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## POSSIBLE PREHISTORIC CONTACTS OF LIVONIAN\*

Livonian is the southeasternmost Finnic language. Kurland Livonian has from times immemorial contacted with the neighboring Kurland Latvian and Saaremaa North Estonian, especially with Jämaja and Anseküla, and to some extent with German. Although inhabitants of Kūolka had intercourse also with Ruhnu Swedes, it has left no noticeable traces in Livonian and Ruhnu Swedish. In addition to borrowings from Latvian, Estonian and German and structural influences of Latvian, Livonian shares the change *\*au > ou* with Jämaja and Anseküla Estonian, Ruhnu Swedish and a set of Latvian dialects (including all Livonoid dialects), cf. Vendell 1882 : 23—24 and Rudzīte 1993 : 159—160. Livonian language has also a set of less noticeable innovations common with different sets of related languages or dialects, sometimes just with geographically distant ones. It also has a set of words that show resemblance with languages that do not belong to the natural contact zone of Kurland Livonian. Any fact of the latter kind has three possible alternative explanations: it either points to prehistoric contacts (including ones conditioned by direct neighborhood) or it is occasioned by similar typological preconditions or it shows only an accidental resemblance with a certain fact of some other language.

Below a set of such facts is discussed. The Livonian data are presented in the Damberg—Karma's orthography with two additions: (a) the open  $\bar{o}$  from Proto-Finnic *\*ā* is extracted from  $\bar{o}$ , (b) *stød* or the laryngeal tone is indicated by an apostrophe ' after the syllable nucleus. In addition, in the Estonian cognates of Livonian items the syllabic quantity 3 is indicated by grave accent ` before the corresponding syllable.

1. As Livonian is spoken in the neighborhood of North Estonian and there has been a permanent flow of Saaremaa Estonians to the northern Kurland throughout centuries up to late 1920's so it is quite normal that Livonian has a set of Estonian borrowings. Livonian shares the jussive mood based on the former 3rd person imperative forms with North Estonian (there are no reliable data on the extent of spread of this category in the Estonian dialects), cf. Livonian *ma mīgō'* '[one has ordered, compelled or otherwise caused that] I be selling', and the marker of the quotative mood based on the actor's name in *\*-ja* with Häädemeeste Estonian (spoken on the west coast of the Gulf of Riga north from the Estonian-Latvian border), cf. Livonian *ma mīji* '[one has informed that] I am selling'. There exist 13 changes that are of especial interest, cf. Table 1, where the different patterns of distribution of

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tribution of common innovations are contrasted as clearly as possible, and Figure 1 for a generalized topology of the patterns.

	Li	Es	Es	Es	Es	Es	Es	Vo	Vo	Vo	Es	Fi	In	In	Fi	Fi	Ka	Ka	Ka	Ka	Ve	Ve	Ve	Ve	Σ
	W	C	SW	E	NE	S	S	E	W	K	Co	N	LL	E	W	E	N	S	A	Lu	N	NE	C	S	
1	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	23
2	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	19
5	+	+	+	+	+	+		+	+	+	+	+	+												13
6	+	+	+	+	+	+		+	+	+	+	+													11
9	+	+	+	+	+	+		+	+	+	+	+													9
12	+	+	+	+	+		+																		6
4	+	+	+	+											+										5
10	+	+	+		+	+	+	+	+	+															9
11	+	+		+		+	+																		5
13	+					+																			2
3	+							+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	16
7	+							+	+	+			+	+			+	+	+	+	+	+	+	+	13
8	+																	+	+	+	+	+	+	+	8
Σ	13	9	8	8	7	6	8	9	8	6	5	4	5	4	4	3	3	5	5	4	4	4	3	3	138

Table 1. Distribution of common innovations of Livonian and other Finnic dialects.

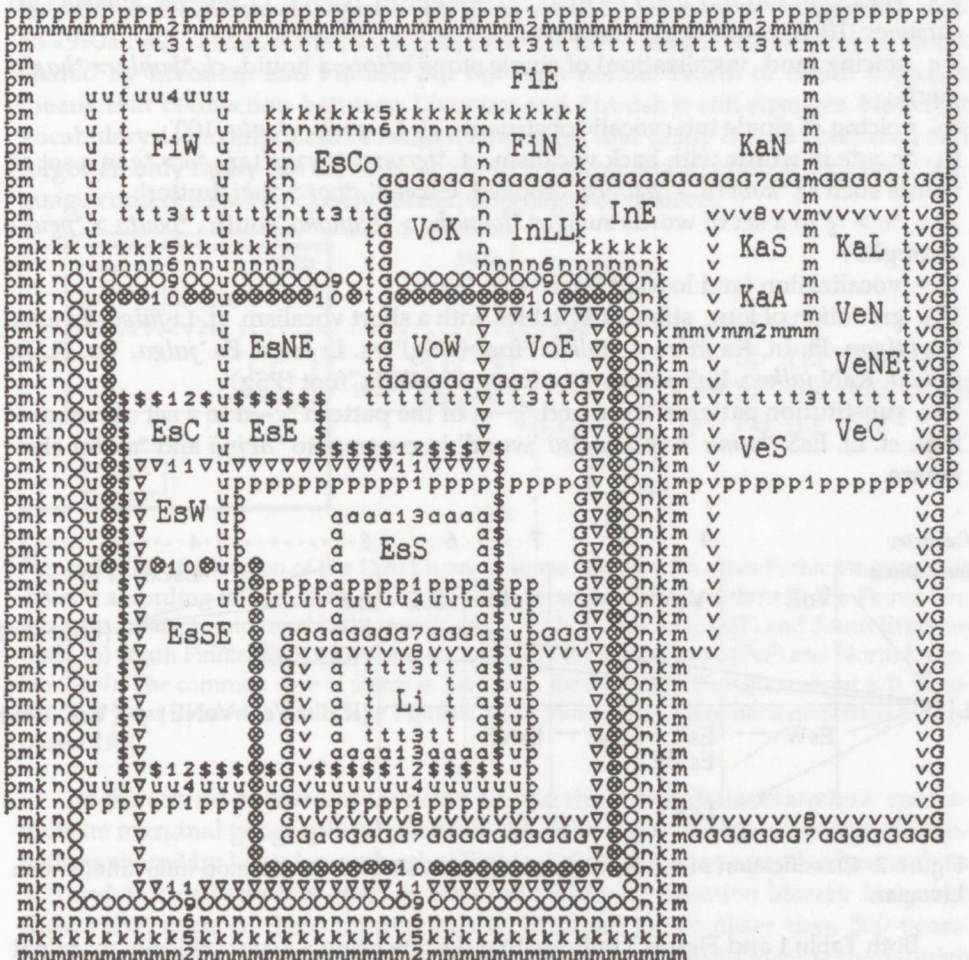


Figure 1. Common innovations of Livonian and other Finnic languages.

The 13 patterns, their order numbers in Table 1 and Figure 1, and their border symbols in Figure 1 are as follows:

- 1<sub>p</sub> the 3rd person singular of the present indicative in *\*-pi*, cf. Livonian *āndab* < *\*antapi* 'gives' in contrast to South Estonian *and* < *\*anta*;
- 2<sub>m</sub> weakening (and loss) of intervocalic single stops after an unstressed syllable (or suffixal gradation), cf. Livonian *lindõ* < *\*lintuta* < *\*lintuta* 'foot (PSg)' and Finnish *lintua* in contrast to Veps *lindud*;
- 3<sub>t</sub> alternation of original geminate stops with single stops (or the radical gradation of geminate stops) after a short vocalism of a stressed syllable, cf. Livonian *kattõ* [*kattõ*] 'to cover' : *katāb* [*katāv*] 'he covers' in contrast to North Estonian *katta* [*katta*]: *katab* [*kattav*]; cf. also the Livonian alternation of original single consonants with geminate stops, induced by the alternation of geminate stops as in *saddõ* [*sa'ddõ*] 'to fall' : *sadāb* 'he falls';
- 4<sub>n</sub> the genitive plural form of a nonpronoun nominal contains one single pluralizer *\*-t-*, cf. Li *jālgad*, EsN *jalgade*, FiW *jalkain* < *\*jalka-t-en* 'feet (GPI)' in contrast to EsS *jalgu*, FiE *jalkojen*, VeN *dõuggeide* < *\*jalka-i-t-en* where two pluralizers *\*-t-* and *\*-i-* occur;
- 5<sub>k</sub> rise of the instrumental/comitative case suffix from the postposition *\*kanssa* 'with', cf. Li *sūkõks*, EsN *suuga*, Vo *sūkā*, In, FiN *sūṅkā* 'with mouth';
- 6<sub>n</sub> vocalization (and loss) of final *\*-n*, except in 1sg, cf. Li *kim*; Es *kümme*, Vo *tšümme* '10' in contrast to Fi *kymmen*;
- 7<sub>G</sub> voicing (and vocalization) of single stops before a liquid, cf. *\*kakla* > *\*kagla* 'neck';
- 8<sub>v</sub> voicing of single intervocalic obstruents, cf. Li *sadā* < *\*sata* '100';
- 9<sub>o</sub> *\*e* > *\*ɛ* in words with back vocalism, cf. *\*terva* > *\*tɛrva* 'tar', *\*o* > *\*ɛ* in a set of words such as *\*kovera* > *\*kɛvɛra* 'crooked, curved', *\*voi* > *\*vɛi* 'butter';
- 10<sub>o</sub> *\*o* > *\*ɛ* in a set of words such as *\*lounako* > *\*lɛunako* 'south', *\*pouta* > *\*pɛuta* 'drought';
- 11<sub>v</sub> vocalization (and loss) of final *\*-n* in 1sg;
- 12<sub>s</sub> gradation of long stressed syllables with a short vocalism, cf. Li *jālga*, Es *jala*, Vo *jalga*, Fi, In, Ka *jalan* < *\*jalkan* 'foot (GSg)' vs. Li *jalgõ*, Es *jalga*, Vo, Fi, In *jalkaa*, KaN *jalkoa*, KaS *jalgoa* < *\*jalkata* < *\*jalkata* 'foot (PSg)';
- 13<sub>a</sub> substitution patterns *\*a—a* and *\*ɛ—a* of the pattern *\*e—a* in a set of borrowings, cf. Li, EsS *\*haina* 'hay', *\*metsa* 'wood' in contrast to *\*heinä* and *\*metsä* elsewhere.

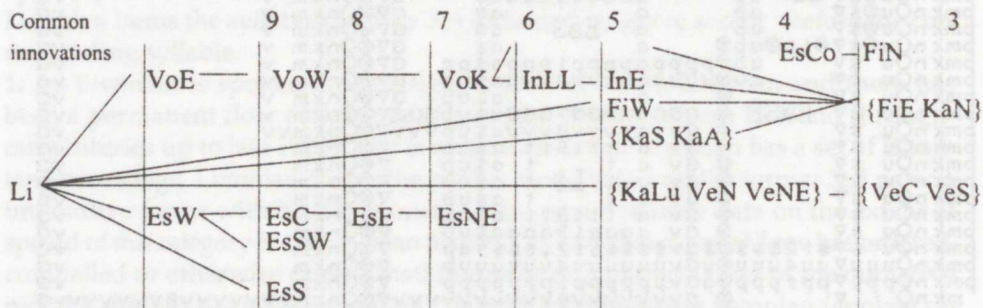


Figure 2. Classification of Finnic dialects on the basis of their common innovations with Livonian.

Both Table 1 and Figure 2 indicate that despite being a geographically marginal Finnic language, the distribution patterns of Livonian are rather those of a kernel

Finnic language than those of a marginal one. Livonian has common innovations with all other Finnic dialects even when all Proto-Finnic or general Finnic innovations are not being considered. Moreover, all the other Finnic dialects can be classified into five sets such that there exists in each set just one dialect possessing all innovations of the remaining dialects of the set. When cyclically applying the similar procedure for each such dialect we receive the structure in Figure 2. Figure 2 reflects also the relative distance of each dialect or language from Livonian on the basis of the number of common innovations.

Note that East Finnish and North Karelian are members of four subsets of three different dialect sets. This is due to the seeming antiquity of East Finnish and North Karelian: the geographically northeasternmost Finnic dialects are situated so far from the contact zone of Livonian that they share only a few innovations that have taken place when the Finnic space was relatively homogeneous. Still the classification is an strong argument for prehistoric contacts of Livonian with those Finnic dialects that are now separated from Livonian by Estonian, Latvian and Russian. This result finds some support from a result obtained on the basis of Eino Koponen's overview of the common vocabulary of Estonian and Livonian (1990): in my comment to Koponen 1990 I demonstrated that Livonian is central as to other Finnic languages having strong connection with North Estonian, South Estonian and Finnish, cf. Figure 3 (a slightly modified version of the figure in Viitso 1990a : 42). The fact that Koponen 1990 has not counted the number of stems shared by Livonian and Finnish but not with neither North or South Estonian means that connection between Livonian and Finnish is still stronger. Note that vocabulary as a component of human languages that easily can be borrowed and forgotten only rarely can serve as a basis of a meaningful hypothesis on direct language contact between closely related languages or dialects.

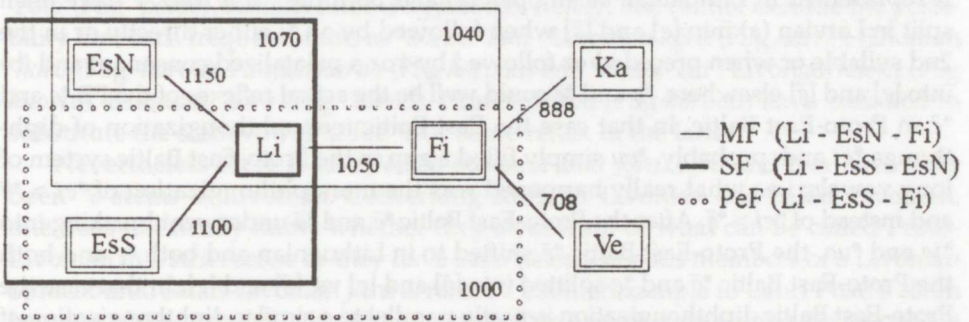


Figure 3. The distribution of the 1170 Livonian stems shared with other Finnic languages or dialects according to Eino Koponen (1990) and three possible partitions of the Finnic languages or dialects into two blocks, notably into (a) Marine Finnic (MF) and South Estonian (EsS), (b) South Finnic (SF) and Finnish (Fi), and (c) Peripheral Finnic (PeF) and North Estonian (EsN). The common core of stems in Livonian, Estonian and Finnish is about 670. Karelian and Veps behave as dialects of Finnish; Votic and Ingrian have been discarded by Koponen 1990.

As the central position of Livonian among the Finnic dialects anyhow contradicts its marginal geographical position. When trying to estimate the age of innovations shared by Livonian with other Finnic dialect one must consider innovations 5, 6 and 11 relatively late ones: at least the history of Estonian literary language shows that none of these innovations in Estonian is not older than 500 years. Hence it is highly probable that Livonian, Estonian, Votic and even some Finnish dialects have lately formed Sprachbunds where maybe different Estonian dialects

have served as radiation centers of innovations. Connections of Livonian with other Finnic dialects are older. Although innovation 3 may well be a set of independent local changes, it is not excluded that Livonian has not always been separated from more distant Finnic dialects by an Estonian curtain.

2. Livonian shares with South Estonian and Lappic the diphthong *\*ai* in *\*haina* < *\*šaina* 'hay' and *\*a* in the stem *\*nana* 'nose' (Viitso 1983 : 275), cf. Livonian *āina* : PSg *ainõ*, South Estonian *hain* : PSg *haina*, North Lapp *suov̄dne*, and Livonian *nanā* (< *\*nana*), Mulgi South Estonian *nana*, South Lapp *njuõnie*, Ume *njuennee*, Arjeplog *njuonnie*, North Lapp *njunne* (here and below the data from different Lappic dialects are presented according to Lehtiranta 1989). The most usual South Estonian equivalent of the stem for 'nose' is *nõna* from *\*nena*. The corresponding stems in all other Finnic dialects go back to *\*heinä* < *\*šeinä* and *\*nenä*. *\*šaina* and *\*šeinä* were borrowed from Proto- or Pre-Baltic when Proto-Finnic was already split. It is unclear whether (a) *\*šaina* and *\*šeinä* represent different patterns of adoption of the unique Proto-Baltic (PB) pattern *\*eiCa* that contradicted the Finnic vowel harmony or (b) *\*šaina* and *\*šeinä* were borrowed at different stages of Pre-Baltic where in certain stems the Proto-Indo-European (PIE) diphthong *\*oi* has been subject to a series of changes, cf. *\*oi* > *\*ai* > *\*ei* > *\*ē* > *\*ie*, cf. Lithuanian *šienās* 'hay' and Latvian *siens* from Proto-East Baltic *\*šienas* < *\*šēnas* < *\*šeinas* < *\*šainas* << PIE *\*koino-*, cf. also Greek *koiná*, or (c) *\*šaina* and *\*šeinä* were borrowed from different of Pre-Baltic dialects representing different stages of development of the PIE diphthong in Baltic. Concerning Lappic, it is not clear whether it has applied the pattern *\*ai(C)Ca* as a substitute for the pattern *\*ei(C)Ca* of a source language or it has borrowed the stem directly from Livonian, South-Estonian or Baltic.

Note that e.g. Zigmas Zinkevičius (1980 : 86, 88) has reconstructed for Proto-East Baltic *\*ē* as a reflex of PIE *\*ei* and *\*ē* as a reflex of PIE *\*ē*. As the PB short *\*e* (*\*ĕ*) is represented in Lithuanian as an open [ɛ] and both the PB *\*e* and *\*ē* have been split in Latvian (a) into [e] and [ē] when followed by an *\*i* either directly or in the 2nd syllable or when preceded or followed by *j* or a palatalized consonant and (b) into [ɛ] and [ē] elsewhere. *\*ɛ* and *\*ē* could well be the actual reflexes of the PB *\*e* and *\*ē* in Proto-East Baltic. In that case the East Baltic monophthongization of diphthongs *\*ei* and, probably, *\*ou* simply filled a gap in the Proto-East Baltic system of long vowels: i.e., what really happened was the monophthongization of *\*ei* > *\*ē* and instead of *\*ei* > *\*ē*. After the Proto-East Baltic *\*ē* and *\*ō* underwent breaking into *\*ie* and *\*uo*, the Proto-East Baltic *\*ē* shifted to in Lithuanian and both *\*ɛ* and both the Proto-East Baltic *\*ē* and *\*ɛ* splitted into [ē] and [ɛ] vs. [ē] and [e]. In that case the Proto-East Baltic diphthongization is partly parallel to a similar diphthongization of Proto-Finnic mid vowels *\*ē*, *\*ō*, *\*ō̄* in Livonian, a Central, East, North-East and Coast Estonian, Finnish and Karelian (and maybe to that of Proto-Finnic *\*e*, *\*o*, *\*ō* in Livonian and Leivu South Estonian) and the splits of *\*ē* and *\*ɛ* parallel to the similar splits of Proto-Finnic *\*ā̄* and *\*ā̄* in Livonian. Differently from the Latvian splits where *\*ē* > *ē* and *\*ɛ* > *e* are shifts, the Livonian splits *\*ā̄* > *ē* and *\*ā̄* > *e* are mergers into *\*ē* and *\*e*.

3. Livonian shares to a substantial extent with Lappic the pattern of adoption of the Lappo-Finnic stem for 'lake' from Baltic, cf. Livonian *jōra*, West Livonian [jāra] : PSg *jarrõ*, South Lapp *jaavrie*, Arjeplog *jaavrie*, North Lapp *jav're*, Lithuanian *jaura* 'bog', Latvian *jūra* 'sea; lake' and, by the way, also Modern Armenian *jūr* 'water' from Grabar *jour* (cf. also Tarvel 1979 : 31–32, Karulis 1992 : 362–363). Here Livonian, (a) differently from Lappic but similarly to other Finnic dialects, has metathesized the postvocalic sequence *ur* and (b) similarly to Lappic but differently from other Finnic dialects has preserved the quality of the vowel of the initial syl-

lable and has not merged the stem into \**e*-stems. Other Finnic dialects, except Kihnu Estonian and proper Votic, have maybe assimilated the back vowel \**a* of the initial syllable to *ä* under the influence of \**j*- and have substituted the stem vowel \**e*- (in nominative sg \**-i*) for \**a*. Kihnu Estonian and (proper) Votic, however, have retained \**a* of the first syllable, cf. Kihnu *ˈjɑrv* (GSg *jarvõ*), Votic *jarvi* (GSg *jarvõõ* < \**jarven*) despite of having substituted the stem vowel *e*- for \**a*-; *järvi* (GSg *järvee*) in Vaipooli (proper) Votic instead of *jarvi* reflects the characteristic Ingrian and Narvusi Finnish influence in that area.

In addition to Livonian *jõra* there are some more words that have an \**a*-stem in Livonian and Lappic and an \**e*-stem elsewhere in Finnic, e.g., Livonian *sõra* 'antler, horn' (PSg *sarrõ*), South Lapp *tjoårvie*, Arjeplog *tjåårvie*, North Lapp *čoårve*; Livonian *tõla* 'winter' (PSg *tallõ*), South Lapp *daalvie*, Arjeplog *taalvie*, North Lapp *dalve*, cf. Estonian *sarv* (PSg *sarve*), Finnish *sarvi* (PSg *sarvea*); Estonian *talv* (PSg *talve*), Finnish *talvi* (PSg *talvea*). (Note that the final *-a*/*-ä* in the Finnish PSg forms is a partitive case ending.) According to Lauri Posti (1939 : 51—52) these and some other Livonian *a*-stems, whose cognates both in Lappic and elsewhere in Finnic go back to \**e*-stems, result (a) either from late regular developments or (b) from late analogy developments because such nouns have *u*-stems in the extinct Salāts Livonian (*Salis-Livisch* in German), cf. (a) Salāts Livonian *jāru* 'lake', *saru* 'antler, horn' (NPl *sarud*), *talv* 'winter' and (b) Livonian (Sjögren—Wiedemann) *īra* 'roe' (PSg *īrrõ*) vs. South Lapp *sarve*, Arjeplog, Lule *sarve*, North Lapp *sårvå* 'elk', Estonian *hirv* (PSg *hirve*) (colloquial) 'roe', (biol.) 'deer', Finnish *hirvi* (PSg *hirveä*) 'elk'; Livonian *pīla* 'cloud' (PSg *pillõ*), vs. South Lapp *balve*, Arjeplog, Lule *palva*, North Lapp *bålvå*, Salāts Livonian *pīlu* (NPl *pīlud*), Estonian *pīlv* (PSg *pīlve*), Finnish *pilvi* (PSg *pilveä*); Livonian *pūola* 'knee' (PSg *põllõ*), South Lapp *buolve*, Arjeplog, Lule *puolva*, North Lapp *buolvå*, Salāts Livonian *polu* (NPl *polud*), Estonian *põlv* (PSg *põlve*), Finnish *polvi* (PSg *polvea*). Really, one cannot exclude the possibility that such frequent stems as \**karva* 'hair', Livonian *kõra* (PSg *karrõ*), Estonian *karv* (PSg *karva*), Finnish *karva* (PSg *karvaa*) and \**korva* 'ear', Livonian *kūora* (PSg *kuorrõ*), Estonian *kõrv* (PSg *kõrva*), Finnish *korva* (PSg *korvaa*) have attracted to substitute the stem vowel \**a* for \**e* or some reflex of the latter.

Nevertheless there is no need to suppose that *jõra*, *sõra* and *tõla* have ever been \**e*-stems in Livonian. Concerning Kurland Livonian and Salāts Livonian, one does not firmly know whether they stem from of what can be called Proto-Livonian in a strict sense or they have been heterogeneous members of a Livonian Sprachbund. Salāts Livonian *jāru* is rather a counterexample to Lauri Posti's claim because of the vowel *ä* in its initial syllable. One cannot even ascribe the rise of *ä* in this stem to the influence of the neighboring (North) Estonian: the corresponding stem has lost its *v*. cf. *jāri*, both in the closest mainland dialects (southern parts of Häädemeeste and Saarde) and in the insular dialects, except Kihnu.

Actually, given that \**jarvi*- : \**jarve*- ~ \**järvi* : \**järve*- (and Pre-Livonian \**jarva*) comes from Baltic \**jaura*, \**sarvi* : \**sarve*- (and Pre-Livonian \**sarva*) comes from Proto-Finno-Ugric \**šorva* and \**talvi* : \**talve*- (and Pre-Livonian \**talva*) comes from Proto-Finno-Ugric \**tälwä*, the main problem concerning these three stems is not the rise of the stem-vowel \**a* in Livonian but the rise of the stem vowel \**e* elsewhere in Finnic. Hardly there exists a natural sound law in Finnic to explain the case. Maybe the solution is in the history of Lappic. Lappic has preserved the distinction of \**a*-/\**ä*- and \**e*-stems despite the merger and later shifting of \**e*, \**i* and \**ü* to *â*. In Lappic, \**a* and \**ä* of non-initial syllables have been lengthened and merged in \**ä* (except some cases that are irrelevant for the present discussion), and shifted to \**e* (cf. Viitso 1985 : 143—144 for a historical explanation of the history of

Lappic vowel system that does not postulate unnatural intermediate vowel systems). So the simplest explanation of the appearance of otherwise unexplainable \*e-stems in the majority of Finnic dialects is that \*jarvi- : \*jarve-, \*sarvi : \*sarve-, and \*talvi : \*talve- owe their stem-vowel \*e to Lappic. The direct borrowing of the stem \*talve- from Lappic would explain also the occurrence of the vowel *a* instead of \*ä in the initial syllable of \*talvi : \*talve- (cf. Tálos 1987 : 77–78). The Lappic change \*ä > \*a in the initial syllables, which has occurred except when followed by \*i in the 2nd syllable, is considerably older than the rise of the Lappic stem vowel \*ē, hence one cannot even rule out the role of Lappic in the appearance of Pre-Livonian \*talva.

4. Livonian has a restricted *i*-metaphony (or *i*-umlaut) of back vowels in initial syllables comparable to that in Lappic and Germanic. In a set of Livonian stems, short \*a, \*o, \*u in initial syllables were fronted to ä, ö, ü when followed by a non-suffixal \*i in the following syllable or by a consonant cluster ending in \*j. More exactly, it is highly probable that *i*-metaphony in Livonian Lappic and Germanic has its roots in palatalization of consonants before the vowel \*i of an unstressed second syllable (Korhonen 1969). Such palatalization occurred after both short and long vowels. Later short back vowels \*a, \*o, \*u were fronted, i.e. palatalized, before palatalized consonants which then became depalatalized. Differently from Germanic, where the process was triggered also by a suffixal \*i as in \*mannir 'men' > \*männir, the Livonian metaphony was never conditioned by a suffixal \*i. School examples of the Livonian metaphony are *täm* 'oak', *te'b* 'sickness' and *ti'g* 'support'; in *te'b* and *ti'g* the vowels *e* and *i* appeared as a substitute for earlier *ö* and *ü* under the influence of Latvian first in recordings about a century ago.

The input form	*tammi	*tobi	*tugi
Consonant palatalization before *i	*tam̃mi	*tob̃i	*tug̃i
Vowel fronting	*tämm̃i	*töb̃i	*tüg̃i
Non-dental consonant depalatalization	*täm̃mi	*töbi	*tugi
Close vowel apocope	*täm̄	*tö'b	*tü'g
Final lenis consonant devoicing		tö'b	tü'c
Delabialization of front labial vowels		te'b	ti'c
Modern orthographic form	täm	teb	tig

Metaphony in Livonian has important restrictions that point to an early interruption of the spread of metaphony. Firstly, back vowels of initial syllables have remained unchanged before a palatalized single dental (mostly, from a former consonant cluster ending in \*j), cf. *paḡā* 'pillow' (PSg *pa'ḡḡō*), *uḡ* 'sleep', *tu'ḡ* 'fire', *kuḡē* 'devil' (PSg *ku'ḡḡō*) from \**padja*, \**uni*, \**tuli*, \**kurja*. Secondly, in some series of words the palatalized consonant was fissioned into a sequence of *i* + c o n s o n a n t; as a result there is a series new polyphthongs, cf. (a) *aigā* [*a'igā*] 'edge' (PSg *a'igō*), *kuo'ig* 'ship' (NPl *kuo'igid* [*ku'o'igiv*]), *ru'isk* 'fist' from \**aḡa* < \**agja*, \**koḡi*, \**rušik(ka)*-; (b) *e'žmi* [*e'žmi*] 'first' (GSg *e'žmiz*), *ke'ž* [*ke'ž*] 'hand' (PPl [*ke'žži*]), *tu'ož* [*tu'o'ž*] 'truth' (PPl *tu'ožž* [*tu'o'žž*]); (c) *lḡ'igi* 'asunder' (adv.) from \**lḡ'gi* < \**lāhki* < \**lahki*, *rūim* 'place' from \**rūm* < *rūmi*; (d) *ḡik* 'hook' (NPl *ḡikōd*), *brūikō* 'to use', *strḡip* 'penalty, fine' from \*(h)*ākk-*, \**brūkk-*, \**strāpp-*. Here we have (a) short mono- or polyphthongs followed by *i* resulting from fission of \**ḡ* or \**š*; (b) short mono- or polyphthongs optionally followed by *i* resulting from fission of \**ž* (< \**ž*i < \**ži* < *zi*) and, in West Livonian and Īra, of \**m*, cf. [*lu'im*] 'snow' from \**lu'm* < \**lumi* instead of East Livonian [*lu'm*]; (c) long monophthongs followed by *i* resulting from fission of a palatalized single resonant or a palatalized lenis stop; (d) long monophthongs followed by *i* resulting from fission of \**pp* or \**kk*. Here the series (d) consists of relatively late borrowings and series (a) and (c) include several late borrowings. Note that cases

(b) are not reflected in the conventional orthography because as late as in 1970's some speakers of Livonian the fissioned forms were either dialectal or optional. In conditions of the Livonian-Latvian bilingualism, Livonians are clearly aware of the "historical" rule even nowadays. So one can apply a somewhat modified version of the historical sequence of rules when adopting e.g. Latvian family names, e.g. *Sprogis* > *Sprūoig*.

5. Livonian shares or seems to share a set of innovations that are exceptional for a Finnic language with Mordvinic languages.

(1) Livonian and Mordvinic share the term for 'apple', cf. Livonian *umārz*, Erza *umar*, Moksha *mar*. Note that both the Erza and Moksha words have also the meaning 'berry'. This gives a good reason to believe (a) that Moksha *mar* is a direct cognate of the Finnic stem *\*marja* (represented in Livonian as *mōra* (East Livonian [*mōra*], West Livonian [*māra*] : PSg *maṛṛō*) and (b) that Livonian *umārz* and Erza *umar* words are etymologically compounds whose first component *u-* is related with the first component *ui-* of the South Estonian word *uibu* 'apple tree' (the second component *-bu* comes from the Finnic stem *\*pū* 'tree').

(2) Livonian and Mordvinic share the stem *\*valta*, cf. Livonian *vālda* 'white' : PSg *valdō*, Erza *valdo* 'light, clear (adj.)', Moksha *valda*. Other Finnic languages share their stem *\*valketa* 'white; light' with Mari, cf. Hill Mari *walyḃḃ* 'light, clear (noun, adj.)', Meadow Mari *wolyḃḃ*. Cf. also Viitso 1985 : 93.

(3) Livonian and Mordvinic have a dative case ending in *-n* or *-ōn* in Livonian, *-nen* in Erza and *-nd'i* in Moksha. Note that the first consonant *-n* in the Mordvinic case suffixes is probably identical with the genitive suffix and that the Livonian dative suffixes always follow, correspondingly, a vocalic or a consonantal genitive stem (Livonian genitive case forms have no case suffixes). In Livonian, only dative and instrumental case suffixes always follow the genitive stem. Moreover, an adjective, attributed to a noun in dative, is always in genitive, cf. *piški laps* 'little child', GSg *piškiz lapsōn*.

(4) Livonian and most Mordvinic dialects have similar cognates of the Proto-Finno-Ugric stem for 'ice', cf. Livonian *jei*, Erza *ej*, Moksha *āj ~ jāj* from one hand and North Estonian, Votic, Ingrian, Finnish *jää* from the other. Still it is possible that Livonian, in contrast to other Finnic languages, has here partially assimilated the vowels of the former 1st and 2nd syllables after the loss of the internal consonant *-ŋ-* in the stem for 'ice'. Note that among Finnic dialects, Võru South Estonian *jägi* has still a reflex of *-ŋ-* at the onset of the 2nd syllable and has preserved the vowel *i* in the 2nd syllable. On the other hand, Alatur' and Nižnepjansk Erza dialects have still preserved *-ŋ* in the stem *eŋ* and e.g. Isakly Erza has *ev* instead of *ej* (Keresztes 1986 : 37; Rédei 1996 : 109); hence, it is possible that *-j-* in *ej*, *āj ~ jāj* is a reflex of the consonant *\*-ŋ-*, conditioned by the neighboring front vowel(s). In the latter case the exceptional similarity of Livonian and Mordvinic stems for 'ice' appears as accidental.

6. Livonian, South, Aunus and Lude Karelian, and Veps share with Mordvinic voicing of the Proto-Finno-Ugric single *\*-t-* and *\*-s-* in voiced environments. Still in Livonian, South, Aunus and Lude Karelian, and Veps this voicing is related with voicing of all non-initial voiceless single stops and sibilants, i.e. of at least *\*-p-*, *\*-k-*, *-s-*; it is problematic whether (a) *-š-* and *-ž-* in these dialects result from split of *\*-s-* and *\*-z-* or (b) *-ž-* results from voicing of *\*-š-*; at least in Livonian the rise of *-ž-* is not uniform and, hence, it is probably relatively late. In Mordvinic, however, *\*-p-* has been merged into *\*-v-* and *\*-k-* into *\*-v-* or *\*-j-*; these changes must have occurred before the voicing of *\*-t-* and *\*-s-*. It is widely believed that this voicing in Finnish is late and caused by Latvian influence in Livonian and Russian influence else-



where. In spite of Arvo Laanest's very categorical critics I still maintain that the peculiarities of gradation in South and Aunus Karelian indicate that voicing in these dialects has occurred relatively early. Moreover, there is no need to look for external influences, Lappic points to the fact that voicing could be a drag chain caused by the spirant \*-δ-.

7. It is possible that Livonian shares with Permic languages the stem for 'hare', cf. East Livonian *kõps* : NPI *kõpsūd* (West Livonian *kips* < *kiips* < \**kõps*) and Komi *keć*, Kukmor Udmurt *keć*. If this is true then the common protoform was \**kepćz* (Viitso 1993). Even when the Livonian and Permic words have a common source, one must remember that the stem \**jānes* 'hare' shared by all other Finnic dialects including Salāts Livonian, cf. *jens*, has no cognates in other Uralic languages; hence the stem \**jānes* is an innovational one and may well have displaced just the stem shared now by Livonian and Permic; in that case Livonian *kõps* cannot be used as an argument for Livonian and Permic contact.

8. Livonian is the northernmost language spoken in the area where the Baltic amber is usually found. It has its own term for 'amber', cf. *eļm* ~ *eļmaz*, whose plural *eļmōd* has the meaning 'pieces of amber; necklace of amber'. Still this term has etymological cognates elsewhere in Finnic: Estonian *helmes* 'bead; drop of sweat or water' (NPI 'helmed' 'beads; necklace of beads'); Votic *elmi* (NPI *elmed*); Finnish *helmi* 'bead', *helme* 'bead; fish scale'; Ingrian *helmi* 'bead'; Karelian *helmi* 'bead; pearl; drop of water'; Lude *hölmü*, cf. SSA 154. Paul Ariste (1962 : 17) considers the Finnic stem a substratal one; later he considers both the Finnic word for amber and its Baltic equivalent, cf. Lithuanian *gintāras* ~ *gūntaras*, Latvian *dziņtars*, loans from different Proto-European languages spoken in the Baltic region (1981 : 10–11).

According to Paul Ariste (1959; 1962 : 17) \**helmes* is the ancient Finnic term for amber. Actually, one does not know whether \**helmi* or \**helmes* was first 'amber' or 'bead'; it is even not very important. Estonian compounds *merihelmes* 'sea-bead' (attested in 1660 as *merrihelmes*) ~ *mere-helmes*, literally 'bead of the sea' (attested in Wiedemann 1869) are clearly secondary terms that do not obligatorily open the original meaning of the component *helmes*, although amber is sometimes found on the coast of the Estonian island Saaremaa.

Uku Masing (1978) suggested that Akkadian *elmešu*, *ellimešu*, *ilmešu* 'amber' was a word of Finnic origin in Akkadian. Regretfully, the meaning of *elmešu* is not clear, some authors translate it as 'diamond'. The main and a good argument for the meaning 'amber' is a text, specially discussed by U. Masing (1978 : 28) after B. Landsberger (1967 : 198), in which the god Marduk complained that after the earth had been thrown into confusion by Era, the place *ša* <sup>giz</sup> *MES el-me-ši* had changed beyond recognition. The Akkadian phrase can be interpreted as 'where *mes*-trees [bearing] *elmešu*'. As we know, the Baltic amber is the resin of prehistoric conifers known as *Pinus succinifera*; by the way, this fact is reflected in modern Estonian *merevaik* and Finnish *meripihka*, literally 'sea-resin'. If the meaning of *elmešu* really was 'amber' then already Akkadians knew that amber was connected with trees.

Michael Heltzer (1997) has dealt with possible prehistorical contacts of ancient Semites and the Baltics relying on the works on the Baltic amber in the Eastern Europe and Near East (e.g., Curt W. Beck (1985), Helen Hughes-Brock (1985), Joan Markley Todd (1985)) and on a bronze idol belonging to the Canaanite culture (1550–1200 BC) found in Šernai, Lithuania (formerly Schernen, East Prussia) in 1900 and has accepted Uku Masing's hypothesis that the Finnic and Akkadian words for amber are related. M. Heltzer once more connected Akkadian *elmešu* and Hebrew *hašmal* 'amber'; this old etymology was discussed also in Masing 1978 (24–26). Aahron Dolgopolsky (1996) finds in his postscript to M. Heltzer's article that this ety-

mology faces a problem of chronology and proposes that the name for amber reached Akkadian and Canaanite independently. Both M. Heltzer and A. Dolgopolsky claim that the Akkadian (and Hebrew) words for amber are loans from Palaeo-Baltic just as the Finnic ones. M. Heltzer connects *helmes* with P. Ariste's theory that it was taken to Finnic from the people of the proto-*satem* group who reached the Baltic area not later than the beginning of the 3rd millennium BC (Heltzer 1997 : 33). A. Dolgopolsky (1997 : 38), however, points that "the final element *-es*, *-as* in Estonian and Livonian cannot be explained as an original proto-Balto-Finnic heritage and can be accounted for if we suppose that the Estonian and Livonian words are loans from an unknown source, and from Estonian and Livonian the word spread to Finnish, Karelian and Votic with loss of the *-es* element". It should be noted, however, that P. Ariste's hypothesis about a proto-*satem* substrate concerned only old loans from Indo-European that had no parallels outside the Finnic and Lappic space and could not be handled as ones from Baltic or Germanic. The claim on the *satem*-substrate was based solely on the etymology of Finnic stem *\*sūri* 'great' by Osmo Mäkinen who connected the stem with an Aryan stem beginning in *ś* in Sanskrit, cf. *śūra* 'hero'; according to Jorma Koivulehto, the Finnic stem has been borrowed from Germanic.

8.2. The Livonian and Estonian words for amber create problems in two respects.

Firstly, the Livonian stem *ēļmaz* has an unexpected palatalized lateral *ļ* [ʎ]. The unexpected palatalization could be considered as an argument for the unique rise of the stem *ēļmaz* from the shorter stem *eļm* < \**helmi*; in that case, however, one should expect that. The most probable protoform of such rise, the NPL form of *eļm* were not *eļmōd*, but †*eļmōd* if not †*ēlmōd*. Therefore rise of the nominative form *eļm* and the corresponding partitive form *eļmō* in Livonian must be explained by the analogy of *ō*-stems such as, e.g. *kuolm* 'three' : IISg *kuolmō(z)* when strong grade forms of the protoform of *ēļmaz* had already lost their intervocalic *\*h* and contracted their 2nd and 3rd syllables, cf. IISg *\*hel'mehesen* >> *eļmō(z)*. The absence of a weak grade stem in plural is characteristic of latest borrowings from Latvian and German, hence, the rise of *eļm* : NPL *eļmōd* cannot be much older.

Secondly, Livonian *ēļmaz* and Estonian form *helmes* are words with the historical morphophonological alternation *\*s* (in consonantal stems) : *\*h* (in vocalic stems); in most cases words alternating *\*s* : *\*h* are old borrowings from Indo-European (Baltic, Germanic or Aryan).

Interestingly enough, Livonian *ēļmaz* is an *-az*-word, Estonian *helmes* is an *-es*-word. There are two other cases with a similar distribution, cf. Livonian *jērmaz* 'pea' vs. North Estonian *hernes* (other Finnic dialects have an analogical form *\*herneh* instead), Livonian *kīraz* 'ax' vs. Estonian *kīrves*. Both stems have been borrowed from Baltic, both represent East Baltic *\*ja*-stems, cf. Lithuanian *žirnis* : GSg *žirnio*, Latvian *zīrnis* : GSg *zīrņa*; Lithuanian *kiūvis* : GSg *kiūvio*, Latvian *cīrvīis* : GSg *cīrvja*; cf., however, Old Prussian *syrne* 'pea'. In other words, Livonian, in contrast to North Estonian and other Finnic dialects, may have solved the problem of adaptation of the East Baltic CCj clusters in these words by dropping the consonant *\*j*- and preserving the open vowel which then must have changed from *\*a* to *\*ä* as the initial syllables had a front vocalism; North Estonian and other Finnic dialects must have solved the problem by fusing *\*j*- and *\*-ä-* < *\*-a-*. Now one can speculate that if there was a cluster of three consonants *\*lmj* also in the source language of the Finnic stem for 'amber', then *\*j* could, in principle, cause the palatalization of the lateral.

Still there occur in Finnic and especially in Livonian and Estonian several autochthonous *as*-words, e.g. names of plants (cf. Li *mōškōz* 'strawberry', and

*muškõz*: '(black) bilberry', EsN *maasikas* and *mustikas* vs. Fi *mansikka* and *mustikka*) and the adjective *\*paras*, Li *parāz* 'right, fitting, suitable' (no specific case forms). EsN *paras* (GSg *paraja*) 'fitting, suitable', EsS *paraš* (GSg *parra*) 'fitting, suitable', Fi *paras* (GSg *parhaan*) 'the best'; cf. also Livonian *pařimi* 'better', EsN *parem*, Fi *parempi*, Ve *paramb*; North Lapp *buorre* 'good'. Mordvinic *paro*. In addition, there are in Finnic in addition to nominals alternating *\*s* and *\*h* also nominals having an unalternating *\*h* < *\*š* (mostly: *\*eh* < *\*eš*) both in consonantal and vocalic stems, cf. Es, Vo, Fi *vene* 'boat', Ka, Ve *veneh*, North Lapp *fânâs*, Erza *venč* (this stem is absent in Livonian). The two word types are often mixed up in Finnic. Therefore it is possible that the Livonian (and Estonian) word for amber was originally an *\*eh*-word; note that Finnish dialectal *helme* goes back to *\*helmeš*. In that case there is no ground to suppose that the Livonian word for amber ever contained the triconsonantal cluster *\*lmj*. Then one must explain the palatalized lateral *-l-* as one risen from a fusion of *\*ll* (*\*ll* may come from a still older cluster *\*ln*) and the following *\*i* of the 2nd syllable. There are two other known cases of early vowel loss in the second syllable in Finnic, in both cases the 1st syllable was originally long, cf. *\*neitsüt* 'maiden' < *\*neitisüt* and *\*kolme* 'three' < *\*kõlem* (Viitso 1990c).

Now we may conclude that Livonian *ēlmaz* comes from Proto-Finnic *\*hellimeh* (from *\*šellimeš* < *\*šelnimesš*). After the early loss of *\*i*, the nominative singular form has undergone the radical gradation with the subsequent lengthening of the vowel of the initial syllable and the vowel *\*e* of the new 2nd syllable has changed to *\*a* (or first to *\*ä*) in at least the nominative and partitive singular forms, cf. *\*hellimeh* > *\*helmeš* > *\*helmeš* > *\*hēlmah*. The same set of changes is characteristic of Livonian nominals with a disyllabic *\*h-* or *\*s-*stem, except that *\*h-*stems not beginning in *\*h-* have lost their final *\*-h* and have not merged into *\*s-*stems, cf. *tiera* (NPI *tierrõd*) 'health; healthy; whole, entire': *\*teřveh* > *\*tervah* > *\*tērvah* > *\*tērrah* > *\*tēřrah* > *\*tēra(h)* > *tiera* or *\*teřveh* > *\*terveh* > *\*tērrah* > *\*tēřrah* > *\*teřa(h)* > *tiera*.

Interestingly enough, one of the shapes proposed for the Akkadian word for 'amber' is *ellimešu*.

8.3. In addition to that Finnic loanword in Akkadian, Masing (1956) has proposed the Finnic, Lappic and Mordvinic verb stem *\*maks-*, cf. Livonian *maksā-* 'to cost (intransitive); to pay', South Estonian *massa-*, Votic *mahsa-*, North Estonian, Finnish, Ingrian, Aunus Karelian, Lude, Veps *maksa-*, North and South Karelian *maksā-*; South Lapp *maakse-*, Lule *maksē*, North Lapp *makse-*, Inari *mäksi-*, Skolt *mā'hsse-*, Kildin *mā'χseδ-*; Erza *makso-* 'to give', Moksha *maksō-* and Akkadian *miksu* 'custom, tax', *mākisu* 'customer', *makkāsu* 'tax-gatherer'. The Finnic stem has been borrowed into Latvian, obviously from Livonian, cf. Latvian *maksāt* 'to pay; to cost'.

There seem to be some other early Semitic borrowings in Finnic, including the probably oldest Finnic term for an alcoholic beverage, cf. *\*kalja*, cf. Livonian *kaļļõ* 'weak beer', Estonian *kali* 'kvass, sour-sweet beverage made usually by fermenting rye bread; additionally produced weak beer', Finnish *kalja* 'weak beer', Tver' Karelian *kalja* 'additionally produced weak beer; bad beer' and Semitic *\*haliju* 'sweet' (> 'sweet beverage'), Syriac *ḥaljā* 'new wine' (Viitso 1994 : 107).

9. It is a well known fact that the names of the biggest rivers in the territory of the historical Livonia in the strictest sense of the word are not explainable on the basis of Livonian and other Finnic languages. Although the term used for former Daugava Livonians *Veinalenses* by Henricus de Lettis is connected with Kurland Livonian *Vēna* (PSg *Veinõ*) and the noun *vēna* (PSg *veinõ*) 'port in a river mouth' and Estonian *Väina* 'Daugava river', *väin* (PSg *väina*) 'strait', the name is obviously related also with the Slavic and Germanic name for Daugava river, cf. Russian *Dvina*, Polish *Dzвина*, German *Diina* that can be connected with the Slavic present participle

\**dveigna* of the verb \**dveignq-* 'to move (itr.)', cf. \**dveiga-* 'to move (tr.)' (Viitso 1983 : 272–274). The name has been borrowed before the Common Slavic change \**ei* > \**i*. The name of Gauja river *Coywa* and its Estonian equivalent *Koiva* clearly comes from the Baltic name *Gauja* via metathesis \**Vuj* > *Viv* (Viitso 1983 : 274). (This metathesis is older from seeming metatheses discussed in section 4 above; Jorma Koivulehto (1970) was the first person to establish the metathesis \**Vuj* > *Viv*, notably \**auj* > \**aiv*, in the Finnic stem \**laiva* 'boat, ship' from Germanic \**flauja*.)

The Baltic or Slavic origin of the most important river names of the historical Livonia in the strictest sense of the latter term has three possible explanations.

Firstly, it is possible that Livonians have arrived to the area that was earlier inhabited by Balts and/or Slavs. Elsewhere I have shown that there is in Finnic a set of old Slavic borrowings that cannot be connected with East Slavs whose expansion to what now is called Russia took place on the second half of the 1st millennium (Viitso 1990b; 1992); and thus support such earlier findings as borrowing of the Finnic stem \**hirti* 'log, pole' from Slavic \**žbrdb* by Jooseppi J. Mikkola (1894 : 114) and E. N. Setälä's (1929) idea that the distribution of vowel + nasal sequences in a set of Finnic loans from Slavic follows that of West Slavic nasalized vowels.

Secondly, it is possible that the ancestors of Balts and Slavs preferred to big rivers and their flood plains were relatively unsuitable for the autochthonous hunters and fishers but preferable for herders of the Indo-European origin, whose names for big rivers were retained even after they were assimilated.

Thirdly, it is possible that both the spread of Finnic and Baltic languages in the Baltic region was connected with the spreading of agriculture at the Bronze age when different bands speaking different languages spread over the Northern Europe looking for better conditions for farming and were mixed up, and only later more massive Finnicization and Balticization little by little took place. Lembit Vaba (1997 : 30) points on the basis of Latvian linguists that for Vidzeme Latgals (Latvians) the closest Finnic neighbors, i.e. South Estonians were *igoņi*, the somewhat farther Estonians, probably North Estonians were *sāmi* (Sg *sāms*). The latter name is probably present also in the Latvian name *Sāmsala* of the Estonian island Saaremaa. In modern Latvian, all Estonians are *igauņi* and Estonia is *Igaunija*. It is possible that *sāmi* were originally Lapps who situated behind the South Estonians and later, in Finland, when becoming linguistically Finnicized preserved their name in a slightly modified form as *suomi*.

10. As demonstrated above, it is highly probable that Livonians have contacted before exclusive contacts with their historical neighbors, i.e. with Latvians, North Estonians, South Estonians and Germans also with several other linguistic groups. It is likely that Livonian has been a member of some Sprachbunds that included other Finnic dialects except North and South Estonian. There are more or less weighty arguments for linguistic contacts with non-Finnic Finno-Ugrians which have been impossible in historical times, i.e. after 1200. Livonian stems *āina* 'hay' and *nanā* 'nose' have protoforms shared with South Estonian and Lappic; Livonian *jōra* 'lake' and *sōra* 'antler, horn' and its Lappic equivalents have avoided sound changes characteristic of other Finnic dialects and Livonian *tōla* 'winter' must be borrowed from Lappic; Livonian shares the words *umārz* 'apple' and *vālda* 'white', and the dative case with Mordvinic. It is not excluded that the Livonian, South Karelian, Aunus Karelian, Lude, Veps and Mordvinic voicing of single stops and sibilants (first of all, \**-t-* > *-d-* and \**-s-* > *-z-*) is not caused by the influence of Balto-Slavic on separate Finno-Ugric languages but is at least partially a common change. Livonian seems

to share its term for amber ( $e[m \sim \bar{e}]maz < *šellimesš$ ) with Akkadian (*elmešu, el-limešu*), the archaeological amber in Near East is of Baltic origin. On the other hand, Finnic and Mordvinic seem to have loans from Semitic.

The possible prehistoric contacts between Finnic and Semitic speakers must have taken place in an area where there was something extraordinary valuable for prehistoric merchants. Maybe it was just amber. As the actual Amber Coast is only 300 kilometers in south-southwest from Livõd Rānda or Livonian Coast, in the Samland peninsula in East Prussia, then Amber Coast is the most probable contact area of ancient Semites and Finnic people no matter whether the term for amber was originally borrowed to Livonian from a lost substrate language or not. But a Neolithic amber workshop has been found even in Sārname, Latvia. Manifold contacts of Livonian with different other Finno-Ugric and Finnic languages or dialects point to a permanent movement of languages and/or ethnic groups comparable to Brownian movement. Maybe the well known paradox that Livonian, despite its geographical position on the Finnic-Baltic language border has relatively few old Baltic and Germanic loans is conditioned by the same circumstance.

### Abbreviations

**Languages and dialects:** **Es** — Estonian, **EsC** — Central North Estonian, **EsCo** — Coast Estonian, **EsSE** — southeastern North Estonian, **EsW** — western North Estonian, **EsE** — East Estonian, **EsN** — North Estonian, **EsNE** — North-East Estonian, **EsS** — South Estonian; **Fi** — Finnish, **FiE** — East Finnish, **FiNa** — Narvusi Finnish, **FiW** — West Finnish; **In** — Ingrian, **InE** — East (i.e. Soikkola and Hevaha) Ingrian, **InLL** — Lower Luga Votic; **Ka** — Karelian, **KaA** — Aunus Karelian, **KaLu** — Lude Karelian, **KaN** — North Karelian, **KaS** — South Karelian; **Li** — Livonian; **Ve** — Veps, **VeC** — Central Veps, **VeCE** — eastern Central Veps, **VeN** — North Veps, **VeS** — South Veps; **Vo** — Votic, **VoE** — East Votic, **VoK** — Kukkuzi Votic, **VoW** — West Votic.

**Morphological forms:** **adj.** — adjective, **adv.** — adverb, **DSg** — dative singular, **GSg** — genitive singular, **IISg** — illative singular, **itr.** — intransitive, **NPI** — nominative plural, **PPI** — partitive plural, **PSg** — partitive singular, **tr.** — transitive.

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## ТИЙТ-РЕЙН ВИЙТСО (Тарту)

### ВОЗМОЖНЫЕ ДОИСТОРИЧЕСКИЕ КОНТАКТЫ ЛИВСКОГО ЯЗЫКА

Вполне вероятно, что ливы контактировали со своими соседями, т.е. латышами, южными эстонцами, северными эстонцами и немцами, а также с другими языковыми группами еще до возникновения исторических контактов. Похоже, что ливский язык входил и в такие языковые союзы, в которых были другие прибалтийско-финские диалекты, но не северноэстонский или южноэстонский. Имеются более или менее веские аргументы в пользу языковых контактов с неприбалтийско-финскими финно-уграми, которые в историческую эпоху, т.е. после 1200 г., уже были невозможны. Так, ливские основы *āina* 'сено' и *nanā* 'нос' имеют общие праформы с южноэстонскими и саамскими формами; лив. *jōra* 'озеро' и *sōra* 'рог' и их саамские соответствия избежали звукоизменений, характерных для других прибалтийско-финских языков, а лив. *tōla* 'зима' должно быть заимствовано из саамских языков; слова же *umārz* 'яблоко' и *vālda* 'белый' и дательный падеж на *-n* или на *-ń* являются общими соответственно для ливского и мордовских языков. Не исключено, что озвончение одиночных смычных и свистящих (прежде всего, *\*-t- > -d-* и *\*-s- > -z-*) в ливском, южнокарельском, ливвиковском, людиковском, вепсском и в мордовских языках не связано с влиянием балто-славянских языков на отдельные финно-угорские языки, а представляют собой, по крайней мере частично, общее изменение. Ливское название янтаря *amber* (*eļm ~ ēļmaz < ?\*hellimeš*), наверно, общее с аккадским (*elmešu, ellimešu*), а археологический янтарь на Ближнем Востоке и в Восточной Европе в III — I тыс. до н.э. — балтийского происхождения. С другой стороны, прибалтийско-финские и мордовские языки, видимо, имеют и семитские заимствования.

Возможные доисторические контакты прибалтийско-финских и семитских языков должны были состояться в районе, где имелось что-либо исключительно ценное с точки зрения доисторических купцов. Возможно, что это и был янтарь. Поскольку собственно Янтарный берег находится лишь в 300 км к юго-востоку от Livõd Rānda, или Ливского берега в Восточной Пруссии, то Янтарный берег — наиболее вероятный регион контактов древних семитов и финно-угров независимо от того, является термин для янтаря в ливском языке заимствованием из некоего исчезнувшего субстратного языка или нет. Многообразие доисторических контактов ливского языка с разными другими финно-угорскими и прибалтийско-финскими языками или диалектами свидетельствует о постоянном движении языков и этнических групп. Возможно, тем же обстоятельством объяснима и сравнительная бедность ливского языка древними балтийскими и германскими заимствованиями.