dōz*, Salaca Livonian *pūd(as) ~ pū(t)š* 'pure, clean'. High vowels **u* and **i* were lost in non-initial syllables unconditionally and conditionally, respectively, e.g. **roostu* > **roost* > Courland Livonian *rūost*, Salaca Livonian *ruost* 'rust'. If the first syllable was short and followed by a voiced consonant, the following high or mid-high vowel underwent apocope, resulting in a secondary broken tone, e.g. **sugu* > **su'g* > Courland Livonian *su'g*, Salaca Livonian *sug* 'sex, tribe'. If the second syllable had any long vowel, the vowel became reduced and the preceding consonant became compensatorily lengthened, e.g. **suguu* > **su'ggə* > Courland Livonian *su'ggō*, Salaca Livonian *sugg* 'sex, tribe.PART' (Kallio 2016, 55–58). In North and South Estonian, the vowel underwent apocope in the second syllable only if the first syllable was long, e.g. *tuul* 'wind' < **tuuli* vs. *tuli* 'fire' (cf. Courland Livonian *tu]* 'fire'). Similarly syncope in an unstressed second syllable in North and South Estonian occurred when the first syllable was long, e.g. *vahtra* 'maple.GEN' < **vahteran*, whereas in Livonian syncope occurred also when the first syllable was short, e.g. *sāgdō* 'frequent.GEN' < **sagudan* < **sagēdan* (Pajusalu 2012, 208–209). Based on Livonian words from Henry's chronicle of Livonian and Thomas Hiärne's wordlist, the Livonian apocope and syncope can be dated to have begun after the 13th century, but by the 17th century (Kallio 2016, 56–57).

7) Labialisation of **aa* > **oo*. This change took place only in Courland Livonian, but it still occurred earlier than the latest Common Livonian changes. Kallio defines the

The case for Southwest Finnic: areal or genetic grouping?

sound change as the raising **aa* > *õõ* (*õ* in Livonian orthography), e.g. **maa* > Courland Livonian *mõ*, Salaca Livonian *mā* 'land', **mansikka(s)* > Courland Livonian *mõškõz*, Salaca Livonian *māžik* 'strawberry', **raha* > Courland Livonian *rõ*, Salaca Livonian *rā* 'money' (Kallio 2016, 58). As mentioned above, Vaba has pointed to a similar phonological feature existing also in the Saaremaa dialect of Island North Estonian. The distribution of the sound change is not across the entire Saaremaa dialect, however, which is why it can be regarded as a case of diffusion between dialects, especially seeing as West Saaremaa had historically close contacts with the Courland Livonian villages until recent times (Vaba 1977, 250).

The phonological features under discussion have varying distributions and, therefore, varying ages. The labialisation of **aa* > **oo*, for example, would point to a relatively recent development, seeing as it is not shared by Island North Estonian entirely, which is why it can be considered an example of an areal feature. Yet, the other features do suggest a fairly early chronology for their developments, which leads to tentative suggestions about their origin. For example, depalatalisation in Livonian has been described by Lembit Vaba to be a substratal feature of Curonian, a West Baltic language which became extinct by the beginning of the 17th century (Vaba 2012, 178, 182–183). If so, then its occurrence also in Island and West North Estonian and Mulgi South Estonian could suggest a Curonian substrate not only in Livonian, but more generally in Southwest Finnic. A similar substrate in Southwest Finnic would point to a linguistic unity that would have formed the basis for further innovations within the dialect even though the innovations would have been due to adstrate contacts with other languages (for example, Scandinavian). The very fact that such otherwise typologically typical changes such as the loss of *h* occur in this geographic region and cluster together with other related phonological phenomena in languages adjacent to one another points to a linguistic unity akin to a dialect of its own.

4. LATER DIALECTAL LEVELLING IN ESTONIAN

The phonological similarities mentioned above would suggest a prior closer connection between Livonian on one hand and Island and West North Estonian on the other, suggested to be Southwest Finnic. The question of when the divergence of Southwest Finnic began is challenging to define, not least because the first comprehensive written sources of Livonian begin in the 19th century. Still, based on the 13th-century Henry's chronicle of Livonia and the 17th-century Hiärne's wordlist of Livonian and Estonian, Kallio dates Proto-Livonian to around the beginning of the 16th century (Kallio 2016, 61). This would be contemporary with the first written sources of North Estonian (Raun, Saareste 1965, 62), which allows for some absolute chronology to be made regarding the divergence of Southwest Finnic into Livonian and western North Estonian. Also, as mentioned above, some sound

changes such as vowel reduction are apparent only after the 13th century. Therefore, phonological changes leading to Livonian as a separate language can be suggested to have begun during the Middle Ages.

There is also documented evidence to indicate that dialectal features shared between Livonian and western North Estonian dialects have been more common in the dialects around the Gulf of Riga previously. Evidence for this is shown in the 18th-century dictionary by Salomo Heinrich Vestring, which has been studied by Pajusalu (2013). Vestring was the reverend of Pärnu from 1692 until his death in 1749. He gathered samples of the dialect in his parish around the Gulf of Pärnu into a dictionary called *Lexicon Esthónico Germanicum*, compiled at the beginning of the 18th century. In an article on this, Pajusalu analyses the linguistic features of the dictionary's dialect. The study shows that a large part of the vocabulary and grammatical features of the dialect have cognates in Livonian, but which have receded in the contemporary dialect of the region known currently as West North Estonian. An example of such linguistic features would be the vocalisation of *v*, for example in the word *arro* 'rarely' (Pajusalu 2013, 110, feature 25). This is the intermediate development suggested by Kallio for the vocalisation of *v* after a liquid in Livonian. In Salaca Livonian, this was preserved until the beginning of the 19th century, e.g. *sarro* 'horn' (Kallio 2016, 46–47; cf. also feature 6 in section 3 of this article). Noteworthy is also the existence of the raising *au* > *ou* in the dictionary by Vestring (Pajusalu 2013, 107, feature 7).

The dictionary by Vestring shows that the southwestern variant of North Estonian was distinct from the literary standard of Tallinn, on which Standard North Estonian is based, and that the local language around Pärnu was in the process of changing phonology and morphology. A terminus post quem for the influence of North Estonian on the language around Pärnu can be dated to the end of the 17th century, that is, during the Swedish times. The Swedish policy of Lutheranism at the time necessitated the creation of a Lutheran literary culture for the newly-conquered territories in the Baltics, and indeed the University of Tartu was founded in 1632 and a North Estonian grammar was compiled in Tallinn in 1637. The first Estonian peasant school outside Riga was founded by the Swedish in Pärnu in 1666 AD, where Salomo Heinrich's father, Johannes Vestring was its first teacher (Vunk 2014, 45–47). By the early 18th century, North Estonian had attained its present stage, literary North Estonian being increasingly used in publications both religious and secular (Raun, Saareste 1965, 68–69).

The linguistic shift occurring around Pärnu, as documented by Vestring, points to a closer linguistic relationship with Livonian and West North Estonian in the past and greater linguistic unity in the southern Finnic area still at that time (Pajusalu 2013, 117). This would be contemporary with the known historical events that took place around the Gulf of Riga, that is, the Livonian War of the mid-16th century, the Polish-Swedish War of

the 17th century and the Great Northern War of the early 18th century, the latter of which was contemporary with the plague epidemic of 1710 (Blumberga 2011, 127; Zemītis 2011, 103). Such events greatly decreased the existing population and the following repopulation by newcomers from elsewhere in the region, in addition to increasing serfdom had a profound effect on the divergence of the Southwest Finnic linguistic unity.

5. CONCLUSION

The South Finnic languages as part of the Finnic branch of the Uralic languages are well studied and have a long research history. This has resulted in our current understanding of their origin and relationship to one another. The first Finnic language to have diverged from Proto-Finnic was South Estonian, followed by Livonian. In addition, North Estonian and Votic have diverged early from one another, resulting in the four main dialects/languages of South Finnic. The divergence of these languages is shown by early isoglosses between the languages.

The South Finnic language area has, however, developed secondary areal features. These secondary features have a varying distribution in the languages, which indicates South Finnic to have been a dialect continuum despite the early divergence of South Estonian and Livonian. The secondary features are innovative when compared to North Finnic languages and they have been explained by contacts with languages from unrelated families, such as Baltic or Germanic.

Besides more widespread South Finnic innovations, other innovations have a more southwestern distribution. The languages that share such features are Livonian, Island and West North Estonian and Mulgi South Estonian. While the innovations are spread across modern language boundaries and can theoretically be explained by diffusion, they exhibit a similar distribution and a fairly early chronology. Such indicators would point to a linguistic unity around the Gulf of Riga that can be called Southwest Finnic. One possibility influencing the development of such a linguistic branch is a shared substrate language such as Curonian.

The dating of Southwest Finnic is based on both historical written sources as well as internal reconstruction of Livonian, the most southwestern Finnic language. The timespan for Southwest Finnic to have developed and existed can be suggested to have been between the 13th and 18 centuries AD, ending with historical and demographic changes around the Gulf of Riga.

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